



Purchasing Department
140 Stonewall Avenue West, Ste 204
Fayetteville, GA 30214
Phone: 770-305-5420
www.fayettecountyga.gov

February 4, 2020

Subject: Request for Quote #1778-A: Crosstown WTP Raw Water VFD

Gentlemen/Ladies:

Fayette County, Georgia invites you to submit a quote for the above listed solicitation in accordance with the information and specifications contained herein.

A pre-quote conference will be held on February 11, 2020 at 11am at the Crosstown Water Treatment Plant, 3500 TDK Blvd., Peachtree City, GA 30269 this will provide the only opportunity for you to become familiar with the site and work conditions, and to ask questions. This is a secured facility and no other site visits will be available. After viewing the work needed at the Crosstown Water Treatment Plant, we will visit the Flint River Pump Station located at 437 Hampton Rd, Fayetteville, GA 30215 to view the work needed there.

Quotes will be accepted until 3pm, Friday, February 21, 2020. Please provide your quote and other information via email to Natasha Duggan, Contract Administrator at nduggan@fayettecountyga.gov or fax to (770) 719-5534.

Address any questions you may have about this request for quotes to Natasha Duggan via email to nduggan@fayettecountyga.gov or fax to (770) 719-5534. Questions will be accepted until 3pm, Monday, February 17, 2020.

Purchasing Department office hours are Monday through Friday 8:00 a.m. to 5:00 p.m. The office telephone number is (770) 305-5420.

Sincerely,

Ted L. Burgess
Director of Purchasing

GENERAL TERMS AND CONDITIONS
RFQ #1778-A: Crosstown WTP Raw Water VFD

1. **Definitions:** The term “contractor” as used herein and elsewhere in these Terms and Conditions shall be used synonymously with the term “successful responder.” The term “county” shall mean Fayette County, Georgia.
2. **Quote is Offer to Contract:** Each quote constitutes an offer to become legally bound to a contract with the county, incorporating the request for quote and the responder’s quote. The binding offer includes compliance with all terms, conditions, special conditions, specifications, and requirements stated in the request for quote, except to the extent that a responder takes written exception to such provisions. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The responder should take care to answer all questions and provide all requested information, and to note any exceptions in the quote submission. Failure to observe any of the instructions or conditions in this request for quote may result in rejection of the quote.
3. **Binding Offer:** Each quote shall constitute a firm offer that is binding for ninety (90) days from the received by date, unless the responder takes exception to this provision in writing.
4. **References:** Include with your quote a list of three (3) jobs that your company has done that are of the same or similar nature to the work described in this request for quote, on the form provided. Include all information as requested on the form.
5. **Preparation Costs:** The responder shall bear all costs associated with preparing the quote.
6. **More Than One Quote:** Do not submit alternate quotes or options, unless requested or authorized by the county in the request for quote. If a responder submits more than one quote without being requested or authorized to do so, the county may disqualify the quotes from that responder, at the county’s option.
7. **Defects or Irregularities:** The county reserves the right to waive any defect or irregularity in any quote received. In case of an error in extension of prices or totals in the quote, the unit prices shall govern.
8. **Brand Name:** If items in this request for quote have been identified, described or referenced by a brand name or trade name description, such identification is intended to be descriptive, but not restrictive and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the quote. Items offered must meet required specifications and must be of a quality which will adequately serve the use and purpose for which intended.
9. **Prices Held Firm:** Prices quoted shall be firm for the period of the contract, unless otherwise specified in the quote. All prices for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or job site.

10. **Responder Substitutions:** Responders offering substitutions or deviations from specifications stated in the request for quote, shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the quote. The absence of such list shall indicate that the responder has taken no exception to the specifications. The evaluation of quotes and the determination as to equality and acceptability of products or services offered shall be the responsibility of the county.
11. **Non-Collusion:** By responding to this request for quote, the responder represents that the quote is not made in connection with any competing responder, supplier, or service provider submitting a separate response to this request for quote, and is in all respects fair and without collusion or fraud.
12. **Ethics – Disclosure of Relationships:** Before a proposed contract in excess of \$10,000.00 is recommended for award to the Board of Commissioners or the County Administrator, or before the County renews, extends, or otherwise modifies a contract after it has been awarded, the contractor must disclose certain relationships with any County Commissioner or County Official, or their spouse, mother, father, grandparent, brother, sister, son or daughter related by blood, adoption, or marriage (including in-laws). A relationship that must be reported exists if any of these individuals is a director, officer, partner, or employee, or has a substantial financial interest in the business, as described in Fayette County Ordinance Chapter 2, Article IV, Division 3 (Code of Ethics).

If such relationship exists between your company and any individual mentioned above, relevant information must be presented in the form of a written letter to the Director of Purchasing. You must include the letter with any bid, proposal, or price quote you submit to the Purchasing Department.

In the event that a contractor fails to comply with this requirement, the County will take action as appropriate to the situation, which may include actions up to and including rejection of the bid or offer, cancellation of the contract in question, or debarment or suspension from award of a County contract for a period of up to three years.

13. **Evaluation:** Award will be made to the lowest responsive, responsible responder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The county may make such investigation as it deems necessary to determine the ability of the responder to perform, and the contractor shall furnish to the county all information and data for this purpose as the county may request. The county reserves the right to reject any item, any quote, or all quotes, and to re-solicit for pricing.
14. **Payment Terms and Discounts:** The County's standard payment terms are Net 30. Any deviation from standard payment terms must be specified in the resulting contract, and both parties must agree on such deviation. Cash discounts offered will be a consideration in awarding the quote, but only if they give the county at least 15 days from receipt of invoice to pay. For taking discounts, time will be computed from the date of invoice acceptance by the County, or the date a correct invoice is received, whichever is the later date. Payment is deemed made, for the purpose of earning the discount, on the date of the check.

15. **Trade Secrets – Internal Use:** In submitting a quote, the responder agrees that the county may reveal any trade secret materials contained in the quote to all county staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The responder agrees to hold harmless the county and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the responder has designated as a trade secret.
16. **Contract Execution & Notice to Proceed:** After an award is made, and all required documents are received by the county, and the contract is fully executed with signature of both parties, the county will issue a written Notice to Proceed. The county shall not be liable for payment of any work done or any costs incurred by any responder prior to the county issuing the Notice to Proceed.
17. **Unavailability of Funds:** This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the county under the contract.
18. **Insurance:** The contractor shall procure and maintain the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:
 - a. **General Liability Insurance:** \$1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.
 - b. **Automobile Liability Insurance:** \$1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.
 - c. **Worker's Compensation & Employer's Liability Insurance:** Workers Compensation as required by Georgia statute.

Before a contract is executed, the Certificates of Insurance for all required coverage shall be submitted. The certificate shall list an additional insured as follows:

Fayette County, Georgia
140 Stonewall Avenue West
Fayetteville, GA 30214

19. **Building Permits:** Work performed for the county requiring building permits by licensed contractors will not have permit fees assessed, although any re-inspection fees for disapproved inspections will be the responsibility of the contractor prior to final inspections and the Certificate of Occupancy or Certificate of Completion being issued.
20. **Unauthorized Performance:** The County will not compensate the contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.
21. **Assignment of Contract:** Assignment of any contract resulting from this request for quotes will not be authorized, except with express written authorization from the county.

22. **Indemnification:** The contractor shall defend, indemnify and save the county and all its officers, agents and employees harmless from all suits, actions, or other claims of any character, name and description brought for or on account of any damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the contractor or other persons employed or utilized by the contractor in the performance of the contract. The contractor shall pay any judgment with cost which may be obtained against the county growing out of such damages, losses, or expenses.
23. **Severability:** The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.
24. **Delivery Failures:** If the contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the county shall have authority to make open-market purchases of comparable goods or services. The county shall have the right to invoice the contractor for any excess expenses incurred, or deduct such amount from monies owed the contractor. Such purchases shall be deducted from contracted quantities.
25. **Substitution of Contracted Items:** The contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If a contractor is unable to deliver the products under the contract, it shall be the contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the contractor's original bid. In the event any contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.
26. **Termination for Cause:** The county may terminate the contract for cause by sending written notice to the contractor of the contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the county's rights or remedies by law.
27. **Termination for Convenience:** The county may terminate the contract for its convenience at any time with 10 days' written notice to the contractor. In the event of termination for convenience, the county will pay the contractor for services performed. The county will compensate partially completed performance based upon a signed statement of completion.
28. **Force Majeure:** Neither party shall be deemed to be in breach of the contract to the extent that performance of its obligations is delayed, restricted, or prevented by reason of any act of God, natural disaster, act of government, or any other act or condition beyond the reasonable control of the party in question.
29. **Governing Law:** This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in proper venue in Fayette County, Georgia.

Checklist of Required Documents

*(Be Sure to Return This Checklist and
the Required Documents in the order listed below)*

RFQ #1778-A: Crosstown WTP Raw Water VFD

Company information – on the form provided _____

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1) _____

Pricing sheet _____

List of exceptions, if any – on the form provided _____

Copy of GA Certificate of Registration or other acceptable license or documentation _____

References – on form provided _____

Addenda, if Any _____

COMPANY NAME: _____

COMPANY INFORMATION
RFQ #1778-A: Crosstown WTP Raw Water VFD

Company Name: _____

Physical Address: _____

Mailing Address (if different): _____

AUTHORIZED REPRESENTATIVE

Signature: _____

Printed or Typed Name: _____

Title: _____

Email Address: _____

Phone Number: _____ Fax Number: _____

PROJECT CONTACT PERSON

Name: _____

Title: _____

Office Number: _____ Cellular Number: _____

Email Address: _____

REFERENCES

RFQ #1778-A: Crosstown WTP Raw Water VFD

Please list three (3) references for current or recent customers who can verify the quality of service your company provides. Projects of similar size and scope are preferable.

1. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

2. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

3. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

COMPANY NAME: _____

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

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

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor
#1778-A: Crosstown WTP Raw Water VFD

Name of Project
Fayette County Georgia

Name of Public Employer

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

Executed on _____, _____, 2020 in (city) _____, (state) _____

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 2020

NOTARY PUBLIC

My Commission Expires:

SCOPE AND SPECIFICATION

RFQ #1778-A: Crosstown WTP Raw Water VFD and Flint River Pump 3 VFD

INTRODUCTION

Fayette County Water System is seeking quotes from qualified vendors for the removal and replacement of two Cutler-Hammer SV9000 Variable Speed Drives at the Crosstown Water Treatment Plant (WTP) Raw Water Pump Station, located at 3500 TDK Blvd, Peachtree City, GA, and one Eaton SVX9000 Variable Speed Drive at the Flint River Pump Station located at 437 Hampton Rd, Fayetteville, GA 30215. The quote is for the removal of the failed units, installation of the new units, door mounted external operator, factory authorized start up and commissioning, Megger Test the existing motors, onsite thermal imaging scan of the installed drive and existing motor, and system control wiring documents and prints for new installation.

BACKGROUND

The Crosstown Water Treatment Plant Raw Water Pump Station has two 200 HP raw water pumps and two 40 HP raw water pumps. Pump #2 and Pump #4 each have Cutler-Hammer SV9000 Variable Speed Drives that need to be replaced. Both pumps have inverter duty rated motors with the following specifications (also see attached motor nameplates photos):

Pump #2 – 40 HP, 460 Volts, 50 Amps

Pump #4 – 200 HP, 460 Volts, 232 Amps

The Flint River Pump Station has three pumps – pumps 1 and 2 are 400 HP using soft starters and pump 3 is 400 HP pump using the Eaton SVX9000 Variable Speed Drive that needs to be replaced. Pump 3 has an inverter duty motor with the following specifications (also see attached motor nameplate photo):

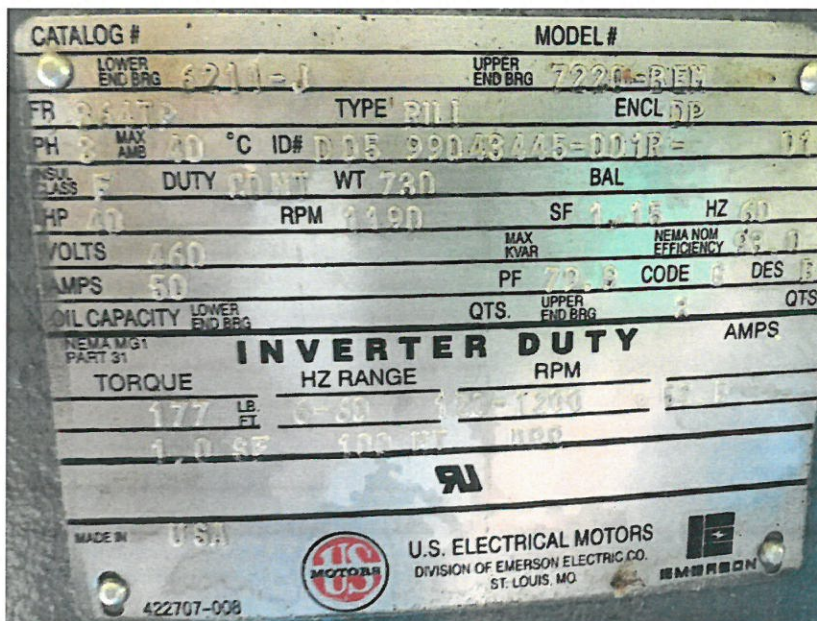
Pump #3 – 400 HP, 460 Volts, 441 Amps

SCOPE OF WORK

1. Remove existing drives, label wiring for reconnection to new drives and dispose of existing drives.
2. Prior to installing new drives, vendor shall perform a Megger Test to determine condition of each motor and provide report to Water System.
3. Provide one of the following or equal:
 - a. Crosstown Pump #2:
 - i. YASKAWA P1000 40 HP, 58 AMP, 480 V, 3P, NEMA 1 Enclosure Variable Speed Drive System. Include one (1) YASKAWA UUX000527 DIGITAL REMOTE OPERATOR, NEMA TYPE 3R/4X EXTERNAL DOOR MOUNT OPERATOR DISPLAY.
 - ii. Amtech AMT-065A-4, 40 HP, 59 AMP, 480 V, 60 Hz, 3 PH Amtech Axpert-Easy Standard drive module with 40 HP choke # 62RB003.
 - b. Crosstown Pump #4:

- i. YASKAWA P1000 250 HP, 296 AMP, 480 V, 3P, IP00 Enclosure Variable Speed Drive System. Include one (1) YASKAWA UUX000527 DIGITAL REMOTE OPERATOR, NEMA TYPE 3R/4X EXTERNAL DOOR MOUNT OPERATOR DISPLAY.
 - ii. Amtech AMT-260A-4, 200 HP, 235 AMP, 480 V, 60 Hz, 3 PH Amtech Axpert-Easy Standard drive module with 200 HP choke # 240RB002.
 - c. Flint River Pump #3:
 - i. YASKAWA P1000 400 HP, 515 AMP, 480 V, 3P, IP00 Enclosure Variable Speed Drive System. Include one (1) YASKAWA UUX000527 DIGITAL REMOTE OPERATOR, NEMA TYPE 3R/4X EXTERNAL DOOR MOUNT OPERATOR DISPLAY.
- 4. Drive must be installed in existing motor control centers (see attached photos). Use existing HOA switch and wire drive to run. Set to run locally and through remote SCADA operation. Install door mount operator display in existing door location. Call to run signal originates at the control rooms in the Crosstown WTP and the South Fayette WTP. PLC relays are located as follows:
 - a. Crosstown Raw Water Pumps 1 and 2 – Horner PLC in Communication Room
 - b. Flint River Pump Station Pump 3 – Horner RTU Cabinet in the Pump Station
- 5. Provide miscellaneous components needed for drive retrofit.
- 6. Provide factory authorized start up and commissioning to assure that Fayette County Water System will be eligible for the Factory Warranty. Please include this information on the appropriate line on the Pricing Sheet.
- 7. Provide on-site operations training for Fayette County Water System personnel.
- 8. Provide on-site thermal imaging scan and report of the installed drives and existing pump motors.
- 9. Provide system control wiring documents and prints for new installation.
- 10. Include shipping costs.

Figure 1 – Crosstown Pump 2 Motor and VFD Nameplates



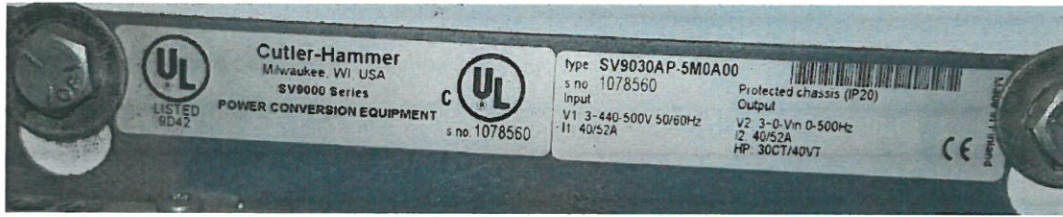


Figure 2 – Crosstown Pump 4 Motor and VFD Nameplates

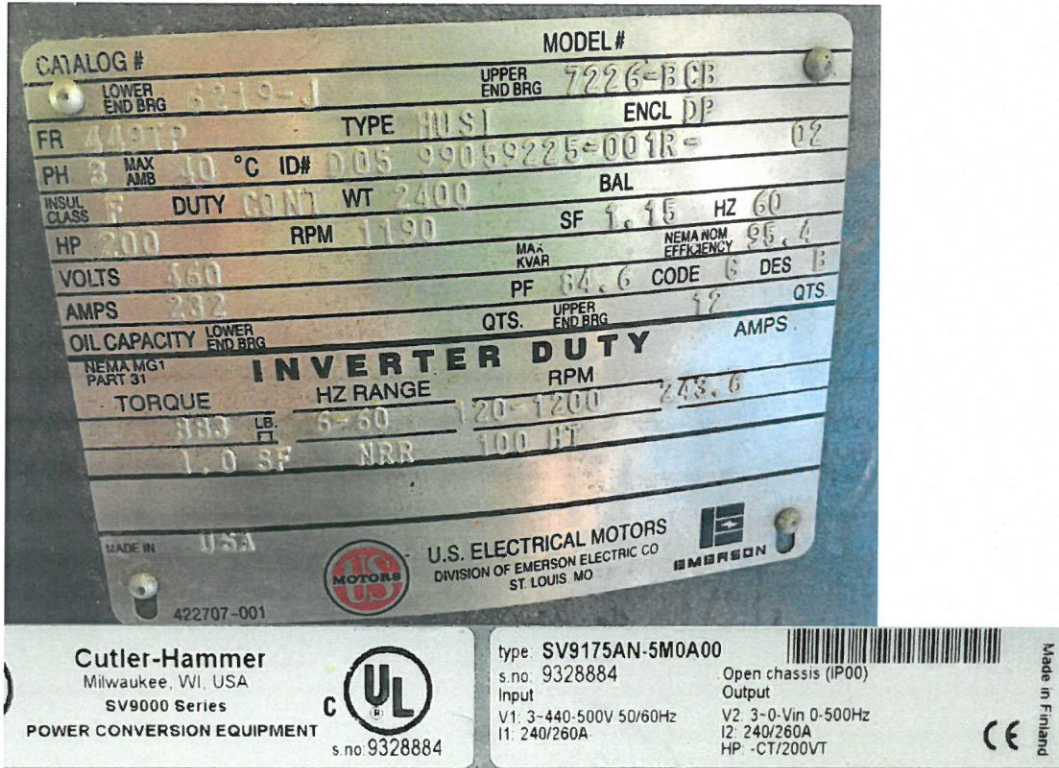
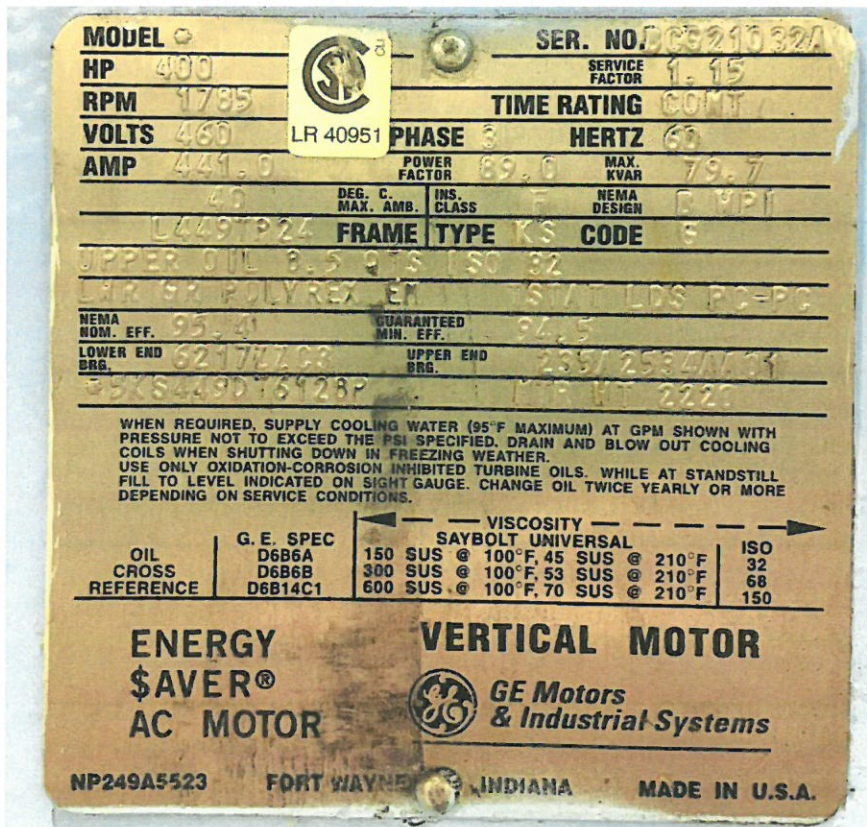


Figure 3 - RWPS MCC Drive Cabinets



Figure 4 Flint River Pump 3 Motor and VFD Nameplates



EATON ELECTRICAL
ADJUSTABLE FREQUENCY DRIVES
4201 NORTH 27 TH STREET
MILWAUKEE, WI 53216

FOR PRODUCT INFORMATION
OR ASSISTANCE:
(800) 322-4986
(520) 262-3687

CAT NO: CPX40064AAK2P15N*
OPTIONS: K2, P1, SN
STYLE NO: CPX-SAT00422-9

G.O. NO: SAT00422-009
DATE CODE: 091702

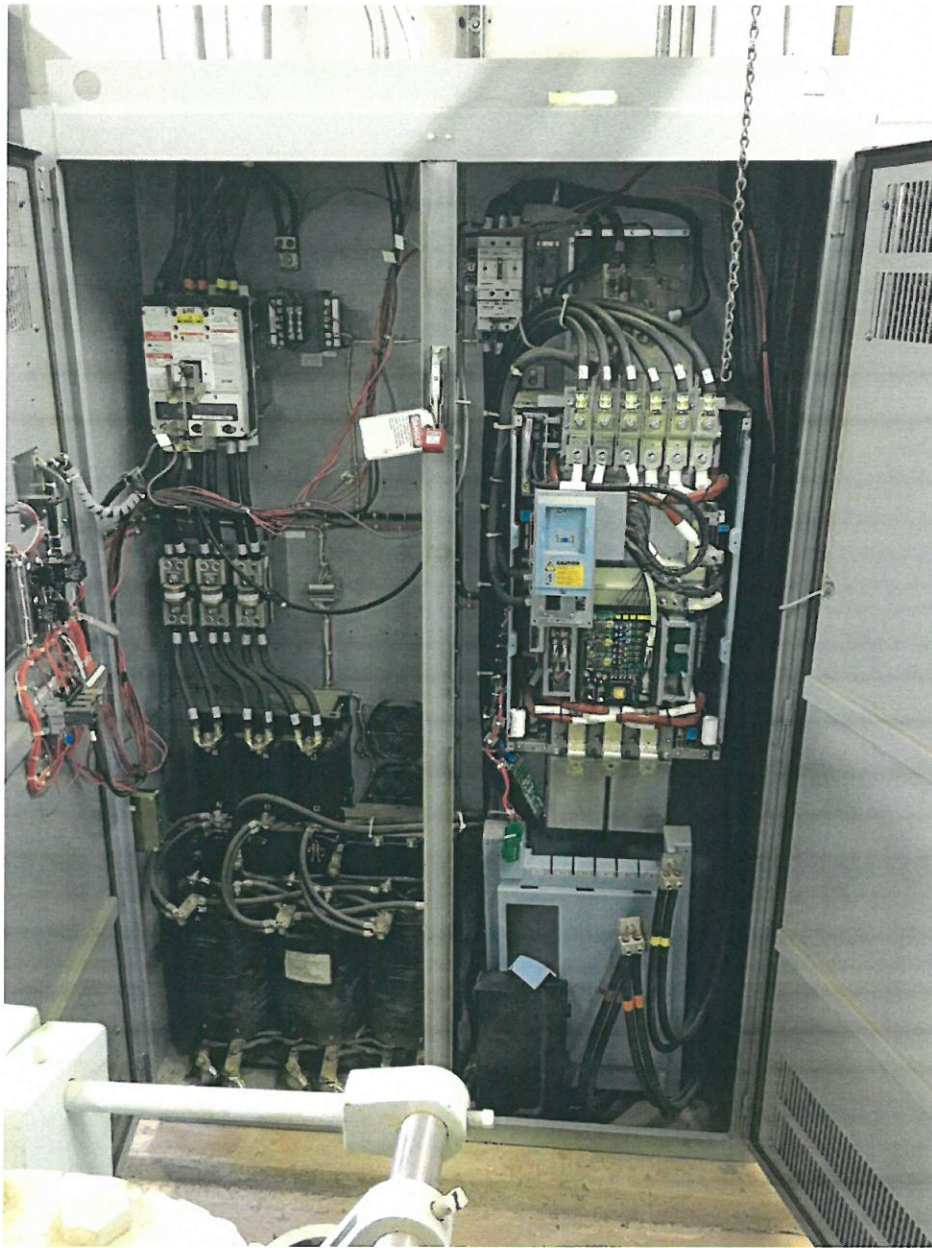
SOFTWARE: 0
INPUT: 480VAC 3 PHASE 50/60HZ 520A RMS
OUTPUT: 0 TO 480VAC 3 PHASE 1 TO 320HZ 520A RMS
MAX AMBIENT: 40 DEG C

NOMINAL HP: 400IL OVERLOAD: 1.10
ENCLOSURE: OVERSIZED NEMA TYPE 1 GASKETED AND FILTERED
SHORT CIRCUIT CURRENT INTERRUPTING RATING: 65KAIC
SERIAL: 12797222

Figure 5 Flint River Pump 3 Drive Cabinet Exterior



Figure 6 Flint River Pump 3 Drive Cabinet Interior



PRICING SHEET, page1
RFQ #1778-A: Crosstown WTP Raw Water VFD

Responder agrees to perform all the work described in the Contract documents for the following prices:

Crosstown WTP Pump #2 Replacement: \$ _____

Crosstown WTP Pump #4 Replacement: \$ _____

Flint River PS Pump #3 Replacement: \$ _____

Total Quote \$ _____

NOTES:

1. All applicable charges shall be included in your total quoted amount, including but not limited to materials, shipping, equipment, installation, labor, and any other amounts. No additional charges will be allowed after the quote received by date.
2. All warranties shall be included in your total quoted amount.
3. **The successful company who is awarded a contract for the performance of this work shall be in compliance with all requirements of the Georgia Construction Industry Licensing Board's Division of Utility Contractors, Georgia Code Title 43, and any other regulations or requirements for the performance of this work. Companies submitting a quote shall include a copy of their Georgia Certificate of Registration or other acceptable license or documentation, as appropriate.**

State Brand & Model Quoted Pump 2 _____

State Brand & Model Quoted Pump 4 _____

State Brand & Model Quoted Pump 3 _____

State Factory Authorized company or personnel who will be performing startup _____

State time needed to commence work after notice to proceed is issued _____ Days.

PRICING SHEET, page 2
RFQ #1778-A: Crosstown WTP Raw Water VFD

State length of time needed to complete project _____ Days.

State, List or Attach the terms of your warranty, if applicable: _____

COMPANY'S NAME _____

EXCEPTIONS TO SPECIFICATIONS
RFQ #1778-A: Crosstown WTP Raw Water VFD

Please list below any exceptions or clarifications to the specifications of this bid. Explain any exceptions in full.

COMPANY NAME: _____

CROSSTOWN TREATMENT PLANT RAW WATER FLOW MODIFICATIONS FOR FAYETTE COUNTY WATER SYSTEM

TONY V. PARROTT, DIRECTOR

AUTHORIZED BY:
FAYETTE COUNTY BOARD OF COMMISSIONERS

HAROLD BOST, CHAIRMAN
GREG DUNN, VICE-CHAIRMAN
HERB FRADY
GLEN GOSA
LINDA WELLS



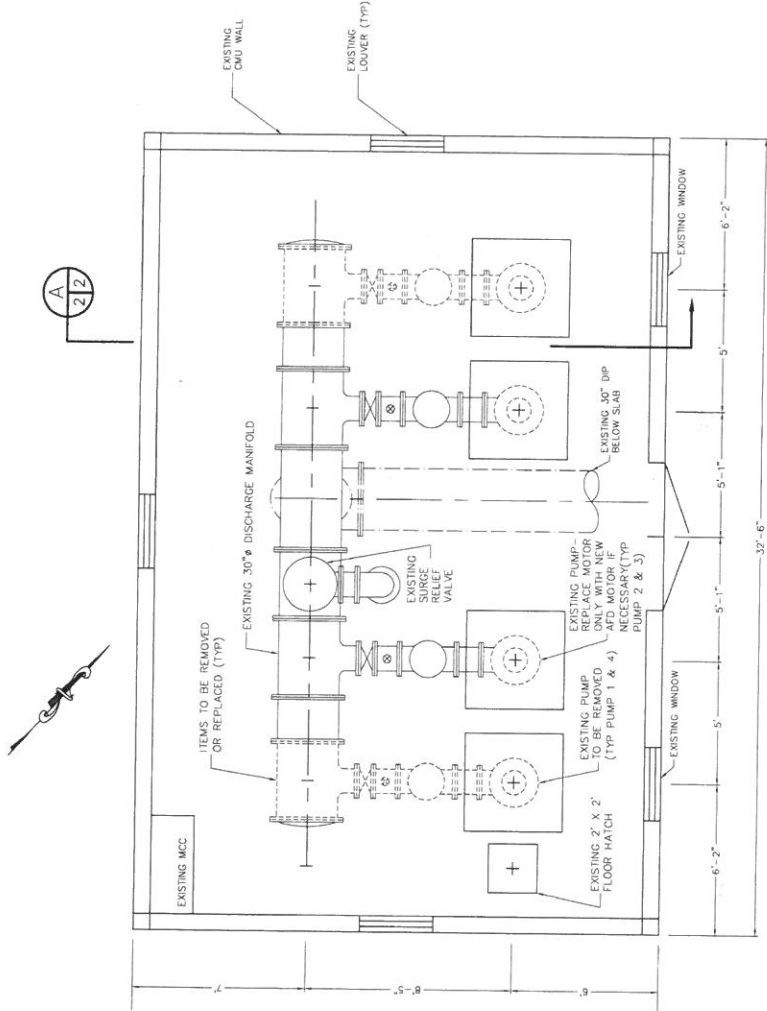
Mallett & Associate
115-B BRANDED SQUARE FAYETTEVILLE, GA 30215
PHONE 770-719-3373 FAX 770-719-3377

CROSSTOWN TREATMENT PLANT
RAW WATER FLOW MODIFICATION
for FAYETTE COUNTY WATER SYS

COVER SHEET

| | |
|-----------------------|----------|
| LAND LOT - 53 & 54 | SCALE |
| DISTRICT - 6TH | DRAWN |
| SECTION - XXX | CHECK |
| CITY - PEACHTREE CITY | APPROVED |
| COUNTY - FAYETTE | DATE |
| STATE - GEORGIA | BY |

8

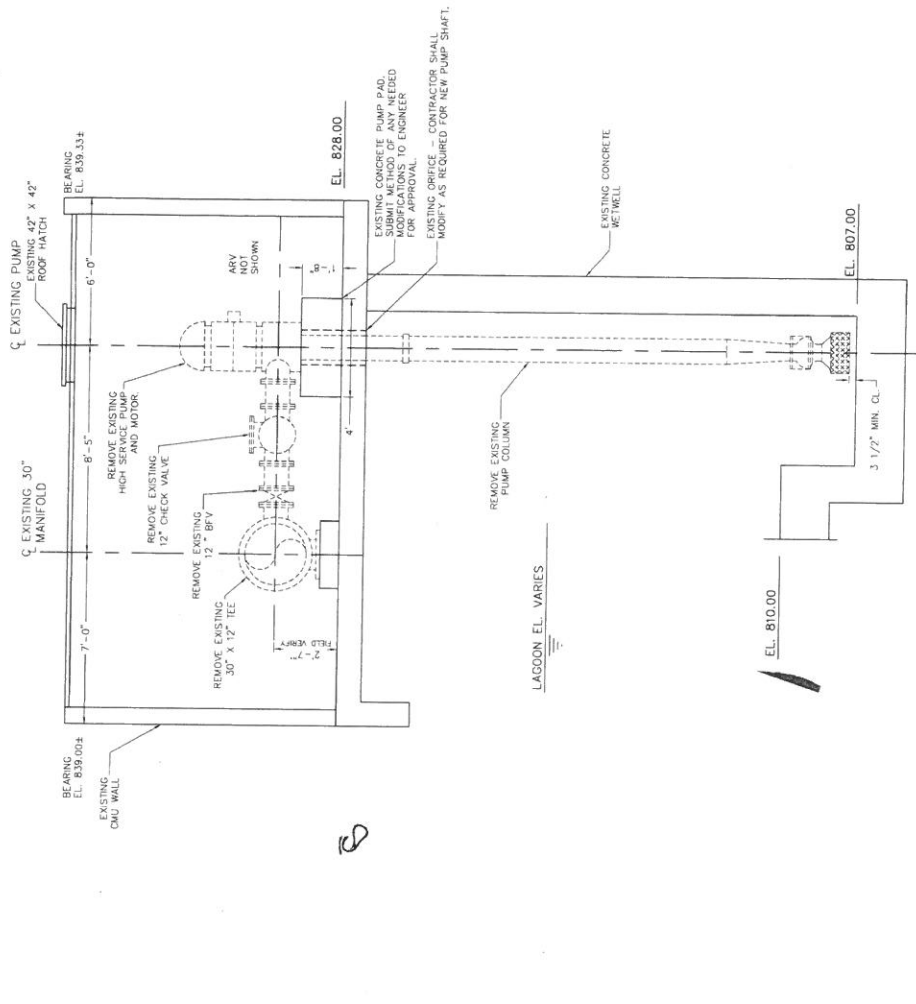


PLAN VIEW — EXISTING RAW WATER PUMP STATION

3/8" = 1'-0"

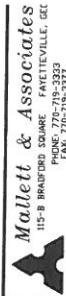
NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING EQUIPMENT AND MATERIALS.
- CONTRACTOR SHALL ADJUST HEIGHT OF EXISTING CONCRETE PUMP PAD AS REQUIRED TO ALIGN PROPOSED PUMP DISCHARGE FLANGE, CHECK VALVE AND PIPING WITH NEW 16" ISOLATION VALVE AND 30" X 16" TEE.
- ALL PIPING AND EXISTING PIPING VALVES & EQUIPMENT SHALL BE PAINTED PER CONTRACT SPECIFICATIONS. COLOR SHALL MATCH EXISTING PIPING, VALVES & EQUIPMENT.
- CONTRACTOR SHALL NOT OPERATE OR ADJUST EXISTING PUMPS, VALVES OR OTHER EQUIPMENT WITHOUT PRIOR AUTHORIZATION FROM WATER TREATMENT PLANT OPERATORS.
- EXISTING PIPING, VALVES PUMPS, MOTORS, AND ALL MISC. EQUIPMENT SHOWN TO BE REMOVED SHALL REMAIN UNTOUCHED UNTIL CONTRACTOR SHALL TRANSPORT AND STORE AT OWNER'S STORAGE FACILITY LOCATED APPROXIMATELY 3 MILES FROM JOB SITE.
- CONTRACTOR SHALL SEQUENCE PUMP REMOVAL AND INSTALLATION AS FOLLOWS:
 - REPLACE PUMP #1 WHILE MAINTAINING OWNERS ABILITY TO OPERATE EXISTING PUMPS #1, #2 AND #4.
 - REPLACE PUMP #4 WHILE MAINTAINING OWNERS ABILITY TO OPERATE NEW PUMP #1 AND PUMPS #1 AND #2.
 - IF NECESSARY, REPLACE MOTORS FOR PUMPS #1 AND #2 WHILE MAINTAINING OWNERS ABILITY TO OPERATE NEW PUMPS #1 AND #4.
- (PERIODS REQUIRING COMPLETE SHUTDOWN OF PUMP STATION SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH THE OWNER).
- FOR PUMPS/PCS OR ADDITIVE NO. 1, SUBSTANTIAL COMPLETION SHALL BE WHEN ONE OF THE NEW 10 MSP PUMPS IS IN OPERATION AND THE OWNER MAY OPERATE THE PUMP STATION CONTINUOUSLY WITH THE EXISTING PUMPS EXCEPT FOR POSSIBLE MINOR PERIODS OF DOWN TIME FOR FINAL TE - INS. ELECTRICAL CONNECTIONS, ETC.



A SECTION (TYP PUMP 1 & 4)

3/8" = 1'-0"



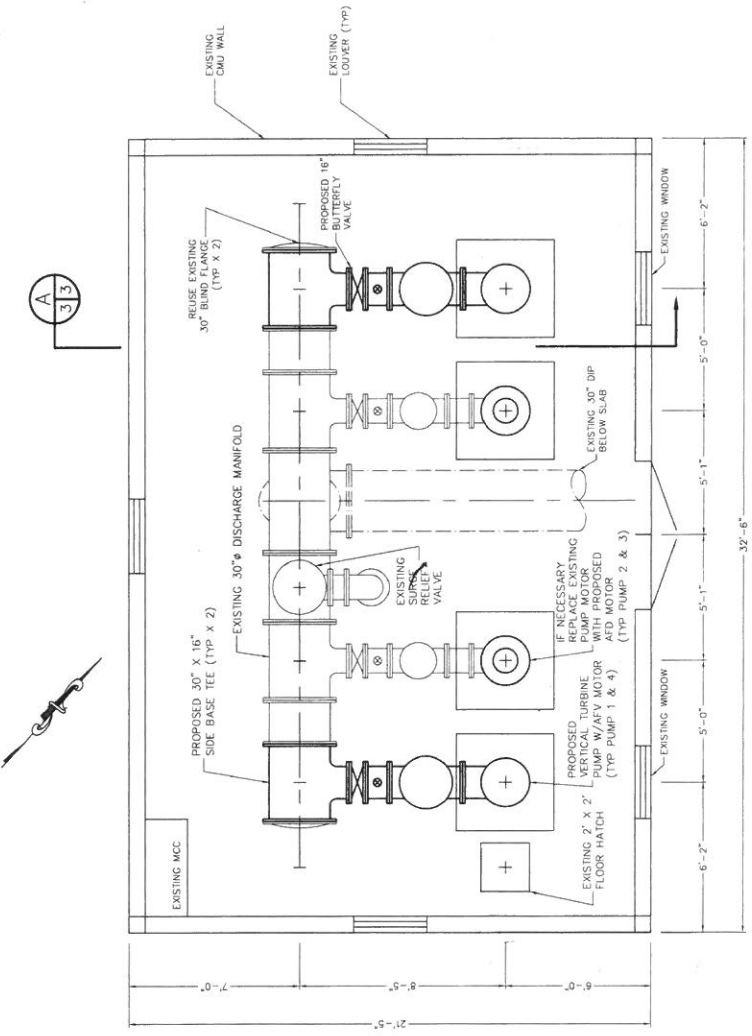
Mallet & Associates
117-B BRADFORD SQUARE - FAYETTEVILLE, GEORGIA
PHONE: 770-719-2377
FAX: 770-719-2377

CROSSTOWN TREATMENT PLANT
RAW WATER FLOW MODIFICATIONS
for FAYETTE COUNTY WATER SYSTEM

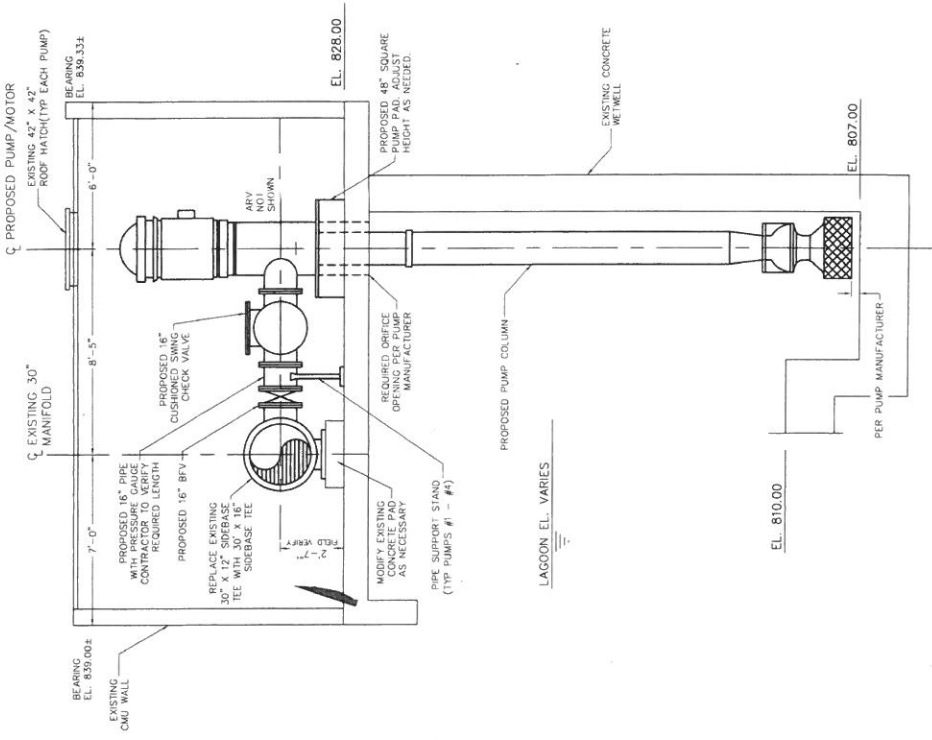
| DESIGN | | DRAWN | | CHECK | | APPROVED | |
|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| LAND LOT - 43 & 54 | DESIGN | DESIGN | DESIGN | DESIGN | DESIGN | DESIGN | DESIGN |
| | RES | RES | RES | RES | RES | RES | RES |
| | DISTRICT - 000 | DISTRICT - 000 | DISTRICT - 000 | DISTRICT - 000 | DISTRICT - 000 | DISTRICT - 000 | DISTRICT - 000 |
| | SECTION - 000 | SECTION - 000 | SECTION - 000 | SECTION - 000 | SECTION - 000 | SECTION - 000 | SECTION - 000 |
| | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE | CITY - FAYETTEVILLE |
| | COUNTY - FAYETTE | COUNTY - FAYETTE | COUNTY - FAYETTE | COUNTY - FAYETTE | COUNTY - FAYETTE | COUNTY - FAYETTE | COUNTY - FAYETTE |
| | STATE - GEORGIA | STATE - GEORGIA | STATE - GEORGIA | STATE - GEORGIA | STATE - GEORGIA | STATE - GEORGIA | STATE - GEORGIA |

| REV. NO. | DATE | DESCRIPTION | BY | APP'D | DATE |
|----------|------|-------------|----|-------|------|
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PLAN VIEW - PROPOSED MODIFICATIONS TO
RAW WATER PUMP STATION
3/8" = 1'-0"



SECTION (TYP PUMP 1 & 4)
3/8" = 1'-0"

Mallett & Associates,
115-B BRANFORD SQUARE FAYETTEVILLE, GEORGIA
PHONE: 770-719-3333 FAX: 770-719-3377

CROSSTOWN TREATMENT PLANT
RAW WATER FLOW MODIFICATIONS
FOR FAYETTE COUNTY WATER SYSTEMS

PROPOSED RAW WATER PUMPS

| | | | | |
|--------------------|-------------|-------|-----|---------|
| LAND LOT - 54 & 54 | DESIGN | RES | RES | SCALE |
| DISTRICT - 6TH | DRAWN | RES | RES | DATE |
| SECTION - 900 | CHECK | OW | OW | FILE NO |
| CITY - MAGNOLIA | APPROVED | OW | OW | SHEET A |
| COUNTY - FAYETTE | BY | APP'D | OW | |
| STATE - GEORGIA | DESCRIPTION | | | |



GENERAL NOTES - WATER LINE INSTALLATION

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH GEORGIA DEPARTMENT OF TRANSPORTATION AND REGULATIONS (PER GEORGIA DEPARTMENT OF TRANSPORTATION JURISDICTION).
2. ANY EXISTING UTILITIES SHOWN ARE APPROXIMATE AND DO NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTOR TO CONDUCT A UTILITY LOCATING SURVEY PRIOR TO BEGINNING CONSTRUCTION ON ANY DRAWINGS. ANY UTILITIES NOT SHOWN AT NO ADDITIONAL COST TO FAYETTE COUNTY WATER SYSTEMS. ANY DELAY IN CONSTRUCTION WILL BE MADE FOR DELAYS DUE TO EXISTING UTILITIES.
3. ALL TRENCHES TO BE COOPERATED WITH FAYETTE COUNTY WATER SYSTEMS. CONTRACTOR TO BE DETERMINED BY FAYETTE COUNTY WATER SYSTEMS. CONTRACTOR TO BE DETERMINED BY FAYETTE COUNTY WATER SYSTEMS. CONTRACTOR TO BE DETERMINED BY FAYETTE COUNTY WATER SYSTEMS.
4. ALL EXISTING VALVES TO BE OPENED AND CLOSED BY FAYETTE COUNTY WATER SYSTEMS EMPLOYEES ONLY.
5. ALL WATER LINES TO BE MINIMUM PRESSURE CLASS 80 JOINT MORTAR LINED, PUSH-ON JOINT, DUCTILE IRON PIPE PER AWWA C900/800. ALL FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON.
6. CONTRACTOR IS ADVISED TO VISIT THE PROPOSED WATER BODIES IN ORDER TO FAMILIARIZE HIMSELF WITH FIELD CONDITIONS, UTILITY LOCATIONS, AND AREAS OF POSSIBLE ROCK EXCAVATION.
7. THE WATER LINE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE STANDARDS, SPECIFICATIONS, AND REGULATIONS OF FAYETTE COUNTY WATER SYSTEMS, DEPARTMENT OF TRANSPORTATION AND FAYETTE COUNTY WATER SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.
8. EROSION CONTROL WILL BE STRICTLY ENFORCED THROUGHOUT THE WORK. CONTRACTOR SHALL SUPPLY AND MAINTAIN EROSION CONTROL MEASURES. ALL MUD TRACKS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.
9. CONTRACTOR SHALL PROVIDE REPAIR AND/OR REPLACE ALL PROPERTY DAMAGE TO EXISTING UTILITIES, LANDSCAPING, SOIL, AND MISC. PLANTINGS OR STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.
10. PROVISIONS DESIGNATED AS "SMALL" WHICH HAVE BEEN PAID PRIOR TO CONSTRUCTION SHALL BE FREE-SPREAD (NO CASING) AT NO ADDITIONAL COST.
11. CONTRACTOR SHALL PROVIDE REPAIR AND/OR REPLACE ALL PROPERTY DAMAGE TO EXISTING UTILITIES, LANDSCAPING, SOIL, AND MISC. PLANTINGS OR STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.
12. PORTIONS OF THIS PROJECT MAY REQUIRE CLEARING AND GRADING. NO ADDITIONAL CONTRACT TIME SHALL BE ALLOWED FOR THIS WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.
13. ADDITIONAL COMPENSATION WILL BE PAID FOR EQUIPMENT, MATERIALS AND LABOR REQUIRED FOR PRESSURE TESTING.
14. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL RESIDENTIAL AND COMMERCIAL PROPERTIES THROUGHOUT THE WORK.
15. CONTRACTOR SHALL COORDINATE WITH GEORGIA POWER COMPANY AND/OR WATER CONTROL BOARD FOR TEMPORARY POWER POLE SUPPORT IN AREAS WHERE EXISTING WATER LINE IS NEAR POWER LINES. THIS SHALL BE DONE AT NO ADDITIONAL COST.
16. CONTRACTOR WILL COORDINATE WITH GEORGIA POWER COMPANY AND/OR WATER CONTROL BOARD FOR TEMPORARY REMOVAL AND REPLACEMENT OF OVERHEAD LINES OR PILES AT NO ADDITIONAL COST.
17. THE WORKING SHALL BE DONE BY LANDSCAPE TRACTOR OR BY SIMILAR EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THE INDICATED WORK.

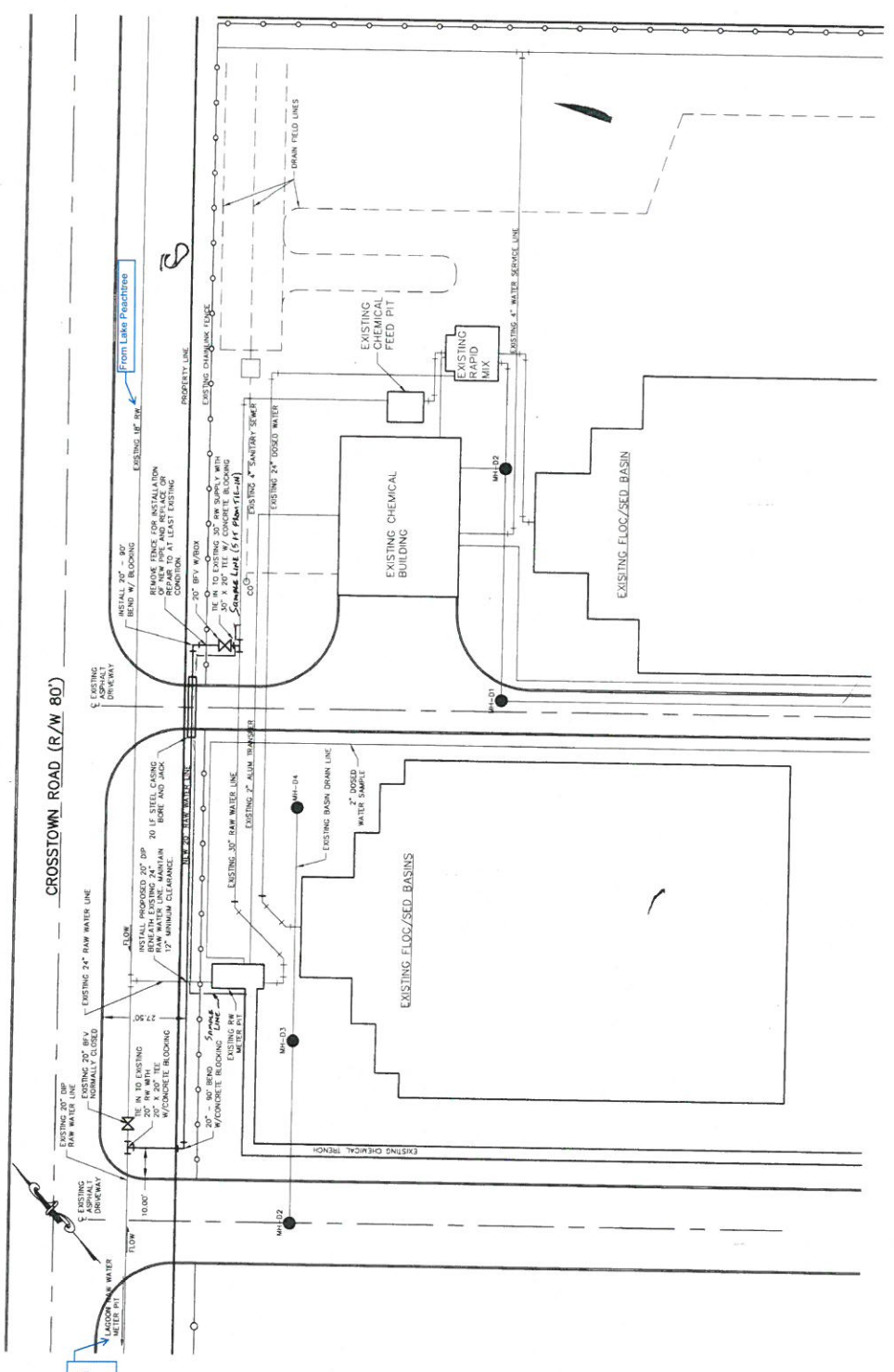


Mallet & Associates,
115-B BRANFORD SQUARE FAYETTEVILLE, GEORGIA
PHONE 776-79-3333
FAX 776-79-3377

CROSSTOWN TREATMENT PLANT
RAW WATER BODIES
MODIFICATIONS
FOR FAYETTE COUNTY WATER SYSTEM

MODIFICATIONS TO YARD PIPING

| | | | | |
|---------------------|-----------------|-----|-----------|----|
| LAND LOT - 53 & 54 | SECTION | PCS | SCALE | 1" |
| DISTRICT - 6P | DRAWN | PCS | DATE | 11 |
| SECTION - 000 | CHECK | DW | FILE NO. | 6 |
| CITY - FAYETTE CITY | APPROVED | JEU | SHEET NO. | |
| COUNTY - FAYETTE | STATE - GEORGIA | | | |

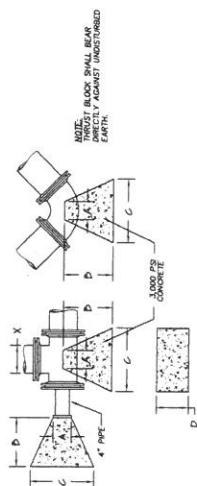


18. Raw Water Sample Lines
 Tapped five feet after the new holding pond raw water line tie-in. The new sample line connects to the existing sample line in the chemical pipe trench. The small valve outside the existing RW meter pit will shut off the water to the raw water sample spigot.

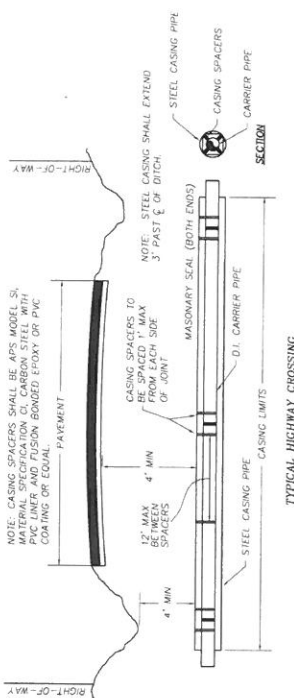


| REV. NO. | DATE | DESCRIPTION | BY | APP'D | STATE | GEORGIA |
|----------|------|-------------|----|-------|-------|---------|
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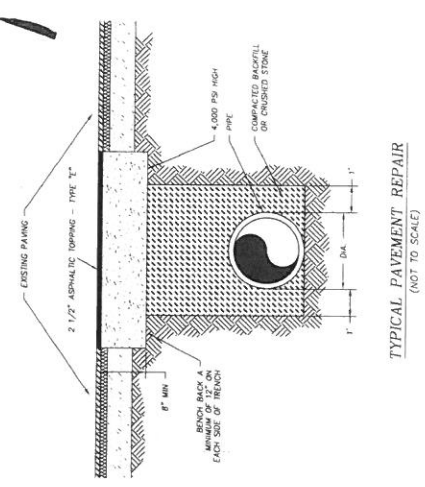
| BLOCKING DIMENSIONS | | | | | | | | | | | | |
|---------------------|--------|--------|-----------------|-------|-------|-------|-------|--------------|-------|-------|-------|-------|
| B | C | D | X | A | B | C | D | X | A | B | C | D |
| 3'-6" | 10'-4" | 10'-4" | 45° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 5'-9" | 9'-3" | 9'-3" | 30° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 7'-6" | 7'-6" | 7'-6" | 15° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 9'-0" | 9'-0" | 9'-0" | 7 1/2° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 10'-4" | 10'-4" | 10'-4" | 4 1/2° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 12'-0" | 12'-0" | 12'-0" | 2 1/4° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 14'-0" | 14'-0" | 14'-0" | 1 1/4° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 16'-0" | 16'-0" | 16'-0" | 3/4° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 18'-0" | 18'-0" | 18'-0" | 1/2° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 20'-0" | 20'-0" | 20'-0" | 1/4° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 22'-0" | 22'-0" | 22'-0" | 1/8° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 24'-0" | 24'-0" | 24'-0" | 1/16° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 26'-0" | 26'-0" | 26'-0" | 1/32° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 28'-0" | 28'-0" | 28'-0" | 1/64° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 30'-0" | 30'-0" | 30'-0" | 1/128° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 32'-0" | 32'-0" | 32'-0" | 1/256° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 34'-0" | 34'-0" | 34'-0" | 1/512° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 36'-0" | 36'-0" | 36'-0" | 1/1024° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 38'-0" | 38'-0" | 38'-0" | 1/2048° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 40'-0" | 40'-0" | 40'-0" | 1/4096° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 42'-0" | 42'-0" | 42'-0" | 1/8192° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 44'-0" | 44'-0" | 44'-0" | 1/16384° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 46'-0" | 46'-0" | 46'-0" | 1/32768° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 48'-0" | 48'-0" | 48'-0" | 1/65536° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 50'-0" | 50'-0" | 50'-0" | 1/131072° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 52'-0" | 52'-0" | 52'-0" | 1/262144° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 54'-0" | 54'-0" | 54'-0" | 1/524288° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 56'-0" | 56'-0" | 56'-0" | 1/1048576° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 58'-0" | 58'-0" | 58'-0" | 1/2097152° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |
| 60'-0" | 60'-0" | 60'-0" | 1/4194304° BEND | 2'-0" | 1'-0" | 1'-0" | 1'-0" | 11 1/4" BEND | 3'-0" | 3'-0" | 3'-0" | 3'-0" |



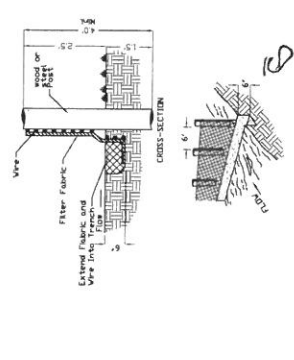
THRUST BLOCKING CHART
(NOT TO SCALE)



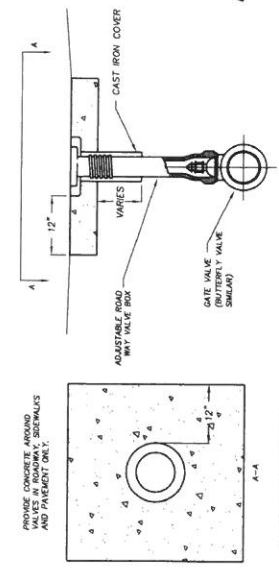
TYPICAL HIGHWAY CROSSING
(NOT TO SCALE)



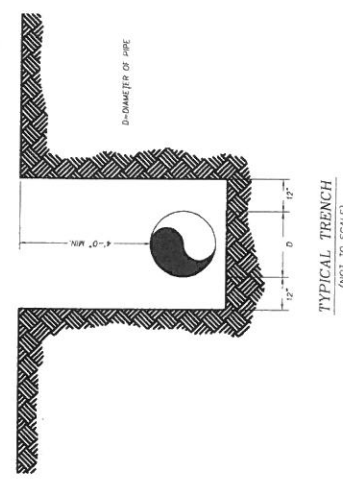
TYPICAL PAVEMENT REPAIR
(NOT TO SCALE)



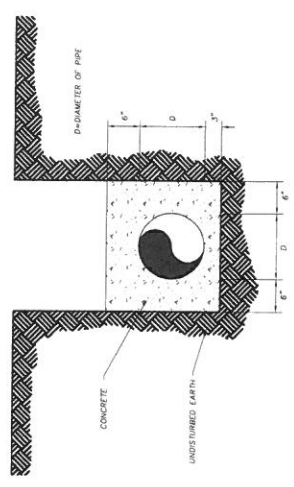
CONSTRUCTION OF A SILT FENCE
(NOT TO SCALE)



TYPICAL VALVE INSTALLATION
(NOT TO SCALE)



TYPICAL TRENCH
(NOT TO SCALE)



TYPICAL TRENCH WITH CASING
(NOT TO SCALE)

Mallet & Associates
115-B BRINDING SQUARE FAYETTEVILLE, GEORGIA
PHONE 778-233-3333
FAX 778-233-3333

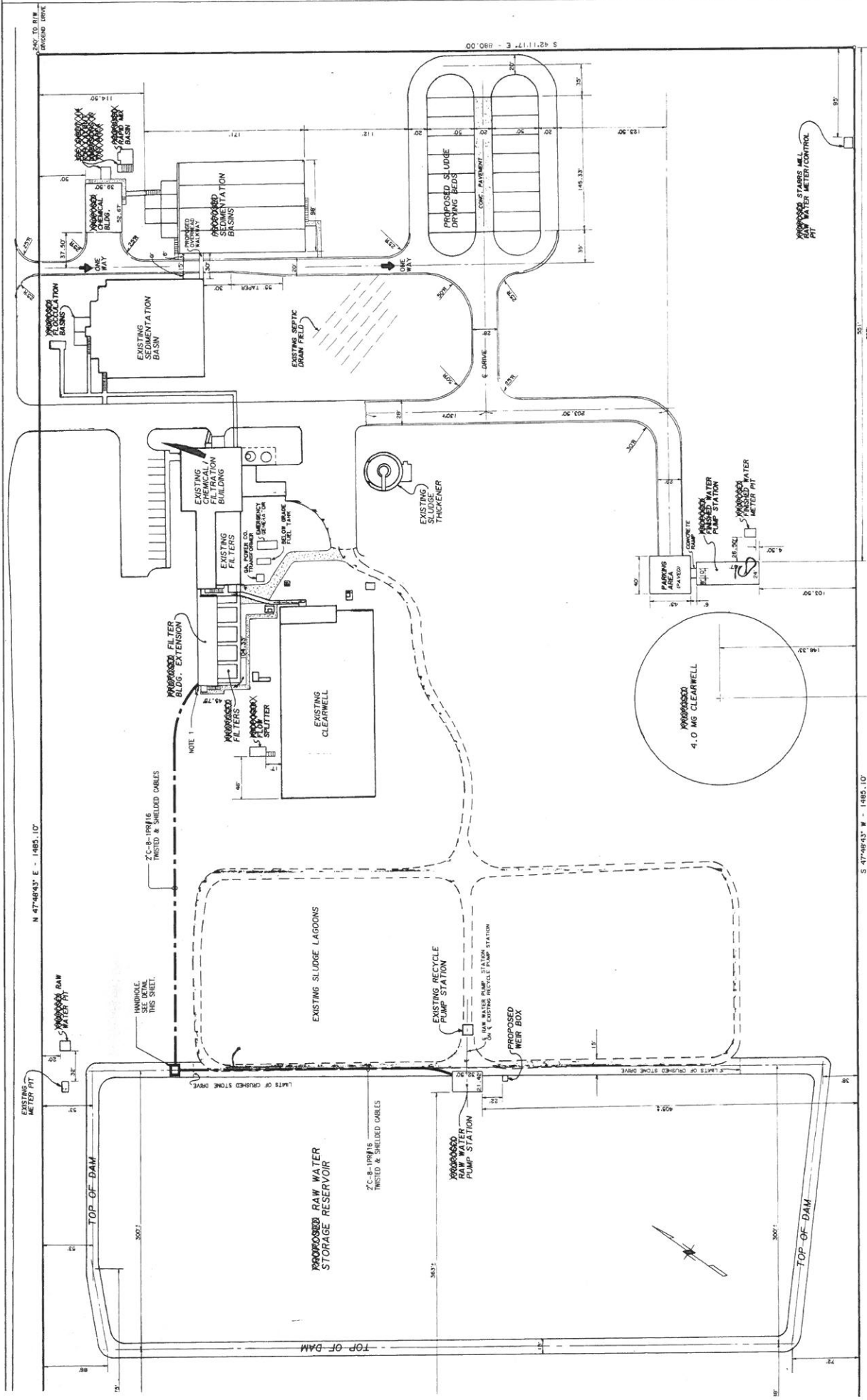
**CROSSTOWN TREATMENT PLANT
RAW WATER FLOW MODIFICATIONS
for FAYETTE COUNTY WATER SYST.**

PIPING DETAILS

| REV. NO. | DATE | DESCRIPTION | BY | APP'D | STATE | COUNTY | CITY | SECTION | DISTRICT | LAND LOT |
|----------|------|-------------|----|-------|---------|---------|---------|---------|----------|----------|
| | | | | | GEORGIA | FAYETTE | PEADRIE | XXX | 6TH | 53 & 54 |
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NOTES:
 1. PROVIDE A P
 PIPE GALLERY
 RIGID GALVAN
 CABLES FROM
 TO THE EXIS
 CONDUIT (40"
 250 FEET).



Mallett & Associates
 105-B BRIMFIELD SQUARE
 FAYETTEVILLE
 TEL: 770-791-3373
 FAX: 770-791-3373

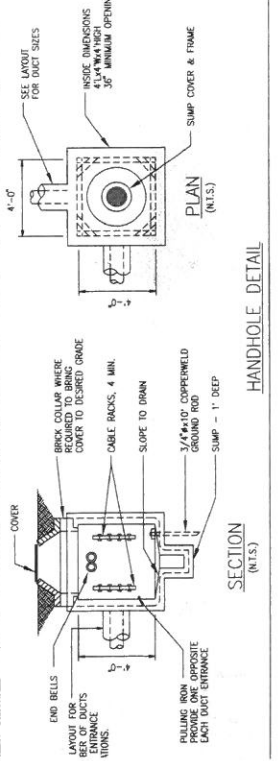
**CROSSTOWN TREATMENT PLANT
 RAW WATER FLOW MODIFICATION
 FOR FAYETTE COUNTY WATER SYSTEM**

ELECTRICAL SITE LAYOUT

| REV. | NO. | DATE | DESCRIPTION | BY | APP'D. | STATE | APPROVED |
|------|-----|------|-------------|----|--------|-------|----------|
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- HANDHOLE NOTES:**
- HANDHOLE WALLS, TOP FLOOR - 6" THICK CONCRETE. SUMP WALLS & FLOOR - 4" THICK CONCRETE. REMAINS TO BE MIN. 4" WALLS & FLOOR SHALL HAVE BARS @ 6" O.C. THE TOP SHALL HAVE BARS FROM DRIVING AND SPACING OF 4" O.C.
 - PROPOSE CONCRETE LEGS OUTSIDE WITH CAPS CORRESPONDING TO ALL SPARE CONDUITS WHICH END IN THE HANDHOLE/HANDHOLE. THESE SHALL BE ON THE OPPOSITE WALL OUTS WITH CAPS ON ALL THE WALLS.



HANDHOLE DETAIL

N 47°48'43" E - 1485.10'

S 47°48'43" W - 1485.10'

S 42°11'17" E - 890.00'

NOTES:

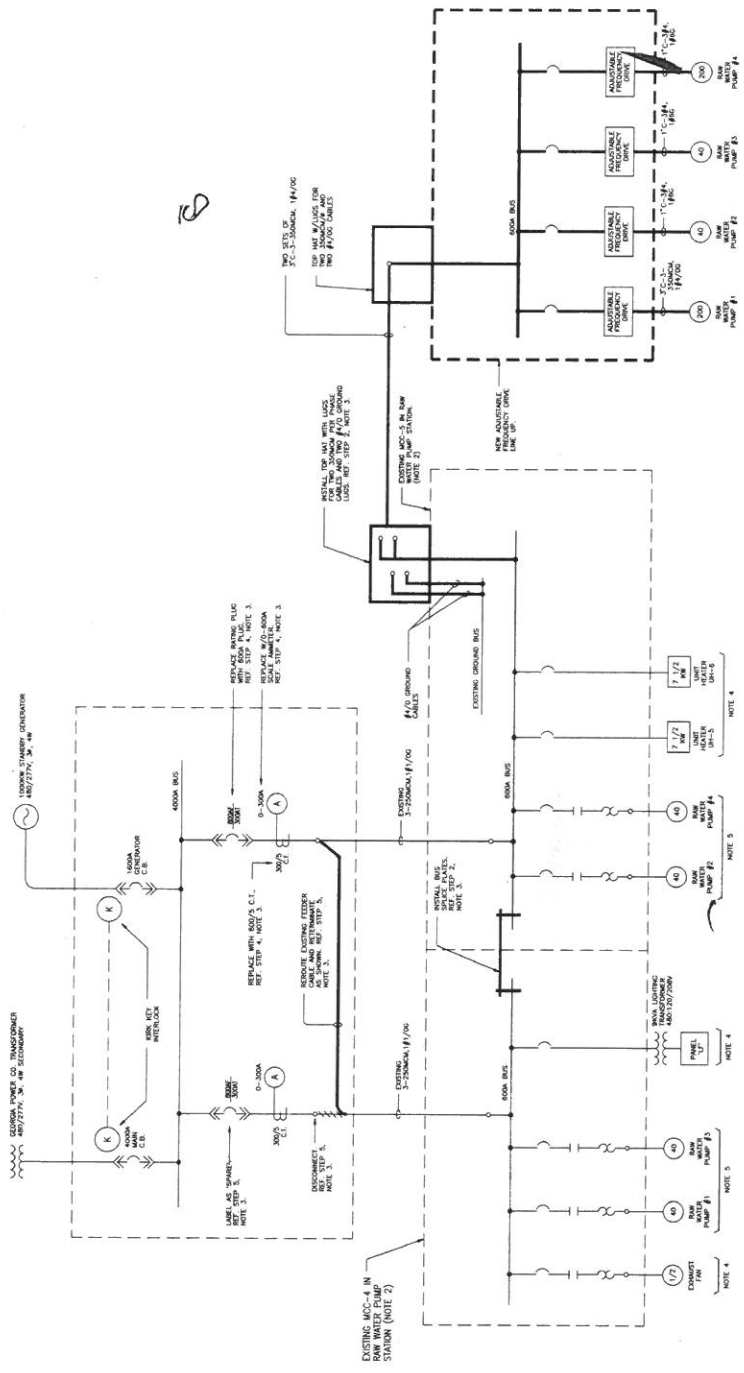
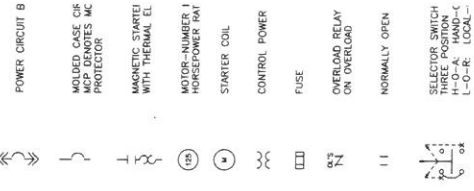
- ALL EXISTING EQUIPMENT AND CABLES ARE SHOWN IN LIGHT LINES. THE REQUIRED MODIFICATIONS ARE SHOWN IN HEAVY LINES.
- EXISTING MAIN SWITCHGEAR IS GENERAL ELECTRIC TYPE AND-8 WITH 1000V C.B. AND 600V C.B. IN GENERAL ELECTRIC TYPE 8000 CENTERS MCC-4 AND MCC-5 ARE GENERAL ELECTRIC TYPE 8000 (G.E. REQUISITION NO. 35197982 - ITEM 1 AND ITEM 2 RESPECTIVELY).
- POWER DISTRIBUTION MODIFICATION WORK SHALL BE CARRIED OUT IN THE STEPS BELOW:

- STEP 1** TURN THE FEEDER C.B.'S FOR MCC-4 AND MCC-5 TO THE OFF POSITION. COORDINATE THIS WITH THE OWNER.
- STEP 2** INSTALL BUS SPOOL PLATES PROCURED FROM GENERAL ELECTRIC TO MAKE THE 600A BUS FOR EXISTING MCC-4 & MCC-5 CONTINUOUS. DISCONNECT EXTENSION HARDWARE AND OTHER NECESSARY MATERIALS FROM GENERAL ELECTRIC AND INSTALL AS INDICATED.
- STEP 3** TURN THE FEEDER C.B. FOR MCC-4 'ON'. THIS FEEDER C.B. WILL TEMPORARILY POWER BOTH MCC-4 & MCC-5.
- STEP 4** REPLACE EXISTING C.T. METER AND METER PLUG WITH THE NEW COMPONENTS PROVIDED FROM GENERAL ELECTRIC.
- STEP 5** COORDINATE WITH THE OWNER FOR POWER OUTAGE TO RAW WATER PUMP STATION. TURN THE FEEDER C.B. FOR MCC-4 OFF AND DISCONNECT THE FEEDER FROM THIS C.B. AND TERMINATE ON THE MODIFIED MCC-5 C.B. PROVIDE ADDITIONAL LUGS FOR THIS CABLE. THE RAW WATER PUMP STATION WILL NOW OPERATE FROM THIS CIRCUIT BREAKER. LABEL THE MCC-4 C.B. AS 'SPARE'.
4. EXISTING LOADS SHALL CONTINUE TO OPERATE AS BEFORE.
5. THE RAW WATER PUMPS SHALL BE TRANSFERRED TO NEW ADJUSTABLE FREQUENCY DRIVES IN THE FOLLOWING SEQUENCE:

- RAW WATER PUMP #1
- RAW WATER PUMP #4
- RAW WATER PUMP #2
- RAW WATER PUMP #3

LABEL EXISTING STARTERS AS 'SPARE' AFTER ALL THE PUMPS ARE TRANSFERRED TO ADJUSTABLE FREQUENCY DRIVES.

LEGEND



PARTIAL SINGLE LINE DIAGRAM (NOTE 1)



**CROSSTOWN TREATMENT PLANT
RAW WATER FLOW MODIFICA
for FAYETTE COUNTY WATER**

E2

SINGLE LINE DIAGRAM & LE

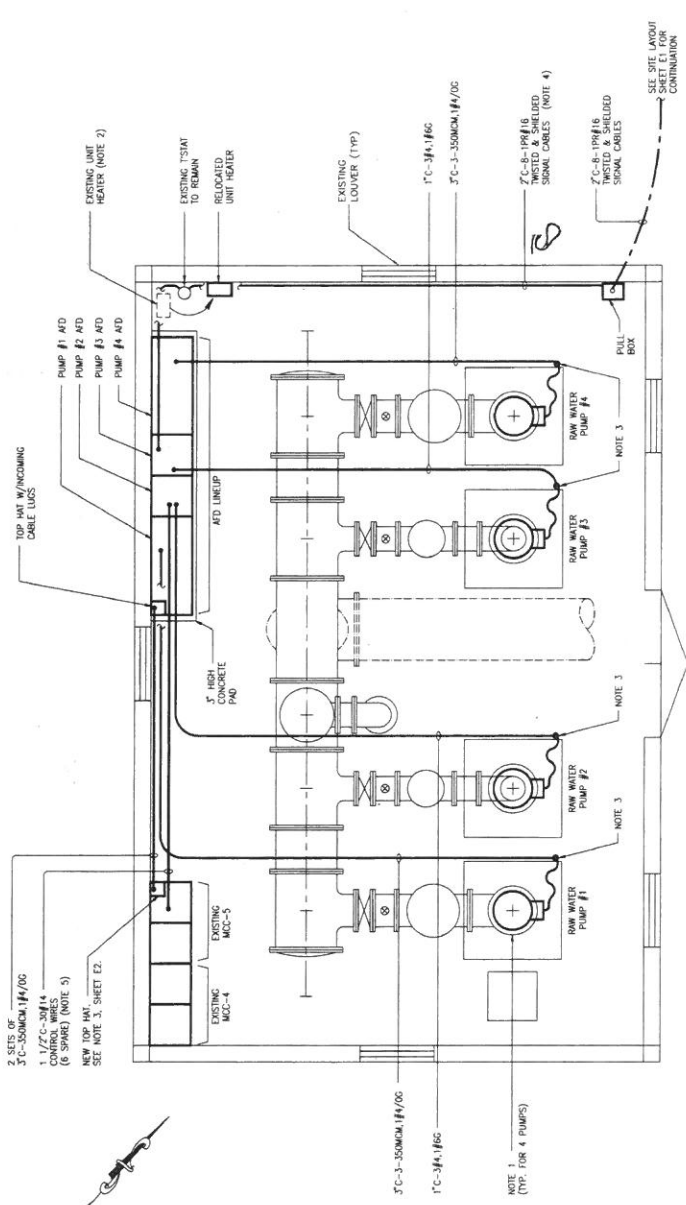
| | |
|---------------------|----------|
| DESIGN | SMK |
| DISTRICT - EPA | BRANN |
| SECTION - XXX | P18 |
| CITY - FAYETTEVILLE | CHECK |
| COUNTY - FAYETTE | SMK |
| STATE - GEORGIA | APPROVED |
| BY | APPTD |

| REV. No. | DATE | DESCRIPTION | BY |
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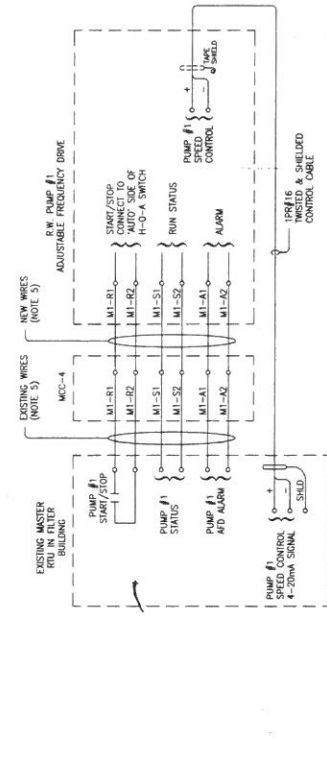


NOTES

- DISCONNECT AND REMOVE EXISTING CABLE MCC-4 & MCC-5 TO THE PUMP MOTOR.
 - RELOCATE EXISTING UNIT HEATER AND RE POWER & TEST CABLES.
 - DROP CONDUIT VERTICALLY DOWN AND CI MOTOR WITH FLEXIBLE CONDUIT, SUPPORT AND FROM PUMP CONCRETE FOUNDATION.
 - LEAVE 4-10R/16 CABLES COILED UP AN SPACE AT BOTH THE ENDS.
 - EXTEND CONTROL WIRES FROM EACH OF PUMP STARTER TO THE RESPECTIVE ADJUSTABLE FREQUENCY DRIVE FOR THE FOLLOWING:
 - 2F14 PUMP START/STOP CONTROL FR
 - 2F14 PUMP RUN STATUS TO SCADA
 - 2F14 PUMP AFD FAIL ALARM
- IDENTIFY EXISTING CONTROL WIRES FROM RTU TO THE STARTERS AND RELABEL AS TYPICAL SCHEMATIC DIAGRAM FOR THE ADJUSTABLE FREQUENCY DRIVE.



**ELECTRICAL LAYOUT
RAW WATER PUMP STATION**
3/8" = 1'-0"



**SCHEMATIC DIAGRAM
ADJUSTABLE FREQUENCY DRIVE
RAW WATER PUMP #1**
TYP. IDENTIFY PUMP OR MOTOR NUMBER
PREFIX FROM MAT TO MCC, AS & B4)

Mallett & Associates
115-B BRANDED SQUARE FAYETTEVILLE, GA
PHONE: 770-715-3332
FAX: 770-715-3333

CROSSSTOWN TREATMENT PLANT
RAW WATER ELECTRIC
for FAYETTE COUNTY WATER SYS

ELECTRICAL LAYOUT & DETAILS

| | | | |
|----------------------|------------------|--------|-------|
| LAND LOT - 53 & 54 | REGION | SNK | SCALE |
| DISTRICT - 61H | BRANN | PTB | DATE |
| SECTION - XXX | CITY | CHECK | FILE |
| CITY - PRADREBE CITY | COUNTY - FAYETTE | SNK | SHEET |
| STATE - GEORGIA | BY | APPR'D | |
| DESCRIPTION | | | |

