

INVITATION TO BID #FY1611-03

Contract Documents & Technical Specifications

WASTEWATER PUMPING STATION IMPROVEMENTS FOR THE OCONEE COUNTY BOARD OF COMMISSIONERS OCONEE COUNTY, GEORGIA

OFFICIALS

Honorable Melvin Davis, Chairman
Honorable Jim Luke, Commissioner
Honorable John Daniell, Commissioner
Honorable Bubber Wilkes, Commissioner
Honorable Mark Saxon, Commissioner

NOVEMBER 19, 2015



Prepared By:
Precision Planning, Inc.
Planners, Engineers, Architects & Surveyors
802 East Spring Street
Monroe, Georgia 30655
(770) 267-8800

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These specifications and contract documents have been prepared by PRECISION PLANNING, INC, which makes no assurances as to legal acceptability of content except as pertains to technical engineering and design data. Insurance requirements and legal acceptability have been reviewed and approved by OWNER'S attorney.

CONTRACT DOCUMENTS & TECHNICAL SPECIFICATIONS
WASTEWATER PUMPING STATION IMPROVEMENTS
FOR THE
OCONEE COUNTY BOARD OF COMMISSIONERS
OCONEE COUNTY, GEORGIA

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SECTION 00030

ADVERTISEMENT FOR BIDS

NOVEMBER 19, 2015
OCONEE COUNTY BOARD OF COMMISSIONERS
23 NORTH MAIN STREET
WATKINSVILLE, GA 30677
INVITATION TO BID# FY1611-03
WASTEWATER PUMPING STATION IMPROVEMENTS

Sealed bids will be received by the Oconee County Board of Commissioners, Oconee County, Georgia, for furnishing all materials, labor, tools, equipment, and any other miscellaneous items necessary for the Work described below and located in Oconee County, Georgia.

Sealed bids will be received by the Board of Commissioners of Oconee County, in the office of the Purchasing Officer, Suite 206, 23 North Main Street, Watkinsville, Georgia, 30677, until 3:30 p. m., local time, on Thursday, December 17, 2015. Any bid received after said time and date of bid opening will not be considered by OWNER. Bids will be publicly opened and read aloud at this time in the Commission Chambers, Suite 205 at the above referenced address.

The Project consists of, but is not limited to the following major elements:

Epps Bridge Road Pumping Station: Improvements to existing duplex submersible pump station to include reconstruction of wetwell bottom, installation of one new pump, rehabilitation/upgrade of pump bases, discharge piping, impellers, power supply lines and controls, installation of new by-pass pump, demolition of existing gas generator and automatic transfer switch and all related piping, conduit, by-pass pumping and appurtenances necessary to complete the work.

Mars Hill Road Pumping Station: Supply of one new submersible pump to replace existing pump.

State Route 316 Pumping Station: Improvements to existing submersible pump station to include replacement of check and isolation valves, installation of new by-pass connection, replacement of existing force main piping with approximately 50 linear feet (LF) of 6-inch ductile iron pipe, and 200 LF of 6-inch HDPE pipe, and all related by-pass pumping and appurtenances necessary to complete the work.

Time of completion for all work associated with the Project shall be ninety (90) consecutive calendar days from the date of a written "Notice to Proceed" from OWNER.

Copies of Contract Documents, Specifications, and Construction Drawings may be obtained at the office of the Oconee County Utility Department, 1291 Greensboro Highway, Watkinsville, Georgia 30677.

For any information regarding this project, you may call Ms. Karen Barnett, Purchasing Officer, at (706)769-2944 or email at kbarnett@oconee.ga.us.

The Information for Bidders, Bid Proposal Form, Form of Agreement, Drawings, Specifications, and forms of Bid Bond, Performance Bond, Payment Bond, Bidders Qualification Forms, and other Contract Documents may be examined at the following locations:

Oconee County Finance Department
23 North Main
Suite 206
Watkinsville, GA 30677
kbarnett@oconee.ga.us

Precision Planning, Inc.
Street 802 E. Spring Streets
Monroe, GA 30655
(770) 267-8800

CMD
30 Technology Parkway
Suite 100
Norcross, Georgia 30092
Phone: (770) 417-4262

iSqFt
c/o Repro Products
4485 South Atlanta Road
Smyrna, GA 30080

Dodge Data & Analytics/Clayton Digital
1216 Brampton Ave
Statesboro, GA 30458
Phone: (912) 681-3700

The OWNER requires a bid bond* or a certified cashier's check in the amount of five percent (5%) of the total bid to be enclosed with the bid at the time of bid opening. If applicable, the certified cashier's check will be made payable to the Oconee County Board of Commissioners.

The successful bidder will be required to furnish OWNER with Insurance, Workman's Compensation Insurance, and Performance and Payment Bonds* in the amount of one-hundred percent (100%) of the total bid.

Each bid must be submitted in a SEALED ENVELOPE, addressed to the OWNER. Each sealed envelope containing a Bid must be plainly marked on the outside as, "Bid for **WASTEWATER PUMPING STATION IMPROVEMENTS**" for the Oconee County Board of Commissioners **and be labeled with the BIDDER'S State of Georgia Utility Contractor License Number**. If bid is forwarded by mail, the sealed envelope containing the Bid must be enclosed in a separate mailing envelope to the attention of the OWNER at the address previously given.

All Bids must be made out on the bid form of the type bound in the Contract Documents, in accordance with the instructions in the Information for Bidders. No interlineation, additions, or deletions shall be made in the proposal form by the BIDDER.

Any and all Bids received without the aforementioned qualification criteria enclosed, will be returned to the BIDDER.

CONTRACTORS and SUBCONTRACTORS bidding on this Project will be required to comply with all Federal, State, and local laws.

OWNER reserves the rights to waive any informalities or to reject any or all Bids, to evaluate Bids, and to accept any Bid which in its opinion may be in the best interest of the OWNER. No Bid will be rejected without just cause.

A Pre-Bid Meeting will be held at 10:00 a.m. on Wednesday December 2, 2015, at the office of the Oconee County Utility Department, 1291 Greensboro Highway, Watkinsville, Georgia 30677. Attendance at the Pre-Bid Meeting is not mandatory for submittal of bids; however, all prospective bidders are encouraged to attend to discuss and clarify any questions regarding the Bid Documents.

Successful Bidder will be required to perform WORK as the Prime Contractor. WORK performed by Prime Contractor shall be at a minimum 50% of the contract value.

No BIDDER may withdraw his bid within the time limit specified in the Instruction to Bidders (Section 00100).

*** Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia.**

Oconee County Board of Commissioners

By

Honorable G. Melvin Davis, Chairman

SECTION 00100

INSTRUCTIONS TO BIDDERS

1. RECEIPT AND OPENING OF BIDS

Oconee County Board of Commissioners, Oconee County, Georgia, (herein referred to as "OWNER"), invites Bids on forms attached hereto. All blanks must be appropriately filled in. Bids will be received by OWNER at the address stated in Section 00030. Bids will be publicly opened and read aloud by OWNER at said time and place.

OWNER may consider informal any Bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities in the Bids received, may reject any and all Bids, and may accept any Bid which is deemed most favorable. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified will not be considered. No Bidder may withdraw a Bid within SIXTY (60) days after the date of the opening thereof.

2. PREPARATION OF BID

Each Bid must be submitted on the prescribed Bid Form and accompanied by the following documents:

- Bid Form (Section 300)
- Partnership, Corporate or Individual Certificate (Sections 310, 320, and 330)
- Bid Bond (Section 410)
- Bidder Experience Statement (Section 420)
- Subcontractor List (Section 440)
- Statement of Equipment (Section 450)
- Suppliers Data Sheet (Section 451)
- Non-collusion Affidavit of Prime Bidder (Section 460)
- Contractor Affidavit Under O.C.G.A. § 13-10-91(b)(1) (Section 462)
- Affidavit Verifying Status for County Public Benefit Application
(SAVE Affidavit) O.C.G.A. § 50-36-1(e)(2) (Section 463)

The following documents will be completed after the Contract has been awarded:

- Notice of Award (Section 500)
- Agreement (Section 510)
- Certificate of Owner's Attorney (Section 00540)
- Notice to Proceed (Section 560)
- Performance Bond (Section 610)
- Labor & Material Payment Bond (Section 615)
- W-9 (Section 617)

Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

All blank spaces for unit prices, lump sum prices, and alternate bid price schedules must be filled in, in ink or typewritten, in both words and figures (in case of discrepancy, unit prices shown in words will govern), and the foregoing items must be fully completed and executed when submitted. Bids shall have original signatures, and must be submitted in a SEALED ENVELOPE bearing on the outside, the name and address of the bidder, **the BIDDER'S State of Georgia Utility Contractor License Number**, and name of the project for which the Bid is submitted. The OWNER has the right to reject any bid that does not contain the above information.

BID MODIFICATIONS WRITTEN ON THE OUTSIDE OF ENVELOPE WILL NOT BE ACCEPTED.

3. PRE-BID SUBMITTALS

For approval of alternate material or equipment, see Section 01300 Submittals.

4. CONTRACT DOCUMENTS, SPECIFICATIONS AND DRAWINGS

Bidders are advised to carefully examine the CONTRACT DOCUMENTS, Specifications, and Construction Drawings for the proposed WORK. Construction Drawings indicate the surface and underground structures likely to affect the prosecution of the WORK insofar as they have been determined, but the information indicated is not guaranteed as being correct and complete. Bidders are expected to examine the Construction Drawings and the location of the WORK, verify all information with authorities concerned, to inform themselves of all laws, ordinances and regulations of all authorities having jurisdiction, and to judge for themselves all the circumstances affecting the cost of the WORK and the time required for its completion.

The Bidder shall assume all risks concerning latent physical conditions at the site that may affect his costs, progress or performance of the work.

Bidder shall promptly give ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by ENGINEER is acceptable to Bidder.

5. SUBCONTRACTS

Bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this Contract, must be acceptable to the OWNER.

6. TELEGRAPHIC MODIFICATIONS

BID MODIFICATION BY TELEGRAPHIC COMMUNICATION WILL NOT BE ALLOWED.

7. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful Bidder, upon his failure or refusal to execute and deliver the Contract and required Bonds within fifteen (15) days after he has received the "Notice of Award", shall forfeit to OWNER as liquidated damages the security deposit submitted with his Bid.

8. TIME OF COMPLETION AND LIQUIDATED DAMAGES

See Agreement Section 00510 Article 3.2 and General Conditions 00700.

9. METHOD OF BIDDING

Bidders shall submit a Bid on a unit price basis for each item of Work listed in the bid schedule.

Unit or lump sum prices for each Bid item in the proposal shall include its pro rata share of overhead and profit so that the Base Bid price given on Bid Summary Sheet represents the total bid. Any bid not conforming to this requirement may be rejected as informal.

The correct amount bid for each unit price item is defined as the correct product of the quantity listed for the item multiplied by the unit price in words. The correct total amount bid for the complete work is defined as the correct sum total of the correct amounts bid for the individual items in the bid form.

Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

10. QUALIFICATIONS OF BIDDER

Each Bidder must submit qualifications with Bid on the prescribed forms provided in the CONTRACT DOCUMENTS. OWNER or OWNER's Representative may make such investigations as it deems necessary to determine the ability of Bidder to perform the WORK and Bidder shall furnish to OWNER all such information and data for this purpose as OWNER may request. OWNER reserves the right to reject any Bidder if the evidence submitted by or investigation of such Bidder fails to satisfy OWNER, or that such Bidder is not properly qualified to carry out the obligations of the Contract and to complete the WORK contemplated therein within the time constraints.

Each Bidder must furnish in his qualification statement, information relative to the facilities, ability, and financial resources available for the fulfillment of the Contract. Before award is made to a Bidder who is not a resident of the State of Georgia, such Bidder shall designate a proper agent in the State of Georgia on whom service can be made in event of litigation. Conditions, limitations, or provisions attached by Bidder to the Bid may cause its rejection. Bids containing items not included in the Form of Bid will be considered irregular.

11. BID SECURITY

Each Bid must be accompanied by certified check, cashier's check, or a Bid Bond prepared on the Form of Bid Bond attached hereto, duly executed by Bidder as principal and having as Surety thereon a surety company acceptable to the OWNER, in the amount of five percent (5%) of the Bid. All bonds furnished for the project shall be countersigned by an agent who is a resident of the State of Georgia. The Power of Attorney for such signature shall be attached. Deposits accompanying Bids shall be sealed in the Bid envelope. Except for the three (3) lowest bidders, the Bid security will be returned to the bidder by regular U.S. mail within thirty (30) days after the bid opening.

The three lowest bid securities will be returned by regular U.S. mail within ten (10) days after the execution of the contract between the OWNER and the successful bidder. If no award has been made within the number of days after the date of bid opening as specified in Article 1 of this section, bidder may demand the immediate return of his bid security.

12. EXECUTION OF BID DOCUMENTS

Bids which are not signed by individuals making them shall have attached thereto a power-of-attorney evidencing authority to sign the Bid in the name of the person for whom it is signed.

Bids which are signed for a partnership shall be signed by all of the partners or by an attorney-in-fact. If a bid is signed by an attorney-in-fact, there shall be a power-of-attorney executed by the partners attached to the Bid evidencing authority to sign the Bid.

Bids which are signed for a corporation shall have the correct corporate name thereof and the signature of the President or other authorized officer of the corporation manually written below the corporate name following the wording "By _____". Such Bids shall also carry the corporate seal of said corporation.

Bidder shall furnish all data required by these CONTRACT DOCUMENTS. Failure to do so may result in the Bid being declared non-responsive. Acceptance of Bidder's documentation and substantiation or Contract Award by OWNER does not relieve Bidder of Liability for nonperformance as covered in the CONTRACT DOCUMENTS, nor will Bidder be exempted from any other legal recourse OWNER may elect to pursue.

13. POWER-OF-ATTORNEY

Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each bond a certified and effectively dated copy of their power-of-attorney.

14. METHOD OF AWARD

Upon careful review and consideration of the Qualifications and Bid Summary (including all alternate prices), OWNER will award Contract to Prime/General CONTRACTOR deemed the lowest responsible bidder as required by Georgia law. Alternates may be awarded at the discretion of OWNER. Bidder to whom the award is made will be notified at the earliest possible date. OWNER reserves the right to reject any and all bids and to waive any informalities in bids received whenever such rejection or waiver is in OWNER's best interest. A responsive Bidder shall be one who submits his bid in the proper form as called for in the CONTRACT DOCUMENTS, and who binds himself on behalf of this Bid to OWNER with the proper Bid Bond or certified check completed and attached, and who properly completes all forms required to be completed and submitted at the time of bidding.

A responsible Bidder shall be one who can fulfill the following requirements:

- A) Bidder shall maintain a permanent place of business. This requirement applies to Bidder where Bidder is a division or a corporation, or where Bidder is fifty percent (50%) or more owned by a person, corporation or firm.
- B) Bidder shall demonstrate that he has adequate construction management experience and sufficient equipment resources to properly perform the work under and in conformance with these CONTRACT DOCUMENTS. This evaluation will be based upon a list of completed or active projects and a list of construction equipment available to Bidder to perform the WORK.
- C) Bidder shall demonstrate that he has financial resources of sufficient strength to meet the obligations incidental to the performance of the WORK covered by these CONTRACT DOCUMENTS. The ability to obtain the required Performance and Payment Bonds will not alone demonstrate adequate financial capability.

15. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the plans, specifications or other bid documents will be made to any Bidder orally.

All requests for such interpretation should be directed to Ms. Karen Barnett with the Oconee County Finance Department via telephone at 706-769-2944 or e-mail at kbarnett@oconee.ga.us and shall be received no later than 5:00 P.M. on Wednesday, December 9, 2015. Every interpretation made to a Bidder will be in the form of an Addendum to the CONTRACT DOCUMENTS, and when issued, will be available via the Oconee County website (www.oconeecounty.com) at least two (2) days before bids are opened. All addenda so issued shall become part of the CONTRACT DOCUMENTS. **Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be made without legal effect.**

Addenda may be issued to clarify, correct, or change the CONTRACT DOCUMENTS as deemed advisable by OWNER or ENGINEER.

16. CONDITIONS OF WORK

Reference Supplementary General Provisions Section 00800, Articles 3.4 and 3.12.

17. SITE CONDITIONS

OWNER does not make any representation as to the soil conditions to be encountered or as to foundation materials. The CONTRACTOR must assume all risk as to the nature and behavior of the soil which may be encountered or of soil, or water, or rock, which underlies the Work or is adjacent thereto, including any difficulties that may be due to quicksand or other unfavorable conditions that may be encountered in the WORK, whether apparent upon surface inspection or disclosed only in the process of carrying forward the WORK. Reference Section 00800, Article 3.4.

18. INDEMNIFICATION

The CONTRACTOR shall indemnify and hold harmless the OWNER and CONSULTING ENGINEER (also known as Precision Planning, Inc.) and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the WORK, provided that any such claim, damage, loss, expense or attorney's fees is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom, and is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not the negligent act is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Clause. In any and all claims against the OWNER or the CONSULTING ENGINEER (Precision Planning, Inc.) or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation set forth in this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workers' or workman's compensation acts, disability benefit acts or other employee benefit acts.

19. START OF WORK

Reference Section 00800 Article 3.2

20. ADDITIONAL WORK NOT INCLUDED IN THE CONTRACT

Reference Section 00800 Article 3.7

21. CONTRACTOR'S AVAILABILITY

The CONTRACTOR shall have a responsible representative on call at all times. The name and phone number of the representative shall be given to the OWNER and ENGINEER at the pre-construction conference. The CONTRACTOR will also maintain a crew with the necessary tools and equipment available on call after normal working hours, on weekends, during inclement weather, or other times when work is not in progress to perform any necessary emergency repair work which may occur as a result of the work under his contract. All costs for emergency repair shall be at the CONTRACTOR's expense and shall be factored into the bid price. In the opinion of the OWNER, negligence on the part of the CONTRACTOR to satisfy such situations will be just cause for the OWNER to take whatever action necessary to remedy the situation. All costs incurred by the OWNER to remedy such situation will be back charged to the CONTRACTOR.

22. CONSTRUCTION CLEARING

Whole clearing of construction rights-of-way, easements, or construction sites will not be allowed. Clearing shall be minimized, and the CONTRACTOR shall make every effort to save trees, shrubs and bushes that are within the construction limits. Timber which is cut shall remain the property of the land owner where the cutting occurred.

All trees within the working easements shown on the CONTRACT DOCUMENTS are property of the existing land owners. If the property owner wishes to keep the timber, the CONTRACTOR shall cut the timber in reasonable lengths and stack such timber on OWNER's property. If the property owner does not wish to keep the timber, the timber shall become the property of the CONTRACTOR and shall be removed from the site and disposed of at the CONTRACTOR's expense. All stumps, rubbish, and other material, not suitable as timber, shall be removed from the site at the CONTRACTOR's expense.

23. SANITARY FACILITIES

Reference Section 01516 Temporary Sanitary Facilities.

24. BUILDINGS AND SHANTIES

No shanties, camps, or buildings for the housing of men employed on the WORK shall be erected on land owned or leased by the OWNER without written permission of the OWNER. Should permission be asked and granted, the CONTRACTOR must comply with all Local and County regulations regarding the construction and maintenance of such buildings.

25. INTOXICATING LIQUORS AND DRUGS

The CONTRACTOR shall neither permit nor suffer the introduction or use of intoxicating liquor or illegal drugs upon or about the WORK specified in this Contract or upon any of the grounds occupied by him or his employees.

26. LINE AND GRADE

All construction field layout and staking shall be the responsibility of the CONTRACTOR.

27. WATER SUPPLY

All water for construction purposes, as well as the expense of having the water conveyed about the WORK, shall be provided by the CONTRACTOR and the cost of this work shall be included in the Unit or Lump Sum price bid for the various Items of the WORK to be done under this Contractor. The source, quality, and quantity of water furnished shall, at all times, be acceptable to all governing agencies and the ENGINEER.

28. WATER-TIGHT STRUCTURES

It is the intention of these specifications to provide that all concrete work be mixed, deposited, and spaded carefully with the end result of obtaining concrete which is impervious to water. Leakage through concrete structures shall be sufficient reason for requiring the CONTRACTOR to uncover or to expose any portion of the WORK for a thorough examination by the ENGINEER, after which said structure shall be repaired and again tested by the CONTRACTOR.

29. MEASURES AND WEIGHTS

To aid the ENGINEER in determining all quantities, the CONTRACTOR shall, whenever so requested, provide scales, equipment, and assistance for weighing or for measuring any of the materials.

It is understood and agreed that a "ton" shall mean the short ton of two thousand (2,000) pounds.

Weights and measures of quantity for payment will be the actual weight or actual measure, and no special or trade or so-termed customary allowances will be made, nor will any material which is lost or misplaced be included for payment.

30. ENVIRONMENTAL REQUIREMENTS

A. Air Pollution

The CONTRACTOR shall be responsible for any necessary burning permits.

B. Stream Pollution

1. Conduct all work in such a manner as to prevent stream siltation.
2. No discharges for untreated or partially treated wastewater to streams are allowed.
3. Any State NPDES Stormwater Discharges Permit(s) required, including a *Notice of Intent* (NOI), is the responsibility of the CONTRACTOR.
4. Monitoring and reporting requirements associated with a NPDES Stormwater discharges Permit shall be the responsibility of the CONTRACTOR.

31. INSUFFICIENCY OF SAFETY PRECAUTIONS

Reference Section 00800 Article 3.14

32. ELECTRIC POWER

Reference Section 01511 Temporary Power

33. SEWAGE AND WATER FLOWS

The CONTRACTOR shall furnish all the necessary equipment, shall take all necessary precautions and shall assume the entire cost of handling and properly disposing of any water, sewage, seepage, storm, surface, and flood flows which may be encountered at any time during the construction of the WORK and in such manner as to not endanger or damage property. The manner of providing for these flows shall meet with the approval of the ENGINEER and the entire cost of said work shall be included in the Unit or Lump Sum Prices bid for the various Sections of the WORK to be done under this Contract.

34. LOCAL BUSINESS INITIATIVE

Any purchase or contract of under \$100,000 bid or otherwise placed by Oconee County, herein "County", may be awarded to a Local Business, as defined according to Oconee County Policy, in case of equivalent bids. In cases in which a bid by a Local Business is within 7% of the lowest overall bid supplied by a non-local business, the County is authorized to negotiate with Local Business with the lowest bid among the Local Business to allow such Local business to match the lowest bid supplied by a non-local business. In the event a Local Business matches the lowest bid, including all other terms, quality and conditions of the bid, then the Local Business may be awarded the contract. In the event the bids of more than one Local Business are within 7% of the lowest overall bid of a non-local business, the Local Business with the lowest bid price will be given the first opportunity to match the lowest overall bid. If this Local Business declines to do so, then the Local Business with the next lowest bid within 7% will be given the opportunity to match the lowest bid and this process will continue until a contract is reached with a Local business or there is no other Local Business within 7% of the lowest overall bid.

35. OPEN RECORDS

- a. All materials submitted in connection with this bid will be public documents and subject to the Open Records Act and all other laws of the State of Georgia, the United States of America and the open records policies of the Oconee County Board of Commissioners. All such materials shall remain the property of Oconee County and will not be returned to the respondent.
- b. If the Contractor has notified the Purchasing Office that the Contractor's submittal contains trade secrets and commercial or financial information, which is privileged and confidential, those portions of the submittal shall be protected and shall not be released outside of the Government. The title page and each page containing proprietary information must be marked.

36. CONTRACTOR'S AFFIDAVIT REQUIRED (E-VERIFY)

All contractors, subcontractors, and sub-subcontractors doing business with Oconee County must provide affidavits. All Bidders shall submit a completed Contractor's Affidavit to the Owner prior to the bid opening. Sub-Contractors shall submit an affidavit to the Prime Contractor and so on and so forth.

Any contractor bidding on a local government project is required to participate in the federal work authorization program to verify information of all newly hired employees or subcontractors. A local government may not even consider a bid or proposal from a contractor unless it includes a signed, notarized affidavit from the contractor attesting to the following:

- The contractor has registered with and is authorized to use the federal work authorization program;
- The user identification number and date of authorization for the affiant; and
- The contractor is using and will continue to use the federal work authorization program throughout the contract period.

The agreement with the contractor must contain a term that requires the contractor to only hire subcontractors who are registered for and participate in E-Verify. The agreement must also provide that the contractor will give the local government notice of the identify of all subcontractors hired by the contractor (or subcontractor, if sub-subcontractors are used) within five days of hiring the subcontractor (or subsubcontractor).

37. SUBCONTRACTOR AFFIDAVITS

The contractor must obtain affidavits from their subcontractors swearing that the subcontractor is registered for and participates in the E-Verify program. The affidavits must be provided to Oconee County within five business days of the subcontractor being hired to work on the Oconee County project.

38. AVAILABILITY OF FUNDS

It is understood and agreed between the parties herein that Oconee County shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

39. EXEMPTION FROM TAXES

The Contractor shall not charge the County for Georgia State Sales or Use Taxes or Federal Excise Tax on the finished goods or services provided under the Agreement. However, this exemption does not apply to the Contractor, and the Contractor shall be responsible for the payment of any sales, use, or excise tax it incurs in providing the goods required by the Agreement, including, but not limited to, taxes on materials purchased by a Contractor for incorporation in or use on a construction project. Nothing in this section shall prohibit the Contractor from including its own sales tax expense in connection with the Agreement in its Agreement price.

40. SAVE AFFIDAVIT

Since a contract has been deemed a “public benefit,” the contractor or other party to the contract must be run through the federal Systematic Alien Verification for Entitlements (SAVE) Program. This program requires Oconee County verify the legal status of non-U.S. citizens who apply for certain public benefits. The contractor must execute a SAVE affidavit attesting that either he or she is a U.S. citizen or legally qualified to receive the benefit. If the contractor is not a U.S. citizen, then Oconee County has to run that contractor through the SAVE system.

41. CONTRACTOR'S OATH

The successful bidder must execute a written oath stating that he or she has not violated O.C.G.A. §36-91-21(e) regarding unlawful restriction of competitive bidding.

END OF SECTION

SECTION 00300

BID FORM

**WASTEWATER PUMPING STATION IMPROVEMENTS
FOR THE
OCONEE COUNTY BOARD OF COMMISSIONERS**

THIS BID IS SUBMITTED TO:

Oconee County Board of Commissioners
P.O. Box 1527, Room 206
23 North Main Street
Watkinsville, Georgia 30677

(Hereinafter called "Owner")

THIS BID IS SUBMITTED BY:

(Name)
(Address)

(Telephone)

(Hereinafter called "Bidder")

BIDDER, in compliance with the Advertisement for Bids for the construction of this project, having examined the Drawings and Specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the price(s) stated below. This price(s) is to cover all expenses including overhead and profit incurred in performing the Work required under the CONTRACT DOCUMENTS, of which this proposal is a part.

**BID SCHEDULE
WASTEWATER PUMPING STATION IMPROVEMENTS
FOR THE OCONEE COUNTY BOARD OF COMMISSIONERS**

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Est. No. of Units</u>	<u>Unit Price Bid</u>	<u>Total for Item</u>
1	Geotechnical Testing (Allowance)	LS	1	\$1,500.00 Dollars and Cents	\$1,500.00
				<u>One Thousand Five Hundred and 00/100</u> (Unit Price in Words)	
2	Rock Removal	CY	40	 Dollars and Cents	
				 (Unit Price in Words)	
3	Epps Bridge Road Pump Station	LS	1	 Dollars and Cents	
				 (Unit Price in Words)	
4	Mars Hill Road Pump Station	LS	1	 Dollars and Cents	
				 (Unit Price in Words)	
5	Highway 316 Pump Station	LS	1	 Dollars and Cents	
				 (Unit Price in Words)	

*****EXTRA WORK, IF AUTHORIZED BY THE OWNER*****

EW.1	Additional Crushed Stone Bedding, including Excavation of Unsuitable Material	CY	40	 Dollars and Cents	
				 (Unit Price in Words)	

TOTAL AMOUNT BID (Including Extra Work)

Dollars & Cents (\$ _____)

Price in Words: _____

NOTE: Amounts shall be shown in words and figures; the amount written in words shall take precedence.

**BID SCHEDULE
WASTEWATER PUMPING STATION IMPROVEMENTS
FOR THE OCONEE COUNTY BOARD OF COMMISSIONERS**

BIDDER hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" from the OWNER and to fully complete WORK within a total construction time of one ninety (90) consecutive calendar days of the date specified in this "Notice to Proceed".

BIDDER acknowledges receipt of the following addenda:

Addendum No.	Date Received

BIDDER agrees to perform all of the construction of the project complete with appurtenances and accessory work described in the Specifications and shown on the Drawings for the above scheduled price(s).

The above scheduled price(s) shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

BIDDER understands that OWNER reserves the right to reject any or all bids and to waive any informalities in the bidding.

BIDDER agrees that his bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

SECTION 00310

PARTNERSHIP CERTIFICATE

STATE OF }
COUNTY OF }SS
}

On this . day of _____, 2015 before me personally appeared _____
_____ known to me to be the person who executed the
above instrument, who, being by first duly sworn, did depose and say that he is a general partner in the firm of
_____ and that firm consists of himself and

_____ and that he executed the foregoing instrument on behalf of said firm for the uses and purposes stated therein,
and that no one except the above named members of the firm have any financial interest whatsoever in said
proposed contract.

PARTNER

PARTNER

PARTNER

PARTNER

Subscribed and sworn to before me, this ____ day of _____, 2015.

NOTARY PUBLIC

(SEAL)

My Commission Expires:

_____ (Date)

NOTE: If only one partner signs, a power of attorney executed by all other partners authorizing him to act
in the name of the Company must be attached, otherwise, all partners must sign.

END OF SECTION

SECTION 00320

CORPORATE CERTIFICATE

I, _____, certify that I am the Secretary of the Corporation named as CONTRACTOR in the foregoing bid; that _____, who signed said bid in behalf of the CONTRACTOR was then _____ of said Corporation; that said authority was duly signed for and in behalf of said corporation by authority of its Board of Directors, and is within the scope of its corporate powers; that said Corporation is organized under the laws of the State of _____.

This _____ day of _____, 2015.

CORPORATE SECRETARY

(SEAL)

END OF SECTION

SECTION 00330

INDIVIDUAL CERTIFICATE

STATE OF }
 }SS
COUNTY OF }

On this _____ day of _____, 2015, before me personally came and
appeared _____
to me known, and known to me to the person described in and who executed the foregoing instrument and
acknowledged that he executed the same.

NOTARY PUBLIC

(SEAL)

My Commission Expires

(Date)

(SEAL)

END OF SECTION

SECTION 00410

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, name, address & phone number

as Principal, and name, address & phone number

as Surety, held and firmly bound unto the Oconee County Board of Commissioners, Oconee County, Georgia, as OWNER in the penal sum of five (5%) percent of the total bid which equals _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the OWNER a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing for the Wastewater Pumping Station Improvements for the Oconee County Board of Commissioners, with the work described as follows:

PROJECT DESCRIPTION:

Epps Bridge Road Pump Station: Improvements to existing duplex submersible pump station to include reconstruction of wetwell bottom, installation of one new pump, rehabilitation/upgrade of pump bases, discharge piping, impellers, power supply lines and controls, installation of new by-pass pump, demolition of existing gas generator and automatic transfer switch and all related piping, conduit, by-passing and appurtenances necessary to complete the work.

Mars Hill Road Pump Station: Supply and installation of one new submersible pump to replace existing pump.

Highway 316 Pump Station: Improvements to existing submersible pump station to include replacement of check and isolation valves, installation of new by-bass connection, replacement of existing force main piping with approximately 50 linear feet (LF) of 6-inch ductile iron pipe and 200 LF of 6-inch HDPE pipe and all related by-passing and appurtenances necessary to complete the work.

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and Surety have executed this Bond by causing their respective names to be hereunto subscribed and their seals to be hereunto affixed by their duly authorized officers, on this the _____ day of _____, 2015.

CONTRACTOR - PRINCIPAL:

BY _____

Name _____
(Please Type)

Title _____

ATTEST:

Name _____
(Please Type)

Title _____

(SEAL)

Note: Attest for a Corporation must be by the corporate secretary; for a partnership by another partner; for an individual by a Notary.

SURETY:

BY _____

Name _____
(Please Type)

Title _____

ATTEST:

Name _____
(Please Type)

Title _____

(SEAL)

Note: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

END OF SECTION

SECTION 00420

BIDDER EXPERIENCE STATEMENT

All questions must be answered and the date given must be clear and comprehensive. This instrument must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires. Attach all additional sheets to these Contract Documents.

1. Name of Bidder: _____

2. Permanent main office address: _____

3. When organized: _____
4. If a corporation, where incorporated: _____

Federal I.D. Number: _____
5. How many years have you been engaged in the contracting business under your present firm or trade name? _____
6. General character of work performed by your company: _____

7. Have you ever failed to complete any work awarded to you? _____
If so, where and why? _____

8. List any project of similar scope and complexity that your organization has completed or has in progress as of the date of receiving Bids: (Please include additional pages, as needed, and attach hereto).

1	Project Name: _____ Location: _____ Contract Amount: \$ _____ Contract Amount: \$ _____ Date Completed: _____ % Complete: _____ Project Engineer and Address: _____ _____ Engineer/Owner Contact: _____ Telephone: _____
2	Project Name: _____ Location: _____ Contract Amount: \$ _____ Contract Amount: \$ _____ Date Completed: _____ % Complete: _____ Project Engineer and Address: _____ _____ Engineer/Owner Contact: _____ Telephone: _____
3	Project Name: _____ Location: _____ Contract Amount: \$ _____ Contract Amount: \$ _____ Date Completed: _____ % Complete: _____ Project Engineer and Address: _____ _____ Engineer/Owner Contact: _____ Telephone: _____
4	Project Name: _____ Location: _____ Contract Amount: \$ _____ Contract Amount: \$ _____ Date Completed: _____ % Complete: _____ Project Engineer and Address: _____ _____ Engineer/Owner Contact: _____ Telephone: _____

9. Background and experience of the principal members of your organization, including officers.
(Include Company Resume if available)

10. Credit available: \$ _____

11. Give Bank reference (Name, Address, Contact Person, Phone Number, Fax Number):

So that we may verify your banking reference, please sign below for authorization:

_____ (Signature)

12. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by OWNER? _____

13. The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by OWNER in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated this ____ day of _____, 2015.

Name of Bidder

By _____

Title _____

State of _____

County of _____

_____ being duly sworn deposes and says that he is
_____ of _____
and that the answers to the foregoing questions and all statements therein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____, 2015.

Notary Public

(SEAL)

My Commission Expires: _____

END OF SECTION

SECTION 00440

SUBCONTRACTOR LIST

Names of all subcontractors proposed by the bidder at the time of bid submittal are listed below:

(Bidder shall include Name & Address of Subcontractor, Type of WORK, Approximate % of Work and the Approximate Dollar Amount - Please Type)

NAME/ADDRESS/PHONE NUMBER	TYPE OF WORK	%	\$ AMOUNT	FEDERAL ID or SOCIAL SECURITY NUMBER

(USE ADDITIONAL PAGES IF NEEDED. PLEASE ATTACH HERETO)

END OF SECTION

SECTION 00450

STATEMENT OF EQUIPMENT

List Machinery and Other Equipment Available to CONTRACTOR for Prosecuting the Work Included in Contract. (To be filled in by CONTRACTOR and Submitted with Bid.)

Available Machinery and Other Equipment Kind - Size - Capacity	Location	Ownership	Date Proposed To Be Placed On Work Site

The above is a true statement of the equipment available to the undersigned Bidder for prosecuting the work included in the contract. Where it is shown that the equipment is not owned by the Bidder, arrangements have been made with the equipment owners to furnish the equipment.

Signed _____

Name _____

Title _____

END OF SECTION

SECTION 00451

SUPPLIERS DATA SHEET

Names of all equipment or material suppliers who will furnish \$5,000 or more on the project are listed below:

(Bidder shall supply Name and Address of Supplier, Item Supplied and Approximate Dollar Amount to be Supplied by each - Please Type)

(Use additional pages if needed. Please attach hereto)

ANY REVISION TO THIS SUPPLIERS DATA SHEET REQUESTED BY THE CONTRACTOR AFTER THE DATA SHEET HAS BEEN SUBMITTED IS SUBJECT TO A DEDUCTIVE AMOUNT IN THE CONTRACT PRICE.

END OF SECTION

SECTION 00460

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____ }

County of _____ }

_____, being duly sworn, deposes and says that:

1. He is _____ (owner, partner, officer, representative, or agent) of _____ the Bidder that has submitted the attached Bid.
2. He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid.
3. Such Bid is genuine and is not a collusive or sham Bid.
4. Neither the said Bidder, nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person, to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the OWNER (Local Public Agency) or any person interested in the proposed Contract.
5. The price or prices quoted in the attached Bid are fair and proper and not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signature _____

Title _____

Subscribed and Sworn to before me this _____ day of _____, 2015.

Notary Signature _____

(Seal)

My Commission Expires:

Date

END OF SECTION

SECTION 00462

**Contractor Affidavit Under O.C.G.A. § 13-10-91(b)(1)
(E-VERIFY)**

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the OCONEE COUNTY BOARD OF COMMISSIONERS has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Oconee County Board of Commissioners

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 2015 in _____(city), _____(state)

Signature of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE _____ DAY OF _____, 2015.

NOTARY PUBLIC

My Commission Expires:

SECTION 00463

**Affidavit Verifying Status for County Public Benefit Application
(SAVE AFFIDAVIT)
O.C.G.A. § 50-36-1(e)(2)**

By executing this affidavit under oath, as an applicant for a Business Occupation Tax Certificate, Alcohol License or other public benefit as referenced in O.C.G.A. § 50-36-1, from Oconee County, Georgia, the undersigned applicant verifies one of the following with respect to my application for a public benefit:

- 1) ___ I am a United States citizen.
- 2) ___ I am a legal permanent resident of the United States.
- 3) ___ I am a qualified alien or non-immigrant under the Federal Immigration and Nationality Act with an alien number issued by the Department of Homeland Security or other federal immigration agency.

My alien number issued by the Department of Homeland Security or other federal:
immigration agency is: _____
My card number is: _____

The undersigned applicant also hereby verifies that he or she is 18 years of age or older and has provided at least one secure and verifiable document, as required by O.C.G.A. § 50-36-1(e)(1), with this affidavit.

The secure and verifiable document provided with this affidavit can best be classified as:

_____.

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of O.C.G.A. § 16-10-2, and face criminal penalties as allowed by such criminal statute.

Executed in _____(city), _____(state).

Signature of Applicant: _____

Date: _____

Printed Name: _____

Date of Birth: _____

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

Notary Public

My Commission Expires: _____

END OF SECTION

SECTION 00500

NOTICE OF AWARD

TO: _____

Project Description

The site of the proposed work is in Oconee County, Georgia.

The Project consists of, but is not limited to the following major elements:

Epps Bridge Road Pump Station: Improvements to existing duplex submersible pump station to include reconstruction of wetwell bottom, installation of one new pump, rehabilitation/upgrade of pump bases, discharge piping, impellers, power supply lines and controls, installation of new by-pass pump, demolition of existing gas generator and automatic transfer switch and all related piping, conduit, by-passing and appurtenances necessary to complete the work.

Mars Hill Road Pump Station: Supply and installation of one new submersible pump to replace existing pump.

Highway 316 Pump Station: Improvements to existing submersible pump station to include replacement of check and isolation valves, installation of new by-bass connection, replacement of existing force main piping with approximately 50 linear feet (LF) of 6-inch ductile iron pipe and 200 LF of 6-inch HDPE pipe and all related by-passing and appurtenances necessary to complete the work.

CONTRACTOR agrees to commence work on or before a date to be specified in a written "Notice to Proceed" of the OWNER for the project. CONTRACTOR shall fully complete all work associated with 2015 Sanitary Sewer Pump Station Improvements within NINETY (90) consecutive calendar days from the date of a written "Notice to Proceed".

The OWNER has considered the Bid submitted by you for the above described WORK in response to its Advertisement for Bids and has decided to award you the Contract.

You are hereby notified that your Bid has been accepted for the Contract Price of _____
_____ (\$ _____)
which is based on the unit prices shown on the Bid Form (Section 00300).

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR's Performance and Payment Bonds and Certificates of Insurance within ten (10) calendar days from the date of this Notice.

If you fail to execute said Agreement and to furnish said Bonds within ten (10) calendar days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your Bid as abandoned and as a forfeiture as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the OWNER.

Dated this ____ day of _____, 2015.

Oconee County Board of Commissioners
OWNER

BY: _____
Melvin Davis, Chairman

ACKNOWLEDGEMENT OF NOTICE

CONTRACTOR

BY: _____

DATE: _____

END OF SECTION

SECTION 00510

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____ in the year 2015, by and between the Oconee County Board of Commissioners, Oconee County, Georgia (hereinafter called OWNER), and _____ (hereinafter called CONTRACTOR). OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

The Project for which the WORK under the CONTRACT DOCUMENTS may be the whole or only a part consists of, but is not limited to, the following major elements:

Epps Bridge Road Pump Station: Improvements to existing duplex submersible pump station to include reconstruction of wetwell bottom, installation of one new pump, rehabilitation/upgrade of pump bases, discharge piping, impellers, power supply lines and controls, installation of new by-pass pump, demolition of existing gas generator and automatic transfer switch and all related piping, conduit, by-passing and appurtenances necessary to complete the work.

Mars Hill Road Pump Station: Supply and installation of one new submersible pump to replace existing pump.

Highway 316 Pump Station: Improvements to existing submersible pump station to include replacement of check and isolation valves, installation of new by-bass connection, replacement of existing force main piping with approximately 50 linear feet (LF) of 6-inch ductile iron pipe and 200 LF of 6-inch HDPE pipe and all related by-passing and appurtenances necessary to complete the work.

ARTICLE 1 - WORK

CONTRACTOR shall complete all WORK as specified or indicated in the CONTRACT DOCUMENTS. The WORK described previously includes all material, labor, tools, equipment, and any other miscellaneous items necessary to complete the work as described in the Technical Specifications and Construction Drawings.

ARTICLE 2 - ENGINEER

The Project has been designed by Precision Planning, Inc., 802 East Spring Street, Monroe, Georgia 30655, who is hereafter referred to as ENGINEER, and who will assume all duties and responsibilities and will have the rights and authority assigned to ENGINEER in the CONTRACT DOCUMENTS in connection with completion of the WORK in accordance with the CONTRACT DOCUMENTS.

ARTICLE 3 - CONTRACT TIME

3.1 CONTRACTOR agrees to commence WORK within ten (10) days of a date to be specified in a written "Notice to Proceed" from the OWNER and to fully complete the contract in a total construction time of NINETY (90) consecutive calendar days from the date of the "Notice to Proceed".

3.2 Time for Completion: OWNER and CONTRACTOR recognize that time is the essence of this Agreement and that OWNER will suffer financial loss if the WORK is not substantially complete within the time specified in Paragraph 3.1 above, plus any extension thereof allowed in the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the WORK is not substantially complete on time. Accordingly, OWNER and CONTRACTOR understand and recognize that it is impossible to conclusively assess damages to the OWNER for the failure of the CONTRACTOR to substantially complete the project in a timely manner. Therefore, the OWNER and CONTRACTOR have agreed that a reasonable amount of damages for each day that the project remains incomplete after the contract time (as stated in paragraph 3.1) has expired would be the amount of \$250.

ARTICLE 4 - CONTRACT PRICE

OWNER shall pay CONTRACTOR for performance of the WORK in accordance with the CONTRACT DOCUMENTS in current funds as follows: _____ (\$_____).

ARTICLE 5 - PAYMENT PROCEDURES

CONTRACTOR shall submit Application for Payment in accordance with the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

5.1 Progress Payments: CONTRACTOR shall furnish to OWNER, on forms furnished by OWNER, no later than the 25th day of each month, a progress payment request for the amount of work accomplished, products furnished, and products stored at the site during the previous month. The progress payment request shall be signed by the CONTRACTOR and be supported by such data as OWNER may reasonably require. ENGINEER shall review, and within ten (10) days after receipt of each progress payment request, indicate in writing approval of the payment request to the OWNER or return the progress payment request to the CONTRACTOR indicating in writing his reasons for refusing to approve it. The OWNER will, within thirty (30) days after receipt of progress payment request, pay CONTRACTOR based on the approved progress payment request, less the retainage and other deductions pursuant to the terms of these CONTRACT DOCUMENTS. (Ref. Section 00800, Paragraph 3.18).

5.1.1 Prior to Substantial Completion progress payments will be made in an amount equal to:

90% of the WORK completed, and

100% of materials and equipment not incorporated in the WORK but delivered and suitably stored, less in each case the aggregate of payments previously made.

5.1.2 No amount shall be retained on progress payment requests submitted after 50% of the WORK has been completed if in the opinion of the OWNER or their authorized representative, such work is satisfactory and has been completed on schedule. This will not affect the retained amounts on the first 50% of the work which may continue to be held to ensure satisfactory completion of the project. If, after discontinuing the retention, OWNER determines that the work is unsatisfactory or has fallen behind schedule, retention may be resumed at the previous level. (Reference O.C.G.A., Article 2, Section 13-10-02 or Section 13-10-20)

- 5.1.3 If the CONTRACTOR falls behind schedule to the point that the time of completion, plus time extensions, has elapsed, then the amount specified for liquidated damages will be deducted from all CONTRACTOR pay requests submitted after the latest time of completion.
- 5.2 Final Payment: Upon acceptance of WORK in accordance with the General Conditions, OWNER shall pay balance due of Contract Price less payments previously made. Pay requests will be submitted in accordance with Section 00800, Paragraph 3.18; Supplementary General Provisions.

ARTICLE 6 - INDEMNIFICATION

The CONTRACTOR shall indemnify and hold harmless the OWNER and Consulting ENGINEER (also known as Precision Planning, Inc.) and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the WORK, provided that any such claim, damage, loss, expense or attorney's fees is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom, and is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not the negligent act is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Clause. In any and all claims against the OWNER or the Consulting ENGINEER (Precision Planning, Inc.) or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation set forth in this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workers' or workmens' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 7 - CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 7.1 CONTRACTOR has familiarized himself with the nature and extent of the CONTRACT DOCUMENTS, WORK, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the WORK. CONTRACTOR is aware that he must be licensed to do business in the State of Georgia, as well as in the County of Walton, Georgia.
- 7.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the WORK which were relied upon by design ENGINEER in preparation of the Drawings and Specifications and which have been identified in the Supplemental General Provisions.
- 7.3 CONTRACTOR has made or caused to be made examinations, investigations and tests, and studies of such reports and related data, in addition to those referred to in Paragraph 7.2, as he deems necessary for the performance of the WORK at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the CONTRACT DOCUMENTS; and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.
- 7.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports, and data with the terms and conditions of the CONTRACT DOCUMENTS.

- 7.5 CONTRACTOR has given OWNER written notice of all conflicts, errors, or discrepancies that he has discovered in the CONTRACT DOCUMENTS and the written resolution thereof by OWNER is acceptable to CONTRACTOR.

ARTICLE 8 - CONTRACT DOCUMENTS

The CONTRACT DOCUMENTS which comprise the entire agreement between OWNER and CONTRACTOR are attached to this Agreement, made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Exhibits to this Agreement include the following:
 - Advertisement for Bidders, Instructions to Bidders, Bid Form and associated documents
- 8.3 Performance and Labor and Material Payment Bonds
- 8.4 Notice of Award
- 8.5 Notice to Proceed
- 8.6 General Conditions
- 8.7 Supplemental General Provisions
- 8.8 Specification bearing the title **Wastewater Pumping Station Improvements**.
- 8.9 Oconee County Utility Department Water and Wastewater Standard Specifications (latest issue)
- 8.10 Construction Drawings
- 8.11 Addenda _____, dated _____.
- 8.12 CONTRACTOR'S Bid
- 8.13 Documentation submitted by CONTRACTOR prior to Notice of Award
- 8.14 Any modifications, including Change Orders, duly delivered after execution of Agreement.
- 8.15 W-9.
- 8.16 Contractor's Affidavit
- 8.17 SAVE Affidavit

There are no CONTRACT DOCUMENTS other than those listed above in this Article 8. The CONTRACT DOCUMENTS may only be altered, amended or repealed by expressed written consent of OWNER.

ARTICLE 9 - MISCELLANEOUS

- 9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions, shall have the meanings indicated in the General Conditions.
- 9.2 No assignment by a party hereto of any rights under or interests in the CONTRACT DOCUMENTS will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due, may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the CONTRACT DOCUMENTS.
- 9.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the CONTRACT DOCUMENTS.
- 9.4 The term Special Conditions as used in the General Conditions or elsewhere in the CONTRACT DOCUMENTS, refers to the "Supplementary General Provisions".
- 9.5 The Supplementary General Provisions are intended to supplement, rather than replace, the General Conditions, except where the Supplementary General Provisions are in direct conflict with the General Conditions, the Supplementary General Provisions shall control.

ARTICLE 10 - PROVISIONS FOR TERMINATION OF CONTRACT

- 10.1 If through any cause, other than an "Excusable Delay", CONTRACTOR shall fail to fulfill its obligations under this Contract in a timely and proper manner, or if CONTRACTOR shall violate any of the covenants, agreements, conditions or obligations of the CONTRACT DOCUMENTS; OWNER may terminate this Contract as defined in the General Conditions. In such event, OWNER may take over the WORK and prosecute the same to completion, by Contract or otherwise, and CONTRACTOR and his sureties shall be liable to OWNER for any additional cost incurred by OWNER in its completion of the WORK and they shall also be liable to OWNER for liquidated damages for any delay in the completion of the WORK as provided below.
- 10.2 Liquidated Damages for Delay: If the work is not completed within the time stipulated, therefore, including any extensions of time for excusable delays as herein provided, CONTRACTOR shall pay to OWNER as fixed and agreed, liquidated damages (as stated in Article 3 Paragraph 3.2) for each working day of delay, until the work is completed, and CONTRACTOR and his sureties shall be liable to OWNER for this amount.
- 10.3 Excusable Delays: The right of CONTRACTOR to proceed shall not be terminated nor shall CONTRACTOR be charged with liquidated damages for any delays in the completion of the work due:
- 10.3.1 To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;
- 10.3.2 To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of CONTRACTOR, including, but not restricted to, acts of a public enemy, acts of another CONTRACTOR in the performance of some other contract with OWNER, fires, floods, epidemics, quarantine, freight embargoes, and weather of unusual severity such as hurricanes, tornados, and cyclones;
- 10.3.3 To acts of OWNER which cause delays, and; provided, however, that CONTRACTOR promptly notified OWNER within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, OWNER shall ascertain the facts and the cause and extent of delay. If upon the basis of the terms of this Contract, the delay is properly excusable, OWNER shall extend the time for completing the WORK for a period of time commensurate with the period of excusable delay.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement in four (4) parts. All portions of the CONTRACT DOCUMENTS have been signed or identified by OWNER, OWNER's Attorney, CONTRACTOR, or by ENGINEER on OWNER's behalf.

This Agreement will be effective on the date of the Agreement as shown on page 00510-1.

BY: _____
Melvin Davis, Chairman
Oconee County Board of Commissioners

ATTEST: _____
Clerk

(Seal)

CONTRACTOR

BY: _____

TITLE: _____

ATTEST: _____
Corporate
Secretary/Partner/Notary

(Seal)

NOTE: Attest for a corporation must be by the corporate secretary; for a partnership by another partner; for an individual by a Notary.

ADDRESSES FOR GIVING NOTICE

OWNER:

Oconee County Board of Commissioners
P.O. Box 145
23 North Main Street
Watkinsville, Georgia 30677

Phone: (706) 769-3960

CONTRACTOR:

Phone: _____

END OF SECTION

SECTION 00560

NOTICE TO PROCEED

TO: _____

Project Description

The site of the proposed WORK is in Oconee County, Georgia.

The Project consists of, but is not limited to the following major elements:

Epps Bridge Road Pump Station: Improvements to existing duplex submersible pump station to include reconstruction of wetwell bottom, installation of one new pump, rehabilitation/upgrade of pump bases, discharge piping, impellers, power supply lines and controls, installation of new by-pass pump, demolition of existing gas generator and automatic transfer switch and all related piping, conduit, by-passing and appurtenances necessary to complete the work.

Mars Hill Road Pump Station: Supply and installation of one new submersible pump to replace existing pump.

Highway 316 Pump Station: Improvements to existing submersible pump station to include replacement of check and isolation valves, installation of new by-bass connection, replacement of existing force main piping with approximately 50 linear feet (LF) of 6-inch ductile iron pipe and 200 LF of 6-inch HDPE pipe and all related by-passing and appurtenances necessary to complete the work.

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 2015 on or before _____, 2015, and you are to complete the WORK on or before _____, _____.

Dated this ____ day of _____, 2015.

Melvin Davis, Chairman
Oconee County Board of Commissioners

Receipt of the above "Notice to Proceed" is hereby acknowledged this the ____ day of _____, 2015.

CONTRACTOR NAME/TITLE

END OF SECTION

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

OWNER (Name and Address):

Oconee County Board of Commissioners
23 North Main Street
P.O. Box 145
Watkinsville, Georgia 30677
(706) 769-5120

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

CONTRACT

Date:

Amount:

Description (Name and Location): Wastewater Pumping Station Improvements, Oconee County, Georgia

BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: _____

Signature and Title

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

Attest: _____

Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.
3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
 - 3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and
 - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
 1. Surety in accordance with the terms of the Contract;
 2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.
4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
 - 4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
 - 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
 - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
 2. Deny liability in whole or in part and notify Owner citing reasons therefor.
5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.
6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
 - 6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;
 - 6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and
 - 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.
7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.
8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.
11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Definitions.
 - 12.1. Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
 - 12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone
 Surety Agency or Broker
 Owner's Representative (engineer or other party)

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

OWNER (Name and Address):
Oconee County Board of Commissioners
23 North Main Street
P.O. Box 145
Watkinsville, Georgia 30677
(706) 769-5120

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

CONTRACT

Date:
Amount:
Description (Name and Location): Wastewater Pumping Station Improvements, Oconee County, Georgia

BOND

Bond Number:
Date (Not earlier than Contract Date):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)
Name and Title:

(Space is provided below for signatures of additional parties, if required.)

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)
Name and Title:

SURETY

Surety's Name and Corporate Seal (Seal)

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title

SURETY

Surety's Name and Corporate Seal (Seal)

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title:

EJCDC No. C-615 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone

Surety Agency or Broker:

Owner's Representative (engineer or other party):

SECTION 00617

W-9

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number									
				-			-		
or									
Employer identification number									

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note. ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

Limited Liability Company (LLC). If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note. You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

- 1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.
- 2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
- 3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
- 4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
- 5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee ¹ The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ³
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity ⁴
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.ftc.gov/idtheft or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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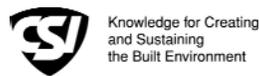
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These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to four printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;
4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.
 - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

~~A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:~~

~~1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;~~

~~2. be written on a Builder's Risk "all risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;~~

~~3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);~~

~~4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;~~

~~5. allow for partial utilization of the Work by Owner;~~

~~6. include testing and startup; and~~

~~7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.~~

~~B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.~~

~~C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.~~

~~D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any~~

~~deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.~~

~~E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.~~

~~5.07 Waiver of Rights~~

~~A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.~~

~~B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:~~

~~1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and~~

~~2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.~~

~~C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.~~

~~5.08 Receipt and Application of Insurance Proceeds~~

~~A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.~~

~~B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.~~

~~5.09 Acceptance of Bonds and Insurance; Option to Replace~~

~~A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract~~

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

~~5.10 Partial Utilization, Acknowledgment of Property Insurer~~

~~A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.~~

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a ~~Saturday~~, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. "*Or-Equal*" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other

individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. ~~Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.~~

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and
2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK;
ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (~~except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D~~), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

~~1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or~~

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. Delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. C-700, 2002 Edition) and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

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SC-1.01.A.1. Add the following language to the definition of a Claim Paragraph 1.01.A.1:

The assertion, assessment, or retention of liquidated damages by the Owner is not a Claim.

SC-16.01.A Delete Paragraph 16.01.A in its entirety and insert the following:

A. Either Owner or Contractor may request nonbinding mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The nonbinding mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for nonbinding mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

SECTION 00800

SUPPLEMENTARY GENERAL PROVISIONS

SECTION 1 - GENERAL

1.1 SUPPLEMENTS

The supplements contained in these Supplementary General Provisions modify, change, delete from, or add to the General Conditions of these CONTRACT DOCUMENTS. Where any article, paragraph, subparagraph, or clause is modified by these supplements, the unaltered provisions of that article, paragraph, subparagraph, or clause shall remain in effect. Reference made in the General Conditions to Supplemental General Conditions or Special Conditions refer to these Supplementary General Provisions.

1.2 GENERAL CONDITIONS

The General Conditions are general in scope and may refer to conditions not encountered on the work covered by these CONTRACT DOCUMENTS. Any provision of the General Conditions which pertains to a nonexistent condition and is not applicable to the work to be performed hereunder, or which conflicts with any provision of the Supplementary General Provisions or Specifications, shall have no meaning in these CONTRACT DOCUMENTS and shall be disregarded.

1.3 CONTRACT DOCUMENTS

The CONTRACT DOCUMENTS cover all matters relating to the work the Contractor is obligated to perform. The CONTRACT DOCUMENTS are organized into various parts and sections for convenience. All parts and sections of the CONTRACT DOCUMENTS are complementary, and what is called for by any shall be as binding as if called for by all.

The CONTRACT DOCUMENTS, as defined herein, form the Contract between OWNER and the CONTRACTOR for the performance of the work covered by these CONTRACT DOCUMENTS. It is agreed by the OWNER and the CONTRACTOR, as evidenced by and through execution of the Contract, that all terms of the CONTRACT DOCUMENTS shall be binding on both parties to the Contract and shall be a part of the Contract, the same as if the CONTRACT DOCUMENTS are repeated therein.

1.4 SPECIFICATIONS

No attempt has been made in the Specifications to segregate work to be performed by any trade or subcontract. Any segregation between the trades or crafts will be solely a matter for agreement between the CONTRACTOR and his employees and his SUBCONTRACTORS.

The Specifications as a whole will govern the construction of the entire work. The applicable provisions thereof will govern work to be performed under each section.

1.5 GOVERNING STANDARD SPECIFICATIONS

Standard specifications or other specifications of organizations, societies, governmental agencies, or bodies, referred to in these CONTRACT DOCUMENTS, are made a part of these CONTRACT DOCUMENTS the same as if repeated herein. Unless specifically stated otherwise, the standard shall be that adopted and published at the date of the Advertisement.

1.6 EXECUTION OF CONTRACT

The CONTRACTOR and the OWNER shall execute the prescribed Contract in six (6) counterparts, each of which shall be deemed an original document.

1.7 DIMENSIONS AND ELEVATIONS

Figured dimensions on drawings shall take precedence over measurement by scale, and detailed working drawings are to take precedence over general drawings and shall be considered as explanatory of them and not as indicating extra work.

1.8 ASSIGNMENTS

The CONTRACTOR shall not assign, in whole or part, this contract or any moneys due or to become due thereunder without the written consent of the OWNER.

SECTION 2 - DEFINITIONS (Ref. Article 1)

2.1 AGREEMENT OR CONTRACT

The written agreement between the OWNER and the CONTRACTOR for the performance of the WORK in accordance with the requirements of the CONTRACT DOCUMENTS and for the payment of the agreed consideration therefore. Whenever, in any portion of the CONTRACT DOCUMENTS, a requirement of the Contract is stated, it shall be interpreted to mean a requirement of the CONTRACT DOCUMENTS as defined herein.

2.2 CONTRACT DOCUMENTS

The Advertisement for Bids, Instructions to Bidders, Bid Form and associated documents, Bid Bond, Notice of Award, Performance Bond, Payment Bond, Agreement, General Conditions, Supplemental General Conditions, Supplementary General Provisions, Technical Specifications, Drawings, Addenda, Change Orders, Contractor's Affidavit, SAVE Affidavit and Notice to Proceed shall constitute the CONTRACT DOCUMENTS. Whenever, in any portion of the CONTRACT DOCUMENTS, the terms "Plans and Specifications" or "Specifications" or "Contract" or words of like import appear, they shall be interpreted to mean CONTRACT DOCUMENTS as defined herein.

2.3 DRAWINGS

Drawings, which are sometimes referred to herein as "plans" are defined as all (a) drawings furnished by OWNER as a basis for bids; (b) supplementary drawings furnished by OWNER to clarify and to define in greater detail the intent of the Contract Drawings and Specifications; (c) drawings submitted by the successful bidder with his bid, provided such drawings are acceptable to OWNER; (d) drawings furnished by OWNER to CONTRACTOR during the progress of the WORK; and (e) engineering data and drawings submitted by the CONTRACTOR during the progress of the WORK, provided such drawings are acceptable to OWNER.

2.4 ENGINEER

Person duly authorized to act as a representative of the OWNER to observe the construction of the WORK contemplated herein.

2.5 INFORMALITY

Any deviation in the bid proposal that does not alter the bid schedule format or place any conditions or qualifications on the bid.

2.6 OWNER: Oconee County Board of Commissioners.

2.7 OWNER'S ATTORNEY

Person duly authorized by OWNER to act in the capacity of OWNER.

2.8 AS ORDERED, AS DIRECTED, AS REQUIRED, AS PERMITTED, AS ALLOWED

Whenever in these CONTRACT DOCUMENTS the words "as ordered", "as directed", "as required", "as permitted", "as allowed", or words or phrases of like import are used, it shall be understood and agreed that the order, direction, requirement, permission, or allowance of OWNER is intended only to the extent of judging compliance with the terms of these CONTRACT DOCUMENTS. None of these terms shall imply that OWNER has any authority or responsibility for supervision of CONTRACTOR's forces or construction operations, such supervision is the sole responsibility of the CONTRACTOR.

2.9 PROJECT OBSERVER

An authorized representative of OWNER assigned to make periodic observations of the WORK performed by CONTRACTOR.

2.10 PERSON

The word "person" shall mean and include any individual, combination of individuals, partnership, society, association, joint stock company, corporation, firm, estate, receiver, trustee, assignee, referee, or any other person acting in a fiduciary or representative capacity, whether appointed by a court or otherwise.

2.11 PROVIDED

Whenever the term "provided" or "provide" is used in the Drawings or CONTRACT DOCUMENTS, it shall mean "provided complete in place", that is, "furnished and installed". Where "as shown", "as indicated", "as detailed", or other words of similar import are used, it is understood and agreed that references to the Drawings are intended unless otherwise expressly stated.

2.12 WRITTEN NOTICE

Any notice to the CONTRACTOR or OWNER by the other relative to any part of these CONTRACT DOCUMENTS in writing and considered delivered and the service thereof completed, when posted by United States Postal Service, or delivered with charges prepaid to any telegraph company for transmission to the CONTRACTOR or OWNER at the address set forth in these CONTRACT DOCUMENTS, or delivered in person to the CONTRACTOR or OWNER or his authorized representative on the Project. Any such notice shall be deemed to have been given or made as of the time of actual delivery, or in the case of mailing, when the notice should have been received in due course of posts, or in the case of telegrams, at the time of actual receipt thereof by the addressee.

SECTION 3 - SUPPLEMENTARY CONDITIONS

3.1 COPIES OF CONTRACT DOCUMENTS

Upon execution of the Agreement, the OWNER will furnish the CONTRACTOR with four (4) copies of CONTRACT DOCUMENTS and four (4) sets of Construction Drawings. Additional copies will be furnished at normal cost of reproduction.

3.2 NOTICE TO PROCEED

CONTRACTOR will be issued a written "Notice to Proceed" by OWNER upon compliance by CONTRACTOR with award procedures. The date of issuance of the "Notice to Proceed" shall be date of beginning of the Contract time.

3.3 STARTING THE PROJECT

The CONTRACTOR shall begin WORK within ten (10) days after issuance of "Notice to Proceed" and shall diligently prosecute the WORK to completion within the Contract Time. The CONTRACTOR shall notify the OWNER and ENGINEER two (2) days in advance of the date he will begin operation.

3.4 EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK

The contractor shall thoroughly and carefully examine and be familiar with these CONTRACT DOCUMENTS and site of work. The failure of the CONTRACTOR to examine the CONTRACT DOCUMENTS or the site and to acquaint himself with conditions relating to the WORK shall not relieve him from any obligation of the CONTRACT DOCUMENTS.

3.5 PERFORMANCE AND PAYMENT BONDS

Simultaneously with the execution and delivery of the Contract, the CONTRACTOR shall furnish and file with the OWNER a properly executed Performance Bond on the prescribed form in an amount equal to one hundred percent (100%) of the total Contract Price as security for the faithful performance by the CONTRACTOR of all undertakings, covenants, terms, conditions, and agreements of the CONTRACT DOCUMENTS, including compliance with performance guarantees and for the repairs and/or replacement of defective or deficient work provided under the CONTRACT DOCUMENTS for a period one (1) year after the date of final acceptance by the OWNER.

The CONTRACTOR shall also furnish and file with the OWNER, at the same time the Performance Bond is furnished, a Payment Bond on the prescribed form in an amount equal to one hundred percent (100%) of the total Contract Price as security for the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of WORK provided by the CONTRACT DOCUMENTS.

The Contract shall not be in force or binding on the OWNER until the Performance Bond and Payment Bond have been provided.

3.6 INTENT OF CONTRACT DOCUMENTS

It is the intent of these CONTRACT DOCUMENTS to prescribe a complete work and that the CONTRACTOR shall (a) furnish all labor, materials, products, supplies, tools, equipment, required to successfully execute and complete the WORK in accordance with these CONTRACT DOCUMENTS and to complete the WORK in an acceptable manner, ready for use, occupancy, or operation by OWNER within the time specified herein; and (b) carry out all duties and obligations imposed by these CONTRACT DOCUMENTS. The CONTRACT DOCUMENTS cover all matters relating to WORK which the CONTRACTOR undertakes to construct or perform. The CONTRACT DOCUMENTS are complementary, and what is called for by any part shall be as binding as if called for by all. Any reference to one part of these CONTRACT DOCUMENTS shall be construed as a reference to all parts.

3.7 ADDITIONAL WORK OR CHANGES

The OWNER may, at any time, without invalidating the Contract or any of the terms or conditions of the CONTRACT DOCUMENTS and without notice to the Sureties, make alterations, deviations, additions to, or omissions from the Drawings and other CONTRACT DOCUMENTS, including an increase or decrease of the quantity of any item or portion of the WORK, as may be deemed by the OWNER to be necessary or advisable and to require such extra WORK as may be determined by the OWNER to be required for the proper completion of the WORK as specified herein.

Should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such addition or subtraction in quantities of such items of work (i.e., difference in cost) shall not increase or decrease the total original contract price by more than twenty-five percent (25%).

Any additional work not included in this contract or intended to be included in this contract that is performed by the CONTRACTOR will be paid for as an "extra" providing the work has been previously authorized and the cost agreed upon in writing by OWNER.

Such extra work shall be subject to payment by fixing the prices and the method of payment and of doing the work, or compensation shall be provided for on the basis of reasonable cost of necessary labor and material and an allowance of fifteen (15%) percent for overhead and profit as may be stipulated by OWNER in the written authorization for the WORK. The cost may include all items of labor or materials; the use of power tools, and equipment actually used, power, and all items of cost such as public liability and Workmen's Compensation Insurance, pro rata charges for foremen; also social security, old age and unemployment insurance; however, no percentage for overhead and profit shall be allowed on items of social security, old age and unemployment insurance. Among the items considered as overhead are included insurance other than mentioned above, bond or bonds, superintendence, timekeeper, clerks, watchmen, use of small tools, incidental tools and equipment shall not exceed the charges listed in the latest edition of the "Contractor's Equipment Ownership Expenses" as published by the Associated General Contractors of America, Inc.

The CONTRACTOR shall give OWNER and ENGINEER access to all accounts, bills, payrolls, and vouchers relating to such extra work, and he agrees that he shall have no claim for compensation for such extra work in the case of items not covered by unit price unless a statement in writing of the actual cost of the same, fully itemized as to labor, materials, and other allowable costs is presented to ENGINEER before the fifteenth (15th) day of the month following that during which each specific order was complied with.

Any such changes will be set forth in a Change Order which will specify the change in WORK to be done, adjustment to Contract time, and the basis of compensation for the changes. A Change Order will not become effective until approved by the OWNER and accepted by the CONTRACTOR. After approval and acceptance, the Change Order will become a part of the CONTRACT DOCUMENTS.

3.8 INSURANCE REQUIREMENTS

The CONTRACTOR shall take out and maintain during the life of this Contract the various types and amount of insurance as required to protect the Public, the CONTRACTOR, the OWNER, officials and representatives of OWNER, representatives of all utility companies, state or federal department representatives, and any SUBCONTRACTOR performing work covered by this Contract from claims for property damages which may arise from operations under this Contract, whether such operations be by himself or by any SUBCONTRACTOR or anyone directly employed by either of them.

Without restricting the obligations and liabilities assumed under the CONTRACT DOCUMENTS, the CONTRACTOR shall, at his own expense, purchase and maintain in force until final acceptance of his work, the below listed forms of insurance coverage:

Certificates in quadruplicate from the insurance carrier stating the limits of liability and expiration date shall be filed with OWNER before operations begin. **Such certificates shall not merely name the types of policy provided, but shall contain a separate express statement of compliance with each of the requirements as set forth in this Section.**

All policies as hereinafter required shall be so written that the OWNER will be notified of cancellation or restrictive amendments at least thirty (30) days prior to the effective date of such cancellation or amendment.

Item A - Worker's Compensation and Employer's Liability Insurance as required or specified by Georgia State Law except that the policy must include employee's liability with a minimum limit of \$100,000 each accident, \$100,000 disease each employee with a \$500,000 disease policy limit.

This Contract shall be null and of no effect unless the CONTRACTOR shall, before entering upon the performance thereof, secure Worker's Compensation Insurance for the benefit of and keep insured, during the life of said Contract, all employees engaged thereon who are required to be insured by the laws of the State of Georgia. In case the CONTRACTOR shall subcontract any portion of the WORK, he shall require that all employees of the SUBCONTRACTOR are properly covered by such Worker's Compensation Insurance.

Item B - Comprehensive General Liability Insurance coverage shall include the following:

- 1) Property damage to existing structures and equipment;
- 2) Direction Operations (including coverage for underground, explosion and collapse hazards)
- 3) Independent Contractors
- 4) Completed Operations/Products (To be maintained for a period of at least twelve (12) months from the date of Substantial Completion)
- 5) Contractual Liability (Blanket or specific coverage for the indemnification agreement as set forth in the General Conditions)
- 6) Personal Injury Liability Coverage
- 7) Broad Form Property Damage Coverage
- 8) Care, Custody and Control Coverage
- 9) Broad Form Blanket Contractual Liability

Comprehensive General Liability Insurance shall have a minimum limit of \$1,000,000 per occurrence combined single limit for bodily injuries liability and property damage liability. The original policies for OWNER's Protection Liability Insurance shall be delivered to the OWNER prior to the start of construction.

Item C - OWNER's Protection Liability Insurance in the name of OWNER including the interest of the Consulting Engineers, Georgia D.O.T. and other agencies and utilities as additional insured.

- 1) This policy shall have minimum limits of \$1,000,000 per occurrence combined single limit for bodily injury liability and property damage liability and shall include owned vehicles, hired and non-owned vehicles. Underlying coverage must equal \$1,000,000. Excess umbrella coverage must equal \$1,000,000.

Item D - Builder's Risk and Installation Floater

- 1) Builder's Risk

This insurance shall be written in completed value form and shall protect the CONTRACTOR, the OWNER and Owner's representatives against risk of damage to building, structures, and materials and equipment, excluding excavation, paving and related work, not otherwise covered under Installation Floater Insurance, from the perils of fire and lightning, the perils included in the standard extended coverage endorsement, and the perils of vandalism and malicious mischief. The amount of such insurance shall not be less than the insurance value of the WORK at completion less the value of materials and equipment insured under Installation Floater Insurance.

Equipment such as pumps, heat exchangers, compressors, tanks, motors, switchgear, transformers, panel boards, control equipment, and other similar equipment shall be insured under Installation Floater Insurance when the aggregate value of this equipment exceeds \$10,000.

Builder's Risk Insurance shall provide for losses to be payable to the CONTRACTOR and the OWNER, as their interests may appear.

2) Installation Floater

This insurance shall protect the CONTRACTOR, the OWNER and their respective officials and representatives from all insurable risks to physical loss or damage to materials and equipment not otherwise covered under Builder's Risk Insurance, while in warehouse or storage areas, during installation, during testing, and after WORK is completed. It shall be of the "all risks" type with coverage designed for the circumstances which may occur in the particular work included in this Contract. The coverage shall be for an amount not less than the value of the WORK at completion, less the value of the materials and equipment insured under Builder's Risk Insurance.

Installation Floater Insurance shall provide for losses to be payable to the CONTRACTOR and the OWNER as their interests may appear.

If the aggregate value of the equipment furnished under the Contract is less than \$10,000, such equipment may be covered under Builder's Risk Insurance and if so covered, this Installation Floater may be omitted.

Certificates of Insurance covering Installation Floater Insurance shall quote the insuring agreement and all exclusions as they appear in the policy, or in lieu of certificate, copies of the complete policy may be submitted.

Item E - Insurance Required by Others - Such Protective and Contractual Bodily Injury Liability Insurance and such Protective and Contractual Property Damage Liability Insurance as shall be required by any public bodies or utility companies whose property, facilities, or rights-of-way may be affected by the WORK under this Contract.

If any part of the WORK is sublet, insurance of the same types and limits as required by Items A, B, C, D, and E shall be provided by or on behalf of the SUBCONTRACTOR(s) to cover that part of the WORK they have contracted to perform.

3.9 SOCIAL SECURITY

The CONTRACTOR shall be and remain an independent CONTRACTOR with respect to all services to be performed hereunder and agrees to and does hereby accept full and exclusive liability for the payment of any and all contributions or taxes for social security, unemployment insurance, or old age retirement benefits, pensions, or annuities not or hereafter imposed under any State or Federal law which are measured by wages, salaries, or other enumeration paid to persons employed by the CONTRACTOR on work performed under the terms of this Contract, and further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated under said respective laws by any duly authorized State or Federal officials; and said CONTRACTOR also agrees to indemnify and save harmless the OWNER from any such contributions or taxes or liability thereof.

3.10 ADMINISTRATION OF OVERTIME WORK

It is the intent of this Contract that the CONTRACTOR provide the necessary work force to complete the work during normal working hours within the Contract time. Normal working hours shall be defined as a day not greater than ten hours (8:00 a.m. to 6:00 p.m.) Monday through Friday with trade recognized legal holidays accepted.

No work beyond the normal working hours defined above requiring the presence of the ENGINEER or Construction Observer will be permitted, except in the case of an emergency, without the written permission of the OWNER.

Should the CONTRACTOR require the services of the OWNER's work force beyond the OWNER's normal working hours of 8:00 a.m. to 6:00 p.m. Monday through Friday, the CONTRACTOR will compensate the OWNER for the overtime pay cost incurred. A minimum of four (4) hours will be charged to the CONTRACTOR for each occurrence. The OWNER will issue a work order to the CONTRACTOR for each request for overtime services. The CONTRACTOR shall reimburse the OWNER for all such expenses by certified check or cashier check, within thirty (30) days of invoicing. Should the CONTRACTOR desire to perform scheduled overtime work, he shall make a written request to the OWNER for permission to do so. The OWNER and ENGINEER will issue a Field Order to the CONTRACTOR for the cost of all resultant project administrative and construction observation costs. The CONTRACTOR shall reimburse the OWNER by certified check or money order for all such costs incurred within thirty (30) days of invoicing.

Failure of the CONTRACTOR to reimburse the OWNER for overtime work within the specified time will result in the amount due being withheld from the CONTRACTOR's latest pay request.

3.11 SUBCONTRACTS

The CONTRACTOR may subcontract portions of the WORK, however, he shall not award any work to any SUBCONTRACTOR without prior written approval of the OWNER. The CONTRACTOR shall give his personal attention to the fulfillment of the Contract and shall at all times keep the WORK under his control.

3.12 COOPERATION WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, ETC.

The CONTRACTOR must be aware that due to the laws of the State of Georgia, he shall be responsible for making all necessary arrangements with the governmental departments, public utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the WORK so that such items may be properly shored, supported and protected, or the CONTRACTOR shall comply with requirements of such parties on the Project in order that they may perform their necessary work, and shall pay all charges and fees made by such parties for this work.

The CONTRACTOR's attention is called to the fact that there may be delays on the project due to work done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.

The CONTRACTOR shall have made himself familiar with all codes, laws, ordinances, and regulations which in any manner affect those engaged or employed in the WORK, or materials and equipment used in or upon the WORK, or in any way effect the conduct of the WORK, and no plea of misunderstanding will be considered on account of his ignorance thereof.

3.13 RECORD DOCUMENTS AND DRAWINGS

The CONTRACTOR shall maintain at the site of the WORK, two (2) sets of CONTRACT DOCUMENTS and Drawings throughout the course of the project. One (1) set of CONTRACT DOCUMENTS and Drawings will remain clean without markup for record purposes. The CONTRACTOR shall use the additional set for marking measurements, on-site changes, items of construction that are actually used, and other conditions as they are encountered during the course of the WORK. This marked-up set of CONTRACT DOCUMENTS and Drawings shall consist of red-lined copies of plans and shop drawings, shall indicate actual field dimensions, shall represent the WORK as actually constructed, and shall be recorded on a daily basis. Failure to produce these records on request of the ENGINEER shall constitute grounds to halt construction with no time extension until steps are taken to see that these records are being properly made.

Prior to the final payment, the CONTRACTOR shall furnish to the ENGINEER two (2) neatly marked sets of construction plans which accurately depict the "as-built" conditions and locates all valves, hydrants, wyes, manholes, cleanouts, lines, laterals, taps, meters, service connections, and pump stations, equipment, materials or parts, stockpiles and other constructed appurtenances. The ENGINEER shall promptly notify the CONTRACTOR in writing if additional information is required.

3.14 PUBLIC CONVENIENCE AND SAFETY

CONTRACTOR shall at all times conduct the WORK in such a manner as to ensure the least practicable obstruction to public travel. The convenience of the general public and of the residents along and adjacent to the WORK area shall be provided for in a satisfactory manner, consistent with the operation and local conditions. Traffic control or warning signs shall be placed immediately adjacent to the WORK, in a conspicuous position, at such locations as traffic demands.

If at any time, in the opinion of the ENGINEER, the WORK is not properly lighted, barricaded, and in all respects safe, to public travel or adjacent property, public or private, and if under such circumstances the CONTRACTOR does not or cannot immediately put the same into proper and approved condition, or if the CONTRACTOR or his representative is not upon the grounds so that he can be immediately notified of the insufficiency of safety precautions, then the OWNER, on recommendation of the ENGINEER, may put the WORK into a condition that shall be considered safe. The CONTRACTOR shall pay all expenses of labor and materials as may have been used for this purpose by him or by the OWNER. Such action of the ENGINEER or OWNER, or their failure to take such action, shall in no way relieve the CONTRACTOR of the responsibility of any cost, loss or damage by any party sustained on account of the insufficiency of the safety precautions.

3.15 SHOP DRAWINGS AND SCHEDULES

At least five (5) days prior to the preconstruction conference, the CONTRACTOR shall submit to OWNER a proposed program of operation, showing how he proposes to complete his WORK within the specified time limit. This program shall outline the proposed sequence of operation, the rates of progress, projected monthly draws, and the dates when his WORK will be sufficiently advanced to permit the installation of WORK under other contracts (if applicable). The WORK under this contract shall be so scheduled that as sections are completed they can be placed into useful operation with a minimum of delay. The program shall be subject to the approval of OWNER and ENGINEER.

CONTRACTOR, at his own expense, shall submit for approval to ENGINEER, six (6) complete sets of shop drawings and schedules required for the WORK, and no WORK shall be fabricated by the CONTRACTOR, except at his own risk, until such approval has been given. Upon approval, ENGINEER shall return two (2) sets of shop drawings to CONTRACTOR and the remaining four (4) sets will be retained by ENGINEER.

CONTRACTOR shall submit all drawings and schedules sufficiently in advance of construction requirements to allow ample time for checking, correcting, resubmitting, and rechecking; and no claim by CONTRACTOR for delays arising from his failure in this respect will be allowed.

All shop drawings submitted, if not prepared by CONTRACTOR, must bear the stamp of approval of CONTRACTOR as evidence that the drawings have been checked by CONTRACTOR. Any submissions without this stamp of approval will not be considered and will be returned to CONTRACTOR for resubmission.

Where shop drawings as submitted by CONTRACTOR indicate a departure from the Contract which ENGINEER deems to be a minor adjustment in the interest of OWNER, not involving a change in the Contract Price or Contract Time, ENGINEER shall approve the drawing, but the approval will contain, in substance, the following notation:

"The modification shown on the attached drawings is approved in the interest of the OWNER to effect an improvement for the Project and is accepted with the understanding that it does not involve any change in the Contract Price or Contract time; that it is subject generally to all Contract stipulations and covenants; and that it is without prejudice to any and all rights of the OWNER under the Contract and Bond or Bonds."

Approval by ENGINEER of shop drawings will be general and shall not relieve CONTRACTOR from the responsibility for adherence to the Contract, nor shall it relieve him of the responsibility for any error which may exist.

3.16 WORK IN INCLEMENT WEATHER

CONTRACTOR is presumed to have taken all difficulties due to weather conditions into consideration in preparing his proposed Contract Price and in establishing his time for completion of the WORK under this Contract. He must be prepared and must take all precautions to protect WORK from unfavorable weather and extremes of temperature, whether hot or cold. He shall provide approved facilities for protecting against unfavorable weather at all times, to the entire satisfaction of OWNER.

Completion time will not be extended for normal bad weather. Time for completion as stated in the CONTRACT DOCUMENTS includes time due to allowance for calendar days on which work cannot be performed out-of-doors. For the purpose of this Contract, CONTRACTOR agrees that he may expect to lose calendar days due to weather in accordance with the following table:

January 14 days	May 6 days	September 2 days
February 14 days	June 3 days	October 3 days
March 10 days	July 4 days	November 5 days
April 7 days	August 2 days	December 9 days

If the total accumulated number of working days lost to the weather for any month exceeds the total accumulated number to be expected for that month, time for completion will be extended by the number of calendar days needed to include the excess number of working days lost. All requests for time extensions must be submitted in writing to the OWNER by the 15th day of each month following the month that had excessive weather delays. No consideration will be given to late requests. No changes in the contract sum will be authorized because of adjustment of contract time due to weather.

3.17 ONE YEAR CORRECTION PERIOD

The CONTRACTOR shall warrant the work for a period of one (1) year after the date of substantial completion. One month prior to the end of the one-year warranty period, an eleven (11) month inspection shall be held at the job site with the OWNER, CONTRACTOR, and ENGINEER. The purpose of this inspection shall be to identify and correct work which has become defective during the Warranty Period. The correction of such work shall be prompt and at the CONTRACTOR's expense.

3.18 PROGRESS PAYMENT APPLICATION

CONTRACTOR shall submit to ENGINEER, on forms furnished by ENGINEER, no later than the 25th day of each month, a progress payment request for the amount of work accomplished, products furnished, and products stored at the site during the previous month. Progress payment request shall be signed by the CONTRACTOR and be supported by such data as OWNER may reasonably require. If payment is requested for products not incorporated in the WORK, but delivered and suitably stored at or near the site, the progress payment request shall also be accompanied by such supporting data, satisfactory to OWNER, as will establish OWNER's title to said products and protect his interest therein, including appropriate insurance.

ENGINEER shall, within ten (10) days after receipt of each progress payment request, either indicate in writing his recommendation of the payment request, or return the progress payment request to CONTRACTOR indicating in writing his reasons for refusing to approve it.

A progress payment will not be made when, in the judgment of OWNER or ENGINEER, the WORK is not proceeding in accordance with the provisions of these CONTRACT DOCUMENTS.

OWNER shall, within thirty (30) days after approval of progress payment request, pay CONTRACTOR a partial payment based on the approved progress payment request, less the retainage and other deductions pursuant to the terms of these CONTRACT DOCUMENTS (Reference Section 00510, Article 5 - Payment Procedures).

It is understood and agreed that the approval of the progress payment request and the paying of a partial payment shall not be construed as acceptance of any work, materials, or products and shall not relieve CONTRACTOR in any way from his responsibilities and obligations under these CONTRACT DOCUMENTS.

3.19 RETAINAGE AND FINAL PAYMENT APPLICATION

Upon completion and after final acceptance of the WORK by the OWNER, the ENGINEER will authorize the preparation of a final pay request for the work done by CONTRACTOR and the value thereof. Preparation of the final price and final payment request will not be authorized until the affidavits, release of liens and other statements and certifications required of CONTRACTOR under these CONTRACT DOCUMENTS have been received by OWNER. ENGINEER will submit to

OWNER the final price and final payment request, together with a certification stating that the work is complete and in substantial conformance with these CONTRACT DOCUMENTS. The entire balance found to be due CONTRACTOR, including retained percentages, but except such sums as may be retained under any provisions of these CONTRACT DOCUMENTS, will be paid to CONTRACTOR.

Retainage shall be in accordance with Georgia State Law, O.C.G.A. § 13-10-80, as amended.

Final payment to CONTRACTOR by OWNER shall not serve to release CONTRACTOR or his sureties from their obligation or responsibilities under or in connection with these CONTRACT DOCUMENTS.

Acceptance by CONTRACTOR of final payment shall be and shall operate as a release to OWNER of all claims and all liability to CONTRACTOR other than claims in stated amounts as may be specifically excepted by CONTRACTOR for all things done or furnished in connection with work under these CONTRACT DOCUMENTS and for every act and neglect of OWNER and others relating to or arising out of this work.

3.20 EASEMENTS AND RIGHTS-OF-WAY

The WORK herein specified is located in Oconee County, Georgia. The CONTRACTOR's operations must be confined inside such property, rights-of-way or easement lines.

Whenever it is required as a part of this contract to perform work within the limits of private property easements or in rights-of-way, such work shall be done in conformity with all permits and agreements between the OWNER and the owners of such, and whether or not such a condition be part of the agreement, care shall be taken to avoid injury to the premises entered, which premises shall be left in a neat and orderly condition by the removal of rubbish and the grading of surplus materials and the restoration of said private property to the same general condition as existed prior to the start of construction. The CONTRACTOR shall not (without the consent from the proper parties) enter or occupy with men, tools, or equipment, any land outside the rights-of-way or private property.

3.21 STORING OF MATERIALS

All materials and equipment required in the WORK may be stored in areas directed by the OWNER, but all such materials, tools, and machinery shall be neatly and compactly piled in such a manner as to cause the least inconvenience to the property owners and the traffic. All fire hydrants must, at all times, be kept free and unobstructed and water and gas shut-off boxes, underground power and telephone line manholes must be left uncovered by such materials.

Materials, tools, and machinery shall not be piled or placed against shade trees unless such trees shall be amply protected against injury therefrom. All materials, tools, machinery, etc. stored upon public thoroughfares must be provided with sufficient warning lights at night time to alert traffic of such obstruction.

3.22 USE OF UTILITIES OR STRUCTURES

The OWNER shall have the right to connect any sewer, conduit, pipe line, or structure within the WORK and its appurtenances herein described, or to grant permits to make connection therewith, at any time after the item has been tested and approved by the ENGINEER prior to final acceptance by OWNER. The CONTRACTOR shall not interfere with the making of such connections, and no extra allowances shall be made to said CONTRACTOR on account thereof.

3.23 USE OF STREETS

During the process of the WORK, the CONTRACTOR shall make ample provision for both vehicular and foot traffic on any public road, and shall indemnify and save harmless the OWNER from any expense whatsoever due to his operations over said roadways. The CONTRACTOR shall also provide free access to all driveways, fire hydrants, water and gas valves, etc., located along the line of his WORK. Gutters and waterways must be kept open or other provisions made for the removal of storm water. Street intersections may be blocked by one-half at a time, and the CONTRACTOR shall lay and maintain temporary driveways, bridges, and crossings, such as in the opinion of the ENGINEER are necessary to reasonably accommodate the public. In the event of the CONTRACTOR's failure to comply with these provisions, the OWNER may cause the same to be done, and still deduct the cost of such work from any moneys due or to become due the CONTRACTOR under this new agreement, but the performance of such work by the OWNER or at its instance, shall serve in no way to release the CONTRACTOR from his general or particular liability for the safety of the public or the WORK.

No pavement cuts are to be left unfilled overnight, except in emergencies, and in such cases, adequate precautions must be exercised to protect traffic.

3.24 PROTECTION OF EXISTING BUILDINGS AND STRUCTURES

The CONTRACTOR shall, at his own expense, shore up and protect any buildings, bridges, or other public or private structures which may be encountered or endangered in the execution of the WORK, and that may not be otherwise provided for, and he shall repair and make good any damages caused to any such property by reason of his operations. No payment will be made for said work or material except that such lumber as the ENGINEER may order left in place as permanent supports for these structures, shall be paid for as provided in the Specifications.

3.25 ACCESS ROADS

Streets, roads, and drives used by the CONTRACTOR for access to and from the sites of his work shall be protected from damage in excess of that caused by the normal traffic of vehicles used for or in connection with construction work. Any such damage done shall be repaired immediately and left in good condition at the end of the construction period. During dry periods of weather, dirt roads used for access to and from work sites shall be watered periodically to eliminate and control dust.

3.26 LINE AND GRADE

Alignment and grade shall be the responsibility of the CONTRACTOR.

3.27 WATER SUPPLY

All water for construction purposes, as well as the expense of having the water conveyed about the WORK, shall be provided by the CONTRACTOR and the cost of this work shall be included in the Unit or Lump Sum price bid for the various Items of the WORK to be done under this Contract except as indicated in Division 01. The source, quality, and quantity of water furnished shall, at all times, be acceptable to all governing agencies and the ENGINEER.

3.28 SEWAGE AND WATER FLOWS

The CONTRACTOR shall furnish all the necessary equipment, shall take all necessary precautions and shall assume the entire cost of handling and properly disposing of any water, sewage, seepage, storm, surface, and flood flows which may be encountered at any time during the construction of the WORK and in such manner as to not endanger or damage property. The manner of providing for these flows shall meet with the approval of the ENGINEER and the entire cost of said work shall be included in the Unit or Lump Sum Prices bid for the various Sections of the WORK to be done under this Contract.

END OF SECTION

SECTION 00840

ADMINISTRATIVE AND PROCEDURAL ITEMS AND FORMS

PART 1 GENERAL

1.01 This section of the CONTRACT DOCUMENTS references the various forms and other documents that will become a part of these CONTRACT DOCUMENTS during the course of the WORK.

PART 2 MATERIALS

2.01 FORMS AND DOCUMENTS

- A. Partial Payment Estimate
- B. Contractor's Affidavit and Lien Waiver
- C. Contract Change Order
- D. Field Order
- E. Statement of Substantial Completion

PART 3 EXECUTION

3.01 ENGINEER shall provide CONTRACTOR with sufficient copies of the above listed forms and/or documents where applicable for submittal by CONTRACTOR during course of the WORK. (Examples of the listed forms are included in this Section. CONTRACTOR may use these and/or photo copies of same for submittal)

3.02 ENGINEER shall use these forms for administrative and procedural duties. (Examples of the listed forms are included in this section)

END OF SECTION

PARTIAL PAYMENT ESTIMATE	CONTRACT NO. _____
	PARTIAL PAYMENT ESTIMATE NO. _____
	PAGE ____ OF ____.

OWNER: Oconee County Board of Commissioners, Oconee County, Georgia	CONTRACTOR: _____	PERIOD OF ESTIMATE FROM _____ TO _____
--	-------------------	---

CONTRACT CHANGE ORDER SUMMARY			ESTIMATE
NO.	ADDITIONS (\$)	DEDUCTIONS (\$)	
			1. Original Contract _____
			2. Change Orders _____
			3. Revised Contract (1 + 2) _____
			4. Work Completed* _____
			5. Stored Materials* _____
			6. Subtotal (4 + 5) _____
			7. Retainage _____
			8. Previous Payments _____
			9. Amount Due (6-7-8) _____
TOTALS	_____	_____	* Detailed breakdown attached.
NET CHANGE	_____	_____	

CONTRACT TIME		
Original (days) _____ Revised _____ Remaining _____	On Schedule Yes _____ No _____	Starting Date _____ Projected Completion _____

<p>CONTRACTOR'S CERTIFICATION: The undersigned Contractor certifies that to the best of their knowledge, information and belief the work covered by this payment estimate has been completed in accordance with the contract documents, that all amounts have been paid by the Contractor to his subcontractors and suppliers for work for which previous payment estimates were issued and payments received from the Owner, and that current payment shown herein is now due.</p> <p>Contractor _____ By _____ Date _____</p> <p>APPROVED BY OWNER: Owner _____ By _____ Date _____</p>	<p>ENGINEER'S STATEMENT: The undersigned states that to the best of their knowledge and belief, the quantities shown in this estimate are correct.</p> <p>Engineer: PRECISION PLANNING, INC.</p> <p>By _____ Date _____</p>
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Oconee County Board of Commissioners, Georgia

CONTRACTOR'S AFFIDAVIT AND LIEN WAIVER

WHEREAS, _____ (CONTRACTOR) has been paid in full by the Oconee County Board of Commissioners, Georgia (OWNER) for labor, materials, and/or equipment furnished under a contract dated _____, except as contained on the attached payment request.

AND WHEREAS, said labor, materials, and/or equipment was applied to real property located in Oconee County, Georgia which is owned by OWNER.

THEREFORE, in consideration of the reliance of OWNER upon this agreement and final payment by OWNER, the CONTRACTOR does hereby:

1. Certify to OWNER that all subcontractors and suppliers to the project have been paid in full.
2. Release, waive, and forever quitclaim unto the OWNER any and all manner of liens CONTRACTOR now has or may acquire in the real property associated with Project.
3. Agree to indemnify and hold harmless OWNER, its successors or assigns, against any loss claim or lien asserted by a subcontractor or supplier against OWNER or against the real property associated with Project.

IN WITNESS WHEREOF, CONTRACTOR has caused this release to be signed by its duly authorized owner, partner, or corporate officer on the ____ day of _____, 20__.

Sworn to and subscribed

before me this ____
day of _____, 20__.

(NAME OF CONTRACTOR)

By: _____

Attest: _____

Notary Public

CONTRACT CHANGE ORDER

Contract No.	Order No.	Date:
Project Title: Wastewater Pumping Station Improvements		State: Georgia
Owner: Oconee County Board of Commissioners		County: Oconee

TO: _____
 (Contractor)

You are hereby requested to comply with the following changes from the contract plans and specifications.

Description of Changes (Supplemental Plans & Specs. Attached)	Decrease In Contract Price	Increase In Contract Price
TOTAL		

Justification: _____

Previous Contract Amount: _____ \$ _____
 Amount of Change Order: _____ \$ _____
 Current Contract Amount: _____ \$ _____

Previous Contract Time Days: _____ Date: _____
 Change in Contract Time Days: _____
 Current Contract Time Days: _____ Date: _____

REQUESTED: _____
 (Owner) (Date)
 RECOMMENDED: _____
 (Precision Planning, Inc.) (Date)
 ACCEPTED: _____
 (Contractor) (Date)

This document will be used as a record of any changes to the original construction contract.

STATEMENT OF SUBSTANTIAL COMPLETION

Project: Wastewater Pumping Station Improvements

Engineer's Project No: _____

Contractor: _____

Contract For: _____ Contract Date: _____

This Statement* of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

To: _____
OWNER

And To: _____
CONTRACTOR

The Work to which this Statement* applies has been observed by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

Date of Substantial Completion

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. When this Statement* applies to a specified part of the Work the items in the tentative list shall be completed or corrected by CONTRACTOR within _____ days of the above date of Substantial Completion.

Executed by ENGINEER on _____, ____.

By: _____

The CONTRACTOR accepts this Statement* of Substantial Completion on _____, ____.

Contractor

By: _____

The OWNER accepts the work or designated portion thereof as substantially complete and will assume full possession thereof on _____, ____.

By: _____

*A PROFESSIONAL ENGINEER'S STATEMENT OF CONDITIONS COMPRISES A DECLARATION OF HIS PROFESSIONAL JUDGEMENT. IT DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, NOR DOES IT RELIEVE ANY PARTY OF HIS RESPONSIBILITY TO ABIDE BY CONTRACT DOCUMENTS, APPLICABLE CODES, STANDARDS, REGULATIONS AND ORDINANCES.

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This Section describes the methods by which measurement will be made of the quantities for which payment will be made for the PROJECT.
- B. The project is to be bid as a unit price contract.

1.02 MEASUREMENT OF WORK

- A. WORK shall be measured by the ENGINEER or his representative, with assistance from the CONTRACTOR prior to preparation of a payment request by the CONTRACTOR.
- B. Unit quantities that are measured in place shall be measured monthly. The CONTRACTOR shall give the ENGINEER a minimum of two days notice for making all required measurements.
- C. Materials that must be measured as delivered shall be measured at the time of delivery by the ENGINEER or his representative; the CONTRACTOR shall provide sufficient advance notice so that such measurements can be made.
- D. WORK completed shall be measured for completion against the schedule of values provided by the CONTRACTOR in accordance with the General Conditions. Related work necessary for a complete and operational job, such as relocation of mail boxes removal of trees, relocation of utilities, field engineering, clearing and grubbing, traffic control, etc., not specifically identified as a pay item shall be included in the unit price bid. No additional payments will be made for such activities.

1.03 PROGRESS PAYMENTS

- A. Progress payments shall be based on the quantity of units installed.
- B. All items of WORK not specifically listed in the Bid Schedule shall be considered incidental to the construction, and the cost of all such work and material shall be included in the prices bid for various items listed.
- C. All items listed for measurement and payment shall include all machinery, plant, materials and labor, etc., to successfully and satisfactorily complete WORK specified.
- D. Payment: The CONTRACTOR will receive payment only for the items listed in the Bid Schedule of his contract, and no separate payments will be made for the work under any section of the CONTRACT DOCUMENTS except as provided for in the Bid Form. Where measurements are required to be made by the ENGINEER, for the payment of a pay item, the failure of the CONTRACTOR to give the adequate notification or failure of the CONTRACTOR to give the ENGINEER assistance for the measurement shall result in the forfeiture of payment for the work or item which was not measured.

- E. WORK to be paid for as a "Lump Sum" shall be measured for completion against the "Schedule of Values" provided by the CONTRACTOR. The "Schedule of Values" shall be submitted at the preconstruction conference and shall include quantities and prices of items aggregating the total "Lump Sum" and will subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction.

PART 2 PRODUCTS

2.01 STORED MATERIALS

Partial payment shall be made for approved materials stored at the project site, provided invoices for said materials are furnished in accordance with payment request submittal.

PART 3 EXECUTION

3.01 GEOTECHNICAL TESTING

The basis of payment for this item shall be a lump sum allowance. The soils technician shall be chosen by the OWNER. The technician shall make periodic site visits, scheduled by the ENGINEER, to verify compaction of trenches is in conformance with Oconee County Standards and the Drawings. All incidental overhead/processing/handling costs incurred by the CONTRACTOR for the geotechnical testing cost allowance shall be included in the unit prices bid per linear foot of the various sizes and type of pipe laid as provided for in the Bid Schedule. If additional compaction tests are required as a result of poor compaction of trenches, the additional cost for said tests shall be the responsibility of the CONTRACTOR.

3.02 ROCK REMOVAL

- A. Quantities for rock removal shall be expressed in cubic yards, as defined below, in accordance with the plans and specifications.
- B. If rock is encountered, the CONTRACTOR is to expose the rock for the length of the proposed trench. The OWNER or ENGINEER shall then attain sufficient topographic data to establish the limits of the rock to be excavated.
- C. The quantity of rock to be paid for shall be calculated from the upper surface data obtained to one foot below the pipe invert multiplied by trench width as allowed in the plans and specifications for each size pipe.

3.03 EPPS BRIDGE ROAD PUMP STATION

The basis of payment for this item shall be lump sum to include all labor, equipment and materials, excavation, cleaning, electrical, by-passing of sewer flows, piping, gas service, gravel or pavement repair, installation and connection of equipment, including, but not limited to, fittings, valves, pumps and electrical components, concrete, demolition of existing facilities, site dressing, grassing, cleanup, temporary erosion control, equipment and all other items as specified or indicated in the CONTRACT DOCUMENTS.

3.04 MARS HILL ROAD PUMP STATION

The basis of payment for this item shall be lump sum to include removal and delivery of existing pump and furnishing, installation, testing and start-up of one (1) submersible pump.

3.05 HIGHWAY 316 PUMP STATION

The basis of payment for this item shall be lump sum to include all labor, equipment and materials, excavation, cleaning, by-passing of sewer flows, relocation of existing electrical components, piping, gravel drive repair, installation and connection of equipment, concrete, demolition of existing facilities, site dressing, grassing, cleanup, temporary erosion control, equipment and all other items as specified or indicated in the CONTRACT DOCUMENTS.

3.06 EXTRA WORK, IF AUTHORIZED IN WRITING BY OWNER

A unit price shall be obtained for additional crushed stone bedding for pipe, the extent of which is presently unknown. The price bid shall include the crushed stone bedding, labor and equipment required for the installation of the additional bedding, excavation, dewatering, protection of existing utilities, cleanup and all work incidental to the construction of additional crushed stone bedding.

END OF SECTION

SECTION 01050

FIELD ENGINEERING

PART 1 GENERAL

1.01 SCOPE OF WORK

WORK covered in this Section includes the surveying and field engineering required to complete the project and meet the provisions of this document.

1.02 QUALITY CONTROL

CONTRACTOR will employ a Land Surveyor registered in the State of Georgia and acceptable to the OWNER/ENGINEER.

1.03 SUBMITTALS

- A. Submit name, address, telephone number and registration number of surveyor prior to beginning work.
- B. Upon request, submit documentation verifying accuracy of survey work. Documentation may include, but is not limited to, original field notes, worksheets, cutsheets, etc.
- C. Submit at least two sets of prints of "as-constructed" drawings with a surveyor's certificate verifying that elevations and locations are in conformance with the contract drawings.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 SURVEY REQUIREMENTS

A. Construction Staking

The CONTRACTOR shall provide all construction staking using recognized surveying and engineering practices. The surveyor will locate lines, grades and locations called for in the contract drawings. The OWNER will provide a suitable number of benchmarks and monuments for the CONTRACTOR to use as a reference.

B. "As Constructed Drawings"

CONTRACTOR shall maintain record drawings in accordance with the Supplementary General Provisions of these CONTRACT DOCUMENTS. The final "as constructed" drawings will show the horizontal location of all manholes, structures, etc. All horizontal locations shall be referenced to the established coordinate systems. The elevations of all gravity sewers, structure inverts, structure tops, shall be shown. The ENGINEER will provide two sets of prints for the CONTRACTOR's use in completing this work.

END OF SECTION

SECTION 01070

ABBREVIATIONS

PART 1 GENERAL

1.01 GENERAL

Wherever in these Specifications and CONTRACT DOCUMENTS the abbreviations or pronouns in place of them are used, the intent and meaning shall be interpreted as specified herein.

1.02 ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ANSI	American National Standards Institute
APHA	American Public Health Association
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
CFR	Code of Federal Regulations
CRSI	Concrete Reinforcing Steel Institute
EPA	Environmental Protection Agency
FS	Federal Specifications
MSS	Manufacturer's Standardization Society of the Valve and Fitting Industry
MUTCD	Manual on Uniform Traffic Control Devices
NBS	National Bureau of Standards
NCPI	National Clay Pipe Institute
NCSA	National Crushed Stone Association
NSF	National Sanitation Foundation
OSHA	Occupational Safety and Health Administration
PCI	Prestressed Concrete Institute
SSPC	Steel Structures Painting Council
WEF	Water Environment Federation

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Pre-Bid Submittal for Equipment and Materials

1. Equipment model numbers or catalog numbers are listed in the specifications to identify a standard or quality required in this project. Alternate equipment or materials may be utilized by and furnished by the CONTRACTOR when such equipment or material has been approved by the OWNER. Pre-bid submittals shall be submitted to the ENGINEER for evaluation, and he shall recommend to the OWNER whether the equipment or material should be approved or disapproved. Submittals shall be made at least fifteen (15) calendar days prior to the bid opening; and if approved, the approval will be issued by addendum. Submittals made less than fifteen (15) calendar days prior to the bid opening will not allow adequate time for evaluation, and will not be considered for inclusion in the project.
2. *THE PRE-BID SUBMITTALS SHALL LIST ANY AND ALL DEVIATIONS FROM ITEMS SPECIFIED, AND THE ADVANTAGES TO BE DERIVED IF THE DEVIATION IS APPROVED. IF NO DEVIATIONS ARE NOTED, IT WILL BE ASSUMED THAT NO SUCH DEVIATIONS EXIST, AND THE FINAL SUBMITTALS WILL ALLOW NO DEVIATIONS.*
3. Pre-Bid Submittals shall be required for any items different than specified.
4. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or those substitute or “or-equal” materials and equipment approved by ENGINEER and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function and quality to be met and any proposed substitute or “or-equal” item. No item of material or equipment will be considered by ENGINEER as a substitute or “or-equal” unless written request for approval has been submitted by Bidder and has been received by ENGINEER at least 15 days prior to the date for receipt of Bids. Each such request shall conform to requirements of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. ENGINEER’s decision of approval or disapproval of a proposed item will be final. If ENGINEER approves any proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

B. Shop Drawings and Product Data

1. CONTRACTOR shall submit complete drawings, engineering data and manufacturer's published instructions and recommendations for all equipment, materials, and products to be incorporated into WORK to ENGINEER for review and approval. Submittal of drawings and engineering data shall be in accordance with requirements of Supplementary General Provisions. Shop Drawings and/or engineering data, as appropriate, shall be submitted for the following: (including, but not limited to)
 - a. Pipe and fittings.
 - b. Concrete: Proposed mix design of each class of concrete. All concrete and masonry accessories and steel reinforcement, including bending diagrams and bar schedule, ties, spreaders, chairs, inserts, for coatings, waterstops, curing and sealing compounds, and epoxy bonding agents.
 - c. Premixed grouts and mortars: Submit laboratory reports to ENGINEER for approval. Submittal must include sieve analysis of fine and coarse aggregate and mix design. Test results and reports required by manufacturer and testing standards shall be submitted to ENGINEER for his review.
 - d. All pumps and controls, valves, wiring diagrams, breakers and instrumentation.
2. Shop drawings and engineering data shall be prepared by original equipment vendors or fabricators, as applicable. Purchase specifications by CONTRACTOR or Supplier shall not be acceptable as substitute for actual vendor drawings and data.
3. Shop drawings and each item of engineering data shall bear CONTRACTOR's approved stamp as per Supplementary General Provisions.

1.02 PROCEDURES

- A. Deliver submittals to ENGINEER at 802 East Spring Street, Monroe, Georgia 30655.
- B. Transmit each item identifying Project, CONTRACTOR, SUBCONTRACTOR, major supplier; identify pertinent drawing sheet and detail number, and specification section number, as appropriate. Identify deviations from CONTRACT DOCUMENTS. Provide space for CONTRACTOR and ENGINEER review stamps.
- C. Comply with progress schedule for submittals related to WORK progress. Coordinate submittal of related items.
- D. After ENGINEER review of submittal, revise and resubmit as required, identifying changes made since previous submittal.
- E. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

1.03 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial construction progress schedules in duplicate within ten (10) days after date of OWNER-CONTRACTOR Agreement. After review by ENGINEER, revise and resubmit as required. Submit revised schedules with each Application for Payment, reflecting changes since previous submittal.
- B. Submit horizontal bar chart with separate bar for each major trade or operation, identifying first work day of each week.
- C. Show complete sequence of construction by activity, identifying WORK of separate stages and other logically grouped activities. Show projected percentage of completion for each item of WORK as of time of each Application for Progress Payment.
- D. Show submittal dates required for shop drawings, product data, and samples, and product delivery dates, including those furnished by OWNER and those under Allowances.
- E. Revise schedule to list change orders, for each application for payment.

1.04 SAMPLES

- A. CONTRACTOR shall furnish, at ENGINEER'S request, samples of materials utilized in fabrication or production of equipment, materials, products supplied under these Specifications. Cost of samples requested shall be paid for by CONTRACTOR. Samples will be tested by qualified independent testing laboratory selected by ENGINEER to determine if mechanical and chemical properties of materials supplied are in accordance with requirements of these Specifications and CONTRACT DOCUMENTS. OWNER shall pay for laboratory testing of material samples provided by CONTRACTOR. CONTRACTOR shall pay for all retests made necessary by failure of materials, etc., to conform to requirements set forth herein.
- B. Submit samples to illustrate functional characteristics of the product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
- C. Include identification on each sample, giving full information.

1.05 OPERATION AND MAINTENANCE MANUALS

Unless otherwise indicated, all items of major equipment shall be supplied with a minimum of four (4) copies of complete operation and maintenance manuals.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01511

TEMPORARY POWER

PART 1 GENERAL

1.01 SCOPE

This section is intended to include requirements for temporary electricity.

1.02 REQUIREMENTS INCLUDED

- A. Temporary Electrical Service
- B. Operation and Maintenance
- C. Removal

1.03 COSTS

- A. The CONTRACTOR shall be responsible for the costs of all items necessary for the installation of temporary power. The cost of these items shall be factored into the project unit prices. Obtain and pay for permits and inspections.
- B. Pay for installation, operation, maintenance, and removal of system.
- C. Pay costs of energy consumed.

PART 2 PRODUCTS

2.01 MATERIALS

- A. May be new or used, adequate to the purpose.
- B. Devices and Equipment: Standard devices, meeting UL requirements.

PART 3 EXECUTION

3.01 INSTALLATION

Install initial service at time of site mobilization.

3.02 OPERATION AND MAINTENANCE

Maintain system to provide continuous service.

3.03 REMOVAL

Remove temporary materials and equipment when permanent system is operational.

END OF SECTION

SECTION 01515
TEMPORARY WATER

PART 1 GENERAL

1.01 SCOPE

This section is intended to include requirements for temporary water to be provided by CONTRACTOR.

1.02 REQUIREMENTS INCLUDED

- A. Temporary water service
- B. Maintenance
- C. Removal

1.03 SERVICE REQUIREMENTS

Water Quality: Water used for flushing and testing of water systems shall be potable water.

1.04 USE OF EXISTING SYSTEM

Existing system may be used for temporary water with owners permission.

1.05 COSTS

CONTRACTOR shall pay all costs necessary to provide water for temporary potable use and for testing. The cost of the water shall be factored into the project unit prices. CONTRACTOR shall reimburse OWNER at current commercial rates where such water is available.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Materials may be new or used, adequate to the purpose.
- B. Drinking Water Dispensers; Standard products.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install initial service at time of job mobilization.
- B. Modify and extend service as work progresses.
- C. Size piping to supply construction needs.
- D. Provide pumps, pressure tanks, automatic controls, and storage tanks as necessary to pressurize system.
- E. Disinfect piping used for drinking water.

3.02 MAINTENANCE

Maintain system to provide continuous service with adequate pressure to outlets, including OWNER's system when temporary service is connected.

3.03 REMOVAL

Restore existing and permanent facilities used for temporary purposes to original condition.

END OF SECTION

SECTION 01516

TEMPORARY SANITARY FACILITIES

PART 1 GENERAL

1.01 SCOPE

This section is intended to include requirements for temporary sanitary facilities provided by CONTRACTOR, including provisions for CONTRACTOR'S use of existing and permanent facilities.

1.02 REQUIREMENTS INCLUDED

- A. Temporary Sanitary Facilities
- B. Maintenance and Service
- C. Removal.
- D. Cleaning

1.03 USE OF EXISTING FACILITIES

Not Used

1.04 USE OF PORTABLE FACILITIES

- A. CONTRACTOR shall provide portable sanitary facilities at such places as approved by the OWNER.
- B. CONTRACTOR shall pay all costs for installation, maintenance, and removal of temporary sanitary facilities.

PART 2 PRODUCTS

2.01 MATERIALS

May be new or used, adequate to the purpose, which will not create unsanitary conditions.

2.02 TOILET FACILITIES

Enclosed portable self-contained units or temporary water closets and urinals, secluded from public view.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Provide facilities at time of site mobilization.
- B. Modify and extend services as work progresses.

3.02 MAINTENANCE AND SERVICE

- A. Clean areas of facilities weekly and maintain in a sanitary condition.
- B. Provide toilet paper, paper towels, and soap in suitable dispensers.

3.03 REMOVAL

Remove portable units when other facilities are available or prior to Substantial Completion.

END OF SECTION

SECTION 01570

TRAFFIC CONTROL

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. CONTRACTOR shall furnish all materials and labor for the installation and continuous maintenance of traffic control devices throughout the project.
- B. This item of work shall include furnishing, installing, maintaining, relocating and removing all traffic control devices used for the purpose of regulating, warning or directing traffic during the construction or maintenance of this project.
- C. Upon completion of work, warning devices are to be removed by the CONTRACTOR. If devices remain on site longer than ten (10) days after project completion, they shall be removed by the OWNER and become his property.

1.02 SAFETY

- A. The governing factor in the execution and staging of work for this project is to provide the public with the safest possible travel conditions along the roadway through the construction zone. The CONTRACTOR shall arrange his operation to keep the closing of any lane of a roadway to an absolute minimum.
- B. No work shall be started on any phase of the project until all appropriate traffic control devices are in place and in operation.
- C. CONTRACTOR is to take all practical precautions to maintain traffic flow, and provide safety of workers and the general public.
- D. At the end of each workday, contractor is to clear the roadway of all dirt and debris and add additional safety devices to maintain safe travel lanes.
- E. When not in use, all traffic control devices shall be removed, placed or covered so as not to be visible to traffic.

1.03 REFERENCES

- A. Manual for Uniform Traffic Control Devices (MUTCD) (latest edition).
- B. Georgia Department of Transportation (Ga. DOT) Standard Specifications Construction of Transportation Systems (latest edition), Section 150.
- C. Georgia Department of Transportation (Ga. DOT) Standard Construction Details (latest edition).

PART 2 PRODUCTS

2.01 PRODUCTS

- A. Traffic Control Devices include: signs and their supports, signals, pavement markings, barricades with sand bags, channelizing devices, warning lights, arrowboards, flaggers, or any other device used for the purpose of regulating, warning or guiding traffic through the construction zone.
- B. All Traffic Control Devices used on this project shall conform to the plans, Ga. DOT Construction Details and Specifications, and MUTCD. No modifications will be allowed without prior written approval of the ENGINEER.
- C. Traffic Control Devices shall be in proper, acceptable condition when in use. Devices which are unclear, damaged, or not correctly positioned shall be promptly restored to fully operational condition.

PART 3 EXECUTION

3.01 EXECUTION

- A. The CONTRACTOR shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The CONTRACTOR shall cover all Traffic Control Devices which are inconsistent with detour or lane assignment patterns during the transition from one construction stage to another.
- B. Construction signs referring to daytime lane closures during working hours shall be removed or covered during non-working hours.
- C. The CONTRACTOR shall ensure all Traffic Control Devices installed by him are operational 24 hours a day, including weekends and holidays. Provide additional inspections at regular intervals.
- D. When traveling in lanes open to public traffic, the contractor's vehicles shall always move with and not against or across the flow of traffic. These vehicles shall enter or leave work areas in a manner which will not be hazardous to, or interfere with, traffic and shall not park or stop except within designated work areas. Personal vehicles shall not park within the right of way except in specific areas designated by the OWNER.
- E. Private driveways and parking areas shall be accessible at all times unless temporary closings are necessary for construction work and the CONTRACTOR has notified the affected individuals and has approval from them.
- F. If trenches are to remain open overnight, or for an extended period of time, CONTRACTOR is to provide heavy duty cover plates to allow vehicles access.

- G. Delays to the CONTRACTOR by complying with these requirements will be considered incidental to the item for traffic control and protection, and no additional compensation will be allowed.
- H. Where flaggers are required they are to be adequately trained and qualified for the job.
- I. Where the roadway or shoulder must be left in a disturbed condition overnight, provide barricades with flashers at intervals so that they are continuously visible from either direction.
- J. When working adjacent to or over travel lanes, the CONTRACTOR shall ensure that dust or other debris from his operation does not interfere with normal traffic operations of adjacent properties.
- K. CONTRACTOR shall take full responsibility for employees parking and make suitable arrangements for vehicles so that no roadway hazards occur and that trespassing on private property does not occur.

END OF SECTION

SECTION 01701

CONTRACT CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Administrative provisions for Substantial Completion and for final acceptance.

1.02 RELATED REQUIREMENTS

Section 01720 - Project Record Documents.

1.03 SUBSTANTIAL COMPLETION

- A. When the CONTRACTOR considers the work substantially complete, he shall prepare a punch list of uncompleted items and send to the ENGINEER for review. At the same time the CONTRACTOR shall request in writing that the ENGINEER schedules a pre-final inspection.
- B. The ENGINEER will review the punch list submitted by the CONTRACTOR and determine if the project is substantially complete.
- C. If the ENGINEER determines that the project is not substantially complete, he will notify the CONTRACTOR in writing which items need to be finished before the project can be considered substantially complete. The CONTRACTOR shall continue working to complete all punch list items and resubmit a revised punch list when he considers the work is substantially complete.
- D. When the ENGINEER determines that the work is substantially complete, he will schedule a pre-final inspection with the OWNER, CONTRACTOR and ENGINEER. A final punch list will be prepared at this time.
- E. After all punch list items have been completed, the CONTRACTOR shall send a request in writing to the ENGINEER to schedule a final inspection. When all punch list items are complete, the ENGINEER will issue a certificate of substantial completion.

1.04 FINAL COMPLETION

- A. When the CONTRACTOR considers that all of the WORK is complete, he shall submit the following certificates:
 - 1. All WORK has been completed and inspected for compliance with the CONTRACT DOCUMENTS and all deficiencies listed with the certificate of substantial completion have been corrected.
 - 2. All equipment and systems have been tested, adjusted and are fully operational.

3. OWNER's personnel have been fully instructed in the operation of all equipment (include sign off for each system).
 4. WORK is complete and ready for final inspection.
- B. Should ENGINEER's inspection find WORK incomplete, he will promptly notify CONTRACTOR in writing listing observed deficiencies.
 - C. CONTRACTOR shall remedy deficiencies and send a request for another final inspection.
 - D. When ENGINEER finds work is complete, he will process final pay request documents.

1.05 REINSPECTION FEES

Should status of completion of WORK require reinspection by ENGINEER due to failure of WORK to comply with CONTRACTOR's claims on pre-final or final inspection, the OWNER will back charge the CONTRACTOR for each extra reinspection required of the ENGINEER. The CONTRACTOR shall reimburse the OWNER by certified check prior to final payment of retainage.

1.06 CLOSEOUT SUBMITTALS

- A. Evidence of Compliance with Requirements of Governing Authorities:
 1. Certificate of Occupancy as required by local codes.
 2. Certificates of Inspection approvals required for plumbing, mechanical and electrical systems as required by local codes if applicable.
 3. Completed form as indicated on page 01701-4 of this Section.
- B. Project Record Documents: Under provisions of Section 01720.
- C. Evidence of Payment and Release of Liens: In accordance with Conditions of the Contract.
- D. Consent of Surety to Final Payment.

Consent of Surety is to be sent by Surety directly to Precision Planning, Inc. to the attention of Mark Noe.

1.07 APPLICATION FOR FINAL PAYMENT

- A. Prior to application for final payment, the CONTRACTOR shall give the ENGINEER a list of all additions or deletions not previously approved by change order.
- B. The ENGINEER will review this list and prepare a final close-out change order for the items that are justified by the terms of the contract or approved by field order.
- C. After approval of the final close-out change order, the CONTRACTOR may submit his application for final payment.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

OCONEE COUNTY, GEORGIA

_____, CONTRACTOR, for the above referenced project and Oconee County Board of Commissioners, OWNER, hereby certify that "as-constructed" drawings for the above-referenced project have been prepared by the CONTRACTOR and provided to the OWNER. The OWNER and CONTRACTOR further certify that the CONTRACTOR has provided the OWNER with all maintenance and operation instructions, and product warranties, and that the OWNER, or OWNER's representative has been trained in the maintenance and operations of the systems installed.

The OWNER and the CONTRACTOR understand that the CONTRACTOR's warranty for the project begins on the date of substantial completion and remains in effect for a period of 1 year. The OWNER understands that he/she shall direct warranty concerns to the CONTRACTOR, during this warranty period and to the product manufacturers for warranties beyond this time period.

CONTRACTOR

Date

OWNER

Date

PRECISION PLANNING, INC.

Date

END OF SECTION

SECTION 01710

FINAL CLEAN-UP

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Final clean-up of site, roadway and buildings.

1.02 DESCRIPTION

Execute clean-up prior to inspection for Substantial Completion of the WORK.

1.03 DISPOSAL REQUIREMENTS

Remove and dispose of waste materials, rubbish, debris and trash in compliance with provisions of governing laws, codes, ordinances and regulations. **Do not burn or bury rubbish, trash, debris and waste materials on Project site.**

PART 2 PRODUCTS

2.01 CLEANING MATERIALS

- A. Use materials which will not create hazards to health or property, and which will not damage surfaces.
- B. Use only materials and methods recommended by manufacturer of material being cleaned.

PART 3 EXECUTION

3.01 PERIODIC CLEANING

- A. On a regular and frequent basis during progress of WORK, perform cleaning necessary to keep Project site and adjacent properties free from unsightly and unsafe accumulation of scrap and waste materials, debris, rubbish and trash resulting from construction operations.
 - 1. Provide sufficient trash bins and containers for collection of scrap and waste material, debris, rubbish and trash.
 - 2. Provide separate, closable top metal containers for collection of oil and paint soaked rags; empty volatile substance cans and other waste products subject to spontaneous combustion.
 - 3. Designate approved eating areas and provide covered containers conforming to local health codes for collection of waste paper and left-over foodstuffs. Enforce usage of containers by workmen.

- B. Dispose of scrap and waste materials, debris, rubbish and trash by one of the following optional methods:
 - 1. Provide services of company regularly engaged in refuse disposal operations, including usage of large metal dump-type trash containers.
 - 2. Use own forces and equipment for loading, hauling and disposal.
- C. Remove accumulations of scrap and waste materials as bins and containers are filled and not less than once per week.
 - 1. Remove containers containing products subject to spontaneous combustion daily.
 - 2. Remove containers containing waste paper and left-over foodstuff daily.
 - 3. Legally dispose of all waste materials, rubbish, volatile materials and cleaning materials off Project site.
 - 4. Dispose of no materials in waterways.

3.02 FINAL CLEANING

Site Work

- 1. All piles of dirt and rocks are to be removed from the work area.
- 2. All disturbed areas are to be grassed and mulched according to these specifications.
- 3. All construction debris is to be removed to an approved disposal site.
- 4. All streets are to be swept with a mechanical sweeper.

3.03 INSPECTION

Prior to occupancy by OWNER of any designated portion of WORK, conduct inspection in presence of OWNER to verify WORK is properly clean and ready for acceptance by OWNER.

END OF SECTION

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Maintenance of Record Documents and Samples.
- B. Submittal of Record Documents and Samples.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. In addition to requirements in General Conditions, Maintain at the site for OWNER, two record copies of:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Approved Change Orders, field orders or other modifications to the Contract.
 - 5. Approved shop drawings, product data, and samples.
 - 6. Field test records.
 - 7. Inspection certificates.
 - 8. Manufacturer's certificates.
- B. Maintain Record Documents in a clean, dry and legible condition. Do not use Record Documents for construction purposes.
- C. Keep Record Documents and samples available for inspection by Engineer.

1.03 RECORDING

- A. Record information on clean sets of blue line opaque drawings and contract specifications. Label each sheet of the Project Record Drawings in the lower right corner with the neatly printed words "**PROJECT RECORD DRAWINGS**".

Two (2) sets of CONTRACT DOCUMENTS and Drawings will remain clean without mark-up for record purposes. CONTRACTOR shall use an additional set for marking measurements, on-site changes, items of construction that are actually used, and other conditions as they are encountered during the course of the WORK. This marked-up set of CONTRACT DOCUMENTS and Drawings shall consist of red-lined copies of plans and shop drawings, shall indicate actual field dimensions, shall represent the work as actually constructed, and shall be recorded on a daily basis. Failure to produce these records on request of ENGINEER or OWNER shall constitute grounds to halt construction with no time extension until steps are taken to see that these records are being properly made.

- B. Provide colored pens or pencils for marking each description of work.
1. The CONTRACTOR shall provide colored pencils for marking record copies of Contract Drawings and Specifications. Use a different colored pencil for each of the following:
(Example)

a.	Architectural Work	Red
b.	Plumbing Work	Green
c.	HVAC Work	Blue
d.	Electrical Work	Orange
e.	Other written notations	Brown
 2. Establish a color code denoting what trade will use what color, and show this on a schedule on the front sheet of the "PROJECT RECORD DOCUMENTS".
- C. Record information concurrently with construction progress. **DO NOT CONCEAL ANY WORK UNTIL REQUIRED INFORMATION IS RECORDED.**
- D. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
1. Measured depths of elements of foundation in relation to finish first floor or benchmark.
 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements. Use stations and offsets or coordinates.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
 4. Field changes of dimension and detail.
 5. Changes made by Modifications.
 6. Details not on original Contract Drawings.
 7. References to related shop drawings and Modifications.

- E. Prior to final construction inspection, CONTRACTOR shall furnish to ENGINEER two (2) neatly marked sets of construction plans which accurately depict the conditions and records all changes made during construction. ENGINEER shall promptly notify CONTRACTOR in writing if additional information is required.
- F. Other Documents: Maintain manufacturer's certifications, inspection certifications, and field test records, required by individual Specifications sections.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 02731

HDPE FORCE MAINS

PART 1 GENERAL

1.01 SCOPE OF WORK

WORK covered by this Section consists of furnishing and installing high-density polyethylene (HDPE) force mains and appurtenances, including but not limited to, materials, necessary excavation, installation, disinfection, and testing.

1.02 RELATED WORK

Oconee County Water and Wastewater Standards and Specifications, latest edition.

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM).
 - 1. ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter
 - 2. ASTM D3261, Standard Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
 - 3. ASTM D3350, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials.
 - 4. ASTM D1238, Melt Flow Index
 - 5. ASTM D1505, Density of Plastics
 - 6. ASTM D2837, Hydrostatic Design Basis
- B. American Water Works Association, AWWA C906, Standard for Polyethylene (PE) Pressure Pipe and Fittings, 4" (100 mm) through 63" (1,575 mm) for Water Distribution and Transmission.
- C. Plastics Pipe Institute (PPI), TR-33, Generic Butt Fusion Joining Procedure for Field Joining of Polyethylene Pipe.
- D. NSF International (NSF)
 - 1. NSF 14 – Plastics Piping System Components and Related Materials
 - 2. NSF 61 – Overview of Goals and Standards

1.04 QUALITY ASSURANCE

All pipes and fittings will be subject to inspection and approval by the OWNER after delivery. Any pipe or specials that have been broken, cracked, or otherwise damaged before or after delivery, or which have failed to meet required tests, shall be removed from site of work and shall not be used therein.

1.05 DELIVERY, STORAGE AND HANDLING

- A. CONTRACTOR shall be responsible for safe unloading, storage and care of material furnished by or to him until it has been incorporated into the WORK.
- B. Unload pipe, fittings, and valves by lifting with hoists to avoid damage. The handling of the pipe shall be in such a manner as to prevent cuts, scratches or gouges.
- C. Unload material at site of work, near place where it will be placed in trench.
 - 1. Pipes shall be stored on level ground free of sharp objects that may damage the pipe. Stacking of the pipe shall be limited to prevent excessive deformation of the bottom layers of pipe under anticipated temperature conditions.
 - 2. Materials shall be placed so as to least interfere with traffic.
 - 3. Provide signs, lights, and barricades as necessary to protect public.
- D. Handle material carefully to prevent breakage and to avoid damage to coatings and linings.
 - 1. Keep interior of pipe, fittings and valves, free of dirt or foreign matter at all times.
 - 2. Do not place materials in drainage ways or ditches.
- E. Materials that cannot be placed along site of work, shall be stored at Contractor's expense. OWNER's storage yard may be utilized if available and approved by Owner.

1.06 SITE CONDITIONS

Water used for constructing or testing shall be paid for by the CONTRACTOR.

PART 2 PRODUCTS

2.01 GENERAL

- A. Pipe and fittings for force mains shall be high density polyethylene (HDPE) pipe unless otherwise specified as ductile iron.
- B. Pipe and fitting interior linings, lubricants, and all other materials which come into contact with water shall conform to ANSI/NSF 61 list of approved materials standard.

2.02 HIGH DENSITY POLYETHYLENE (HDPE) PIPE AND FITTINGS

- A. Polyethylene compounds shall be listed in PPI TR-4, have a grade of PE34 with a minimum cell classification of PE 345464C for PE3408/3608 materials, as defined in ASTM D 3350. In conformance with AWWA C906, they shall have a PPI recommended Hydrostatic Design Basis of 1600 psi (PE3408) at a temperature of 73.4°F (23°C).
- B. HDPE pipe shall be in accordance with AWWA C906 and shall have an outside diameter equal to ductile iron pipe for the same size. As a minimum strength, pipe shall have a dimension ratio of 17 (SDR 17) and minimum working pressure rating of 100 psi.
- C. If rework compounds are required, only those generated in the Manufacturer's own plant from resin compounds of the same class and type from the same raw materials supplier may be used as long as pipe and fittings meet the requirements of this specification.
- D. CONTRACTOR shall submit to ENGINEER written evidence that high-density polyethylene (HDPE) pipe is in conformance with requirements specified herein. Certified copies of independent laboratory test results or mill test results from pipe supplier may be considered evidence of compliance provided such tests are performed according to appropriate ASTM testing standards by experienced, competent personnel. In case of doubt as to accuracy or adequacy of mill tests, ENGINEER may require that CONTRACTOR furnish test reports from an independent testing laboratory on samples of pipe materials.
- E. All HDPE pipe and fittings shall be from a single manufacturer who is experienced, reputable, and qualified in the manufacture of the HDPE pipe to be furnished. The pipe shall be designed, constructed, and installed in accordance with best practices and methods and shall comply with these Specifications. The manufacturer shall have adequate in-plant inspection and quality control/quality assurance testing and have the ability to provide sound technical support for its products. HDPE pipe and fittings shall be manufactured by Performance Pipe as a division of the Chevron Phillips Chemical Company LP, ISCO Industries LLC, KWH Pipe, or approved equal.
- F. The pipe manufacturer shall provide a warranty against manufacturing defects of material and workmanship for a period of ten years after the final acceptance of the project by the OWNER. The manufacturer shall replace at no expense to the OWNER any defective pipe and fitting material including labor within the warranty period.
- G. Each pipe shall be clearly marked as required by governing ASTM standard specifications to show its class, date of manufacture, and name or trademark of manufacturer.
- H. Pipe Color: Pipe shall include color identification, purple for non-potable water lines; either striped by co-extruding longitudinal color markings or solid in color.
- I. Polyethylene fittings shall be from the same manufacturer of the HDPE pipe and shall be manufactured using compounds complying with the requirements of AWWA C906. Butt fusion fittings, shall comply with ASTM D3261. Fabricated fittings shall be manufactured to be as strong or stronger than the pipe to which the fittings will be joined. Mechanical fittings produced from material not listed in this Section shall be approved only after submission of appropriate test data and service histories indicating their acceptability for the intended service. In all cases, the specifications and requirements for the fittings supplied shall comply with the appropriate sections of AWWA C906.

- J. All transitions from HDPE pipe to ductile iron pipe and fittings shall be made with a mechanical joint adapter per the HDPE pipe manufacturer's recommendations and specifications.
1. Methods of transition from HDPE to ductile iron pipe, fittings, and valves shall be approved by the ENGINEER before construction.
 2. No solid sleeves shall be allowed between HDPE and ductile iron transitions.
 3. Fittings and transitions shall be from the same manufacturer of the HDPE pipe.
 4. The pipe supplier must certify compliance with the above requirements.

2.03 DETECTION TAPE

- A. Inert, bonded layer of plastic or mylar with a metallized foil core.
- B. Highly resistant to alkalis, acids, or other destructive chemical components encountered in soils.
- C. The tape will be high visibility green, minimum 2 inches wide, and shall bear the printed identification "CAUTION: SEWER LINE BELOW".

2.04 TRACING WIRE

Tracing wire shall be continuous multi-strand wire, 10 gauge THHN, purple in color, for the entire length of the pipe.

PART 3 EXECUTION

3.01 PIPE LAYING

- A. Excavation and bedding shall be as specified in Oconee County Water and Wastewater Standards.
- B. Pipe and fittings shall be carefully inspected before being placed and no defective pipe shall be laid in trench. If defective or damaged pipe is found after installation, CONTRACTOR shall replace that pipe section at his expense.
- C. Water shall not be allowed to run or stand in trench while pipe laying is in progress or before trench has been backfilled. CONTRACTOR at no time shall open up more trench than his available pump facilities are able to dewater. Where pipelines are located in or across stream beds or drainage ditches, CONTRACTOR shall divert stream flow and dewater each section as WORK progresses.
- D. Interior of all pipe shall be kept thoroughly clean. After each line of pipe has been laid, it shall be carefully inspected and all dirt, trash, rags and other foreign matter removed from interior.
- E. Backfilling of trenches shall be started immediately after the pipe has been installed. Backfill shall be deposited and compacted in accordance with ASTM D 2774.

- F. Force mains shall be installed so that a minimum grade of 0.1% is always maintained uphill from the low point to high points in the pipeline where air release valves are to be installed, unless otherwise shown on the DRAWINGS, to avoid entrapped air.
 - 1. Should CONTRACTOR fail to maintain proper grade, force main shall be corrected at CONTRACTOR's expense by relaying the force main to proper grade or by installation of additional air release valves to correct problem.
 - 2. Method of correction shall be at ENGINEER's option.
- G. Full length of each section of pipe shall rest solidly upon the bedding.
- H. Contractor is responsible for compatibility between pipe materials, fittings, and appurtenances.

3.02 JOINT CONSTRUCTION

- A. All joints for the various types of pipes shall be installed according to pertinent AWWA, ASTM, and manufacturer's specifications. Any defective work will be removed and replaced if it cannot be corrected in accordance with the above mentioned specifications.
- B. Sections of polyethylene pipe should be joined into continuous lengths on the jobsite above ground. The joining method shall be the butt fusion method and shall be performed in strict accordance with the pipe manufacturer's recommendations. The butt fusion equipment used in the joining procedures should be capable of meeting all conditions recommended by the pipe manufacturer, including but not limited to, temperature requirements of 400 degrees Fahrenheit, alignment, and interfacial fusion pressure of 75 psi. The butt fusion joining will produce a joint weld strength equal to or greater than the tensile strength of the pipe itself. All welds will be made using a Data Logger to record temperature and fusion pressure, which will produce a graphic representation of the fusion cycle that shall be part of the Quality Control records.
- C. Mechanical joining will be used where the butt fusion method cannot be used. Mechanical joining will be accomplished by either using HDPE mechanical joint adapters installed per manufacturer's recommendations.
- D. Socket fusion, hot gas fusion, threading, solvents, and epoxies shall not be used to join HDPE pipe.

3.03 STREAM AND UTILITY CROSSINGS

Shall be in accordance with Oconee County Water and Wastewater Standards.

3.04 PIPE MARKING AND DETECTION

- A. Detection tape shall be placed over the pipe per Oconee County Water and Wastewater Standards.
- B. Tracing wire shall be affixed to the pipe with tape or wrapped around the pipe.

3.05 CLEANING

- A. After completing each section of pipeline, CONTRACTOR shall remove all debris and construction materials and equipment from site of WORK, grade and smooth over surfaces on both sides of line and leave entire work area in clean, neat and serviceable condition.
- B. Thoroughly clean all of the new pipe lines to remove all dirt, stones, wood pieces, and other material which may have entered the pipes during construction. Flush pipe lines at a minimum velocity of 2.5 feet per second. All flushing shall be coordinated with the OWNER.

3.06 HYDROSTATIC TEST

- A. When pipeline of an adequate length for testing has been installed, line shall be filled with clean water, thoroughly blown free of air and prepared for testing. Pressure testing shall be conducted per Manufacturer's recommendations and as approved by the ENGINEER.
- B. If directed by OWNER, pipe lines shall be tested before trench is completely backfilled. Pressure testing shall be conducted in accordance with ASTM F2164, Field Leak Testing of Polyethylene Pressure Piping Systems using Hydrostatic Pressure, and shall be performed in the presence of the OWNER.
- C. The test pressure shall be 1.5 times the design operating pressure of the pipe.
- D. Procedure:
 - 1. Fill the line slowly with a flow velocity less than 2 feet per second.
 - 2. Expel air completely from the line during filling and again before applying test pressure. Air shall be expelled by means of air release valves and/or corporation stops at high points.
 - 3. Apply initial test pressure and allow to stand without makeup pressure for two to three hours to allow for diametric expansion or pipe stretching to stabilize. After this equilibrium is established, apply the specified test pressure for one to three hours.
 - 4. The allowable amount of makeup water for expansion during the pressure test shall conform to Chart 6, Allowance for Expansion under Test Pressure, Technical Report TR 31/9-79, published by the Plastic Pipe Institute. If there are no visual leaks or significant pressure drops (less than 5% in one hour) during the final test period, the installed pipe passes.
 - 5. Locate, remove and replace any defective pipe, valves and/or fittings.
 - 6. Repeat tests until satisfactory results are achieved.

3.07 DISINFECTION

Shall be in accordance with Oconee County Water and Wastewater Standards.

3.08 CLEAN-UP AND RESTORATION

Shall be in accordance with Oconee County Water and Wastewater Standards.

END OF SECTION

SECTION 02737

CERAMIC EPOXY INTERIOR LINING FOR DUCTILE IRON PIPE

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This Section defines the bid item for ceramic epoxy lining of ductile iron pipe.
- B. This Section supplements related specifications for ductile iron pipe.

1.02 CONDITION OF DUCTILE IRON PIPE PRIOR TO SURFACE PREPARATION

All Ductile Iron pipe and fittings shall be delivered to the application facility without asphalt, cement lining, or any other lining on the interior surface. Because complete removal of old linings may not be possible, the intent of this specification is that the entire interior of the Ductile Iron pipe and fittings shall not have been lined with any substance prior to the application of the specified lining material and no coating shall have been applied to the first six inches of the exterior of the spigot ends.

PART 2 PRODUCTS

2.01 LINING MATERIAL

The standard of quality is PROTECTO 401 Ceramic Epoxy. The material shall be an amine cured novalac epoxy containing at least 20% by volume of ceramic quartz pigment. Any request for substitution must be accompanied by a successful history of lining pipe and fittings for sewer service, a test report verifying the following properties and a certification of the test results.

- A. A permeability rating of 0.00 when tested according to the procedure described in Method A of ASTM E 96, Procedure A with a test duration of 30 days.
- B. The following tests must be run on coupons from factory lined Ductile Iron pipe.
 - 1. ASTM B 117 Salt Spray (scribed panel). Results to equal 0.0 undercutting after two years.
 - 2. ASTM G 95 Cathodic Disbondment (1.5 volts at 77°F). Results to equal no more than 0.5 mm undercutting after 30 days.
 - 3. Immersion Testing - Rated using ASTM D 714.
 - a. 20% Sulfuric Acid - No effect after two years.
 - b. 140°F 25% Sodium Hydroxide - No effect after two years.
 - c. 160°F Distilled Water (scribed panel) - No effect after two years.
 - d. 120°F Tap Water (scribed panel) - 0.0 undercutting after two years with no effect.

- C. Abrasion Resistance: Less than .075 mm (3 mils) loss after one million cycles on a $\pm 22.5^\circ$ sliding aggregate slurry abrasion tester using a sharp natural siliceous gravel with a particle size between 2 mm and 10 mm (European Standard SN598).

PART 3 EXECUTION

- 3.01 Applicator: The lining shall be applied by a certified firm with a successful history of applying linings to the interior of Ductile Iron pipe and fittings.
- 3.02 Surface Preparation: Prior to abrasive blasting, the entire area to receive the protective compound shall be inspected for oil, grease, etc. Any areas where oil or grease is present, or any substance which can be removed by solvent, shall be solvent cleaned to remove these substances. After the surface has been made free of grease, oil or other substances, all areas to receive the protective compounds shall be abrasive blasted using compressed air nozzles with sand or grit abrasive material. The entire surface to be lined shall be struck with the blast media so that all rust, loose oxides, etc. are removed from the surface. Only slight stains and tightly adhering oxide may be left on the surface. Any area where rust reappears before lining must be reblasted.
- 3.03 Lining: After surface preparation, the interior of the pipe shall receive 40 mils nominal dry film thickness of PROTECTO 401. No lining shall be applied when the substrate or ambient temperature is below 40°F. The surface also must be dry and dust free. If flange pipe or fittings are included in the project, the lining shall not be used on the face of the flange.
- 3.04 Coating of Bell Sockets and Spigot Ends: Due to the tolerances involved, bell interior and spigot exterior up to 6 inches back from the end of the spigot end must be coated with 6 mils nominal, 10 mils maximum PROTECTO Joint Compound. The Joint Compound shall be applied by brush to ensure coverage. Care should be taken that the Joint Compound is smooth without excess buildup in the gasket seat or on the spigot ends. Coating of the gasket seat and spigot ends shall be done after the application of the linings.
- 3.05 Number of Coats: The number of coats of lining material applied shall be as recommended by the lining manufacturer. However, in no case shall this material be applied above the dry thickness per coat recommended by the lining manufacturer in printed literature. The maximum or minimum time between coats shall be that time recommended by the lining material manufacturer. No material shall be used for lining which is not indefinitely recoatable with itself without roughening of the surface.
- 3.06 Touch-Up & Repair: PROTECTO Joint Compound shall be used for touch-up or repair in accordance with manufacturer's recommendations.
- 3.07 High Pressure Cleaning: The Ductile Iron Pipe Research Association (and its Member Companies), Federal Signal Corporation (and its subsidiaries Vactor, Elgin, Guzzler, Jetstream & Ravo), and Induron Coatings Inc. participated in a pressure cleaning research program which was conducted by the Missouri University of Science and Technology – High Pressure Waterjet Laboratory. The test program included asphaltic seal coated cement-mortar lined and Protecto 401 lined ductile iron pipe which resulted in guidelines for the pressure cleaning of the inside diameters of ductile iron pipe. Through a collaborative effort with the organizations above and the City of Moline, Illinois, field tests were conducted and the guidelines verified as effective and safe for cement-mortar and Protecto 401 lined ductile iron pipe.

Guidelines are as follows:

- A. The nozzle shall be configured with fan jets only (no round jets).
- B. The fan jets should be oriented at a maximum angle of 30 degrees to the pipe wall.
- C. The nozzle shall be a minimum of 2-inches standoff from the pipe surface.
- D. The nozzle assembly shall be self-rotating and incorporate a rotational control mechanism - target speed of 30 rpm.
- E. The water pressure at the nozzles shall be no more than 1,800 psi.
- F. The nozzle assembly shall have non-abrasive wheels and/or UHMW (ultra-high molecular weight) polyethylene skids positioned so that at no time does the nozzle assembly contact the lining of the pipe.
- G. The nozzle assembly shall continually move when pressure washing with no hesitation in the pipe.
- H. All hose couplings, hoses, etc. shall be smooth so as to facilitate movement across the pipe joints without creating damage to the lining.

Pipe diameters of 24-inch and larger may require additional passes for effective cleaning.

Vactor Blue Twister Nozzle (or equal) and appropriate assembly – Although research shows no significant damage in testing, the decision to pressure wash, if made by the customer, engineer, or installer, may present some risk of damage to the Protecto 401.

Any such risk is dependent on water pressure, speed, jet design and angle to the lining, distance of the jet from the lining, type of lining, and other factors. DIPRA does not warrant or guarantee the result or assume any risk associated with pressure washing.

3.08 Inspection and Certification

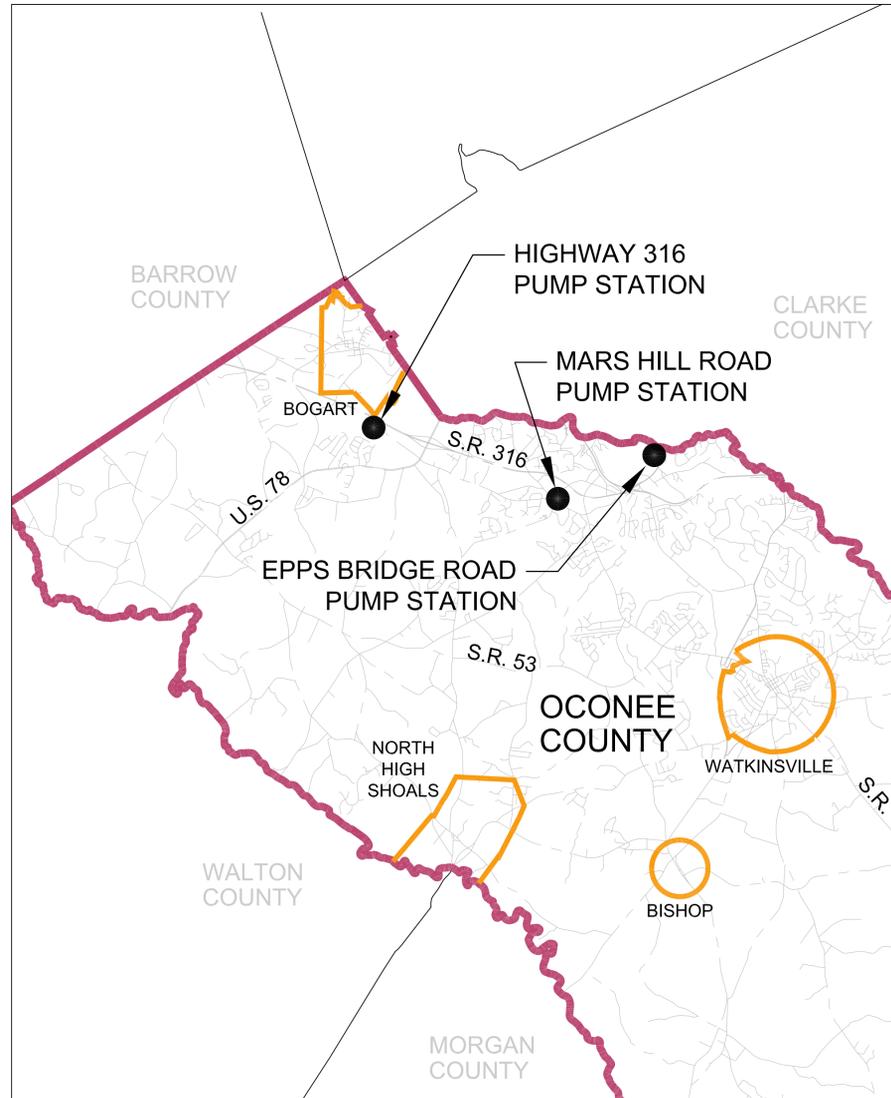
- A. Inspection
 - 1. All Ductile Iron pipe and fitting linings shall be checked for thickness using a magnetic film thickness gauge. The thickness testing shall be done using the method outlined in SSPC PA-2 Film Thickness Rating.
 - 2. The interior lining of all pipe and barrels and fittings shall be tested for pinholes with a nondestructive 2,500 volt test. Any defects found shall be repaired prior to shipment.
 - 3. Each pipe joint and fitting shall be marked with the date of application of the lining system along with its numerical sequence of application on that date and records maintained by the applicator of his work.
- B. Certification: The pipe or fitting manufacturer must supply a certificate attesting to the fact that the applicator met the requirements of this specification and that the material used was as specified.

- C. Handling: PROTECTO 401 Lined Pipe and Fittings must be handled only from the outside of the pipe and fittings. No forks, chains, straps, hooks, etc. shall be placed inside the pipe and fittings for lifting, positioning, or laying.

END OF SECTION

WASTEWATER PUMPING STATION IMPROVEMENTS

FOR THE
OCONEE COUNTY UTILITY DEPARTMENT
ITB #FY1611-03
PPI PROJECT NUMBER E14229A



PROJECT LOCATION
N.T.S.



**Oconee County, Georgia
Board of Commissioners**

23 NORTH MAIN STREET
P.O. BOX 145
WATKINSVILLE, GA 30677
PHONE: 770.769.5120

Prepared by:



planners • engineers • architects • surveyors

802 East Spring Street, Monroe, Ga 30655
770.267.8800 • www.ppi.us

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SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND LEGEND
3	EPPS BRIDGE ROAD PUMP STATION SITE PLAN
4	EPPS BRIDGE ROAD PUMP STATION SECTIONS & DETAILS
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6	HIGHWAY 316 PUMP STATION SECTIONS & DETAILS
7	CONSTRUCTION NOTES
E-1	ELECTRICAL LEGEND AND NOTES
E-2	EPPS BRIDGE ROAD PUMP STATION ONE LINE DIAGRAM AND SITE PLAN



TOTAL SITE AREA	0.3 ACRES
TOTAL DISTURBED AREA	0.3 ACRES

24-HOUR CONTACT
WAYNE HAYNIE
23 NORTH MAIN STREET
17061 769-5120



Know what's below.
Call before you dig.

NO.	REVISION	DESCRIPTION	DATE
A		ISSUED FOR BID	11/19/15

GENERAL NOTES

- OWNER: OCONEE COUNTY BOARD OF COMMISSIONERS 23 NORTH MAIN STREET WATKINSVILLE, GA 30677 CONTACT: MR. WAYNE HAYNE PHONE: (706) 769-5120
- ENGINEER: PRECISION PLANNING, INC. 802 EAST SPRING STREET MONROE, GA 30655 CONTACT: MR. JIM SUNTA PHONE: (770) 267-8800
- LOCATION OF LOT LINES, PROPERTY LINES, RIGHT-OF-WAY LINES, AND OTHER LAND DIVISION REFERENCES WERE OBTAINED FROM RECORDED DATA AND LAND USE OBSERVATIONS. THE LAND DIVISIONS WERE NOT FIELD CHECKED. THEREFORE, THEY MUST ONLY BE CONSIDERED TO APPROXIMATELY REPRESENT THE ACTUAL LAND DIVISIONS, PROPERTY AND/OR EASEMENTS.
- THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF WORK. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR TO NOTIFY THE UTILITY PROTECTION AGENCY 72 HOURS PRIOR TO START OF WORK. PHONE 811.
- THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR THE ADJUSTMENT OR RELOCATION OF ALL EXISTING UTILITIES. ALL COSTS AND/OR FEES RESULTING FROM UTILITY ADJUSTMENT OR RELOCATION SHALL BE PAID FOR BY THE CONTRACTOR.
- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO EXCAVATION OR DEMOLITION. ADDITIONAL UTILITIES MAY NOT BE SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN.
- IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, HAVE REPLACED OR REPAIRED THE UTILITIES TO THEIR ORIGINAL OR BETTER CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO SUBMITTING HIS BID IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENT WILL AFFECT THE SCHEDULING OF WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED AROUND UTILITY FACILITIES THAT WILL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR WILL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.
- CONTRACTOR IS TO MEET ALL LOCAL UTILITY COMPANY REGULATIONS IN ANY READJUSTMENT OR RELOCATION OF EXISTING SERVICES.
- MINIMUM COVER FOR ALL FORCE MAIN LINES SHALL BE 48 INCHES, EXCEPT WHERE ROCK IS ENCOUNTERED DURING TRENCH EXCAVATION. WHERE TRENCH ROCK IS PRESENT AT OR ABOVE 3 FEET FROM GROUND LEVEL, AT THE OWNER'S OPTION, REDUCE COVER OVER PIPE TO 30 INCHES. INSTALL PIPE ON 8 INCHES OF BEDDING MATERIAL AT THESE LOCATIONS.
- A MINIMUM HORIZONTAL SEPARATION OF 10' SHALL BE MAINTAINED BETWEEN WATER LINES AND SANITARY SEWER LINES. AN 18" MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS OF WATER AND SEWER LINES. A 12" MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS OF OTHER PIPES. WHEN CROSSING A WATER LINE, SEWER LINE, OR ANY OTHER PIPING, PIPE JOINTS SHALL BE PLACED AS FAR AWAY AS POSSIBLE FROM THE OTHER PIPE.
- CONTRACTOR MAY TEMPORARILY RELOCATE CREEKS, STREAMS, BRANCHES OR DITCHES WITHIN THE EASEMENTS AT HIS EXPENSE USING PROPER EROSION CONTROL MEASURES, IF AUTHORIZED BY THE APPLICABLE REGULATORY AGENCY AND THE OWNER.
- ALL CONSTRUCTION STAKING SHALL BE BY THE CONTRACTOR AT HIS EXPENSE.
- WHEN CONSTRUCTION INVOLVES THE REMOVAL OF FENCE, POLES, SIDEWALKS, DRIVES, TEMPORARY OR FIXED STRUCTURES; THE CONTRACTOR AT HIS EXPENSE SHALL PROVIDE FOR TEMPORARY SERVICE OR CONTAINMENT TO THE AFFECTED PROPERTY, AND SHALL REPLACE SUCH ITEMS WITH SIMILAR OR BETTER MATERIALS AS SOON AS PRACTICAL OR AS DIRECTED BY THE OWNER FOLLOWING UTILITY INSTALLATION.
- THE CONTRACTOR SHALL RESTORE OR HAVE RESTORED, AT HIS EXPENSE, ALL EXISTING FACILITIES WHICH HAVE BEEN DAMAGED DUE TO HIS CONSTRUCTION ACTIVITIES, TO THE ORIGINAL OR BETTER CONDITION. THE CONTRACTOR SHALL UTILIZE THE SAME MATERIAL COMPOSITION AS EXISTING TO REPLACE THE EXISTING FACILITIES UNLESS APPROVED OTHERWISE BY THE OWNER.

GENERAL NOTES (CONT.)

- ALL NEW FORCE MAINS ARE TO BE INSPECTED, TESTED, AND DISINFECTED PRIOR TO THE CONNECTION OF ANY SERVICES.
- PEDESTRIAN AND LOCAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. SAFETY DEVICES AND FLAGMEN SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE. WRITTEN PERMISSION TO CLOSE THE CONSTRUCTION AREA TO TRAFFIC MUST BE OBTAINED FROM THE APPROPRIATE GOVERNMENT AGENCY PRIOR TO THE CLOSING. ALL LOCAL EMERGENCY SERVICES SHALL BE NOTIFIED IN WRITING A MINIMUM 72 HOURS PRIOR TO ROAD CLOSINGS.
- DURING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY TRAFFIC CONTROL MEASURES TO ENSURE SAFETY AT ALL TIMES FOR EMPLOYEES, RESIDENTS, AND MOTORISTS, IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', ANSI D6.1, LATEST REVISION.
- ALL EARTHWORK OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF OSHA 29 CFR PART 1926, SUBPART P-EXCAVATIONS, LATEST REVISION, AND SHALL BE CONDUCTED IN A MANNER ACCEPTABLE TO OWNER.
- ALL FORCE MAIN PIPE MATERIALS SHALL BE DR17 HDPE PIPE UNLESS NOTED AS DUCTILE IRON PIPE, IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. BEDDING FOR ALL PIPING SHALL BE CLASS 'D', EXCEPT WHEN WET TRENCH CONDITIONS WARRANT 'B' OR 'C' BEDDING.
- LOCATIONS SHOWN FOR VALVES, AND APPURTENANCES MAY BE FIELD ADJUSTED BY THE OWNER PRIOR TO INSTALLATION TO ACCOMMODATE EXISTING FIELD CONDITIONS.
- HORIZONTAL PIPE DEFLECTION NOTED ON PLANS ARE TO ASSIST THE CONTRACTOR WITH THE HORIZONTAL ALIGNMENT OF THE FORCE MAIN, AND IS NOT INTENDED TO DEPICT ALL NECESSARY HORIZONTAL BENDS/FITTINGS TO CONSTRUCT THE FORCE MAIN.
- ALL CONSTRUCTION SHALL COMPLY WITH OCONEE COUNTY UTILITY DEPARTMENT WATER AND WASTEWATER STANDARDS AND SPECIFICATIONS.

ABBREVIATIONS:

A.R.V.	=	AIR RELEASE VALVE
ASPH	=	ASPHALT
BLDG	=	BUILDING
C.F.	=	CUBIC FEET
CL	=	CENTER LINE
C.M.P.	=	CORRUGATED METAL PIPE
DIA. or Ø	=	DIAMETER
D.I.P.	=	DUCTILE IRON PIPE
D/W	=	DRIVEWAY
ESMT	=	EASEMENT
ELEV.	=	ELEVATION
E.O.P./EP	=	EDGE OF PAVEMENT
EX.	=	EXISTING
F.H.	=	FIRE HYDRANT
G.D.O.T.	=	GEORGIA DEPARTMENT OF TRANSPORTATION
G.M.D.	=	GEORGIA MILITIA DISTRICT
G.V.	=	GAS VALVE
G.W.	=	GUY WIRE
HDPE	=	HIGH DENSITY POLYETHYLENE
HDWL.	=	HEADWALL
I.E.	=	INVERT ELEVATION
I.P.F.	=	IRON PIN FOUND
J.B.	=	JUNCTION BOX
L.F.	=	LINEAR FOOT
M.H.	=	MANHOLE
N.A.	=	NOT APPLICABLE
N/F	=	NOW OR FORMERLY
PERM.	=	PERMANENT
P.	=	PROPERTY LINE
P.P.	=	POWER POLE
P.V.C.	=	POLYVINYL CHLORIDE PIPE
R.C.P.	=	REINFORCED CONCRETE PIPE
R/W	=	RIGHT-OF-WAY
S.S.E.	=	SANITARY SEWER EASEMENT
STA.	=	STATION
S.Y.	=	SQUARE YARDS
TEMP.	=	TEMPORARY
TYP.	=	TYPICAL
V.C.P.	=	VITRIFIED CLAY PIPE
W.L.	=	WATER LINE
W.M.	=	WATER METER
W.V.	=	WATER VALVE

EXISTING		NEW	
W	W	WATER	N.A.
G	G	GAS LINE	N.A.
UT	UT	UNDERGROUND TELEPHONE	N.A.
SS	SS	SANITARY SEWER	N.A.
FM	FM	FORCE MAIN	FM FM
SD	SD	STORM DRAIN	N.A.
		RIGHT-OF-WAY	N.A.
		EDGE OF PAVEMENT	N.A.
		PROPERTY LINE	N.A.
		POWER POLE	N.A.
		MANHOLE	N.A.
		WATER VALVE	N.A.
		FIRE HYDRANT	N.A.
		WATER METER	N.A.
		TELEPHONE PEDESTAL	N.A.
		AIR RELEASE VALVE	N.A.
		AIR RELEASE/VACUUM VALVE	N.A.
		SIGN	N.A.
		BUILDING	N.A.
		FENCE	N.A.
		TREE LINE	N.A.
		TREE	N.A.
		ASPHALTIC CONCRETE PAVING	
		CONCRETE PAVING	
		GRAVEL ROAD	N.A.
		LIGHT POLE	N.A.
		CONTOUR	N.A.

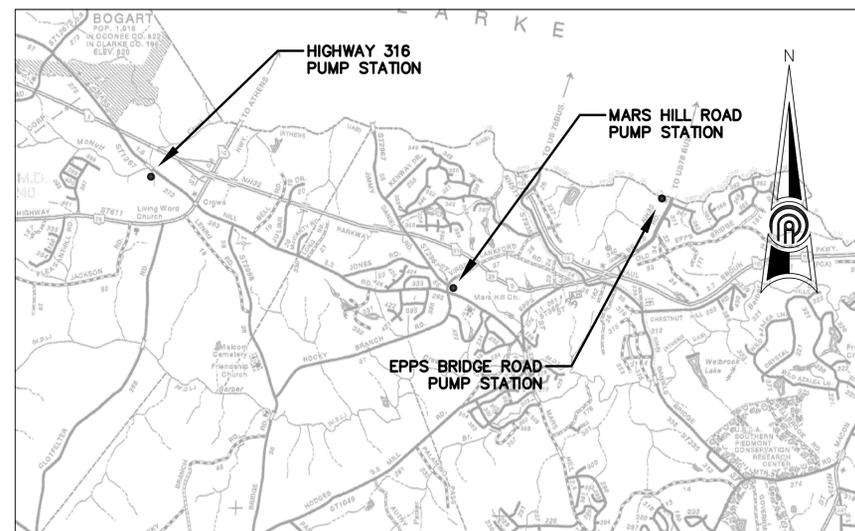
OBSTRUCTIONS ENCOUNTERED:

IN ADDITION TO SHOWING THE STRUCTURES TO BE BUILT FOR THIS PROJECT, THE DRAWINGS SHOW CERTAIN INFORMATION OBTAINED BY THE ENGINEER REGARDING THE PIPES, POLE LINES, CONDUITS AND OTHER STRUCTURES WHICH EXIST ALONG THE LINE OF THE WORK, BOTH AT AND BELOW THE SURFACE OF THE GROUND. THE ENGINEER AND THE OWNER EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION GIVEN ON THE DRAWINGS WITH REGARD TO EXISTING STRUCTURES, AND THE CONTRACTOR WILL NOT BE ENTITLED TO ANY EXTRA COMPENSATION ON ACCOUNT OF INACCURACY OR INCOMPLETENESS OF SUCH INFORMATION, SAID STRUCTURES BEING INDICATED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR, WHO MUST VERIFY THE INFORMATION TO HIS OWN SATISFACTION. THE GIVING OF THIS INFORMATION UPON THE CONTRACT DRAWINGS WILL NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO SUPPORT AND PROTECT ALL PIPES, CONDUITS, AND OTHER STRUCTURES WHICH MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF WORK, AND TO MAKE GOOD ALL DAMAGES DONE TO SUCH PIPES, CONDUITS, AND OTHER STRUCTURES, AS PROVIDED IN THESE SPECIFICATIONS. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND OBSTRUCTIONS PRIOR TO EXCAVATION SO AS TO PREVENT DAMAGE TO THOSE SERVICES OR OTHER UTILITIES. ANY SUCH DAMAGES MUST BE REPAIRED WITHOUT DELAY AND THE COST OF SUCH REPAIRS SHALL BE PAID FOR BY THE CONTRACTOR.

ALL CONSTRUCTION METHODS, PROCEDURES AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OCONEE COUNTY WATER AND SEWERAGE AUTHORITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.

FORCE MAINS AND APPURTENANCES MUST BE COMPLETELY INSTALLED AND TESTED PRIOR TO PERMANENT CONNECTIONS BEING MADE TO THE EXISTING SYSTEM.

24 HR CONTACT
WAYNE HAYNE
UTILITY DEPARTMENT DIRECTOR
PH: 706-769-5120



VICINITY MAP
N.T.S.

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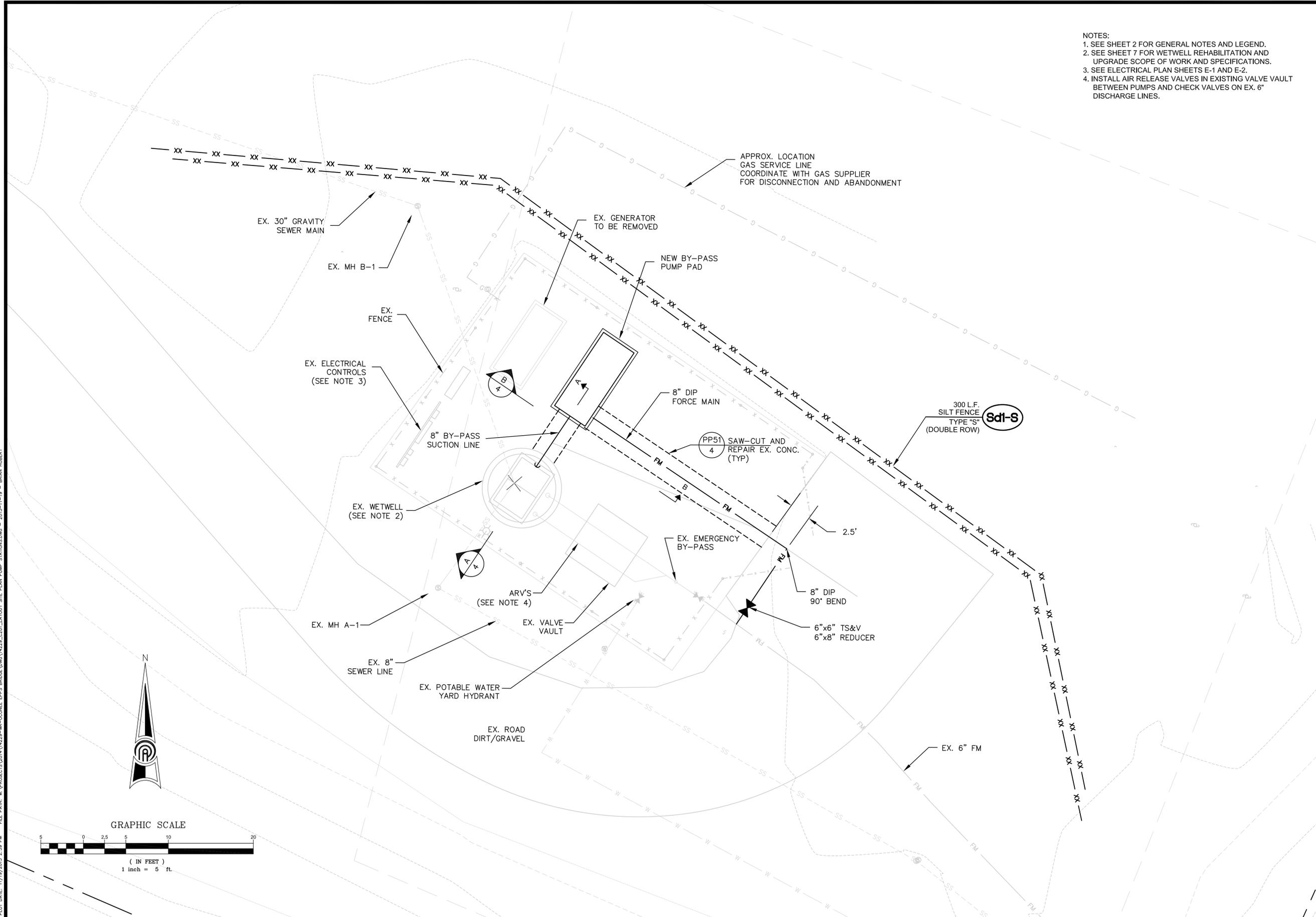
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WASTEWATER PUMPING STATION IMPROVEMENTS

GENERAL NOTES AND LEGEND	SHEET TITLE	DRAWN	CHECKED	KMM
		JDS	BBH	
DATE	NO.	DESCRIPTION		
11/19/15	A	ISSUED FOR BID		
OCTOBER 2015				
DATE				
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PPI PROJECT NO.				
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 PLOT DATE: 11/19/2015 2:59 PM



- NOTES:
 1. SEE SHEET 2 FOR GENERAL NOTES AND LEGEND.
 2. SEE SHEET 7 FOR WETWELL REHABILITATION AND UPGRADE SCOPE OF WORK AND SPECIFICATIONS.
 3. SEE ELECTRICAL PLAN SHEETS E-1 AND E-2.
 4. INSTALL AIR RELEASE VALVES IN EXISTING VALVE VAULT BETWEEN PUMPS AND CHECK VALVES ON EX. 6" DISCHARGE LINES.

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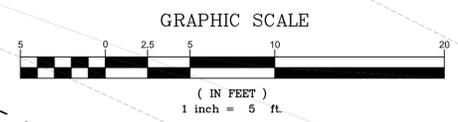
**WASTEWATER
 PUMPING STATION
 IMPROVEMENTS**

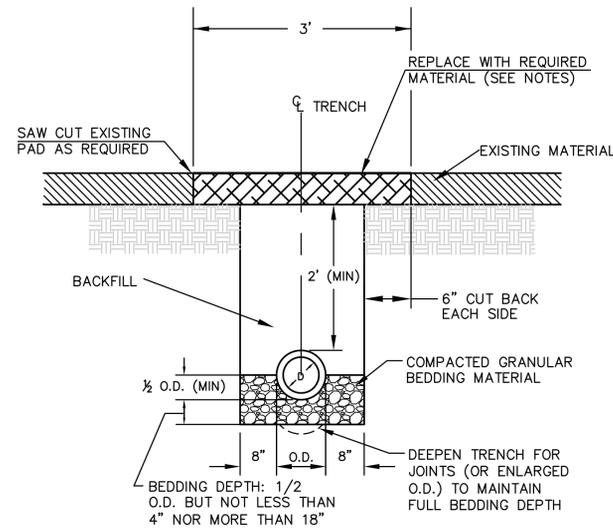
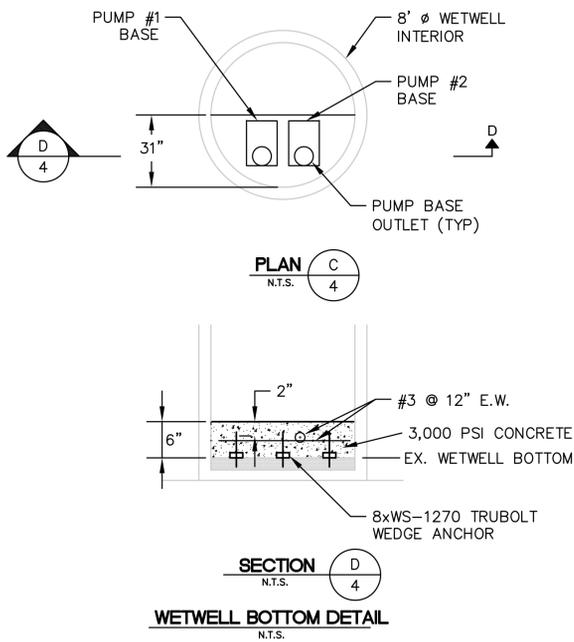
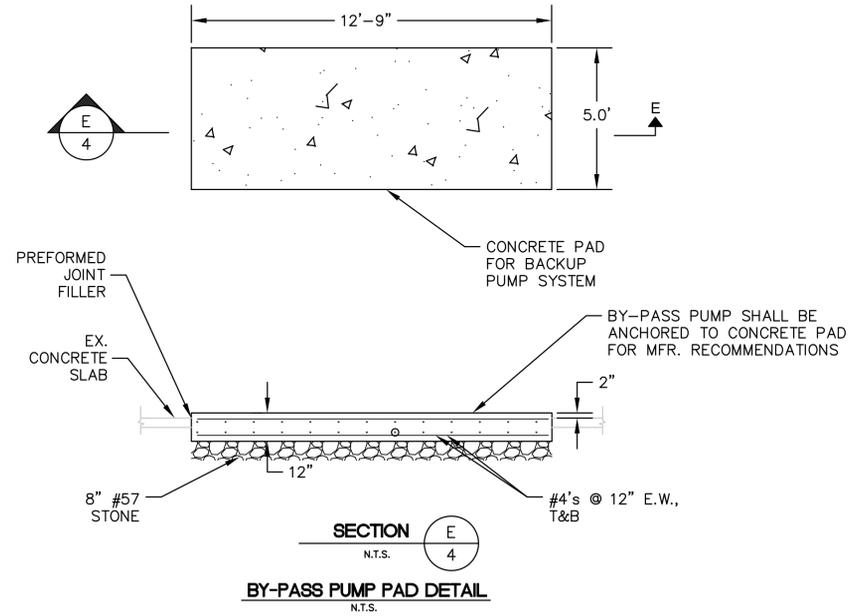
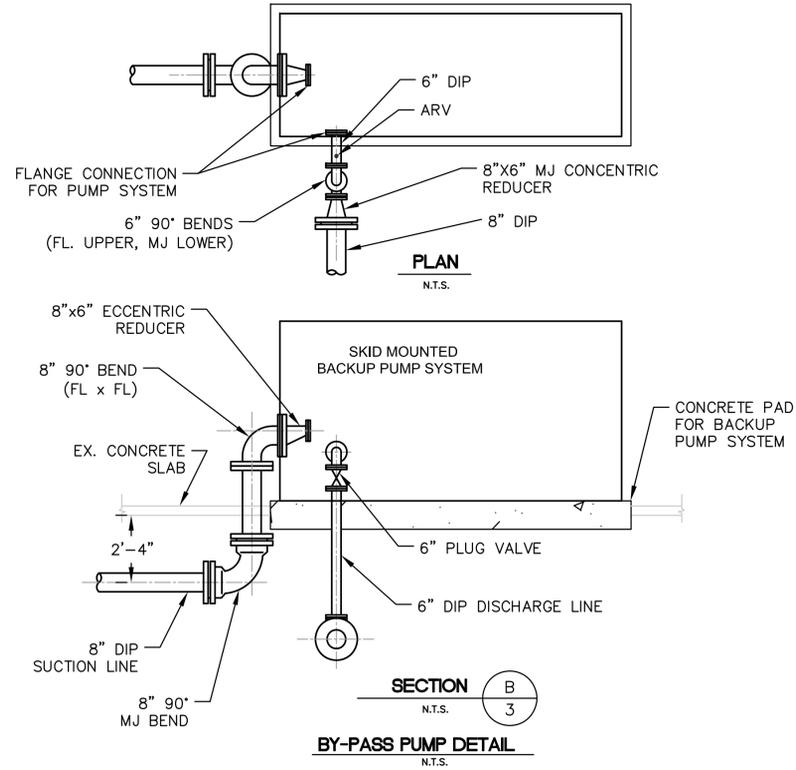
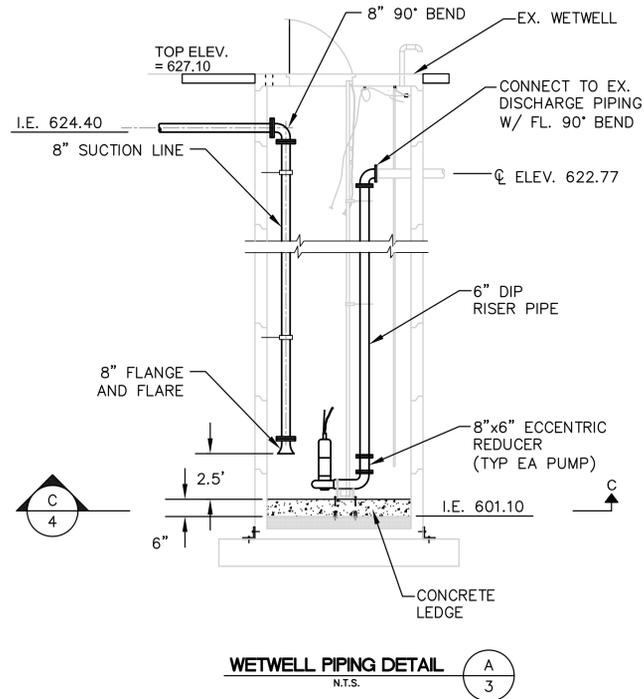
EPPS BRIDGE ROAD PUMP STATION SITE PLAN		SHEET TITLE	
DESIGN	JDS	DRAWN	BBH
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DATE	NO.	DESCRIPTION
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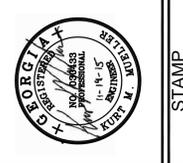


- NOTES:
 1) FOR EXISTING CONCRETE DRIVE, REPAIR CUT WITH MIN. 5" CLASS "B" CONCRETE PER GA D.O.T. STANDARD SPECIFICATION SECTION 430.
 2) LENGTH OF REPAIR TO MATCH LENGTH OF MATERIAL REMOVED FROM EXISTING DRIVE.

NOTES:
 1. SEE SHEET 2 FOR GENERAL NOTES AND LEGEND.

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WASTEWATER PUMPING STATION IMPROVEMENTS

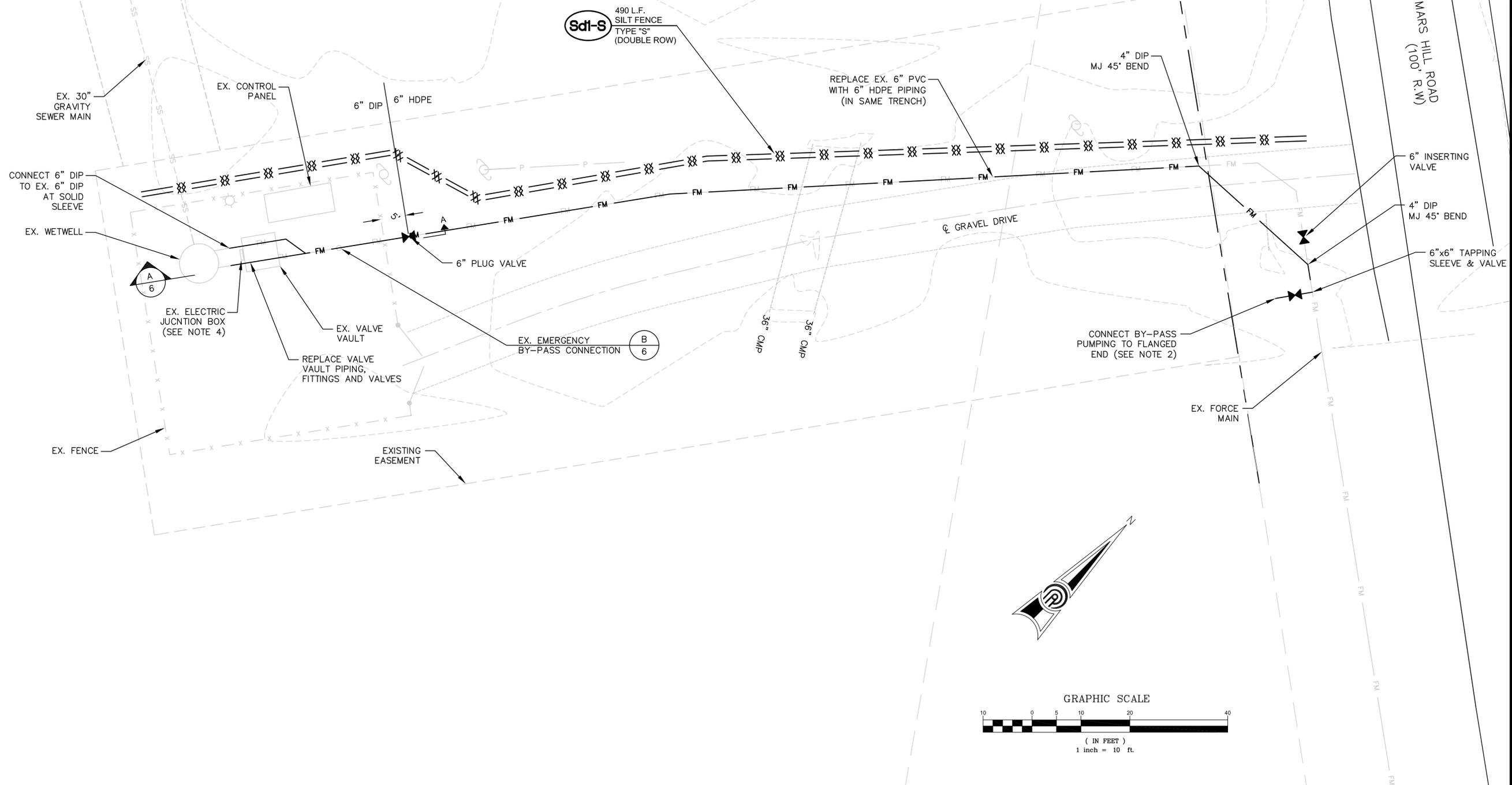
EPPS BRIDGE ROAD PUMP STATION SECTION & DETAILS
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 DESIGN: JDS
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DATE	NO.	DESCRIPTION
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- NOTES:
- SEE SHEET 2 FOR GENERAL NOTES AND LEGEND.
 - PIPING CONFIGURATION FOR TEMPORARY BY-PASS PUMPING SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL. AFTER TEMPORARY BY-PASS PUMPING IS COMPLETE, PLUG EX. 6" BY-PASS AT THE VALVE AND ABANDON THE VALVE.
 - CONTRACTOR TO PROVIDE TRANSITION FITTINGS FOR DUCTILE IRON PIPE TO HDPE PIPE AS REQUIRED.
 - THE CONTRACTOR SHALL RELOCATE THE EXISTING JUNCTION BOX AND ASSOCIATED CONDUITS TO A LOCATION AWAY FROM THE PIPING BETWEEN THE VALVE VAULT AND THE WETWELL. PROVIDE AND INSTALL NEW CONDUITS FROM THE WETWELL TO THE NEW JUNCTION BOX LOCATION, AND EXTEND THE EXISTING CONDUITS FROM THE PUMP CONTROL PANEL TO THE NEW JUNCTION BOX LOCATION. THE EXISTING CABLES SHALL NOT BE SPLICED FOR EXTENSION. REUSE THE EXISTING CABLES IF POSSIBLE BUT IF THE NEW JUNCTION BOX LOCATION WILL REQUIRE TO EXTEND THE CABLES, THE NEW CABLES TO THE PUMP CONTROL PANEL SHALL BE SUPPLIED AND INSTALLED.



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**WASTEWATER
PUMPING STATION
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HIGHWAY 316 PUMP STATION SITE PLAN		SHEET TITLE	
DESIGN	JDS	DRAWN	BBH
CHECKED	KMM	RELEASE	

DATE	NO.	DESCRIPTION
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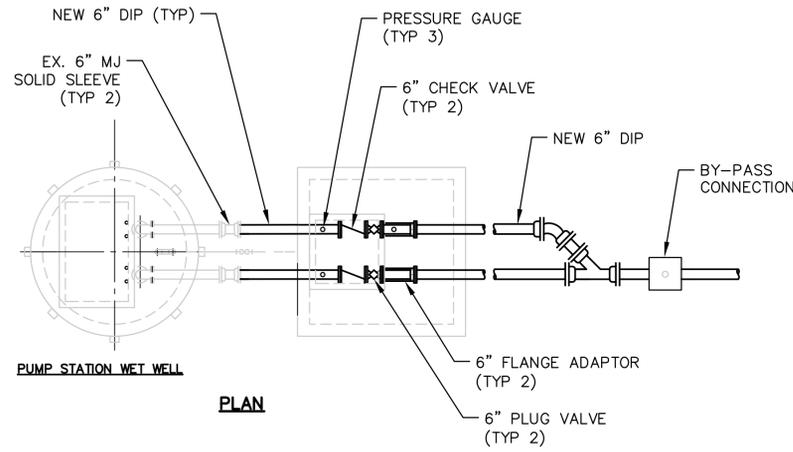
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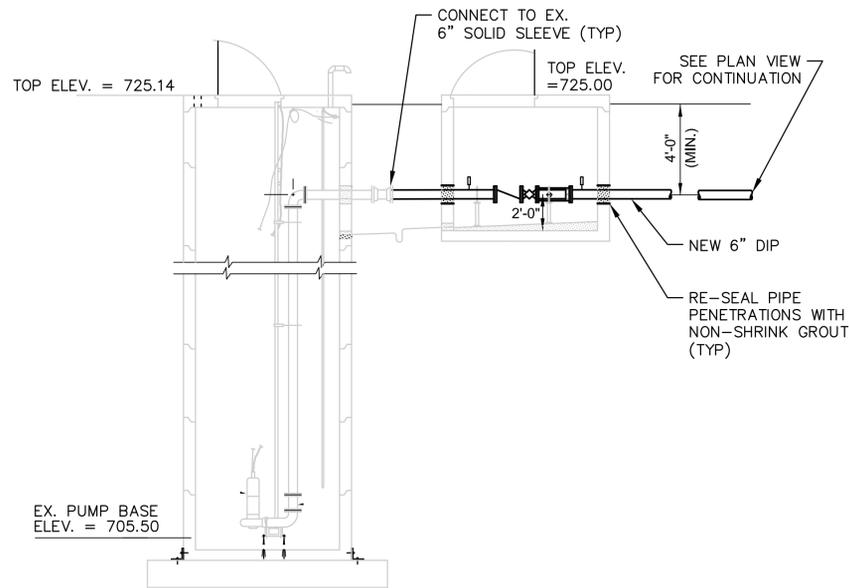
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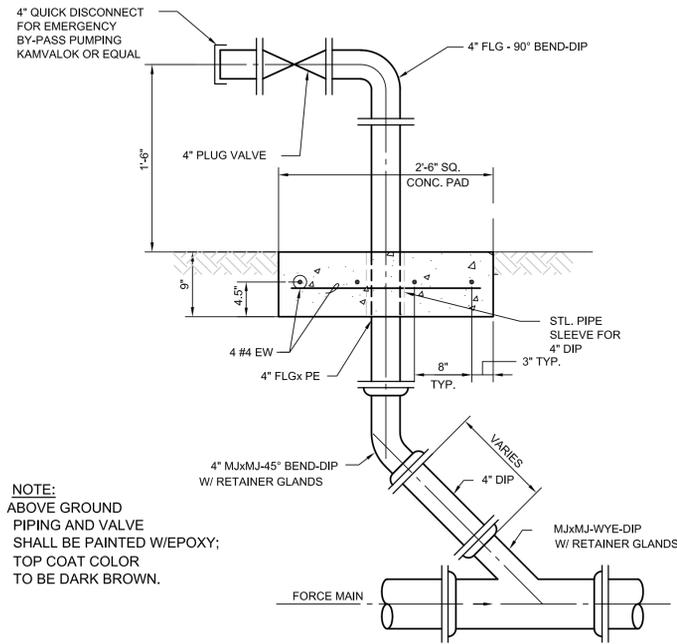
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PLAN

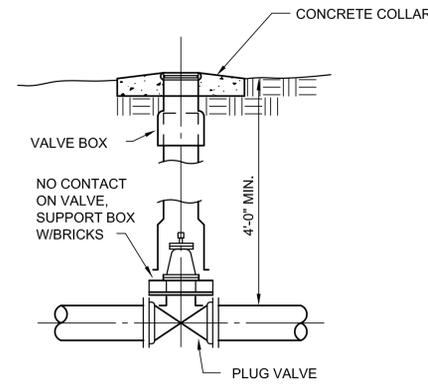


WETWELL PIPING DETAIL A/5
N.T.S.



NOTE:
 ABOVE GROUND
 PIPING AND VALVE
 SHALL BE PAINTED W/EPOXY;
 TOP COAT COLOR
 TO BE DARK BROWN.

**EMERGENCY BY-PASS
 CONNECTION DETAIL** B/5
N.T.S.



PLUG VALVE W2
N.T.S.

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**WASTEWATER
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HIGHWAY 316 PUMP STATION SECTIONS & DETAILS		SHEET TITLE	
DESIGN	JDS	DRAWN	BBH
CHECKED	KMM		

DATE	NO.	DESCRIPTION
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SCOPE OF WORK -- EPPS BRIDGE ROAD PUMP STATION

CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING TASKS FOR REHABILITATION AND UPGRADE OF THE EPPS BRIDGE ROAD PUMP STATION:

1. BYPASSING OF SEWAGE FLOWS DURING WORK ACTIVITIES:
 - A. PLUG AND BYPASS SEWER FLOWS ENTERING THE WETWELL FROM EXISTING MANHOLES A-1 AND B-1 INTO THE EXISTING FORCE MAIN AT THE STATION'S BYPASS TEE.
 - B. CONTRACTOR SHALL PROVIDE ALL PUMPS, HOSES, FUEL, FITTINGS AND APPURTENANCES REQUIRED TO PERFORM THE BYPASSING.
 - C. EACH BYPASS PUMP SHALL BE PROVIDED WITH A RESERVE BACK-UP UNIT.
 - D. CONTRACTOR SHALL PROVIDE ON-SITE MONITORING OF BYPASSING EACH DAY OF OPERATION FROM 8:00 A.M. TO 8:00 P.M.
 - E. THE BYPASS PUMPS SHALL BE DESIGNED FOR THE FOLLOWING CONDITIONS:

MH A-1
AVERAGE DAILY FLOW: 20,000 GPD
PEAK FLOW: 40 GPM
DEPTH: 9 FT

MH B-1
AVERAGE DAILY FLOW: 105,000 GPD
PEAK FLOW: 210 GPM
DEPTH: 18 FT

2. WETWELL CLEANING AND PREPARATION FOR NEW/UPGRADED FACILITIES:
 - A. PRESSURE WASH EXISTING WETWELL INTERIOR WALL AND ALL OTHER MATERIALS TO REMAIN IN STATION UPON COMPLETION OF PROJECT. PROVIDE VACUUM TRUCK TO REMOVE SOLIDS FROM CLEANING ACTIVITIES.
 - B. DISCONNECT FORCE MAIN RISER PIPING FROM 90° BEND FOR EACH PUMP, INCLUDING FLEXIBLE HOSE AND FITTINGS ON PUMP 1 RISER.
 - C. DISASSEMBLE EXISTING 8" (PUMP 1) AND 4" (OLD PUMP 2) PUMP BASES TO INCLUDE BOLTS, WASHERS, ETC. AS NEEDED FOR CONSTRUCTION OF NEW CONCRETE LEDGE. PLACE 4" BASE AT A LOCATION AWAY FROM WORK AREA, AS DIRECTED BY COUNTY STAFF, FOR COUNTY USE ELSEWHERE.
 - D. REMOVE EXISTING GUIDE RAILS FOR PUMP 1.

3. WETWELL UPGRADE:
 - A. CONSTRUCT CONCRETE LEDGE PER PLAN SHEET 4.
 - B. INSTALL EXISTING 8" BASE FOR PUMP 1 AND NEW 8" BASE FOR PUMP 2 IN ACCORDANCE WITH PUMP BASE INSTALLATION DETAILS AND MANUFACTURER RECOMMENDATIONS.
 - C. INSTALL NEW FORCE MAIN RISER PIPING CONNECTION PUMP BASES TO EXISTING 90° BENDS AS SHOWN ON PLAN SHEET 4.
 - D. INSTALL TWO (2) 3"Ø SCHEDULE 40 STAINLESS STEEL GUIDE RAILS. USE EXISTING UPPER GUIDE CONNECTION FOR NEW RAILS.
 - E. INSTALL 8" EMERGENCY BYPASS SUCTION LINE AND LEVEL FLOATS AS SHOWN ON PLAN SHEETS 3, 4 AND E-2.

4. SUPPLY, INSTALL AND TEST ONE (1) NEW SUBMERSIBLE PUMP AS REPLACEMENT FOR OLD PUMP 2.
5. PERFORM UPGRADES TO SUBMERSIBLE PUMP CONTROLS AND ELECTRICAL SUPPLY PER PLAN SHEETS E-1 AND E-2.
6. UPON SATISFACTORY COMPLETION OF ITEMS 2-5 ABOVE, COORDINATE WITH COUNTY STAFF TO DISCONTINUE BYPASSING SO AS TO PUT THE UPGRADED/NEW PUMPS INTO OPERATION.
7. CONSTRUCT CONCRETE PAD, DISCHARGE LINE AND ALL ELECTRICAL LINES FOR NEW EMERGENCY BYPASS PUMP AS SHOWN ON PLAN SHEETS 3, 4 AND E-2.
8. SUPPLY AND INSTALL NEW EMERGENCY BYPASS PUMP PER PLAN SHEETS 3, 4 AND E-2 IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

9. TIME IS OF THE ESSENCE IN EFFECTING THE PUMP STATION REHABILITATION AND RETURNING THE EXISTING SUBMERSIBLE PUMP TO SERVICE. THE CONTRACTOR COMMENCE WITH BYPASSING ACTIVITIES WITHIN 14 CALENDAR DAYS OF THE NOTICE TO PROCEED DATE AND WILL BE ALLOWED A MAXIMUM OF 14 CONSECUTIVE DAYS FROM THE START OF BYPASSING TO START-UP OF THE UPGRADED EXISTING PUMP 1 TO INCLUDE, AT A MINIMUM, ACTIVITIES COVERED UNDER ITEMS 2, 3 AND 5 ABOVE.

IN CASE UNFORESEEN OR UNUSUAL CIRCUMSTANCES WARRANT BYPASSING BEYOND 14 CONSECUTIVE DAYS, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE ENGINEER'S REVIEW AND APPROVAL DESCRIBING THE NEED FOR GRANTING SUCH EXTENSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH BYPASSING BEYOND 14 DAYS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

10. IT IS UNDERSTOOD THAT DUE TO DELIVERY TIME, THE NEW SUBMERSIBLE PUMP WILL LIKELY NOT BE AVAILABLE PRIOR TO RETURNING UPGRADED PUMP 1 TO SERVICE. THEREFORE, CONTRACTOR SHALL COORDINATE HIS WORK TO ALLOW THE COUNTY TO INSTALL ITS EXISTING TRAILER-MOUNTED BACK-UP PUMP FOR USE AS THE EMERGENCY BACK-UP UNTIL NEW PUMP 2 IS PUT INTO SERVICE. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE COST OF INSTALLING AND OPERATING THE COUNTY'S BACK-UP PUMP.

11. PERFORM FINAL CLEAN-UP AS REQUIRED BY SPECIFICATION SECTION 01710.

SCOPE OF WORK -- MARS HILL ROAD PUMP STATION

1. CONTRACTOR SHALL FURNISH ONE (1) NEW SUBMERSIBLE PUMP AS SPECIFIED IN THE EQUIPMENT NOTES.
2. CONTRACTOR SHALL CONNECT THE NEW PUMP TO THE EXISTING PUMP BASE, POWER CORD, GUIDE RAILS AND LIFTING CHAIN IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
3. CONTRACTOR SHALL PERFORM TESTING AND START-UP AS SPECIFIED IN THE EQUIPMENT NOTES AND IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

SCOPE OF WORK -- STATE ROUTE 316 PUMP STATION

CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING TASKS FOR REHABILITATION AND UPGRADE OF THE STATE ROUTE 316 PUMP STATION:

1. INSTALL INSERTION TEE AND TAPPING VALVE AND SLEEVE ON EXISTING 6" FORCE MAIN AS SHOWN ON PLAN SHEET 5.
2. BYPASSING OF SEWAGE FLOWS DURING WORK ACTIVITIES:
 - A. BYPASS SEWER FLOWS FROM THE WETWELL TO THE EXISTING FORCE MAIN AT THE NEW TAP AS SHOWN ON PLAN SHEET 5.
 - B. CONTRACTOR SHALL PROVIDE ALL PUMPS, HOSES, FUEL, FITTINGS AND APPURTENANCES REQUIRED TO PERFORM THE BYPASSING.
 - C. BYPASS PUMP SHALL BE PROVIDED WITH A RESERVE BACK-UP UNIT.
 - D. CONTRACTOR SHALL PROVIDE ON-SITE MONITORING OF BYPASSING EACH DAY OF OPERATION FROM 8:00 A.M. TO 8:00 P.M.
 - E. THE BYPASS PUMPS SHALL BE DESIGNED FOR THE FOLLOWING CONDITIONS:

AVERAGE DAILY FLOW: 40,000 GPD
PEAK FLOW: 150 GPM
DEPTH: 14 FT

2. REMOVE EXISTING FORCE MAIN PIPING, FITTINGS AND VALVES AND REPLACE WITH NEW PIPING, FITTINGS AND VALVES AS SHOWN ON PLAN SHEETS 5 AND 6.
3. PERFORM FINAL CLEAN-UP AS REQUIRED BY SPECIFICATION SECTION 01710.

EQUIPMENT NOTES

1. EXCEPT WHERE OTHERWISE INDICATED, ALL EQUIPMENT AND MATERIALS TO BE SUPPLIED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH THE OCONEE COUNTY UTILITY DEPARTMENT WATER AND WASTEWATER STANDARDS AND SPECIFICATIONS.

2. SUBMERSIBLE PUMPS:

A. EPPS BRIDGE ROAD PUMP STATION

PUMP SHALL BE FLYGT MODEL CP-3300.091 WITH 6-INCH VOLUTE EQUIPPED WITH 460 VOLT, 3 PHASE, 60 HZ, 1750 RPM, 88 HP MOTOR WITH 380 MM IMPELLER. PUMP SHALL BE EXPLOSION PROOF AND INCLUDE 50 FT SUBMERSIBLE CABLE, FLS LEAKAGE DETECTOR WITH SLINGS, GRIP EYE AND VOLUTE PREPARED FOR FLUSH VALVE.

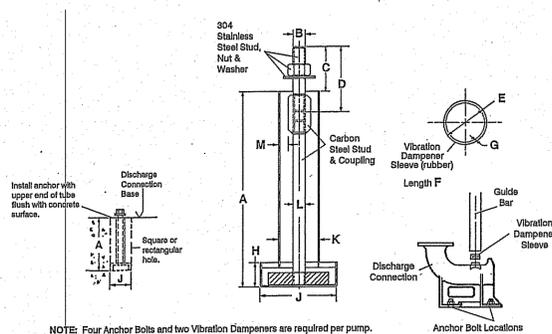
B. MARS HILL ROAD PUMP STATION

THE REQUIRED PUMP WAS SELECTED BY THE OWNER. PUMP SHALL BE FLYGT MODEL NP-3202.095 WITH 4-INCH VOLUTE EQUIPPED WITH 460 VOLT, 3 PHASE, 60 HZ, 1775 RPM, 45 HP MOTOR WITH 340 MM IMPELLER. PUMP SHALL BE EXPLOSION PROOF AND INCLUDE 50 FT SUBMERSIBLE CABLE AND FLS LEAKAGE DETECTOR.

PUMP SHALL MEET THE FOLLOWING DUTY POINT:

FLOW, GPM: 350
TDH, FT: 155

Anchor Bolts
(Heavy Duty Stainless Steel)



NOTE: Four Anchor Bolts and two Vibration Dampers are required per pump.

ANCHOR PART NUMBER	ANCHOR BOLT SIZE	VIBRATION DAMPENER	A	B	C	D	E	F	G	H	J	K	L	M
14 48 82 00	3/4" x 10 UNC	255 47 01	12"	3/4"	2-1/4"	4"	3"	1-3/8"	1/16"	1-1/2"	4-3/4"	2-1/2"	3/4"	1/2"

EQUIPMENT NOTES (CONTINUED)

C. FIELD TEST

THE PUMPS INSTALLED SHALL BE TESTED AT START-UP BY THE PUMP MANUFACTURER OR HIS AUTHORIZED REPRESENTATIVE. ALL HYDRAULIC, MECHANICAL AND ELECTRICAL TESTS SHALL BE RUN TO INSURE THE PROPER INSTALLATION, OPERATION AND MAINTENANCE OF THE PUMPS. AT A MINIMUM, THE FIELD TESTS SHALL INCLUDE CHECKS FOR:

- i. COMPLIANCE WITH OPERATING REQUIREMENTS.
- ii. CORRECT ROTATION BEFORE MOUNTING TO THE DISCHARGE CONNECTION.
- iii. BALANCED VOLTAGE AND CURRENT.
- iv. PROPER SEATING OF THE PUMP TO THE DISCHARGE CONNECTION.
- v. INSURANCE THAT THE CONNECTION BETWEEN THE PUMP AND DISCHARGE CONNECTION DOES NOT LEAK.

D. IN ADDITION TO THE FIELDS TESTS, EACH PUMP AND MOTOR COMBINATION SHALL BE FULLY TESTED ON WATER AT THE PUMP MANUFACTURER'S WORKS TO ESTABLISH THAT ALL RATING CONDITIONS HAVE BEEN MET. THE CONTRACTOR SHALL MAKE ALL REMEDIAL WORK NECESSARY ON ANY OR ALL PUMPS SHOULD THEY FAIL TO MEET THE CONDITIONS SPECIFIED AT NO EXTRA COMPENSATION. PUMPS SHALL THEN BE RETESTED AND FAILURE TO MEET THE SPECIFIED CONDITIONS AFTER REMEDIAL WORK HAS BEEN PERFORMED MAY BE CAUSE FOR REJECTION OF THE PUMPS. TWO (2) CERTIFIED COPIES OF THE TESTS ON ALL PUMPS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY ENGINEER BEFORE SHIPMENT IS MADE.

E. THE PUMP MANUFACTURER SHALL SUBMIT THE PROPER DOCUMENTATION DEMONSTRATING THAT THE PUMP MANUFACTURER WARRANTS THE PUMPS BEING SUPPLIED TO THE OWNER AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF FIVE (5) YEARS OR 15,000 HOURS.

3. EMERGENCY BYPASS PUMP SHALL BE GODWIN DRI-PRIME MODEL HL150M POWERED BY A PERKINS 1106D-E66TA DIESEL ENGINE MOUNTED ON A SKID WITH 150-GALLON U.L. APPROVED FUEL TANK AND PRIME GUARD AUTOMATIC ENGINE CONTROLLER, 12-VOLT BATTERY TRICKLE CHARGER AND 110 VOLT JUNCTION BOX. DESIGN AND SPECIFICATION OF THE BYPASS PUMP SYSTEM SHALL BE THE SOLE RESPONSIBILITY OF GODWIN PUMPS OF AMERICA, INC. PUMP SHALL MEET THE FOLLOWING DUTY POINTS:

	PT 1	PT 2
FLOW, GPM:	318	844
TDH, FT:	267	237

4. DUCTILE IRON PIPE, VALVES AND FITTINGS

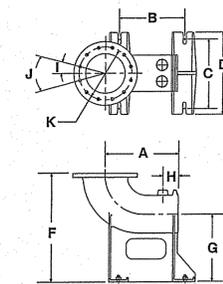
A. INTERIOR OF ALL DUCTILE IRON PIPE, VALVES AND FITTINGS SHALL HAVE CERAMIC EPOXY LINING AS SPECIFIED IN SPECIFICATION SECTION 02737.

B. EXTERIOR OF ALL NEW AND EXISTING DUCTILE IRON PIPE AND FITTINGS INSIDE THE EPPS BRIDGE ROAD PUMP STATION WETWELL SHALL BE COATED WITH A 100% SOLIDS COAL TAR EPOXY COATING SYSTEM. SYSTEM SHALL BE SERIES 46H-413 BY TNEC OR APPROVED EQUIVALENT. SURFACE PREPARATION, COATING THICKNESS, MIXING AND APPLICATION SHALL BE IN ACCORDANCE WITH COATING MANUFACTURER RECOMMENDATIONS.

5. AIR RELIEF VALVES SHALL BE MODEL S20A BY CRISPIN-MULTIPLEX MANUFACTURING CO. OR APPROVED EQUIVALENT, AND SHALL BE PROVIDED WITH BACKFLUSHING ATTACHMENTS, INCLUDING ISOLATION GATE VALVE, TWO (2) 1" FLUSHING VALVES AND FIVE (5) FEET OF 1" HOSE WITH QUICK CONNECT ATTACHMENTS.

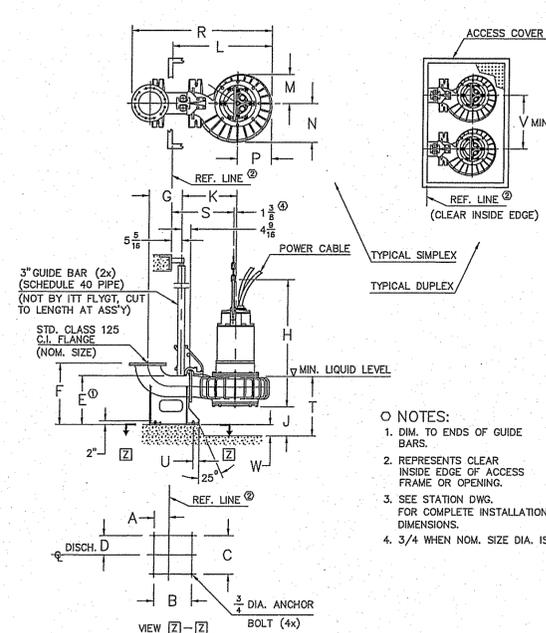
6. INSERTING VALVE SHALL BE QUIKVALE MANUFACTURED BY ROMAC INDUSTRIES, INC. OR APPROVED EQUIVALENT. INSERTING VALVE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

Discharge Connections (Cast Iron)



Part Number	Disch. Inlet	Disch. Outlet	A	B	C	D	E	F	G	H	I	J	K
444 71 06	6"	6"	16 3/4"	11"	10"	12 3/16"	15"	17 3/4"	10 1/8"	4 9/16"	22.6"	45" x 8"	11 3/4"

Outline Dimensions



- NOTES:
1. DIM. TO ENDS OF GUIDE BARS.
 2. REPRESENTS CLEAR INSIDE EDGE OF ACCESS FRAME OR OPENING.
 3. SEE STATION DWG. FOR COMPLETE INSTALLATION DIMENSIONS.
 4. 3/4" WHEN NOM. SIZE DIA. IS 6".

DIMENSIONAL CHART																				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	R	S	T	U	V	W
3 1/2	11	10	5	13 1/2	17 1/2	12 1/2	6 1/2	24 1/2	42 1/2	12	13 1/2	12 1/2	5 1/2	29	23	2 1/2	33	4		
7 1/2	19 1/2	19 1/2	9 1/2	25 1/2	31 1/2	17 1/2	6 1/2	28 1/2	51	15	19 1/2	17 1/2	32 1/2	25	3	58	0			
7 1/2	19 1/2	19 1/2	9 1/2	25 1/2	31 1/2	18 1/2	6 1/2	10	28 1/2	48 1/2	12 1/2	17 1/2	15	7 1/2	32 1/2	26	3	58	0	

EPPS BRIDGE PUMP STATION DETAILS

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WASTEWATER PUMPING STATION IMPROVEMENTS

CONSTRUCTION NOTES

DATE	NO.	DESCRIPTION	DESIGN	DRAWN	CHECKED	RELEASE
11/19/15	A	ISSUED FOR BID	JDS	BBH	KMM	

OCTOBER 2015

E14229A
PPI PROJECT NO.

7

FILE: 14229_C501_DETALS.DWG

SCHEMATIC DIAGRAM SYMBOLS

	CONDUCTORS CONNECTED
	CONDUCTORS NOT CONNECTED
	CONNECTION POINT
	TERMINAL POINT FOR OUTGOING CONDUCTORS, WITH IDENTIFICATION. "XX" DENOTES CONTRACTOR ASSIGNED.
	MCPXXX-XX MAGNETIC-ONLY CIRCUIT BREAKER (MCP), WITH CURRENT RATING
	CBXXX-XX CIRCUIT BREAKER, THERMAL-MAGNETIC UNLESS OTHERWISE NOTED, WITH FRAME SIZE AND TRIP RATING
	FUXXX-XX FUSE WITH SIZE AND OPTIONAL IDENTIFICATION.
	DSXXX-XX DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V RATED MINIMUM UNLESS OTHERWISE NOTED.
	FUDXXX-XX FUSE DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V MINIMUM UNLESS OTHERWISE NOTED.
	M-XXX MOTOR (HP AS SHOWN, PHASES AS REQUIRED)
	MSR-XXX MOTOR STARTER COIL
	OL-XXX THERMAL MOTOR OVERLOAD
	M-XXX MOTOR CONTACT
	LSXXX-XX LIMIT SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	PSXXX-XX PRESSURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	TSXXX-XX TEMPERATURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	FSXXX-XX FLOW SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	FLTXXX-XX LEVEL SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	PRSXXX-XX PROXIMITY SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	PCSXXX-XX PULLCORD SWITCH NORMALLY CLOSED AND NORMALLY OPEN
	SVXXX-XX SOLENOID VALVE
	PBXXX-XX MOMENTARY PUSHBUTTON NORMALLY CLOSED AND NORMALLY OPEN
	SSXXX-XX SELECTOR SWITCH NORMALLY NORMALLY CLOSED AND NORMALLY OPEN
	LTXXX-XX PILOT LIGHT X = LENS COLOR A = AMBER B = BLUE G = GREEN R = RED W = WHITE
	CRXXX-XX CONTROL RELAY
	CRXXX-XX CONTROL RELAY CONTACT NORMALLY CLOSED AND NORMALLY OPEN
	ALXXX-XX ALARM LIGHT
	AHXXX-XX ALARM HORN
	TFRXXX-XX CONTROL POWER TRANSFORMER, PRIMARY AND SECONDARY VOLTAGE SHOWN. SIZE AS SHOWN OR SPECIFIED.
	CTXXX-XX CURRENT TRANSFORMER. PRIMARY/SECONDARY TURNS RATIO AS SHOWN.
	CB-XXX LOW VOLTAGE POWER CIRCUIT AND BREAKER DRAWOUT TYPE, FRAME TRIP SHOWN
	CB-XXX MOLDED CASE CIRCUIT BREAKER, FRAME AND TRIP ID SHOWN
	LIGHTNING ARRESTOR AND GROUND
	DS-XXX DISCONNECT OR ISOLATING SWITCH: CONTINUOUS RATING SHOWN

ONE LINE DIAGRAM SYMBOLS

	MCP-XXX MAGNETIC-ONLY CIRCUIT BREAKER (MCP), DRAWOUT TYPE, WITH CURRENT RATING
	FS-XXX FUSED SWITCH: FUSE AND SWITCH CONTINUOUS RATINGS SHOWN
	TFR-XXX POWER TRANSFORMER: PRIMARY & SECONDARY VOLTAGES, %Z, SIZE SHOWN
	XS CURRENT TRANSFORMER: RATIO SHOWN (3 INDICATES NO. OF CT'S) METER SWITCH, X: AS - AMMETER SWITCH VS - VOLTMETER SWITCH FS - FREQUENCY SWITCH
	PT POTENTIAL TRANSFORMER PRIMARY & SECONDARY VOLTAGES & WINDINGS SHOWN. (X) UNITS
	METER A - AMMETER W - WATTMETER KWH - WATT-HOUR METER F - FREQUENCY METER VAR - VAR METER V - VOLTMETER
	FVNR SIZE X FULL VOLTAGE, NON-REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED
	FVR SIZE X FULL VOLTAGE, REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED
	VFD-XXX VARIABLE FREQUENCY DRIVE. NEMA SIZE INDICATED
	RVSS-XXX REDUCED VOLTAGE SOLID STATE DRIVE (SOFT START). NEMA SIZE INDICATED
	M-XXX MOTOR (HP AS SHOWN, PHASES AS REQUIRED)
	GEN RECEPTACLE
	MTS-XXX MANUAL TRANSFER SWITCH
	CABLE TAG: P - POWER CABLE C - CONTROL CABLE S - SHIELDED SIGNAL CABLE
CIRCUIT AND RACEWAY SYMBOLS	
	RACEWAY OR WIRING SYSTEM ABOVE FLOOR LEVEL BELOW CEILING, EXPOSED. (UNLESS OTHERWISE NOTED)
	RACEWAY OR WIRING SYSTEM BELOW FLOOR LEVEL, ABOVE CEILING, HIDDEN, OR EXISTING CABLE/CONDUIT. (UNLESS OTHERWISE NOTED)
	SCHEMATIC DIAGRAM FIELD WIRING. (UNLESS OTHERWISE NOTED)
	ONE LINE DIAGRAM EQUIPMENT ENCLOSURE. (UNLESS OTHERWISE NOTED)
	GROUNDING CONDUCTOR (CONCEALED), #4/0 AWG BARE COPPER
	GROUNDING CONDUCTOR (EXPOSED), #4/0 AWG INSULATED COPPER
	HOME RUN - SEE PANELBOARD SCHEDULE FOR CIRCUIT INFORMATION EXAMPLE: HOME TO PANELBOARD PBD A, CIRCUITS 1, 3, AND 5
GROUNDING SYMBOLS	
	GROUND ROD, 3/4" x 10'-0", COPPERCLAD (UNLESS OTHERWISE NOTED)
	GROUND ROD AND WELL
	COMPRESSION TYPE GROUNDING BOND TO MOTOR CASING OR EQUIPMENT
	EXOTHERMIC TYPE GROUNDING BOND TO MOTOR CASING OR EQUIPMENT
	—GG— BARE COPPER GROUNDING CONDUCTOR #2 AWG.
	—G— BARE COPPER GROUNDING CONDUCTOR #1/0 AWG.

GENERAL ABBREVIATIONS

AR	ALARM RELAY	M	MOTOR CONTACTOR
AS	AMMETER SELECTOR SWITCH	MA	MILLIAMPERE
A	AMP(S), AMPERE(S)	MAX	MAXIMUM
AC	ALTERNATING CURRENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AHAP	AS HIGH AS POSSIBLE	MCP	MOTOR CONTROL PANEL/MOTOR CIRCUIT PROTECTOR
AL	ALUMINUM	MECH	MECHANICAL
AT	AMPERE TRIP	MFR	MANUFACTURE(R)
AF	AMPERE FRAME	MH	MANHOLE
AUTO	AUTOMATIC	MIC	MICROPHONE
AUX	AUXILIARY	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	MISC	MISCELLANEOUS
BC	BARE COPPER CONDUCTOR	mV	MILLIVOLT
BKR	BREAKER	MCM	MILLI CIRCULAR MILLS
C	CONDUCTOR/CONTACTOR	MOP	MOTOR OPERATOR PANEL
CB	CIRCUIT BREAKER	MPR	MOTOR PROTECTION RELAY
CJB	CIRCUIT JUNCTION BOX	MCB	MAIN CIRCUIT BREAKER
CKT	CIRCUIT	MTR	MOTOR
CLG	CEILING	MVS	MEDIUM VOLTAGE STARTER
CR	CONTROL RELAY	N/A	NOT APPLICABLE
CND	CONDUIT	NC	NORMALLY CLOSED
CONC	CONCRETE	NEUT,N	NEUTRAL
CS	CONTROL SWITCH	NIC	NOT IN CONTRACT
CONT	CONTROL	NO	NORMALLY OPEN
CPT	CONTROL POWER TRANSFORMER	NOM	NOMINAL
CT	CURRENT TRANSFORMER	NP	NAMEPLATE
CU	COPPER	NTS	NOT TO SCALE
D	DIAMETER	OC	ON CENTER
DB	DUCT BANK	OD	OUTSIDE DIAMETER
DC	DIRECT CURRENT	OH	OVERHEAD
DET	DETAIL	OL's	OVERLOADS
DIAG	DIAGRAM	OT	OIL TIGHT
DPSH	DIFFERENTIAL PRESSURE SWITCH	P	POLE
DS	DISCONNECT SWITCH	PA	PUBLIC ADDRESS
DWG	DRAWING	PB	PUSHBUTTON, PULLBOX
EA	EACH	PE	PHOTO ELECTRIC CELL
EC	ELECTRICAL CONTRACTOR	PF	POWER FACTOR
EF	EXHAUST FAN	PH	PHASE FACTOR
ELEV	ELEVATION	PJB	POWER JUNCTION BOX
ELEC	ELECTRIC(AL)	PLC	PROGRAMMABLE LOGIC CONTROLLER
EMER	EMERGENCY	PNL	PANEL
ENCL	ENCLOSURE/ENCLOSED	PP	POWER PANEL
EP	EXPLOSION PROOF EQUIP.	PR	PAIR
EX, E	EXISTING	PRI	PRIMARY
FCP	FURNISHED WITH EQUIPMENT PANEL	PS	PRESSURE SWITCH
FDR	FEEDER	PT	POTENTIAL TRANSFORMER
FLA	FULL LOAD AMPS	PVC	POLYVINYL CHLORIDE
FPP	FIBER OPTIC DISTRIBUTION PANEL	PWR	POWER
FS	FLOW SWITCH	QSH	SHEAR PIN LIMIT SWITCH
FU	FUSE	ROPT	RECEPTACLE
FUT	FUTURE	RCT	REACTOR
FVNR	FULL VOLTAGE NON-REVERSING	REF	REFERENCE REQ'D REQUIRED
FVR	FULL VOLTAGE REVERSING	RMS	ROOT MEAN SQUARE
GALV	GALVANIZED	RMS	RESISTANCE TEMPERATURE DETECTOR
GEN	GENERATOR	SCH	SCHEDULE
GFR	GROUND FAULT RELAY	SE	SPEED SENSOR
GRD	GROUND	SEL	SECONDARY
GRS	GALVANIZED RIGID STEEL	SER	SELECTOR
H	HIGH	SPD	SERVICE ENTRANCE RATED SINGLE POLE DOUBLE THROW SPECIFICATION
HGT	HEIGHT	SPHTR	MOTOR SPACE HEATER
HH	HANDHOLE	SSL	SPEAKER
HID	HIGH INTENSITY DISCHARGE	SSS	SPEED SWITCH
HP	HORSEPOWER	SUB	SUBSTATION
HS	HAND STATION (SWITCH)	SW	SWITCH
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	SYMM	SYMMETRICAL
HZ	HERTZ (CYCLES PER SECOND)	SYS	SYSTEM
HOA	HAND/OFF/AUTO	SV	SOLENOID OPERATED VALVE
HOR	HAND/OFF/REVERSE	SPB	SIGNAL PULL BOX
HMH	HIGH VOLTAGE MANHOLE	TB	TERMINAL BOX
ID	INSIDE DIAMETER	TEL	TELEPHONE
IMC	INDIVIDUAL MOTOR CONTROLLER	TEMP	TEMPERATURE
INTLK	INTERLOCK	TRFMR	TRANSFORMER
INST	INSTANTANEOUS	THER	THERMOSTAT
INSTR	INSTRUMENT	TJB	TERMINAL JUNCTION BOX
I/O	INPUT-OUTPUT	TSH	TEMPERATURE SWITCH HIGH TELEVISION
JB	JUNCTION BOX	TV	TYPICAL
KV	KILOVOLT	TR	TIMING RELAY
KVA	KILOVOLT-AMPERE	TSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
KVAR	KILOVOLT-AMPERE REACTIVE	TSP	TWISTED SHIELDED PAIR
KW	KILOWATT	UG	UNDERGROUND
KWH	KILOWATT-HOUR	UH	UNIT HEATER
KAIC	KILO AMPERE INTERRUPTING CURRENT	UON	UNLESS OTHERWISE NOTED
L-O-R	LOCAL-OFF-REMOTE	V	VOLT
L	LONG	VA	VOLT AMPERE
LC	LIGHTING CONTACTOR	VAR	VOLT AMPERE REACTIVE
LCP	LOCAL CONTROL PANEL	VFD	VARIABLE FREQUENCY DRIVE
LP	LIGHTING PANEL	VSH	VIBRATION SWITCH
LOS	LOCK-OUT STOP	W	WATT, WIRE, WIDE
LSIG	LONG, SHORT, INSTANTANEOUS TRIP SETTING AND GROUND FAULT PROTECTION	W/W	WITH
LSL	LEVEL SWITCH LOW	W/O	WITHOUT
LSO	LIMIT SWITCH OPEN	WE	WEIGHT LOAD CELL
LSC	LIMIT SWITCH CLOSED	WIT	WEIGHT INDICATING TRANSMITTER
LTG	LIGHTING	WP	WEATHERPROOF
LV	LOW VOLTAGE	XL	WARNING HORN/LIGHT
LSH	LEVEL SWITCH HIGH	XT	ANEMOMETER
ZS	POSITION (LIMIT) SWITCH	ZSO	POSITION (LIMIT) SWITCH OPEN
ZSC	POSITION (LIMIT) SWITCH CLOSED	ZSC	POSITION (LIMIT) SWITCH CLOSED
ZT	POSITION TRANSMITTER	ZT	POSITION TRANSMITTER

GENERAL NOTES:

- SCOPE:
 - FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS REQUIRED TO COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, BOXES, LIGHT FIXTURES, PANELS, SWITCHES, RECEPTACLES, DISCONNECTS, STARTERS, AND ALL OTHER WORK INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREIN.
 - OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY THE LOCAL AUTHORITIES HAVING JURISDICTION AND DELIVER CERTIFICATE OF APPROVAL TO THE GENERAL CONTRACTOR. ALL ASSOCIATED FEES SHALL BE PAID BY THE CONTRACTOR.
 - ALL MATERIALS AND EQUIPMENT OF THE ELECTRICAL SYSTEM NECESSARY FOR ITS PROPER AND SAFE OPERATION OR OTHERWISE REQUIRED BY CODE, BUT NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, SHALL BE FURNISHED AND INSTALLED WITHOUT ADDITIONAL CHARGE.
 - WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE, THE LATEST STANDARD BUILDING CODE, NFPA 820, ANY OTHER LOCALLY ADOPTED CODES AND LOCAL AUTHORITIES HAVING JURISDICTION.
- ALL SUBSTITUTIONS FOR EQUIPMENT AND MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES. IT IS THE RESPONSIBILITY OF CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. AND COORDINATED THE INSTALLATION ACCORDINGLY. THE EQUIPMENT WIRING SHALL INCLUDE ALL NECESSARY CABLES AND CONDUIT REQUIRED FOR THE PROPER AND SAFE EQUIPMENT OPERATION.
- ALL CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING WIRING. USE #14 AWG MINIMUM CONDUCTOR FOR SIGNAL WIRING. THE INSULATION FOR ALL CONDUCTORS SHALL BE THWN-2. SERVICE ENTRANCE CONDUCTORS SHALL BE XHHW. ALL CABLE INSTALLED IN CABLE TRAYS SHALL BE TC RATED.
- POWER WIRES SIZES #12 AWG AND #10 AWG SHALL BE SOLID TYPE. ALL OTHER SIZES SHALL BE STRANDED. CABLES BETWEEN THE VFD AND ASSOCIATED MOTOR SHALL BE SHIELDED POWER VFD RATED CABLES.
- ALL EXPOSED CONDUITS SHALL BE GALVANIZED RIGID STEEL, UNLESS NOTED OTHERWISE ON THE DRAWINGS, MINIMUM OF 3/4". ALL BURIED CONDUIT SHALL BE PVC-40, MINIMUM OF 1". ALL UNDERGROUND CONDUITS SHALL HAVE RIGID STEEL ELBOWS.
- ALL FITTINGS SHALL BE CAST WITH THREADED HUBS. ALL CONNECTIONS SHALL BE COMPRESSION TYPE.
- CONTRACTOR SHALL PROVIDE PULL STRING AND IDENTIFICATION LABELS AT EACH CONDUIT END FOR ALL SPARE CONDUITS.
- ALL EQUIPMENT LOCATED IN THE PRIMARY SEWAGE WETWELL SHALL BE CLASS 1, DIVISION 1 RATED.

PLAN DRAWING SYMBOLS

	MOTOR CONNECTION
	MOTOR STARTER, INDIVIDUAL --- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY
	COMBINATION MOTOR STARTER/DISCONNECT INDIVIDUAL --- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY
	DISCONNECT SWITCH. DISCONNECT SWITCHES ARE HEAVY DUTY, SINGLE THROW, WITH NEMA 4X ENCLOSURE UNLESS OTHERWISE NOTED. MOUNT AT 4'-8" TO CENTER OF DISCONNECT.
	FUSED DISCONNECT, NON-FUSED. PROVISION FOR CLASS R FUSES.
	FIELD INSTRUMENT CONNECTION
	START/STOP HAND STATION MOUNTED TO HANDRAIL (NEMA 4X UNLESS OTHERWISE NOTED)
	120V, 20A, 1P TOGGLE SWITCH [BLANK] = 1P TOGGLE SWITCH 2 = 2P TOGGLE SWITCH 3 = 3P TOGGLE SWITCH D = SLIDE DIMMER M = MOTOR RATED S = TOGGLE WITH OCCUPANCY SENSOR
	DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
	GFCI DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
	QUADRAPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
	TELEPHONE BOX. MOUNT 18" A.F.F., INSTALL A 1/2" CONDUIT FROM BOX TO 6" ABOVE CEILING. PROVIDE PULL CORD FOR FUTURE CONNECTIONS AS REQUIRED.
	JUNCTION BOX
	60A, 480V, 3PH WELDING RECEPTACLE WITH INTERLOCKED 60A (NEMA 4X FUSED DISCONNECT SWITCH UNLESS OTHERWISE NOTED)

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WASTEWATER
PUMPING STATION
IMPROVEMENTS

EPPS BRIDGE ROAD
PUMP STATION
LEGEND AND NOTES

SHEET TITLE	CHECKED
DESIGN	DRAWN
AZ	AZ

DATE NO. DESCRIPTION

11/09/15	A ISSUED FOR BID
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NOVEMBER 2015

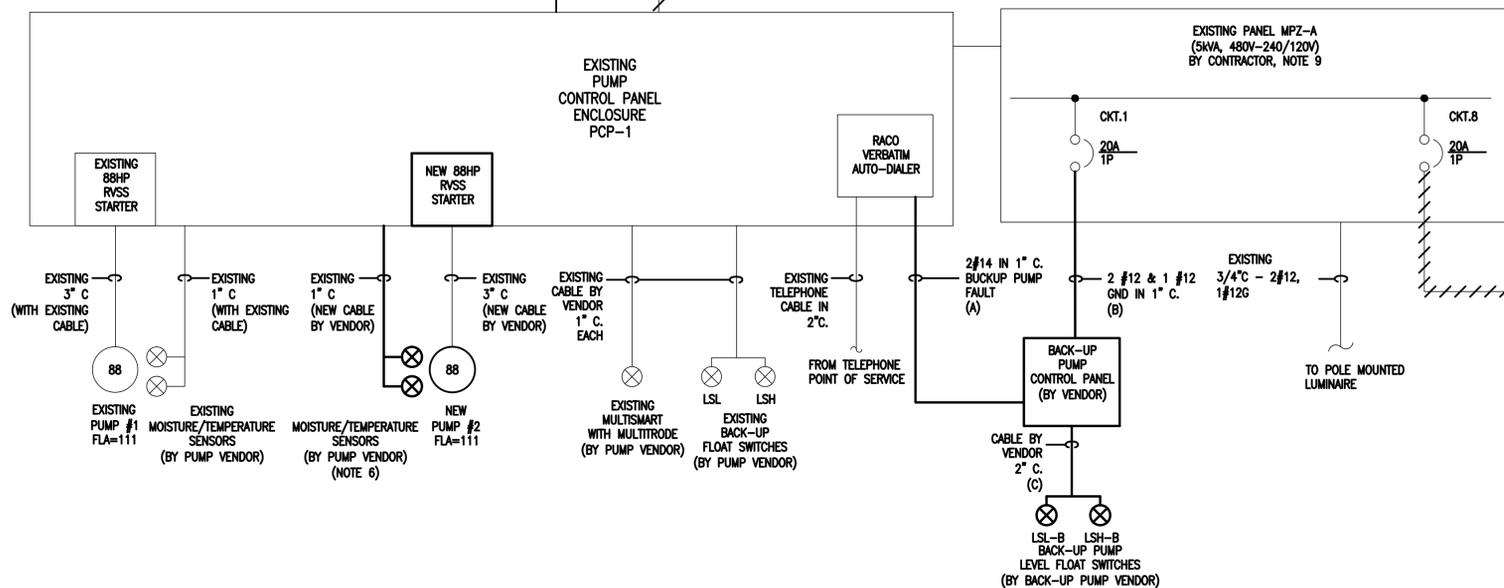
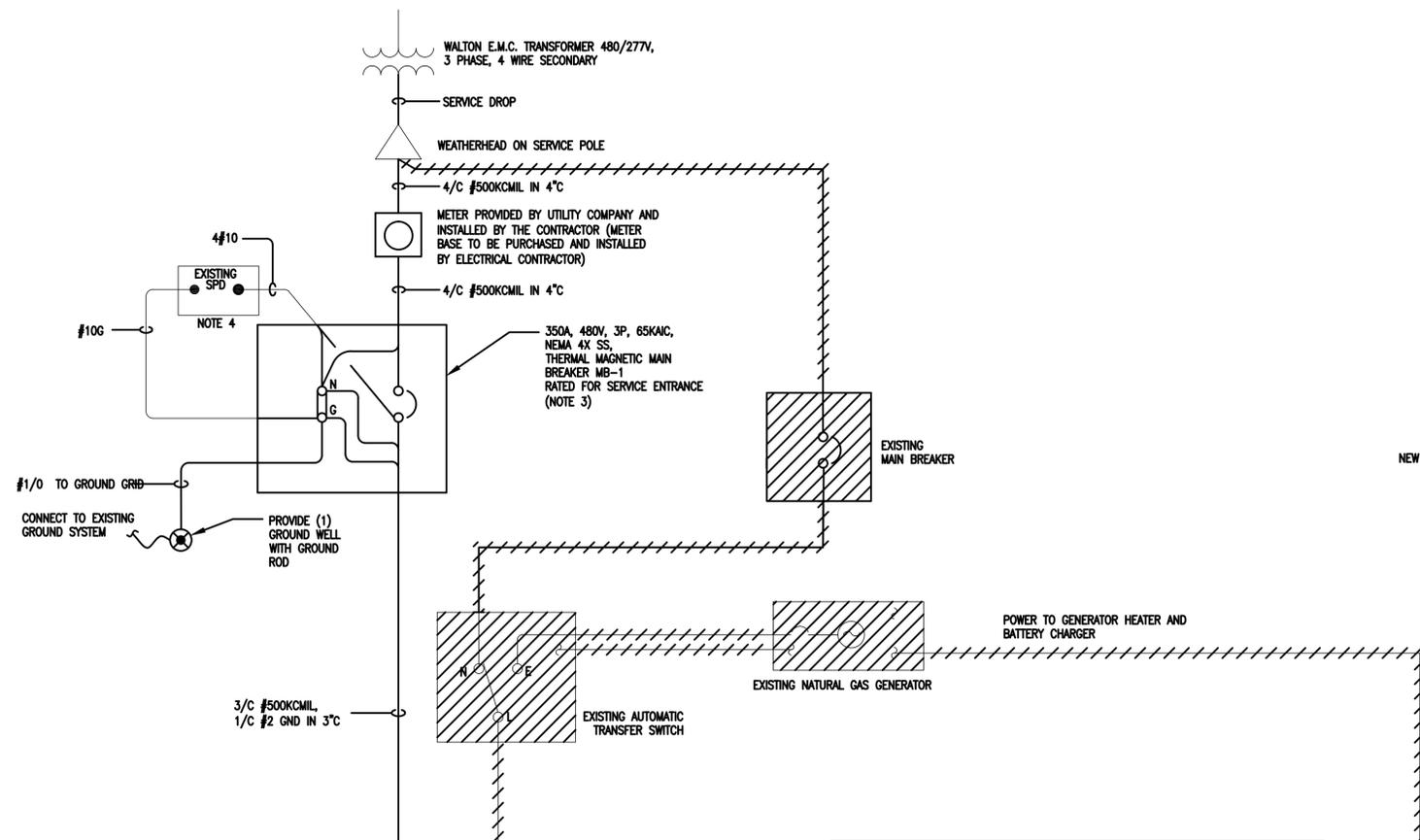
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E14229

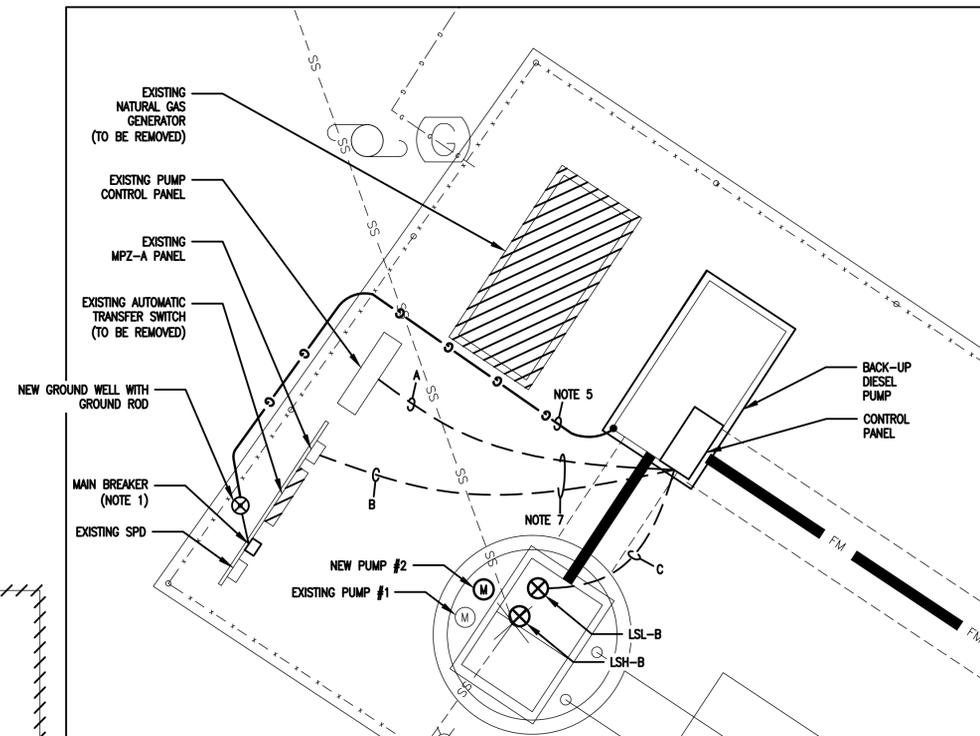
PPI PROJECT NO.

EDEC, INC.
3069 PEACHTREE IND. BLVD.
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DULUTH, GEORGIA 30097
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E-1



1 ONE LINE DIAGRAM
SCALE: N.T.S.



2 ELECTRICAL SITE PLAN
SCALE: 1/4" = 1'

- PROJECT GENERAL SCOPE:**
- ONE EXISTING 47 HP PUMP SHALL BE REPLACED WITH 88 HP PUMP.
 - ONE EXISTING 47 HP MOTOR STARTER IN PUMP CONTROL PANEL SHALL BE REPLACED WITH 88 HP RATED RVSS MOTOR STARTER. THE EXISTING RVSS STARTER SHALL MATCH THE EXISTING 88 HP RATED STARTER FOR PUMP #1.
 - THE CONTRACTOR IS RESPONSIBLE TO UPGRADE THE EXISTING POWER DISTRIBUTION SYSTEM TO ACCOMMODATE FOR THE LOAD INCREASE.
 - THE EXISTING NATURAL GAS GENERATOR AND ATS TO BE REMOVED. A NEW DIESEL BACK-UP PUMP TO BE INSTALLED TO SERVE IN CASE OF POWER LOSS TO THE SITE.
- NOTES:**
- THE CONTRACTOR SHALL PROVIDE AND ROUTE NEW SECONDARY SERVICE CABLE/CONDUIT TO NEW MAIN BREAKER. NEW BREAKER SHALL BE INSTALLED IN PLACE OF THE EXISTING MAIN BREAKER.
 - THE EXISTING GENERATOR, ATS AND ALL ASSOCIATED CABLES/CONDUITS SHALL BE DISCONNECTED, REMOVED AND RETURNED TO THE OWNER.
 - CONTRACTOR SHALL PROVIDE AND INSTALL NEW SERVICE ENTRANCE RATED MAIN BREAKER TO REPLACE THE EXISTING MAIN BREAKER.
 - RECONNECT THE EXISTING SURGE PROTECTION DEVICE (SPD) TO NEW MAIN BREAKER.
 - CONTRACTOR SHALL PROVIDE #1/0 BARE COPPER WIRE AND RUN IT UNDERGROUND BETWEEN BACK-UP PUMP ENCLOSURE AND NEW GROUND ROD.
 - CONTRACTOR SHALL DUPLICATE ALL INTERLOCKS AND CONTROLS OF THE EXISTING STARTER AND MOISTURE/TEMPERATURE RELAY FOR THE NEW STARTER.
 - CONTRACTOR SHALL COORDINATE EXISTING CONCRETE SAW CUTS WITH THE PROCESS PIPING TO MINIMIZE THE NUMBER OF SAW CUTS.

LEGEND:
////// - EQUIPMENT TO BE DEMOLISHED

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**WASTEWATER
PUMPING STATION
IMPROVEMENTS**

EPPS BRIDGE ROAD PUMP STATION ONE LINE DIAGRAM AND SITE PLAN		SHEET TITLE	
DESIGN	AZ	CHECKED	AZ
DRAWN	DV	RELEASE	

DATE	NO.	DESCRIPTION
11/19/15	A	ISSUED FOR BID

NOVEMBER 2015
DATE
E14229
PPI PROJECT NO.

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E-2