

OAK GROVE FORCEMAIN - SPECIAL CONDITIONS

1.0 EXISTING FACILITY OPERATIONS

Connections to the existing facilities or alteration of existing facilities will be made at times when the facility involved is not in use or at times established by the Owner when the use of the facility can be conveniently interrupted for the period of time needed to make the connection or alteration. Notify the Owner at least ten (10) days prior to relocating any facility piping or taking any existing facility component out of service.

2.0 PROJECT SCHEDULE

2.1 Project Schedule: The following activities shall be completed by the indicated date or days after Notice to Proceed.

Task or Milestone	Completion (Days after NTP)
Shop Drawing Submittals	
Completion and submission of all Shop Drawings by Contractor	14
Review of Shop Drawings By JWSC/Engineer	28
Re-submittal of Shop Drawings By Contractor (if Required)	35
Review of Re-submittal Shop Drawings By JWSC/Engineer (if Required)	42
Critical Submittals	
Geotechnical Borings (Coordinated with/by Engineer of Record)	14
CSX Permit application with bore plan details (Coordinated with/by Engineer of Record) – Concurrent with DNR/ACOE Permit	70
DNR/ACOE application (Coordinated with/by Engineer of Record - Concurrent with CSX Permit)	70
Horizontal Directional Drill Work Plan, CSX Plan, Supplemental Work Plan, and Calculations	7
Schedule of Values*	7
Project Schedule*	7
Superintendent Qualifications and Contact Information	7
Dewatering Plan	7
Substantial Completion– Work for Project Scope Along Oak Grove Road	170
Final Completion of All work (including all restoration)	180
* The construction progress schedule shall show the proposed dates of commencement and completion of the various milestones of the work required under the contract as well as the anticipated amounts of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The construction progress schedule will be a true reflection of the actual construction progress, shall be reviewed and updated for the bi-weekly project meetings and submitted with the monthly periodic payment request. The monthly payment request shall not be considered complete without the accurately updated construction progress schedule.	

2.2 Work Hours

Unless otherwise noted in the Contract Documents, the time allotted for completion of the project is based on a standard work week with construction activities between 7:00 a.m. and 7:00 p.m., Monday through Friday. Contractor shall coordinate any necessary night or weekend construction

activities a minimum of 24 hours in advance with the JWSC project representative and Glynn County. The OAK GROVE HOA may require notifications and updates on a regular basis to help communicate any impacts to the existing residence within the Oak Grove development.

2.3 Delays

Contractor shall not be compensated for delays caused by Contractor's inefficiency, rework made necessary by Contractor's error, failure to perform the Work as scheduled, or any other corrective or productivity measures made necessary by errors, omissions, or failures to properly perform the Work. Neither shall the Contractor be compensated for delays caused by events by Act of God as described in the General Conditions. Within thirty (30) days after the onset of a delay, Contractor shall notify the JWSC in writing of the delay, which shall provide: (1) a detailed description of the delay and its probable duration, (2) the specified portion of the Work affected, and (3) an opinion as to the cause of the delay and liability (if any) for the delay. In the case of continuing delay for the same cause, only one notice of delay is necessary. Failure to provide this notice within thirty (30) days of the delay waives any claim for extension of time resulting from such delay. If the delay is due to the failure of another contractor on a separate but conflicting project to complete its work in a timely manner, changes ordered in the Work, an Act of God event, or any other cause which the JWSC, in its sole judgment and discretion, determines to justify the delay, then the Contract Completion Date may be extended as necessary to compensate for the delay. All time extensions shall be in the form of a written amendment signed by both parties.

3.0 SUBSTITUTIONS

This Section outlines the restrictions and requirements for substitutions, product and manufacturer options, and construction method options.

For the purposes of these Contract Documents, a "substitute item" shall be defined as one of the following:

A product or manufacturer offered as a replacement to a specified product or manufacturer.

A product or manufacturer offered in addition to a specified product or manufacturer.

A "substitute construction method" shall be defined as one of the following:

A mean, method, technique, sequence or procedure of construction offered as a replacement for a specified mean, method, technique, sequence or procedure of construction.

A mean, method, technique, sequence or procedure of construction offered in addition to a specified mean, method, technique, sequence or procedure of

construction.

An item or construction method, which is offered where no specific product, manufacturer, mean, method, technique, sequence or procedure of construction is specified or shown on the drawings, shall not be considered a substitute and shall be at the option of the Contractor, subject to compliance with all provisions in the Contract Documents for that item or construction method.

For products specified only by a referenced standard, the Contractor may select any product by any manufacturer, which meets the requirements of the Specifications, unless otherwise indicated in the Contract Documents.

If the manufacturer is named on the drawings or in the Specifications as an acceptable manufacturer, products of that manufacturer meeting all requirements of the drawings and specifications are acceptable.

Whenever the Engineer's design is based upon a specific product or process of a specific manufacturer, that manufacturer shall be so listed in the specifications or on the drawings, and such product or process shall be used in the base bid.

Any **Contractor** proposing to furnish products or processes other than those listed as base bid items shall make a written application for approval of the proposed substitution to the JWSC/Engineer at least 15 days prior to the date set for receipt of bids. The minimum information required in the application is listed below.

- A. Documentation demonstrating that the item being proposed as a substitute will fit in the space allowed, perform the same functions and have the same capabilities as the product or process specified.
- B. A letter signed by an officer of the company certifying compliance with the specifications without exception.**
- C. Installation list with contacts and phone numbers for the same minimum number of installations and years of experience as the specified product or process.
- D. Complete descriptive and technical data addressing all specification requirements.
- E. Complete list of deviations from the specifications as written.
- F. Identification of accessory items required as a result of the proposed substitution.
- G. Identification of all architectural, structural, mechanical, piping, electrical or other modifications required as a result of the proposed substitution.

Whenever a product specification includes minimum experience requirements which the proposed substitution cannot meet, a condition of approval will require that the manufacturer furnish the Owner with a cash deposit or bond acceptable to the Owner in an amount equal to the cost of the product or process which shall remain in effect until the experience requirement has been met.

The burden of proving equivalency of a proposed substitute to an item designated by trade name or manufacturer's name referenced on the drawings or in the specifications rests on the party submitting the request for approval. The JWSC/Engineer will give consideration to reports from reputable independent testing laboratories, verified experience records showing the reputation of the proposed product with previous users or any other written information that is reasonable under the circumstances. The degree of proof required for approval of a proposed substitute as equivalent to a named product is the amount of proof necessary to convince the JWSC/Engineer beyond all doubt. To be acceptable, a proposed substitute must meet or exceed all requirements of the drawings and specifications.

If the proposed substitution is approved, an addendum will be issued to all prospective bidders at least five days prior to the date set for the opening of bids listing any and all approved substitutions. If approved, the bidder may offer a price for the substitution in the bid form for the Owner's consideration. The bid offered shall include the cost of all additional architectural, structural, mechanical, piping, electrical or other modifications, including engineering and design costs, required as a result of the proposed substitution. The JWSC/Engineer shall be the final judge on questions of equivalence.

4.0 SUBMITTALS

The work under this Section includes submittal to the JWSC/Engineer of shop drawings, product data and samples required by the various sections of these specifications. The submittal contents required are specified under each Section.

4.1 Definitions

Shop Drawings: Shop drawings include technical data, drawings, diagrams, procedures and methodology, performance curves, schedules, templates, patterns, test reports, calculations, instructions, measurements and similar information as applicable to the specific item for which the shop drawing is prepared.

Product Data: Product data includes standard printed information on materials, products and systems, not specifically prepared for this project other than the designation of selections from among available choices printed therein.

Samples: Samples include both fabricated and un-fabricated physical examples of materials, products and units of work, both as complete units and smaller portions of units of work, either for limited visual inspection or more detailed testing and analysis.

4.2 Routing of Submittals

Submittals and routine correspondence shall be routed as follows:

- Supplier to Contractor

- Contractor to JWSC
- JWSC to Engineer
- Engineer to JWSC
- JWSC to Contractor
- Contractor to Supplier

4.3 Submittal Log

The Contractor shall submit to the Engineer a complete list of preliminary items for which shop drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.

The Engineer will review the submitted preliminary shop drawing list and information and will develop a submittal log required for the project. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the JWSC and the Engineer. This log should include the following items:

1. Submittal-Description and Number assigned.
2. Date to JWSC.
3. Date returned to Contractor (from JWSC).
4. Approval Status of Submittal.
5. Date of Resubmittal and Return (as applicable).
6. Date material release (for fabrication).
7. Projected date of fabrication.
8. Projected date of delivery to site.
9. Status of O&M manuals submittal.
10. Related Specification Section.
11. Related Drawings Sheet Number.

4.4 Contractor's Responsibilities

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall ensure that the material or equipment shall be as described in the submittal. The Contractor shall verify in writing that all features of all products conform to the requirements of the drawings and specifications. **If the Contractor takes exception to the specifications, the Contractor shall note the exception in the letter of transmittal to the Engineer and the shop drawings shall clearly indicate any deviations in the submittal from the requirements of the Contract Documents.** Submittal documents shall be clearly edited to indicate only those items which are being submitted for review. All extraneous material shall be crossed out or otherwise obliterated. The Contractor shall ensure

that there is no conflict with other submittals and shall notify the JWSC/Engineer in each case where his submittal may affect the work of another contractor or the Owner. The Contractor shall ensure coordination of submittals among the related crafts and subcontractors.

The transmittal letter which accompanies all submittals must include the following information:

1. Date.
2. Project Title and Number.
3. Contractor's name, address, phone and fax numbers.
4. The number of each Shop Drawing, Project Data, and Sample submitted.
5. Notification of Deviations from Contract Documents.
6. Submittal Log Number.

Before each submittal, the Contractor shall have determined and verified all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto; all materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the work; and all information relative to the Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.

Submittal documents common to more than one piece of equipment shall be identified with the appropriate equipment numbers and specification section and paragraph. Each submittal shall bear a stamp or written indication that the Contractor's obligations under the contract with respect to the Contractor's review and approval of that submittal have been met. Any deviations from the requirements of the drawings and specifications shall be noted on the submittals.

The Contractor shall submit six (6) copies of all specified information and/or submittals may be made electronically in PDF format. **Submittals which do not have all the information required to be submitted including notification of deviations and the Contractor's stamp or written indication of review, are not acceptable and will be returned without review.**

The Contractor shall be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by JWSC of the necessary Shop Drawings.

The Contractor shall be fully responsible for observing the need for and making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the

materials/equipment he proposed to supply both as pertains to his own work and any work affected under other parts, headings, or divisions of Drawings and Specifications.

4.5 Review Procedures

The JWSC/Engineer's review will not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights, or fabrication processes, or to safety precautions or programs incident thereto. Unless otherwise specified, within fourteen days after receipt of a submittal, the JWSC/Engineer will review the submittal and return three (3) copies or an electronic PDF format of the review to the Contractor with comments. The returned submittals will indicate one of the following actions:

- If the review indicates conformance with the drawings and specifications, submittal copies will be marked "**NO EXCEPTIONS TAKEN**". In this event, the Contractor may begin to implement the work or incorporate the material or equipment covered by this submittal.
- If the review indicates limited corrections are required, submittal copies will be marked "**MAKE CORRECTIONS NOTED**". The Contractor may begin implementing the work or incorporate the materials or equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated into Operation and Maintenance data, a corrected copy shall be provided.
- If the review indicates that the submittal is insufficient or contains incorrect data, submittal copies will be marked "**AMEND AND RESUBMIT**". Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted, and returned marked either "NO EXCEPTION TAKEN" or "MAKE CORRECTIONS NOTED".
- If the review indicates that the submittal does not comply with the drawings and specifications, submittal copies will be marked "**REJECTED - SEE REMARKS**". Submittals with deviations that have not been clearly identified will be rejected. Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted, and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED".

Review of drawings, submittals, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors and omissions therein and shall not be regarded as an assumption of risks or liability by JWSC or Engineer or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure or partial failure, or the method of work,

material, or equipment so reviewed. A mark of “NO EXCEPTION TAKEN” or “MAKE CORRECTIONS NOTED” shall mean that the JWSC/Engineer has no objection to the Contractor, upon his own responsibility, using or providing the materials or equipment proposed.

5.0 INTERPRETATION OF PLANS AND SPECIFICATIONS

All questions regarding the meaning or intent of the plans, specifications and contract documents shall be directed in writing to the JWSC’s Contract Project Representative identified in Paragraph 2.0 of the General Conditions. Reference may be made throughout the Contract Documents to the Standards for Water and Sewer Design and Construction of the Brunswick – Glynn County Joint Water and Sewer Commission. In the event of a conflict between the aforementioned Standards and the project plans and specifications prepared by Four Waters Engineering, Inc. (4Waters), the 4Waters plans and specifications shall take precedence.

6.0 FIELD ENGINEERING

Field engineering shall include all surveying work required to layout the proposed facilities and control the location of the finished project. The Contractor shall be solely responsible for constructing the project to the correct horizontal and vertical alignment as shown on the drawings and as specified herein. The Contractor shall assume all costs associated with rectifying any work constructed in the wrong location.

The drawings provide the location and/or coordinates of principal components of the project.

6.1 Owner’s Responsibilities

The Owner will provide the following:

- A topographic survey (included on the drawings)

The Owner may, acting through the Engineer, order changes to the location of some of the components of the project or provide clarification to questions regarding the correct alignment.

6.2 Contractor’s Responsibilities

The Contractor’s responsibilities include but are not limited to the following:

- Be responsible for setting reference points and/or offsets, establishment of baselines, and all other layout, staking and other surveying required for the construction of the project.
- Safeguard all reference points, stakes, grade marks, horizontal and vertical control points, and bear the cost of re-establishing same if

disturbed.

- Stake out temporary and permanent easements or the limits of construction to ensure that the work is not deviating from the indicated limits.
- Record drawing surveys shall be performed in accordance with Paragraph 7.0 of these Special Conditions.

Baselines shall be defined as the line to which the location of the work is referenced, i.e. edge of pavement, road centerline, property line, right of way or survey line.

7.0 RECORD DOCUMENTS

The work under this Section includes but is not limited to the compiling, maintaining, recording and submitting of project record documents as herein specified.

Record documents include but are not limited to the following:

- Drawings
- Specifications
- Change orders and other modifications to the Contract
- Engineer field orders or written instructions, including requests for information (RFI) and clarification memos
- Reviewed shop drawings, product data and samples
- Test records

The Contractor shall maintain on-site an up to date set of As-Built Drawings.

7.1 Record Drawings

The Contractor is solely responsible for proper and correct documentation of all work, and for meeting the following As-Built requirements. The Contractor shall plan ahead and have their surveyor on-site to record information and data during construction. As-Built Drawings maintained by the Contractor shall provide dimensions, distances and coordinates to the nearest 0.1 foot. Elevations shall be provided to the nearest 0.01 foot.

Contractor shall provide Final As-Built drawings to the Engineer of Record in AutoCAD format, in Georgia State Plane East Zone Coordinates (Horizontal Datum NAD 83 and Vertical Datum NAVD88), conducted by a surveyor licensed in the State of Georgia of all installed components of the project from a post construction field run survey. As-Built data provided to the Engineer of Record for incorporation into the Record Drawings shall include Horizontal Directional Drill pipe installation information in plan and profile views in AutoCAD format with X, Y, and Z coordinates in Georgia State Plane East Zone Coordinates (Horizontal Datum NAD 83 and Vertical Datum

NAVD88) conducted by a surveyor licensed in the State of Georgia. Directional Drill Bore Log shall be provided as part of the As-Built documentation and shall be in Georgia State Plane East Zone Coordinates (Horizontal Datum NAD 83 and Vertical Datum NAVD88) and be relative to the established surface survey bench mark and baseline stationing that is tied to existing, fixed and visible sight features. Directional Drill Bore Log shall show recorded X, Y, and Z locations of the drill head at minimum every 20 feet in the AutoCAD format documentation.

The Contractor shall pay all surveying and preparation costs associated with the Final As-Built Drawings. The Final As-Built Drawings shall provide elevations to the nearest 0.01 foot for all manhole inverts, manholes frames and all other pertinent items constructed by the Contractor. The Final As-Built Drawings shall provide dimensions, distances and coordinates to the nearest 0.1 foot and angles to the nearest 10 seconds.

Final As-Built Drawings shall be labeled "FINAL AS-BUILT DRAWINGS" and shall include the name of the licensed surveyor who prepared the drawings, the date the survey was conducted, certification statement with the horizontal and vertical datum used, and surveyor's seal.

Final As-Built Drawings shall include the following:

- Horizontal and vertical location of all exposed and underground piping systems, valves, appurtenances, fittings, taps; etc., and all deviations from the design plans. Provide size, material, top of pipe elevations, invert elevations, slope percentages, length and type of all pipes, vertical clearances at each utility crossing.
- Location and dimensions of roadways and parking areas;
- Location of structures including finish floor elevations, tank depths, top and bottom elevations;
- Horizontal angle and distance between manholes;
- If profiles or cross-sections are part of the design plans, then As-Built data shall be shown on each profile or cross-section on the As-Built drawings.

The Engineer of Record shall review and utilize the Final As-Built information provided by the Contractor for the preparation of the Final Record Drawings. Contractor shall provide written certification of the accuracy and completeness of the Final As-Built information provided to the Engineer of Record.

7.2 Specifications

Legibly mark each section to record the manufacturer, trade name, catalog number and supplier of each product and item of equipment actually furnished. Also record all changes made by Requests for Information (RFI), field order, clarification memorandums of Contract change order.

7.3 Submittal

At the completion of the project, deliver Record Documents to the JWSC/Engineer. Include a signed transmittal letter which lists the title and number of each record document. Final As-Built Drawings shall be provided as noted in Section 7.1.

8.0 WARRANTY

Contractor shall warrant that the Work, workmanship and material furnished by Contractor shall be new and of specified quality, shall conform to the requirements of the Contract Documents, shall be free from defects, and shall be free from any security interest, lien, or other encumbrances. This warranty shall remain in effect for a period of twelve (12) months after FINAL ACCEPTANCE OF THE WORK, unless otherwise specified in the Contract Documents. Any defective Work, workmanship, or material corrected during the warranty period shall be similarly warranted for twelve (12) months following its correction or for such other period as specified herein. The express warranty set forth herein shall not be exclusive and shall not act as a limitation upon any statutory or other warranty of any kind, express or implied, including any implied warranty of merchantability or fitness for a particular purpose.

In the event of breach of this warranty, Contractor shall take the necessary actions to correct the breach in the most expedient manner as dictated by then-existing circumstances. All costs incidental to the repair, replacement, redesign, and testing incurred as a result thereof, including the removal, replacement, and reinstallation of equipment in place when the Work was started, shall be Contractor's responsibility. Upon written notification of a breach, Contractor shall promptly send the necessary personnel to the project site to assume responsibility for corrective action. Time is of the essence. Contractor shall be afforded necessary and reasonable access to perform warranty work. If Contractor fails to promptly correct the breach, the JWSC may take corrective action without waiving any other rights or remedies it may have, and Contractor shall reimburse the JWSC for all expenses reasonably incurred in performing such corrective action.

9.0 SEWAGE SPILLS

9.1 Contractor Requirements

During the contract period the Contractor shall be responsible for repair of any damaged sewer system infrastructure and for any sewer system overflows or spills which result from the Contractor's activities. The Contractor shall be responsible for, at no cost to the Brunswick-Glynn County

JWSC, the cleanup, notification, advertisement, monitoring, sampling and analysis, reporting, and other requirements as noted in the following section 8.2, of any sewer system overflows or spills which result from the Contractor's activities.

9.2 Georgia EPD Requirements for Sewage Spills

A. It shall be the duty of the person in charge of such substances at the time to forthwith notify EPD in person or by telephone of the location and nature of the danger, and it shall be such person's further duty to immediately take all reasonable and necessary steps to prevent injury to property and downstream users of said water.

1. Spills and Major Spills:

a. A "spill" is any discharge of raw sewage by a Publicly Owned Treatment Works (POTW) to the waters of the State.

b. A "major spill" means:

1) The discharge of pollutants into waters of the State by a POTW that exceeds the weekly average permitted effluent limit for biochemical oxygen demand (5-day) or total suspended solids by 50 percent or greater in one day, provided that the effluent discharge concentration is equal to, or greater than 25 mg/L for biochemical oxygen demand or total suspended solids.

2) Any discharge of raw sewage that 1) exceeds 10,000 gallons or 2) results in water quality violations in the waters of the State.

c. "Consistently exceeding effluent limitation" means a POTW exceeding the 30-day average limit for biochemical oxygen demand or total suspended solids for at least five days out of each seven day period during a total period of 180 consecutive days.

2. The following specific requirements shall apply to POTW's. If a spill or major spill occurs, the owner of a POTW shall immediately:

a. Notify EPD, in person or by telephone, when a spill or major spill occurs in the system.

b. Report the incident to the local health department(s) for

the area affected by the incident. The report at a minimum shall include the following:

- 1) Date of the spill or major spill;
 - 2) Location and cause of the spill or major spill;
 - 3) Estimated volume discharged and name of receiving waters; and
 - 4) Corrective action taken to mitigate or reduce the adverse effects of the spill or major spill.
- c. Post a notice as close as possible to where the spill or major spill occurred and where the spill entered State waters and also post additional notices along portions of the waterway affected by the incident (i.e. bridge crossings, boat ramps, recreational areas, and other points of public access to the affected waterway). The notice at a minimum shall include the same information required in 8.2 A. 2. b. (1-4) above. These notices shall remain in place for a minimum of seven days after the spill or major spill has ceased.
- d. Within 24 hours of becoming aware of a spill or major spill, the owner of a POTW shall report the incident to the local media (television, radio, and print media). The report shall include the same information required in 8.2 A. 2. b (1-4) above.
- e. Within five (5) days (of the date of the spill or major spill), the owner of a POTW shall submit to EPD a written report which includes the same information required in 8.2 A. 2. b (1 -4) above.
- f. Within 7 days (after the date of a major spill), the owner of a POTW responsible for the major spill, shall publish a notice in the largest legal organ of the County where the incident occurred. The notice shall include the same information required in 8.2 A. 2. b (1-4) above.
- g. The owner of a POTW shall immediately establish a monitoring program of the receiving waters affected by a major spill or by consistently exceeding an effluent limit, with such monitoring being at the expense of the POTW for at least one year. The monitoring program shall include an upstream sampling point as well as sufficient downstream locations to accurately characterize the impact of the major spill or the

consistent exceedance of effluent limitations described in the definition of "Consistently exceeding effluent limitation" above. As a minimum, the following parameters shall be monitored in the receiving stream:

- 1) Dissolved Oxygen;
- 2) Fecal Coliform Bacteria;
- 3) pH;
- 4) Temperature; and
- 5) Other parameters required by the EPD.

- h. The monitoring and reporting frequency as well as the need to monitor additional parameters, will be determined by EPD. The results of the monitoring will be provided by the POTW owner to EPD and all downstream public agencies using the affected waters as a source of a public water supply. Within 24 hours of becoming aware of a major spill, the owner of a POTW shall provide notice of a major spill to every county, municipality, or other public agency whose public water supply is within a distance of 20 miles downstream and to any others which could be potentially affected by the major spill.