



October 07, 2025

**INVITATION TO BID  
BL006-26**

The Gwinnett County Board of Commissioners is soliciting competitive sealed bids from qualified suppliers for the **Purchase of Slide Gates for the Lanier Filter Plant.**

**Bid Submittal Date and Location:**

Bids should be typed or submitted in ink and returned in a sealed container marked on the outside with the BL# and Company Name. **Sealed Bids will be received until 2:50 P.M. local time on November 06, 2025, at the Gwinnett County Financial Services - Purchasing Division – 4th Floor Charlotte J. Nash Building, 75 Langley Drive, Lawrenceville, Georgia 30046. NOTE THAT THE PURCHASING DIVISION HAS TEMPORARILY RELOCATED. ALL BIDS MUST BE SUBMITTED AT THIS LOCATION. Any bid received after this date and time will not be accepted.** Bids will be publicly opened and read at 3:00 P.M. The bid opening will be virtual ONLY. To access the bid opening virtually, visit the following link (<https://gwinnettgov.webex.com/gwinnettgov/j.php?MTID=m105b35427f34923540830bfa1cb3916b>) or dial **1-408-418-9388, and enter Conference ID 2349 724 4423.** Apparent bid results will be available the following business day on our website [www.GwinnettCounty.com](http://www.GwinnettCounty.com).

**Instruction on Submitting Questions:**

Questions regarding bids should be directed to Brittany Bryant, CPPB, Purchasing Associate III, at [Brittany.Bryant@GwinnettCounty.com](mailto:Brittany.Bryant@GwinnettCounty.com) or by calling 770-822-7759, **no later than 3:00 P.M. on October 29, 2025.** Bids are legal and binding upon the vendor when submitted. All bids should be submitted in duplicate.

Successful contractors will be required to meet insurance requirements. The Insurance Company should be authorized to do business in Georgia by the Georgia Insurance Department and must have an A.M. Best rating of A-7 or higher.

Gwinnett County does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of Gwinnett County Government should be directed to the ADA Coordinator at the Gwinnett County Justice and Administration Center, 770-822-8165.

The written bid documents supersede any verbal or written prior communications between the parties.

Award will be made to the supplier(s) submitting the lowest responsive and responsible bid. Gwinnett County reserves the right to reject any or all bids to waive technicalities and to make an award deemed in its best interest. Bids may be split or awarded in entirety. Gwinnett County reserves the option to negotiate terms, conditions and pricing with the lowest responsive, responsible vendor(s) at its discretion.

Award notification will be posted after award on the County website, [www.gwinnettcounty.com](http://www.gwinnettcounty.com) and companies submitting a bid will be notified via email.

We look forward to your bid and appreciate your interest in Gwinnett County.

Brittany Bryant, CPPB  
Purchasing Associate III

**The following pages should be returned in duplicate as your bid:**

- Bid Schedule, Pages 6-8**
- References, Page 9**
- Contractor Affidavit and Agreement, Page 10**
- Code of Ethics, Page 11**

**I. INTENT:**

- a. The intent of this scope is to procure replacement slide gates for the Pre-Treatment Facility and Ozone Facility at the Lanier Filter Plant (LFP).

**II. BACKGROUND**

- a. Gwinnett County Department of Water Resources (GCDWR) has been experiencing issues with leaks (inability to seal off flow) and jamming (due to corrosion) of the Rodney Hunt slide gates at the Pre-Treatment and Ozone Facilities at Lanier Filter Plant (LFP). A gate assessment has been completed by GCDWR and the following gates which do not adequately seal have been identified for replacement:
  1. **Pre-Treatment Facility**- Three (3) gates on the inlet from the Ozone Facility.
  2. **Ozone Facility** - Fourteen (14) gates on the inlet channel, contactor inlets and outlets and the outlet channel.
- b. The **Pre-Treatment Facility** was constructed in 1995, and the existing gates have been in operation for approximately 30 years. The electronic operators on the gates have recently been replaced. The two inlet chamber gates for the 60" diameter discharge pipes from the Ozone Facility are exposed to ozonated water. These two existing 66"x66" Cast Iron (CI) gates are to be replaced with stainless steel gates with ozone resistant Viton seals. The 48"x96" existing CI intermediate gate separating the two sections of the inlet chamber is to be replaced with a CI gate, as it is less exposed to ozonated water.
- c. The **Ozone Facility** was also constructed in 1995. Electronic operators have been installed on the gates that were previously manually operated. The gates are either stainless steel or CI. The gates on the two outlet channels (60" DI pipes to the Pre-treatment Facility) have jammed a number of times, requiring cleaning and unjam the gates. The two intermediate gates separating the two sections of the inlet channel do not seal. One of the inlet gates on Contactor #2 and the two inlet gates to Contactor #4 were recently replaced and are operating satisfactorily. All the gates in the Ozone Facility except for the three recently replaced gates are to be replaced with stainless steel gates with Viton seals.
- d. Replacement of the gates described above is required to restore operational flexibility to enable a process or train to be taken out of service and isolated for inspection and maintenance purposes. GCDWR has also initiated a preventative maintenance schedule to periodically exercise the gates to minimize the buildup of any corrosion material on the gates and slides, thus reducing the risk of jamming.
- e. The procurement of the replacement slide gates, frames, stems and field and start up services shall be procured by GCDWR under this scope. The equipment will be installed by another installation Contractor (yet to be appointed) at a future date together with other rehabilitation work in the two facilities.
- f. The location of Lanier Filter Plant is 2590 South Water Works Road, Buford, GA 30518.

**III. SCOPE:**

- a. The replacement gates shall meet the design criteria and be able to be installed in the locations of the existing gates after they have been removed with minimal structural or anchor bolt modifications.
- b. The intention is to replace the following:
  1. Three (3) slide gates and frames in the Pre-Treatment facility
  2. Fourteen (14) slide gates, frames and stems in the Ozone Facility.
- c. The replacement gates shall be operated by the existing electrical operators.

- d. Drawings showing the location of the gates and the installation requirements are provided in Attachment 1.
- e. Equipment manufacturers shall design the gates, frames, seals, supports and stems (as applicable) to withstand the full water pressure on either side of the gate when only one side is drained.
- f. Equipment manufacturers shall review and confirm that the existing anchor bolts can be reused, the new stems (diameter, thread and pitch) shall be compatible with the existing actuators and existing stems can be attached to the replacement gates.
- g. The equipment manufacturer shall provide confirmation that the existing gate and stem support arrangements have been checked and are adequate for installation of the replacement gates and can be operated using the existing electrical operators without having to move them.
- h. Replacement gates shall not exceed the allowable leakage as per AWWA C560 (CI) and C561.
- i. Shop drawings showing locations and details of anchor bolts are to be provided.
- j. Equipment manufacturers shall provide all support/bracing elements and materials necessary for the proper installation, support and performance of the gates with exception of the anchor bolts. Any new anchor bolts will be supplied and installed by the installation Contractor in accordance with the gate and anchor manufacturers requirements.
- k. If required, the Owner may be able to facilitate a post bid inspection to enable the manufacturer to undertake any onsite measurements necessary for the design and support of the replacement equipment prior to preparing the shop drawings. Note that access into the facility basins are considered as confined spaces and manufacturers may not be able to access the ozone facility gates. Manufacturers will be required to provide appropriate PPE for their staff. Confined space access and monitoring equipment will be provided by the Owner.
- l. Drawings of the facilities, existing gate locations and gates shop drawings are provided in Attachments 1, 2 and 3 to assist the equipment manufacturer in assessing the design and installation requirements of replacement gates to suit existing conditions.

**IV. Bids are requested for the following services:**

- a. Supply of all information requested on this bid.
- b. Complete design of replacement gates, frames, stems (as applicable), supports and any minor modifications to enable installation after removal of the existing gates.
- c. Manufacture and assembly of gates and components.
- d. Submission of specified submittals for approval prior to commencing manufacture.
- e. Provide a manufacturing and delivery schedule and provide monthly progress updates.
- f. Coordination and delivery to Lanier Filter Plant located at 2590 South Water Works Road, Buford, GA 30518.
- g. Site visit to confirm any measurements prior to preparation of the shop drawings.

- h. Assessment of the existing anchor bolt and stem mounting arrangements to confirm they are adequate for the replacement equipment. If in the opinion of the manufacturer the existing anchors and support are not considered acceptable, design of any modifications, and provision of materials (except the anchor bolts) necessary for the modifications. Replacement anchor bolts shall be located at least 6" away for the existing bolts. Any replacement anchors shall be supplied and installed by the Installation Contractor.
- i. Start up assistance to the Installation Contractor (not yet appointed). Note that it is intended to undertake the work in a number of phases to minimize process interruptions and as listed below and shown on the drawings:
- 1. Pre-Treatment Facility**
    - i. One process interruption to remove existing gates and install the SS gate on one 60" pipe inlet and the intermediate 48" x 96" CI gate in the inlet chamber.
    - ii. One process interruption to remove existing gate and install the second SS gate on the 60" inlet chamber.
  - 2. Ozone Facility**
    - i. One process interruption to remove existing gates and install the two inlet channel and single outlet channel intermediate gates
    - ii. One process interruption to remove existing gates and install three inlet channel No 1 and two outlet channel No 1 gates on Contactors Trains 1 and 2.
    - iii. One process interruption to remove existing gates and install the two inlet channel No. 2 and the two gates in outlet channel 2 and the two outlet channel gates to the Pre-Treatment Facility.
- j. During each process interruption, GCDWR will isolate the flow to the work area. Under certain conditions, the remainder of the facility will be in operation.
- k. Provision of Manufacturer's Certificate of Proper Installation.
- l. Provision of Manufacturer's Warranty.
- m. Provision of two hard copies and one electronic copy (in searchable PDF format) of Operating and Maintenance instructions for all components, including shop drawings of equipment, spare parts list, preventative maintenance schedule, and troubleshooting information.
- n. Supply of specified spare parts and special tools for future maintenance.

**V. Drawings and photographs of the two facilities are provided in the Attachments and the following specifications are applicable:**

**SPECIFICATIONS:**

Equipment shall comply with the following specifications:

- Section 01 43 33 - Manufacturers Field Services
- Section 01 78 23
- - Operation and Maintenance Data
- Section 01 88 15 - Anchorage and Bracing
- Section 01 91 14 - Equipment Testing and Facility Startup
- Section 05 05 19 - Post-Installed Anchors
- Section 35 20 16.25 – Fabricated Slide gates
- Section 35 20 16.26 - Cast-Iron Slide Gates

**ATTACHMENTS**

- Attachment 1: Drawings
- Attachment 2: Existing Gate Schedule and Drawings

- Attachment 3: Photographs

**VI. The following information sheets should be submitted with the bid.**

- a. Make, model, and weight of each component.
- b. Manufacturer's catalog information, descriptive literature, specifications, and materials of construction.
- c. Complete description of gates, frames, stems, gaskets and other ancillary items.
- d. Plan and section views of the gates, anchor bolt locations and dimensional tolerances required for installation.
- e. A complete listing of materials for each gate components.
- f. Drawings of each gate size.
- g. Confirmation that the design will enable the gates to withstand and seal with water on one side only.
- h. Typical anchor bolt mounting details.
- i. Manufacturer Certificate of Compliance with materials specifications shall be submitted prior to shipment of the equipment. The certificate shall certify that materials, manufacture, and final product conform to or exceeds specified requirements and intent for which the product will be used. Submit supporting reference data, affidavits, and certificates as appropriate. The certificate may reflect recent or previous test results on material or product, acceptable to the Engineer.

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**BID SCHEDULE**

BID ITEM NO.	DESCRIPTION	QTY	MANUF. & NO.	DELIVERY A.R.O	UNIT PRICE	TOTAL PRICE
<b>PART 1 – Pre-Treatment Facility</b>						
1.1	Stainless steel gates, frames and seals	2 EA			\$	\$
1.2	Cast iron gate, frame and seals	1 EA			\$	\$
1.3	Tools and spare parts for stainless steel gates	1 LS			\$	\$
1.4	Tools and spare parts for Cast Iron gates	1 LS			\$	\$
1.5	Post bid onsite visit to obtain information to confirm replacement gates will be able to be installed using existing anchors and operators	1 LS			\$	\$
1.6	Submittal preparation, shop drawings and submissions	1 LS			\$	\$
1.7	Support to Installation Contractor					
1.7.1	Factory representative to inspect the final installation and supervise testing, including all travel, accommodation and ancillary expenses etc. (two separate visits of one day each).	2 DAYS			\$	\$
1.7.2	Cost for separate onsite day visit of 8 hours if requested by Owner	1 DAY			\$	\$
1.7.3	Provide two hard copies and one electronic copy of the operating and maintenance manuals	1 LS			\$	\$
<b>PART 1 TOTAL</b>						<b>\$</b>

COMPANY NAME \_\_\_\_\_

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**BID SCHEDULE**

BID ITEM NO.	DESCRIPTION	QTY	MANUF. & NO.	DELIVERY A.R.O	UNIT PRICE	TOTAL PRICE
<b>PART 2 – Ozone Facility</b>						
2.1	Stainless steel gates, frames, stems and seals	14 EA			\$	\$
2.2	Tools and spare parts for stainless steel gates	1 LS			\$	\$
2.3	Onsite visit to obtain information to confirm replacement gates will be able to be installed using existing anchors and operators	1 LS			\$	\$
2.4	Submittal preparation, shop drawings and submissions	1 LS			\$	\$
2.5	Support to Installation Contractor					
2.5.1	Factory representative to inspect the final installation and supervise testing, including all travel, accommodation and ancillary expenses etc. (three separate visits of one day each)	3 DAYS			\$	\$
2.5.2	Cost for separate onsite day visit of 8 hours if requested by Owner.	1 DAY			\$	\$
2.5.3	Provide two hard copies and one electronic copy of the operating and maintenance manuals	1 LS			\$	\$
<b>PART 2 TOTAL</b>						\$
<b>OVERALL TOTAL (PART 1 + PART 2)</b>						\$

**Notes:**

1. The unit price **MUST** include ALL charges, including but not limited to delivery and field and start up services to a separate installation contractor.
2. If submitting an approved equivalent, please submit product cut sheets or information documents.
3. Reminder to include the Manufacturer/Product Number and the Delivery A.R.O (time to receive the product after receiving the purchase order)
4. Gwinnett County reserves the right to award to the lowest responsive and responsible bidder either by section or the overall low bidder.

COMPANY NAME \_\_\_\_\_

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**BID SCHEDULE CONTINUED**

The undersigned acknowledges receipt of the following addenda, listed by number and date appearing on each:

Addendum No.	Date	Addendum No.	Date
_____	_____	_____	_____
_____	_____	_____	_____

Certification Of Non-Collusion In Bid Preparation \_\_\_\_\_

Signature Date

In compliance with the attached specifications, the undersigned acknowledges all requirements outlined in the "Instructions to Vendors" and all documents referred to therein, if this bid is accepted by the Board of Commissioners within ninety (90) days of the date of bid opening, to furnish any or all of the items upon which prices are bid, at the price set opposite each item bid, delivered to the designated point(s) within the time specified in the fee schedule. By submission of this bid, I understand that Gwinnett County uses Electronic Payments for remittance of goods and services. Vendors should select their preferred method of electronic payment upon notice of award. For more information on electronic payments, please refer to the Electronic Payment information in the Instructions to Vendors.

Legal Business Name \_\_\_\_\_

Address \_\_\_\_\_

Does your company currently have a location within Gwinnett County?    Yes                      No

Representative Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Telephone Number \_\_\_\_\_      E-mail address \_\_\_\_\_

Contact Person (if someone other than the authorized representative listed above)

\_\_\_\_\_

Telephone Number \_\_\_\_\_      E-mail address \_\_\_\_\_

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**REFERENCES**

Gwinnett County requests a minimum of three (3) references where work of a similar size and scope has been completed.

Note: References should be customized for each project, rather than submitting the same set of references for every project bid. The references listed should be of similar size and scope of the project being bid on. Do not submit a project list in lieu of this form.

1. Company Name \_\_\_\_\_

Brief Description of Project \_\_\_\_\_

Completion Date \_\_\_\_\_

Contract Amount \$ \_\_\_\_\_ Start Dates \_\_\_\_\_

Contact Person \_\_\_\_\_ Telephone \_\_\_\_\_

E-Mail Address \_\_\_\_\_

2. Company Name \_\_\_\_\_

Brief Description of Project \_\_\_\_\_

Completion Date \_\_\_\_\_

Contract Amount \$ \_\_\_\_\_ Start Date \_\_\_\_\_

Contact Person \_\_\_\_\_ Telephone \_\_\_\_\_

E-Mail Address \_\_\_\_\_

3. Company Name \_\_\_\_\_

Brief Description of Project \_\_\_\_\_

Completion Date \_\_\_\_\_

Contract Amount \$ \_\_\_\_\_ Start Date \_\_\_\_\_

Contact Person \_\_\_\_\_ Telephone \_\_\_\_\_

E-Mail Address \_\_\_\_\_

Company Name \_\_\_\_\_





**Bid # & Description** BL006-26, Purchase of Slide Gates for the Lanier Filter Plant

## CODE OF ETHICS AFFIDAVIT

**PLEASE RETURN THIS FORM COMPLETED WITH YOUR SUBMITTAL. SUBMITTED FORMS ARE REQUIRED PRIOR TO EVALUATION.**

In accordance with Section 54-33 of the Gwinnett County Code of Ordinances the undersigned bidder/proposer makes the following full and complete disclosure under oath, to the best of their knowledge, of the name(s) of all elected officials whom it employs or who have a direct or indirect pecuniary interest in or with the vendor, its affiliates or its subcontractors:

1. \_\_\_\_\_  
Company Submitting Bid/Proposal

2. Please select one of the following:
- No information to disclose (*complete only section 4 below*)
  - Disclosed information below (*complete section 3 & section 4 below*)

3. If additional space is required, please attach list:

\_\_\_\_\_  
Gwinnett County Elected Official Name

\_\_\_\_\_  
Gwinnett County Elected Official Name

\_\_\_\_\_  
Gwinnett County Elected Official Name

\_\_\_\_\_  
Gwinnett County Elected Official Name

4. BY: \_\_\_\_\_  
Authorized Officer or Agent Signature

Sworn to and subscribed before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor

(seal)

Note: See Gwinnett County Code of Ethics Ordinance EO2011, Sec. 54-33. The ordinance will be available to view in its' entirety at [GwinnettCounty.com](http://GwinnettCounty.com)



GWINNETT COUNTY FINANCIAL SERVICES |  
RISK MANAGEMENT  
**VENDOR INSURANCE REQUIREMENTS**

**Insurance:**

Contractor shall provide evidence of insurance for at least the coverage and amounts set forth below. All insurance shall be maintained in the form and with a company (or companies) satisfactory to the Gwinnett County Board of Commissioners. The Contractor and their Subcontractor's/vendor's Certificates of Insurance shall require that the County be notified in writing thirty (30) days prior to cancellation, modification, or non-renewal of any insurance policy listed on the certificate(s). Upon request, the County will be provided certified copies of all required insurance policies.

**A. Minimum Coverage**Commercial General Liability (Occurrence Form):

General Aggregate (other than Prod/Comp Ops Liability)	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal & Advertising Injury Liability	\$1,000,000
Each Occurrence	\$1,000,000

- Gwinnett County Board of Commissioners to be named as Additional Insured
- Additional Insured Endorsement CG 20 10 (edition dates of 07/04, 04/13, 12/19 or a substitute endorsement providing equivalent coverage) and CG 2037 (edition dates of 07/04, 04/13, 12/19 or a substitute endorsement providing equivalent coverage) must be provided with your Certificate of Insurance.
- Primary and Non-Contributory Endorsement to be specified in writing
- Contractual Liability
- Broad Form Property Damage
- Severability of Interest
- Underground, explosion, and collapse coverage
- Personal Injury (deleting both contractual and employee exclusions)
- Incidental Medical Malpractice
- Hostile Fire Pollution Wording
- Include Waiver of Subrogation in favor of Gwinnett County Board of Commissioners
- If project or operations are within 50 ft of a railroad, Contractor is required to name the specific Railroad as an Additional Insured and provide a copy of the Additional Insured Endorsement CG2417 or its equivalent.
- In the event the General Liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of five (5) years or applicable statute of limitation period following completion of the work.

Automobile Liability to include:

Combined Single Limit – Each Accident	\$1,000,000
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- Comprehensive form providing coverage for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of all owned, non-owned, leased, hired, borrowed vehicles, and any other statutorily required automobile coverage.
- Gwinnett County Board of Commissioners to be named as Additional Insured
- Additional Insured Endorsements must be provided with the Certificate of Insurance
- Coverage to include loading and unloading
- Contractual Liability

Worker's Compensation & Employer's Liability Coverage to include:

Workers Compensation Employers Liability	Georgia State Statutory Limits
Bodily Injury by Accident – Each Accident	\$ 500,000
Bodily Injury by Disease – Policy Limit	\$ 500,000
Bodily Injury by Disease – Each Employee	\$ 500,000

- Waiver of Subrogation in favor of Gwinnett County Board of Commissioners

Umbrella/Excess Liability Insurance with policy limits as determined by Contract Sums (higher limits may be required depending on the extent of contract):Contract Sums:

Contracts up to \$999,999 Each Occurrence and Aggregate Limit	\$1,000,000
Contracts from \$1,000,000 to \$1,999,999 Each Occurrence and Aggregate Limit	\$3,000,000
Contracts from \$2,000,000 to \$4,999,999 Each Occurrence and Aggregate Limit	\$5,000,000
Contracts Over \$5,000,000 Each Occurrence and Aggregate Limit	\$10,000,000

- Concurrency of Effective Dates with Primary
- Blanket Contractual Liability
- Drop Down Feature
- Umbrella Policy must be as broad as the primary policy.
- Coverage excess over General Liability, Business Auto Liability, and Employers Liability
- In the event the Umbrella/Excess Liability insurance required by this Contract is written on a claims- made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of five (5) years or applicable statute of limitation period following completion of the work.
- Evidence of coverage in the form of a Certificate of Insurance shall be provided to the County prior to start of work.
- Gwinnett County Board of Commissioners shall be Additional Insureds.
- Contractor shall be liable for money, securities, or other property of the County.
- Such coverage shall include an owner coverage endorsement for County and County shall be included as a loss payee.
- Additional Insured Endorsements must be provided with the Certificate of Insurance

Cyber Liability Insurance: Applies if scope of work includes the storage or transfer of any County data or sensitive data (including but not limited to personally identifiable, health, or payment card data) or the related hosting of database(s) or internet site(s):

Limit of Insurance per Claim	\$1,000,000
Aggregate Limit	\$1,000,000

The Contractor shall maintain insurance coverage for network security and privacy risks, including, but not limited to, insurance for data breach or introduction of virus or malicious codes, consumer notification, whether or not required by law, forensic investigation, public relations and crisis management and credit or identity monitoring or similar remediation services, unauthorized access, failure of security information theft, damage to destruction of or alteration of electronic information, breach of privacy perils, wrongful disclosure and release of private information, collection, or other negligence in the handling of confidential information, and including coverage for related regulatory fines, defenses, and penalties allowed by law.

Property Insurance:

The Contractor is fully and solely responsible for any physical loss or damage to all tools, equipment, construction office trailers and their contents, vehicles or any other personal property utilized in the performance of the Contractor's work. Contractor agrees to waive its rights of recovery and cause its insurers, if any, to waive their rights of subrogation against Owner and Company for any such damage or loss, however caused.

Riggers Liability Insurance:

If any work to be performed involves the rigging, lifting, lowering or moving of property or equipment, then those parties performing such work shall carry Rigger's Liability Insurance in an amount adequate to insure against the physical loss or damage to the property or equipment in its care

Aviation Insurance: Applies if scope of work requires the use of aircraft, including helicopters, unmanned aircraft systems (e.g., drones) and/or fixed-wing aircraft:

Maintain (or require aircraft owner or operator to maintain), and Contractor shall furnish proof of, Aircraft Liability insurance with minimum limits of \$10,000,000 per occurrence for bodily injury and property damage of all aircraft.

Unmanned aircraft systems, minimum limits of \$2,000,000 for bodily injury, property damage, and personal injury (including invasion of privacy) for unmanned aircraft systems, and guest voluntary settlement bodily injury coverage (for any aircraft except unmanned aircraft systems)

- Such policy shall include contractual liability covering all owned and non-owned aircraft
- If the party providing the Aircraft Liability insurance is not Contractor, then Contractor shall require such party to (a) waive any subrogation rights of recovery they and/or their insurance carriers may have against County and any other indemnified parties and (b) name County and such other parties as Additional Insureds
- The Contractor shall (or shall require aircraft owner or operator) to hire, employ, and utilize pilots certified by the Federal Aviation Administration to operate any such aircraft.

- B. Gwinnett County Board of Commissioners (and any applicable Authority) must be specified in writing as an Additional Insured on General Liability, Auto Liability and Umbrella Liability policies.
- C. Gwinnett County should be provided with a minimum of 30 days advance written notice of cancellation, material change, or non-renewal of policies required by the contract.
- D. Certificate Holder should read:  
 Gwinnett County Board of Commissioners  
 75 Langley Drive  
 Lawrenceville, GA 30046-6935

- E. Insurance Company, except Worker' Compensation carrier, must have an A.M. Best Rating of A-7 or higher. Certain Workers' Comp funds may be accepted subject to the approval of the Gwinnett County Insurance Unit. European markets including those based in London and domestic surplus lines markets that operate on a non-admitted basis are exempt from this requirement provided that the Contractor's broker/agent can provide financial data to establish that a market is equal to or exceeds the financial strengths associated with the A.M. Best's rating of A-7 or better.
- F. Insurance companies providing coverage should be licensed, and authorized to do business by the Office of the Insurance and Safety Fire Commissioner of Georgia ("Insurance Commissioner"), with the exception of non- admitted carriers, in which case the broker placing coverage should be licensed by the Insurance Commissioner. All agents placing coverage should be licensed by the Insurance Commissioner, either as a resident or non- resident.
- G. Certificates of Insurance, and any subsequent renewals, must reference each corresponding bid/contract by project name and project/bid number, if applicable.
- H. The Contractor shall agree to provide complete certified copies of current insurance policy(ies) or a certified letter from the insurance company(ies) if requested by the County to verify compliance with these insurance requirements.
- I. All insurance coverage required to be provided by the Contractor shall state that it is primary over any insurance program carried by the County.
- J. Contractor shall incorporate a copy of the insurance requirements as herein provided in each and every subcontract with each and every subcontractor in any tier and shall require each and every subcontractor of any tier to comply with all such requirements. The Contractor agrees that if for any reason a subcontractor fails to procure and maintain insurance as required, all such required Insurance shall be procured and maintained by Contractor at Contractor's expense.
- K. No Contractor or Subcontractor shall commence any work of any kind under this Contract until all insurance requirements contained in this Contract have been complied with and until evidence of such compliance satisfactory to Gwinnett County as to form and content has been filed with Gwinnett County. The ACORD Certificate of Insurance or a preapproved substitute is the required form in all cases where reference is made to a Certificate of Insurance or an approved substitute.
- L. The Contractor and its insurer(s) shall agree to waive all rights of subrogation against the County, the Board of Commissioners, its officers, officials, employees, and volunteers from losses arising from work performed by the Contractor for the County.
- M. Special Form Contractors' Equipment and Contents Insurance covering owned, used, and leased equipment, tools, supplies, and contents is required to perform the services called for in the Contract. The coverage must be on a replacement cost basis. The County will be included as a Loss Payee in this coverage for County owned equipment, tools, supplies, and contents.
- N. The Contractor shall make available to the County, through its records or the records of its insurer, information regarding any claim related to a County project. Any loss run information relating to a County project will be made available to the County upon its request.
- O. Compliance by the Contractor and Subcontractors with the foregoing insurance requirements shall not relieve the Contractor and Subcontractors of liability under the Contract and any applicable law.
- P. The Contractor and all Subcontractors are to comply with the Occupational Safety and Health Act of 1970, Public Law 91-956, and any other laws that may apply to this Contract.
- Q. The Contractor shall at a minimum apply risk management practices accepted by the Contractors' industry.
- R. The Contractor shall advise the County if required limits of insurance become eroded or impaired.

Surety Bonds (if required)

All of the surety requirements will stay the same except the Surety Company must have the same rating as set forth in item E above.

FAILURE TO RETURN THIS PAGE MAY RESULT IN REMOVAL OF YOUR COMPANY FROM COMMODITY LISTING.

**BL006-26**

**Buyer Initials: BB**

IF YOU DESIRE TO SUBMIT A "NO BID" IN RESPONSE TO THIS PACKAGE, PLEASE INDICATE BY CHECKING ONE OR MORE OF THE REASONS LISTED BELOW AND EXPLAIN.

Do not offer this product or service; remove us from your bidder's list for this item only.

Specifications too "tight"; geared toward one brand or manufacturer only.

Specifications are unclear.

Unable to meet specifications

Unable to meet bond requirements

Unable to meet insurance requirements

Our schedule would not permit us to perform.

Insufficient time to respond.

Other

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COMPANY NAME \_\_\_\_\_

AUTHORIZED REPRESENTATIVE \_\_\_\_\_

**GWINNETT COUNTY  
DEPARTMENT OF FINANCIAL SERVICES – PURCHASING DIVISION  
GENERAL INSTRUCTIONS FOR VENDORS, TERMS AND CONDITIONS**

**\*\*\*ATTENTION\*\*\***

FAILURE TO RETURN THE FOLLOWING DOCUMENTS MAY RESULT IN SUBMITTAL BEING DEEMED NON-RESPONSIVE AND AUTOMATIC REJECTION. THE COUNTY SHALL BE THE SOLE DETERMINANT OF TECHNICALITY VS. NON-RESPONSIVE SUBMITTAL:

1. FAILURE TO USE COUNTY FEE SCHEDULE.
2. FAILURE TO RETURN OR ACKNOWLEDGE APPLICABLE COMPLIANCE/SPECIFICATION SHEETS.
3. FAILURE TO RETURN OR ACKNOWLEDGE APPLICABLE ADDENDA.
4. FAILURE TO PROVIDE INFORMATION ON ALTERNATES OR EQUIVALENTS.
5. FAILURE TO PROVIDE BID BOND, WHEN REQUIRED, WILL RESULT IN SUBMITTAL BEING DEEMED NON-RESPONSIVE AND AUTOMATIC REJECTION. BID BONDS ARE NOT REQUIRED ON ALL SOLICITATIONS. BOND REQUIREMENTS ARE CLEARLY STATED ON THE INVITATION PAGE. IF CLARIFICATION IS NEEDED, CONTACT THE PURCHASING ASSOCIATE LISTED IN THE INVITATION. **IF BONDS ARE REQUIRED, FORMS WILL BE PROVIDED IN THIS SOLICITATION DOCUMENT.**
6. FAILURE TO PROVIDE CONTRACTOR AFFIDAVIT AND AGREEMENT, WHEN REQUIRED, MAY RESULT IN SUBMITTAL BEING DEEMED NON-RESPONSIVE AND REJECTED. THE CONTRACTOR AFFIDAVIT AND AGREEMENT IS NOT REQUIRED ON ALL SOLICITATIONS. IF CLARIFICATION IS NEEDED, CONTACT THE PURCHASING ASSOCIATE LISTED IN THE INVITATION.
7. FAILURE TO PROVIDE AN ETHICS AFFIDAVIT WHEN REQUIRED, MAY RESULT IN SUBMITTAL BEING DEEMED NON-RESPONSIVE AND REJECTED. THE ETHICS AFFIDAVIT IS REQUIRED ON ALL FORMAL SOLICITATIONS OVER \$100,000.00. IF CLARIFICATION IS NEEDED, CONTACT THE PURCHASING ASSOCIATE LISTED IN THE INVITATION.

**I. PREPARATION OF SUBMITTAL**

- A. Each vendor shall examine the drawings, specifications, schedule, and all instructions. Failure to do so will be at the vendor's risk, as the vendor will be held accountable for their submittal.
- B. Each vendor shall furnish all information required by the solicitation form or document. Each vendor shall sign the submittal and print or type his or her name on the fee schedule. The person signing the submittal should initial erasures or other changes. An authorized agent of the vendor must sign the submittal.
- C. Fee schedule pricing should have only two decimal places unless otherwise stated. In the event of a calculation error in total price, the unit pricing prevails.
- D. Except for solicitations for the sale of real property, individuals, firms, and businesses seeking an award of a Gwinnett County contract may not initiate or continue any verbal or written communications regarding a solicitation with any County officer, elected official, employee, or other County representative other than the Purchasing Associate named in the solicitation between the date of the issuance of the solicitation and the date of the final award. The Purchasing Director will review violations. If determined that such communication has compromised the competitive process, the offer submitted by the individual, firm or business may be disqualified from consideration for award. Solicitations for the sale of real property may allow for verbal or written communications with the appropriate Gwinnett County representative.
- E. Sample contracts (if pertinent) are attached. These do NOT have to be filled out with the submittal but are contained for informational purposes only. If awarded, the successful vendor(s) will be required to execute these documents prior to County execution.
- F. Effective July 1, 2013 and in accordance with the Georgia Illegal Immigration Reform Enhancements for 2013, an original signed, notarized and fully completed Contractor Affidavit and Agreement should be included with vendor's submittal, if the solicitation is for the physical performance of services for all labor or service contract(s) that exceed \$2,499.99 (except for services performed by an individual who is licensed pursuant to Title 26, Title 43, or the State Bar of Georgia). Failure to provide the Contractor Affidavit and Agreement with your submittal may result in being deemed non-responsive and automatic rejection.

**II. DELIVERY**

- A. Each vendor should state time of proposed delivery of goods or services.
- B. Words such as "immediate," "as soon as possible," etc. should not be used. The known earliest date or the minimum number of calendar days required after receipt of order (delivery A.R.O.) should be stated. If calendar days are used, include Saturday, Sunday, and holidays in the number.

**III. EXPLANATION TO VENDORS**

Any explanation desired by a vendor regarding the meaning or interpretation of the solicitation, drawings, specifications, etc. must be requested by the question cutoff deadline stated in the solicitation for a reply to reach all vendors before the deadline of the solicitation. Any information given to a prospective vendor concerning a solicitation will be furnished to all prospective vendors as an

addendum to the solicitation if such information is necessary or if the lack of such information would be prejudicial to uninformed vendors. The written solicitation documents supersede any verbal or written communications between the parties. Receipt of addenda should be acknowledged in the submittal. **It is the vendor's responsibility to ensure they have all applicable addenda prior to their submittal.** This may be accomplished by contacting the assigned Purchasing Associate prior to the submittal or visiting the Gwinnett County website.

#### IV. SUBMISSION OF FORMAL OFFERS/SUBMITTALS

- A. Formal bid and proposal submittals shall be enclosed in a sealed package or envelope, addressed to the Gwinnett County Purchasing Division with the name of the vendor, the date and hour of opening and the solicitation number on the face of the package or envelope. Facsimile or emailed submittals will not be considered. Any addenda should be enclosed in the sealed envelopes as well.
- B. ADD/DEDUCT: Add or deduct amounts indicated on the outside of the envelope are allowed and will be applied to the lump sum amount. Amount shall be clearly stated and should be initialed by an authorized representative.
- C. Samples of items, when required, must be submitted within the time specified and, unless otherwise specified by the County, at no expense to the County. Unless otherwise specified, samples will be returned at the vendor's request and expense, if items are not destroyed by testing.
- D. Items offered must meet required specifications and must be of a quality that will adequately serve the use and purpose for which intended.
- E. Full identification of each item submitted, including brand name, model, catalog number, etc. must be furnished to identify exactly what the vendor is offering. Manufacturer's literature may be furnished but vendor should not submit excessive marketing material.
- F. The vendor must certify that items to be furnished are new and that the quality has not deteriorated to impair its usefulness.
- G. Unsigned submittals will not be considered except in cases where it is enclosed with other documents that have been signed. The County will determine acceptability in these cases.
- H. Gwinnett County is exempt from federal excise tax and Georgia sales tax regarding goods and services purchased directly by Gwinnett County. Vendors are responsible for federal excise tax and sales tax, including taxes for materials incorporated in county construction projects. Vendors should contact the State of Georgia Sales Tax Division for additional information. Agreements were there is a cost-plus mark-up, mark-up will not be paid on taxes.
- I. Information submitted by a vendor in the solicitation process shall be subject to disclosure after the public opening in accordance with the Georgia Open Records Act.

#### V. WITHDRAWAL DUE TO ERRORS

Vendors must give Gwinnett County Purchasing Division written notice within two (2) business days of completion of the opening stating that they wish to withdraw their submittal without penalty for an obvious clerical or calculation error. Submittal may be withdrawn from consideration if the price was substantially lower than the other submittals due solely to a mistake therein, provided pricing was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake and was due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of the submittal. The unintentional arithmetic error or omission can be clearly proven through inspection of the original work papers, documents, and materials used in preparing the submittal sought to be withdrawn. The vendor's original work papers shall be the sole acceptable evidence of error and mistake if a vendor elects to withdraw their submittal. If a quote or bid submittal is withdrawn under the authority of this provision, the lowest remaining responsive offer shall be deemed to be low bid.

No vendor who is permitted to withdraw their submittal shall, for compensation, supply any material or labor or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid or proposal was submitted.

Vendors who fail to request withdrawal by the required forty-eight (48) hours may automatically forfeit bid bond if a bond was required. Bid may not be withdrawn otherwise.

Withdrawal is not automatically granted and will be allowed solely at Gwinnett County's discretion.

#### **VI. TESTING AND INSPECTION**

Since tests may require several days for completion, the County reserves the right to use a portion of any supplies before the results of the tests are determined. Cost of inspections and tests of any item that fails to meet the specifications, shall be borne by the vendor.

#### **VII. F.O.B. POINT**

Unless otherwise stated in the request for invitation and any resulting contract, or unless qualified by the vendor, items shall be shipped F.O.B. Destination, Freight Prepaid and Allowed. The seller shall retain title for the risk of transportation, including the filing for loss or damages. The invoice covering the items is not payable until items are delivered and the contract of carriage has been completed. Unless the F.O.B. clause states otherwise, the seller assumes transportation and related charges either by payment or allowance.

#### **VIII. PATENT INDEMNITY**

The vendor guarantees to hold the County, its agents, officers, or employees harmless from liability of any nature or kind for use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, for which the vendor is not the patentee, assignee, or licensee.

**IX. BID BONDS AND PAYMENT AND PERFORMANCE BONDS (IF REQUIRED, FORMS WILL BE PROVIDED IN THIS DOCUMENT)**

A five percent (5%) bid bond, a one hundred percent (100%) performance bond, and a one hundred percent (100%) payment bond must be furnished to Gwinnett County for any solicitation as required in the solicitation package or document. **Failure to submit a bid bond with the proper rating will result in submittal being deemed non-responsive.** Bonding company must be authorized to do business in Georgia by the Georgia Insurance Commission, listed in the Department of the Treasury's publication of companies holding certificates of authority as acceptable surety on Federal bonds and as acceptable reinsuring companies, and have an A.M. Best rating as stated in the insurance requirement of the solicitation. **The bid bond, payment bond, and performance bond must have the proper A.M. Best rating as stated in the solicitation document.**

**X. DISCOUNTS**

- A. Time payment discounts may be considered in arriving at net prices and in award of solicitations. Offers of discounts for payment within ten (10) days following the end of the month are preferred.
- B. In connection with any discount offered, time will be computed from the date of delivery and acceptance at destination, or from the date correct invoice or voucher is received, whichever is the later date. Payment is deemed to be made for the purpose of earning the discount on the date of the County check.

**XI. AWARD**

- A. Award will be made to either the highest scoring firm (for proposals) or the lowest responsive and responsible vendor (for quotes/bids). The quality of the articles to be supplied, their conformity with the specifications, their suitability to the requirements of the County, and the delivery terms will be taken into consideration in making the award. The County may make such investigations as it deems necessary to determine the ability of the vendor to perform, and the vendor shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any submittal if the evidence submitted by, or investigation of such vendor fails to satisfy the County that such vendor is properly qualified to carry out the obligations of the contract.
- B. The County reserves the right to reject or accept any or all offers and to waive technicalities, informalities and minor irregularities in the submittals received.
- C. The County reserves the right to make an award as deemed in its best interest, which may include awarding to a single vendor or multiple vendors; or to award the whole solicitation agreement, only part of the agreement, or none of the agreement, based on its sole discretion of its best interest.
- D. In the event of proposal scores rounded to the nearest whole number result in a tie score, the award will be based on lowest cost.
- E. If proposal negotiations with the highest ranked firm are unsuccessful, the County may then negotiate with the second ranked firm and so on until a satisfactory agreement has been reached.

**XII. DELIVERY FAILURES**

Failure of a vendor to deliver within the time specified or within reasonable time as interpreted by the Purchasing Director, or failure to make replacement of rejected articles/services when so requested, immediately or as directed by the Purchasing Director, shall constitute authority for the Purchasing Director to purchase in the open market articles/services of comparable grade to replace the articles/services rejected or not delivered. On all such purchases, the vendor shall reimburse the County within a reasonable time specified by the Purchasing Director for any expense incurred in excess of the contract prices, or the County shall have the right to deduct such amount from monies owed the defaulting vendor. Alternatively, the County may penalize the vendor one percent (1%) per day for a period of up to ten (10) days for each day that delivery or replacement is late. Should public necessity demand it, the County reserves the right to use or consume articles/services delivered which are substandard in quality, subject to an adjustment in price to be determined by the Purchasing Director.

**XIII. COUNTY FURNISHED PROPERTY**

No material, labor or facilities will be furnished by the County unless so provided in the solicitation package.

**XIV. REJECTION OF SUBMITTALS**

Failure to observe any of the instructions or conditions in this solicitation package may constitute grounds for rejection.

**XV. CONTRACT**

Each submittal is received with the understanding that the acceptance in writing by the County of the offer to furnish any or all the commodities or services described therein shall constitute a contract between the vendor and the County which shall bind the vendor on his part to furnish and deliver the articles quoted at the prices stated in accordance with the conditions of said accepted submittal. The County, on its part, may order from such vendor, except for cause beyond reasonable control, and to pay for, at the agreed prices, all articles specified and delivered.

Upon receipt of a solicitation package containing a Gwinnett County "Sample Contract" as part of the requirements, it is understood that the vendor has reviewed the documents with the understanding that Gwinnett County requires that all agreements between the parties must be entered into via this document. If any exceptions are taken to any part, each must be stated in detail and submitted as part of the vendor's submittal. If no exceptions are stated, it is assumed that the vendor fully agrees to the provisions contained in the "Sample Contract" in its entirety.

An  
y Consultant as defined in O.C.G.A. §36-80-28 that is engaged to develop or draft specifications/requirements or serve in a consultative role during the procurement process for any County procurement method, by entering into such an arrangement or executing a contract, the consultant agrees to abide by the current state law and: 1) Avoid any appearance of impropriety and shall follow all policies and procedures of the County, 2) Disclose to the County any material transaction or relationship pursuant to §36-80-28, that is considered a conflict of interest, any involvement in litigation or other dispute, relationship, or financial interest not disclosed in the ethics affidavit, and 3) Acknowledge that any violation or threatened violation of the agreement may cause irreparable injury to

the County, entitling the County to seek injunctive relief in addition to all other legal remedies.

When the vendor has performed in accordance with the provisions of this agreement, Gwinnett County shall pay to the vendor, within thirty (30) days of receipt of any department approved payment request and based upon work completed or service provided pursuant to the contract, the sum so requested, less the retainage stated in this agreement, if any. If Gwinnett County fails to pay the vendor within sixty (60) days of receipt of a pay request based upon work completed or service provided pursuant to the contract, the County shall pay the vendor interest at the rate of ½% per month or pro rata fraction thereof, beginning the sixty-first (61<sup>st</sup>) day following receipt of pay requests. The vendor's acceptance of progress payments or final payment shall release all claims for interest on said payment.

The parties agree that this Contract shall be governed and construed in accordance with the laws of the State of Georgia.

**XVI. NON-COLLUSION**

Vendor declares that the submittal is not made in connection with any other vendor's submittal for the same commodity or commodities, and that the submittal is bona fide and is in all respects fair and without collusion or fraud. An affidavit of non-collusion shall be executed by each vendor. Collusion and fraud in submittal preparation shall be reported to the State of Georgia Attorney General and the United States Justice Department.

**XVII. DEFAULT**

The contract may be canceled or annulled by the Purchasing Director in whole or in part by written notice of default to the vendor upon non-performance or violation of contract terms. An award may be made to the next low responsive and responsible vendor, or the next highest scoring responsive and responsible proposer, or articles specified may be purchased on the open market similar to those so terminated. In either event, the defaulting vendor (or their surety) shall be liable to the County for costs to the County in excess of the defaulted contract prices; provided, however, that the vendor shall continue the performance of this contract to the extent not terminated under the provisions of this clause. Failure of the vendor to deliver materials or services within the time stipulated on their offer, unless extended in writing by the Purchasing Director, shall constitute contract default.

**XVIII. TERMINATION FOR CAUSE**

The County may terminate this agreement for cause upon ten days prior written notice to the vendor of the vendor's default in the performance of any term of this agreement. Such termination shall be without prejudice to any of the County's rights or remedies by law.

**XIX. TERMINATION FOR CONVENIENCE**

The County may terminate this agreement for its convenience at any time upon 30 days written notice to the vendor. In the event of the County's termination of this agreement for convenience, the vendor will be paid for those services actually performed. Partially completed performance of the agreement will be compensated based upon a signed statement of completion to be submitted by the vendor, which shall itemize each element of performance.

**XX. SUBSTITUTIONS**

Vendors offering substitutions or who are deviating from the attached specifications shall list such deviations on a separate sheet to be submitted with their offer. The absence of such a substitution list

shall indicate that the vendor has taken no exception to the specifications contained herein.

**XXI. INELIGIBLE VENDORS**

The County may choose not to accept the offer by an individual, firm, or business who is in default on the payment of taxes, licenses, or other monies owed to the County. Additionally, vendors or persons placed on an Ineligible Source List for reasons listed in Part 6, Section II of the Gwinnett County Purchasing Ordinance shall not be eligible to provide any commodities or services to the County during the period such person remains on the Ineligible Source List.

**XXII. PENDING LITIGATION**

An individual, firm, or business that has litigation pending against the County, or anyone representing a firm or business in litigation against the County, not arising out of the procurement process, will be disqualified.

**XXIII. OCCUPATION TAX CERTIFICATE**

Each successful vendor must have a valid Gwinnett County occupation tax certificate if the vendor maintains an office within the unincorporated area of Gwinnett County. Incorporated, out of County, and out of State vendors are required to have any and all certificates necessary to do business in any town, County or municipality in the State of Georgia, or as otherwise required by County ordinance or resolution. Vendors may be required to provide evidence of valid certificates. Out of State vendors are required to have a certificate in the Georgia jurisdiction where they receive the most revenue.

**XXIV. PURCHASING POLICY AND REVIEW COMMITTEE**

The Purchasing Policy & Review Committee has been established to review purchasing procedures and make recommendations for changes; resolve problems regarding the purchasing process; make recommendations for standardization of commodities, schedule buying, qualified products list, annual contracts, supplier performance (Ineligible Source List), and other problems or requirements related to purchasing. The Purchasing Policy & Review Committee has authority to place vendors on the Ineligible Source List for reasons listed in Part 6, Section II of the Gwinnett County Purchasing Ordinance, for a period not to exceed three (3) years.

**XXV. AMERICANS WITH DISABILITIES ACT**

All vendors for Gwinnett County are required to comply with all applicable sections of the Americans with Disabilities Act (ADA) as an equal opportunity employer. In compliance with the Americans with Disabilities Act (ADA), Gwinnett County provides reasonable accommodations to permit a qualified applicant with a disability to enjoy the privileges of employment equal to those employees without disabilities. Disabled individuals must satisfy job requirements for education background, employment experience, and must be able to perform those tasks that are essential to the job with or without reasonable accommodations. Any requests for the reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of Gwinnett County should be directed to the ADA Coordinator, 75 Langley Drive, Lawrenceville, Georgia 30046, 770-822-8165.

**XXVI. ALTERATIONS OF SOLICITATION AND ASSOCIATED DOCUMENTS**

Alterations of County documents are strictly prohibited and will result in automatic disqualification of the vendor's solicitation response. If there are "exceptions" or comments to any of the solicitation requirements or other language, then the firm may make notes to those areas, but may not materially

alter any document language.

#### **XXVII. TAX LIABILITY**

Local and state governmental entities must notify vendors of their use tax liability on public works projects. Under Georgia law, private vendors are responsible for paying a use tax equal to the sales tax rate on material and equipment purchased under a governmental exemption that is incorporated into a government construction project: excluding material and equipment provided for the installation, repair, or expansion of a public water, gas, or sewer system when the property is installed for general distribution purposes. To the extent the tangible personal property maintains its character (for example, the installation of a kitchen stove), it remains tax-exempt. However, if the installation incorporates the tangible personal property into realty (for example, the installation of sheetrock), it becomes taxable to the private vendor. See O.C.G.A. §48-8-3(2) and O.C.G.A. §48-8-63.

#### **XXVIII. STATE AND FEDERAL LAW REGARDING WORKER VERIFICATION**

Effective July 1, 2013 State Law requires that all who enter into a contract for the physical performance of services for all labor or service contract(s) that exceed \$2,499.99 (except for services performed by an individual who is licensed pursuant to Title 26, Title 43, or the State Bar of Georgia) and that all who enter into a contract for public works as defined by O.C.G.A. §36-91-2(12) for the County, must satisfy the Illegal Immigration Reform Enhancements for 2013 in conjunction with the Federal Immigration Reform and Control Act (IRCA) of 1986, in all manner, and such are conditions of the contract.

The Purchasing Division Director with the assistance of the Internal Audit Division shall be authorized to conduct random audits of a vendor's or subcontractors' compliance with the Illegal Immigration Reform Enhancements for 2013 and the rules and regulations of the Georgia Department of Labor. The vendor and subcontractors shall retain all documents and records of its compliance for a period of five (5) years following completion of the contract or shall abide by the current time requirements at the time of the contract. This requirement shall apply to all contracts for all public works, labor or service contracts that exceed \$2,499.99 except for services performed by an individual who is licensed pursuant to Title 26, Title 43, or the State Bar of Georgia.

Whenever it appears that a vendor's or subcontractor's records are not sufficient to verify the work eligibility of any individual in the employment of such vendor or subcontractor, the Purchasing Director shall report same to the Department of Homeland Security and may result in termination of the contract if it is determined at any time during the work that the vendor or subcontractor is no longer in compliance with worker verification.

By submitting an offer to the County, vendor agrees that, in the event the vendor employs or contracts with any subcontractor(s) in connection with the covered contract, the vendor will secure from the subcontractor(s) such subcontractor(s)' indication of the employee-number category applicable to the subcontractor, as well as attestation(s) from such subcontractor(s) that they follow the Illegal Immigration Reform Enhancements for 2013 in conjunction with all federal requirements. Original signed, notarized Subcontractor Affidavits and Agreements must be maintained by the vendor awarded the contract.

A vendor's or subcontractor's failure to participate in the federal work authorization program as defined above shall be subject to termination of the contract. A vendor's failure to follow Gwinnett County's instruction to terminate a subcontractor that is not participating in the federal work authorization program may be subject to termination of the contract.

**XXIX. SOLID WASTE ORDINANCE**

No individual, partnership, corporation, or other entity shall engage in solid waste handling except in such a manner as to conform to and comply with the current Gwinnett County Solid Waste Ordinance and all other applicable local, state and federal legislation, rules, regulation, and orders.

**XXX. GENERAL CONTRACTORS LICENSE**

Effective July 1, 2008: **All General Contractors must have a current valid license from the State Licensing Board for Residential and General Contractors, unless specifically exempted from holding such license pursuant to Georgia law (O.C.G.A. §43-41-17).**

**XXXI. PRODUCTS MANUFACTURED IN GEORGIA**

When contracting for or purchasing supplies, materials, equipment, or agricultural products that exceeds \$100,000.00, excluding beverages for immediate consumption, Gwinnett County shall give preference as far as may be reasonable and practicable to such supplies, materials, equipment, and agricultural products as may be manufactured or produced in this state. Such preference shall not sacrifice quality. Gwinnett County Board of Commissioners shall consider, among other factors, information submitted by the vendor which may include the vendor's estimate of the multiplier effect on gross state domestic product and the effect on public revenues of the state and the effect on public revenues of political subdivisions resulting from acceptance of an offer to sell Georgia manufactured or produced goods as opposed to out-of-state manufactured or produced goods. Any such estimates shall be in writing. **(O.C.G.A. §36-84-1).**

**XXXII. INDEMNIFICATION**

To the fullest extent permitted by law, the vendor shall, at his sole cost and expense, indemnify, defend, satisfy all judgments, and hold harmless the County, its commissioners, officers, agents, and employees from and against all claims, damages, actions, judgments, costs, penalties, liabilities, 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, action, judgment, cost, penalty, liability, loss or expense (1) 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, and (2) is caused in whole or in part by the negligent acts, errors by any act or omission of the vendor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless whether such claim is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any of the rights or obligations of indemnity which would otherwise exist as to any party or person described in this agreement. In any and all claims against the County, its commissioners, officers, agents, and employees by any employee of the vendor, 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 contained herein 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 vendor or any subcontractor under Worker's Compensation Acts, disability benefit acts, or other employee benefit acts.

Vendor shall also indemnify, hold harmless, insure, and defend the County for damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the vendor or other persons employed or utilized by the vendor in the performance of a contract that utilizes survey services.

**XXXIII. CODE OF ETHICS**

Vendors shall disclose under oath the name of all elected officials whom it employs or who have a direct or indirect pecuniary interest in the business entity, its affiliates, or its subcontractors. (This shall not

apply to informal purchases as defined by the Purchasing Ordinance.) The vendor shall execute a Code of Ethics affidavit. Failure to submit the affidavit during the procurement process shall render the offer non-responsive.

Any business entity holding a contract with Gwinnett County that after execution of the contract or issuance of the purchase order employs, subcontracts with, or transfers a direct or indirect pecuniary interest in the business entity to an elected official shall within five (5) days disclose such fact in writing under oath to the Clerk of the Board of Commissioners. Failure to comply, or vendors submitting false information or omitting material information shall be referred to the Purchasing Policy & Review Committee for action pursuant to the Purchasing Ordinance or to the District Attorney for possible criminal prosecution. Note: See Gwinnett County Code of Ethics Ordinance E02011, Sec. 54-33. The ordinance is available to view in its entirety at [www.gwinnettcountry.com](http://www.gwinnettcountry.com).

#### **XXXIV. ELECTRONIC PAYMENT**

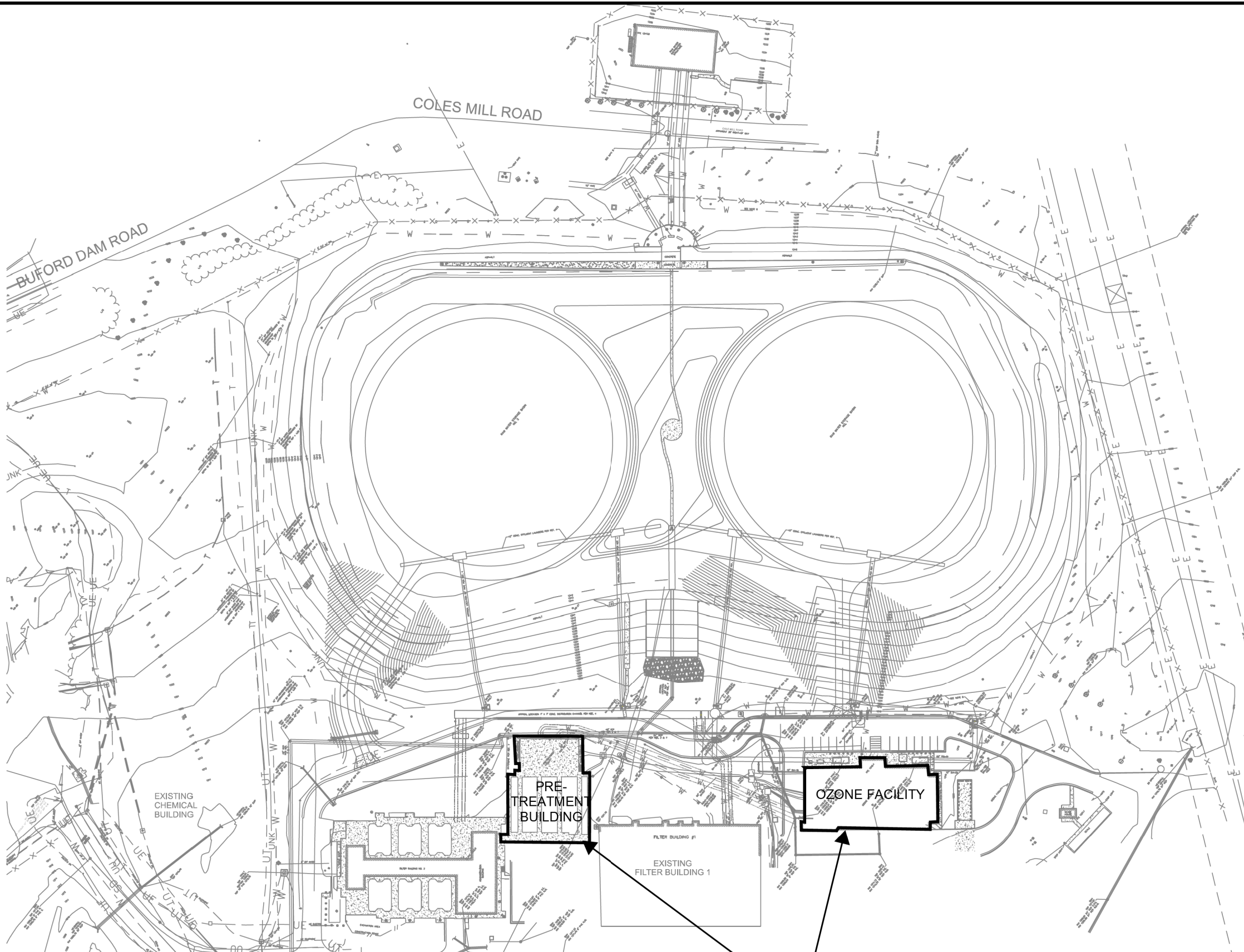
Vendors accepting procurements should select one of Gwinnett County's electronic payment options.

- A. A vendor may select ePayables payment process which allows acceptance of Gwinnett County's virtual credit card as payment for outstanding invoices. The authorized vendor representative must send an email to: [vendorelectronicpayment@gwinnettcountry.com](mailto:vendorelectronicpayment@gwinnettcountry.com) and indicate the desire to enroll in Gwinnett County's virtual credit card payment process.
- B. A vendor may select Direct Deposit payment process and the payment will be deposited directly into an account at their designated financial institution. To securely enroll in Direct Deposit, either access your online [Vendor Login and Registration](#) on the County's web site and update the requested information on the Direct Deposit tab or mail a [Direct Deposit Authorization Agreement](#) form.

The County will send a Payment Advice notification via email for both payment types. For more information about Electronic Payments, please visit the Gwinnett County Treasury Division page or click here -> [Gwinnett County Electronic Payments](#).

#### **DIRECTIONS TO GJAC BUILDING FROM I-85**

Take I-85 to Georgia Highway 316 (Lawrenceville/Athens exit). Exit Highway 120 (Lawrenceville/Duluth exit) and turn right. At seventh traffic light, turn right onto Langley Drive. Cross Highway 29 through the traffic light and proceed through the roundabout. Visitors can either proceed to the front parking area on the left or to the parking deck behind the building. Click [here](#) for additional information about parking. **The Purchasing Division is located on the fourth floor of the Charlotte J. Nash Building. NOTE THAT THE PURCHASING DIVISION HAS TEMPORARILY RELOCATED.**



PRE-TREATMENT BUILDING

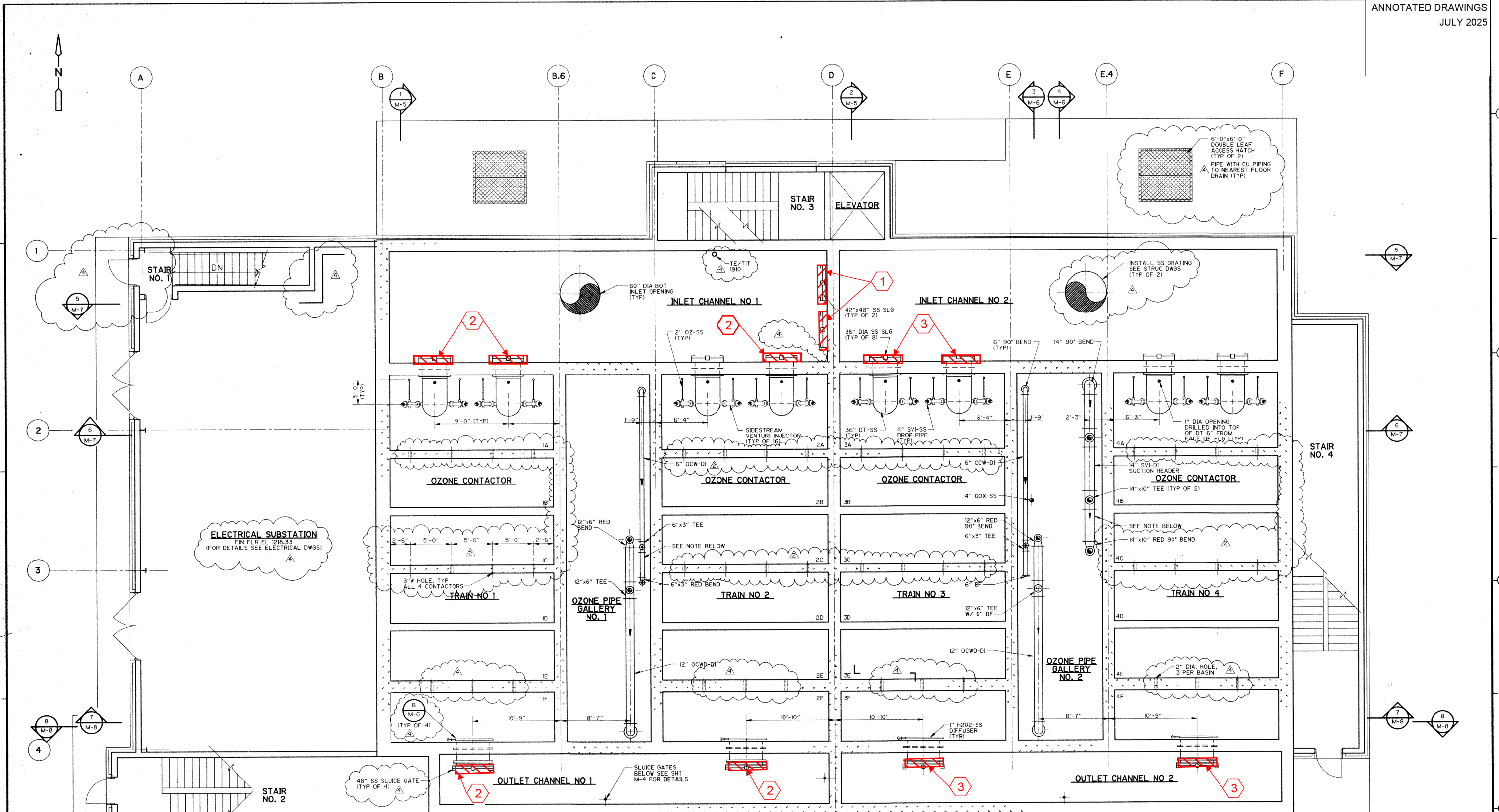
OZONE FACILITY

EXISTING FILTER BUILDING 1

EXISTING CHEMICAL BUILDING

PROJECT LOCATON

LANIER FILTER FACILITY - PLANT  
PRE-TREATMENT & OZONE  
SLIDE GATE REPLACEMENT - FACILITY  
LOCATONS



**# KEYNOTES**

1,2,3. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

**REMOVE AND REPLACE GATES**

**INTERMEDIATE LEVEL PLAN**  
3/16"=1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS
8-30-95	TMM	MCN		CONFORMED DWGS
7-17-95	TMM	AJK		REVISED PER ADDENDUM NO. 4
7-10-95	TMM	AJK		REVISED PER ADDENDUM NO. 3
6-30-95	CLP	MCN		REVISED PER ADDENDUM NO. 2

DESIGNED BY: C. SCHULZ  
DRAWN BY: PETERS/MORGAN  
SHEET CHK'D BY: C. SCHULZ  
CROSS CHK'D BY: W. PITTS  
APPROVED BY: C. WILDER  
DATE: JUNE 1995

**CAMP DRESSER & MCKEE INC.**

**CDM**  
environmental engineers, scientists,  
planners, & management consultants

**DEPARTMENT OF PUBLIC UTILITIES  
GWINNETT COUNTY, GEORGIA**

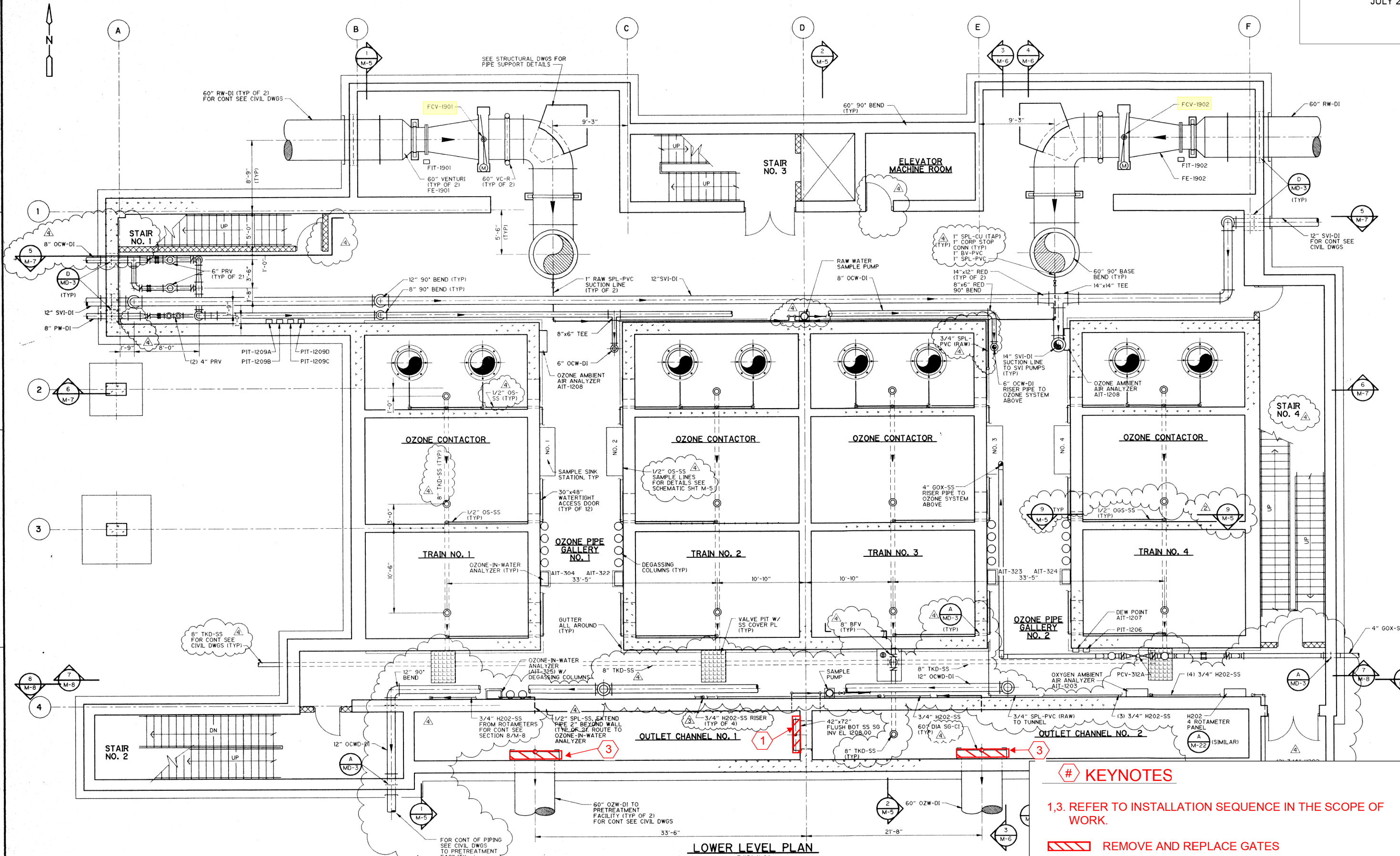
**LANIER FILTER PLANT  
SLIDE GATE REPLACEMENT**

**EXISTING SLIDE GATE REPLACEMENT AT  
OZONE FACILITY - PLAN**

PROJECT NO. 6150-15  
FILE NAME: 6150LM3

SHEET NO. **M-3**

MAKE REDWELL  
2/2013  
08/16/98 16:26:30  
M:\GWINNETT\PROJ\6150\OZONE\6150LM3



**# KEYNOTES**

1,3. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

REMOVE AND REPLACE GATES

**LOWER LEVEL PLAN**  
3/16"=1'-0"

3-30-95	TMM	MCN	CONFORMED DWGS
7-17-95	TMM	AJK	REVISED PER ADDENDUM NO. 4
7-10-95	TMM	AJK	REVISED PER ADDENDUM NO. 3
5-30-95	CLP	MCN	REVISED PER ADDENDUM NO. 2
REV. NO.	DATE	DRWN	CHKD

DESIGNED BY: C. SCHULZ  
DRAWN BY: PETERS/MORGAN  
SHEET CHK'D BY: C. SCHULZ  
CROSS CHK'D BY: W. PITTS  
APPROVED BY: C. WILDER  
DATE: JUNE 1995

**CAMP DRESSER & MCKEE INC.**  
environmental engineers, scientists,  
planners, & management consultants

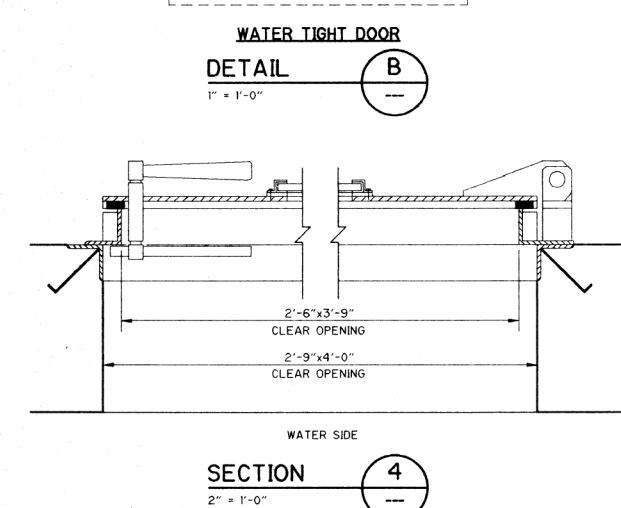
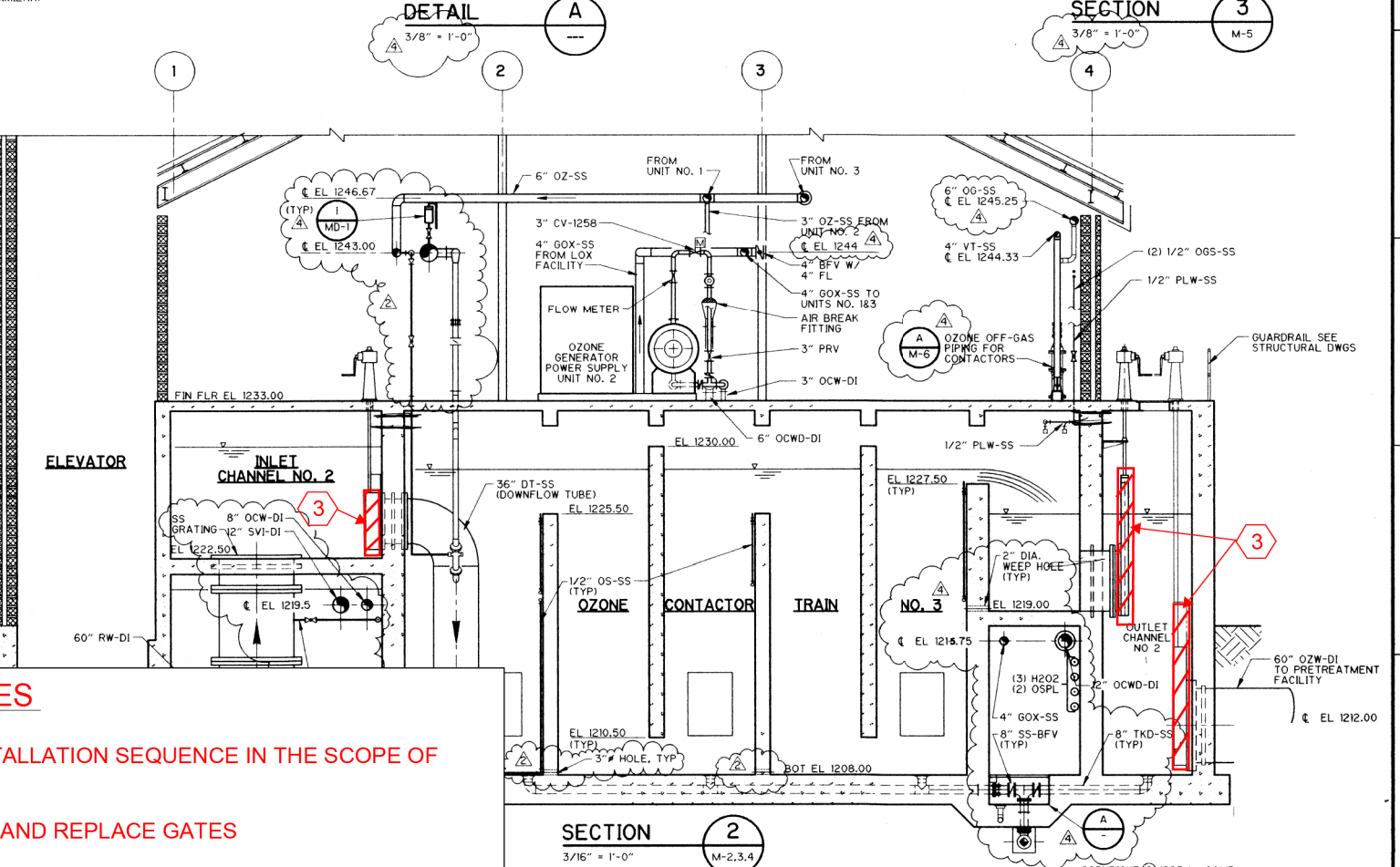
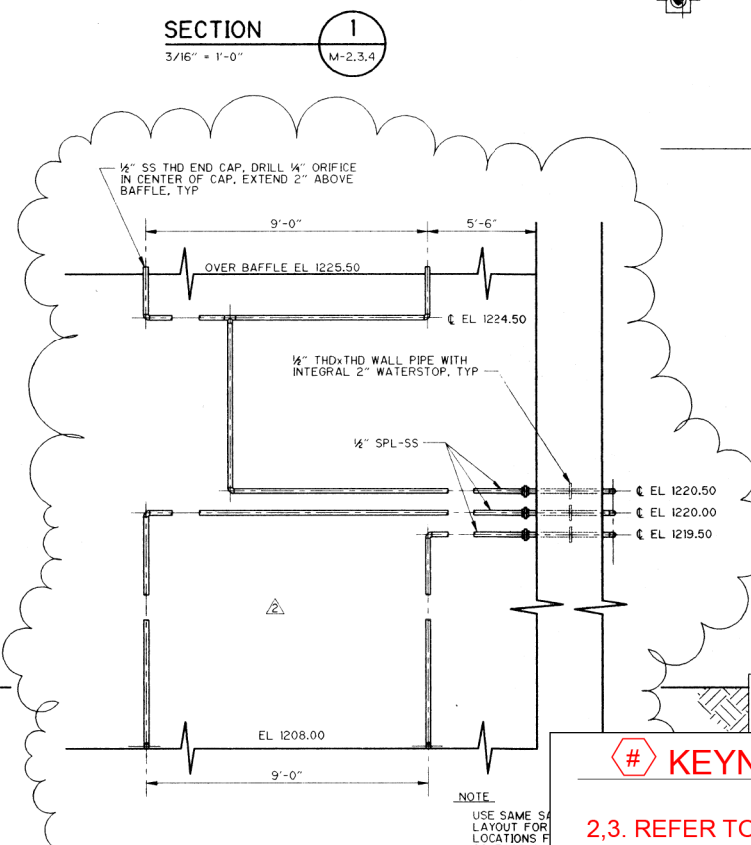
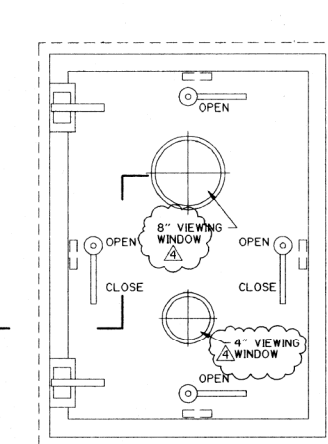
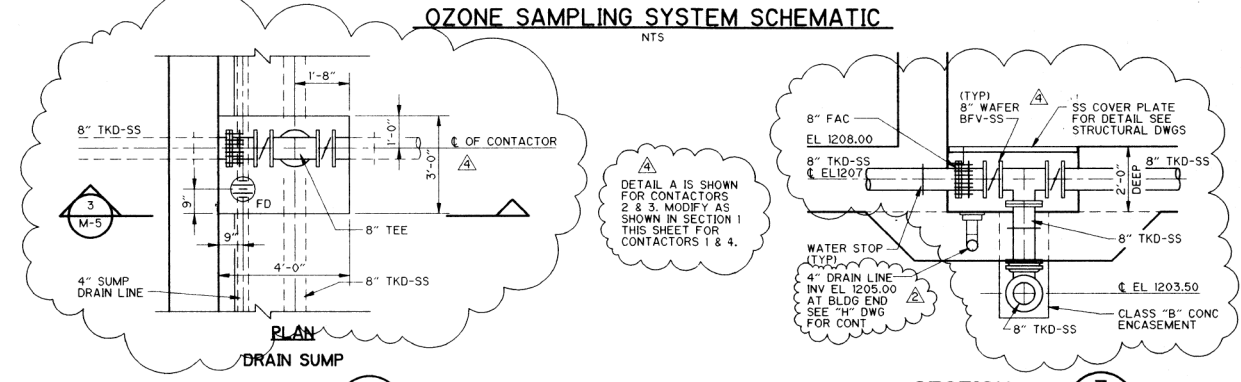
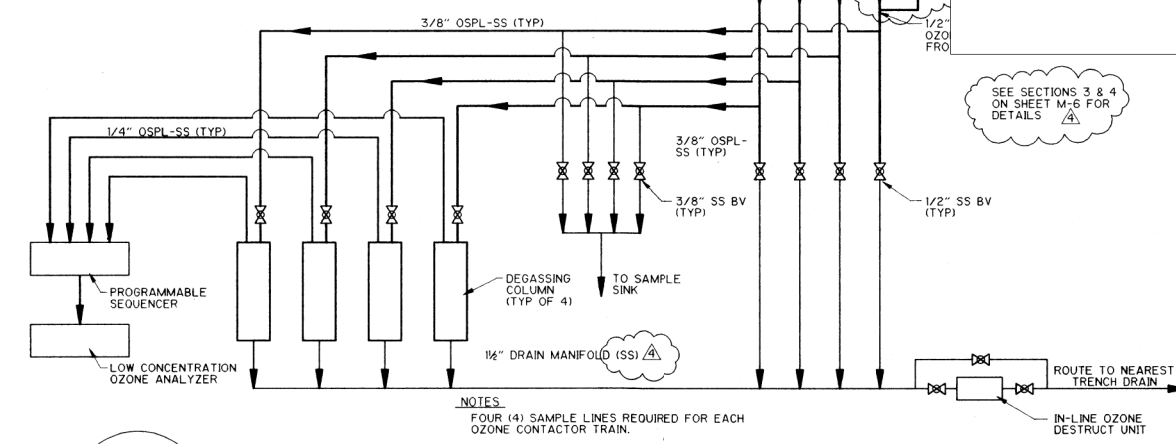
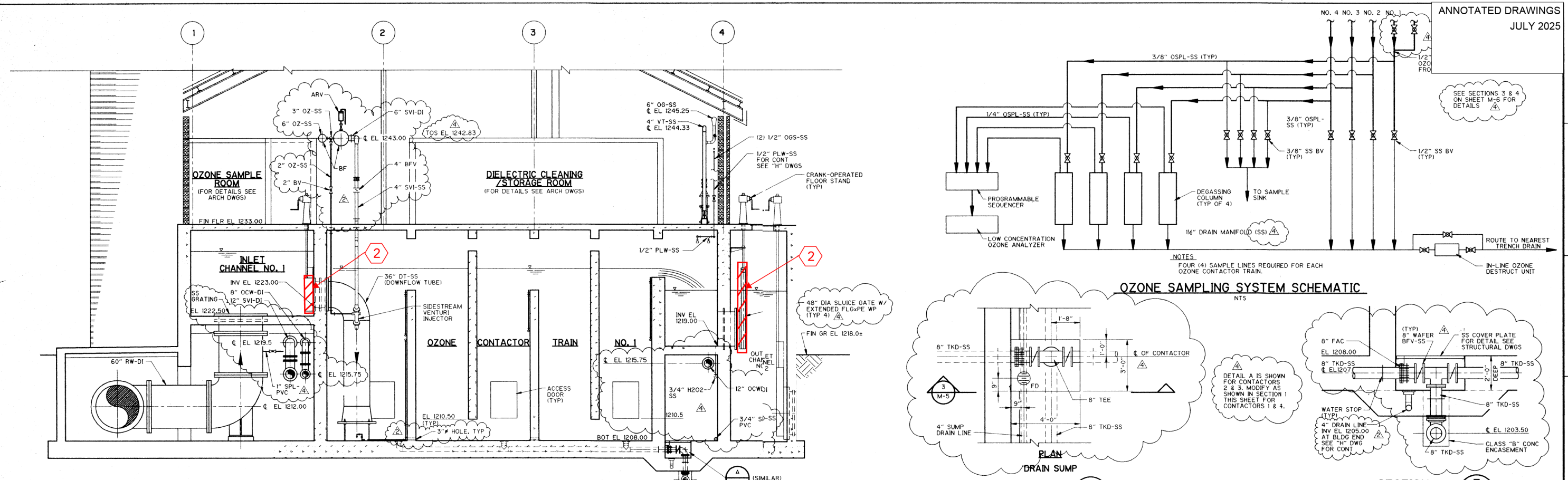


**DEPARTMENT OF PUBLIC UTILITIES  
GWINNETT COUNTY, GEORGIA**  
LANIER FILTER PLANT  
SLIDE GATE REPLACEMENT

**EXISTING SLIDE GATE REPLACEMENT AT  
OZONE FACILITY - LOWER LEVEL PLAN**

PROJECT NO. 6150-15  
FILE NAME: 6150L4  
SHEET NO. **M-4**

MAKE RIDGEMAN  
 8/15/95 134635  
 8/15/95 134635  
 8/15/95 134635



**# KEYNOTES**

2,3. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

**REMOVE AND REPLACE GATES**

REV. NO.	DATE	DRWN	CHKD	REMARKS
3-30-95	TMM	MCN	CONFORMED DWGS	
7-17-95	TMM	AJK	REVISED PER ADDENDUM NO. 4	
8-30-95	CLP	MCN	REVISED AND REISSUED PER ADDENDUM NO. 2	

DESIGNED BY: C. SCHULZ  
DRAWN BY: PETERS/MORGAN  
SHEET CHK'D BY: C. SCHULZ  
CROSS CHK'D BY: W. PITTS  
APPROVED BY: C. WILDER  
DATE: JUNE 1995

**CAMP DRESSER & MCKEE INC.**

**CDM**  
environmental engineers, scientists, planners, & management consultants

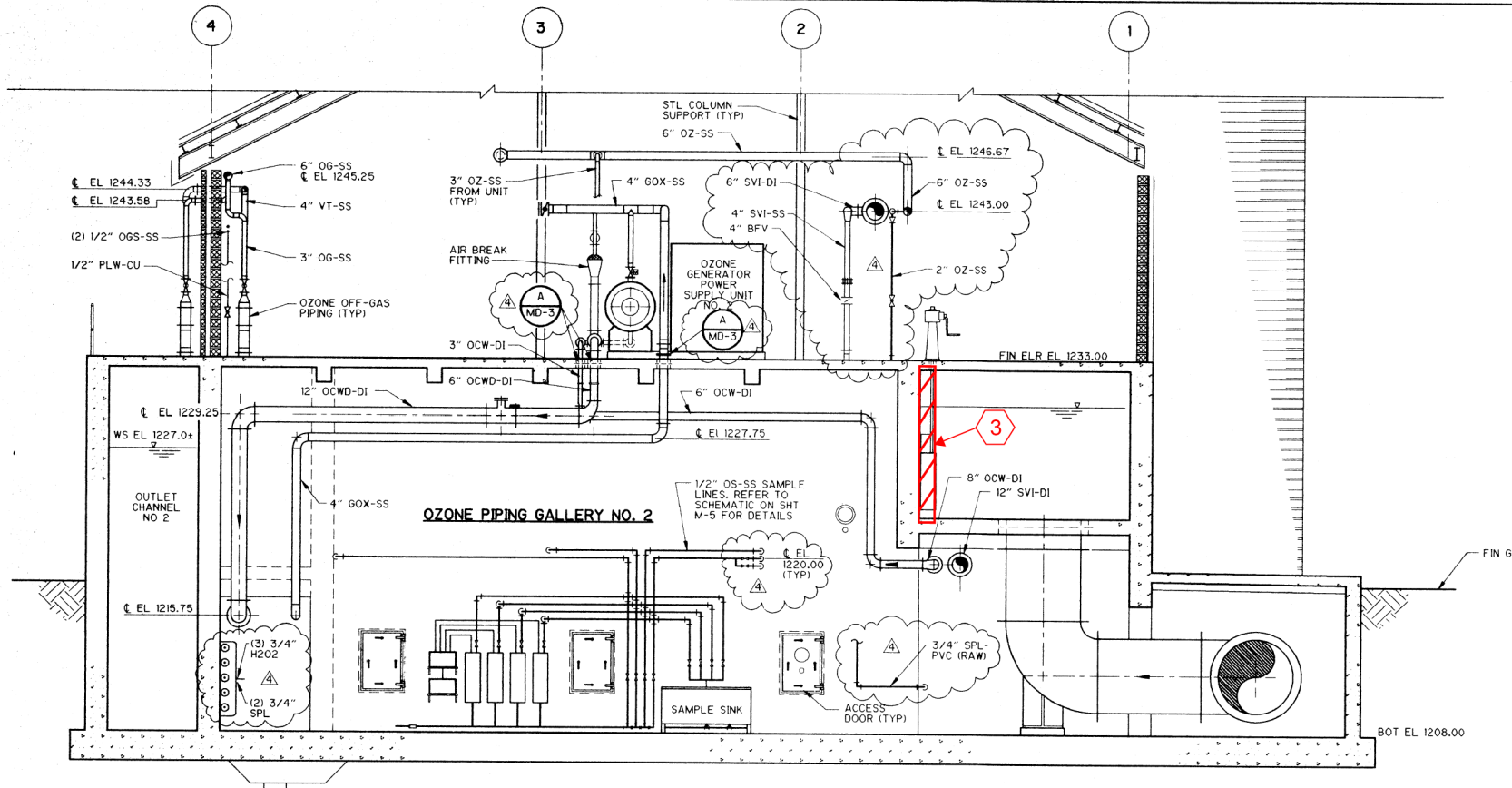
**DEPARTMENT OF PUBLIC UTILITIES  
GWINNETT COUNTY, GEORGIA**

**LANIER FILTER PLANT  
SLIDE GATE REPLACEMENT**

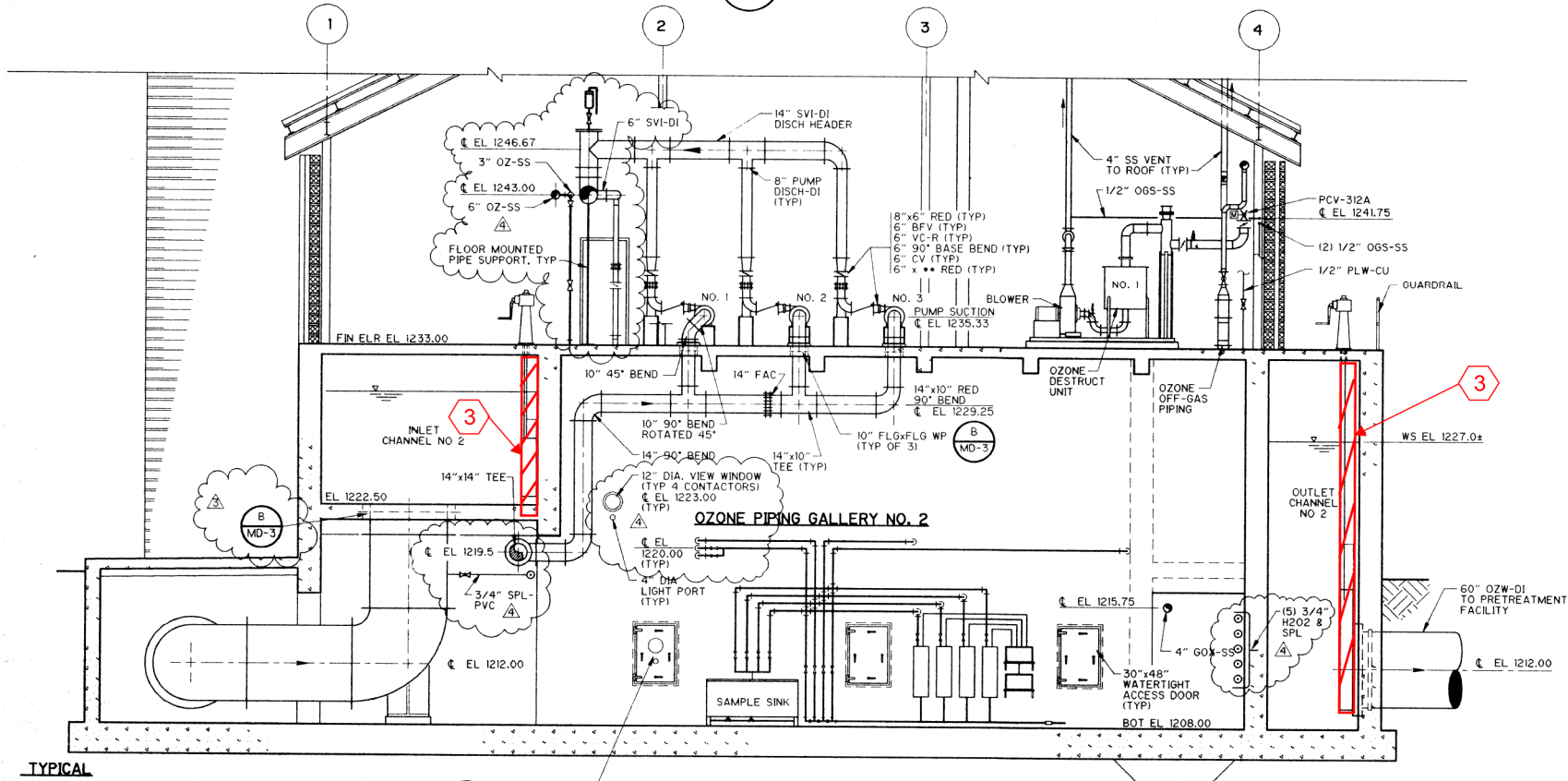
**EXISTING SLIDE GATE REPLACEMENT AT  
PRETREATMENT FACILITY - PLAN**

PROJECT NO. 6150-15  
FILE NAME: 6150LM5  
SHEET NO. **M-5**

MCKE REBEWELL  
04440  
08/16/95 15:00:24  
GWINNETT (GEO) (MECH) (OZONE) 650LMS



SECTION 3  
3/16" = 1'-0"  
M-2,3,4



SECTION 4  
3/16" = 1'-0"  
M-2,3,4

# KEYNOTES  
3. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.  
REMOVE AND REPLACE GATES

221823  
08/26/95 11:28  
GWINNETT/VS/AN/CON/OZONE  
MKE RODGELL

REV. NO.	DATE	DRWN	CHKD	REMARKS
8-30-95	TMM	MCN		CONFORMED DWGS
7-17-95	TMM	AJK		REVISED PER ADDENDUM NO. 4
5-30-95	CLP	MCN		REVISED PER ADDENDUM NO. 2

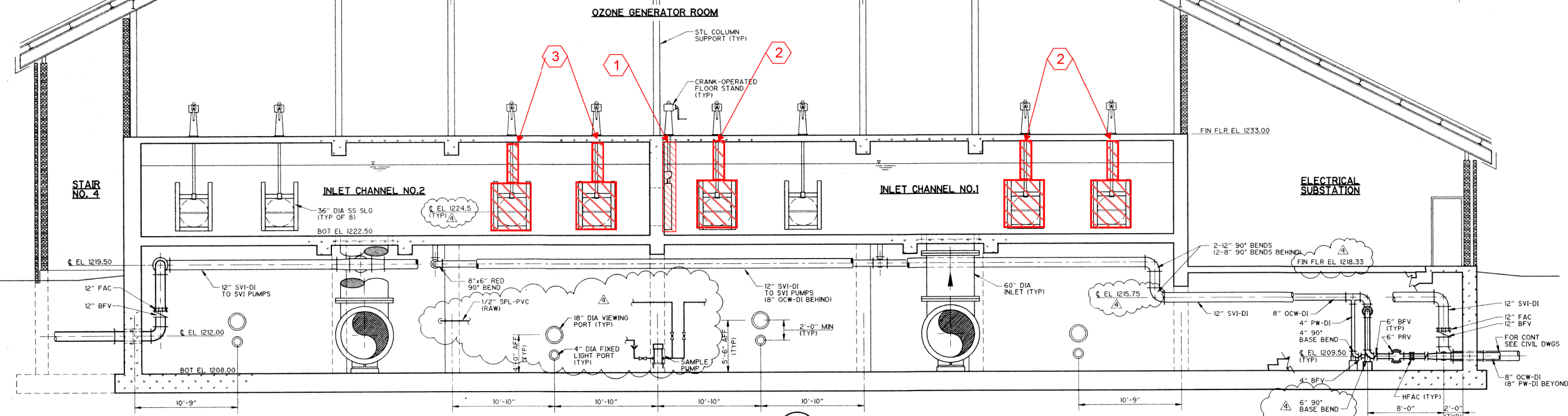
DESIGNED BY: C. SCHULZ  
DRAWN BY: PETERS/MORGAN  
SHEET CHK'D BY: C. SCHULZ  
CROSS CHK'D BY: W. PITTS  
APPROVED BY: C. WILDER  
DATE: JUNE 1995

CAMP DRESSER & MCKEE INC.  
**CDM**  
environmental engineers, scientists,  
planners, & management consultants

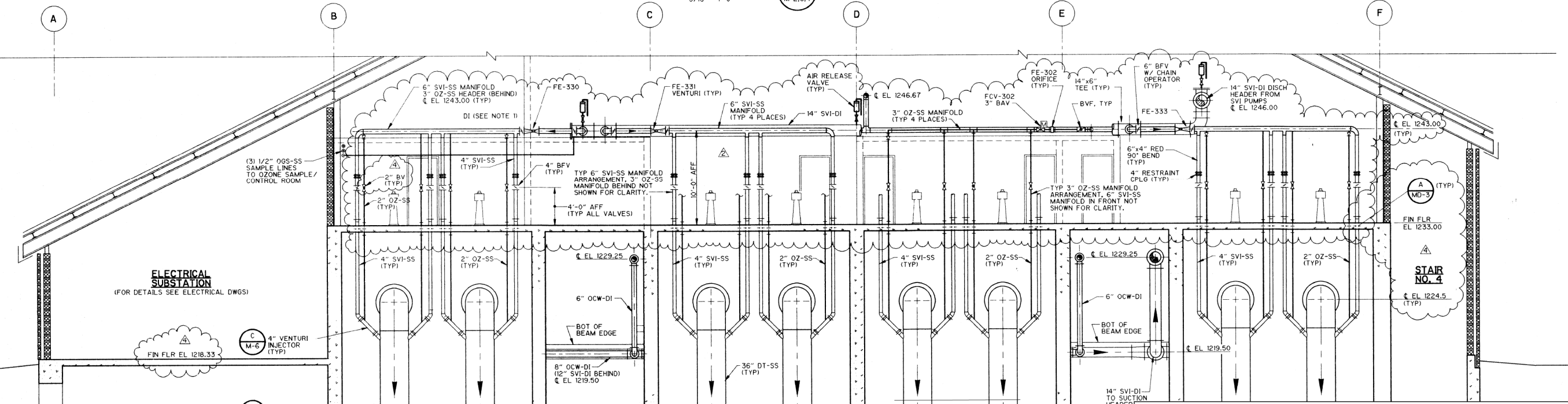
DEPARTMENT OF PUBLIC UTILITIES  
GWINNETT COUNTY, GEORGIA  
LANIER FILTER PLANT  
SLUICE GATE REPLACEMENT

EXISTING SLIDE GATE REPLACEMENT AT  
OZONE FACILITY - SECTIONS  
M-6

PROJECT NO. 6150-15  
FILE NAME: 6150LM6  
SHEET NO. M-6



SECTION 5  
3/16" = 1'-0"  
M-2,3,4



SECTION 6  
3/16" = 1'-0"  
M-2,3,4

**KEYNOTES**

1,2,3. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

REMOVE AND REPLACE GATES

WARE RIDGEBELL 7266.38  
 06/16/95 1558.31  
 GWNETT, GIBB, MEDA/OZONE, 650/LM7

DESIGNED BY: C. SCHULZ	DESIGNED BY: C. SCHULZ
DRAWN BY: PETERS/MORGAN	DRAWN BY: PETERS/MORGAN
SHEET CHECKED BY: C. SCHULZ	SHEET CHECKED BY: C. SCHULZ
CROSS CHECKED BY: W. PITTS	CROSS CHECKED BY: W. PITTS
APPROVED BY: C. WILDER	APPROVED BY: C. WILDER
DATE: JUNE 1995	DATE: JUNE 1995

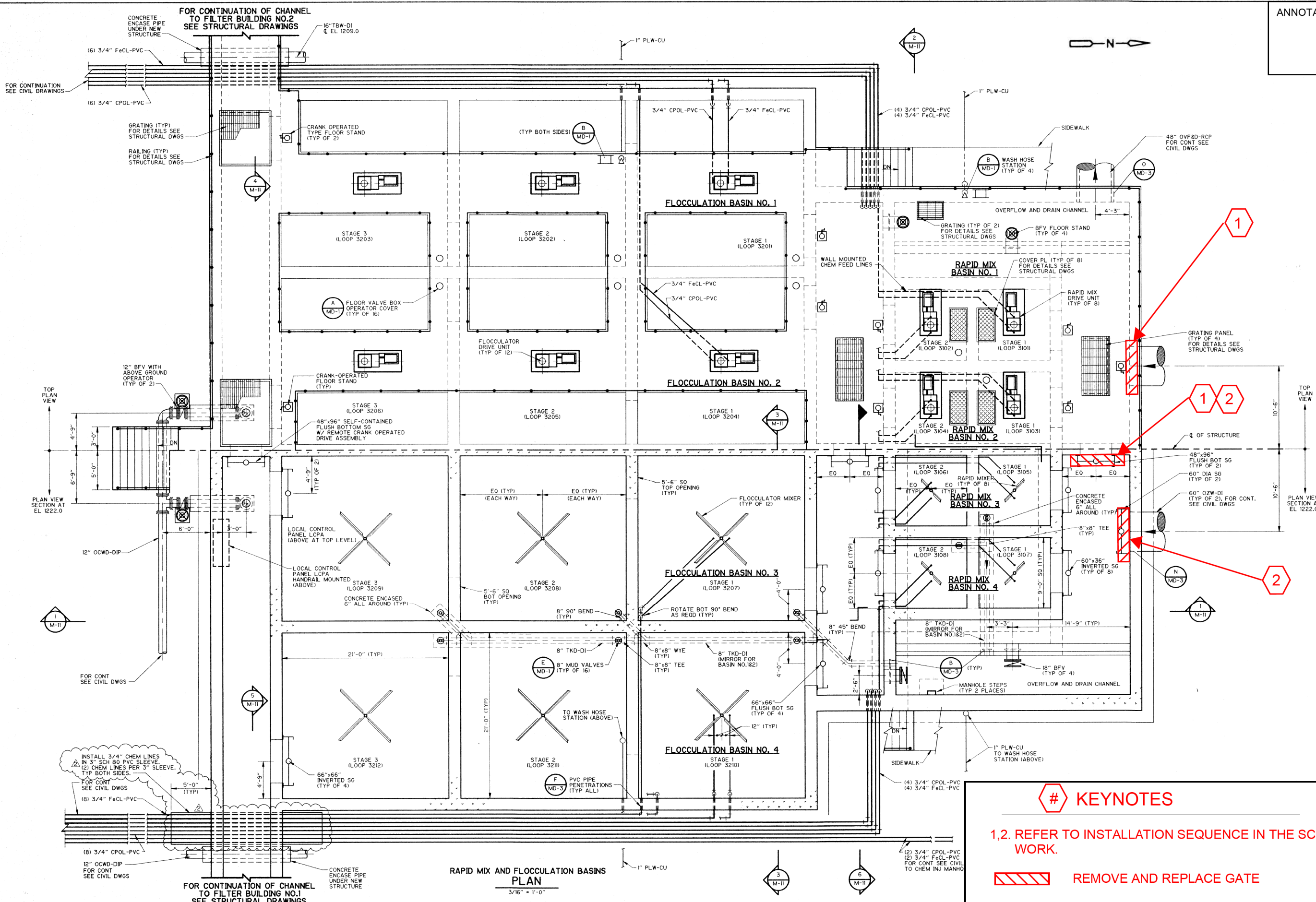
DESIGNED BY: C. SCHULZ  
 DRAWN BY: PETERS/MORGAN  
 SHEET CHECKED BY: C. SCHULZ  
 CROSS CHECKED BY: W. PITTS  
 APPROVED BY: C. WILDER  
 DATE: JUNE 1995

CAMP DRESSER & MCKEE INC.  
 DEPARTMENT OF PUBLIC UTILITIES  
 GWINNETT COUNTY, GEORGIA  
 LANIER FILTER PLANT  
 SLIDE GATE REPLACEMENT

EXISTING SLIDE GATE REPLACEMENT AT  
 OZONE FACILITY - SECTIONS

PROJECT NO. 6150-15  
 FILE NAME: 6150LM7  
 SHEET NO. M-7





# KEYNOTES

1,2. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

REMOVE AND REPLACE GATE

RAPID MIX AND FLOCCULATION BASINS PLAN  
3/16" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS
3-30-95	TMM	MCN		CONFORMED DWGS
5-30-95	TMM	MCN		REVISED PER ADDENDUM NO. 2

DESIGNED BY: A. KIM  
 DRAWN BY: T. MORGAN  
 SHEET CHK'D BY: W. PITTS  
 CROSS CHK'D BY: M. NOUVEL  
 APPROVED BY: C. WILDER  
 DATE: JUNE 1995

CAMP DRESSER & MCKEE INC.

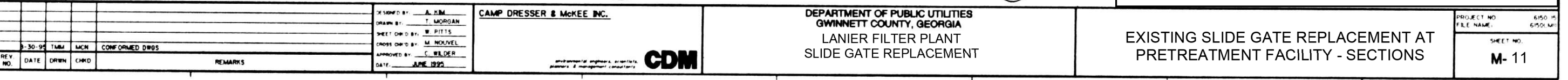
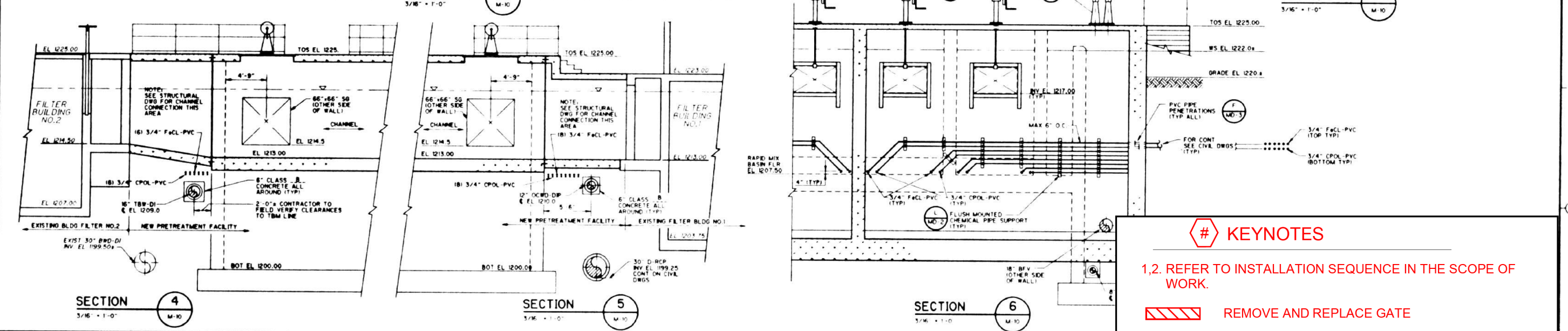
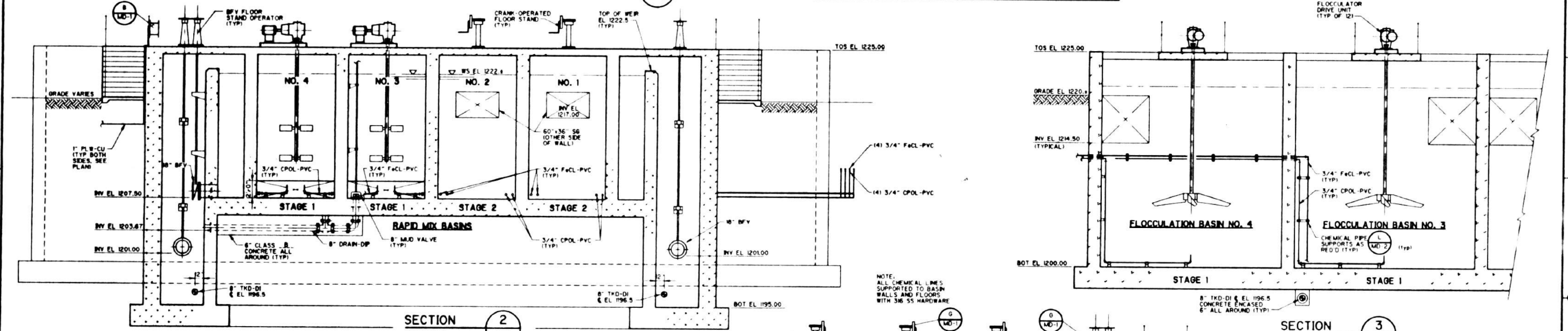
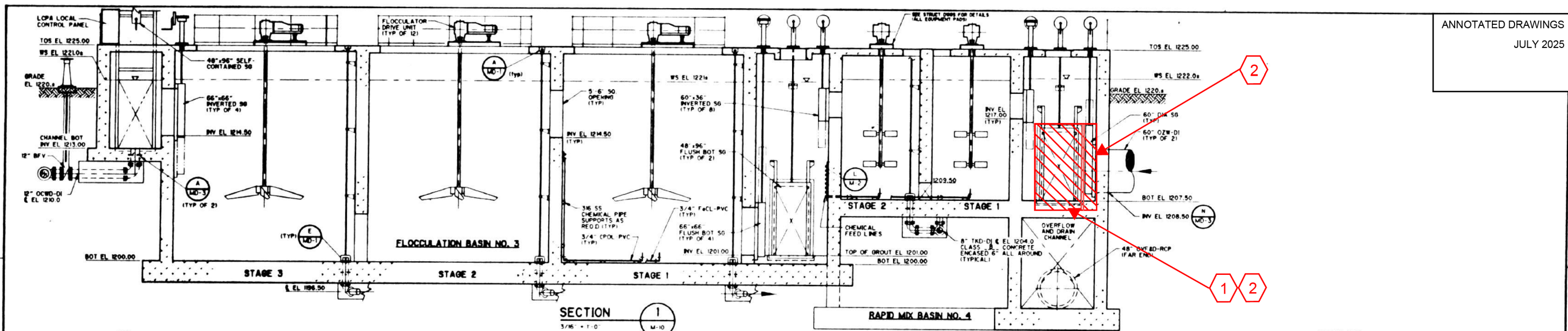
**CDM**  
 environmental engineers, scientists,  
 planners, & management consultants

DEPARTMENT OF PUBLIC UTILITIES  
 GWINNETT COUNTY, GEORGIA  
 LANIER FILTER PLANT  
 SLIDE GATE REPLACEMENT

EXISTING SLIDE GATE REPLACEMENT  
 AT PRETREATMENT FACILITY - PLAN

PROJECT NO. 6150-15  
 FILE NAME: 6150LM10  
 SHEET NO. M-10

MOORE ENGINEERING 2210022 06/05/95 10:32:28



# KEYNOTES

1,2. REFER TO INSTALLATION SEQUENCE IN THE SCOPE OF WORK.

REMOVE AND REPLACE GATE

MAKE REVISIONS  
 10/20/25  
 10/20/25

10/20/25  
 10/20/25

REV NO.	DATE	DRWN	CHRD	REMARKS
1	3-30-25	TMM	MCH	CONFORMED DWGS

DESIGNED BY: A. JIM  
 T. MORGAN  
 DRAWN BY: W. PITTS  
 SHEET CHD BY: M. NOUVEL  
 CROSS CHD BY: C. WILDER  
 APPROVED BY: C. WILDER  
 DATE: JUNE 1995

CAMP DRESSER & MCKEE INC.

DEPARTMENT OF PUBLIC UTILITIES  
 GWINNETT COUNTY, GEORGIA  
 LANIER FILTER PLANT  
 SLIDE GATE REPLACEMENT

EXISTING SLIDE GATE REPLACEMENT AT  
 PRETREATMENT FACILITY - SECTIONS

PROJECT NO. 6150.15  
 FILE NAME: 6150.M1  
 SHEET NO. M-11

**ATTACHMENT 2: Existing Gate Details and Drawings**

**SCHEDULE OF EXISTING SLIDE GATES FOR REPLACEMENT**

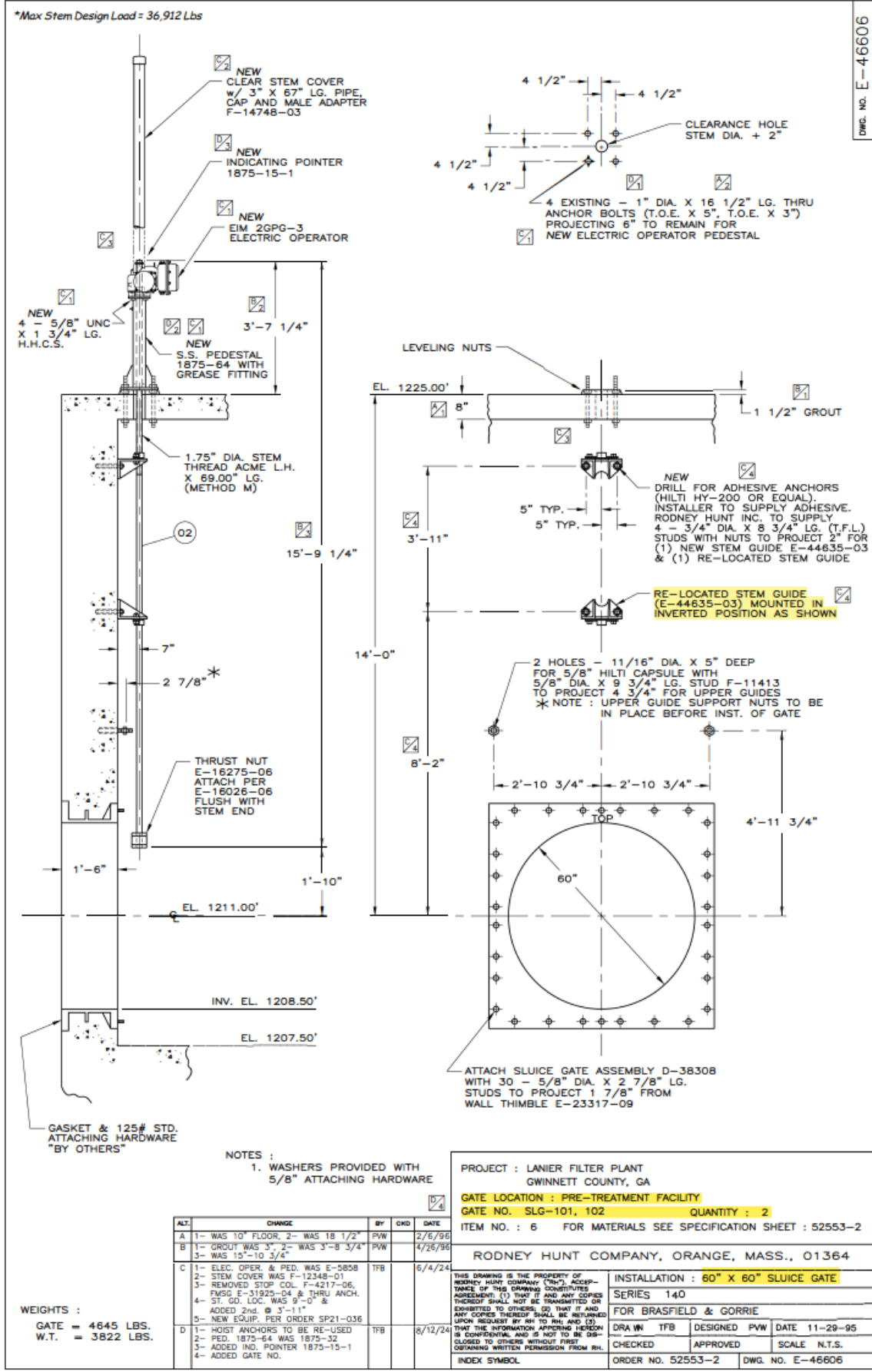
**PRE-TREATMENT GATE SCHEDULE**

Process Location	Designation	No. of Gates	Size (W inch x H inch)	Description & Location	Stem	Gate IL	Seating Head Max (ft)	Seating Head Min (ft)	Unseating Head Max (ft)	Unseating Head Min (ft)	Gate Material	Nominal Shaft Diameter Inches	Operator Type/Make	Operator Model/HP
Inlet channel	Bottom seal, upward opening	2	Dia. 60"	Inlet pipes to Pre-Treatment 60" feeding pipes for isolation	Rising	1207.50	13.70	0.00	24.00	0.00	SS	1.75	Electric/Bettis	2GPG-3/1.5
Inlet Channel	Flush bottom seal, upward opening	1	48" x 96"	Inlet channel No1 & No2 intermediate	Rising	1207.50	13.70	0.00	24.00	0.00	CI	2.75	Electric/Bettis	3GPA-3/1.5

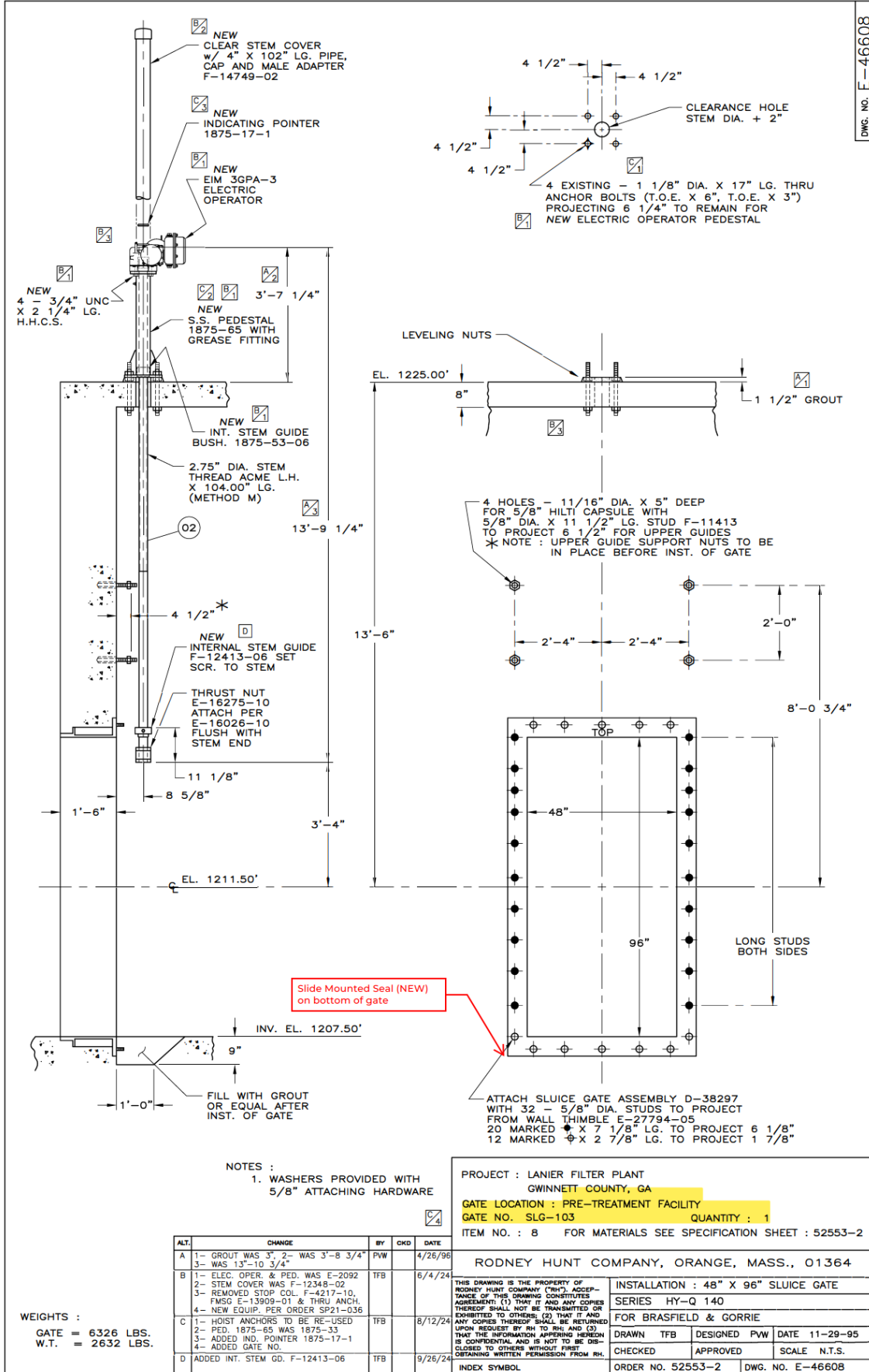
**OZONE FACILITY GATE SCHEDULE**

Inlet Channel	Upward opening	2	42" x 48"	Inlet channel No1 & No2 intermediate	Rising	1222.50	9.00	0.00	9.00	0.00	SS	1.5	Electric/Bettis	VA850001-A/ 0.75
Ozone Contact tank No.1	Upward opening	2	Dia. 36"	Contactactor 1 inlet gate for isolation	Rising	1222.50	9.00	4.50	6.10	0.00	SS	1.5	Electric/Bettis	VA850001-A/ 2GLG-3/ 1.5
Ozone Contact tank No.2	Upward opening	1	Dia. 36"	Contactactor 2 inlet gate for isolation	Rising	1222.50	19.00	0.00	20.60	6.90	SS	1.5	Electric/Bettis	2GSG-3/1.5
Ozone Contact tank No.3	Upward opening	2	Dia. 36"	Contactactor 3 inlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.5	Electric/Bettis	2GSG-3/1.5
Ozone Contact tank No.4	Upward opening	0	Dia. 36"	Contactactor 4 inlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.5	Electric/Bettis	VA850001-A/ 1.5
Ozone Contact tank No.1	Upward opening	1	Dia. 48"	Contactactor 1 outlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.25	Electric/Bettis	VA850001-A/ 1EPA-3/ 0.75
Ozone Contact tank No.2	Upward opening	1	Dia. 48"	Contactactor 2 outlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.25	Electric/Bettis	VA850001-A/ 1EPA-3/ 0.75
Ozone Contact tank No.3	Upward opening	1	Dia. 48"	Contactactor 3 outlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.25	Electric/Bettis	VA850001-A/ 1EPA-3/ 0.75
Ozone Contact tank No.4	Upward opening	1	Dia. 48"	Contactactor 4 outlet gate for isolation	Rising	1222.50	4.50	0.00	9.60	6.90	SS	1.25	Electric/Bettis	VA850001-A/ 1EPA-3/ 0.75
Discharge Pipes	Upward opening	2	Dia. 60"	Outlet channel No 1 & No2 60" gate for isolation	Rising	1208.00	19.50	0.94	13.70	0.00	SS	2	Electric/Bettis	VA850001-A/ 2GLG-3/ 1.5
Outlet Channel	Upward opening	1	42" x 72"	Outlet channel No1 & No2 intermediate	Rising	1208.00	23.50	0.00	23.50	0.00	SS	2	Electric/Bettis	VA850001-A/ 2GLG-3/ 1.5

DWG. NO. E-46606



Max Stem Design Load = 46,667 Lbs



DWG. NO. E-46608

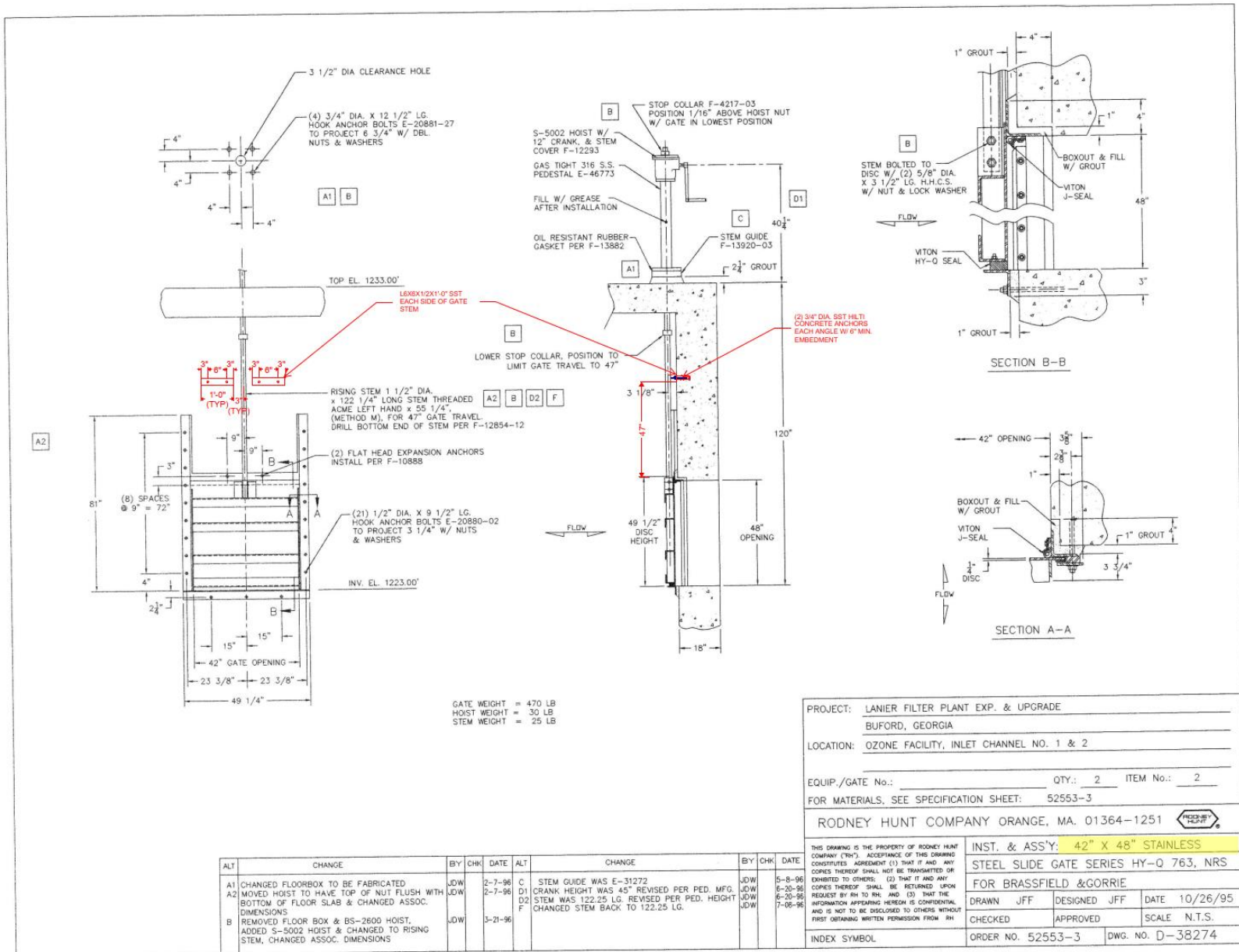
NOTES :  
1. WASHERS PROVIDED WITH 5/8" ATTACHING HARDWARE

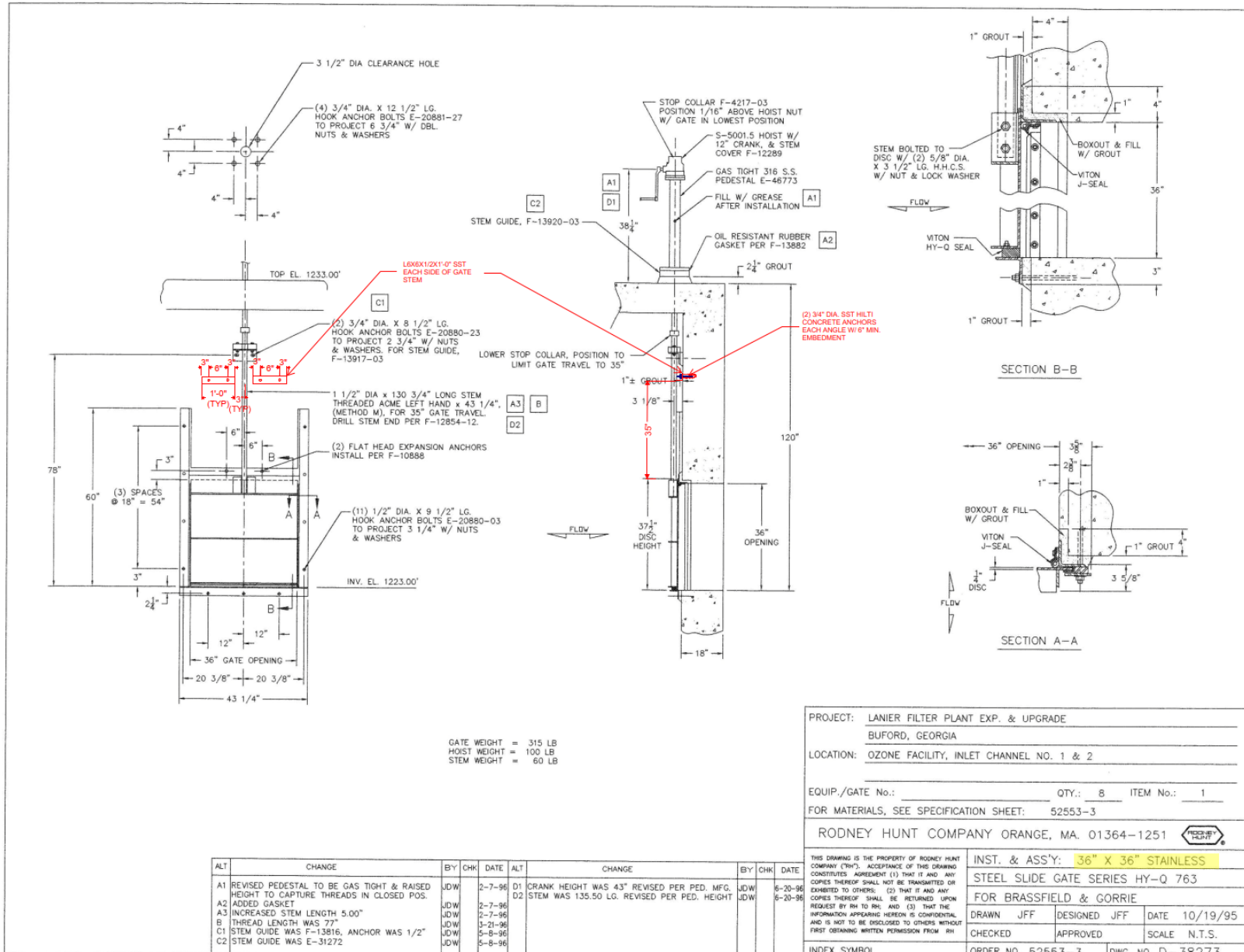
PROJECT : LANIER FILTER PLANT  
GWINNETT COUNTY, GA  
GATE LOCATION : PRE-TREATMENT FACILITY  
GATE NO. SLG-103 QUANTITY : 1  
ITEM NO. : 8 FOR MATERIALS SEE SPECIFICATION SHEET : 52553-2

ALT.	CHANGE	BY	CHKD	DATE
A	1- GROUT WAS 3'-2" WAS 3'-8 3/4" 3- WAS 13'-10 3/4"	PVW		4/26/98
B	1- ELEC. OPER. & PED. WAS E-2092 2- STEM COVER WAS F-12348-02 3- REMOVED STOP COL. F-4217-10, FM5G E-13909-01 & THRU ANCH. 4- NEW EQUIP. PER ORDER SP21-036	TFB		6/4/24
C	1- HOIST ANCHORS TO BE RE-USED 2- PED. 1875-65 WAS 1875-33 3- ADDED IND. POINTER 1875-17-1 4- ADDED GATE NO.	TFB		8/12/24
D	ADDED INT. STEM GD. F-12413-06	TFB		9/26/24

WEIGHTS :  
GATE = 6326 LBS.  
W.T. = 2632 LBS.

RODNEY HUNT COMPANY, ORANGE, MASS., 01364	
INSTALLATION : 48" X 96" SLUICE GATE	SERIES HY-Q 140
FOR BRASFIELD & GORRIE	
DRAWN TFB	DESIGNED PVW
CHECKED	APPROVED
DATE 11-29-95	SCALE N.T.S.
ORDER NO. 52553-2	DWG. NO. E-46608





PROJECT: LANIER FILTER PLANT EXP. & UPGRADE  
BUFORD, GEORGIA

LOCATION: OZONE FACILITY, INLET CHANNEL NO. 1 & 2

EQUIP./GATE No.: \_\_\_\_\_ QTY.: 8 ITEM No.: 1

FOR MATERIALS, SEE SPECIFICATION SHEET: 52553-3

RODNEY HUNT COMPANY ORANGE, MA. 01364-1251

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INST. & ASS'Y: 36" X 36" STAINLESS

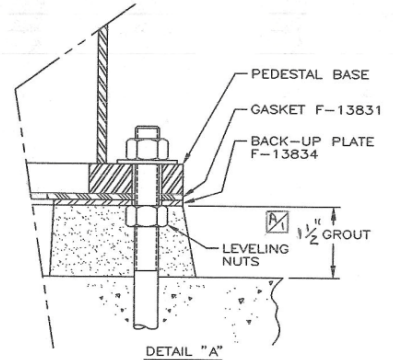
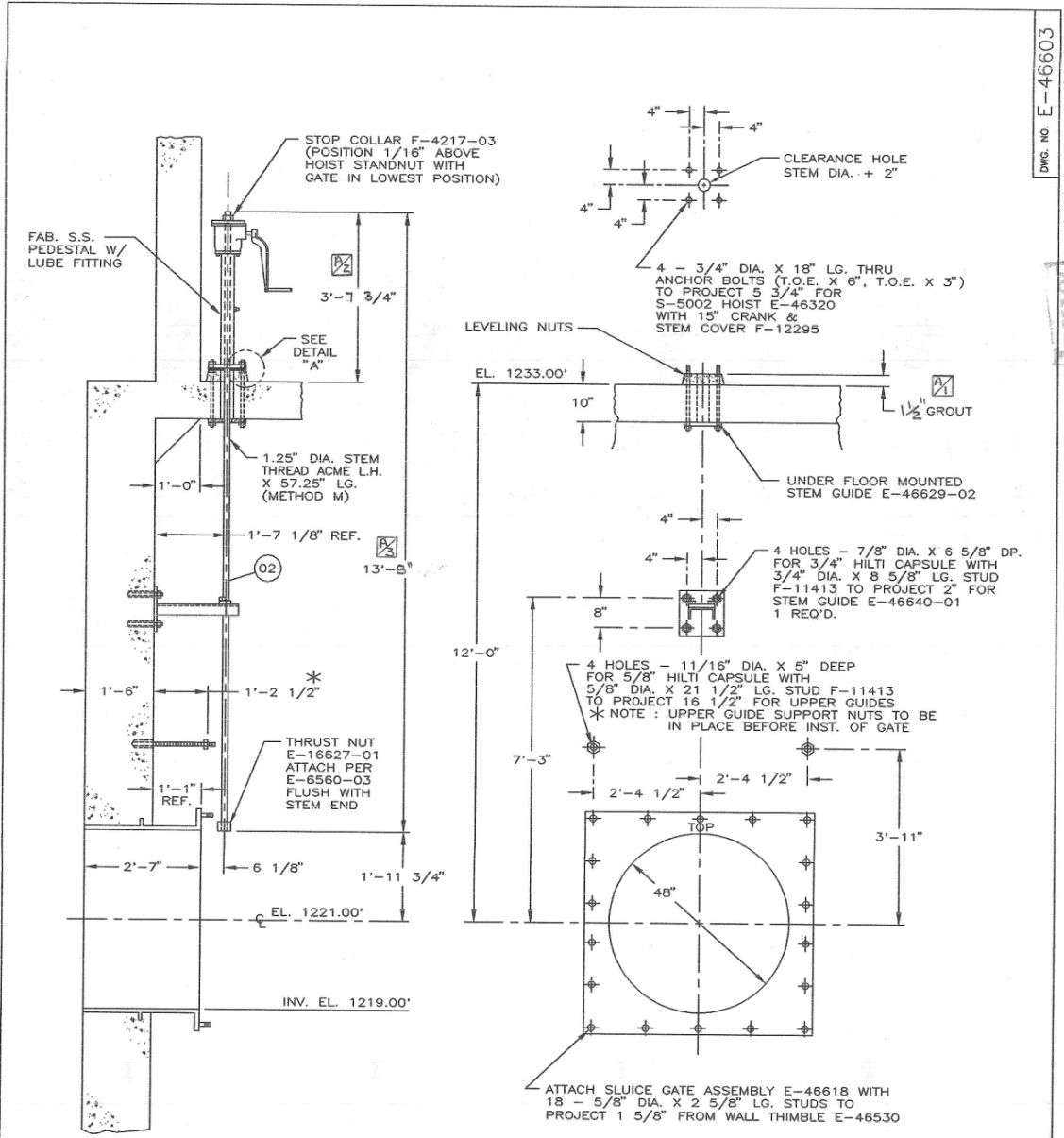
STEEL SLIDE GATE SERIES HY-Q 763

FOR BRASSFIELD & GORRIE

DRAWN JFF	DESIGNED JFF	DATE 10/19/95
CHECKED	APPROVED	SCALE N.T.S.

INDEX SYMBOL

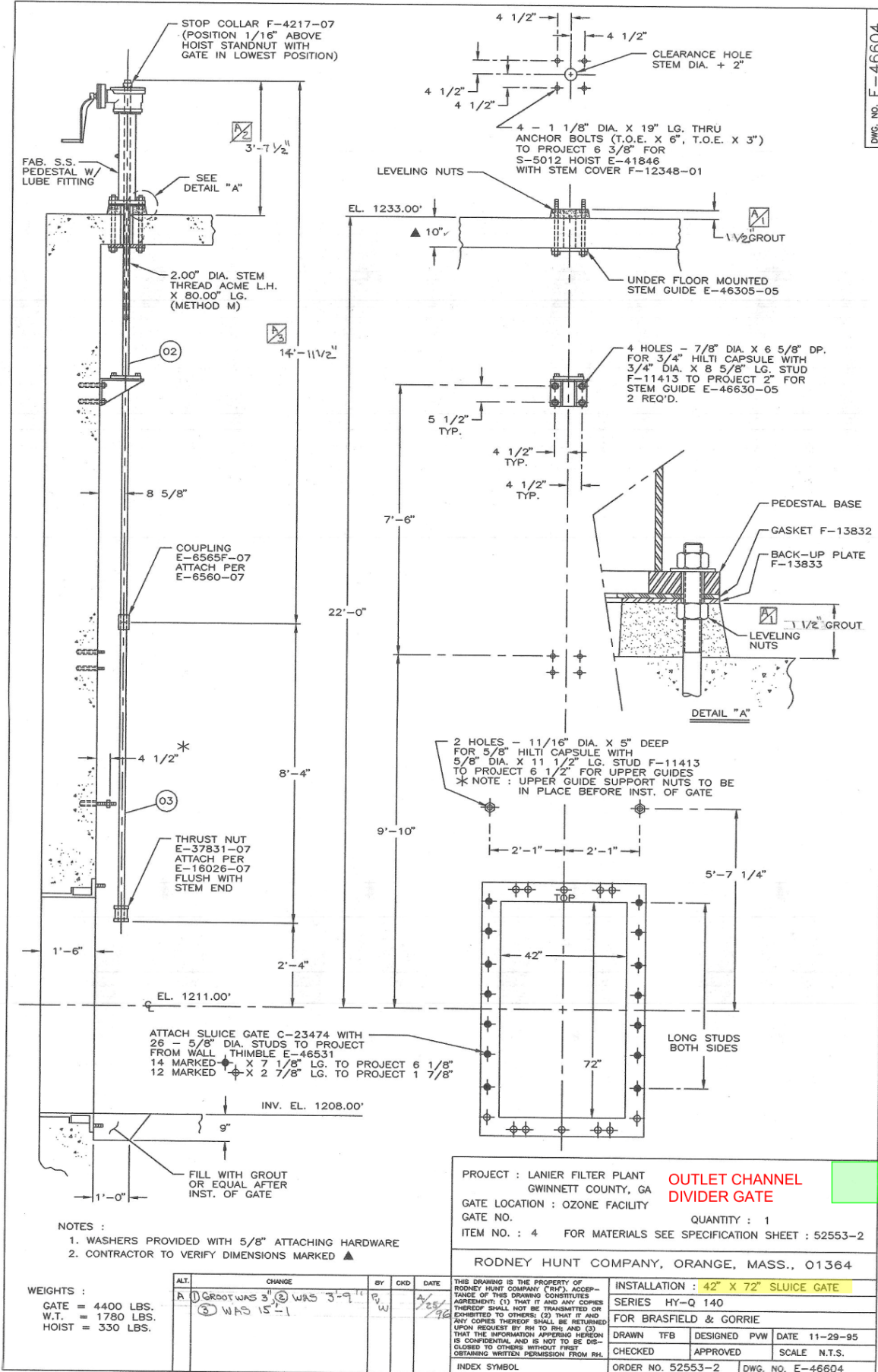
ORDER NO. 52553-3 DWG. NO. D-38273



WEIGHTS :  
 GATE = 3300 LBS.  
 W.T. = 2030 LBS.  
 HOIST = 98 LBS.

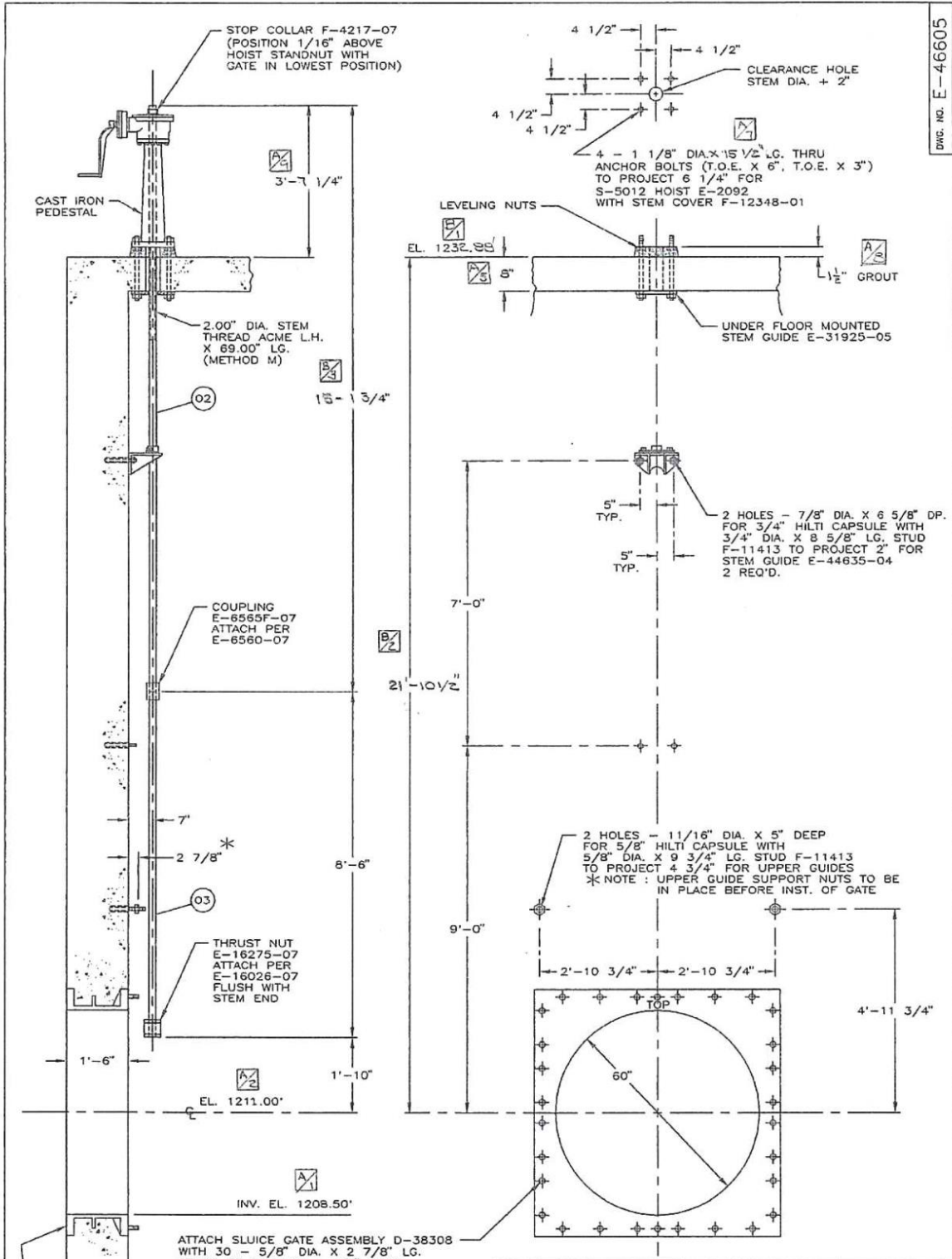
ALT.	CHANGE	BY	CHKD	DATE
A	① GROUT WAS 3" ② WAS 3 5/8" ③ WAS 13-9 1/2"	RW		1/24/02

PROJECT : LANIER FILTER PLANT GWINNETT COUNTY, GA		<b>CONTACTOR OUTLET GATES</b>	
GATE LOCATION : OZONE FACILITY		GATE NO. QUANTITY : 4	
ITEM NO. : 3		FOR MATERIALS SEE SPECIFICATION SHEET : 52553-2	
RODNEY HUNT COMPANY, ORANGE, MASS., 01364			
INSTALLATION : 48" X 48" SLUICE GATE			
SERIES 140			
FOR BRASFIELD & GORRIE			
DRAWN	TFB	DESIGNED	PVW
CHECKED	APPROVED	DATE	11-29-95
SCALE		N.T.S.	
INDEX SYMBOL		ORDER NO. 52553-2	DWG. NO. E-46603



DWG. NO. E-46604

DWG. NO. E-46605



PROJECT : LANIER FILTER PLANT  
GWINNETT COUNTY, GA  
GATE LOCATION : OZONE FACILITY  
GATE NO. QUANTITY : 2  
ITEM NO. : 5 FOR MATERIALS SEE SPECIFICATION SHEET : 52553-2

RODNEY HUNT COMPANY, ORANGE, MASS., 01364

WEIGHTS :  
GATE = 4645 LBS.  
W.T. = 3822 LBS.  
HOIST = 330 LBS.

ALT.	CHANGE	BY	CHKD	DATE
A	① WAS 1209.50' ② WAS 1212.00' ③ WAS 1210.00' ④ WAS 14.434 ⑤ WAS 3'-8 3/4"	RW		2/27/96
B	① EL WAS 1233.00' ② WAS 22-0' ③ WAS 15'-3 1/2"	FL		2/25/96

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THAT THE INFORMATION APPEARING HEREON  
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CLOSED TO OTHERS WITHOUT FIRST  
OBTAINING WRITTEN PERMISSION FROM RH.

INDEX SYMBOL

INSTALLATION : 60" X 60" SLUICE GATE
SERIES 140
FOR BRASFIELD & GORRIE
DRAWN TFB DESIGNED PVW DATE 11-29-95
CHECKED APPROVED SCALE N.T.S.
ORDER NO. 52553-2 DWG. NO. E-46605

**ATTACHMENT 3: Photographs of Existing Installation**  
**Pre-Treatment Facility**



Photo 1: Gates and Operators on the Inlet Side of the Pre-Treatment Basin



Photo 2: Intermediate Gate Operator



Photo 3: Inlet Gate Operator

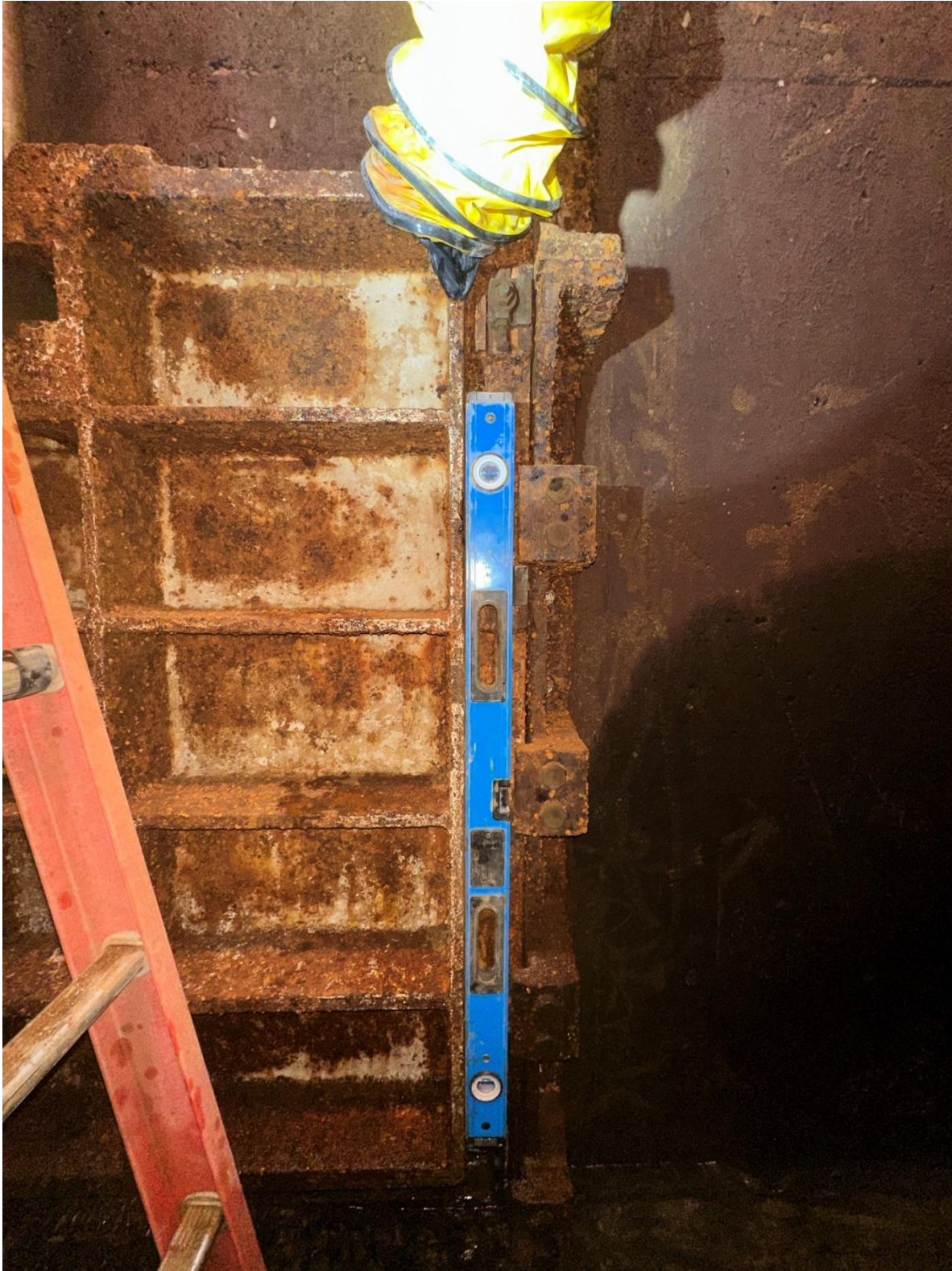


Photo 4: Existing Ozone Outlet Channel 2 Gate- (Typical Gate Condition)



Photo 5: Existing Ozone Outlet Channel 2 Gate After Cleaning



Photo 6: Typical Interior Actuator Installation in Ozone Facility



Photo 6: Typical Exterior Actuator Installation in Ozone Facility

**SPECIFICATIONS:**

- Section 01 43 33 - Manufacturers Field Services
- Section 01 78 23 - Operation and Maintenance Data
- Section 01 88 15 - Anchorage and Bracing
- Section 01 91 14 - Equipment Testing and Facility Startup
- Section 05 05 19 - Post-Installed Anchors
- Section 35 20 16.25 – Fabricated Slide gates
- Section 35 20 16.26 - Cast-Iron Slide Gates

**SECTION 01 43 33**  
**MANUFACTURERS' FIELD SERVICES**

**PART 1 GENERAL**

1.01 DEFINITIONS

- A. Person-Day: One person for 8 hours within regular Contractor working hours.

1.02 SUBMITTALS

- A. Informational Submittals:
1. Training Schedule: Submit, in accordance with requirements of this Specification, not less than 7 days prior to start of equipment installation and revise as necessary for acceptance.
  2. Lesson Plan: Submit, in accordance with requirements of this Specification, proposed lesson plan not less than 7 days prior to scheduled training and revise as necessary for acceptance.

1.03 QUALIFICATION OF MANUFACTURER'S REPRESENTATIVE

- A. Authorized representative of the manufacturer, factory trained, and experienced in the technical applications, installation, operation, and maintenance of respective equipment, subsystem, or system, with full authority by the equipment manufacturer to issue the certifications required of the manufacturer. Additional qualifications may be specified in the individual specification section.
- B. Representative subject to acceptance by Owner. No substitute representatives will be allowed unless prior written approval by such has been given.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION**

3.01 FULFILLMENT OF SPECIFIED MINIMUM SERVICES

- A. Furnish manufacturers' services, when required by an individual specification section, to meet the requirements of this section.
- B. Where time is necessary in excess of that stated in the Specifications for manufacturers' services, or when a minimum time is not specified, time required to perform specified services shall be considered incidental.
- C. Schedule manufacturer' services to avoid conflict with other onsite testing or other manufacturers' onsite services.
- D. Determine, before scheduling services, that conditions necessary to allow successful testing have been met.

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- E. Only those days of service approved by Engineer will be credited to fulfill specified minimum services.
- F. When specified in individual specification sections, manufacturer's onsite services shall include:
  - 1. Assistance during product (system, subsystem, or component) installation to include observation, guidance, instruction of Contractor's assembly, erection, installation or application procedures.
  - 2. Inspection, checking, and adjustment as required for product (system, subsystem, or component) to function as warranted by manufacturer and necessary to furnish Manufacturer's Certificate of Proper Installation.
  - 3. Providing, on a daily basis, copies of manufacturers' representatives field notes and data to Owner.
  - 4. Revisiting the Site as required to correct problems and until installation and operation are acceptable to Engineer.
  - 5. Resolution of assembly or installation problems attributable to or associated with respective manufacturer's products and systems.
  - 6. Assistance during functional and performance testing, and facility startup and evaluation.
  - 7. Training of Owner's personnel in the operation and maintenance of respective product as required.

3.02 MANUFACTURER'S CERTIFICATE OF PROPER INSTALLATION

- A. When so specified, a Manufacturer's Certificate of Proper Installation form, a copy of which is attached to this section, shall be completed and signed by equipment manufacturer's representative.
- B. Such form shall certify signing party is a duly authorized representative of manufacturer, is empowered by manufacturer to inspect, approve, and operate their equipment and is authorized to make recommendations required to ensure equipment is complete and operational.

3.03 TRAINING (NOT REQUIRED)

3.04 SUPPLEMENTS

- A. The supplement listed below, following "End of Section," is part of this specification.
  - 1. Manufacturer's Certificate of Proper Installation.

**END OF SECTION**

**MANUFACTURER’S CERTIFICATE OF PROPER INSTALLATION**

OWNER \_\_\_\_\_ EQPT SERIAL NO: \_\_\_\_\_  
EQPT TAG NO: \_\_\_\_\_ EQPT/SYSTEM: \_\_\_\_\_  
PROJECT NO: \_\_\_\_\_ SPEC. SECTION: \_\_\_\_\_

I hereby certify that the above-referenced equipment/system has been:

(Check Applicable)

- Installed in accordance with Manufacturer’s recommendations.
- Inspected, checked, balanced and adjusted.
- Serviced with proper initial lubricants.
- Electrical and mechanical connections meet quality and safety standards.
- All applicable safety equipment has been properly installed.
- Functional tests.
- System has been performance tested, and meets or exceeds specified performance requirements. (When complete system of one manufacturer)

Note: Attach any performance test documentation from manufacturer.

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I, the undersigned Manufacturer’s Representative, hereby certify that I am (i) a duly authorized representative of the manufacturer, (ii) empowered by the manufacturer to inspect, approve, and operate their equipment and (iii) authorized to make recommendations required to ensure equipment furnished by the manufacturer is complete and operational, except as may be otherwise indicated herein. I further certify that all information contained herein is true and accurate.

Date: \_\_\_\_\_, 20\_\_

Manufacturer: \_\_\_\_\_

By Manufacturer’s Authorized Representative: \_\_\_\_\_  
(Authorized Signature)

Installation Contractor’s Authorized Representative: \_\_\_\_\_  
(Authorized Signature)

**SECTION 01 78 23**

**OPERATION AND MAINTENANCE DATA**

**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Detailed information for the preparation, submission, and Engineer's review of Operations and Maintenance (O&M) Data, as required by individual Specification sections.

1.02 DEFINITIONS

- A. Preliminary Data: Initial and subsequent submissions for Engineer's review.
- B. Final Data: Engineer-accepted data, submitted as specified herein.
- C. Maintenance Operation: As used on Maintenance Summary Form is defined to mean any routine operation required to ensure satisfactory performance and longevity of equipment. Examples of typical maintenance operations are lubrication, belt tensioning, adjustment of pump packing glands, and routine adjustments.

1.03 SEQUENCING AND SCHEDULING

- A. Equipment and System Data:
  - 1. Preliminary Data:
    - a. Do not submit until Shop Drawing for equipment or system has been reviewed and approved by Engineer.
    - b. Submit prior to shipment date.
  - 2. Final Data: Submit Instructional Manual Formatted data not less than 30 days prior to installation of equipment. Submit Compilation Formatted and Electronic Media Formatted data prior to Completion of Project and Final Invoice.
- B. Materials and Finishes Data:
  - 1. Preliminary Data: Submit at least 15 days prior to request for training.
  - 2. Final Data: Submit within 10 days after final inspection.

1.04 DATA FORMAT

- A. Prepare preliminary and final data in the form of an instructional manual. Prepare final data in data compilation format and electronic media.
- B. Instructional Manual Format:
  - 1. Binder: Commercial quality, permanent, three-ring or three-post binders with durable plastic cover.
  - 2. Size: 8-1/2 inches by 11 inches, minimum.

3. Cover: Identify manual with typed or printed title “OPERATION AND MAINTENANCE DATA” and list:
    - a. Project title.
    - b. Designate applicable system, equipment, material, or finish.
    - c. Identity of separate structure as applicable.
    - d. Identify volume number if more than one volume.
    - e. Identity of equipment number and Specification section.
  4. Spine:
    - a. Project title.
    - b. Identify volume number if more than one volume.
  5. Title Page:
    - a. Contractor name, address, and telephone number.
    - b. Subcontractor, Supplier, installer, or maintenance contractor’s name, address, and telephone number, as appropriate.
      - 1) Identify area of responsibility of each.
      - 2) Provide name and telephone number of local source of supply for parts and replacement.
  6. Table of Contents:
    - a. Neatly typewritten and arranged in systematic order with consecutive page numbers.
    - b. Identify each product by product name and other identifying numbers or symbols as set forth in Contract Documents.
  7. Paper: 20-pound minimum, white for typed pages.
  8. Text: Manufacturer’s printed data, or neatly typewritten.
  9. Three-hole punch data for binding and composition; arrange printing so that punched holes do not obliterate data.
  10. Material shall be suitable for reproduction, with quality equal to original. Photocopying of material will be acceptable, except for material containing photographs.
- C. Electronic Media Format:
1. Portable Document Format (PDF):
    - a. After all preliminary data has been found to be acceptable to Engineer, submit Operation and Maintenance data in PDF format on CD.
    - b. Files to be exact duplicates of Engineer-accepted preliminary data. Arrange by specification number and name.
    - c. Files to be fully functional and viewable in most recent version of Adobe Acrobat.

## 1.05 SUBMITTALS

- A. Informational:
1. Data Outline: Submit one electronic copy of a detailed outline of proposed organization and contents of Final Data prior to preparation of Preliminary Data.
  2. Preliminary Data:
    - a. Submit two copies for Engineer’s review.
    - b. If data meets conditions of the Contract:
      - 1) One copy will be returned to Contractor.

- 2) One copy will be retained in Engineer's file.
- c. If data does not meet conditions of the Contract:
  - 1) All copies will be returned to Contractor with Engineer's comments (on separate document) for revision.
  - 2) Engineer's comments will be retained in Engineer's file.
  - 3) Resubmit two copies revised in accordance with Engineer's comments.
3. Final Data: Submit two copies in format specified herein.

## 1.06 DATA FOR EQUIPMENT AND SYSTEMS

- A. Content For Each Unit (or Common Units) and System:
  1. Product Data:
    - a. Include only those sheets that are pertinent to specific product.
    - b. Clearly annotate each sheet to:
      - 1) Identify specific product or part installed.
      - 2) Identify data applicable to installation.
      - 3) Delete references to inapplicable information.
    - c. Function, normal operating characteristics, and limiting conditions.
    - d. Performance curves, engineering data, nameplate data, and tests.
    - e. Complete nomenclature and commercial number of replaceable parts.
    - f. Original manufacturer's parts list, illustrations, detailed assembly drawings showing each part with part numbers and sequentially numbered parts list, and diagrams required for maintenance.
    - g. Spare parts ordering instructions.
    - h. Where applicable, identify installed spares and other provisions for future work (for example, reserved panel space, unused components, wiring, terminals).
  2. Charts of valve tag numbers, with the location and function of each valve.
  3. Drawings: Supplement product data with Drawings as necessary to clearly illustrate:
    - a. Format:
      - 1) Provide reinforced, punched, binder tab; bind in with text.
      - 2) Reduced to 8-1/2 inches by 11 inches, or 11 inches by 17 inches folded to 8-1/2 inches by 11 inches.
      - 3) Where reduction is impractical, fold and place in 8-1/2-inch by 11-inch envelopes bound in text.
      - 4) Identify Specification section and product on Drawings and envelopes.
    - b. Relations of component parts of equipment and systems.
    - c. Control and flow diagrams.
    - d. Coordinate drawings with Project record documents to assure correct illustration of completed installation.
  4. Instructions and Procedures: Within text, as required to supplement product data.
    - a. Format:
      - 1) Organize in consistent format under separate heading for each different procedure.
      - 2) Provide logical sequence of instructions for each procedure.

- 3) Provide information sheet for Owner's personnel, including:
    - a) Proper procedures in event of failure.
    - b) Instances that might affect validity of guarantee or Bond.
  - b. Installation Instructions: Including alignment, adjusting, calibrating, and checking.
  - c. Operating Procedures:
    - 1) Startup, break-in, routine, and normal operating instructions.
    - 2) Test procedures and results of factory tests where required.
    - 3) Regulation, control, stopping, and emergency instructions.
    - 4) Description of operation sequence by control manufacturer.
    - 5) Shutdown instructions for both short and extended duration.
    - 6) Summer and winter operating instructions, as applicable.
    - 7) Safety precautions.
    - 8) Special operating instructions.
  - d. Maintenance and Overhaul Procedures:
    - 1) Routine maintenance.
    - 2) Guide to troubleshooting.
    - 3) Disassembly, removal, repair, reinstallation, and re-assembly.
- B. Content for Each Electric or Electronic Item or System:
1. Description of Unit and Component Parts:
    - a. Function, normal operating characteristics, and limiting conditions.
    - b. Performance curves, engineering data, nameplate data, and tests.
    - c. Complete nomenclature and commercial number of replaceable parts.
    - d. Interconnection wiring diagrams, including control and lighting systems.
  2. Electrical service.
  3. Control requirements and interfaces.
  4. Communication requirements and interfaces.
  5. List of electrical relay settings, and control and alarm contact settings.
  6. Electrical interconnection wiring diagram, including as applicable, single-line, three-line, schematic and internal wiring, and external interconnection wiring.
  7. Operating Procedures:
    - a. Routine and normal operating instructions.
    - b. Startup and shutdown sequences, normal and emergency.
    - c. Safety precautions.
    - d. Special operating instructions.
  8. Maintenance Procedures:
    - a. Routine maintenance.
    - b. Guide to troubleshooting.
    - c. Adjustment and checking.
    - d. List of relay settings, control and alarm contact settings.
  9. Manufacturer's printed operating and maintenance instructions.
  10. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
- C. Maintenance Summary:
1. Compile individual Maintenance Summary for each applicable equipment item, respective unit or system, and for components or sub-units.

2. Format:
  - a. Use Maintenance Summary Form bound with this section or electronic facsimile of such.
  - b. Each Maintenance Summary may take as many pages as required.
  - c. Use only 8-1/2-inch by 11-inch size paper.
  - d. Complete using typewriter or electronic printing.
3. Include detailed lubrication instructions and diagrams showing points to be greased or oiled; recommend type, grade, and temperature range of lubricants and frequency of lubrication.
4. Recommended Spare Parts:
  - a. Data to be consistent with manufacturer's Bill of Materials/Parts List furnished in O&M manuals.
  - b. "Unit" is the unit of measure for ordering the part.
  - c. "Quantity" is the number of units recommended.
  - d. "Unit Cost" is the current purchase price.

#### 1.07 DATA FOR MATERIALS AND FINISHES

- A. Content for Architectural Products, Applied Materials, and Finishes:
  1. Manufacturer's data, giving full information on products:
    - a. Catalog number, size, and composition.
    - b. Color and texture designations.
    - c. Information required for reordering special-manufactured products.
  2. Instructions for Care and Maintenance:
    - a. Manufacturer's recommendation for types of cleaning agents and methods.
    - b. Cautions against cleaning agents and methods that are detrimental to product.
    - c. Recommended schedule for cleaning and maintenance.
- B. Content for Moisture Protection and Weather Exposed Products:
  1. Manufacturer's data, giving full information on products:
    - a. Applicable standards.
    - b. Chemical composition.
    - c. Details of installation.
  2. Instructions for inspection, maintenance, and repair.

#### 1.08 SUPPLEMENTS

- A. The supplements listed below, following "End of Section", are part of this Specification.
  1. Forms: Maintenance Summary Form.

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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

**MAINTENANCE SUMMARY FORM**

PROJECT: \_\_\_\_\_ CONTRACT NO.: \_\_\_\_\_

- 1. EQUIPMENT ITEM \_\_\_\_\_
- 2. MANUFACTURER \_\_\_\_\_
- 3. EQUIPMENT/TAG NUMBER(S) \_\_\_\_\_
- 4. WEIGHT OF INDIVIDUAL COMPONENTS (OVER 100 POUNDS) \_\_\_\_\_
- 5. NAMEPLATE DATA (hp, voltage, speed, etc.) \_\_\_\_\_
- 6. MANUFACTURER'S LOCAL REPRESENTATIVE \_\_\_\_\_
  - a. Name \_\_\_\_\_ Telephone No. \_\_\_\_\_
  - b. Address \_\_\_\_\_

7. MAINTENANCE REQUIREMENTS

Maintenance Operation Comments	Frequency	Lubricant (If Applicable)
List briefly each maintenance operation required and refer to specific information in manufacturer's standard maintenance manual, if applicable. (Reference to manufacturer's catalog or sales literature is not acceptable.)	List required frequency of each maintenance operation.	Refer by symbol to lubricant required.



**SECTION 01 88 15**  
**ANCHORAGE AND BRACING**

**PART 1 GENERAL**

1.01 SUMMARY

- A. This section covers requirements for anchorage and bracing of equipment, distribution systems, and other nonstructural components required in accordance with the ICC 2012 International Building Code (IBC), for seismic, wind, gravity, soil, and operational loads.

1.02 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
  - 1. American Institute of Steel Construction (AISC) 360, Specification for Structural Steel Buildings.
  - 2. American Society of Civil Engineers (ASCE): ASCE 7, Minimum Design Loads for Buildings and Other Structures.
  - 3. International Code Council (ICC): International Building Code (IBC).

1.03 DEFINITIONS

- A. Authority Having Jurisdiction (AHJ): Permitting building agency; may be a federal, state, local, or other regional department, or individual including building official, fire chief, fire marshal, chief of a fire prevention bureau, labor department, or health department, electrical inspector; or others having statutory authority. AHJ may be Owner when authorized to be self-permitting by governmental permitting agency or when no governmental agency has authority.
- B. Designated Seismic System: Architectural, electrical, and mechanical system or their components for which component importance factor is greater than 1.0.

1.04 DESIGN AND PERFORMANCE REQUIREMENTS

- A. General:
  - 1. Anchorage and bracing systems shall be designed by a qualified professional engineer registered in the State of Georgia.
  - 2. Design anchorage into concrete including embedment in accordance with ACI 318-14; Chapter 17 (or other industry standard approved by Engineer), and Project Specifications.
    - a. Unless otherwise noted, design for cracked concrete condition.
  - 3. Design anchorage and bracing of architectural, mechanical, and electrical components and systems in accordance with this section, unless a design is specifically provided within Contract Documents or where exempted hereinafter.
  - 4. Design attachments, braces, and anchors for equipment, components, and distribution systems to structure for gravity, seismic, wind, and operational loading.

5. Anchor and brace piping and ductwork, whether exempt or not exempt for this section, so that lateral or vertical displacement does not result in damage or failure to essential architectural, mechanical, or electrical equipment.
6. Architectural Components: Includes, but are not limited to, nonstructural walls and elements, partitions, cladding and veneer, access flooring, signs, cabinets, suspended ceilings, and glass in glazed curtain walls and partitions.
7. Provide supplementary framing where required to transfer anchorage and bracing loads to structure.
8. Adjust equipment pad sizes or provide additional anchorage confinement reinforcing to provide required anchorage capacities.
9. Design anchorage and bracing for:
  - a. Equipment and components that weigh more than 400 pounds and are mounted 4 feet or less above adjacent finished floor.
  - b. Mechanical and electrical components that are not provided with flexible connections between components and associated ductwork, piping, or conduit.
10. For components exempted from design requirements of this section, provide bolted, welded, or otherwise positively fastened attachments to supporting structure.

B. Design Loads:

1. Gravity: Design anchorage and bracing for self-weight and superimposed loads on components and equipment.
2. Wind: Design anchorage and bracing for wind criteria for exposed architectural components and exterior and wind-exposed mechanical and electrical equipment. Alternately, manufacturer certification may be provided for components such as roofing and flashing to verify attachments meet Project.
3. Operational:
  - a. For loading supplied by equipment manufacturer for IBC required load cases.
  - b. Loads may include equipment vibration, torque, thermal effects, effects of internal contents (weight and sloshing), water hammer, and other load-inducing conditions.
  - c. Locate braces to minimize vibration to or movement of structure.
  - d. For vibrating loads, use anchors meeting requirements of Section 05 05 19, Post-Installed Anchors, for anchors with designated capacities for vibratory loading per manufacturer's ICC-ES report.
  - e. In accordance with 2012 IBC, Section 1613, and Chapter 13 of ASCE 7.
  - f. Design forces for anchors in concrete or masonry shall be in accordance with ASCE 7, Section 13.4 as applicable for Project Seismic Design Category.

C. Seismic Design Requirements:

1. Analyze local region of body of nonstructural component for load transfer of anchorage attachment if component  $I_p = 1.5$ .
2. Provide support drawings and calculations for electrical distribution components if any of the following conditions apply:
  - a. Conduit diameter is greater than 2.5-inch trade size.

- b. Total weight of bus duct, cable tray, or conduit supported by trapeze assemblies exceeds 10 pounds per foot.
3. Other seismic design and detailing information identified in ASCE 7, Chapter 13, is required to be provided for new architectural, mechanical and electrical components, systems, or equipment.

1.05 SUBMITTALS

A. Action Submittals:

1. Shop Drawings:
  - a. List of architectural, mechanical, and electrical equipment requiring Contractor-designed anchorage and bracing, unless specifically exempted.
  - b. Manufacturers' engineered seismic and non-seismic hardware product data.
  - c. Attachment assemblies' drawings including seismic attachments; include connection hardware, braces, and anchors or anchor bolts for nonexempt components, equipment, and systems.
  - d. Submittal will be rejected if proposed anchorage method would create excessive stress to supporting member. Revise anchorages and strengthen structural support to eliminate overstressed condition.

B. Informational Submittals:

1. Anchorage and Bracing Calculations: For attachments, braces, and anchorages, include IBC and any Project-specific criteria, in addition to manufacturer's specific criteria used for design; sealed by a civil or structural engineer registered in the State of Georgia
2. Manufacturer's hardware installation requirements.

1.06 SOURCE QUALITY CONTROL

- A. Contractor and supplier responsibilities to accommodate Owner-furnished shop fabrication related special inspections and testing are provided in Section 01 91 14 Equipment Testing and Facility Startup.

**PART 2 PRODUCTS**

2.01 GENERAL

- A. Design and construct attachments and supports transferring seismic and non-seismic loads to structure of materials and products suitable for application and in accordance with design criteria shown on Drawings and nationally recognized standards.
- B. Provide post-installed concrete and masonry anchors for anchorage of equipment to concrete or masonry in accordance with Section 05 05 19B, Post-Installed Anchors. Provide post-installed anchors of the size, minimum embedment, and spacing designated in calculations submitted by Contractor and accepted by Engineer.
- C. Do not use powder-actuated fasteners or sleeve anchors for seismic attachments and anchorage where resistance to tension loads is required. Do not use expansion

anchors, other than undercut anchors, for nonvibration isolated mechanical equipment rated over 10 horsepower.

**PART 3 EXECUTION**

**3.01 GENERAL**

- A. Make attachments, bracing, and anchorage in such a manner that component lateral force is transferred to lateral force resisting system of structure through a complete load path.
- B. Design, provide, and install overall seismic anchorage system to provide restraint in all directions, including vertical, for each component or system so anchored.
- C. Provide snubbers in each horizontal direction and vertical restraints for components mounted on vibration isolation systems where required to resist.
- D. Provide piping anchorage that maintains design flexibility and expansion capabilities at flexible connections and expansion joints.
  - 1. Piping and ductwork suspended more than 12 inches below supporting structure shall be braced for seismic effects to avoid significant bending of hangers and their attachments.
- E. Anchor tall and narrow equipment such as motor control centers and telemetry equipment at base and within 12 inches from top of equipment, unless approved otherwise by Engineer.
- F. Do not attach architectural, mechanical, or electrical components to more than one element of a building structure at a single restraint location where such elements may respond differently during a seismic event. Do not make such attachments across building expansion and contraction joints.

**3.02 INSTALLATION**

- A. Do not install components or their anchorages or restraints prior to review and acceptance by Engineer and AHJ.
- B. Notify Engineer upon completion of installation of seismic restraints.

**3.03 FIELD QUALITY ASSURANCE AND QUALITY CONTROL**

- A. In accordance with Section 05 05 19B, Post-Installed Anchors.
- B. Owner-Furnished Quality Assurance, in accordance with IBC Chapter 17 requirements, is provided in Section 01 91 14 Equipment Testing and Facility Startup.

**END OF SECTION**

**SECTION 01 91 14**  
**EQUIPMENT TESTING AND FACILITY STARTUP**

**PART 1 GENERAL**

1.1 DEFINITIONS

- A. Facility: Entire Project, or an agreed-upon portion, including all of its unit processes.
- B. Functional Test: Test or tests in presence of Engineer and Owner to demonstrate that installed equipment meets manufacturer's installation, calibration, and adjustment requirements and other requirements as specified.
- C. Performance Test: Test or tests performed after any required functional test in presence of Engineer and Owner to demonstrate and confirm individual equipment meets performance requirements specified in individual sections.
- D. Unit Process: As used in this section, a unit process is the Inclined Plate Settler System.

1.2 SUBMITTALS

- A. Informational Submittals:
  - 1. Facility Startup and Performance Demonstration Plan.
  - 2. Functional and Performance test results.
  - 3. Completed Unit Process Startup Form for each unit process.

1.3 FACILITY STARTUP AND PERFORMANCE DEMONSTRATION PLAN

- A. Develop a written plan, in conjunction with installation Contractor and Owner's operations personnel; to include the following:
  - 1. Step-by-step instructions for startup of each unit process and the complete facility.
  - 2. Unit Process Startup Form (sample attached), to minimally include the following:
    - a. Description of the unit process, including equipment numbers/nomenclature of each item of equipment and all included devices.
    - b. Detailed procedure for startup of the unit process, including valves to be opened/closed, order of equipment startup, etc.
    - c. Startup requirements for each unit process, including water, power, chemicals, etc.
    - d. Space for evaluation comments.
  - 3. Facility Performance Demonstration/Certification Form (sample attached), to minimally include the following:
    - a. Description of unit processes included in the facility startup.
    - b. Sequence of unit process startup to achieve facility startup.
    - c. Description of computerized operations, if any, included in the facility.
    - d. Contractor certification facility is capable of performing its intended function(s), including fully automatic operation.
    - e. Signature spaces for Contractor and Engineer.

## PART 2 PRODUCTS (NOT USED)

## PART 3 EXECUTION

### 3.1 GENERAL

- A. Facility Startup Meetings: Schedule to discuss test schedule, test methods, materials, chemicals and liquids required, facilities operations interface, and Owner involvement.
- B. Contractor's Testing and Startup Representative:
  - 1. Designate and furnish one or more personnel to coordinate and expedite testing and facility startup.
  - 2. Representative(s) shall be present during startup meetings and shall be available at all times during testing and startup.
- C. Provide temporary valves, gauges, piping, test equipment and other materials and equipment required for testing and startup.
- D. Provide Subcontractor and equipment manufacturers' staff adequate to prevent delays. Schedule any ongoing work so as not to interfere with or delay testing and startup.
- E. Owner will:
  - 1. Provide water, power, chemicals, and other items as required for startup, unless otherwise indicated.
  - 2. Operate process units and facility with support of the installation Contractor.
  - 3. Provide labor and materials as required for laboratory analyses if required.
  - 4. Make available spare parts, special tools, and operation and maintenance information for Owner-furnished products.

### 3.2 EQUIPMENT TESTING

- A. Preparation:
  - 1. Complete installation before testing.
  - 2. Furnish qualified manufacturers' representatives, when required by individual Specification sections.
  - 3. Obtain and submit from equipment manufacturer's representative Manufacturer's Certificate of Proper Installation Form, in accordance with Section 01 43 33B, Manufacturers' Field Services, when required by individual Specification sections.
  - 4. Equipment Test Report Form: Provide written test report for each item of equipment to be tested, to include the minimum information:
    - a. Owner/Project Name.
    - b. Equipment or item tested.
    - c. Date and time of test.
    - d. Type of test performed (Functional or Performance).
    - e. Test method.
    - f. Test conditions.
    - g. Test results.
    - h. Signature spaces for Contractor and Engineer as witness.

5. Cleaning and Checking: Prior to beginning functional testing:
  - a. Calibrate testing equipment in accordance with manufacturer's instructions.
  - b. Inspect and clean equipment, devices, connected equipment, and structures to ensure they are free of foreign material.
  - c. Lubricate equipment in accordance with manufacturer's instructions.
  - d. Turn rotating equipment by hand when possible to confirm that equipment is not bound.
  - e. Check power supply to electric-powered equipment for correct voltage.
  - f. Adjust clearances and torque settings.
6. Ready-to-test determination will be by Owner based at least on the following:
  - a. Acceptable Operation and Maintenance Data.
  - b. Notification by installation Contractor of equipment readiness for testing.
  - c. Receipt of Manufacturer's Certificate of Proper Installation, if so specified.
  - d. Adequate completion of work adjacent to, or interfacing with, equipment to be tested.
  - e. Availability and acceptability of manufacturer's representative, when specified, to assist in testing of respective equipment.
  - f. Satisfactory fulfillment of other specified manufacturer's responsibilities.
  - g. Equipment and electrical tagging complete.
  - h. Delivery of all spare parts and special tools.

B. Functional Testing:

1. Conduct as specified in individual Specification sections.
2. Notify Owner in writing at least 10 days prior to scheduled date of testing.
3. Prepare Equipment Test Report summarizing test method and results.
4. When, in Engineer's opinion, equipment meets functional requirements specified, such equipment will be accepted for purposes of advancing to performance testing phase, if so required by individual Specification sections. Such acceptance will be evidenced by Engineer/Owner's signature as witness on Equipment Test Report.

C. Performance Testing:

1. Conduct as specified in individual Specification sections.
2. Notify Engineer and Owner in writing at least 10 days prior to scheduled date of test.
3. Performance testing shall not commence until equipment has been accepted by Engineer as having satisfied functional test requirements specified.
4. Type of fluid, gas, or solid for testing shall be as specified.
5. Unless otherwise indicated, furnish labor, materials, and supplies for conducting the test and taking samples (if required) and performance measurements.
6. Prepare Equipment Test Report summarizing test method and results.
7. When, in Owner's opinion, equipment meets performance requirements specified, such equipment will be accepted as conforming to Contract requirements. Such acceptance will be evidenced by Engineer's signature on Equipment Test Report.

### 3.3 STARTUP OF UNIT PROCESSES

- A. Prior to unit process startup, equipment within unit process shall be accepted by Owner as having met functional and performance testing requirements specified.

- B. Startup sequencing of unit processes shall be as chosen by Contractor to meet schedule requirements.
- C. Make adjustments, repairs, and corrections necessary to complete unit process startup.
- D. Startup shall be considered complete when, in opinion of Owner, unit process has operated in manner intended for 5 continuous days without significant interruption. This period is in addition to functional or performance test periods specified elsewhere.
- E. Significant Interruption: May include any of the following events:
  - 1. Failure of Contractor to provide and maintain qualified onsite startup personnel as scheduled.
  - 2. Failure to meet specified functional operation for more than 2 consecutive hours.
  - 3. Failure of any critical equipment or unit process that is not satisfactorily corrected within 5 hours after failure.
  - 4. Failure of any noncritical equipment or unit process that is not satisfactorily corrected within 8 hours after failure.
  - 5. As determined by Owner.
- F. A significant interruption will require startup then in progress to be stopped. After corrections are made, startup test period to start from beginning again.

### 3.4 FACILITY PERFORMANCE DEMONSTRATION

- A. When, in the opinion of Owner, startup of all unit processes has been achieved, sequence each unit process to the point that facility is operational.
- B. Demonstrate proper operation of required interfaces within and between individual unit processes.
- C. After facility is operating, complete performance testing of equipment and systems not previously tested.
- D. Document, as defined in Facility Startup and Performance Demonstration Plan, the performance of the facility including its computer system until all unit processes are operable and under control of computer system.
- E. Certify, on the Facility Performance Demonstration/Certification Form, that facility is capable of performing its intended function(s), including fully automatic and computerized operation.

### 3.5 SUPPLEMENTS

- A. Supplements listed below, following “End of Section,” are a part of this Specification:
  - 1. Unit Process Startup Form.
  - 2. Facility Performance Demonstration/Certification Form.

END OF SECTION

**UNIT PROCESS STARTUP FORM**

**OWNER:** \_\_\_\_\_ **PROJECT:** \_\_\_\_\_

**Unit Process Description: (Include description and equipment number of all equipment and devices):** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Startup Procedure (Describe procedure for sequential startup and evaluation, including valves to be opened/closed, order of equipment startup, etc.):** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Startup Requirements (Water, power, chemicals, etc.):** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Evaluation Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**FACILITY PERFORMANCE DEMONSTRATION/CERTIFICATION FORM**

**OWNER:** \_\_\_\_\_ **PROJECT:** \_\_\_\_\_

**Unit Processes Description (List unit processes involved in facility startup):** \_\_\_\_\_

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**Unit Processes Startup Sequence (Describe sequence for startup, including computerized operations, if any):** \_\_\_\_\_

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**Contractor Certification that Facility is capable of performing its intended function(s), including fully automatic operation:**

Contractor: \_\_\_\_\_ Date: \_\_\_\_\_, 20\_\_\_\_

Engineer: \_\_\_\_\_ Date: \_\_\_\_\_, 20\_\_\_\_

(Authorized Signature)

**SECTION 05 05 19**

**POST-INSTALLED ANCHORS**

**PART 1 GENERAL**

**1.01 REFERENCES**

- A. The following is a list of standards which may be referenced in this section:
1. American Concrete Institute (ACI):
    - a. 318, Building Code Requirements for Structural Concrete.
    - b. 355.2, Qualification of Post-Installed Mechanical Anchors in Concrete.
    - c. 355.4, Qualification of Post-Installed Adhesive Anchors in Concrete.
  2. American Iron and Steel Institute (AISI): Stainless Steel Type 316.
  3. American National Standards Institute (ANSI).
  4. ASTM International (ASTM):
    - a. A123/A123M, Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
    - b. A143, Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement.
    - c. A153/A153M, Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
    - d. A193/A193M, Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service.
    - e. A194/A194M, Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both.
    - f. A380, Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems.
    - g. A385, Practice for Providing High-Quality Zinc Coatings (Hot-Dip).
    - h. A563, Specification for Carbon and Alloy Steel Nuts.
    - i. A780, Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
    - j. A967, Specification for Chemical Passivation Treatments for Stainless Steel Parts.
    - k. E488, Standard Test Methods for Strength of Anchors in Concrete Elements.
    - l. F436, Specification for Hardened Steel Washers.
    - m. F468, Specification for Nonferrous Bolts, Hex Cap Screws, and Studs for General Use.
    - n. F568M, Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners.
    - o. F593, Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
    - p. F594, Specification for Stainless Steel Nuts.
    - q. F1554, Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength.
  5. International Association of Plumbing and Mechanical Officials Uniform ES (IAPMO-UES): Evaluation Reports for Concrete and Masonry Anchors.
  6. International Code Council Evaluation Service (ICC-ES):

- a. Evaluation Reports for Concrete and Masonry Anchors.
  - b. AC01, Acceptance Criteria for Expansion Anchors in Masonry Elements.
  - c. AC70, Acceptance Criteria for Fasteners Power-driven into Concrete, Steel and Masonry Elements.
  - d. AC106, Acceptance Criteria for Predrilled Fasteners (Screw Anchors) in Masonry Elements.
  - e. AC193, Acceptance Criteria for Mechanical Anchors in Concrete Elements.
  - f. AC308, Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements. Evaluation Reports for Concrete and Masonry Anchors.
7. NSF International (NSF): 61, Drinking Water System Components - Health Effects.
  8. Specialty Steel Industry of North America (SSINA):
    - a. Specifications for Stainless Steel.
    - b. Design Guidelines for the Selection and Use of Stainless Steel.
    - c. Stainless Steel Fabrication.

## 1.02 DEFINITIONS

- A. Corrosive Area: Containment area or area exposed to delivery, storage, transfer, or use of chemicals.
- B. Exterior Area: Location not protected from weather by a building or other enclosed structure to include buried roof structures.
- C. Interior Dry Area: Location inside building or structure where floor is not subject to liquid spills or wash down, and where wall or roof slab is not common to a water-holding or earth-retaining structure.
- D. Interior Wet Area: Location inside building or structure where floor is sloped to floor drains or gutters and is subject to liquid spills or wash down, or where wall, floor, or roof slab is common to a water-holding or earth-retaining structure.
- E. Submerged: Location at or below top of wall of open water-holding structure, such as a basin or channel, or wall, ceiling, or floor surface inside a covered water-holding structure, or exterior below grade wall or roof surface of water-holding structure, open or covered.

## 1.03 SUBMITTALS

- A. Action Submittals:
  1. Shop Drawings: Specific instructions for concrete anchor installation, including drilled hole size and depth, preparation, placement, procedures, and instructions for safe handling of anchoring systems.
- B. Informational Submittals:
  1. Concrete Anchors:
    - a. Manufacturer's product description and installation instructions.

- b. Current ICC-ES or IAPMO-UES Report for each type of post-installed anchor to be used.
- 2. Passivation method for stainless steel members.

1.04 QUALITY ASSURANCE

A. Qualifications:

- 1. Installers of adhesive anchors horizontally or upwardly inclined to support sustained tension loads shall be certified by an applicable certification program. Certification shall include written and performance tests in accordance with the ACI/CRSI Adhesive Installer Certification Program or equivalent.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Package stainless steel items in a manner to provide protection from carbon impregnation.

**PART 2 PRODUCTS**

2.01 GENERAL

- A. Unless otherwise indicated, meet the following requirements:

Item	ASTM Reference
Stainless Steel:	
Threaded Rods	F593, AISI Type 316, Condition CW
Nuts*	F594, AISI Type 316, Condition CW
Carbon Steel:	
Threaded Rods	F1554, Grade 36 or F568M Class 5.8
Flat and Beveled Washers (Hardened)	F436
Nuts*	A194/A194M, Grade 2H
Galvanized Steel:	
All	A153/A153M
*Nuts of other grades and styles having specified proof load stresses greater than specified grade and style are also suitable. Nuts must have specified proof load stresses equal to or greater than minimum tensile strength of specified threaded rod.	

- B. Bolts, Washers, and Nuts: Use stainless steel material types.

2.02 POST-INSTALLED CONCRETE ANCHORS

- A. General:

1. AISI Type 316 stainless steel.
2. Post-installed anchor systems used in concrete shall be approved by ICC Evaluation Services Report or equivalent for use in cracked concrete and for short-term and long-term loads including wind and earthquake.
3. Mechanical Anchors: Comply with the requirements of ICC-ES AC193 or ACI 355.2.
4. Adhesive Anchors: Comply with the requirements of ICC-ES AC308 or ACI 355.4.
5. Acceptable for use in potable water structures by EPA and local health agencies or NSF 61.

B. Adhesive Anchors:

1. Threaded Rod:
  - a. Diameter as shown on Drawings.
  - b. Length as required to provide minimum depth of embedment indicated and thread projection required.
  - c. Clean and free of grease, oil, or other deleterious material.
2. Adhesive:
  - a. Two-component, insensitive to moisture, designed to be used in adverse freeze/thaw environments.
  - b. Cure Temperature, Pot Life, and Workability: Compatible for intended use and anticipated environmental conditions.
3. Packaging and Storage:
  - a. Disposable, self-contained system capable of dispensing both components in proper mixing ratio and fitting into a manually or pneumatically operated caulking gun.
  - b. Store adhesive on pallets or shelving in a covered storage area.
  - c. Package Markings: Include manufacturer's name, product name, batch number, product expiration date, ANSI hazard classification, and appropriate ANSI handling precautions.
  - d. Dispose of When:
    - 1) Shelf life has expired.
    - 2) Stored other than in accordance with manufacturer's instructions.
4. Manufacturers and Products:
  - a. Hilti, Inc., Tulsa, OK; HIT Doweling Anchor System, HIT-HY 200 V3 Safe Set System with HIT-Z ROD (ESR-4868), HIT RE 500 V3 Safe Set System with HAS threaded rod (ESR-3814), or HIT-RE 500 V3 Safe Set System with Hilti Roughening Tool (HIT RT) with HAS threaded rod (ESR-3814) for diamond cored holes, or approved equivalent.
  - b. Simpson Strong-Tie Co., Inc., Pleasanton, CA; SET-3G Epoxy Adhesive Anchors. (ESR-4057), or approved equivalent.
  - c. DeWalt/Powers Fasteners, Brewster NY; Pure 220+ Epoxy adhesive anchor system with Dust X+ System (ESR-5144), or approved equivalent.

C. Adhesive Threaded Inserts:

1. Type 316 stainless steel, internally threaded inserts.
2. Manufacturer and Product: Hilti, Inc., Tulsa, OK; HIS-RN Insert with HIT-RE 500-V3 or HIT-HY 200 adhesive, or approved equivalent.

**PART 3 EXECUTION (BY INSTALLATION CONTRACTOR)**

**3.01 CONCRETE ANCHORS**

- A. Begin installation only after concrete to receive anchors has attained design strength.
- B. Locate existing reinforcing with Ground Penetrating Radar or other method approved by Engineer prior to drilling. Coordinate with Engineer to adjust anchor locations where installation would result in hitting reinforcing.
- C. Install in accordance with written manufacturer's instructions.
- D. Provide minimum embedment, edge distance, and spacing as indicated on Drawings.
- E. Use only drill type and bit type and diameter recommended by anchor manufacturer.
- F. Clean hole of debris and dust per manufacturer's requirements.
- G. When unidentified embedded steel, rebar, or other obstruction is encountered in drill path, slant drill to clear obstruction. If drill must be slanted more than indicated in manufacturer's installation instructions to clear obstruction, notify Engineer for direction on how to proceed.
- H. Adhesive Anchors:
  - 1. Unless otherwise approved by Engineer and adhesive manufacturer:
    - a. Do not install adhesive anchors when temperature of concrete is below 40 degrees F or above 100 degrees F.
    - b. Do not install prior to concrete attaining an age of 21 days.
    - c. Remove any standing water from hole with oil-free compressed air. Inside surface of hole shall be dry.
    - d. Do not disturb anchor during recommended curing time.
    - e. Do not exceed maximum torque as specified in manufacturer's instructions.

**3.02 FIELD QUALITY ASSURANCE AND QUALITY CONTROL**

- A. Owner-Furnished Quality Assurance, in accordance with IBC Chapter 17 requirements, is provided in Section 01 91 14.

**3.03 MANUFACTURER'S SERVICES**

- A. Adhesive and Mechanical Anchors: Conduct Site training of installation personnel for proper installation, handling, and storage of adhesive anchor system. Notify Engineer of time and place for sessions.

**3.04 FASTENER SCHEDULE**

- A. Unless indicated otherwise on Drawings, provide fasteners as follows:

Service Use and Location	Product	Remarks
1. Post-Installed Anchors for Metal Components to Cast-in-Place Concrete (such as, Ladders, Handrail Posts, Electrical Panels, Platforms, and Equipment)		
Submerged, Exterior, Interior Wet, and Corrosive Areas	Stainless steel adhesive anchors	Verify product acceptability and manufacturer's requirements if anchor installation will occur in an overhead application
4. All Others		
All service uses and locations	Stainless steel fasteners	

]

- B. Antiseizing Lubricant: Use on all stainless steel threads.
- C. Do not use adhesive anchors to support fire-resistive construction or where ambient temperature will exceed 120 degrees F.

**END OF SECTION**

SECTION 35 20 16.25

FABRICATED SLIDE GATES

PART 1 GENERAL

1.1 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Water Works Association (AWWA): C561, Fabricated Stainless Steel Slide Gates.
2. ASTM International (ASTM):
  - a. A193/A193M, Alloy-Steel and Stainless Steel Bolting Materials for High Temperature or High Pressure Service and Other Special Purpose Applications.
  - b. A240/A240M, Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and General Applications.
  - c. A276, Standard Specification for Stainless Steel Bars and Shapes.
  - d. A380, Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems.
3. NSF International (NSF):
  - a. NSF/ANSI 61, Drinking Water System Components - Health Effects.
  - b. NSF/ANSI 372, Drinking Water System Components - Lead Content.

1.2 DEFINITIONS

- A. Slenderness Ratio: The ratio of the maximum unsupported stem length to the stem cross-section radius of gyration.
- B. EPDM: Ethylene propylene diene monomer.
- C. UHMWPE: Ultra-high molecular weight polyethylene.
- D. Viton® (FKM): Fluoroelastomers

1.3 SUBMITTALS

A. Action Submittals-Shop Drawings:

1. Make, model, weight, and required electrical gate operator horsepower of each equipment assembly.
2. Manufacturer's catalog information, descriptive literature, specifications, and identification of materials of construction.
3. Detailed mechanical drawings showing the equipment fabrications and interface with other items. Include dimensions, size, and locations of connections to other work, and weights of associated equipment associated therewith. Submittal drawings shall include installation details showing all details of construction, details required for installation, dimensions, and anchor bolt locations.
4. Gate operator and stem calculations for each gate and service condition.

5. Gate opening and closing thrust forces that will be transmitted to the support structure with operator at extreme positions and load.
6. Manufacturer installation and testing procedures shall be submitted for approval.
7. Performance Test Procedures.
8. Performance Test Procedures.
9. Anchorage and bracing drawings and cut sheets, as required by Section 01 88 15, Anchorage and Bracing.

B. Informational Submittals:

1. Anchorage and bracing calculations as required by Section 01 88 15, Anchorage and Bracing.
2. Manufacturer’s Certificate of Compliance, as per supplement 2.
3. Special shipping, storage and protection, and handling instructions.
4. Manufacturer’s written/printed installation instructions.
5. Routine maintenance requirements prior to plant startup.
6. Operation and Maintenance Data: As specified in Section 01 78 23, Operation and Maintenance Data.
7. Manufacturer’s Certificate of Proper Installation, in accordance with Section 01 43 33, Manufacturers’ Field Services.
8. Field Performance Test Reports and Log.
9. Manufacturing and delivery schedule and provide monthly progress updates.
10. Submission of specified submittals for approval prior to commencing manufacture.

1.4 EXTRA MATERIALS

A. Furnish, tag, and box for shipment and storage the following spare parts and special tools:

Item	Quantity
Stem collars for all gate stems	One of each different size
Stainless steel lift nuts	One of each different size
Special tools required to maintain or dismantle	One complete set
Seal kit	One set for each gate-size excluding seal between frame and concrete

B. Delivery: LFP, 2590 South Water Works Rd, Buford, GA 30518.

PART 2 PRODUCTS

2.1 GENERAL

- A. Components and Materials in Contact with Water for Human Consumption: Comply with the requirements of the Safe Drinking Water Act and other applicable federal, state, and local requirements. Provide certification by manufacturer or an accredited certification organization recognized by the Authority Having Jurisdiction that components and materials comply with the maximum lead content standard in accordance with NSF/ANSI 61 and NSF/ANSI 372.

1. Use or reuse of components and materials without a traceable certification is prohibited.

## 2.2 SUPPLEMENTS

- A. See supplements to this section for additional product information.

## 2.3 MATERIALS

### A. Stainless Steel:

1. Plate, Sheet, and Strip: ASTM A240/A240M, Type 316L.
2. Bars and Shapes: ASTM A276, Type 316L.

## 2.4 PERFORMANCE REQUIREMENTS

- A. Leakage shall not exceed 0.1 gallon per minute per foot of gate periphery under either seating or unseating head conditions.

## 2.5 SLIDE GATES

### A. Rising stem type, with assembly styles designated as follows:

1. Style A: Upward acting type for wall surface mounting on the concrete structures.

### B. Guide Frames:

1. Stainless steel.]
2. Vertical Guides: Design for maximum rigidity, and extend in one continuous piece from the gate invert to form posts for support of gate operators of self-contained gates. When guides extend above the operating floor, they shall be sufficiently strong so that no further reinforcements are required.
  - a. Weight: Not less than 9 pounds per linear foot for stainless steel.
  - b. Incorporate a replaceable Viton Grade A bearing strip in a retainer slot on the downstream side (unseating head side) of the gate.
3. Frame Invert: For flush bottom gate, furnish a Viton Grade A insert to function as a seating surface for the gate disc.
  - a. Weight: Not less than 9 pounds per linear foot or stainless steel.
4. Join vertical guide frames and invert with factory welded corners.
5. Size guided slot to provide a minimum disc engagement of 1 inch on each side.

### C. Disc:

1. Disc Plate (Sliding Member): One-piece stainless steel plate. Reinforce as required so that the disc will not deflect more than  $1/720$  of the gate span or  $1/16$ -inch, whichever is less, when the upstream liquid depth (seating head side) is as shown on the schedule and the downstream liquid depth is less than  $1/2$  inch.
2. Reinforce gate disc with one-piece stainless steel angles or channels welded to the disc plate. Bolted reinforcements will not be permitted.
3. Reinforcement to extend into the guides so they overlap the seating surface of the guide.

D. Stems:

1. To match existing stem diameter, ASTM A276, Type 316 stainless steel.
2. Threads: to match existing. Extend threaded portion of stem 2 inches above operator when gate is in CLOSED position.
3. Ratio of the unsupported stem length to the radius of gyration, both in inches, shall not exceed 200.
4. Stems to withstand in compression, without damage, the thrust equal to at least 2-1/2 times the rated output of the hoisting mechanism.
5. Equip operating stems with stainless steel bushed stem guides, mounted on stainless steel brackets; adjustable in two directions and spaced so that the L/r ratio does not exceed 200.
6. Adjustable stop collar for the CLOSED position.
7. Connect the stems to the disc plate with a yoke, bolted to the stem and welded to the disc.

DI. Manufacturers:

1. Stainless Steel:
  - a. Rodney Hunt Co.
  - b. H. Fontaine, Ltd.
  - c. Waterman
  - d. BNW Zero Leakage.
  - e. or approved equivalent

2.6 APPURTENANCES

- A. Lifting Lugs: Furnish suitably attached for equipment assemblies and components weighing over 100 pounds.
- B. Anchor Bolts: Provide details of ASTM A193/A193M, Type 316 stainless steel post installed anchor bolts to be supplied and installed by the installation Contractor to meet requirements specified in Section 05 05 19, Post-Installed Anchors
- C. Identification Tagging Requirements:
  1. For each gate provide stainless steel tag bearing the gate tag number, dimensions and materials to be mounted on the existing operators.
  2. Attach the tags to a soldered split key ring so that ring and tag cannot be removed when mounted. Use block type numbers and letters with 1/4 inch minimum high numbers and letters stamped on and filled with black enamel.

2.7 SHOP/FACTORY FINISHING

- A. Mechanically descale and passivate all weld burn and weld slag in accordance with ASTM A380 to provide uniform finish.
- B. Factory Tests and Adjustments: Fully assemble and test gates actually furnished at required seating and unseating head conditions.

1. Functional Test: Perform manufacturer's standard test on equipment.

### PART 3 EXECUTION

#### 3.1 INSTALLATION (BY INSTALLATION CONTRACTOR WITH SUPPORT BY MANUFACTURER)

- A. Gate installation shall be by the Installation Contractor (not yet appointed) with support from the gate manufacturers authorized representative as described below.
- B. In accordance with the manufacturer's written instructions. Inspection, storage of materials at site, and shop and field testing of each slide gate shall be performed in accordance with procedures covered in AWWA C651 Standard and manufacturer's recommendations.
- C. Slide gates shall be bolted securely or otherwise fastened to skids in such a manner that they can be safely transported and handled without damage.
- D. Disassemble factory assembled gate components before installation.
- E. Reconnect existing operators after installing gates.
- F. During installation, slide gate frames shall be positioned accurately and supported to prevent shifting on the existing concrete. Provide guidance to the installation Contractor for bracing frames both horizontally and vertically to prevent distortion.
- G. Upon completion of installation, the surfaces shall be cleaned, free of grease and dirt, and descaled in accordance with ASTM A380 by the installation Contractor.
- H. Lubricate stems before operating.

#### 3.2 FIELD QUALITY CONTROL

- A. Functional Tests:
  1. Conduct on each slide gate.
  2. After gates have been installed, adjusted, and properly lubricated, each slide shall be operated for one complete cycle: open-close-open or close-open-close – to ensure that they operate without binding, scraping or distorting. Electric motor operators shall function smoothly and without interruption. Torque switches in the electric motor operators, shall be adjusted and limit switches set by Others according to the manufacturer's recommendations.
- B. Performance Test:
  1. Conduct on each slide gate.
  2. Conduct leakage test on each slide gate in accordance with AWWA C561 and manufacturer's recommendations. Seating and unseating heads shall be measured along with leakage through the slide gates. All values shall be within the limits specified herein.
  3. Perform under actual or approved simulated operating conditions. Where approved by Owner due to site operating limitations, a gate might only be tested under the single condition of being closed during normal operation.

4. Test for a continuous 1-hour period without malfunction.
5. Adjust, realign, or modify units and retest if necessary.

### 3.3 MANUFACTURER'S SERVICES

- A. Manufacturer's Representative: Present at Site for minimum person-days listed below, travel time excluded:
  1. One trip for 1 person-day for installation assistance and [inspection.
  2. Four trips of 1 person-day for functional and performance testing and completion of Manufacturer's Certificate of Proper Installation.
- B. See Section 01 43 33, Manufacturers' Field Services and Section 01 91 14, Equipment Testing and Facility Startup.
- C. Upon completion of installation, provide field test reports and manufacturer installation and performance certification - certifying that the system was properly installed and conforms to all specifications and referenced standard requirements.

### 3.4 SUPPLEMENTS

- A. The supplement listed below, following "End of Section," is a part of this Specification.
  1. Slide Gate Schedule.
  2. Manufacturers Certificate Of Compliance

END OF SECTION

**SUPPLEMENT 1: SLIDE GATE SCHEUDLE**

A. Refer to Scope Attachment 2

**SUPPLEMENT 2: MANUFACTURERS CERTIFICATE OF COMPLIANCE**

**MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

OWNER: \_\_\_\_\_

PRODUCT, MATERIAL, OR SERVICE

SUBMITTED: \_\_\_\_\_

PROJECT NAME: \_\_\_\_\_

PROJECT NO: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I hereby certify that the above-referenced product, material, or service called for by the Contract for the named Project will be furnished in accordance with all applicable requirements. I further certify that the product, material, or service are of the quality specified and conform in all respects with the Contract requirements, and are in the quantity shown.

Date of Execution: \_\_\_\_\_, 20\_\_

Manufacturer: \_\_\_\_\_

Manufacturer's Authorized Representative (*print*): \_\_\_\_\_

\_\_\_\_\_

(Authorized Signature)

**SECTION 35 20 16.26**

**CAST-IRON SLIDE GATES**

**PART 1 GENERAL**

**1.1 REFERENCES**

- A. The following is a list of standards which may be referenced in this section:
1. American Water Works Association (AWWA):
    - a. C560, Cast-Iron Slide Gates.
  2. ASTM International (ASTM):
    - a. A126, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
    - b. A193, Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service.
    - c. A276, Standard Specification for Stainless and Heat-Resisting Steel Bars and Shapes.
    - d. B21, Standard Specifications for Naval Brass Rod, Bar, and Shapes.
    - e. B584, Standard Specification for Copper Alloy Sand Castings for General Applications.
  3. Joint Industry Conference (JIC): Standards for Hydraulic Cylinders.
  4. NSF International (NSF):
    - a. NSF/ANSI 61, Drinking Water System Components - Health Effects.
    - b. NSF/ANSI 372, Drinking Water System Components - Lead Content.

**1.2 DEFINITIONS**

**1.3 SUBMITTALS**

- A. Action Submittals- Shop Drawings:
1. Equipment Assembly: Make, model, weight, and required operator horsepower of each.
  2. Manufacturer's catalog information, descriptive literature, specifications, dimensional layouts, and identification of materials of construction.
  3. Detailed mechanical drawings showing equipment fabrications and interface with other items. Include dimensions, size, and locations of connections to other work, and weights of associated equipment.
  4. Gate opening and closing thrust forces that will be transmitted to support structure with operator at extreme positions and load.
  5. Gate operator and stem calculations for each gate and service condition.
  6. Field performance test procedures.
    - a. Anchorage and bracing drawings and cut sheets, as required by Section 01 88 15, Seismic and Bracing.
- B. Informational Submittals:

1. Anchorage and bracing calculations as required by Section 01 88 15, Anchorage and Bracing.
2. Manufacturer’s Certificate of Compliance, in accordance with Supplement 2.
3. Special shipping, storage and protection, and handling instructions.
4. Manufacturer’s installation instructions.
5. Routine maintenance requirements prior to plant startup.
6. Manufacturer’s Certificate of Proper Installation, in accordance with Section 01 43 33, Manufacturers’ Field Services.
7. Operation and Maintenance Data: As specified in Section 01 78 23, Operation and Maintenance Data.

1.4 EXTRA MATERIALS

- A. Furnish, tag, and box for shipment and storage following spare parts and special tools.

Item	Quantity
Stem collars for gate stems	One of each different size
Bronze lift nuts	One of each different size
Special tools required to maintain or dismantle	One complete set

- B. Delivery: Delivery: LFP, 2590 South Water Works Rd, Buford, GA 30518

PART 2 PRODUCTS

2.1 GENERAL

- A. Components and Materials in Contact with Water for Human Consumption: Comply with the requirements of the Safe Drinking Water Act and other applicable federal, state, and local requirements. Provide certification by manufacturer or an accredited certification organization recognized by the Authority Having Jurisdiction that components and materials comply with the maximum lead content standard in accordance with NSF/ANSI 61 and NSF/ANSI 372.
1. Use or reuse of components and materials without a traceable certification is prohibited.

2.2 SUPPLEMENTS

- A. See supplements to this section for additional product information.

2.3 SLIDE GATES

- A. General:
1. Conform to AWWA C560, rising stem type.
  2. Minimum Acceptable Casting Thickness for Cast-Iron Components: 3/4 inch.
- B. Frames:
1. Cast-iron, one-piece construction, in accordance with ASTM A126, Class B.

2. Machine contact surfaces.
  - a. Machine dovetailed grooves on front face, into which seat facings shall be driven and machined.
  - b. Machine back flange to bolt directly to machined face of wall thimble cast in concrete.
3. For frames with top and bottom wedges, furnish integrally cast pads machined with keyways to receive wedge seats.
4. Where side clearance is limited, flanged frames may require mounting holes to be drilled through to front face of frame.

C. Discs:

1. Cast-iron, one-piece construction with integrally cast vertical and horizontal ribs in accordance with ASTM A126 Class B.
2. Machine dovetailed grooves on seating face, into which seat facings shall be driven and machined.
3. Wedge Pads: Integrally cast on disc and machined to receive adjustable wedges.
4. Cast a heavily reinforced nut pocket integrally on vertical centerline above horizontal centerline to receive thrust nut.

D. Guides:

1. Cast-iron, one-piece, in accordance with ASTM A126 Class B designed to withstand total thrust from water pressure and wedging action.
2. Machine contact surfaces.
3. Length: Sufficient to retain and support at least half disc in fully OPEN position.
4. Attach to frame with ASTM A276 or ASTM A193, Type 316 stainless steel studs; dowel to prevent relative motion between guides and frame or cast guides integrally with frame.
5. Securely attach wedge seats to machined pads on guides.

E. Wedges and Seat Facings:

1. Side wedges for all conditions. Top and bottom wedges for unseating heads as necessary to meet leakage requirements.
2. Solid cast ASTM B584, Alloy 865 manganese bronze.
3. Machine contact surfaces. Key to cast-iron pads to prevent rotation or lateral motion.
4. Attach wedges to disc with ASTM A276 or ASTM A193, Type 316 stainless steel studs and nuts.
5. Seat Facings: ASTM B21, Alloy B, shaped to fill and permanently lock in machined dovetail grooves when pneumatically impacted into place. Attaching pins and screws not permitted.

F. Stems:

1. Stems. ASTM A276, Type 316 stainless steel to match existing and operated by existing electrical operators.
2. Threads: to match existing for use with existing electrical operators. Extend threaded portion of stem 2 inches above operator when gate is in CLOSED position.
3. Couplings:
  - a. Use when stems have more than one section.

- b. Same material as stem.
  - c. Furnish with internal threads that transmit full thrust of stem.
  - d. Hold in place on stem with bolts or keys and keyways.
  - e. Same size and interchangeable.
4. Size so that ratio of unsupported stem length (L) to radius of gyration (r), both in inches, does not exceed 200.
  5. Withstand in compression, without damage, thrust equal to at least 2-1/2 times rated output of hoisting mechanism.
  6. Cast-iron, bushed-stem guides, mounted on cast-iron brackets, adjustable in two directions and spaced so that L/r ratio does not exceed 200.
  7. Adjustable stop collar for CLOSED position.

G. Flush-Bottom Closure Seals:

1. Compressible Resilient Seal:
  - a. Attached to bottom of disc with a bronze or stainless steel bar and bronze or stainless steel fasteners.
  - b. Specially molded shape designed to fit a lip machined on bottom rib of disc.
  - c. Shaped to produce a wide sealing area on a machined cast-iron stop bar, bolted and keyed to gate frame to form a flush invert.
  - d. Differential sealing pressure of resilient seal on stop bar shall be variable by adjustment of side wedges on gate.
2. Alternative Closures:
  - a. Solid, square-cornered, resilient rubber seal in place of bottom dovetail facing and wedging devices.
  - b. Securely fastened to bottom cross member of frame on a stop plate, with a retainer bar and stainless steel fasteners.
  - c. Make top surface of seal flush with invert of gate opening.
  - d. Machine full length of bottom edge of disc accurately to make contact with seal when disc is closed.

H. Manufacturers:

1. Rodney Hunt Co.
2. H. Fontaine, Ltd.
3. HydroGate Corp.
4. Waterman
5. BNW Zero-Leakage
6. Or approved equivalent

2.4 APPURTENANCES

- A. Lifting Lugs: Furnish suitably attached for equipment assemblies and components weighing over 100 pounds.
- B. Anchor Bolts: Provide details of diameter (minimum of 1/2"), type and length for type 316 stainless steel post installed anchor bolts to be supplied and installed by the installation Contractor to meet requirements specified in Section 05 05 19, Post-Installed Anchors.
- C. Identification Tagging Requirements:

1. For each gate provide stainless steel tag bearing the gate tag number, dimensions and materials to be mounted on the existing operators.
2. Attach the tags to a soldered split key ring so that ring and tag cannot be removed when mounted. Use block type numbers and letters with 1/4 inch minimum high numbers and letters stamped on and filled with black enamel.

## 2.5 SHOP/FACTORY FINISHING

### A. Coatings:

1. Slide Gate: Factory prepare, prime, and finish coat exposed metal surfaces with manufacturer's standard coating for drinking water applications.

## 2.6 SOURCE QUALITY CONTROL

### A. Factory Tests and Adjustments: Fully assemble and test slide actually furnished.

1. Functional Test: Perform manufacturer's standard test on equipment.
2. Performance Test: In accordance with AWWA C540.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. In accordance with manufacturer's written instructions.
- B. Accurately place anchor bolts using templates furnished by manufacturer.
- C. Grease threads above stem nut prior to placing gate in operation.

### 3.2 FIELD QUALITY CONTROL

#### A. Functional Tests: Conduct on each slide gate.

#### B. Performance Test:

1. Conduct on each slide gate.
2. Perform under actual or approved simulated operating conditions.
3. Test for a continuous 1-hour period without malfunction.
4. Adjust, realign, or modify units and retest if necessary.
5. Leakage shall be as per AWWA C560 and not exceed 0.1 gallon per minute per foot of gate periphery under either seating or unseating head conditions.

### 3.3 MANUFACTURER'S SERVICES

#### A. Manufacturer's Representative: Present at Site [for minimum person-days listed below, travel time excluded:

1. One trip for 1 person-days for installation assistance and inspection.
2. Two trips for 1 person-days for functional and performance testing and completion of Manufacturer's Certificate of Proper Installation.

- B. See Section 01 43 33, Manufacturers' Field Services and Section 01 91 14, Equipment Testing and Facility Startup.

### 3.4 SUPPLEMENTS

- A. The supplements listed below, following "End of Section," are a part of this Specification.
  - 1. Schedule Key.: Slide Gate.
  - 2. Manufacturers Certificate Of Compliance.

END OF SECTION

**SUPPLEMENT 1: SCHEDULE KEY- FABRICATED SLIDE GATES**

A. Refer to Scope for gate schedule.

**SUPPLEMENT 2: MANUFACTURERS CERTIFICATE OF COMPLIANCE**

**MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

OWNER: \_\_\_\_\_ PRODUCT, MATERIAL, OR SERVICE  
SUBMITTED: \_\_\_\_\_  
PROJECT NAME: \_\_\_\_\_  
PROJECT NO: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I hereby certify that the above-referenced product, material, or service called for by the Contract for the named Project will be furnished in accordance with all applicable requirements. I further certify that the product, material, or service are of the quality specified and conform in all respects with the Contract requirements, and are in the quantity shown.

Date of Execution: \_\_\_\_\_, 20\_\_

Manufacturer: \_\_\_\_\_

Manufacturer's Authorized Representative (*print*): \_\_\_\_\_

\_\_\_\_\_  
(Authorized Signature)