WADE R. FOWLER, JR., COMMISSIONER EVELYN O. SHAW, COMMISSIONER RONNA ROWE GARRETT, COMMISSIONER DONALD L. PORTER, COMMISSIONER MARION J NOLAND, INTERIM CEO/GENERAL MANAGER



FAYETTEVILLE PUBLIC WORKS COMMISSION 955 OLD WILMINGTON RD P.O. BOX 1089 FAYETTEVILLE, NORTH CAROLINA 28302-1089 TELEPHONE (910) 483-1401 WWW.FAYPWC.COM

October 31, 2022

TO: All Prospective Bidders

FROM: Trent Ensley, Procurement Manager

SUBJECT: ADDENDUM NO. 2 PWC2223018 – Big Rockfish Creek Out Fall – Contract 2

- 1. The Specifications and Bid Documents are hereby modified or clarified per the attached documents.
- 2. The foregoing changes or clarifications shall be incorporated in the original Bid Documents and a signed copy of this Addendum No. 2 shall accompany the bid to acknowledge the bidder's receipt and familiarly with the changes and/or clarifications.

TE:tke

Acknowledgement:

Company_____

By_____

Date_____

ADDENDUM 2

BIG ROCKFISH CREEK SANITARY SEWER OUTFALL CONTRACT 2

FAYETTEVILLE PUBLIC WORKS COMMISSION

FAYETTEVILLE, NORTH CAROLINA

LICENSED NORTH CAROLINA REGISTERED ENGINEERS

ENGINEER OF RECORD
SEAL O25490 SEAL O25490 SWGINEED HEAL WAR RSHITT
Oct 31 2022 12:23 PM

ADDENDUM NO. 2 October 31, 2022

FAYETTEVILLE PUBLIC WORKS COMMISSION BIG ROCKFISH SANITARY SEWER OUTFALL AND LIFT STATION ELIMINATION OUTFAL-CONTRACT 2 DIVISION OF WATER INFRASTRUCTURE PROJECT NO. CS-370434-15&16

NOTICE TO CONTRACTORS:

This Addendum shall become a part of the Contract Documents for the above project.

Each Contractor shall be responsible for notifying their subcontractors of the contents of this Addendum.

Receipt for all Addenda must be acknowledged in the Contract Documents that are submitted with the bid.

Modified or newly issued specifications contained in this Addendum shall supersede and shall take precedence over any conflicting information in the original specifications.

LIST OF ATTACHMENTS:

- 1. Attachment 1 Revised Bid Proposal
- 2. Attachment 2 Revised Section E: Well Abandonments/Relocations Requirements and Technical Specifications
- 3. Attachment 3-Appendix G-Site Investigations of Existing Wells to be abandoned and relocated
- Item 1:Replace the existing Bid Proposal in its entirety with the attached Bid Proposal in
Attachment 1. Bidders are instructed to discard all previous versions of the Bid Proposal.
Revisions include the addition of an electrical allowance to Part C Well
Abandonments/Relocations.
- **Item 2:** Remove and replace in its entirety "Item 10. Working Times" in Section 01000-Special Conditions with the following revised provision:

"For work within NCDOT Right-of-Way:

The Contractor shall comply with requirements provided by the relevant encroachment permits obtained for this project. NCDOT will permit working hours between 8:00 a.m. to 5:00 p.m. (Monday for Friday) for work contained in the Lakeview Drive, Lake Farm Road, and Mariners Landing Drive.

For all other work:

The Contractor shall be permitted to work to Monday through Friday, during normal business hours and additional hours as needed if permission is obtained from the

Fayetteville Public Works Commission. Regular working times shall not exceed 50 hours per week, 10 hours per day (between 7:00 a.m. and 5:00 p.m.), Monday through Friday. No Work, unless otherwise required due to an emergency or as authorized by the Fayetteville Public Works Commission, shall be performed after these times, on weekends, or on Holidays observed by the Fayetteville Public Works Commission without prior written approval from the Fayetteville Public Works Commission. Requests to work other than regular working times or legal Holidays must be submitted in writing to the Fayetteville Public Works Commission a minimum of two (2) business days in advance of the requested time. Requests shall only be approved if the Fayetteville Public Works Commission determines that the work is necessary in order to meet the contract completion date. The written request shall include a proposed schedule for the Work to be completed.

Legal holidays observed by the Fayetteville Public Works Commission include New Year's Day, Martin Luther King's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving (2 days), and Christmas (2 days).

For any authorized work beyond the regular working times, Inspector Overtime shall be charged at a rate of \$80.00 per hour. Should the contractor fail to obtain the required approval to work beyond the regular working times, Inspector Overtime will be charged at the rate of \$250.00 per 30-minute interval. The Fayetteville Public Works Commission's Project Coordinator shall be present at all times when the Contractor is approved to work beyond regular working times. The overtime charge will be deducted from the Contractor's pay application. Inspector overtime may be waived for circumstances beyond the Contractor's control, as deemed by the PWC Project Engineer or PWC Project Coordinator.

Should, during the course of construction, it become necessary to complete portions of the Work outside of the regular working times. The Contractor, The Fayetteville Public Works Commission, and any other applicable party will determine an acceptable schedule and any special parameters required for the Work. Payment for this work will be made at the contract price and no additional payment will be considered.

Should the Contractor be granted permission to work outside of the normal working times, Inspector Overtime will be charged as outlined above. Should the contractor fail to leave the site at the agreed upon time, Inspector Overtime will be charged at the unapproved rate as outlined above. The Contractor shall adhere to the time restrictions agreed to in the Project Engineer's approval of the request. The Contractor will be assessed a penalty of \$250 per 30-minute interval for any portion thereof, should the Contractor fail to leave the site at the agreed upon time. Inspector overtime will be charged during the approved hours, as outlined above. The penalty may be waived for circumstances beyond the Contractor's control, as deemed by the PWC Project Engineer or PWC Project Coordinator.

Should the Contractor fail to request approval or notify the owner and work outside of the normal working times, the Contractor will be assessed a penalty of \$250 per 30-minute interval for the total amount of time worked.

If the Contractor fails to properly complete activities within the times indicated or otherwise approved (7:00 a.m. and 5:00 p.m. or hours designated by the approved encroachment), PWC will issue a Non-Compliance Notice."

Item 3:Replace in its entirety Section E: Well Abandonments/ Relocations Requirements and
Technical Specifications. Bidders are instructed to discard all previous versions of Section
E.

Notable revisions include:

- Section 01000-Revision to Paragraph H-Water Supply Well System Installation-All plumbing from new well to point of entry into crawlspace and all electrical wiring from new well to existing electrical panel shall be new. No field splicing shall be allowed for electrical circuit. Water supply connection to existing plumbing in crawlspace shall be in accordance with local and state plumbing codes and by the use of an acceptable transition coupling.
- Section 01025 Measurement and Payment Replacement of Existing Residential Water Well Electrical System -Removal of electrical upfits; the intent of this item is to replace in kind the electrical circuit from existing electrical panel/circuit breaker to new well pump in accordance with all state and local electrical code
- Section 01025 Measurement and Payment Replacement of Existing Residential Water Well Plumbing System-Clarification that all replacement of existing water well appurtenances shall be located in new well enclosure unless these appurtenances are located elsewhere such as in the crawlspace. All water supply plumbing shall be new from point of entry into crawlspace to new well.
- Section 01025 Measurement and Payment-Addition of a Water Well Electrical Allowance established at \$50,000-Intent of allowance is to provide a contract mechanism to reimburse Contractor for any electrical betterment or upfit that is necessitated by the need to replace the electrical panel, increase breaker or circuit load/capacity or correct electrical code issues that otherwise would prevent new well system from being permitted and installed.
- **Item 4:** Insert Appendix G-Site Investigations of Existing Wells to be Abandoned and Relocated.

ATTACHMENT 1

00300 - BID PROPOSAL

TECHNICAL EVALUATION CRITERIA FORM PROJECT DOCUMENTATION					
(1) Permanent Name of Business:					
(2) Permanent address:					
(3) Length of Time in Business:					
(4) Has the organization operated under any other name?					
(5) State the names and/or companies financially interested in the proposal:					
 (6) Within the last five (5) years, has any officer or principal of the organization ever been an officer or principal of another organization when it failed to complete a construction contract? If yes, list name(s), and responsibility. 					
SEWI	ER MAIN EXPERIENCE				
(1) List not less than three (3) completed la to include the dates of such projects. Pl project should be from separate reference	ease provide all requested information	for each listed project. Each			
Project 1A:		Cost:			
Location:	Dates:	Size:			
Scope:	Client:	Phone:			
Project 1B:		Cost:			
Location:	Dates:	Size:			
Scope:	Client:	Phone:			
Project 1C:		Cost:			

Location:	Dates:	Size:
Scope:	Client:	Phone:
	I	
(2) A listing of three (3) large diameter sew information as stated in #1.)	er outfall projects of similar size, s	scope and cost. (Provide reference
Project 2A:		Cost:
Location:	Dates:	Size:
Scope:	Client:	Phone:
Project 2B:		Cost:
Location:	Dates:	Size:
Scope:	Client:	Phone:
Project 2C:		Cost:
Location:	Dates:	Size:
Scope:	Client:	Phone:
	I	
(3) List any subcontracting experience on la performed for this project. Please provi		s with specifics to the type of work
Project:		Cost:
Location:	Dates:	Size:
Work Performed:		
Project:		Cost:

Location:	Dates:	Size:
Work Performed:		
Project:		Cost:
Location:	Dates:	Size:
Work Performed:		
(4) List of projects in progress. Please prov Project:	ide all requested information.	Cost:
Owner:		
Percentage Complete:	Scheduled Completion D	Pate:
Project:		Cost:
Owner:		<u> </u>
Percentage Complete:	Scheduled Completion D	Pate:
Project:		Cost:
Owner:		
Percentage Complete:	Scheduled Completion D	Pate:
Project:		Cost:
Owner:		,
Percentage Complete:	Scheduled Completion D	ate:
Project:		Cost:

Owner:				
Percentage Complete:	Scheduled Completi	on Date:		
Project:		Cost:		
Owner:				
Percentage Complete: Scheduled Completion Date:				
PROJECT PER	SONNEL AND EXPERI	IENCE		
(1) The number of crews qualified and availa in this proposal:	able to perform the work sta	ted		
(2) The names of Bidder superintendents and crew leaders/foreman who are qualified and available to perform the work stated in this proposal:				
	Crew leaders/foreman:			
AD	DITIONAL ITEMS			
	s shall be submitted as att			
(1) Affidavit stating any OSHA violations oc(2) A statement provided by the Surety Com				
amount of work currently under bond.	pany stating the Didder's be	siding mint and a statement of the		
(3) A statement listing any judgments, claims organization or its officers.	s, arbitration proceedings, o	r suits pending or outstanding against		
(4) A statement listing any filed lawsuits, jud regard to construction contracts within th		proceedings, or suits pending with		
(5) The resumes or brief summary of key per responsible for the project.	sonnel of the organization.	Identify the person that will be primarily		
(6) List of equipment that is available for use	e on the subject project.			
The Owner may conduct such investigations/verifications as deemed necessary to establish the responsibility, qualification and financial ability of the Bidder. Should the Owner adjudge that the apparent low bidder is not the lowest responsive, responsible bidder by virtue of the above information furnished, said apparent low bidder will be so notified and its bid security shall be returned to it without prejudice. Failure or refusal to furnish any items of information requested by the Owner shall be considered as non-responsive and therefore, basis for rejection of the bid.				
Submitted By:		Date:		
Printed Name:		Title:		

BID PROPSAL

PROJECT IDENTIFICATION: BIG ROCKFISH CREEK SANITARY SEWER OUTFALL

CONTRACT IDENTIFICATION & NUMBER:

Bid Request: Big Rockfish Creek Sanitary Sewer Outfall and Camden Glenn Lift Station Elimination Outfall Contract 2 CS370434-15/16

THIS BID IS SUBMITTED TO:

Fayetteville Public Works Commission Attn: Tanya Hazlett, Procurement Advisor PWC Administration Building 955 Old Wilmington Road Fayetteville, North Carolina 28301

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into a Contract with OWNER in the form included in the Contract Documents to perform and furnish all Work specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Instructions to Bidders, including, without limitation, those dealing with the disposition of payment and performance bonds, and insurance certificates. This bid will remain open for one hundred twenty (120) days after the day of Bid opening. BIDDER will sign the Contract and submit the Contract Security and other documents required by the Contract Documents within ten (10) days after the date of receipt of the Notice of Award by the BIDDER.

3. In submitting this Bid, Bidder represents, as more fully set forth in the Contract, that:

a. BIDDER has examined copies of all the Contract Documents and addenda, receipt of which is acknowledged on the bid summary page.

b. BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules, and regulations) and the conditions affecting cost, progress of performance of the work and has made such independent investigations as BIDDER deems necessary.

c. BIDDER acknowledges that OWNER and DESIGN ENGINEER does not assume responsibility for the accuracy of dimensions or completeness of information and data shown or indicated in the Bidding Documents with respect to existing facilities.

d. BIDDER has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site of the Work (except underground facilities) and all drawings of physical conditions in or relating to existing surface or subsurface structures, pipelines, and utilities at or contiguous to the site are provided within these Contract Documents. Geotechnical Reports and other information regarding subsurface conditions are identified in the attached appendices and detailed in Article 4 of the General Conditions. BIDDER acknowledges that the OWNER and DESIGN ENGINEER does not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to underground facilities at or contiguous to the site of Work. BIDDER has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations investigations, explorations, tests, studies, and data that are necessary to identify and understand conditions (surface, subsurface, and underground facilities) at or contiguous to the site of Work or which relate to any aspect of means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. BIDDER waives all rights to claim that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the proper submission of

the Bid for the performance and furnishing of the Work in accordance with the Contract Time, Contract Price, and other terms and conditions of the Contract Documents.

e. BIDDER hereby certifies that, if awarded the Contract for construction of the Project, it will take all possible actions to minimize costs to the OWNER which are related to any disruptions in any part of the Work resulting from unforeseeable conditions which may be encountered and work changes or additions which may be made.

f. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, exploration, tests, studies, and data with the Contract Documents.

g. BIDDER has given OWNER written notice of all conflicts, errors, ambiguities, or discrepancies that BIDDER has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to BIDDER, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

h. By bidding in response to this invitation, the BIDDER represents that in the preparation and submission of this Bid, said BIDDER did not, either directly or indirectly, enter into any combination or arrangement with any person, firm or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1).

i. Bid form must be completed in blue or black ink or by typewriter. The Bid price of each item on the form must be stated in both words and numerals. In case of a conflict, words shall take precedence. Discrepancies in the multiplication of units of work and unit prices will be resolved in favor of the correct multiplication of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

j. BIDDER understands that the award of contract will be made on the basis of the total Bid amount which will be determined as the sum of the unit price and lump sum Bid Items.

k. BIDDER understands that quantities are estimated and are not guaranteed; they are solely for comparing Bids and establishing the total Bid amount. The Contract Price will be modified by Change Order, and final payment will be based on the quantities of work actually furnished and installed by the successful BIDDER.

- 1. BIDDER shall complete the Work for the prices indicated on the following pages.
- m. BIDDER shall complete the material price form as contained in Section 0300 to establish material price for PVC and DIP pipe materials and steel encasement as time of Bid and include authenticity of these prices with dated quote from the supplier. Failure to complete this form and furnish the supplementary bid documents may result in an unresponsive bid.

The BIDDER has received, acknowledged, and used the following addenda in completing the Bid. (Initial and Date as appropriate).

Addendum No. 1	Dated
Addendum No. 2	Dated
Addendum No. 3	Dated
Addendum No. 4	Dated

FAYETTEVILLE PUBLIC WORKS COMMISSION BIG ROCKFISH CREEK OUTFALL CONTRACT 2

BASE	BASE BID, PART A - Big Rockfish Creek Sanitary Sewer Outfall (Station from Sta. 116+89 to Sta. 264+64)						
ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price	
SITE I	PREPAR	ATION & ALLOWANCES					
1	1	Mobilization (less than or equal to 3% of Part A Bid) @lump sum	LS	1	\$	\$	
2	2	Traffic Control & Traffic Control Plan @lump sum	LS	1	\$	\$	
3	3	Allowance for "Third Party" Vibration Monitoring @lump sum	LS	1	\$ 50,000.00	\$ 50,000.00	
SANI		WER MAIN INSTALLATION					
4	7	Furnish and Install PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (Open Trench)					
		18-inch Sanitary Sewer					
4-a		8' - <10' Depth @per linear foot	LF	141	\$	\$	
4-b		10' - <12' Depth @per linear foot	LF	140	\$	\$	
4-c		12' - <14' Depth @per linear foot	LF	130	\$	\$	

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
4-d		14' - <16' Depth @per linear foot	LF	303	\$	\$
4-e		16' - <18' Depth @per linear foot	LF	529	\$	\$
4-f		18' - <20' Depth @per linear foot	LF	186	\$	\$
4-g		20' - <22' Depth @per linear foot	LF	40	\$	\$
5	5	Install "Owner Furnished" PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (Open Trench, Excluding Cost of Pipe)				
5	5	24-inch Sanitary Sewer				
5-a		8' - <10' Depth @per linear foot	LF	233	\$	\$
5-b		10' - <12' Depth @per linear foot	LF	679	\$	\$
5-c		12' - <14' Depth @per linear foot	LF	773	\$	\$
5-d		14' - <16' Depth @per linear foot	LF	609	\$	\$
5-e		16' - <18' Depth @per linear foot	LF	352	\$	\$
5-f		18' - <20' Depth @per linear foot	LF	427	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
5-g		20' - <22' Depth @per linear foot	LF	166	\$	\$
5-h		22' - <24' Depth @per linear foot	LF	30	\$	\$
6	N/A	Furnish PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (For Open Trench)				
6-a		24-inch Sanitary Sewer, New (Cost of Pipe Only) @per linear foot	LF	847	\$	\$
6-b	6	24-inch Sanitary Sewer, Transport Owner Furnished Pipe from Owner Storage Yard to Project Site @per linear foot	LF	2,422	\$	\$
7	8	Furnish and Install C900 PVC DR-18 Sewer Pipe (Open Trench)				
/	0	18-inch Sanitary Sewer				
7-a		0' - <8' Feet Depth @per linear foot	LF	213	\$	\$
7-b		8' - <10' Depth @per linear foot	LF	323	\$	\$
7-с		10' - <12' Depth @per linear foot	LF	586	\$	\$
7-d		12' - <14' Depth @per linear foot	LF	272	\$	\$
7-e		14' - <16' Depth @per linear foot	LF	325	\$	\$

Item No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
7-f		16' - <18' Depth @per linear foot	LF	91	\$	\$
8	8	Furnish and Install C900 PVC DR-18 Sewer Pipe (Open Trench)				
		24-inch Sanitary Sewer				
8-a		10' - <12' Depth @per linear foot	LF	193	\$	\$
8-b		12' - <14' Depth @per linear foot	LF	2,162	\$	\$
8-c		14' - <16' Depth @per linear foot	LF	380	\$	\$
8-d		16' - <18' Depth @per linear foot	LF	190	\$	\$
8-e		18' - <20' Depth @per linear foot	LF	151	\$	\$
8-f		20' - <22' Depth @per linear foot	LF	734	\$	\$
8-g		22' - <24' Depth @per linear foot	LF	205	\$	\$
8-h		24' - <26' Depth @per linear foot	LF	25	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
9	9	Furnish and Install Epoxy-Lined Class 250 Ductile Iron Sewer Pipe (Open Trench)				
		18-inch DIP Sanitary Sewer				
9-a		0' - <8' Depth @per linear foot	LF	121	\$	\$
9-b		8' - <10' Depth @per linear foot	LF	120	\$	\$
9-c		10' - <12' Depth @per linear foot	LF	33	\$	\$
9-d		12' - <14' Depth @per linear foot	LF	44	\$	\$
9-e		14' - <16' Depth @per linear foot	LF	17	\$	\$
10	9	Furnish and Install Epoxy-Lined Class 250 Ductile Iron Sewer Pipe (Open Trench)				
		24-inch DIP Sanitary Sewer				
10-a		0' - <8' Depth @per linear foot	LF	93	\$	\$
10-b		8' - <10' Depth @per linear foot	LF	187	\$	\$
10-c		14' - <16' Depth @per linear foot	LF	54	\$	\$
10-d		16' - <18' Depth @per linear foot	LF	96	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
11	10	Furnish and Install Class 250 Restrained Joint Epoxy-Lined Ductile Iron Sewer Pipe (Open Trench)				
		24-inch DIP Sanitary Sewer				
11-a		12' - <14' Depth @per linear foot	LF	731	\$	\$
11-b		14' - <16' Depth @per linear foot	LF	702	\$	\$
11-c		16' - <18' Depth @per linear foot	LF	678	\$	\$
11-d		18' - <20' Depth @per linear foot	LF	364	\$	\$
11-e		20' - <22' Depth @per linear foot	LF	252	\$	\$
11-f		22' - <24' Depth @per linear foot	LF	91	\$	\$
12	11	Furnish Steel Encasement Pipe installed by Guaranteed Encased Trenchless Crossing with RJ Epoxy lined DIP Class 250 Sanitary Sewer Carrier Pipe				
12-a		54-inch Steel Encasement Pipe installed by Guaranteed Trenchless Crossing with 24-inch Sanitary Sewer Carrier Pipe @per linear foot	LF	626	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
13	13	Furnish and Install Sewer Service Lateral				
13-a		PVC Sewer Service Lateral, 6-inch Diameter @per each	EA	2	\$	\$
SANI	SANITARY SEWER MANHOLES					
		Furnish and Install Precast Concrete Manhole				
14	15	Furnish and Install 4' Dia. Precast Concrete Manhole, Non-Traffic, CamLock Ring and Cover				
14-a		8' - <10' Feet Depth @each	EA	3	\$	\$
14-b		12' - <14' Depth @each	EA	2	\$	\$
14-c		14' - <16' Depth @each	EA	4	\$	\$
14-d		16' - <18' Depth @each	EA	5	\$	\$
15	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Non-Traffic, CamLock Ring and Cover				
15-a		10' - <12' Depth @each	EA	1	\$	\$
15-b		12' - <14' Depth @each	EA	4	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
15-c		14' - <16' Depth @each	EA	1	\$	\$
15-d		16' - <18' Depth @each	EA	1	\$	\$
15-e		18' - <20' Depth @each	EA	1	\$	\$
15-f		20' - <22' Depth @each	EA	2	\$	\$
15-g		22' - <24' Depth @each	EA	1	\$	\$
15-h		24' - <26' Depth @each	EA	1	\$	\$
16	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Traffic, Standard Ring and Cover				
16-a		8' - <10' Depth @each	EA	4	\$	\$
16-b		10' - <12' Depth @each	EA	5	\$	\$
16-c		12' - <14' Depth @each	EA	9	\$	\$
16-d		14' - <16' Depth @each	EA	4	\$	\$
16-e		16' - <18' Depth @each	EA	7	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
16-f		20' - <22' Depth @each	EA	1	\$	\$
16-g		22' - <24' Depth @each	EA	2	\$	\$
17	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Traffic, CamLock Ring and Cover				
17-a		10' - <12' Depth @each	EA	1	\$	\$
17-b		12' - <14' Depth @each	EA	2	\$	\$
17-c		14' - <16' Depth @each	EA	2	\$	\$
17-d		16' - <18' Depth @each	EA	2	\$	\$
17-e		20' - <22' Depth @each	EA	1	\$	\$
18	17	Furnish and Install Standard Manhole Vents @each	EA	9	\$	\$
19	18	Connect To Existing Manhole				
19-a		24-inch Diameter (Approx. Stat. 116+90, SSMH 45) @each	EA	1	\$	\$

2016Furnish and Install Inside DropImage: Construction of the second se	Price
20-a @per vertical VF 10 \$ \$ 21 20 Furnish and Install Anti-Microbial Admixture, Cementitious Base Coating and Polymeric Lining Image: Coating and Polymeric Lining	
21 20 Coating and Polymeric Lining Image: Coating and Polymeric Lining Image: Coating and Polymeric Lining 21-a 4-foot Inside Diameter per vertical VF 22 \$	
21-a @per vertical VF 22 \$	
21-b 5-foot Inside Diameter @	
22 19 Furnish and Install Manhole Insert Odor Control EA 3 \$ \$	
EROSION AND SEDIMENTATION CONTROL	
23 21 Furnish and Install Erosion and Sedimentation Control Devices LS 1 \$ \$	
24 22 Furnish and Install Anti-Seepage Collars	
24-a Compacted Clay on 18" C900 PVC each 10 \$ \$	

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
24-b		Compacted Clay or Placed Concrete on 18" DIP @each		1	\$	\$
24-c		Compacted Clay on 24" C900 PVC @each		19	\$	\$
25	23	Convert Temporary Construction Entrance to Permanent Access @each	EA	3	\$	\$
26	24	Furnish and Install Temporary Stream Crossing				
26-a		Stream S7 @each	EA	1	\$	\$
26-b		Stream S8 @each	EA	1	\$	\$
26-c		Stream S10 @each	EA	1	\$	\$
27	25	Furnish and Install Temporary Wetland Crossing				
27-a		Wetland 1/A @each	EA	1	\$	\$
27-b		Wetland 2 @each	EA	1	\$	\$
27-с		Wetland 18 @each	EA	1	\$	\$
27-d		Wetland 26 @each	EA	1	\$	\$
27-е		Wetland 27 @each	EA	1	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
27-f		Wetland 28 @each	EA	1	\$	\$
27-g		Wetland 29 @each	EA	1	\$	\$
27-h		Wetland B @each	EA	1	\$	\$
27-i		Wetland C @each	EA	1	\$	\$
28	26	Sod Grass Installation @per square foot	SF	450,430	\$	\$
29	27	Permanent Seeding				
29-a		Non-wetland Areas @per square foot	SF	112,608	\$	\$
29-b		Wetland Areas @per square foot	SF	151,905	\$	\$
INCID	ENTALS	, DEMOLITION AND RESTORATION				
34	29	Reconstruct NCDOT Maintained Residential Street (NOA)				
34-a		Lakeview Drive @per square yard	SY	4,400	\$	\$
34-b		Lake Farm Road @per square yard	SY	1,250	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
34-c		Mariner's Landing Drive @per square yard	SY	6,250	\$	\$
35	30	Mill and Overlay @per square yard	SY	1,155	\$	\$
36	32	Dirt Road Repair @per square yard	SY	1,195	\$	\$
39	33	Removal and Replacement of Concrete @per square yard	SY	915	\$	\$
40	31	Gravel Driveway Repair @per square yard	SY	287	\$	\$
41	38	Removal and Replacement Drainage Pipe				
41-a		15-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	560	\$	\$
41-b		18-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	48	\$	\$
41-c		24-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	144	\$	\$
41-d		48-inch Diameter Corrugated Plastic Pipe @per linear foot	LF	52	\$	\$
42	34	Undercut Pipe Trench And Replacement with No. 57 or 67 Stone for Pipe Foundation @per cubic yard	СҮ	1,000	\$	\$

ltem No.	Spec. 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
43	35	Removal of Unsuitable Material Excavation and Backfill with Select Material @per cubic yard	СҮ	27,000	\$	\$
44	36	Rock Excavation and Replacement with Select Backfill @per cubic yard	CY	150	\$	\$
45	37	Maintenance Stone (No Overage Allowed) @per square yard	SY	11,930	\$	\$
46	45	Replacement of Existing Water Service Connection (AQUA) @each	EA	22	\$	\$
47	39	Hydrostatic Pressure Testing of New 24-inch Sewer Pipe at Aerial Pipes, Pipes Near Private Wells and Pipes Crossing Wetlands @per linear foot	LF	7,017	\$	\$
48	39	Hydrostatic Pressure Testing of New 18-inch Sewer Pipe at Aerial Pipes, Pipes Near Private Wells and Pipes Crossing Wetlands @per linear foot	LF	2,101	\$	\$
				Subtotal-Pa	art A, Base Bid	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
SITE	PREPAR	ATION & ALLOWANCES				
1	1	Mobilization (less than or equal to 3% of Part A Bid) @lump sum	LS	1	\$	\$
2	2	Traffic Control & Traffic Control Plan @lump sum	LS	1	\$	\$
3	3	Allowance for "Third Party" Vibration Monitoring @lump sum	LS	1	\$50,000.00	\$50,000.00
SANI	TARY SE	WER MAIN INSTALLATION				
4	7	Furnish and Install PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (Open Trench)				
		18-inch Sanitary Sewer				
4-a		8' - <10' Depth @per linear foot	LF	141	\$	\$
4-b		10' - <12' Depth @per linear foot	LF	140	\$	\$
4-c		12' - <14' Depth @per linear foot	LF	130	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
4-d		14' - <16' Depth @per linear foot	LF	303	\$	\$
4-e		16' - <18' Depth @per linear foot	LF	529	\$	\$
4-f		18' - <20' Depth @per linear foot	LF	186	\$	\$
4-g		20' - <22' Depth @per linear foot	LF	40	\$	\$
5	5	Install "Owner Furnished" PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (Open Trench, Excluding Cost of Pipe)				
C	0	24-inch Sanitary Sewer				
5-a		8' - <10' Depth @per linear foot	LF	233	\$	\$
5-b		10' - <12' Depth @per linear foot	LF	679	\$	\$
5-c		12' - <14' Depth @per linear foot	LF	773	\$	\$
5-d		14' - <16' Depth @per linear foot	LF	609	\$	\$
5-e		16' - <18' Depth @per linear foot	LF	318	\$	\$
5-f		18' - <20' Depth @per linear foot	LF	340	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
5-g		20' - <22' Depth @per linear foot	LF	71	\$	\$
5-h		22' - <24' Depth @per linear foot	LF	-	\$	\$
6	N/A	Furnish PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (For Open Trench)				
6-a		24-inch Sanitary Sewer, New (Cost of Pipe Only) @per linear foot	LF	601	\$	\$
6-b	6	24-inch Sanitary Sewer, Transport Owner Furnished Pipe from Owner Storage Yard to Project Site @per linear foot	LF	2,422	\$	\$
_		Furnish and Install C900 PVC DR-18 Sewer Pipe (Open Trench)				
7	8	18-inch Sanitary Sewer				
7-a		0' - <8' Feet Depth @per linear foot	LF	213	\$	\$
7-b		8' - <10' Depth @per linear foot	LF	323	\$	\$
7-с		10' - <12' Depth @per linear foot	LF	586	\$	\$
7-d		12' - <14' Depth @per linear foot	LF	272	\$	\$
7-e		14' - <16' Depth @per linear foot	LF	325	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
7-f		16' - <18' Depth @per linear foot	LF	91	\$	\$
8	8	Furnish and Install C900 PVC DR-18 Sewer Pipe (Open Trench)				
		24-inch Sanitary Sewer				
8-a		10' - <12' Depth @per linear foot	LF	193	\$	\$
8-b		12' - <14' Depth @per linear foot	LF	2,162	\$	\$
8-c		14' - <16' Depth @per linear foot	LF	380	\$	\$
8-d		16' - <18' Depth @per linear foot	LF	190	\$	\$
8-e		18' - <20' Depth @per linear foot	LF	151	\$	\$
8-f		20' - <22' Depth @per linear foot	LF	734	\$	\$
8-g		22' - <24' Depth @per linear foot	LF	205	\$	\$
8-h		24' - <26' Depth @per linear foot	LF	25	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
9	9	Furnish and Install Epoxy-Lined Class 250 Ductile Iron Sewer Pipe (Open Trench)				
		18-inch DIP Sanitary Sewer				
9-a		0' - <8' Depth @per linear foot	LF	121	\$	\$
9-b		8' - <10' Depth @per linear foot	LF	120	\$	\$
9-c		10' - <12' Depth @per linear foot	LF	33	\$	\$
9-d		12' - <14' Depth @per linear foot	LF	44	\$	\$
9-e		14' - <16' Depth @per linear foot	LF	17	\$	\$
10	9	Furnish and Install Epoxy-Lined Class 250 Ductile Iron Sewer Pipe (Open Trench)				
		24-inch DIP Sanitary Sewer				
10-a		0' - <8' Depth @per linear foot	LF	93	\$	\$
10-b		8' - <10' Depth @per linear foot	LF	187	\$	\$
10-c		14' - <16' Depth @per linear foot	LF	54	\$	\$
10-d		16' - <18' Depth @per linear foot	LF	96	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
11	10	Furnish and Install Class 250 Restrained Joint Epoxy-Lined Ductile Iron Sewer Pipe (Open Trench)				
		24-inch DIP Sanitary Sewer				
11-a		12' - <14' Depth @per linear foot	LF	731	\$	\$
11-b		14' - <16' Depth @per linear foot	LF	696	\$	\$
11-c		16' - <18' Depth @per linear foot	LF	690	\$	\$
11-d		18' - <20' Depth @per linear foot	LF	371	\$	\$
11-e		20' - <22' Depth @per linear foot	LF	268	\$	\$
11-f		22' - <24' Depth @per linear foot	LF	99	\$	\$
12	11	Furnish Steel Encasement Pipe installed by Guaranteed Encased Trenchless Crossing with RJ Epoxy lined DIP Class 250 Sanitary Sewer Carrier Pipe				
12-a		54-inch Steel Encasement Pipe installed by Guaranteed Trenchless Crossing with 24-inch Sanitary Sewer Carrier Pipe @per linear foot	LF	835	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
13	13	Furnish and Install Sewer Service Lateral				
13-a		PVC Sewer Service Lateral, 6-inch Diameter @per each	EA	2	\$	\$
SANI	TARY SE	WER MANHOLES, LATERALS AND COATINGS				
		Furnish and Install Precast Concrete Manhole				
14	15	Furnish and Install 4' Dia. Precast Concrete Manhole, Non-Traffic, CamLock Ring and Cover				
14-a		8' - <10' Feet Depth @each	EA	3	\$	\$
14-b		12' - <14' Depth @each	EA	2	\$	\$
14-c		14' - <16' Depth @each	EA	4	\$	\$
14-d		16' - <18' Depth @each	EA	5	\$	\$
15	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Non-Traffic, CamLock Ring and Cover				
15-a		10' - <12' Depth @each	EA	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
15-b		12' - <14' Depth @each	EA	4	\$	\$
15-c		14' - <16' Depth @each	EA	1	\$	\$
15-d		16' - <18' Depth @each	EA	1	\$	\$
15-e		18' - <20' Depth @each	EA	1	\$	\$
15-f		20' - <22' Depth @each	EA	2	\$	\$
15-g		22' - <24' Depth @each	EA	1	\$	\$
15-h		24' - <26' Depth @each	EA	1	\$	\$
16	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Traffic, Standard Ring and Cover				
16-a		8' - <10' Depth @each	EA	4	\$	\$
16-b		10' - <12' Depth @each	EA	5	\$	\$
16-c		12' - <14' Depth @each	EA	9	\$	\$
16-d		14' - <16' Depth @each	EA	4	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
16-e		16' - <18' Depth @each	EA	7	\$	\$
16-f		20' - <22' Depth @each	EA	1	\$	\$
16-g		22' - <24' Depth @each	EA	2	\$	\$
17	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Traffic, CamLock Ring and Cover				
17-a		10' - <12' Depth @each	EA	1	\$	\$
17-b		12' - <14' Depth @each	EA	2	\$	\$
17-c		14' - <16' Depth @each	EA	2	\$	\$
17-d		16' - <18' Depth @each	EA	2	\$	\$
17-e		20' - <22' Depth @each	EA	1	\$	\$
18	17	Furnish and Install Standard Manhole Vents @each	EA	9	\$	\$
19	18	Connect To Existing Manhole				
19-a		24-inch Diameter (Approx. Stat. 116+90, SSMH 45) @each	EA	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
20	16	Furnish and Install Inside Drop				
20-a		Interior Drop Structure for Sewer Service Lateral, 6-inch Diameter @per vertical foot	VF	10	\$	\$
21	20	Furnish and Install Anti-Microbial Admixture, Cementitious Base Coating and Polymeric Lining				
21-a		4-foot Inside Diameter @per vertical foot	VF	22	\$	\$
21-b		5-foot Inside Diameter @per vertical foot	VF	285	\$	\$
22	19	Furnish and Install Manhole Insert Odor Control @each	EA	3	\$	\$
EROS		SEDIMENTATION CONTROL	-			
23	21	Furnish and Install Erosion and Sedimentation Control Devices @lump sum	LS	1	\$	\$
24	22	Furnish and Install Anti-Seepage Collars				
24-a		Compacted Clay on 18" C900 PVC @each		10	\$	\$
BIG ROCKFISH CREEK OUTFALL CONTRACT 2 00300 – BID PROPOSAL						

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
24-b		Compacted Clay or Placed Concrete on 18" DIP @each		1	\$	\$
24-c		Compacted Clay on 24" C900 PVC @each		19	\$	\$
25	23	Convert Temporary Construction Entrance to Permanent Access @each	EA	3	\$	\$
26	24	Furnish and Install Temporary Stream Crossing				
26-a		Stream S7 @each	EA	1	\$	\$
26-b		Stream S8 @each	EA	1	\$	\$
26-c		Stream S10 @each	EA	1	\$	\$
27	25	Furnish and Install Temporary Wetland Crossing				
27-a		Wetland 1/A @each	EA	1	\$	\$
27-b		Wetland 2 @each	EA	1	\$	\$
27-с		Wetland 18 @each	EA	1	\$	\$
27-d		Wetland 26 @each	EA	1	\$	\$
27-е		Wetland 27 @each	EA	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
27-f		Wetland 28 @each	EA	1	\$	\$
27-g		Wetland 29 @each	EA	1	\$	\$
27-h		Wetland B @each	EA	1	\$	\$
27-i		Wetland C @each	EA	1	\$	\$
28	26	Sod Grass Installation @per square foot	SF	450,430	\$	\$
29	27	Permanent Seeding				
29-a		Non-wetland Areas @per square foot	SF	112,608	\$	\$
29-b		Wetland Areas @per square foot	SF	151,905	\$	\$
INCID	ENTALS	, DEMOLITION AND RESTORATION				
34	29	Reconstruct NCDOT Maintained Residential Street (NOA)				
34-a		Lakeview Drive @per square yard	SY	4,400	\$	\$
34-b		Lake Farm Road @per square yard	SY	1,250	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
34-c		Mariner's Landing Drive @per square yard	SY	6,280	\$	\$
35	30	Mill and Overlay @per square yard	SY	1,155	\$	\$
36	32	Dirt Road Repair @per square yard	SY	1,195	\$	\$
39	33	Removal and Replacement of Concrete @per square yard	SY	915	\$	\$
40	31	Gravel Driveway Repair @per square yard	SY	287	\$	\$
41	38	Removal and Replacement Drainage Pipe				
41-a		15-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	560	\$	\$
41-b		18-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	48	\$	\$
41-c		24-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	144	\$	\$
41-d		48-inch Diameter Corrugated Plastic Pipe @per linear foot	LF	52	\$	\$
42	34	Undercut Pipe Trench And Replacement with No. 57 or 67 Stone for Pipe Foundation @per cubic yard	CY	1,000	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
43	35	Removal of Unsuitable Material Excavation and Backfill with Select Material @per cubic yard	CY	27,000	\$	\$
44	36	Rock Excavation and Replacement with Select Backfill @per cubic yard	CY	150	\$	\$
45	37	Maintenance Stone (No Overage Allowed) @per square yard	SY	11,930	\$	\$
46	45	Replacement of Existing Water Service Connection (AQUA) @each	EA	22	\$	\$
47	39	Hydrostatic Pressure Testing of New 24-inch Sewer Pipe at Aerial Pipes, Pipes Near Private Wells and Pipes Crossing Wetlands @per linear foot	LF	7,017	\$	\$
48	39	Hydrostatic Pressure Testing of New 18-inch Sewer Pipe at Aerial Pipes, Pipes Near Private Wells and Pipes Crossing Wetlands @per linear foot	LF	2,101	\$	\$
				total- Part A,	Alternate Base	\$
		tree Estates Sanitary Sewer & Camden Glen Lift Station Connecti ATION & ALLOWANCES	on			
1	1	Mobilization (less than or equal to 3% of Part B Bid) @lump sum	LS	1	\$	\$
2	2	Traffic Control & Traffic Control Plan @lump sum	LS	1	\$	\$
3	4	Lift Station Demolition - Camden Glen LS Abandonment @lump sum	LS	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
4	3	Allowance for "Third Party" Vibration Monitoring @lump sum	LS	1	\$5,000.00	\$5,000.00
SANI	TARY SE	WER MAIN INSTALLATION				
5	7	Furnish and Install PVC SDR-26 (Pipe Stiffness 115) Sewer Pipe (Open Trench)				
		8-inch Sanitary Sewer				
5-a		10' - <12' Depth @per linear foot	LF	36	\$	\$
5-b		12' - <14' Depth @per linear foot	LF	50	\$	\$
5-c		14' - <16' Depth @per linear foot	LF	23	\$	\$
5-d		16' - <18' Depth @per linear foot	LF	20	\$	\$
5-e		18' - <20' Depth @per linear foot	LF	78	\$	\$
5-f		20' - <22' Depth @per linear foot	LF	121	\$	\$
5-g		22' - <24' Depth @per linear foot	LF	52	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
6	10	Furnish and Install Class 250 Restrained Joint Epoxy-Lined Ductile Iron Sewer Pipe (Open Trench)				
0	10	8-inch Sanitary Sewer				
6-a		10' - <12' Depth @per linear foot	LF	5	\$	\$
	10	Furnish and Install Class 250 Restrained Joint Epoxy-Lined Ductile Iron Sewer Pipe (Open Trench)				
7		12-inch Sanitary Sewer				
7-a		8' - <10' Depth @per linear foot	LF	44	\$	\$
7-b		10' - <12' Depth @per linear foot	LF	15	\$	\$
8	11	Furnish Steel Encasement Pipe installed by Guaranteed Encased Trenchless Crossing with RJ Epoxy lined Class 250 DIP Sanitary Sewer Carrier Pipe				
8-a		36-inch Steel Encasement Pipe installed by Guaranteed Trenchless Crossing with 12-inch Sanitary Sewer Carrier Pipe @per linear foot	LF	411	\$	\$
9	12	Connect to Existing Sewer (Sheet C36A)				
9-a		8-inch Diameter @each	EA	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
10	14	Reconnect Existing Sanitary Sewer Service				
10-a		4" Sanitary Sewer Service @each	EA	1	\$	\$
SANIT	TARY SE	WER MANHOLES	•		•	
		Furnish and Install Precast Concrete Manhole				
11	15	Furnish and Install 4' Dia. Precast Concrete Manhole, Non-Traffic, Standard Ring and Cover				
11-a		8' - <10' Depth (Installation of Temporary Manhole - Sheet C36A) @each	EA	1	\$	\$
11-b		12' - <14' Depth @each	EA	1	\$	\$
12	15	Furnish and Install 4' Dia. Precast Concrete Manhole, Traffic, Standard Ring and Cover				
12-a		12' - <14' Depth @each	EA	1	\$	\$
12-b		18' - <20' Depth @each	EA	1	\$	\$
13	15	Furnish and Install 5' Dia. Precast Concrete Manhole, Traffic, Standard Ring and Cover				
13-a		18' - <20' Depth @each	EA	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
13-b		22' - <24' Depth @each	EA	1	\$	\$
14	17	Furnish and Install Standard Manhole Vents @each	EA	1	\$	\$
15	16	Furnish and Install Interior Drop Structure				
15-a		8-inch Diameter @per vertical foot	VF	14	\$	\$
WATE	R MAIN	INSTALLATION				
16	42	Remove and Replace 2-inch SDR-21 PVC Water Main @per linear foot	LF	40	\$	\$
17	44	Remove and Replace 2-inch Blow-off Assembly on SDR-21 PVC Water Main @each	EA	1	\$	\$
18	43	Furnish and Install 2-inch Ball Valve on Existing PVC Water Main (Cut-in Connection) @each	EA	1	\$	\$
19	46	Sterilization and Testing	LS	40	\$	\$
EROS	ION AND	SEDIMENTATION CONTROL				
20	21	Furnish and Install Erosion and Sedimentation Control Devices @lump sum	LS	1	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
21	26	Sod Grass Installation @per square foot	SF	18,750	\$	\$
INCID	ENTALS	, DEMOLITION AND RESTORATION	-			
22	28	Asphalt Pavement Patch (FAYPWC M.1&M.2) @per square yard	SY	115	\$	\$
23	30	Mill and Overlay @per square yard	SY	700	\$	\$
24	33	Concrete Curb Repair @per linear foot	LF	110	\$	\$
25	34	Undercut Pipe Trench And Replacement with No. 57 or 67 Stone for Pipe Foundation @per cubic yard	CY	25	\$	\$
26	35	Removal of Unsuitable Material Excavation and Backfill with Select Material @per cubic yard	CY	25	\$	\$
27	36	Rock Excavation and Replacement with Select Backfill @per cubic yard	CY	15	\$	\$
28	40	Remove Existing Manhole (Sheet C36A-Existing Sewer Manhole in cul de sac and Temporary Manhole) @each	EA	2	\$	\$
29	38	Removal and Replacement Drainage Pipe				
29-a		18-inch Diameter Reinforced Concrete Pipe @per linear foot	LF	20	\$	\$

ltem No.	Spec 01025 Ref. No.	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
30	41	Removal and Replacement Drainage Structures				
30-a		Curb Inlet Structures (Inclusive of connecting pipe) @each	EA	2	\$	\$
				Subtotal B	ase Bid, Part B	\$
PART		Abandonment/Relocation	T		· · · · · · · · · · · · · · · · · · ·	
ltem No.	Spec 01025 Ref. No	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
1	C1	Mobilization (Less than or Equal to 5% of the Total Bid Price) @ lump sum	LS	1		
2	C2	Traffic Control & Traffic Control Plan @ lump sum	LS	1		
3	C3	Erosion and Sedimentation Control & Erosion and Sedimentation Control Plan @ lump sum	LS	1		
4	C4	Clearing & Grubbing @per acre	AC	1		
5	C5	Fence Removal & Replacement @ per linear foot	LF	308		
6	C6	Well Abandonment @each	EA	13		

ltem No.	Spec 01025 Ref. No	Description	Unit	Estimated Quantities	Bid Unit Price	Bid Price
7	C7	Water Supply Well System Installation @each	EA	13		
8	C8	Furnish & Install Well House/Pumphouse @each	EA	13		
9	C9	Replacement of Existing Residential Water Well Electrical Systems @each	EA	13		
10	C10	Well Electrical System Upfits (Allowance)	ALLOW	1	\$50,000.00	\$50,000.00
11	C11	Replacement of Existing Residential Water Well Plumbing Systems @each	EA	13		
12	C12	Furnish & Install SOD (NOA) @per square yard	SY	3,325		
13	C13	Gravel/Soil Driveway Restoration @per square yard	SY	676		
Subtotal Base Bid, Part C						\$
Total Base Bid (Part A, Base + Part B, Base + Part C, Base)					\$	
Total Alternate Base Bid (Part A, Alternate Base + Part B, Base + Part C, Base)						\$

BID SUMMARY TOTAL PART "A" BIG ROCKFISH CREEK SANITARY SEWER OUTFALL (STA. 116+89 TO STA. 264+64)-BASE	\$
TOTAL PART "B" PEARTREE ESTATES SANITARY SEWER & CAMDE GLEN LIFT STATION CONNECTION-BASE	\$
TOTAL PART "C" WELL ABANDONMENT/RELOCATION-BASE	\$
TOTAL BASE BID	\$
TOTAL PART "A" BIG ROCKFISH CREEK SANITARY SEWER OUTFALL (STA. 116+89 TO STA. 264+64)-ALTERNATE BID	\$
TOTAL PART "B" PEARTREE ESTATES SANITARY SEWER & CAMDE GLEN LIFT STATION CONNECTION-BASE	\$
TOTAL PART "C" WELL ABANDONMENT/RELOCATION-BASE	\$
TOTAL BASE ALTERNATE BID	\$

The undersigned BIDDER certifies that it is a licensed as a Contractor under the applicable provisions of North

Carolina law regulating the practice of general contracting, and that its license number is_____

(License Number).

The undersigned BIDDER hereby agrees to accept an award of the Contract based on the Total Contract Amount

(Total bid amount for Parts A, B, and C as applicable) as accepted by the OWNER and as indicated on the Notice of Award.

4. BIDDER agrees that Work shall be completed within the time frame indicated in the Agreement as follows:

a. All work described herein to be complete, including restoration and all punch list items within $\underline{670}$ consecutive calendar days from the start date stipulated on the Notice to Proceed.

b. The BIDDER acknowledges that time is of the essence in this Contract and that the OWNER will suffer financial loss if the Work is not complete within the time specified in Paragraph 4.a above plus any extensions thereof allowed in accordance with Article 10 of the General Conditions. BIDDER also recognizes the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by the OWNER if the Work is not complete on time. Accordingly, instead of requiring any such proof, the OWNER and the CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) the CONTRACTOR shall pay the OWNER **<u>\$1,500.00</u>** per calendar day for each day that expires after the time specified in Paragraph 4.a, plus any proper time extension, until the Work is finally complete.

5. The following documents are attached to and made part of this bid:

a. Required Bid Security in the form of either a cashier's check or certified check or Bid Bond in the amount of 5% of maximum Bid price.

7. The terms used in this Bid which are defined in the General and Supplementary Conditions of the Contract Documents have the meanings assigned to them therein, which are incorporated by reference as if fully set forth herein.

8. An individual contractor is required to furnish his social security number and sole proprietorship, partnership and corporation are required to furnish their employer identification numbers to the PWC. Please indicate this information on this Bid Form as follows:

Social Security Number: _____

Federal Employer Identification Number:

SUBMITTED ON _____, 20___.

^{6.} Communications concerning this Bid shall be addressed to: (CONTRACTOR's Name, Address, Telephone Number and Email)

AN INDIVIDUAL

BY			(SEAL)
BY(Individual	's Name and Signature)		
Doing Business as:			
North Carolina Contractor Registration Nur	mber:		-
Business Address:			-
Phone Number:			-
Subscribed and sworn to before me this	day of	20	
NOTARY PUBLIC			
My Commission Expires:			
A PARTNERSHIP			
BY			(SEAL)
D1	(Firm Name)		<u>(61/11)</u>
(G	General Partner and Signature)		
North Carolina Contractor Registration Nur	mber:		
Business Address:			
Phone Number:			
Subscribed and sworn to before me this	day of	20	
NOTARY PUBLIC			

A CORPORATION OR OTHER LEGAL ENTITY

BY		_	
BY(Legal Entity Name)		(State of Incorpo	oration)
BY(Name and Title of Person Authorize			(SEAL)
(Name and Title of Person Authorize	ed to Sign and Signature)		
ATTEST:			_
North Carolina Contractor Registration Number:			_
Business Address:			
Phone Number:			_
Subscribed and sworn to before me this	day of	20	·
NOTARY PUBLIC			
My Commission Expires:			
<u>A JOINT VENTURE</u>			
BY			
(Name and Signate	ure)		
North Carolina Contractor Registration Number:			_
Business Address:			
Phone Number:			
Subscribed and sworn to before me this			
	au, or	20	·
NOTARY PUBLIC			
My Commission Expires:			

(Each joint venturer must sign. The name of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

BID BOND

This is a Bid Bond that is subject to the provisions of Article 3 of Chapter 44A of the North Carolina General Statutes.

This Bond is Executed on		_, 20
The name of the PRINCIPAL is		
-		
The name of the SURETY is		
The Fayetteville Public Works Com	mission is the OWNER	
The amount of the Bond is		
	(Dollars) (\$)

KNOW ALL MEN BY THESE PRESENTS, the Principal and Surety above named are hereby held and firmly bound unto the above named OWNER hereinafter called the OWNER in the penal sum of the amount stated above in lawful money of the United States, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the OWNER a certain Bid attached hereto and hereby made a part hereof to enter into a Contract in writing, for the construction of:

BIG ROCKFISH CREEK OUTFALL CONTRACT 2

NOW, THEREFORE

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

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

IN WITNESS WHEREOF, the Principal and the Surety have hereto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

ATTEST:

(Principal Secretary)		Principal	
(SEAL)	BY:	BY:	
	(Address))	
Witness as to Principal		Surety	
(Address)		(Address)	
ATTEST:			
N.C. Resident Agent (SEAL)			
Witness as to Surety			
(Address)			

- (1) Correct name of contractor
- (2) A Corporation, a Partnership or an Individual, as the case may be
- (3) If contractor is a Partnership, all partners should execute bond

POWER OF ATTORNEY (Attach)

LIST OF SUBCONTRACTORS

In compliance with the Instructions to Bidders and the Supplementary Conditions, the undersigned submits the following names of Subcontractors to be used in performing the Work.

The Bidder certifies that all Subcontractors listed are eligible to perform the Work and that all Subcontractors performing more than five percent of the work are listed.

Subcontractor's Work	Subcontractor's Name

Bidder's Signature

MATERIAL PRICE FORM

In compliance with the Instructions to Bidders and the Bid Proposal, the undersigned submits the following material price to be used in performing the Work.

The Bidder certifies that all material pricing is the basis of their bid and was utilized to calculate the bid pricing for PVC and DI piping and steel encasement.

Material Description**	Material Unit	Supplier/Vendor Name and Address	Date of Quote
6" SDR 26 PVC	LF	\$	
8" SDR 26 PVC	LF	\$	
8" C900 DR 18 PVC	LF	\$	
8" DI Class 51 Push On	LF	\$	
8" DI Class 51 Restrained Joint	LF	\$	
18" SDR 26 PVC PS 115	LF	\$	
18" C900 DR 18 PVC	LF	\$	
18" DI Class 51 Push On	LF	\$	
18" DI Class 51 Restrained Joint	LF	\$	
24" SDR 26 PVC PS 115	LF	\$	
24" C900 DR 18 PVC	LF	\$	
24" DI Pressure Class 350 Push On	LF	\$	
24" DI Pressure Class Restrained Joint	LF	\$	
30" Steel Encasement (ASTM A53) Wall Thickness 0.500"	LF	\$	
48" Steel Encasement (ASTM A53) Wall Thickness 0.500"	LF	\$	

**Bidder shall include authenticity of these prices with dated quote from the supplier.

Bidder's Signature

AFFIDAVIT OF ORGANIZATION AND AUTHORITY SWORN STATEMENT

STATE OF			
COUNTY OF			
on oath deposes and says that the Bidder on the at statements herein made are made on behalf of such B	tached B	id Form is organized a	
(Fill Out A	Applicable	Paragraph)	
1. CORPORATION			
The bidder is a corporation organized and existing units President is			
does have a corporate seal. The and bids for the company by action of its Board of D		is authorized	to sign construction contract
of which is hereto attached. (Strike out last sentence	if not app	licable.)	
2. PARTNERSHIP The Bidder is a Partnership consisting of			and
	_, partner	s doing business under t	he name of
4. OTHER The bidder is a and its duly authorized representative(s) is/are			f, who is/are authorized
to sign construction contracts and bids on behalf of th5. ADDRESSThe business address of the Bidder is as follows:	nis legal e	nuty.	
	_	Its phone number is	·
		Bidder By:	
Subscribed and sworn before me this	day of	,	20
Notary Public		County	
My Commission Expires:			

EQUAL EMPLOYMENT OPPORTUNITY ACKNOWLEDGEMENT

During the performance of this Contract the Contractor agrees as follows:

- a. The Contractor will not discriminate against any employee or applicant because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post in conspicuous of the nondiscrimination clause.
- b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contractual understanding, a notice to be provided, advising the labor union or worker's representative of the Contractor's commitments under the Equal Employment Opportunity Section of this Contract, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further OWNER Contracts.
- e. The Contractor will include the provisions of the section in every subcontract or purchase order unless exempted by rules, regulations or orders of the OWNER so that such provisions will be binding upon each Subcontractor or vendor.

(Use the following form for signatures by a Legal Entity):

Full Legal Name of the Entity

(Printed Name of Signer) (Title of Signer)

(Use the following form for signatures by an INDIVIDUAL):

BY:	(Seal)
-----	--------

WITNESS:

BY:

(THE ACKNOWLEDGEMENT OF THE ABOVE SIGNATURE MUST BE NOTARIZED USING THE FORM ON THE FOLLOWING PAGE)

(Use the following form for acknowledgement signature by an individual.)

NORTH CAROLINA

(Enter correct State and County if different than shown)

COUNTY

WITNESS my hand and notarial seal this _____ day of _____, 20____.

Notary Public

My commission expires ______(SEAL)

NONDISCRIMINATION CLAUSE

It is specifically agreed as part of the consideration of the signing of this Contract that the parties hereto named, their agents, employees or servants will not discriminate in any manner on the basis of age, handicap, race, color, creed, sexual orientation or national origin with reference to the subject matter of this Contract, no matter how remote.

This provision being incorporated for the benefit of the Fayetteville Public Works Commission and its residents may be enforces as set out in said ordinances, enforcement of this provision shall be by action for specific performance, injunctive relief, or other remedy as by reference to the subject matter of this Contract.

(Use the following form for signatures by a LEGAL ENTITY):

Full Legal Name of the Entity

By: _____ (SEAL)

(Printed Name of Signer), (Title of Signer)

(Use the following form for signatures by an INDIVIDUAL)

BY:_____

(Printed Name)

WITNESS:

(Printed Name)

NON-COLLUSIVE AFFIDAVIT

State of)
County of)
	Being first duly sworn, deposes and says that:
(1) He is the	of
	(Owner, Partner, Officer, Representative or Agent)
	The BIDDER that has submitted the
attached BID;	

- (2) He is fully informed respecting the preparation and contents of the attached BID and of all pertinent circumstances respecting such Bid;
- (3) Such BID is genuine and is not a collusive or sham BID;
- (4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other BIDDER, firm, or person to fix the price or prices in the attached BID or of any other BIDDER, or to fix any overhead, profit, cost elements of the BID price or the BID price of any other BIDDER, or secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Fayetteville Public Works Commission, or any person interested in the proposed Contract;
- (5) The price or prices quoted in the attached BID are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.

	BY:	
	ITS	
	(Tit	le)
Subscribed and sworn before me this	day of	20
	_My Commission expires	

(Notary Public)

F.T.A. CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned ______ certifies, to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq*.)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, ______, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, *apply* to this certification and disclosure, if any.

_____ Signature of Contractor's Authorized Official

_____ Name and Title of Contractor's Authorized

Official

_____Date

CERTIFICATION OF

REGARDING DEBARMENT, SUSPENSION AND OTHER MATTERS

The Primary Participant, ______ (major third party contractor), certifies to the best of its knowledge and belief, that it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- 2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction or records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- 4. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

(If the primary participant is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT _____ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET. SEQ. ARE APPLICABLE THERETO.

Signature

Title

Printed Name

Date

ATTACHMENT 2

01000-1 - SPECIAL PROVISIONS (Well Abandonment/Relocation)

<u>PART 1.</u>

1.01 <u>PURPOSE</u>

These Special Provisions are intended to supplement and amplify the requirements of these Contract Documents. Where any article or item of these Contract Documents are modified or deleted by this section, the remaining unaltered provisions of that article, paragraph, subparagraph, or clause shall remain in effect. In the event of a conflict, these Special Provisions shall take precedence.

1.02 <u>CUSTOMER SERVICE</u>

The Contractor is expected to make every effort to reduce the impact of their operation to Fayetteville Public Works Commission's (PWC) operation and maintenance of the water and sewer system, and the affected customers within the project area. Full cooperation and coordination with PWC personnel, other utilities, and customers is expected. It shall be expected that the Contractor will promptly respond to any concerns voiced by customers and/or PWC personnel and make every effort to resolve them immediately. Providing exemplary customer service shall be incidental to this Contract, and no additional payment will be made for this service. The Contractor shall coordinate with the property owner to ensure access to the property is not inhibited at any time. To reduce any inconvenience to the property owner, the Contractor shall ensure existing wells are not abandoned until proposed wells are installed and active.

1.03 <u>REPLACEMENT OF FENCING</u>

The Contractor is to replace any fencing disturbed as part of their operations for the work described within these Contract Documents. If fence removal is required during construction, PWC shall reimburse the Contractor for costs associated with removal and replacement of existing fencing. If temporary fencing is required, the Contractor shall provide such fencing as necessary, at no additional cost to the Owner. Temporary fencing shall be of chain link construction and shall be a minimum of six (6) feet in height. The Contractor is responsible to coordinate the fence removal and replacement for both the temporary and permanent placement with the property owner. Fences removed during construction activities shall be replaced using new materials which match existing and shall be constructed to the same height as existing to restore the fence to the original condition or better.

1.04 <u>PUBLIC CONVENIENCE</u>

A. CONTRACTOR'S DUTY AND OBLIGATION TO THE PUBLIC

The Contractor at all times shall conduct the work in such a manner as to ensure the least obstruction to traffic practicable. The convenience of the general public and of the residents and businesses along and adjacent to the street(s) shall be provided for in a satisfactory manner, consistent with the operation and local conditions. Costs for such work shall be incidental to the unit prices bid. The Contractor shall at all times cooperate with the public and merchants affected by the construction operations and shall maintain good public relations at all times.

The Contractor shall schedule and stage construction in a sequence to minimize disruption to the largest number of residents/businesses for the shortest period of time. Special considerations shall be given to the neighborhood solid waste and trash collection schedule, mail delivery, and bus routes, if applicable.

B. PUBLIC SAFETY

The Contractor shall barricade all work, roads, etc. to keep the public away from the construction. The Contractor shall provide protection to all portions of the Work when the work is not in progress. The Contractor shall provide and install all measures necessary to protect the public. Damage due to the lack of proper protection shall be the Contractor's sole responsibility.

The Contractor and subcontractors shall be responsible for any damage to any Owner's property, private property, or property owned by other utilities. The Contractor shall repair all damage to as good as or better than existing conditions. The Contractor and subcontractors shall be responsible for and pay any claims.

C. JOBSITE REQUIREMENTS

In addition to requirements outlined in these Contract Documents, the following are mandatory requirements that will be strictly enforced:

- Posted speed limits shall be strictly adhered to. No speeding.
- Driveways shall not be blocked without prior notification and coordination with the resident.
- To the maximum extent possible, one lane of traffic shall be maintained at all times.
- Excess soil, stone, equipment, materials, etc. in the road or along the right-of-way shall be removed at the end of each workday. Soil, stone, millings, pipe, etc., shall not be stored or stockpiled in the road right-of-way.
- Mailboxes and traffic signs shall be only removed as necessary to facilitate the installation of the Work and shall be reinstalled during the same day of removal. Any damages to mailboxes, signs or posts shall be repaired by the Contractor at no cost to the Owner.
- Contractor(s) shall not enter onto private property for the purpose of using water or electricity without the written permission of the property owner.
- The use of profane or abusive language or obscene gesturing by workmen will not be tolerated and will be just cause for immediate dismissal from the project site as directed by the Owner or its authorized representative.
- OSHA safety measures are to be maintained at all times.
- An English-speaking Contractor's representative is required for each separate work crew.
- Do not litter at any time.
- Respond to all complaints within 24 hours.
- Wear proper protective clothing (hard hats, shoes, shirts, etc). Personnel must wear an approved safety vest at all times while working on the Owner's project.
- The trench shall be completely backfilled at the end of each workday.
- If construction is temporarily halted during the workday, the open trench shall be manned continuously.
- Damage to sod and/or grass along the street right-of-way due to (but not limited to) temporarily stockpiled material, construction travel and other construction related activities shall be replaced with sod at the Contractor's sole expense.

<u>PART 2.</u>

2.02 <u>UTILITIES</u>

A. OWNERSHIP OF EXISTING UTILITIES

Existing utilities indicated on the Plans to be abandoned shall remain the property of the property owner. The Contractor shall be responsible for removing the existing utilities as noted on the plans and removing the material from the site unless otherwise directed by the property owner. The property owner shall have the right of first refusal regarding the salvage of the material.

B. CONSTRUCTION AROUND UTILITY POLES AND GUY WIRES

The Contractor will be required to perform construction work around utility poles and guy wires which shall be left in place within the construction limits of the project. The Contractor shall contact the owner of the utility to coordinate securing the poles during construction. It may be necessary for the Contractor to hire an electrical utility contractor to secure poles. All work outlined in this paragraph shall be at no additional cost to the Owner.

C. UTILITY COORDINATION

Whenever the property owner's use of the water must be interrupted by the Work, the Contractor shall notify the residents a minimum of 48 hours prior to service interruption. This notification shall be accomplished with door hanger notification cards placed at the addresses of the affected residents. Property owners shall be informed when service interruption takes place and the expected duration. To minimize the duration of interrupted water services, the Contractor shall not abandon/disconnect existing water service until the proposed well and water utilities are installed and ready to be activated.

D. PROTECTION OF EXISTING UTILITIES

The Contractor shall take every precaution to prevent damage to existing utilities. Any damage to existing utilities shall be replaced or repaired by the Contractor.

If existing utilities are damaged, the Contractor shall immediately notify the property owner and the Project Coordinator. The Contractor shall immediately commence repairs to the damaged utility in accordance with the property owner's requirements.

Any damage to the City of Fayetteville's storm drainage infrastructure shall be repaired in accordance with City of Fayetteville requirements within seven (7) business days after damage occurs. All costs associated with the required repairs shall be the responsibility of the Contractor, at no cost to the Owner.

E. SPILL RESPONSE

The Contractor shall not discharge or pump any sewage, solids, or debris on the ground, streets, storm water system, ditches, or streams. Any sewage spills shall be immediately reported to the North Carolina Department of Environment, Health, and Natural Resources, (919) 807-6308.

In the event that raw sewage is spilled, discharged, leaked or otherwise deposited in the open environment, due to the Contractor's work, the Contractor is responsible for any clean-up of solids and disinfection of the area affected. This work will be performed at the Contractor's expense with no additional cost to the Owner. The Contractor is also responsible for complying with all regulatory requirements in regard to the size spill with no additional cost to the Owner. The Contractor shall cooperate fully with the Owner and the applicable state agencies in responding to and cleaning up the spill. Any work completed by the Owner in responding to a spill caused by the Contractor's operations shall be billed to the Contractor.

F. DAMAGE TO EXISTING UTILITIES

If the Work is delayed as a result of damage to an improperly marked utility, the Contractor may request an extension of the Contract Time in accordance with these Contract Documents. Should the Contractor determine compensation for the delay is also warranted, the Contractor shall submit a claim to the utility owner. Adjustments to the Contract Price will not be made due to delays or additional work resulting from damage to existing utilities that are not properly located. If the Work is delayed as a result of damage to a properly marked utility, no additional Contract Time or compensation shall be granted.

G. CROSSING EXISTING OR PROPOSED UTILITIES

The Contractor shall conduct their operations so that the following requirements are adhered to:

- 1. Underground telephone, cable TV, and gas utilities or conduit banks shall be crossed maintaining a minimum of 12-inch separation or clearance.
- 2. Electrical crossings shall be performed while the conductor is de-energized and at all times in the presence of the utility owner. Electrical crossings shall be in accordance with NESC requirements. Electrical primary conductor crossings shall be as follows:
 - a. Crossing over a conductor, maintain a minimum of 12-inches of undisturbed soil encasing the conductor.
 - b. Crossing under a conductor shall be accomplished by boring, maintaining 12-inches of undisturbed soil encasing the conductor.

No separate payment shall be made for this work.

H. WATER SUPPLY WELL SYSTEM INSTALLATION

The Contractor shall enlist a licensed plumber and electrician licensed in the State of North Carolina to perform due diligence prior to completing the plumbing and electrical works improvements such that the following steps are completed for properties within the project boundary that require a well relocation. All verifications must be coordinated with PWC Project Coordinator minimum of two weeks in advanced to gain access and entry to residence crawlspace to inspect existing water supply appurtenances, including bladder tank, pressure switch, and piping, and interior of residence if inspection of main electrical panel is needed. Verification or condition assessment of existing conditions shall be coordinated closely with installation of new well and the expected new well pump size to verify required water supply and electrical power upgrade.

- 1. Verify current configuration of the water well system to confirm most effective water supply piping from relocated well to existing plumbing.
- 2. Verify ability to reuse existing pressure switch, bladder tank, etc. or if new appurtenances are needed to serve the property.

3. Verify electrical loading capacity of existing breaker and circuit from the residential control main electrical breaker panels to confirm it is acceptable to power new well pump. If a larger pump exceeding the acceptable load capacity of the existing circuit and breaker occurs, determine available load capacity of existing circuit and breaker to power new well pump. If the existing electrical system is acceptable and meets all current local and state electrical building codes, then complete wiring of new well pump utilizing existing buried circuit and acceptable buried, waterproof splice to new power wiring for new well pump.

For the basis of bid comparison and determination, Contractor is to price work based on the following:

- 1. Abandonment of existing wells as shown on the "Additional Services-Well Relocation on Lakeview Drive" Drawings
- 2. Install complete a new residential well as shown on the "Additional Services-Well Relocation on Lakeview Drive" Drawings
- 3. Connect new water supply pipe from new well to the crawlspace or home.
- 4. Connect new electrical circuit to the existing electrical panel and circuit breaker that meet all local and state building code requirements.
- 5. The Contractor shall coordinate, prepare, submit, and acquire all applicable building and inspection permits upon determination of the required plumbing and electrical improvements.
- 6. Should the verification determine that an existing electrical system is unacceptable and requires upgrades outside these boundaries or entails complete replacement of electrical circuit, circuit breaker replacement/upfit and/or other electrical upfits to meet required conditions and/or current code, the Contractor shall replace the electrical systems from limits as shown on Drawings to the residential structure as required. The method of measurement and basis of bid of electrical work should simply be replacement of power wiring from pump to breaker electrical panel. Any breaker upfit or additional upfits to the main panel will be verified based on a field adjusting directive and paid out of an allowance since these efforts will be dependent upon required well pump size and the possibility of substandard wiring, breakers, or other issues at the panel and that do not conform to code.
- 7. Should the verification determine that an existing plumbing system is unacceptable and requires upgrades outside these boundaries or entails complete replacement of water supply piping, pressure switch, bladder tank, piping, and any other incidentals to meet required conditions and/or current code, the Contractor shall replace the water supply system from limits as shown on drawings to the crawl space at residential structure as required.

The Contractor shall install water supply wells to comply with the following conditions necessary for approval of a variance as specified by 15A NCAC 2C .0118 (a)(1) and (2):

- 1. Grout will be required the entire length of the casing from land surface into gravel pack/confining layer.
- 2. The well shall be sampled for bacteria and inorganics.
- 3. No potential sources of groundwater contamination shall be stored near the well-head.
- 4. The well shall meet current 2C.0100 rules, including but not limited to being 12" above land surface, properly sealed, and adequately vented.

The Contractor shall install water supply wells in accordance with all other requirements and criteria of the Well Construction Standards, including but not limited to the requirements in 15A NCAC 2C .0113(b) to repair or to abandon any well which acts as a source or channel for the migration of contamination or to comply with any other applicable Federal, State, or local laws or regulations.

I. BUILDER'S RISK POLICY

The Contractor shall furnish Builder's Risk as specified in General Conditions 00700 (Article 1.03.A.4) for all well abandonment and relocation work.

2.02 <u>TESTING</u>

A. COMPLIANCE SAMPLING/TESTING

Following installation of wells, the Contractor will complete required sampling and analysis of groundwater collected from wells within 30 days after issuing a certificate of completion in accordance with Section .3800 15A NCAC 18A .3802. Water samples shall be collected from the sample tap at the well or the closest accessible collection point to the water source with a tap capable of being disinfected, provided the sampling point shall precede any water treatment devices. Samples shall be collected using aseptic sampling techniques for collection of coliform bacteria and sampling techniques and containers for chemical constituents following methods described in 40 Code of Federal regulations 143.4 Monitoring, which are incorporated by reference including any subsequent amendments, additions or editions. Samples for total coliform and fecal coliform bacteria shall be collected after the disinfectant agent has been flushed from the well and water supply system. The water shall be determined to be free of disinfectant before collection of samples for bacteria. Water samples shall be analyzed in the North Carolina State Laboratory of Public Health or a certified laboratory. Water samples shall be tested for total coliform bacteria, and if present, further analyzed for the presence of fecal coliform bacterial or E. coli. Water samples shall also be analyzed for arsenic, barium, cadmium, chromium, copper, fluoride, lead, iron, magnesium, manganese, mercury, nitrate, nitrite, selenium, silver, sodium, zinc, and pH.

2.03 <u>CONSTRUCTION REQUIREMENTS</u>

A. COORDINATION OF WORK

The Contractor shall maintain unobstructed access to all areas for other Contractors. The Contractor is required to conduct his operations in a manner that will not interfere with or damage work that is being performed by others. The Contractor shall coordinate his operations in a manner which will facilitate the progress of work in adjacent areas.

Any conflicts or interference that cannot be resolved through direct communication with other Contractors working on the site shall immediately be brought to the Project Engineer's attention for resolution. The Project Engineer's decisions regarding resolution of conflicts between Contractors shall be final and binding. The Contractor shall not claim extra compensation for delays caused by other Contractors unless such delays are clear violations of a prior coordination agreement facilitated by the Owner.

B. CONSTRUCTION FACILITIES

The Contractor shall be responsible for obtaining all temporary utilities required for construction at no additional cost to the Owner. The Contractor shall make all necessary arrangements for securing water for construction purposes. The Contractor shall contact the utility owner to obtain the necessary permit for the temporary water usage.

C. CLEANLINESS DURING CONSTRUCTION

The Contractor shall perform a daily clean-up of all dirt, debris, scrap materials and other items resulting from their operations. No open accumulation of refuse, surplus or scrap materials will be permitted. The Contractor shall legally dispose off-site all waste materials and other excess materials resulting from construction.

Failure of the Contractor to maintain a clean site, including streets, will be basis for the Owner to issue a written notice of non-compliance with the Contract. The Contractor shall comply with the notice within 24 hours or as directed. If the Contractor fails to comply, the Owner may authorize the cleanup to be performed by others and the costs shall be deducted from the Contractor's pay application.

D. RIGHTS-OF-WAY

The Contractor shall locate the limits of the rights-of-way, or property lines prior to beginning construction and shall not encroach beyond those limits. The Contractor shall be solely responsible for any damage to property resulting from failing to locate these limits prior to beginning construction.

E. RESPONSIBILITY FOR MATERIAL

All pipe, fittings, manholes, and other materials shall be inspected upon arrival at the job site by a competent superintendent before unloading to ensure that the quality of the materials conform to the specifications. All materials shall be subject to inspection by the County. Materials found to be defective shall be clearly marked and removed from the project.

F. WATER OUTAGES

The Contractor shall schedule, coordinate and sequence so new well installation and water supply connection results in minimum outage (less than 2 hours as specified herein) to customer.

The Contractor shall schedule a coordination meeting with the Project Coordinator and Project Engineer a minimum of three (3) working days prior to any proposed water outage. The coordination meeting shall be conducted prior to any notices being issued. The Contractor shall locate (vertically and horizontally) any utilities within the work area, in accordance with these Contract Documents. The locations of all utilities within the work area shall be determined prior to the coordination meeting. Any conflicts with the proposed work and the existing utilities shall be identified, and a plan for resolving the conflicts shall be presented to the Owner. The purpose of this coordination meeting is to ensure that the Contractor has a good understanding of the requirements related to the proposed outage, verify that there are no utility conflicts, discuss any

necessary contingency plans, and all equipment, materials, tools, and all other incidentals necessary to complete the work are on the project site in good working order. The Contractor shall also provide a proposed construction sequence to present to the Owner and/or the Project Engineer for approval. <u>The proposed construction sequence shall be developed with the intent to mitigate</u> the duration of water service interruption for the property owner.

Should, for any reason, the Owner deem that the Contractor is not prepared for the proposed outage, the outage notifications will not be distributed, and the outage shall be postponed a minimum of two (2) weeks. The Owner will provide written notification to the Contractor of this decision. No additional contract time will be granted for this delay. Should the Contract time expire within that two (2) week period, the Owner reserves the right to assess liquidated damages, as outlined in these Contract Documents.

Once the water outage notifications have been issued, a follow-up coordination meeting with the Project Coordinator and Project Engineer shall be held a minimum of 24 hours prior to the scheduled outage. The purpose of this meeting is to verify that the Contractor is prepared to proceed with the outage, and that all equipment, materials, tools, and all other incidentals necessary to complete the Work are on the project site and in good working order. If for any reason the Owner deems that the Contractor is not prepared, the outage shall be postponed, and all customers immediately notified of the cancellation. The outage shall be postponed a minimum of two (2) weeks. No additional Contract time will be granted for this delay. Should the Contract time expire within that two (2) week period, the Owner reserves the right to assess liquidated damages, as outlined in these Contract Documents.

The Contractor shall complete the required work and restore water service within two (2) hours following service interruption. Should the Contractor fail to complete the work within the allotted time, the Owner shall assess a penalty of \$500 per 15-minute interval or any portion thereof until water service is restored. This penalty will be deducted from the Contractor's pay application or be billed directly to the Contractor. The penalty may be waived for circumstances beyond the Contractor's control, as deemed by the Owner. The Project Coordinator and/or Project Engineer reserve the right to cancel or postpone the outage at any time, for any reason.

G. DISPOSITION OF SURPLUS PROPERTY

All property which is surplus to the needs of the project will remain or become the property of the Contractor, unless otherwise stated in these Contract Documents. All property belonging to the Contractor shall be removed from the project by the Contractor prior to final acceptance.

H. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until final acceptance by the Owner, the project site and all the Work shall be the responsibility of the Contractor. The Contractor shall take every precaution to prevent damage to the project site, Work, and the surrounding areas. It shall be the responsibility of the Contractor to address any damage or injury arising from their direct or indirect performance on this project. The Contractor shall be responsible for maintaining the project site at all times and ensuring that the Work is installed and maintained in accordance with these Contract Documents until accepted by the Owner. This paragraph does not supersede the requirements of the general warranty.

I. FINAL COMPLETION DOCUMENTATION

Prior to receiving final payment, the Contractor shall complete and/or provide the following:

- 1) Complete all punch list items to the satisfaction of the Project Engineer.
- 2) Satisfactorily resolve all customer complaints and obtain the required releases.
- 3) Provide project record drawings, in accordance with Submittals Section 01300;
- Provide well abandonment reports, well completion reports, and well water analytical records to the Cumberland County Health Department in accordance with NCAC Title 15A Subchapter 2C Section .0100; and
- 5) Provide project close-out submittals in accordance with Submittals Section 01300.

DIVISION I GENERAL REQUIREMENTS

01025-1 MEASUREMENT AND PAYMENT (Well Abandonment/Relocation)

GENERAL

A. The purpose of this Section is to define the methods of measurement and payment for each of the unit prices and/or lump sum prices listed in the Bid Form, which are required to construct the Work. Payment will be made based on completion in a satisfactory manner of the specified items included in the description in this Section for each Bid Item. Not all Work required, significant, or incidental, is identified in this Section or in the Bid Form. Where Work is shown on the Drawings and//or specified in the Contract Documents, but not specifically described in this Section or is incidental to or affiliated with the Work as described, the Work shall be deemed to be included in the value of the Work described in the Pay Items with which the Work is most closely associated. All Work so shown or specified is included in these payment items.

B. The unit price and/or lump sum price bid shall be full compensation for the work required under each bid item, which shall include all incidental costs relative thereto. Certain items of work are specified and/or shown as a detail in the Contract Documents and drawings; bid prices shall include all items of work required to furnish and/or install each in accordance with the Project requirements, whether specifically stated or itemized in the Measure and Payment description.

C. Certain bid items have been designated to conform to maximum payment widths and/or lengths and no additional payment therefore will be allowed unless otherwise approved by the Fayetteville Public Works Commission (PWC). These designated items will be as identified in the Bid Form, Technical Specifications and as may be indicated on the Drawings. The designation of these items of work shall be noted as "No Overage Allowed" or "NOA". Prospective bidders shall be responsible for verifying that the actual quantities of work are listed in the Bid Form prior to submitting bids and include all costs (regardless whether the Bid quantities are over or under the quantities indicated on the Drawings) in the unit price bid.

LUMP SUM PAYMENT ITEMS

C1 MOBILIZATION/ DEMOBILIZATION

A lump Sum Payment less than or equal to 5% of the Total Bid Price (to include all bonds, insurance, move on expenses, etc.) will be allowed for "mobilization" and "demobilization" as a progress payment line item. The actual cost of bonds and insurance (up to the maximum payment of 5%) will be considered in the initial payment request provided that cost documentation suitable to the PWC Project Engineer is furnished by the Contractor. Any outstanding balance of the mobilization and demobilization Pay Item will be payable when the Project is determined to be 10% complete as indicated by the approved progress payments (less cost of mobilization).

C2 TRAFFIC CONTROL & TRAFFIC PLAN

The lump sum prices bid under each PART in the Bid Form shall include all costs for the preparation and implementation of required traffic management plans, furnishing, installing and maintaining traffic control signage and devices, relocating or removing signs or other traffic control devices, replacement of street signs, replacement of traffic signal loops, and all other incidental work throughout the project site, throughout the project duration. The Contractor shall coordinate his activities so as to minimize disruption of traffic and inconvenience to residents and the general public. All such traffic control devices, signage, traffic patterns and road closures shall be approved by the City of Fayetteville and/or NCDOT. All traffic control measures outside of public right-of-way shall be approved by the PWC Project Engineer.

Payment under the lump sum prices shall be made as follows:

- (1) 25% of the Lump Sum Price when the Project work is 10% complete as indicated by approved progress payments.
- (2) 50% of the Lump Sum Price when the Project is 50% complete as indicated by approved progress payments.
- (3) 100% of the Lump Sum Price when the Project is 80% complete as indicated by approved progress payments.

Prospective bidders are advised that failure to provide and maintain adequate traffic control devices and/or signage may result in the Project Engineer's refusal to make payment until corrective measures are in place. Improper signage and/or traffic control devices will not be allowed. The City of Fayetteville, NCDOT, and/or the Fayetteville Public Works Commission reserves the right relocate and/or remove such non-conforming signs and devices, setup proper signage to ensure public safety and deduct all costs for these items which may be incurred by the Owner. The Contractor shall make no claim for such work performed.

C3 EROSION AND SEDIMENTATION CONTROL

The lump sum prices bid under the applicable PARTs in the Bid Form bid for erosion and sedimentation control shall include all costs for furnishing, erecting, maintaining and removing silt fence, temporary sedimentation control devices, and any other erosion control devices shown or as may be required by the appropriate regulatory agencies throughout the project site, throughout the project duration. No additional payment will be made for removal of soil and debris from drainage structures, features, or reconditioning grading that is part of the normal maintenance activities associated with the approved erosion control plan. No additional payment shall be made for any other work due to inadequate or improperly maintained measures.

Prospective bidders are advised that erosion and sedimentation control will be strictly enforced, and any failure to conform to required standards is considered a right precedent to the Owner to deny payment. Additional measures required by the North Carolina Department of Environmental Quality (NCDEQ) shall not be cause for change in the lump sum price bid. Bidders shall make themselves aware of all NCDEQ regulations and requirements. The Contractor shall be responsible for all fines levied due to improper erosion and sediment control measures to include all costs incurred by City of Fayetteville and/or Fayetteville Public Works Commission necessary to bring a non-conforming site into compliance.

The lump sum price bid shall include all costs necessary for the Contractor to comply with the requirements of the NPDES permit that is associated with the approved erosion control permit. Such activities include but are not limited to installation and maintenance of rain gauges, completing the required inspection reports, posting the permit and reports on the project, and furnishing copies of the inspections reports to the Owner.

Payment under the lump sum prices bid for each PART shall be made monthly as indicated in the Contractor's schedule for the substantial completion of all work under this Contract. In no case, shall the monthly payment exceed ten (10) percent of the lump sum prices bid without the approval of the Owner.

UNIT PRICE ITEMS

C4 <u>CLEARING AND GRUBBING</u>

The unit price bid per acre shall include the costs for felling trees, stump removal and disposal off-site, cutting trees in pulpwood length and stacking within limits of disturbance (LOD) if required, disposing of all trimmings, removing and disposing off-site all logs, branches, trunks, root mats, brush, vegetation, debris from clearing and grubbing operations and all other incidental materials not to be re-used in the work. Areas containing and requiring cutting and removal of weeds, grass, grain annual or perennial plants, or saplings less than one inch in diameter shall not be measured and paid for as clearing and grubbing. Payment shall be based on the horizontal area cleared and grubbed as designated on the plans or as directed by the Owner. Measurement will be made to the nearest one hundredth of an acre.

The unit price bid per acre.

C5 <u>FENCE REMOVAL & REPLACEMENT</u>

The unit price bid per linear foot shall include the cost associated with removal and replacement of existing residential property fence as needed to gain necessary access to the existing and proposed well locations. If fence removal is required during construction, PWC shall reimburse the Contractor for costs associated with removal and replacement of existing fencing. If temporary fencing is required, the Contractor shall provide such fencing as necessary, at no additional cost to the Owner. Fences shall be removed and replaced, using new materials as required, to restore the fence to the original condition or better.

C6 <u>WELL ABANDONMENT</u>

Payment under this item shall include all costs to abandon existing wells in accordance with NCDEQ requirements. Work shall include, but not limited to, chlorinating the well before sealing, perforating the well casing, filling the well with cement, grout, bentonite, and or gravel, furnishing all necessary records to NCDEQ, furnishing all records and confirmations of receipt of records by NCDEQ to the Owner, removal and disposal of the existing well house/pumphouse, removal and disposal of piping, removing the pump and providing it to the property owner, disconnecting any electrical components from the power source to the well

pump, disconnecting and plugging existing plumbing, and properly disposing of waste generated during well abandonment activities, and any other incidentals necessary to complete the work.

Abandoned wells are to be sealed at locations shown in the contract or as directed. Perform all work in accordance with NCDEQ requirements. Contractor shall utilize a Well Contractor that is certified by the State of North Carolina to perform abandonment. Prior to commencing clearing and grubbing in the easement, the Contractor shall inspect the area to determine if there are any wells within the clearing limits. The well shall be inspected from land surface to the entire depth of the well before it is sealed to ensure freedom from obstructions that may interfere with sealing operations. Before sealing, place chlorine in the well in sufficient quantities to produce a chlorine residual of at least 100 milligrams per liter in the well. All casing and screen materials may be salvaged except casing that is cemented in place. In the case of gravel-packed wells in which the casing and screens have not been removed, perforate the casing opposite the gravel pack at intervals not exceeding 10 feet. Completely fill bored wells with cement grout or dry clay compacted in place. Completely fill wells constructed in unconsolidated formations with cement grout by introducing it through a pipe extending to the bottom and raising it as the well is filled. Fill wells constructed in consolidated rock formations or that penetrate zones of consolidated rock to at least 5 feet below the top of the consolidated rock with sand, gravel, or grout opposite the zones of consolidated rock. Fill the remainder of the well with cement grout. Complete a certified well abandonment record (Form GW-30) and submit to the Owner and to NCDEQ.

C7 <u>WELL INSTALLATION</u>

Payment under this item shall include all costs to install proposed wells in accordance with NCDEQ requirements. Work shall include but not limited to all materials, labor and tools for drilling and installing the screened well including the well screen and casing, sand filter pack, bentonite, and grout or rock well including casing into competent rock and rock bore to yielding strata; well development which includes purging groundwater from newly installed wells to remove sediment until discharge is clear and free of sediment; furnishing all necessary records to NCDEQ; furnishing all records and confirmations of receipt of records by NCDEQ to the Owner; installation/connection of piping, fittings, valves, sample taps, hose bibs, manual pressure gauges, fasteners, gaskets, and pipe supports; furnishing all electrical components from the power source to the well pump, pump controllers, motor drives, sensors, and accessories utilizing existing buried circuit and acceptable buried, waterproof splice to new power wiring for new well pump; installing/connecting plumbing; containerization and proper disposal of all waste generated during well installation activities; and any other incidentals necessary to complete the work.

Piping within wells to include all ductile iron pipe and PVC pipe for raw and treated water.

Cost shall also include associated sampling and analysis of groundwater collected from wells within 30 days after issuing a certificate of completion in accordance with Section .3800 15A NCAC 18A .3802.

C8 <u>Furnish and Install Well House/Pump House</u>

Payment under this item shall include all costs to install well house/pumphouse; including heat trace wire or heat bulb for freeze protection if existing bulb is present; and any other incidentals necessary to complete the work. Well House/Pump House should match existing well house that is being replaced.

C9 Replacement of Existing Residential Water Well Electrical System

Payment under this item shall include all costs to replace the existing residential water well electrical system including electrical circuit wire/cable, circuit breaker replacement to meet required conditions and any other incidentals necessary to complete the work per State Requirements and Electrical Code.

C10 Well Electrical System Upfits (Allowance)

Payment under this item shall include all costs to upfit and/or replace the electrical panel. Any breaker upfit or additional upfits to the main panel will be verified based on a field adjusting directive and paid out of an allowance since these efforts will be dependent upon required well pump size and the possibility of substandard wiring, breakers, or other issues at the panel and that do not conform to code. All work shall be completed per State Requirements and Electrical Code.

Payment under this item shall be defined by General Condition Section 0700 Paragraph 9.02.

All invoices for electrical work shall be included for reimbursement to the Contractor. Any and all remaining allowance will be deducted from the Final Contract Price at time of final payment.

C11 Replacement of Existing Residential Water Well Plumbing System

Payment under this item shall include all costs to replace existing residential water well plumbing system including pressure switch, bladder tank, piping, and any other incidentals necessary to complete the work per State Requirements and Plumbing Code.

Payment for the plumbing should be assumed to be replaced from the existing residential well location to the crawlspace.

C12 SOD (NO OVERAGE ALLOWED)

Payment for placing sod as indicated on the drawings or as directed by the Project Coordinator or Project Engineer shall be made at the unit price bid per square yard listed in the Bid Form. Payment shall include grading, fine raking, sod bed preparation, pest and disease control, soil amendments, placing sod, anchoring, fertilizing, maintaining, protection of turf areas, removal and replacement of dying sod and watering to ensure growth. No payment will be made for sodding outside Limits of Disturbance (LOD) or rights-of-way disturbed. Contractor will be responsible for collateral damage outside LOD.

Stripping of topsoil will not be measured and paid for as a separate bid item. All work shall be included for payment under the applicable items listed in the Bid Form. Work shall include stripping, stockpiling, spreading, leveling, supplemental topsoil, filling, grading and compaction of suitable topsoil along right-of-way and LOD.

C13 GRAVEL & SOIL DRIVEWAY RESTORATION

Payment for restoring gravel & soil driveways as indicated on the drawings or as directed by the Project Coordinator or Project Engineer shall be made at the unit price bid per square yard listed in the Bid Form. Payment shall include grading, fine raking, and placing gravel/soil to pre-construction conditions. No payment will be made for repairs outside LOD, or rights-of-way disturbed. Contractor will be responsible for collateral damage outside LOD.

ATTACHMENT 3

Project: Big Rockfish Creek Outfall

Well Relocation

Site Visit Checklist Address: 2507 Lakeview Drive

	D		Vater Supply S		c: /p ·	
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
						Approx 30 feet
Water Supply Well	Y	1				deep
			within Well			
Well Pumps	Y	1	House		Submersible	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
					Fabricated Built	
Well Housing/Enclosure	Y	1	See Plan		Structure	
			within Well			
Bladder Tank	Y	1	House			
			within Well			
Water Filter	Y	1	House			
Chemical Feed System	Y	1	within Well House within Well	Pro-Elite Systems		Water Conditioning Iron Removal - Purified Drinking Water - Taste, Color and Odor Control Removal
Pressure Gauge	Y	1	House			
Cable Guard	Unknown					
Check Valves	Unknown					
Sample Taps	Unknown					
			within Well			
Hose Bibs	Y	1	House			
Drain Valve	Unknown					
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other:						

Other:

Project: Big Rockfish Creek Outfall

Well Relocation

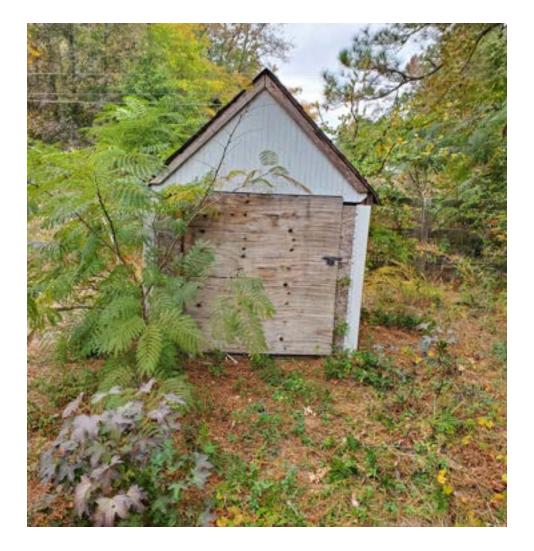
Site Visit Checklist Address: 2507 Lakeview Drive

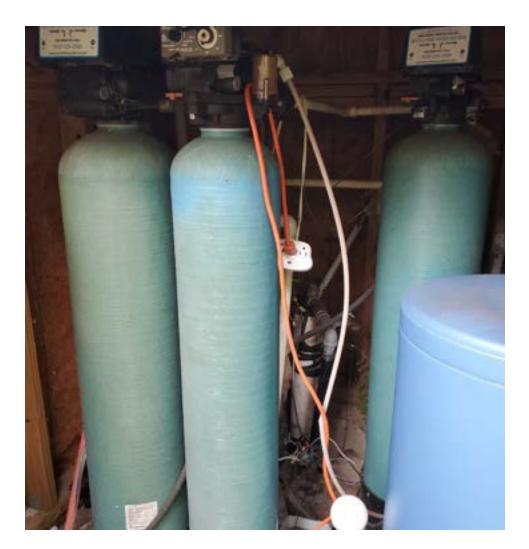
Electrical System							
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes	
Pump Controller	Unknown						
Motor Drives	Unknown						
Sensors	Unknown						
Breaker Panel	Y	1	Side of house				
			within Well				
Pressure Switch	Y	1	House				
Safety Switch	Unknown						
Pump Savor	Unknown						
			within Well				
Heat Lamp	Y	1	House				
Disconnect Switch	Unknown						
Other: Electrical Gate i	is connected to pur	np power c	ircuit.				

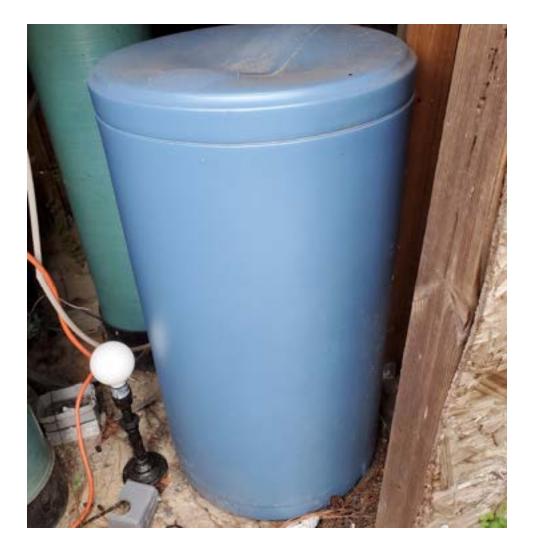


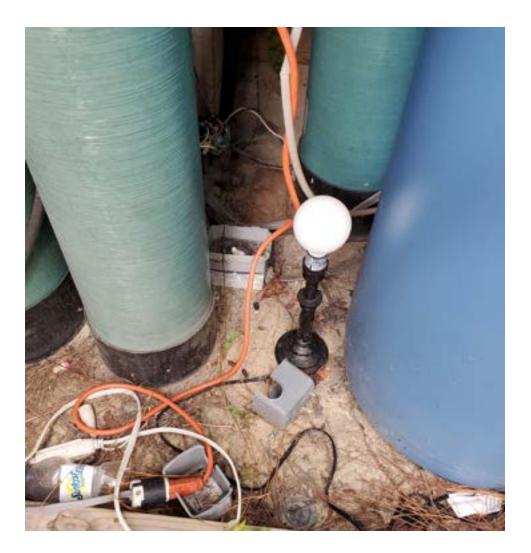


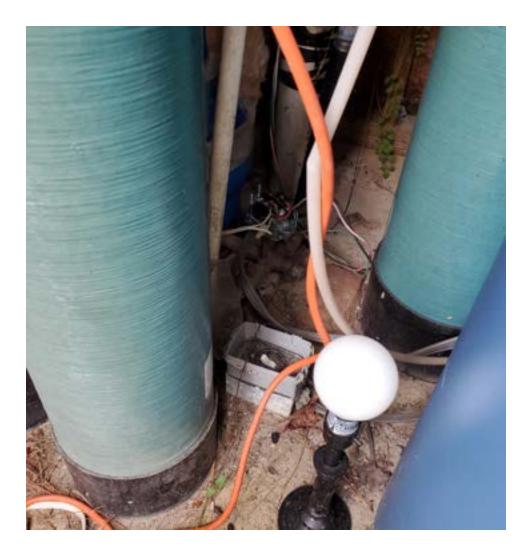




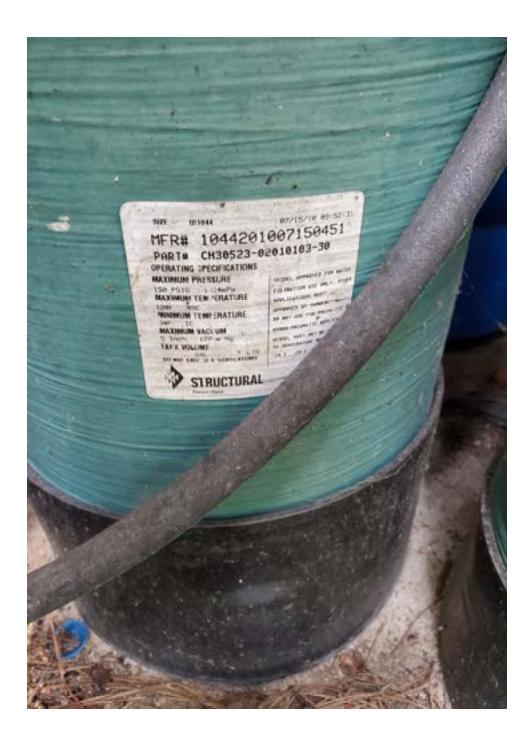


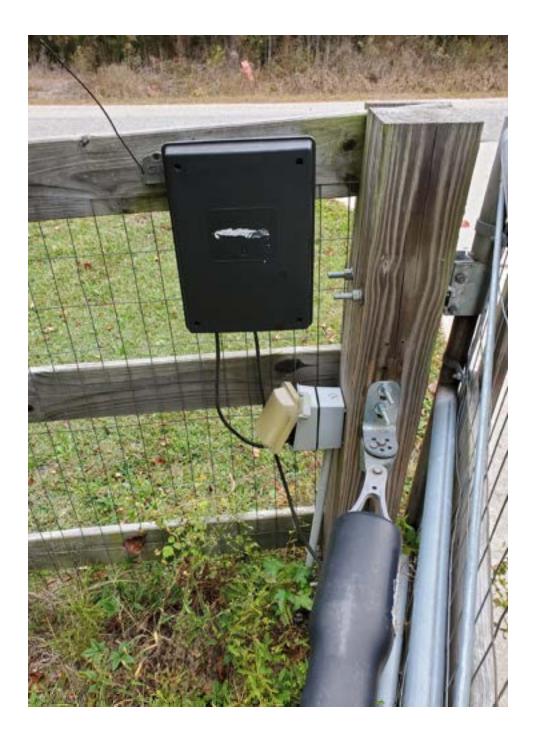














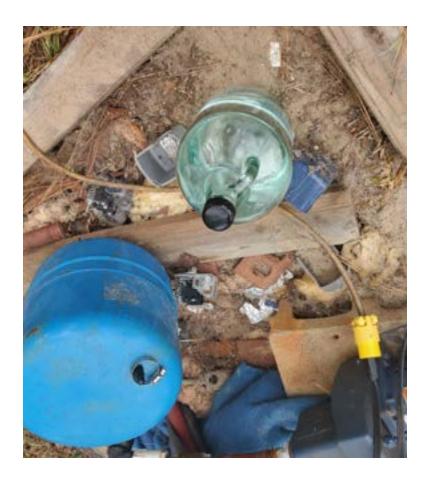


Site Visit Checklist Address: 2545 Lakeview Drive

		M	/ater Supply S	ystem		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Water Supply Well	Y	1			,	,
		_	within Well	Pentair (STA-	1/2 HP 115/230V	
Well Pumps	Y	1	House	RITE)	3450RPM	
Well Cap	Unknown			,		
Well Seal	Unknown					
Well Housing/Enclosure	Y	1			Prefab/ Fiberglass	
			within Well			
Bladder Tank	Y	1	House			
Water Filter	Unknown					
Chemical Feed System	Unknown					
			within Well			
Pressure Gauge	Y	1	House		100 psi	
Cable Guard	Unknown					
Check Valves	Unknown					
			within Well			
Sample Taps	Y	1	House			
Hose Bibs	Unknown					
			within Well			
Drain Valve	Y	1	House			
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other: Old line from well	to house.					
		1	Electrical Sys			
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown					
			Outsdie of			
Breaker Panel	Y	1	House			
			within Well			
Pressure Switch	Y	1	House			
Safety Switch	Unknown					
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Unknown					
Other:						

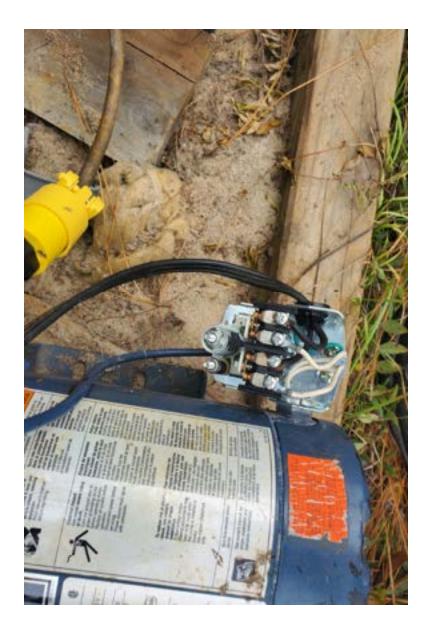
















Site Visit Checklist Address: 2551 Lakeview Drive

	T	r	Vater Supply S			
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Water Supply Well	Y	1				
			within Well			
Well Pumps	Y	1	House	Flotec	1/2 HP 3450 RPM	
Well Cap	Unknown					
Well Seal	Unknown					
			within Well		Prefab/ Doghouse	
Well Housing/Enclosure	Y	1	House		Fiberglass	
			within Well			
Bladder Tank	Y	1	House	Water Worker		
Water Filter	Unknown					
Chemical Feed System	Unknown					
Pressure Gauge	Unknown					
Cable Guard	Unknown					
Check Valves	Unknown					
Sample Taps	Unknown					
Hose Bibs	Unknown					
Drain Valve	Unknown					
Release Valve	Unknown					
			within Well			
Ball Valve	Y	1	House			
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
			within Well			
Clamps	Y	1	House			
Safety Rope Other:	Unknown					
			Electrical Syst	em		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown					
			Outside of			
Breaker Panel	Y	1	House			
			within Well			
Pressure Switch	Y	1	House			
Safety Switch	Unknown					
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Unknown					
Other:	•					

















Project: Big Rockfish Creek Outfall

Well Relocation

Site Visit Checklist Address: 2561 Lakeview Drive

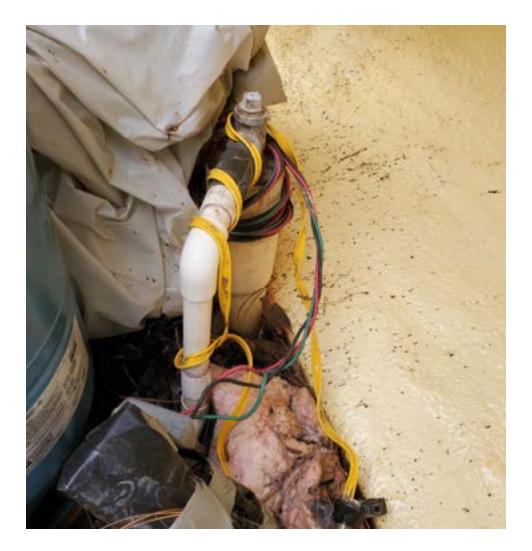
		-	ater Supply S			
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
						Approx 25 to 30
Water Supply Well	Y	1	See Plan			feet deep
			within Well			
Well Pumps	Y	1	House		Submersible	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
Well Housing/Enclosure	Y	1	See Plan		Prefab/ Fiberglass	
			within Well			
Bladder Tank	Y	1	House		125 PSI	
Water Filter	Unknown					
Chemical Feed System	Unknown					
			within Well			
Pressure Gauge	Y	1	House		100 psi	
Cable Guard	Unknown					
Check Valves	Unknown					
Commission Town	N/	4	within Well			
Sample Taps	Y	1	House			
	N/	4	within Well			
Hose Bibs	Y	1	House			
Drain Valve	Unknown					
Release Valve	Unknown		within Well			
Ball Valve	Y	1				
Fasteners	r Unknown	T	House			
	Unknown					
Gaskets Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
-	Unknown					
Safety Rope Other: House was burned		n narcol M	/oll is active b	ut not boing uso	d	
Other. House was burried	u down and not c	n parcei. v	Ven is active b	ut not being use	u.	
			Electrical Sys	tem		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown	quantity	Location	Manalacturer	Size, rarameters	connents/notes
Motor Drives	Unknown					
Sensors	Unknown					
Breaker Panel	Unknown					
			within Well			
Pressure Switch	Y	1	House			
Safety Switch	Unknown	-				<u> </u>
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Unknown					

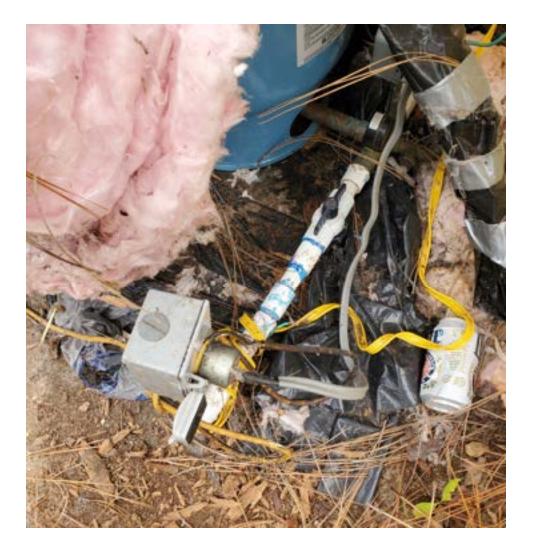




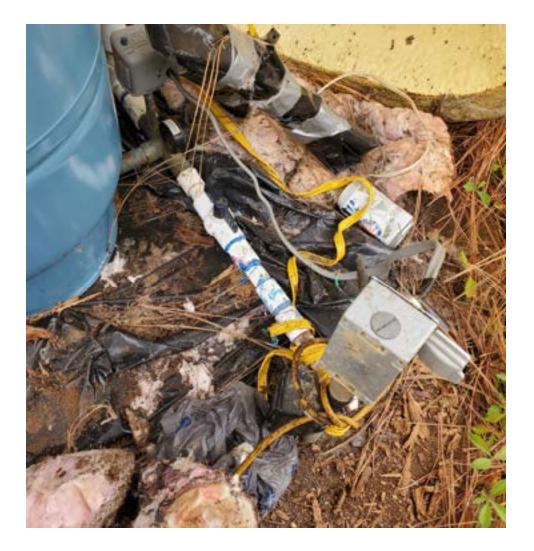


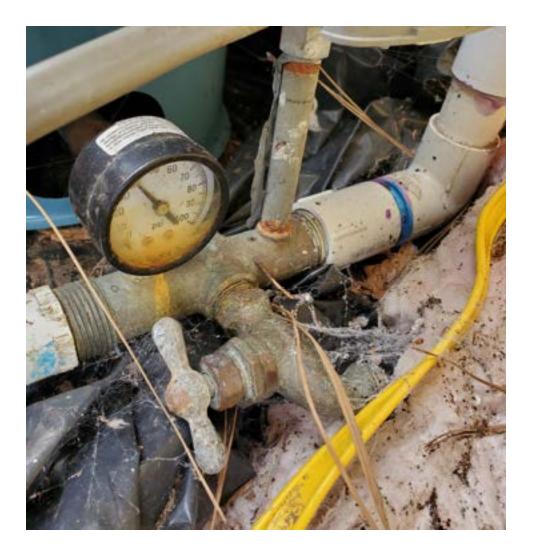












Project: Big Rockfish Creek Outfall

Well Relocation

Site Visit Checklist Address: 2564 Lakeview Drive

Components	Present (Y/N)	Quantity	Vater Supply S Location	Manufacturer	Size/Parameters	Comments/Notes
components		Quantity	LUCATION	manulacturer	JILE Faranteleis	
Water Supply Well	Y	1				Approx 15 to 25 feet depth
			within Well	Pentair (STA-	1 HP 115/230V	
Well Pumps	Y	1	House	RITE)	3450RPM	
Well Cap	Unknown					
Well Seal	Unknown					
Well Housing/Enclosure	Y	1			Prefab/ Fiberglass	
Diaddau Taulu	N N	1	within Well			
Bladder Tank	Y	1	House	Well X-Trol		
			within Well			
Water Filter	Y	1	House			
Chemical Feed System	Unknown					
			within Well			
Pressure Gauge	Y	1	House		100 psi	
Cable Guard	Unknown					
Check Valves	Unknown					
			within Well			
Sample Taps	Y	1	House			
			within Well			
Hose Bibs	Y	1	House			
			within Well			
Drain Valve	Y	1	House			
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Y	1				
Other:			Electrical Syst	tem		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown					
Breaker Panel	Y	1	Within house			
			within Well			
Pressure Switch	Y	1	House			
Safety Switch	Unknown					
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Y	1				
				i		



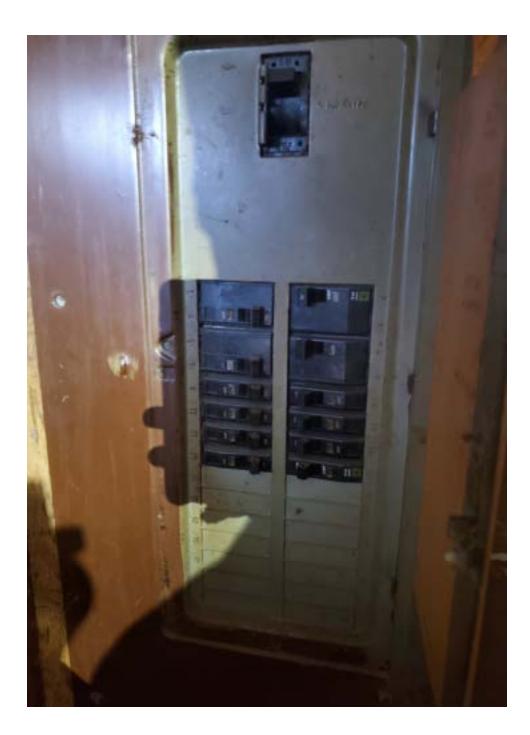














Site Visit Checklist Address: 2571 Lakeview Drive

Components Water Supply Well	Present (Y/N) Y	Quantity	/ater Supply S Location	Manufacturer	Size/Parameters	
				manulacturer	JIZE/ Falanieleis	Comments/Notes
		1				
	1	-	within Well			
Well Pumps	Y	1	House	Flotec	3/4 HP 3450 RPM	
	Unknown	1	House	TIOLEC	3/4 ITF 3430 IVF IVI	
	Unknown					
well Seal	OTINIOWIT		within Well			
Well Housing/Enclosure	Y	1	House		Prefab/ Fiberglass	
Well Housing/Enclosure	1	1	within Well			
Bladder Tank	Y	1	House			
	Unknown	1	nouse			
	Unknown					
Chemical Feed System	UTIKITUWIT		within Well			
Drossura Cauga	Y	1	House		100 001	
Pressure Gauge Cable Guard	r Unknown	1	House		100 PSI	
Check Valves	Unknown					
.	N.		within Well			
Sample Taps	Y	1	House			
			within Well			
Hose Bibs	Y	1	House			
	Unknown					
	Unknown					
	Unknown					
Fasteners	Unknown					
	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other:			Electrical Syst	tem		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
	Unknown	1	-			,
	Unknown					
	Unknown					
5015015			Outside of			
Breaker Panel	Y		House			
	T		within Well			
Pressure Switch	Y		House			
Safety Switch	Unknown					
	Unknown					
Lightening Arrestor	Unknown					
	Unknown					
Other:	-	-		-	-	-

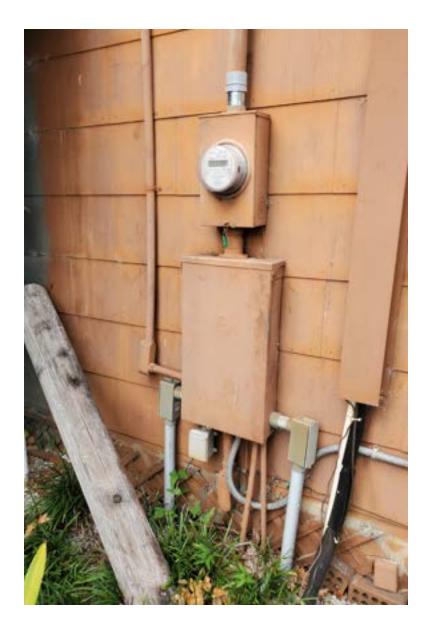
















Project: Big Rockfish Creek Outfall

Well Relocation

Site Visit Checklist Address: 2583 Lakeview Drive

		V	Vater Supply Sy	ystem		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
						Approx 90 to 100
Water Supply Well	Y	1				feet deep
			within Well			
Well Pumps	Y	1	House		Submersible	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
Wein Sean		-				
Well Housing/Enclosure	Y	1	See Plan		Prefab/ Fiberglass	
		_	within Well			
Bladder Tank	Y	1	House	Water Pro		
Water Filter	Unknown	1	nouse	Water Pro		
Chemical Feed System	Unknown					
Chemical Feed System			within Well			
Pressure Gauge	Y	1	House		100 PSI	
Cable Guard	Unknown	±	nouse		100 - 21	
Check Valves	Unknown					
	Onknown		within Well			
Sample Taps	Y	1	House			
Sumple Tups		-	within Well			
Hose Bibs	Y	1	House			
11050 0105	•	-	within Well			
Drain Valve	Y	1	House			
Release Valve	Unknown	-	House			
			within Well			
Ball Valve	Y	2	House			
Fasteners	Unknown	_				
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other: Sprinkler System		will need to	be considered	to be replaced	when new well is in:	stalled.
• •			Electrical Syst	em		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown			1		
Control Panel	Y	1	Within House	1		
			within Well			
Pressure Switch	Y	1	House			
Safety Switch	Unknown					
Pump Savor	Unknown					
			within Well			
Heat Lamp	Y	1	House			
Disconnect Switch	Unknown					
Other:						







Well Relocation

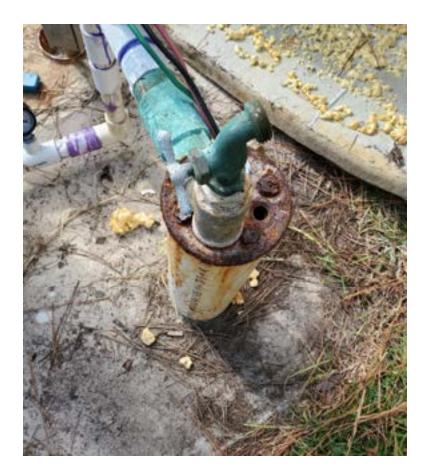
Site Visit Checklist Address: 2603 Lakeview Drive

			Water Supply	System		
	Present					
Components	(Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Water Supply Well	Y	1				
			within Well			
Well Pumps	Y	1	House		Submersible	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
				Prefab/		
Well Housing/Enclosure	Y	1	See Plan	Fiberglass		
			within Well			
Bladder Tank	Y	1	House	AO Smith	125 PSI	
			within Well			
Water Filter	Y		House			
Chemical Feed System	Unknown					
			within Well			
Pressure Gauge	Y	1	House		100 PSI	
Cable Guard	Y					Not being used
Check Valves	Unknown					
Sample Taps	Unknown					
Hose Bibs	Y	1				
Drain Valve	Unknown					
Release Valve	Unknown					
Ball Valve	Y	1				
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other:				1		
			Electrical Sy	stem		
	Present					
Components	(Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown			1		1
	2		Outside house	1		1
			inaccessible -			
Breaker Box	Y	1	locked			
Pressure Switch	Y	1				1
Safety Switch	Unknown					
Pump Savor	Unknown					
			within Well			1
Heat Lamp	Y	1	House			
Disconnect Switch	Unknown					





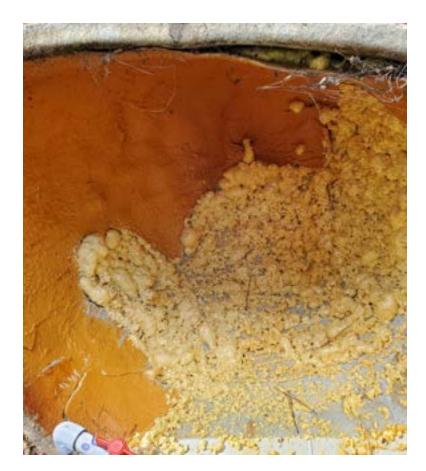










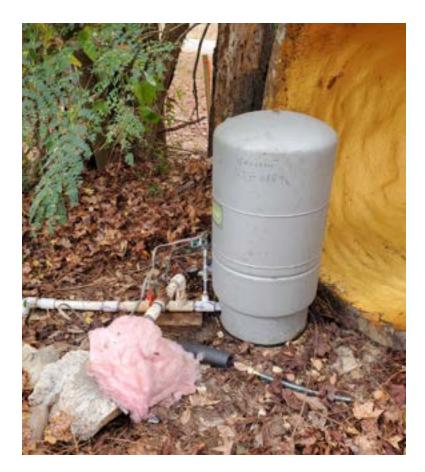




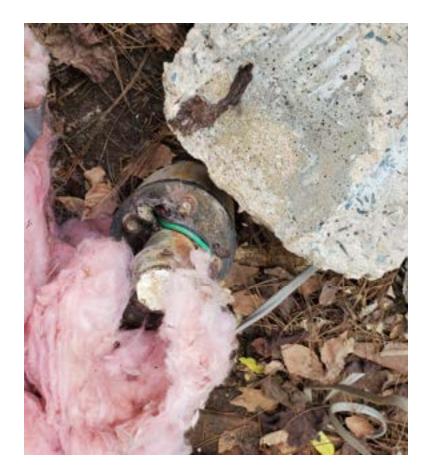
Well Relocation

Site Visit Checklist Address: 2623 Lakeview Drive

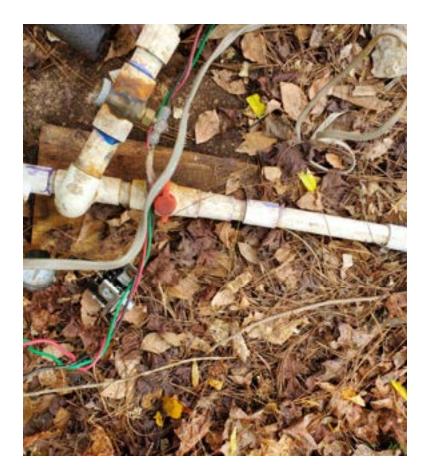
			Vater Supply S			
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Water Supply Well	Y	1				
			within Well			
Well Pumps	Y	1	House		Submersible	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
				Prefab/		
Well Housing/Enclosure	Y	1	See Plan	Fiberglass		
			within Well			
Bladder Tank	Y	1	House		125 PSI	
Water Filter	Unknown					
Chemical Feed System	Unknown					
			within Well			
Pressure Gauge	Y	1	House		100 PSI	
Cable Guard	Unknown					
Check Valves	Unknown					
Sample Taps	Unknown					
Hose Bibs	Unknown					
Drain Valve	Unknown					
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
Other:			Electrical Syst	em		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown					
Breaker Panel	Y	1	Outside of house			
Pressure Switch	Y	1	within Well House			
Safety Switch	Unknown					
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Unknown					
Other:	•					











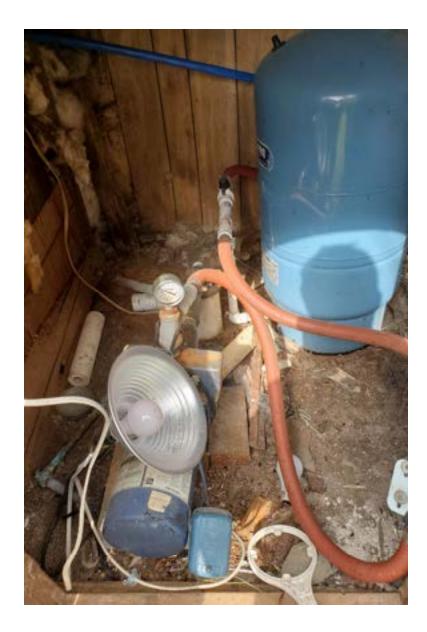


Well Relocation

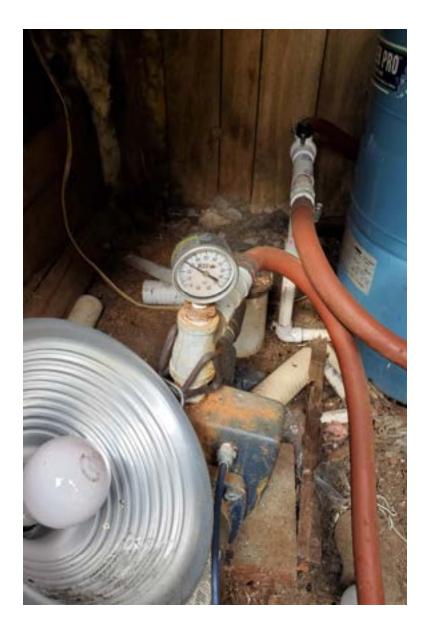
Site Visit Checklist Address: 2653 Lakeview Drive

			ater Supply Sy		0. 15	
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes
Water Supply Well	Y					
			within Well		3/4 HP 115/230 V	
Well Pumps	Y	1	House	STA-Rite	60HZ	
			within Well			
Well Cap	Y	1	House			
			within Well			
Well Seal	Y	1	House			
				Fabricated		
				Built		
Well Housing/Enclosure	Y	1		Structure		
			within Well			
Bladder Tank	Y	1	House			
			within Well			
Water Filter	Y	1	House			
Chemical Feed System						
			within Well			
Pressure Gauge	Y	1	House		100 PSI	
Cable Guard	unknown					
Check Valves	unknown					
Sample Taps	unknown					
			outside of			
Hose Bibs	Y	1	well house			
Drain Valve	unknown					
Release Valve	unknown					
Ball Valve	unknown					
Fasteners	unknown					
Gaskets	unknown					
Pipe Supports	unknown					
Pitless Adaptor	unknown					
Torque Arrestor	unknown					
Clamps	unknown					
Safety Rope	unknown					
Other:			Electrical Syste	em		
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Note
Pump Controller	unknown	y			<u></u>	
Motor Drives	unknown					
Sensors	unknown					
Breaker Panel	Y	1				In garage
Pressure Switch	Y	1				In garage
Safety Switch	unknown					<u> </u>
Pump Savor	unknown					
Lightening Arrestor	unknown	ļ				
Disconnect Switch	unknown					
Other:						



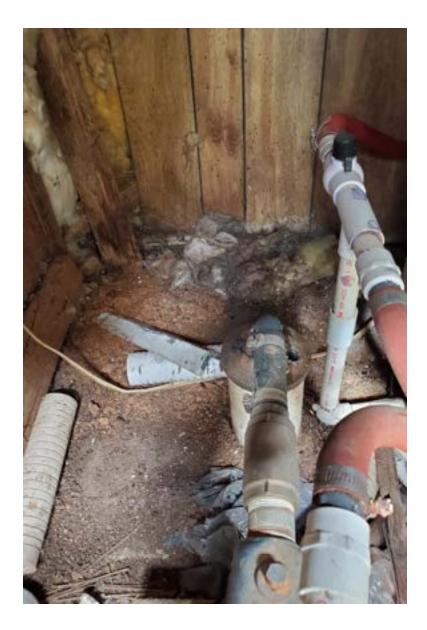


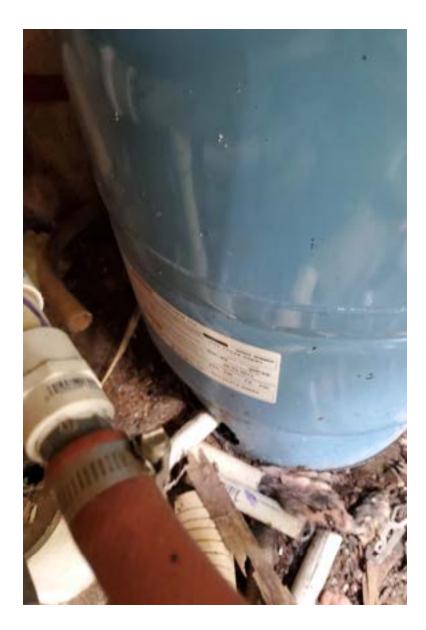


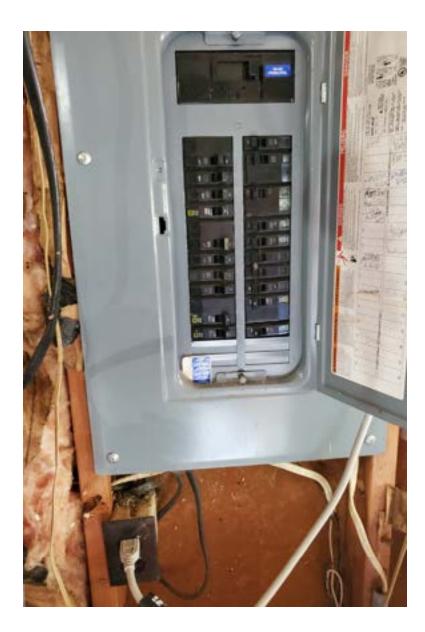












Water Supply System									
Components	Present (Y/N)	Quantity	Location	Manufacturer	Size/Parameters	Comments/Notes			
Water Supply Well	Y								
Well Pumps	Y	1		ĺ	Submersible				
Well Cap	Unknown		·	1	1				
Well Seal	Unknown				[]				
				Prefab/					
Well Housing/Enclosure	Y	1		Fiberglass					
Bladder Tank	Unknown								
Water Filter	Unknown								
Chemical Feed System	Unknown			['					
Pressure Gauge	Unknown								
Cable Guard	Unknown								
Check Valves	Unknown			<u> </u>					
Sample Taps	Unknown								
Hose Bibs	Unknown			<u> </u>					
Drain Valve	Unknown		[!	['	['				
Release Valve	Unknown			<u> </u>	[]				
Ball Valve	Unknown		[!	'	['				
Fasteners	Unknown			<u> </u>	<u> </u>				
Gaskets	Unknown			<u> </u>	<u> </u>				
Pipe Supports	Unknown			<u> </u>	['				
Pitless Adaptor	Unknown			<u> </u>					
Torque Arrestor	Unknown		[!	'	['				
Clamps	Unknown			<u> </u>	[]				
Safety Rope Other: Inaccessible - bolt	Unknown			<u> </u>	<u> </u>				
		E	Electrical Sy	/stem					
Components	Present (Y/N)	Quantity	-		Size/Parameters	Comments/Notes			
Pump Controller	Unknown		· · · ·		· · · · · · · · · · · · · · · · · · ·				
Motor Drives	Unknown			1	ĺ				
Sensors	Unknown			1	ĺ				
	1		Outside	1	1				
Breaker Panel	Y	1	of house	1	1				
Pressure Switch	Unknown		·	1	1				
Safety Switch	Unknown								
Pump Savor	Unknown								
Lightening Arrestor	Unknown								
Disconnect Switch	Unknown								
Other:									







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Project: Big Rockfish Creek Outfall Well Relocation Site Visit Checklist Address: 2667 Lakeview Drive

		W	ater Supply Sys	tem		
					Size/	_
Components	Present (Y/N)	Quantity	Location	Manufacturer	Parameters	Comments/Notes
						Appears to be
Water Supply Well	Y					decommisioned
				A.O. Smith	1/2 HP 3450	
Well Pumps	Y	1		Corp	RPM 60HZ	
Well Cap	Unknown					
Well Seal	Unknown					
Well						
Housing/Enclosure	N					
Bladder Tank	Y	1				
Water Filter	Unknown					
Chemical Feed						
System	Unknown					
Pressure Gauge	Y	1				
Cable Guard	Unknown					
Check Valves	Unknown					
Sample Taps	Unknown					
Hose Bibs	Y	1				
Drain Valve	Unknown					
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
				enovation and ne		
coordinate with prop	erty owner and P	WC Project	Coordinator wit		ower will be su	ipplied to pump.
			Electrical System	h location and p		
Coordinate with prop	erty owner and P	WC Project Quantity		h location and p		
			Electrical Syste	h location and p		
Components Pump Controller			Electrical Syste	h location and p		
Components			Electrical Syste	h location and p		
Components Pump Controller Motor Drives Sensors			Electrical Syste	h location and p		
Components Pump Controller Motor Drives Sensors Control Panel			Electrical Syste	h location and p		
Components Pump Controller Motor Drives Sensors Control Panel Pressure Switch			Electrical Syste	h location and p		
Components Pump Controller Motor Drives Sensors Control Panel Pressure Switch Safety Switch			Electrical Syste	h location and p		
Components Pump Controller Motor Drives Sensors Control Panel Pressure Switch Safety Switch Pump Savor			Electrical Syste	h location and p		
Components Pump Controller Motor Drives			Electrical Syste	h location and p		









Well Relocation

Site Visit Checklist Address: 2673 Lakeview Drive

			Water Supply Syste	em		
					Size/	
Components	Present (Y/N)	Quantity	Location	Manufacturer	Parameters	Comments/Notes
						Approx 25 to 30
Water Supply Well	Y	1	See Plan			feet deep
Well Pumps	Y	1	within Well House		Submersible	· · · · · ·
Well Cap	Y	1	within Well House			
Well Seal	Y	1	within Well House			
				5 1 · · · ·		
Well				Fabricated		
Housing/Enclosure	Y	1	See Plan	Built Structure	105 001	
Bladder Tank	Y	1	within Well House		125 PSI	
Water Filter	Y	1	within Well House			
Chemical Feed						
System	Y	1	within Well House			
Pressure Gauge	Y	1	within Well House		100 PSI	
Cable Guard	Unknown					
Check Valves	Unknown					
Sample Taps	Unknown					
Hose Bibs	Y		within Well House			
Drain Valve	Unknown					
Release Valve	Unknown					
Ball Valve	Unknown					
Fasteners	Unknown					
Gaskets	Unknown					
Pipe Supports	Unknown					
Pitless Adaptor	Unknown					
Torque Arrestor	Unknown					
Clamps	Unknown					
Safety Rope	Unknown					
			Electrical System			
Components	Present (Y/N)	Quantity	Location	Manufacturer	ize/Parameter	Comments/Notes
Pump Controller	Unknown					
Motor Drives	Unknown					
Sensors	Unknown					
Breaker Panel	Y	1	within House			
Pressure Switch	Y	1	within Well House			
Heat Lamp	Y	1	within Well House			
Pump Savor	Unknown					
Lightening Arrestor	Unknown					
Disconnect Switch	Y					
Other:						

