



1112 Manatee Avenue West
Bradenton, FL 34205
purchasing@mymanatee.org

Solicitation Addendum

Addendum No.: 1
Solicitation No.: 23-TA004431JH
Project No.: 6022386
Solicitation Title: Missionary Village Lift Station Rehabilitation
Addendum Date: December 02, 2022
Procurement Contact: Jeb Hayter

IFBC No. 23-TA004431JH is amended as set forth herein. Responses to questions posed by prospective bidders are provided below. This Addendum is hereby incorporated in and made a part of IFBC No. 23-TA004431JH.

The deadline to submit all inquiries concerning interpretation, clarification or additional information pertaining to this IFBC was November 16, 2022.

REPLACE:

APPENDIX K, BID PRICING FORM

Replace Appendix K, Bid Pricing Form with the Appendix K, Bid Pricing Form Revised issued with this Addendum 1, hereby incorporated into this IFBC.

ADD:

BID ATTACHMENT 4, HVAC SPECIFICATIONS 15700 SPLIT SYSTEM UNITS

Bid Attachment 4, HVAC Specifications 15700 Split System Units. Bid Attachment 4 is hereby incorporated into this IFBC.

CHANGE TO:

ADVERTISEMENT, DATE, TIME AND PLACE DUE

The Due Date and Time for submission of bids in response to this Invitation for Bid Construction (IFBC) is ~~December 07, 2022~~ **December 14, 2022 at 11:00 A.M. ET.** Bids must be delivered to the following location: Manatee County Administration Building 1112 Manatee Ave. W., Suite 803, Bradenton, FL 34205 prior to the Due Date and Time.

CHANGE TO:

SECTION A, INFORMATION FOR BIDDERS, A.01, BID DUE DATE

The Due Date and Time for submission of bids in response to this Invitation for Bid Construction (IFBC) is ~~December 07, 2022~~ **December 14, 2022 at 11:00 A.M. ET**. Bids must be delivered to the following location: Manatee County Administration Building 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 and time stamped by a Procurement representative prior to the Due Date and Time.

CHANGE TO:

SECTION A, INFORMATION FOR BIDDERS, A.51, SOLICITATION SCHEDULE

The following schedule has been established for this Solicitation process. Refer to the County's website (www.mymanatee.org > Business > *Bids & Proposals*) for meeting locations and updated information pertaining to any revisions to this schedule.

Scheduled Item	Scheduled Date
Question and Clarification Deadline	November 16, 2022
Final Addendum Posted	November 23, 2022
Bid Response Due Date and Time	December 07, 2022, 11:00 A.M., ET <u>December 14, 2022</u>
Project Award	January, 2023

QUESTIONS AND RESPONSES:

Q1. Who can site visit be scheduled with?

R1. The County will not be conducting escorted site visits for this solicitation. Observations can be made from walking outside the fence line.

Q2. Is there an Engineers estimate for this project?

R2. The Engineer's estimated opinion of cost is \$4,395,800.00.

Q3. Where can I find the information needed for Appendix A, Minimum Qualifications, No. 5?

R3. This information is supplied by the Florida Department of Business and Professional Regulation.

Q4. What is the engineers project estimate?

R4. See R2.

Q5. Please confirm the site location address is 1171 E. SR 64, Bradenton, FL 34212?

R5. The site address is 1201 117th Street East, Bradenton, FL 34212. The Northeast corner of State Road 64 and 117th Street.

- Q6. Do we need to contact you or someone else about going to the site to look at it?**
R6. See R1.
- Q7. Reference Invitation for Bid, Section A: Information for Bidders, Paragraph A.25 Legal Name of Corporation. Please indicate if you will accept a Certificate of Status from the State of Florida to fulfill this requirement?**
R7. Yes, a certificate of status issued by the State of Florida will suffice.
- Q8. Reference Invitation for Bid, Section B. Appendix E: ePayables Application. We cannot accept credit card payment as this form provides for. Please advise how we should indicate this on Appendix E, so our response is compliant?**
R8. Please fill the form out as N/A.
- Q9. Reference General Note 1, on Drawing C00.2A stating "ground to be sloped away from slab to natural ground elevation as shown on this drawing". It further states to "Install weed barrier fabric with washed shell or rock" within lift station fencing. Then it states for the site both inside and outside the fence "as shown on this drawing" to provide a weed barrier fabric covered with a shredded wood type mulch." Please provide specific indication and limits on the drawing of what type of groundcover is required as the drawing currently shows nothing for groundcover as referenced in this Note 1?**
R9. The area within the fence not covered by concrete is to have mirafi weed barrier fabric with 4 inches of rock or washed shell. A 1-foot-wide band on the northeast and south sides of the site is to have a surface treatment of weed barrier fabric with 4 inches of shredded wood type mulch.
- Q10. Please note the following discrepancies regarding the Odor Control System: Drawing C00.3 states, "Relocate Existing Odor Control Unit.", Drawing S00.2 & M00.1 shows and states, "New Odor Control Unit (By Others)" and Note 21 on Drawing M00.1 states "The Odor Control Unit will be installed by Evoqua and the Contractor shall contract Mr. Mike Murphy to coordinate the termination point of pipes to be connected to the odor Control Unit. Drawing G00.3 Note 17 states "Have Evoqua install the new odor control unit." Drawing E1.02 Note 3 states "Odor Control System to be relocated per C00.3, Blower and Control Panel to be reused and reconnected." Please clarify specifically what scope the Contractor is to include in this bid relative to relocating, installing, or procuring the Odor Control System and what is specifically being provided or performed by Others?**
R10. All notes regarding relocation of the existing odor control system are to be disregarded. Manatee County has a contract with Evoqua to install a new, larger odor control unit. The Contractor is required to coordinate with Evoqua to determine where pipes that are to be installed by the Contractor are to be terminated. Evoqua will connect to these pipes when the new odor control unit is installed by Evoqua. A new control panel for the new larger odor control unit will be installed by Evoqua but the electrical subcontractor will have to coordinate with Evoqua concerning items such as the termination of conduit and conductors to which Evoqua will connect when installing the new odor control unit. The contractor shall coordinate the return of the existing Evoqua system.

- Q11. Reference Section 01590 which states that the Contractor shall furnish, install, and maintain a temporary field office for the County. Is it the intent for this field office be located in the Temporary Construction Easement shown in Appendix B - Temporary Easement - Hyatt Survey Services, Inc. - 08/2021. Please advise of the intended location of this required field office?**
- R11. The Contractor can disregard this requirement to provide a field office for the County. A field office can be furnished if desired by the Contractor for their use. The temporary easement may be used for this purpose or location outside of the project limits as coordinated by the Contractor with a third party.
- Q12. Reference the new reinforced concrete entry drive on drawings C00.1, .2A, .2B. These drawings do not specifically show the finish grade elevations for the concrete drive. The Civil sheets depict spot Elevations on the existing site plans and finish. Please confirm if the intent is for the finish grade elevation to match the existing grade elevation?**
- R12. The driveway surface is to be from the required elevation at the master manhole as shown on Detail 4 on Sheet D00.4 and is to be sloped uniformly from that elevation to match the existing pavement gutter line and curb elevations of 117th Street.
- Q13. Reference Drawing C00.3, the existing SS and FM pipes entering existing MH S2 will need to be plugged and bypass pumped to rehab existing MH S2. Please provide the average daily and peak influent flows for each line and the desired location upstream to locate the temporary bypass pump suction?**
- R13. To the best of the County's knowledge the gravity sewer lines into MH S2 do not currently transmit flow. The combined flow rate when both upstream lift stations that discharge into the 4" FM are on at the same time is approximately 307 GPM. When only LS RTU 280 is on flows are estimated to drop to approximately 102 GMP. Total flow into MH S2 is estimated to not exceed 100,000 GPD. Contractor will be required to monitor the bypass system 24/7 during the bypass operation.
- Q14. Reference Existing MH S2 on Drawing C00.2A, stating INV OUT: 10.76' E (See Note 23). There is no Note 23. Please provide Note 23?**
- R14. Please reference Note 20 instead of Note 23.
- Q15. Drawings E1.05, E1.08 and the panelboard schedule on E1.06 show Air Conditioning Units to be provided in the electrical room. There are no specifications nor schedules for any HVAC equipment. Please provide detailed specification for all HVAC equipment and ancillary items required for this project?**
- R15. See attached specification 15700 Split System Units.
- Q16. Reference Invitation for Bid Construction Appendix K, Bid Pricing Form. Item 6.22 Exothermic Mold, Weld and Bonding has a quantity of 20 LS. Section 01150 1.07, Bid Item 6, 6.22 states that Payment for Exothermic Mold, Weld and Bonding shall be Lump Sum. Please confirm if bid item 6.22 is for 1 Lump Sum or 20 LF?**
- R16. Unit shall be EA. See revised Appendix K, Bid Pricing Form.

- Q17. Reference Drawing M00.1 the "All Pumps" table states the Flygt motor voltage is 380V. Specification Section 16150 2.01.C.1 states the voltage for the motor is 480V. Please advise which is the correct specified motor voltage?**
- R17. This is a Typographical error. The voltage for the Flygt motor is 480V.
- Q18. Reference Drawing C00.2A, A callout for the entrance gate states, "Two 6' High x 15" long cantilever type Auto Slide Gates.... (Ref. Struct. Dwg. For Slab Info)". There is another note "(2) 15' Long Automatic Slide Gates" therefore implying the gates have motorized openers. Structural sheets have no operator slab reference and Specification Section 02444 Fencing has no information regarding gate operators, nor do the electrical drawings. Please clarify what type of operator, if any is required to open the gates and provide detailed information on what type of operator is required, if so?**
- R18. The gates will be manually opened but should have provisions for the addition of automatic operators in the future by others. There will be no motor operator included in this project.
- Q19. Reference Drawing C00.2A, Fence note calls for "Security Slats" Specification Section 02444 Fencing Paragraph 1.01.A calls for privacy decorative slatting. Part 2 Products of the specification does not specify slats. Please clarify what is required for slats?**
- R19. Manatee County requires black security or privacy slats in the fencing. The intent is for black vinyl coated fencing with black security or privacy slats.
- Q20. Reference Drawing C00.1, .2A, .2B showing existing manholes S1 and S2. Please provide detailed information on the size (diameter and depth) of the manholes as well as the size of the frame and cover?**
- R20. The information known about MHs S1 and S2 are indicated on the MH schedule on Sheet C00.2A.
- Q21. Reference Drawing C00.2A. There is a callout for the 16' ID Polymer Concrete Wet Well referencing "See Note 24." There is no Note 24 on this Drawing. Please provide Note 24?**
- R21. Please reference note 21 instead of Note 24.
- Q22. Reference Drawing C00.3 showing the Ex Wet Well & MH S1 call outs referencing Note 1 Drawing C00.4. Please confirm if Note 2 on Drawing C00.4 also applies to these structures?**
- R22. Note 2 on Sheet C00.4 applies to all structures shown for demolition on Sheet C00.3.
- Q23. Bid Attachment 1, Insurance and Bond Requirements, Builder's Risk Insurance states the maximum allowable deductible is \$10,000. Deductibles this low are not available in today's builders' risk market. Further, deductibles are the sole responsibility of the first named insured on the policy and not the responsibility of the owner or any other additional insureds on the policy. Because there is no financial exposure to the Owner, Contractor's deductibles should be at the sole discretion of the Contractor. Please confirm that Contractor may manage their own deductible amount.**
- R23. Procurement will discuss this with the lowest responsive / responsible bidder.

- Q24. Reference Sheet M00.1 the "All Pumps" table states that Flygt or Hydromatic pumps may be used. Specification Section 03500 Part 2.01.D states, "The control panel will be ordered through Barney's Pump of Lakeland, FL." The control panels come with the pumps and are specific to the pumps. Barney's Pump represents Hydromatic, so if the Flygt pumps are to be installed, may the control panel come from a source other than Barney's Pump?**
- R24. The pump controls for this project are VFD drives. The preferred VFD manufacturer is Fuji. The pump manufacturers must be selected from the County approved products list. The County does not require that the pumps be purchased from Barney's pump of Lakeland.
- Q25. Drawing G00.2, Note 22, references Specification Section 02240, Dewatering During Construction, requiring Contractor to submit an engineered dewatering plan. Specification 02240-3.03. B states "Water pumped from the trench or other excavation may be disposed of in a storm sewer having adequate capacity, canals or suitable disposal pits, provided that the Contractor has complied with all permit requirements and has permission to do so from the City and County." Please advise of the capacity of the nearest SD Curb inlets on 117th Street East and if the City and County is providing permission for the Contractor to discharge in this location. If these are not of sufficient capacity, please advise where the Contractor is permitted to discharge the ground water dewatering discharge during construction?**
- R25. Potential options for groundwater discharge are provided in the specification. The capacity of the nearest SD curb inlets on 117th are unknown at this time. Acceptance is pending an approved overall dewatering plan that has complied with all permit requirements. If the discharge location ultimately leads an FDOT system, authorization from FDOT is required as well.
- Q26. Reference Appendix K Bid Pricing Form will the Client please provide this form in an excel format. The column widths/heights are narrow, and it will be difficult to be legible on the current sheets provided by the Client. Or please provide a larger Bid Form to allow room to write in the values for the unit prices.**
- R26. Yes, to be considered responsive, it is the sole responsibility of the bidder to correctly calculate and manually enter all sub-total, contingency, and total bid price fields.
- Q27. Please confirm all underground electrical conduit installation will be per Direct Buried Ductbank detail on E1.11? Concrete Encasement is not required.**
- R27. All underground electrical conduit is direct buried. No concrete encasement required.
- Q28. Reference Spec 03500 - Lift Station, 13.01.E, Install weed barrier fabric with shell or rock, shredded wood mulch. Bid Item 7, 7.03 & 7.04 specifies Polypropylene Weed Barrier Fabric under either stone or wood mulch. Please provide a specification for the polypropylene fabric, inert stone, washed shell, wood mulch?**
- R28. Provide mirafi weed barrier fabric as mentioned in R9. There is no additional specification language regarding the inert stone, washed shell, and wood much.
- Q29. Reference drawing C00.2A and the callout "Connect new 12" FM to existing 12" FM w/ 36 LF of 12" C900 PVC DR18 Pipe, 45 bend and pipe spool and tie into existing**

valve." Please advise if it is acceptable to temporarily isolate the influent flow of this FM line by closing the existing 12" FM influent valve located at the Southwest corner of the lift station- to facilitate the tie-in of the new section of 12" FM line? If it is acceptable to shut this down temporarily, what is the maximum allowable duration for this shut down?

- R29. It is acceptable to close the existing valve to isolate the influent flow for this connection. The valve shall be assumed to work for bidding but shall be verified by the County prior to the tie-in. The duration of temporary force main shut down depends on system flows at the time of the tie-in including time of day, rainfall events, contractor means and methods, and sequence of construction. The tie-in duration associated with pumping down upstream wet wells alone prior to tie-in cannot be guaranteed as adequate to complete the tie-in. Contractor may need vacuum trucks staged at all applicable upstream wet wells to prevent spills. Contractor shall determine their preferred means for bypass such as but not limited to installing a linestop with bypass tee to divert flow into the existing wet well during tie-in operations.
- Q30. Reference drawing C00.2A and the callout "New 2" service tap on existing 8" PVC WM, W/ isolation valve..." Please advise if it is acceptable to isolate flows on the 8" water main to tie-in the 2" service tap located at the West side of the sidewalk in lieu of doing a hot tap. If it is acceptable what is the maximum allowable duration for this shutdown?**
- R30. The flow in the existing watermain cannot be isolated, so the tap will need to be a hot tap.
- Q31. Reference Drawing C00.2A and the existing 8" PVC WM line where it crosses the new 12" C900 DR18 PVC FM line. Please also reference Drawing M00.2 Section 1 Continued at the bottom of the page. This section does not show this existing 8" water main pipe. Please advise what is the elevation of this existing 8" PVC water main pipe where it crosses the new 12" FM pipe?**
- R31. The Contractor will need to perform exploratory excavation as is stated in sequencing Note 2 on Sheet G00.3 to determine the elevation of the existing 8" water main. If there is a conflict between the new force main and the existing water main, the Contractor shall notify the County to consult with the Engineer for resolution of the issue prior to beginning construction.
- Q32. Reference drawing C00.2B - there is a rectangular shaped box shown with approximate scaled dimensions 10' x 15' on the Southeast corner of the lift station - over lapping the odor control system. There is no indication what this box represents and is not shown on any other drawings. Please clarify what this box represents if anything?**
- R32. The box can be ignored.
- Q33. Specification Section 07100 calls for Bitumastic Black Solution Damp proofing to be applied on exterior surfaces poured-in-place concrete walls from top of footings up to 6" below finished grade. Please confirm if this Damp proofing system is to be applied to the exterior walls of the Precast Polymer Concrete Manhole and Precast Polymer Concrete Wet Well shown on Drawing S00.2?**
- R33. It is not necessary for the bitumastic damp proofing to be applied to the exterior of the polymer concrete manholes and wet well.

- Q34. Detail US-23 on sheet D00.3 shows the antenna frame being cast into concrete. Please advise what is the depth of the embedment of the antenna and what is the depth of concrete? The existing anchorage frame will most likely be damaged if removed from the existing foundation. Will the County be supplying a new foundation section of the antenna to be cast in concrete by the Contractor or is the intent for the County to provide the manufacturer and model of the tower and it is the responsibility of the Contractor to replace the embedded anchor section? If so, please provide manufacturer and model information.**
- R34. The antenna manufacturer typically provides a plan for the foundation.
- Q35. Reference specification section 03350 section 3.02-B specifying power trowel and cement-sand shake be required for concrete slabs. Please confirm this requirement is to apply to the concrete slab for the electrical building as this method typically applies to much larger concrete slab areas?**
- R35. Per specification section 03350, section 3.02, A.2. hand steel troweling is acceptable at small slab areas.
- Q36. Reference Drawing C00.1 and existing manhole S2 - Is it acceptable to stop the flow in the existing 4" PVC FM pipe connecting to the West side of manhole S2 to facilitate installation of the new 12" PVC gravity pipe (refer to drawing C00.2B) and to rehabilitate S2 without by-passing the flow? If so, what is the maximum allowable duration for this shut down?**
- R36. See R13. The duration of temporary force main shut down depends on system flows at the time of the tie-in including time of day, rainfall events and contractor means and methods. The tie-in duration associated with pumping down upstream wet wells prior to tie-in cannot be guaranteed as adequate to complete the tie-in. Contractor may need vacuum trucks staged at all applicable upstream wet wells to prevent spills or other means such but not limited to installing a linestop with bypass tee to divert flow into the existing wet well during tie-in operations. Pass through bypass options may be suggested if compatible with MH rehabilitation operations.
- Q37. Per specification section 03350 - Concrete Finishes, a Lapidolith concrete hardener is to be applied to concrete floors. Please confirm that this Hardener is compatible with the Concrete Floor Coatings system specified?**
- R37. Per specification 09900, the concrete floor at the electrical building shall be coated with system no. 290-1. The Lapidolith hardener is not required.
- Q38. Contract Drawing C00.2A has a callout stating, "Install new water meter and RPZ backflow preventer assembly above grade w/ pad (Ref. Detail UW-14)". Similarly, there is another callout stating, "New 2" service tap on existing 8" PVC WM, w/ isolation valve. (Ref. Detail UW-3) Route to odor control unit and hose bibb." Details UW-14 and UW-3 are not provided to us. Please provide these details?**
- R38. The references to Details UW-3 and UW-14 should be changed to Detail UW-22 that is provided on Sheet D00.3
- Q39. Specification 02623, Part 2, 2.02 B, states a 16"-48" PVC gravity sewer line shall be DR 25 & AWWA C905; Drawing M00.1 shows the 20" gravity sewer line as DR 25 &**

- AWWA C900; Bid Item 2.23 says DR 18 & C900. Please clarify the correct DR and AWWA requirement for the 20" gravity sewer line?**
- R39. All AWWA PVC pipe is now covered by AWWA Standard C900 since AWWA revised the PVC standard in 2016. It is noted that some referenced still refer to C905, which was dropped by AWWA when the revised C900 Standard was issued. The DR should be changed to 25 for the 20" gravity sewer on all documents.
- Q40. Reference Drawing S01.1 Detail 1 - Section - Thru Electrical Bldg. the interior walls are called out to be painted but not the exterior. Please confirm whether the Exterior of the CMU walls are to be painted per Specification Section 09900?**
- R40. Per specification 09900, the interior of the CMU walls shall be coated with system no. 104-3. The exterior walls should be split face CMU in grey. Boxes mounted to the exterior split face CMU walls shall be mounted with SS spacers or 3/4" backer board that is slightly larger than the enclosure size.
- Q41. Specification Section 09900 3.14 specifies a coating system No. 115-1 (Interior) and 1029-1 (Exterior) to be used on Overhead Metal Decking and Joists. Please advise what specific areas require this coating in the Electrical Building, if any. Interior: underside of the galvanized steel deck, hot dipped galvanized support beams and purlins. Exterior: top of galvanized steel deck?**
- R41. Per specification 09900, interior galvanized surfaces shall be coated with system no. 66HS-3 and interior non-galvanized steel surface shall be coated with system no. 66HS-1.
- Q42. Specification Section 09900 3.18 specifies coating systems to be used on exterior above grade concrete. Please advise if these systems are to be applied to the above grade Wet Well concrete slab, access pads, HVAC pads, Generator pads, Meter pad, and Antenna foundation?**
- R42. Exterior concrete surfaces shall be coated with system no. 156-1.
- Q43. The Drawings do not specifically address or call out a coating requirement for the interior concrete surfaces of manholes and wet well. Please confirm if the interior walls of the Precast Polymer Concrete Manhole and Polymer Concrete Wet Well shown on Drawing S00.2 are to be coated per Specification Section 09970, Surface Protection Spray System?**
- R43. No coating is required to Polymer concrete surfaces as the material is inert to hydrogen sulfide corrosion.
- Q44. Reference Appendix A3. Would you consider modifying this requirement for the period of November 1, 2018, through the date of submission of the bid?**
- R44. No, this requirement shall remain the same.
- Q45. here is a lot of reference to the relocation of the existing generator. Contract Drawing G00.3, Note 18 states, "Remove the existing generator and deliver to the site designated by Manatee County." A callout on Contract Drawing C00.1 states, "Contractor shall mount generator on a trailer and deliver to location provided by Manatee County." Another callout on Contract Drawing C00.3 states, "Demolish existing generator concrete pad and coordinate with the County to mount the existing generator on a trailer and remove from the site." Please confirm if the**

trailer referenced in these drawing notes and callouts will be provided by the Owner. Also, please indicate if the generator needs to be permanently mounted to the trailer or if it will just be transported on the trailer to be unloaded by the County at their designated location?

R45. The existing generator is to be turned over to the County at a coordinated time and location. Trailer mounting the generator is not required.

Q46. This RFI is in reference to the piping material to be used for the 2" water line between the new hose bibb and the new 2" service tap on the existing 8" PVC WM shown on Contract Drawing C00.2A. On this drawing there is a callout for a 2" x 2" tee w/ 2" gate valve on branch, route 2" PVC water to new odor control unit and hose bibb. There is also a callout to install new water meter and rpz backflow preventer assembly above grade w/ pad (ref. Detail UW-14). Detail UW-14, states to use copper or brass pipe minimum schedule 40. Specification Section 02590 Water Services on Private Property, 2.01.C, states that water service pipe shall be per Section 02620 of the specifications. Specification Section 02620 Polyethylene (HDPE) Pipe and Fittings, 2.01.C, states that polyethylene tubing 2 inches in diameter and smaller for potable and reclaimed water shall be high density PE 3408 polyethylene resin per ASTM D2737, Pressure Class 200, Copper Tube Size (CTS), SDR 9, Performance Pipe DriscoPlex 5100, Endot EndoPure, Charter Plastics or an approved equal, meeting the requirements of AWWA C901. Please confirm if the 2" water line in question is to be PVC, copper or brass, or HDPE. If it is a combination of these materials, then please specify the dimensions on each?

R46. Bidders are directed to Manatee County standard detail US-15, US-20, and the Manatee County approved product list.

NOTE:

Deleted items will be ~~struck through~~, added or modified items will be underlined. All other terms and conditions remain as stated in the IFBC.

INSTRUCTIONS:

Receipt of this Addendum must be acknowledged as instructed in the solicitation document. Failure to acknowledge receipt of this Addendum may result in the response being deemed non-responsive.

END OF ADDENDUM

AUTHORIZED FOR RELEASE

APPENDIX K, BID PRICING FORM - REVISED IFBC NO. 22-TA004431JH PROJECT NAME: MISSIONARY VILLAGE LIFT STATION REHABILITATION PROJECT NUMBER: 6022386 Bidders must provide prices for each line item for their bid to be considered responsive.				BID A 360 CALENDAR DAYS		BID B 400 CALENDAR DAYS	
ITEM	DESCRIPTION	U/M	EST. QUANTITY	UNIT PRICE BID A 360 CALENDAR DAYS	EXTENDED PRICE BID A	UNIT PRICE BID B 400 CALENDAR DAYS	EXTENDED PRICE BID B
1	MOBILIZATION/DEMOBILIZATION	LS	1				
2	Mechanical Improvements						
2.01	Traffic Control	LS	1				
2.02	10" Check Valve	EA	3				
2.03	10" Gate Valve	EA	3				
2.04	10" DR 11 HDPE 90 DEG Bend	EA	3				
2.05	10" PE X Flanged HDPE	EA	6				
2.06	10" HDPE Riser	LF	66				
2.07	12" DI FM	LF	26				
2.08	12" MAG Flow Meter	EA	1				
2.09	12" Gate Valve	EA	4				
2.10	12" Restrained C900 DR-18 PVC FM	LF	120				
2.11	10" SCH 80 PVC Odor Control Suction Pipe	LF	40				
2.12	12" SDR 26 PVC Gravity Sewer, Incl. Connection to MH S2	LF	58				
2.13	12" Force Main Drop Connection	EA	1				
2.14	16' Dia. Polymer Concrete Wetwell	EA	1				
2.15	Core Wet Well & Install Connection Boot for 10" Pipe	EA	2				
2.16	Core Wet Well & Install Connection Boot for 12" Pipe	EA	1				
2.17	Core Wet Well & Install Connection Boot for 20" Pipe	EA	1				
2.18	5' Diameter Polymer Manhole	EA	1				
2.19	Core Manhole & Install Connection Boot for 12" Pipe	EA	3				
2.20	Core Manhole & Install Connection Boot for 20" Pipe	EA	1				
2.21	2" SCH 80 PVC Pipe	LF	125				
2.22	2" Service Tap	LF	1				
2.23	20" C900 DR 18 25 PVC Gravity Sewer	LF	5				
2.24	6" Cam Lock and Cap	EA	1				
2.25	6" Gate Valve	EA	1				
2.26	6' Chainlink Fence	LF	240				
2.27	6' Tall X 15' Long Cantilever Slide Gates for Fence Opening	EA	2				
2.28	Connection to Existing 12" Valve	EA	2				
2.29	Demolition	LS	1				
2.30	DI Fittings	TON	2.3				
2.31	Hose Bib and Rack	EA	1				
2.32	Rehab Existing Manhole	EA	1				
2.33	Relocate Generator off-site	EA	1				
2.34	SS Pipe Supports	EA	13				
2.35	Pumps, Discharge Connections, Guide Rails and Upper Guide Rail Brackets	EA	3				
2.36	Pump Access Hatches W/Fall Protection Grates	EA	3				
2.37	Cable Holder	EA	1				
2.38	Water Meter Assembly	EA	1				
2.39	2" Backflow Preventor Assembly	EA	1				
2.40	2" X 2" Combination Air and Vacuum Release Valve	EA	1				

3	Structural					
3.01	Concrete Slab-On-Grade	CY	5			
3.02	6" Thick Concrete Driveway	SY	125			
3.03	Excavate Useable Soil (0 to 18 ft deep)	CY	380			
3.04	Excavate Unuseable Clay Soil (18 to 22 ft deep), Including Disposal	CY	74			
3.05	Excavate Unuseable Limestone (22 ft and deeper), Including Disposal	CY	67			
3.06	Construct Leveling Course	CY	240			
3.07	Backfill and Compact Useable Soil	CY	266			
3.08	Backfill and Compact Imported Soil	CY	35			
3.09	Mill Existing Asphalt Pavement	SY	105			
3.10	Roadway Base Restoration	SY	35			
3.11	Local Road SIII Asphaltic Concrete	SY	105			
3.12	Dewatering (Pipe and Structures)	Day	52			
4	Electrical Equipment Building					
4.01	Excavation	CY	25			
4.02	Backfill and Compaction	CY	15			
4.03	Concrete Slabs-On-Grade	CY	15			
4.04	Concrete Masonry Walls	SF	730			
4.05	Steel Beams	LF	205			
4.06	Steel Plates	SF	50			
4.07	Steel Deck	SF	255			
4.08	CIP Anchor Bolts	EA	30			
4.09	1/2" Plywood	SF	255			
4.10	Rigid Insulation Boards	SF	255			
4.11	Underlayment	SF	255			
4.12	Standing Seam Metal Roof	SF	255			
4.13	Alum Doors w/ Hardware	EA	3			
4.14	Alum Frames	EA	3			
4.15	Caulk & Sealant	LF	125			
4.16	Paint Interior Walls	SF	730			

5	Instrumentation & Controls						
5.01	Relocate tower, RTU, startup, and commissioning services	EA	1				
6	Electrical						
6.01	Main Service Entrance Breaker	EA	1				
6.02	VFD's	EA	3				
6.03	Automatic Transfer Switch	EA	1				
6.04	Power Distribution Panel	EA	1				
6.05	450KW Generator	EA	1				
6.06	120 V Power Distribution	EA	1				
6.07	Low Voltage Receptacles	EA	1				
6.08	Outlet Boxes	EA	1				
6.09	Rigid Conduit	LF	1055				
6.10	Low Voltage Cables	LF	2448				
6.11	Instrumentation Cable	LF	770				
6.12	Flexible Conduits & Fittings	EA	105				
6.13	Sealing Fitting	EA	5				
6.14	Hangers and Supports for Electrical Systems	EA	6				
6.15	Underground Ductbank	CY	50				
6.16	Manholes and Handholes	EA	1				
6.17	AC Unit Split System	EA	2				
6.18	Manual Transfer Switch	EA	1				
6.19	Disconnect	EA	6				
	Grounding and Bonding						
6.20	Grounding Rods	EA	6				
6.21	Grounding Cable	LF	265				
6.22	Exothermic Mold, Weld and Bonding	LS EA	20				
7	Civil						
7.01	Erosion and Sediment Control	LS	1				
7.02	Temporary Bypass Pumping for Installation of 12" Gravity Sewer	LS	1				
7.03	Stone Surface 4" Thick W/Polypropylene Weed Barrier	SQ YD	219				
7.04	Wood Type Mulch 4" Thick W/Polypropylene Weed Barrier	SQ YD	23				
7.05	Site Restoration	LS	1				
8	Permit Allowance	1 LS	1	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
9	Record Drawings	1 LS	1				
SUB-TOTAL BASE BID							
10	CONTRACT CONTINGENCY (Used with prior County Approval)	10%	1				
TOTAL BID							

Bidders Name _____

Bidders Signature _____

*To be considered responsive, it is the sole responsibility of the bidder to correctly calculate and manually enter all sub-total, contingency, and total bid price fields.

SECTION 15700 SPLIT SYSTEM UNITS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnish packaged type, indoor, ductless, split condensing DX (single unit systems or variable refrigerant volume systems as indicated in schedule), air handling units of the size, configuration and capacity scheduled on drawings.

1.02 QUALITY ASSURANCE

- A. Certify unit performance in accordance with ARI Standard 210/240.
- B. Furnish units with minimum heating and cooling capacities shown in schedule and on plans.
- C. Provide minimum 1 year complete warranty including parts and service.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Mitsubishi (Basis of Design)
- B. LG
- C. Daikin

2.02 INDOOR UNIT (SINGLE SPLIT SYSTEM)

- A. Performance: See equipment schedule.
- B. Indoor unit shall be wall mounted type, completely factory assembled and tested. Included in the unit is factory wiring, piping, electronic proportional expansion valve, control circuit board, fan motor thermal protector, flare connections, condensate drain pan, condensate drain pump, self-diagnostics, auto-restart function, 3-minute fused time delay, and test run switch. The unit shall have an adjustable external static pressure switch.
- C. Indoor unit and refrigerant pipes will be charged with dehydrated air prior to shipment from the factory.
- D. Both refrigerant lines shall be insulated from the outdoor unit.
- E. The indoor units shall be equipped with a return air thermistor.
- F. Switch box shall be reached from the side or bottom for ease of service and maintenance.
- G. Fabricate sheet metal parts of continuous heavy gauge galvanized or phosphatized painted steel. Provide baked enamel finish.
- H. Fan:
 - 1. The fan shall be direct-drive type fan, statically and dynamically balanced impeller with high and low fan speeds available.

2. The air flow rate shall be available in high and low settings.
 3. The fan motor shall be thermally protected.
- I. Filter:
1. The return air shall be filtered by means of a washable long-life filter with mildew proof resin.
- J. Coil:
1. Coils shall be of the direct expansion type constructed from copper tubes expanded into aluminum fins to form a mechanical bond.
 2. The coil shall be of a waffle louver fin and high heat exchange, rifled bore tube design to ensure highly efficient performance.
 3. The coil shall be a 3 row cross fin copper evaporator coil with 14 FPI design completely factory tested.
 4. The refrigerant connections shall be flare connections.
 5. A condensate pan shall be located under the coil.
 6. A condensate pump shall be located below the coil in the condensate pan with a built in safety alarm.
 7. A thermistor will be located on the liquid and gas line.

2.03 **OUTDOOR UNIT (SINGLE SPLIT SYSTEM)**

- A. Furnish and install an air-cooled split system outdoor unit, with capacities as indicated on the plans for use with ductless indoor units.
- B. Unit shall be completely factory assembled and pre-tested.
- C. Unit shall be condensing type as noted.
- D. Unit casing shall be galvanized steel, zinc phosphatized, baked enamel finish and fully weatherproof.
- E. Condenser coil shall be factory coated with a corrosion inhibitor, be of non-ferrous construction, aluminum plate fins, mechanically bonded to seamless copper tube, subcooling circuitry.
- F. Condenser fans and motors shall be direct drive, propeller type fins, Class B motor insulation, inherent protection, permanently lubricated, resiliently mounted; fans shall have safety guard.
- G. Compressor shall be a hermetically sealed, high efficiency compressor with special lubrication system, bearing surfaces and motor installation, internal over-current, over-temperature and over-pressure protection and crankcase heater. The compressors shall have a five (5) year warranty.
- H. A wire guard shall be provided over the condenser coils for protection from physical damage. The wire guard shall be either factory mounted or field erected.

- I. Accessories shall be as indicated on the drawings.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install system per manufacturer recommendations and installation instructions.
- B. Provide clearance at each unit for routine service.
- C. Piping Connections:
 - 1. Support piping independently of coils and with adequate flexibility to prevent undue stress at coil header connections.
 - 2. Install full size drain lines from the drain pan connection and trap to permit condensate to drain freely.
 - 3. Route condensate drain piping as shown on plans.

END OF SECTION

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