Financial Management Department
Purchasing Division
1112 Manatee Ave W Suite 803
Bradenton, FL 34205
Phone: (941) 749-3074
www.mymanatee.org

Email
April 5, 2017

TO: All Interested Bidders

SUBJECT: Invitation for Bid (IFB) 17-0395DC
Master Reuse Wet Weather Management Well System Project
(North Regional Water Reclamation Facility Deep Injection Wells)

ADDENDUM 2

Bidders are hereby notified that this Addendum shall be acknowledged on the Bid Form and made a part of the above named bidding and contract documents.

The following items are issued to add to, modify, and/or clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. Bid Opening is extended to **April 11, 2017, 3:00 P.M.**, same location.

2. Electronic Bid Form is included. None of the bid items have been revised.

The following questions have been presented by potential bidders:

1. **QUESTION:** What material is the existing 30" RWM that gets hot tapped?
   RESPONSE: Pipe material is DIP. The following General Note 3 is added to Drawing 005-Y-2001:
   General Note 3: Contractor shall field verify existing 30" RW material, O.D., and coating prior to shop drawing submittal for hot tap materials.

2. **QUESTION:** Are any coatings required for the IW-1 piping or anywhere else on the project and if so please provide a spec.
   RESPONSE: Yes, reference Specification Section 02615, Ductile Iron Pipe and Fittings, paragraph 2.02 C.

3. **QUESTION**: Is there a spec for the flowmeter on drawing 005-Y-2001?
   RESPONSE: Yes, reference Keynote 1 on Drawing D008-N-6001.

4. **QUESTION:** Is there a spec for cast-in-place concrete?
   RESPONSE: Yes, the following note 9 is added to detail 0330-056 on drawing 950-Y-501:

   Note 9. Concrete shall have a 28-day compressive strength of 4,000 psi, with a maximum W/C ration of 0.50, a maximum slump of 5". Concrete shall be mixed and placed per ACI 304 and 308 (Latest edition) and shall be cured with an approved curing compound meeting ASTM C1315.

5. **QUESTION**: It appears as if only IW-1 gets the slab and piping according to the bid schedule of items. Do all three injection wells get the same concrete slab and piping as IW #1 as shown on drawing 005-Y-2001? Are the hot taps all the same size and is the 300 LF plus or minus of 12" piping the same at each site?
   RESPONSE: Yes, the slab and piping (Drawings 005-Y-2001, D008-N-6001, 950-Y-501, and 950-Y-502) are applicable only to IW #1; and IW-2 and IW-3 do not have similar slab, piping, or hot taps. Reference Legend for Drawing 2 which identifies that piping shown in the drawing is either "conceptual conveyance" (Light Blue) or "Piping to IWs to be installed by others" (Dark Blue). NO, there is only one hot-tap for project.

6. **QUESTION:** Do we need to include any electrical work, such as conduit rough-in of the well slab for the flowmeter, level sensor, and pressure transmitter? If so, please provide specifications and drawings.
   RESPONSE: No electrical work for the instruments shown on Drawing D008-N-6001. Pressure recorder to be provided as shown and specified. Also see answer to question 7.

7. **QUESTION:** Are the level sensor, pressure transmitter, or any other instruments shown on the drawings to be included in our scope of work? If so, please provide a spec.
   RESPONSE: Yes, see Keynotes on sheet D008-N-6001 for specifications.

8. **QUESTION:** Can we install C-900 or ductile iron pipe instead of HDPE below grade? There will be a cost savings since there is a fixed cost for HDPE fusion machine and technician mobilization and there is only about 300 LF of piping. That is only 7 welds total using 40 joints of pipe.
   RESPONSE: Yes, but work will be paid for at the price bid for Bid Item I-16b. Temporary pipe of material furnished to be buried with three (3) feet minimum cover as noted in "Enlarged Plan View" on drawing 005-Y-2001.

9. **QUESTION**: Please provide depth and materials for the 8" tail pipe in the DIW shown on 005-Y-2001.
   RESPONSE: The six (6) inch tail pipe with eight (8) inch flare shall be in accordance with the following note revision to Drawing 005-Y-2001:
   Revise note in A Section that reads "6-inch SST Conductor for Logging Devise" to instead read "20 feet of 6-inch SST Conductor for Logging Device (See Note 1)."

10. **QUESTION:** What material are the pipe supports detail 4005-500?
    RESPONSE: The following note is added to detail 4005-500 on drawing 950-Y-501:
    Pipe Supports shall be Type 304 SST.

11. **QUESTION:** Pipe support manufacturers' have standard sizing of pipe supports but do not provide calculations. Can the requirement for calculations in detail 4005-005 be removed?
RESPONSE: No.

12. **QUESTION:** Are there any piping, electrical, or instrumentation requirements for the DZMW's?
RESPONSE: Yes, the following table is added on drawing D008-N-6001 for DZMWs and APMW:

CONTRACTOR FURNISHED and INSTALLED EQUIPMENT FOR MONITOR WELLS DZMW1 and APMW	
1.	One (1) commercial quality portable generator to power sample pump in monitor wells (Furnish Only)
2.	Two (2) submersible monitor well sample pumps with discharge pipe to surface, above ground discharge piping to allow sampling and connection of hose for pumping to waste. Pump shall be GOULDS 40GS (40 gpm) with stainless steel construction. Motor shall be 1.5 HP, single phase, 2-wire, 230 volt and compatible for use with portable generator furnished above. Above ground piping shall include isolation valves, check valve, hose connection fitting. Piping and fittings shall be schedule 80 PVC. (Furnish and Install one pump in each well)
3.	Two (2) In-Situ LevelTROLL data logger systems set 100 feet below ground surface. Provide complete system with software for downloading data from surface and reading data with a laptop computer. (Furnish and Install one system in each well)

13. **QUESTION:** Is there any piping, electrical, or instrumentation requirements for the APMW conversion?
RESPONSE: Yes, reference question 12 above that adds table "CONTRACTOR FURNISHED AND INSTALLED EQUIPMENT FOR MONITOR WELLS DZMW1 AND APMW" to drawing D008-N-6001.

14. **QUESTION:** What is the Static Water Level in the existing Avon Park Well?
RESPONSE: Static water level in the Avon Park Well is not monitored. This zone is highly utilized regionally during the dry season (winter/spring) and water level can fluctuate significantly from dry season to summer months. The Contractor should anticipate water levels greater than twenty (20) feet below land surface spring months to potentially above land surface during the summer. Bidders may obtain current water level in the well during a site visit (see response to question 29); however, the Bidder will need to provide their own measuring equipment.

15. **QUESTION:** What is the warranty period?
RESPONSE: Three (3) years. Reference General Conditions, Article XIII, paragraph 13.1 N (page GC-40).

16. **QUESTION:** Section 01310.1.02.A Allows work hours 7:00 am to 7:00 pm weekdays only. Typical for this type of work and as per our conversation in the field with the Engineer we would prefer to work 24/7, is this allowable?
RESPONSE: Yes, the following sentence is added to Specification Section 01310, Construction Schedule and Project Restraints, paragraph 1.02 A:
Drilling operations may be conducted 24 hours, 7 days per week but Contractor may be required to provide noise abatement if noise levels exceed noise ordinance limits at adjacent properties.

17. **QUESTION:** As the contract is for a period in excess of 3 years we are concerned with steel casing prices going up. Will the county allow for any changes in pricing due to inflation?
RESPONSE: No, reference Specification Section 01150, Measurement and Payment, paragraph 1.06 A.1, in that, prices bid shall represent full payment for item. However, in the event of extraordinary circumstances affecting steel, or the commodity market, that could never have been reasonable predicted, an increase in cost may be reviewed for consideration.

18. **QUESTION:** With an April 4, 2017 bid date when would you expect the County to issue the Notice to Proceed?
RESPONSE: See response to question 27.

19. **QUESTION:** What is the contract duration over 3 years, 1260 and 1440 days?
RESPONSE: If Bid A is awarded, time of completion is 1290 days (substantial completion at 1260 days). If Bid B is awarded, time of completion is 1470 days (substantial completion at 1440 days). Reference Specification Section 01005, General Requirements, paragraph 1.16.

20. **QUESTION:** Is there a limit on minimizing the construction timeline?
RESPONSE: No, but the second and third injection wells cannot begin until authorized by the County and upon agreement of final well construction details by FDEP. This will occur after completion and testing of the exploratory pilot hole at the first well.

21. **QUESTION:** How many wells can be constructed during the same period?
RESPONSE: If the County decides to construct all three of the wells, the second and third wells can be completed concurrently. The associated monitoring wells for the second and third wells can also be constructed concurrently.

22. **QUESTION:** There is significant cost requirement for professional liability. Can the professional liability requirement be waived?
RESPONSE: No.

23. **QUESTION:** What proof is required of the site visit?
RESPONSE: Signature on Bid Form attests to Bidder having made a site visit.

24. **QUESTION:** Is the project federally funded?
RESPONSE: No.

25. **QUESTION:** Are there minimum wages or American material limitations?
RESPONSE: No.

26. **QUESTION:** Can the bid forms be released in Excel format?
    RESPONSE: Bid forms in an Excel Format are included with this Addendum.

27. **QUESTION:** What is the timeline for the project, beginning with Award?
    RESPONSE: It is anticipated that award will be scheduled for approval on the May 23rd Manatee County Board of County Commissioners' agenda. The Notice to Proceed is typically issued two to four weeks after Commissioners' approval.

28. **QUESTION:** What is the engineers estimate?
    RESPONSE: $11.6 Million.

29. **QUESTION:** We were unable to make the last pre bid may we setup a site visit?
    RESPONSE: To arrange site visit, contact:
    Steven Cruz
    Utilities Plant Maintenance Supervisor
    Manatee County Utilities
    Northeast Water Reclamation Facility
    8500 69th St. E.
    Palmetto, Fl. 34221
    steve.cruz@mymanatee.org
    (941) 792-8811 ext. 8069
    MOBILE: (941) 348-7057
    FAX: (941) 776-4032

30. **QUESTION:** If we are unable to view the site will we be excluded from bidding the project?
    RESPONSE: Yes, Section A - Information To Bidders, Paragraph A.04 states that inspection of the project sites is a requirement to be considered for award of this bid. Also see response to questions 23 and 29 above.

31. **QUESTION:** Confirm that the conceptual conveyance & piping to the IWs shown in Drawing 2 of the specifications are not considered part of the scope of work to be bid. There is no mention of it in the summary of work and there isn't a specific bid item on the bid sheet.
    RESPONSE: Confirmed. See also response to question 5 above for temporary piping for IW-1 and bid item I-16 of Section 01150 Measurement and Payment.

32. **QUESTION:** Can the performance bond be separated by wells; or can the time period be shortened?
    RESPONSE: Bid requirements shall remain as stated, one contract, full term, total cost bond.

Revise the Contract Documents as Listed Below:

1. Specification Section 01150: Delete paragraph 1.06 A.3.r in its entirety and replace with the following new paragraph 1.06 A.3.r:
   Any tree removal and/or tree trimming required to prepare drilling sites is to be included as part of the work of mobilizing to each well and meet requirements of Manatee County or any other agency having jurisdiction over such work.

2. Drawing D008-N-6001: Add the following sentence to the end of Sheet Keynote 3: Also, provide with software and data transfer unit to allow downloading and reading recorded data with a laptop computer.

If you have submitted a bid prior to receiving this addendum you may request in writing that your original, sealed bid be returned to your firm. All sealed bids received will be opened on the date stated.

Bids will be received at Manatee County Procurement Division, 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205 until **April 11, 2017 at 3:00 P.M.**

Sincerely,

Melissa M. Wendel, CPPO
Purchasing Official

/dcr

BID A 1,260 DAYS FOR SUBSTANTIAL COMPLETION

PART IA - IW-1

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
I-1.	Mobilize and Demobilize All Equip. to the IW-1 Well Site to Complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for IW-1, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
I-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
I-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
I-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 41-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 31-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 23-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
I-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -
I-6.	Furnish and Install Casing:				
	a. 32-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 24-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 12-inch Dia. Carbon Steel	FT	2000	$ -	$ -

PART IA - IW-1

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
I-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	6000	$ -	$ -
	b. Up to 6% Bentonite	FT3	3600	$ -	$ -
	c. Up to 8% Bentonite	FT3	2400	$ -	$ -
I-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
I-9.	Pressure Test Casing - Successfully Complete Pressure Test on Final 24-Inch Casing Prior to Drilling Out Plug, Complete	LS	1	$ -	$ -
I-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
I-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	6	$ -	$ -
I-12.	Packer Test Pumping Time, Complete	HR	100	$ -	$ -
I-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
I-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
I-15.	Development - Develop Well, Complete	HR	48	$ -	$ -
I-16.	Temporary Wellhead				
	a. Install Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
	b. Temporary HDPE piping to reclaimed line as shown in Drawings (IW-1 only)	FT	300	$ -	$ -
	c. Hot Tap Reclaimed line, Install Above Ground Appurtenances, and connect with DIP piping as shown in drawings (IW-1 only)	LS	1	$ -	$ -
I-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
I-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	40	$ -	$ -
I-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	35	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	12	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -
I-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
I-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IA $ -

PART IIA - IW-2

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
II-1.	Mobilize and Demobilize All Equip. to the IW-2 Well Site to Complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for IW-2, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
II-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
II-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
II-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 41-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 31-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 23-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
II-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -
II-6.	Furnish and Install Casing:				
	a. 32-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 24-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 12-inch Dia. Carbon Steel	FT	2000	$ -	$ -

PART IIA - IW-2

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
II-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	6000	$ -	$ -
	b. Up to 6% Bentonite	FT3	3600	$ -	$ -
	c. Up to 8% Bentonite	FT3	2400	$ -	$ -
II-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
II-9.	Pressure Test Casing - Successfully Complete Pressure Test on Final 24-Inch Casing Prior to Drilling Out Plug, Complete	LS	1	$ -	$ -
II-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
II-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	6	$ -	$ -
II-12.	Packer Test Pumping Time, Complete	HR	100	$ -	$ -
II-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
II-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
II-15.	Development - Develop Well by Air Lifting, Complete	HR	48	$ -	$ -
II-16.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
II-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
II-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	40	$ -	$ -
II-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	35	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	12	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -
II-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
II-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IIA $ -

PART IIIA - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-1.	a. Mobilize and Demobilize All Equip. to the IW-3 Well Site at the NRWRF to Complete Drilling and Testing Activities for IW-3, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
	b. Additional Mobilization Cost to Construct Well at SEWRF	LS	1	$ -	$ -
III-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
III-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
III-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 47-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 33-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 25-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
III-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -

PART IIIA - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-6.	Furnish and Install Casing:				
	a. 34-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 26-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 16-inch Dia. Carbon Steel	FT	2000	$ -	$ -
	d. 9.625-inch Dia. FRP Tubing	FT	2000	$ -	$ -
III-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	7500	$ -	$ -
	b. Up to 6% Bentonite	FT3	4500	$ -	$ -
	c. Up to 8% Bentonite	FT3	3000	$ -	$ -
III-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
III-9.	Pressure Test Casing - Successfully Complete Pressure Test on Casings, Complete				
	a. Final 16-Inch Casing Prior to Drilling Out Plug	LS	1	$ -	$ -
	b. Final 9-Inch FRP Tubing using an Inflatable Packer	LS	1	$ -	$ -
III-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
III-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$ -	$ -
III-12.	Packer Test Pumping Time, Complete	HR	130	$ -	$ -
III-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
III-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
III-15.	Development - Develop Well by Air Lifting, Complete	HR	48	$ -	$ -
III-16.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
III-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
III-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete:	HR	40	$ -	$ -
III-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	52	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	16	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -

PART IIIA - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
III-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IIIA $ -

PART IVA- DEEP ZONE MONITOR WELL (DZMW-1)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
IV-1.	Mobilize and Demobilize All Equip. to the DZMW-1 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-1, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
IV-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
IV-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
IV-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
IV-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
IV-6.	Furnish and Install Casing:			$ -	
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
IV-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
IV-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
IV-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
IV-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
IV-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART IVA- DEEP ZONE MONITOR WELL (DZMW-1)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
IV-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
IV-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
IV-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
IV-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART IVA $ -

PART VA- DEEP ZONE MONITOR WELL (DZMW-2)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
IV-1.	Mobilize and Demobilize All Equip. to the DZMW-2 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-2, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
IV-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
V-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
V-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
V-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
V-6.	Furnish and Install Casing:				
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
V-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
V-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
V-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
V-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
V-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART VA- DEEP ZONE MONITOR WELL (DZMW-2)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
V-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
V-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
V-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
V-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VA $ -

PART VIA- DEEP ZONE MONITOR WELL (DZMW-3)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VI-1.	Mobilize and Demobilize All Equip. to the DZMW-3 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-3, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
VI-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
VI-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
VI-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
VI-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
VI-6.	Furnish and Install Casing:				
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
VI-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
VI-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
VI-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
VI-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
VI-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART VIA- DEEP ZONE MONITOR WELL (DZMW-3)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VI-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
VI-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
VI-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
VI-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VIA $ -

PART VII- AVON PARK MONITOR WELL CONVERSION (APMW)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VII-1.	Mobilize and Demobilize All Equip. to the Existing Avon Park Test Well Site to Complete Construction and Testing as required, including 200-ft gravel access road, Complete	LS	1	$ -	$ -
VII-2.	Drill Out Open Hole (if needed) to Depth of:				
	a. 8-inch Diameter up to 1,100 feet (Reverse-air)	FT	100	$ -	$ -
VII-3.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Existing Well to 1,050 feet	EA	1	$ -	$ -
	b. Converted Well to 1,100 feet (if needed)	EA	1	$ -	$ -
VII-4.	Furnish and Install Liner Casing (if needed):				
	a. 4-inch Dia. Carbon Steel	FT	900	$ -	$ -
VII-5.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	200	$ -	$ -
	b. Up to 6% Bentonite	FT3	80	$ -	$ -
VII-6.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
VII-7.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
VII-8.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
VII-9.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
VII-10.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Exhibit 1, List A	EA	1	$ -	$ -
	b. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VIIA $ -

SUMMARY OF BID A

Total Part IA– Injection Well No. 1 (IW-1) Municipal	$ -
Total Part IIA – Injection Well No. 2 (IW-2) Municipal	$ -
Total Part IIIA – Injection Well No. 3 (IW-3) RO/Municipal	$ -
Total Part IVA – Deep Zone Monitoring Well No. 1 (DZMW-1)	$ -
Total Part VA – Deep Zone Monitoring Well No. 2 (DZMW-2)	$ -
Total Part VIA – Deep Zone Monitoring Well No. 3 (DZMW-3)	$ -
Total Part VIIA – Avon Park Monitoring Well Conversion (APMW)	$ -
Total Parts IA through VIIA	**$** -
Contingency (10% of Total Parts 1A through VIIA)	$ -
Total Parts IA through VIIA Plus Contingency	**$** -

TIME OF SUBSTANTIAL COMPLETION *for Total Project (Parts IA through VIIA)*		1,260 days
IW-1, DZMW-1, and APMW (Parts IA, IVA, and VIIA)	420 days	
IW-2 and DZMW-2 (Parts IIA and VA)	420 days	
IW-3 and DZMW-3 (Parts IIIA and VIA)	420 days	
TIME OF FINAL COMPLETION *for Total Project (Parts IA through VIIA)*		1,290 days

BID B 1,440 DAYS FOR SUBSTANTIAL COMPLETION

PART IB - IW-1

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
I-1.	Mobilize and Demobilize All Equip. to the IW-1 Well Site to Complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for IW-1, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
I-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
I-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
I-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 41-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 31-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 23-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
I-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -
I-6.	Furnish and Install Casing:			$ 1.00	
	a. 32-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 24-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 12-inch Dia. Carbon Steel	FT	2000	$ -	$ -

PART IB - IW-1

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
I-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	6000	$ -	$ -
	b. Up to 6% Bentonite	FT3	3600	$ -	$ -
	c. Up to 8% Bentonite	FT3	2400	$ -	$ -
I-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
I-9.	Pressure Test Casing - Successfully Complete Pressure Test on Final 24-Inch Casing Prior to Drilling Out Plug, Complete	LS	1	$ -	$ -
I-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
I-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	6	$ -	$ -
I-12.	Packer Test Pumping Time, Complete	HR	100	$ -	$ -
I-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
I-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
I-15.	Development - Develop Well, Complete	HR	48	$ -	$ -
I-16.	Temporary Wellhead				
	a. Install Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
	b. Temporary HDPE piping to reclaimed line as shown in Drawings (IW-1 only)	Ft	300	$ -	$ -
	c. Hot Tap Reclaimed line, Install Above Ground Appurtenances, and connect with DIP piping as shown in drawings (IW-1 only)	LS	1	$ -	$ -
I-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
I-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	40	$ -	$ -
I-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	35	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	12	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -
I-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
I-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IB $ -

PART IIB - IW-2

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
II-1.	Mobilize and Demobilize All Equip. to the IW-2 Well Site to Complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for IW-2, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
II-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
II-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
II-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 41-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 31-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 23-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
II-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -
II-6.	Furnish and Install Casing:				
	a. 32-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 24-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 12-inch Dia. Carbon Steel	FT	2000	$ -	$ -

PART IIB - IW-2

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
II-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	6000	$ -	$ -
	b. Up to 6% Bentonite	FT3	3600	$ -	$ -
	c. Up to 8% Bentonite	FT3	2400	$ -	$ -
II-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
II-9.	Pressure Test Casing - Successfully Complete Pressure Test on Final 24-Inch Casing Prior to Drilling Out Plug, Complete	LS	1	$ -	$ -
II-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
II-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	6	$ -	$ -
II-12.	Packer Test Pumping Time, Complete	HR	100	$ -	$ -
II-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
II-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
II-15.	Development - Develop Well by Air Lifting, Complete	HR	48	$ -	$ -
II-16.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
II-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
II-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	40	$ -	$ -
II-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	35	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	12	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -
II-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
II-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IIB $ -

PART IIIB - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-1.	a. Mobilize and Demobilize All Equip. to the IW-3 Well Site at the NRWRF to Complete Drilling and Testing Activities for IW-3, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
	b. Additional Mobilization Cost to Construct Well at SEWRF	LS	1	$ -	$ -
III-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
III-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 1,800 feet bls (Reverse-air)	FT	1,450	$ -	$ -
	c. 12-inch Diameter up to 3,500 feet bls (Reverse-air)	FT	1,900	$ -	$ -
III-4.	Pilot Hole Reaming or Open Hole to Depth of:			$ -	
	a. 47-inch Diameter to 350 feet bls (Mud Rotary)	FT	350	$ -	$ -
	b. 33-inch Diameter to 1,600 feet bls (Reverse-air)	FT	1,250	$ -	$ -
	c. 25-inch Diameter up to 2,000 feet bls (Reverse-air)	FT	400	$ -	$ -
	d. Re-establish 12-inch Diameter open hole up to 3,500 feet bls (Reverse-air)	FT	1,500	$ -	$ -
III-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,800 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Pilot hole up to 3,500 feet	EA	1	$ -	$ -
	d. Reamed Hole to 2,000 feet	EA	1	$ -	$ -
	f. Completed Well up to 3,500 feet	EA	1	$ -	$ -
	g. Temperature Log Following Each Cement Stage	EA	5	$ -	$ -
	h. Cement Bond Log on Final Casing	EA	1	$ -	$ -

PART IIIB - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-6.	Furnish and Install Casing:			$ -	
	a. 34-inch Dia. Carbon Steel	FT	350	$ -	$ -
	b. 26-inch Dia. Carbon Steel	FT	1600	$ -	$ -
	c. 16-inch Dia. Carbon Steel	FT	2000	$ -	$ -
	d. 9.625-inch Dia. FRP Tubing	FT	2000	$ -	$ -
III-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	7500	$ -	$ -
	b. Up to 6% Bentonite	FT3	4500	$ -	$ -
	c. Up to 8% Bentonite	FT3	3000	$ -	$ -
III-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	20	$ -	$ -
III-9.	Pressure Test Casing - Successfully Complete Pressure Test on Casings, Complete				
	a. Final 16-Inch Casing Prior to Drilling Out Plug	LS	1	$ -	$ -
	b. Final 9-Inch FRP Tubing using an Inflatable Packer	LS	1	$ -	$ -
III-10.	Cores - During Pilot Hole or Open Hole Drilling, Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals, Complete	Feet	40	$ -	$ -
III-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$ -	$ -
III-12.	Packer Test Pumping Time, Complete	HR	130	$ -	$ -
III-13.	Pumping Test Setup, Complete	LS	2	$ -	$ -
III-14.	Pumping Test Pumping Time, Complete	HR	10	$ -	$ -
III-15.	Development - Develop Well by Air Lifting, Complete	HR	48	$ -	$ -
III-16.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
III-17.	Standby Time (Max. 12 hr/day)	HR	40	$ -	$ -
III-18.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	40	$ -	$ -
III-19.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	52	$ -	$ -
	b. Exhibit 1, List A	EA	70	$ -	$ -
	c. Exhibit 1, List B	EA	16	$ -	$ -
	d. Exhibit 1, List C	EA	1	$ -	$ -

PART IIIB - IW-3

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
III-20.	Acidization Setup - Setup for Acidization, Complete, Including well kills	LS	1	$ -	$ -
III-21.	Furnish and Emplace Acid, Complete	GAL	10,000	$ -	$ -

TOTAL PART IIIB $ -

PART IVB- DEEP ZONE MONITOR WELL (DZMW-1)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
IV-1.	Mobilize and Demobilize All Equip. to the DZMW-1 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-1, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
IV-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
IV-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
IV-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
IV-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
IV-6.	Furnish and Install Casing:				
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
IV-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
IV-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
IV-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
IV-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
IV-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART IVB- DEEP ZONE MONITOR WELL (DZMW-1)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
IV-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
IV-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
IV-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
IV-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART IVB $ -

PART VB- DEEP ZONE MONITOR WELL (DZMW-2)

Pay Item	Description	Unit	Est. QTY	Unit Cost	Computed Total Price for Item
IV-1.	Mobilize and Demobilize All Equip. to the DZMW-2 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-2, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
IV-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
V-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
V-4.	Pilot Hole Reaming or Open Hole to Depth of:				
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
V-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
V-6.	Furnish and Install Casing:				
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
V-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
V-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
V-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
V-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
V-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART VB- DEEP ZONE MONITOR WELL (DZMW-2)

Pay Item	Description	Unit	Est. QTY	Unit Cost	Computed Total Price for Item
V-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
V-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
V-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
V-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VB $ -

PART VIB- DEEP ZONE MONITOR WELL (DZMW-3)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VI-1.	Mobilize and Demobilize All Equip. to the DZMW-3 Well Site to complete Drilling (in a 12 Hr/Day, 5 Day/Week Schedule) and Testing Activities for DZMW-3, Complete, Including Drilling Pad and Four Water Table Monitoring Wells	LS	1	$ -	$ -
VI-2.	Set Pit Casing, Complete	LS	1	$ -	$ -
VI-3.	Drill Pilot Hole - Drill Nominal 8 to 12-¼ -Inch Dia. Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques, Complete to Depth of:				
	a. 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
VI-4.	Pilot Hole Reaming or Open Hole to Depth of:			$ -	
	a. 23-inch Diameter to 350 feet (Mud Rotary)	FT	350	$ -	$ -
	b. 15-inch Diameter to 1,600 feet (Reverse-air)	FT	1,250	$ -	$ -
VI-5.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Pilot Hole to 350 feet	EA	1	$ -	$ -
	b. Reamed Hole to 350 feet	EA	1	$ -	$ -
	c. Pilot Hole to 1,600 feet	EA	1	$ -	$ -
	d. Reamed Hole to 1,600 feet	EA	1	$ -	$ -
	e. Completed Well to 1,600 feet	EA	1	$ -	$ -
	f. Cement Bond Log on Final FRP Casing	EA	1	$ -	$ -
VI-6.	Furnish and Install Casing:			$ -	
	a. 16-inch Dia. Carbon Steel to 350 feet	FT	350	$ -	$ -
	b. 6-inch Dia. FRP to 1,500 feet	FT	1150	$ -	$ -
VI-7.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface and Pilot Holes Prior to Reaming Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	1500	$ -	$ -
	b. Up to 6% Bentonite	FT3	900	$ -	$ -
	c. Up to 8% Bentonite	FT3	600	$ -	$ -
VI-8.	Gravel - Furnish and Emplace Clean Gravel Used to Plug Cavities, Complete	YD3	5	$ -	$ -
VI-9.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
VI-10.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
VI-11.	Packer Test Set up - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test,	EA	2	$ -	$ -

PART VIB- DEEP ZONE MONITOR WELL (DZMW-3)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VI-12.	Packer Test Pumping Time, Complete	HR	32	$ -	$ -
VI-13.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
VI-14.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
VI-15.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Water Table Monitoring Wells Weekly Compliance Samples	EA	22	$ -	$ -
	b. Exhibit 1, List A	EA	28	$ -	$ -
	c. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VIB $ -

PART VIIB - AVON PARK MONITOR WELL CONVERSION (APMW)

ITEM No.	DESCRIPTION	U/M	EST QTY	UNIT COST	EXTENDED COST
VII-1.	Mobilize and Demobilize All Equip. to the Existing Avon Park Test Well Site to Complete Construction and Testing as required, including 200-ft gravel access road,	LS	1	$ -	$ -
VII-2.	Drill Out Open Hole (if needed) to Depth of:				
	a. 8-inch Diameter up to 1,100 feet (Reverse-air)	FT	100	$ -	$ -
VII-3.	Geophysical Logging - Furnish, Setup, Operate, and Remove all Equip. to Conduct Geophysical Logs in Accordance with Table 1 of Section 02679 on:				
	a. Existing Well to 1,050 feet	EA	1	$ -	$ -
	b. Converted Well to 1,100 feet (if needed)	EA	1	$ -	$ -
VII-4.	Furnish and Install Liner Casing (if needed):				
	a. 4-inch Dia. Carbon Steel	FT	900	$ -	$ -
VII-5.	Grout Casing - Grout Carbon Steel Casing from Bottom to Land Surface Using ASTM Type II Cement with up to:				
	a. 0% Bentonite (Neat)	FT3	200	$ -	$ -
	b. Up to 6% Bentonite	FT3	80	$ -	$ -
VII-6.	Development - Develop Well by Air Lifting, Complete	HR	24	$ -	$ -
VII-7.	Temporary Wellhead - Complete Wellhead in accordance with the Drawings, Complete	LS	1	$ -	$ -
VII-8.	Standby Time (Max. 12 hr/day)	HR	20	$ -	$ -
VII-9.	Extra Work - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER, Complete	HR	20	$ -	$ -
VII-10.	Water Sampling - Collect, Analyze, and Report Water Samples in Accordance with Section 02311 for:				
	a. Exhibit 1, List A	EA	1	$ -	$ -
	b. Exhibit 1, List C	EA	1	$ -	$ -

TOTAL PART VIIB $ -

SUMMARY OF BID B

Total Part IB– Injection Well No. 1 (IW-1) Municipal	$ -
Total Part IIB – Injection Well No. 2 (IW-2) Municipal	$ -
Total Part IIIB – Injection Well No. 3 (IW-3) RO/Municipal	$ -
Total Part IVB – Deep Zone Monitoring Well No. 1 (DZMW-1)	$ -
Total Part VB – Deep Zone Monitoring Well No. 2 (DZMW-2)	$ -
Total Part VIB – Deep Zone Monitoring Well No. 3 (DZMW-3)	$ -
Total Part VIIB – Avon Park Monitoring Well Conversion (APMW)	$ -
Total Parts IB through VIIB	$ -
Contingency (10% of Total Parts 1B through VIIB)	$ -
Total Parts IB through VIIB Plus Contingency	$ -

TIME OF SUBSTANTIAL COMPLETION *for Total Project (Parts IB through VIIB)* 1,440 days

IW-1, DZMW-1, and APMW (Parts IB, IVB, and VIIB)	420 days
IW-2 and DZMW-2 (Parts IIB and VB)	480 days
IW-3 and DZMW-3 (Parts IIIA and VIB)	540 days

TIME OF FINAL COMPLETION *for Total Project (Parts IB through VIIB)* 1,470 days