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Section 1: Cover Letter

Florida Water Partners (FWP) is pleased to provide this Guaranteed Maximum Price (GMP-4) for the Southeast LFA Wellfield Project – SETM – Construction Packages 2B and 4A and Valve Package BP-1. Bid packages 2B and 4A were advertised on March 27th, 2025, with bids received on May 1st, 2024. A total of seven bid packages were received for Segment 2B and seven bid packages were received for Segment 4A and evaluated by FWP and PRWC to determine the best value bidder for each scope of work. After the review and evaluation period it was determined that all bidders were responsive. Garney Companies was the best value selection for Construction Package 2B. Amici was the best value selection for Construction Package 2B. Amici was the best value selection 5 – Schedule 3 – GMP Bid Breakdown. Valve Package BP-1 was advertised on February 25, 2025, with two bids received on March 10, 2025. Bids were evaluated by FWP and PRWC to determine the best value bidder for each scope of work. After the review and evaluation period it was determined that two bidders were responsive, and one was non-responsive. Ferguson Waterworks was the best value selection for Valve Package BP-1.

GMP-4 SETM Bid Package includes cost for performance and payment bonds, insurance, CMAR general conditions, CMAR contingency, and CMAR fee.

FWP will serve as the CMAR, furnishing construction administration and management services and will use the CMAR efforts to perform the Work in accordance with the Contract Documents.

GMP-4 scope of work description is included in Section 4 – Schedule 2 – Contract Drawings and Specifications.

The GMP is based on a unit price agreement with a Limited Notice to Proceed date of June 23, 2025. The construction schedule for GMP-4 is provided Section 7.

Should you have any questions, comments, or wish to discuss any of the GMP package in greater detail, please feel free to contact us immediately.

Section 2: Exhibit 'C' GMP Addendum Summary

EXHIBIT "C"

GMP ADDENDUM

Agreement between Polk Regional Water Cooperative and Construction Manager at Risk

Southeast LFA Wellfield and West Polk LFA Wellfield

- 1. The CMAR's (GMP) for the Work as defined in Section 6.1.3 and the CMAR's Fee as defined in Section 6.1.2, for the Construction Phase Services is \$28,639,140,00.
- 2. This price is for the performance of the Work in accordance with the Schedules listed below and attached to this Addendum as follows:
 - Schedule 1 CMAR's Personnel.
 - Schedule 2 Contract Drawings & Specifications.
 - Schedule 3 GMP Bid Breakdown.
 - Schedule 4 Clarifications, Assumptions, Exclusions and Allowances.
- 3. Pursuant to Article 2, Section 2.1, the Project critical dates are as follow:

Package 2B

- A. Limited Notice to Proceed date June 2025
- B. Conditional Notice to Proceed date August 2025
- C. Project Substantial Completion Date 722 Calendar days from Notice to Proceed
- D. Project Final Completion Date 60 Calendar days after Substantial Completion
- E. In the event the CMAR does not achieve Substantial Completion within the Contract Time, including approved extensions, the CMAR shall pay the Cooperative, as liquidated damages and not as a penalty, the sum of \$3,500.00 per day for each calendar day the actual time of performance exceeds the authorized Contract Time.

Package 4A

- A. Limited Notice to Proceed date June 2025
- B. Conditional Notice to Proceed date September 2025
- C. Project Substantial Completion Date <u>556</u> Calendar days from Notice to Proceed
- D. Project Final Completion Date 60 Calendar days after Substantial Completion
- E. In the event the CMAR does not achieve Substantial Completion within the Contract Time, including approved extensions, the CMAR shall pay the Cooperative, as liquidated damages and not as a penalty, the sum of \$3,500.00 per day for each calendar day the actual time of performance exceeds the authorized Contract Time.

- 4. The CMAR shall not be due any additional Construction Phase Fee on increases in the GMP that do not exceed a cumulative total of \$28,639,140.00.
- 5. The CMAR's Fee for overhead, profit and general expenses of any kind, except as may be expressly included in Article 9, for services provided during and related to the construction phase, shall be ___8__% of the cost of work, as defined under section 6.1.3, and contingency. The CMAR's Fee shall be converted to a fix amount upon acceptance of the GMP, subject to changes as described herein, and shall be paid proportionally to the ratio of the work in place, including stored materials (see Article 8.1.3), as it bears on the latest estimate of the total construction cost and/or to the GMP, whichever is less.
- 6. Pursuant to Section 6.1.3.2.2, the cost of the premiums for all insurance and cost of premiums for all bonds, which the CMAR is required to procure by this Agreement specifically for the construction project. General Liability will be cost at a fixed rate of _____2.5____% of the final Contract Amount and CMAR bonds will be cost at a fixed rate of ____1.25___%. The premium stated will be substantiated with industry standard documentation. The cost of the work shall include any subcontractor bonds the CMAR deems appropriate. There shall be no CMAR Overhead and profit fee on this item.

IN WITNESS WHEREOF, the parties have caused this amendment to be executed by their duly authorized Project Administrators, as of the effective date.

| | POLK REGIONAL WATER COOPERATIVE, an independent special district of the State of Florida |
|---|--|
| ATTEST: | |
| Ву: | By: Chairman Board of Directors |
| | Date: |
| Approved as to form and legal sufficien | icy: |
| Cooperative Attorney Date | |
| Attest: | Construction Manager at Risk. a corporation By: |
| Printed Name | |

Section 3: Schedule 1 – CMAR's Personnel

| Name | Title | Duration (Months) | Percentage |
|-------------|-----------------------|-------------------|------------|
| | Off-Site Staff | 10 | ' |
| | | - | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | On-Site Staff | .1. | |
| TBD | Asst. Project Manager | 22 | 100% |
| Kyle Davis | Project Engineer | 31 | 100% |
| Sean Fabela | Superintendent | 22 | 100% |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Section 4: Schedule 2 – Contract Drawings & Specifications

The following documents were used to develop GMP-4.

Package 2B

- 1. SE Water Transmission Main Construction Package 2B Technical Specifications, dated March 2025 prepared by Team One.
- 2. Southeast Water Transmission Main Construction Package 2B drawings, dated March 2025 prepared by Team One.
- Geotechnical Engineering Report PRWC SE Wellfield Pipeline Seg 9, dated March 2023 prepared by Madrid CPWG and PRWC SE Wellfield Pipeline Seg 5, dated May 2023 prepared by Madrid CPWG
- 4. Addendums 1 and 2 prepared by FWP, Team One, and PRWC. The addendums are included in Section 6.

Package 4A

- 1. SE Water Transmission Main Construction Package 4A Technical Specifications dated March 2025 prepared by Team One.
- 2. Southeast Water Transmission Main Construction Package 4A drawings dated March 2025 prepared by Team One.
- 3. Geotechnical Engineering Reports PRWC SE Wellfield Pipeline Seg 5, dated May 2023.
- 4. Addendums 1, 2 and 3 prepared by FWP, Team One, and PRWC. The addendums are included in Section 6.

Valve Package BP-1

1. SE Water Transmission Main Technical Specifications sections 33 14 00 and 40 71 15 dated June 2024 prepared by Team One.

LARGE FILES TO BE PROVIDED SEPARATELY

Section 5: Schedule 3 – GMP Bid Breakdown

Enclosed is the GMP-4 summary and backup.

| GMP-4: C | onstruction Package 2B and 4A | 5/8/2025 |
|-------------|---|------------|
| CONSTRU | JCTION COSTS | TOTALS |
| | CMAR General Conditions | 2,053,805 |
| | Construction Package 2B | 15,273,144 |
| 10% | CMAR Contingency | 1,527,314 |
| | Construction Package 4A | 5,441,227 |
| 10% | CMAR Contingency | 544,123 |
| | Valve Package | 786,395 |
| 5% | CMAR Contingency | 39,320 |
| | Testing & Inspection Fees | 10,000 |
| | Permit Fees | 10,000 |
| | SUBTOTAL COSTS | 25,685,328 |
| ALLOWA | NCES, INDIRECT COSTS | TOTALS |
| ALLOWANG | CES III A THE | |
| INDIRECT CO | OST | |
| | Bonds/Insurance | 898,986 |
| 8% | Construction Fee | 2,054,826 |
| GMP-4 TOT | AL | 28,639,140 |



PRWC - SETM

GMP-04: SEGMENT 2B, 4A and BP-1 Valve Package

Submittal Date: 05/08/2025

| | Submittal Date: 05/08/2025 | | | 11.11.0 . (4) | 5 : 1 10 : (4) |
|-----|---|--------|----------|------------------------------|--------------------|
| | DESCRIPTION | OTY | 110.4 | Unit Cost (\$) | Extended Cost (\$) |
| SEC | DESCRIPTION | QTY | UM | \$70,000.00 | \$70,000.00 |
| 2B | Mobilization and Demobilization | 1 | LS | | \$12,300.00 |
| 2B | Gopher Tortoise Survey | 1 | LS LS | \$12,300.00 \$10,000.00 | \$12,300.00 |
| 2B | Preconstruction Video | 1 | LS | \$78,000.00 | \$78,000.00 |
| 2B | Survey/As-built Drawings | 1 | LS | | \$200,000.00 |
| 2B | Maintenance of Traffic | | LS | \$200,000.00 \$214,000.00 | \$200,000.00 |
| 2B | Clearing and Grubbing | 1 | | | \$110,000.00 |
| 2B | Erosion and Sedimentation Control | 1 | LS | \$110,000.00 | \$55,000.00 |
| 2B | Existing Utility Location, Relocations & Support | 1 - | LS | \$55,000.00 | |
| 2B | 24" Ductile Iron Pipe (Open-Cut) | 5 | LF | \$240.00 | \$1,200.00 |
| 2B | 30" Ductile iron Pipe (Open-Cut) | 19550 | LF | \$344.00 | \$6,725,200.00 |
| 2B | 36" Ductile Iron Pipe (Open-Cut) | 8635 | LF | \$464.00 | \$4,006,640.00 |
| 2B | 10" PVC Pipe (Open-Cut) | 133 | LF | \$230.00 | \$30,590.00 |
| 2B | 24" PVC Pipe (Open-Cut) | 13 | LF | \$250.00 | \$3,250.00 |
| 2B | 42" Steel Pipe (Open-Cut) - NOT IN THIS CONTRACT | | | 4 15 8 | |
| 2B | 10" HDPE (Horizontal Directional Drill) | 11959 | LF | \$70.00 | \$837,130.00 |
| 2B | 10" HDPE (Open-Cut) | 120 | LF | \$120.00 | \$14,400.00 |
| 2B | Jack and Bore Steel Casing - NOT IN THIS CONTRACT | | | | |
| 2B | Below Grade Bacteriological Sampling Assembly | 20 | EA | \$5,000.00 | \$100,000.00 |
| 2B | Water Main Testing and Disinfection | 1 | LS | \$187,800.00 | \$187,800.00 |
| 2B | 24" Butterfly Valve Installation- VALVE TO BE PROVIDED | 1 | EA | \$6,200.00 | \$6,200.00 |
| 2B | 30" Butterfly Valve Installation- VALVES TO BE PROVIDED | 4 | EA | \$8,100.00 | \$32,400.00 |
| 2B | 36" Butterfly Valve Installation- VALVE TO BE PROVIDED | 1 | EA | \$9,300.00 | \$9,300.00 |
| 2B | 10" 90 degree bend | 1 | EA | \$2,900.00 | \$2,900.00 |
| 2B | 24" 90 degree bend | 1 | EA | \$9,500.00 | \$9,500.00 |
| 2B | 30" 90 degree bend | 9 | EA | \$16,000.00 | \$144,000.00 |
| 2B | 30" 45 degree bend | 1 | EA | \$12,200.00 | \$12,200.00 |
| 2B | 30" 22.5 degree bend (vertical) | 1 | EA | \$12,000.00 | \$12,000.00 |
| 2B | 36"x30" reducer | 1 | EA | \$16,200.00 | \$16,200.00 |
| 28 | 36" 45 degree bend | 3 | EA | \$17,000.00 | \$51,000.00 |
| 2B | 36" 11.25 degree bend | 1 | EA | \$13,950.00 | \$13,950.00 |
| 2B | 30" 11.25 degree bend | 2 | EA | \$10,500.00 | \$21,000.00 |
| 2B | 10" DI 11.25 degree bend | 26 | EA | \$5,000.00 | \$130,000.00 |
| 2B | 30"x10" Tee | 2 | EA | \$23,000.00 | \$46,000.00 |
| 2B | 30"x24" reducer | 1 | EA | \$10,200.00 | \$10,200.00 |
| 2B | 10" Gate Valve | 3 | EΑ | \$5,900.00 | \$17,700.00 |
| 2B | 30" DI Test Cap | 1 | EA | \$6,800.00 | \$6,800.00 |
| 2B | 2" Flushing Valve Outlet - NOT IN THIS CONTRACT | | | | |
| 2B | 1" Air Release Valve Assembly | 14 | EA | \$8,000.00 | \$112,000.00 |
| 2B | 2" Combination Air Release Valve Assembly | 5 | EA | \$12,200.00 | \$61,000.00 |
| 2B | 2" Surge Suppression Air Release Valve Assembly | 2 | EA | \$12,900.00 | \$25,800.00 |
| 2B | 3" Combination Air Release Valve Assembly | 12 | EA | \$20,200.00 | \$242,400.00 |
| 2B | 3" Air Release Valve Assembly | 1 | EA | \$21,800.00 | \$21,800.00 |
| 2B | 4" Blow Off Assembly | 13 | EA | \$22,000.00 | \$286,000.00 |
| 2B | Asphalt Roadway Repair | 692 | SQ YD | \$216.00 | \$149,472.00 |
| 2B | Milling and Overlay of Existing Asphalt Pavement | 3206 | SQ YD | \$26.00 | \$83,356.00 |
| 2B | Curb or Curb and Gutter -NOT IN THIS CONTRACT | | | | |
| 2B | Dirt Road Restoration | 6,116 | SQ YD | \$5.00 | \$30,580.00 |
| 2B | Gravel Road Restoration | 86 | SQ YD | \$56.00 | \$4,816.00 |
| 2B | Clay Road Restoration | 17,120 | SQ YD | \$19.00 | \$325,280.00 |
| 2B | Concrete Sidewalk Replacement - NOT IN THIS CONTRACT | | | \$25.00 | \$320,200io |
| | Concrete Driveway Replacement- NOT IN THIS CONTRACT | | | | |
| 2B | Asphalt Driveway Replacement- NOT IN THIS CONTRACT | | | | |

| 2B | Fencing removal and re-installation | 6,084 | LF | | \$45.00 | \$273,780.00 |
|----------|---|-------|----|----------|--------------|---|
| 2B | Sodding | 1 | LŞ | | \$26,000.00 | \$26,000.00 |
| 2B | Seed and Mulch | 1 | LS | \vdash | \$70,000.00 | \$70,000.00 |
| 2B | Gopher Tortoise Permitting and Relocation- ALLOWANCE | 1 | LS | \vdash | , , | \$80,000.00 |
| 2B | Utility Pole Protection- ALLOWANCE | 1 | LS | - | | \$80,000.00 |
| | Meter Assembly Installation | 1 | LS | - | \$79,000.00 | \$79,000.00 |
| 2B | ALTERNATE: Remobilization at direction of CMAR | 1 | LS | | \$125,000.00 | \$125,000.00 |
| | TELETINITE HOMOSIME CONTROL | | | | 1, | , |
| 2B | SEGMENT 2B SCHEDULE OF VALUES SUBTOTAL | | | \vdash | | \$15,273,144.00 |
| 2B | CMAR CONTINGENCY | | | | 10.0% | \$1,527,315.00 |
| | 30 | | | | | |
| | SUB TOTAL SEGMENT 2B | | | | | \$16,800,459.00 |
| 10 11 11 | | | | | | |
| 4A | Mobilization and Demobilization | 1 | LS | \$ | 272,000.00 | |
| 4A | Gopher Tortoise Survey | 1 | LS | \$ | 7,800.00 | |
| 4A | Preconstruction Video | 1 | LS | \$ | 4,200.00 | |
| 4A | Survey/As-built Drawings | 1 | LS | \$ | 43,000.00 | \$ 43,000.00 |
| | Maintenance of Traffic | 1 | LS | \$ | 70,000.00 | |
| 4A | Clearing and Grubbing | 1 | LS | \$ | 140,000.00 | \$ 140,000.00 |
| 4A | Erosion and Sedimentation Control | 1 | LS | \$ | 41,000.00 | \$ 41,000.00 |
| 4A | Existing Utility Location, Relocations & Support | 1 | LS | \$ | 54,000.00 | \$ 54,000.00 |
| 4A | 24" PVC Pipe (Open Cut) | 12463 | LF | \$ | 174.00 | \$ 2,168,562.00 |
| 4A | Corrosion Protection Systems | 16-3 | | | STATE PARTY | |
| 4A | 24" HDPE Pipe (HDD) | 2253 | LF | \$ | 324.00 | \$ 729,972.00 |
| | 24" HDPE Carrier in 36" Jack and Bore Steel Casing | 320 | LF | \$ | 2,190.00 | \$ 700,800.00 |
| | Below Grade Bacteriological Sampling Assembly | 11 | EA | \$ | 2,800.00 | \$ 30,800.00 |
| | Water Main Testing and Disinfection | 1 | LS | \$ | 79,000.00 | \$ 79,000.00 |
| | 24" Butterfly Valve Installation- VALVES TO BE PROVIDED | 4 | EA | \$ | 5,200.00 | \$ 20,800.00 |
| | a) 24"- 90 degree bend | 10 | EA | \$ | 11,000.00 | \$ 110,000.00 |
| | | | | _ | | |
| | b) 24"- 45 degree bend | 17 | EA | \$ | 7,000.00 | \$ 119,000.00 |
| | c) 24"- 22.5 degree bend | 14 | EA | \$ | 6,900.00 | \$ 96,600.00 |
| | d) 24"- 11.25 degree bend | 8 | EA | \$ | 7,000.00 | \$ 56,000.00 |
| | 2" Flushing Valve Outlets - NOT IN THIS CONTRACT | | | | | |
| | a) 6" Air Release Assembly | 1 | EA | \$ | 29,000.00 | \$ 29,000.00 |
| 4A | b) 4" Air Release Assembly | 3 | EA | \$ | 21,000.00 | \$ 63,000.00 |
| 4A | c) 3" Air Release Assembly | 1 | EA | \$ | 17,000.00 | \$ 17,000.00 |
| 4A | d) 2" Air Release Assembly | 1 | EA | \$ | 14,000.00 | \$ 14,000.00 |
| 4A | Blow Off Assemblies | 4 | EA | \$ | 13,000.00 | \$ 52,000.00 |
| 4A | Asphalt Roadway Repair | 131 | SY | \$ | 150.00 | \$ 19,650.00 |
| 4A | Milling Existing Asphalt Pavement Down 2-inches | 1417 | SY | \$ | 49.00 | \$ 69,433.00 |
| 4A | Curb or Curb and Gutter - NOT IN THIS CONTRACT | | | | | |
| 4A | a) Dirt Remove and Replace | 778 | SY | \$ | 28.00 | \$ 21,784.00 |
| 4A | b) Clay Remove and Replace | 95 | SY | \$ | 120.00 | \$ 11,400.00 |
| 4A | Concrete Sidewalk Replacement - NOT IN THIS CONTRACT | | | | | |
| 4A | Concrete Driveway Replacement | 284 | SY | \$ | 89.00 | \$ 25,276.00 |
| 4A | Asphalt Driveway Replacement | 145 | SY | \$ | 150.00 | |
| | Asphalt Trail Replacement - NOT IN THIS CONTRACT | Haw a | | | DW-ML | |
| | Fencing Removal and Re-installation | 7800 | LF | \$ | 18.00 | \$ 140,400.00 |
| | Sodding | 1 | LS | \$ | 44,000.00 | \$ 44,000.00 |
| | Seed and Mulch | 1 | LS | \$ | 17,000.00 | \$ 17,000.00 |
| | Gopher Tortoise Permitting and Relocation- ALLOWANCE | 1 | LS | 1 | 17,000.00 | \$ 50,000.00 |
| | Utility Pole Protection- ALLOWANCE | 1 | LS | + | | \$ 80,000.00 |
| | Remobilization at direction of CMAR | 1 | LS | \$ | 22,000.00 | \$ 22,000.00 |
| 4A | MEMORIIZACION AC UNECCION OF CIVIAN | 1 | LJ | 13 | ۵۵٫000,00 | 22,000.00 |
| 4A | SEGMENT 4A SCHEDULE OF VALUES SUBTOTAL | | | + | | \$5,441,227.00 |
| 4A | | , | | 1 | 10.0% | \$544,123.00 |
| 4/1 | LIVIAN CONTINGENCE | | | 1 | 10.070 | ÇJ44,123.00 |
| 4A | SUB TOTAL SEGMENT 4A | | | 1 | | \$5,985,350.00 |

| | | | | GMP-04 TOTA | L | 28,639,140.50 |
|--------|--|-----|----------|----------------------------|------|-----------------------------|
| TOTAL | | | | | | |
| GMP-04 | CMAR FEE | | | | | \$2,054,826.00 |
| TOTAL | | | | | | |
| GMP-04 | CMAR BONDS/INSURANCE | | | | | \$898,986.00 |
| TOTAL | CHAIN GENERAL CONDITIONS | | | | | |
| GMP-04 | CMAR GENERAL CONDITIONS | | | | | \$2,053,805.00 |
| | PERMIT FEES | | | | | \$10,000.00 |
| | TESTING & INSPECTION FEES | | | | | \$825,714.50 \$10,000.00 |
| BP-1 | SUB TOTAL SEGMENT BP-1 | | | | | Anne 744 F6 |
| BP-1 | CMAR CONTINGENCY | | | 5.0 | 6 | \$39,319.74 |
| | BP-1 Valve Package SCHEDULE OF VALUES SUBTOTAL | | | | | \$786,394.76 |
| BP-2 | Warehouse Storage fees | 12 | MN | \$ 1,500.0 | \$ | 18,000.00 |
| BP-1 | Extended Warranty | 42 | MN | \$ 775.0 | \$ | 32,550.00 |
| | 25% Supply Bond | 1 | LS | \$ 5,364.3 | \$ | 5,364.32 |
| | 7% SALES TAX | 1 | LS | \$47,788.4 | 4 \$ | 47,788.4 |
| | 24" Flanged Gate Valve | 2 | EA | \$ 16,849.0 | \$ | 33,698.0 |
| | 16" Flanged Gate Valve | 4 | EA | \$ 5,812.0 | \$ | 23,248.00 |
| | 12" Flanged Gate Valve | 4 | EA | \$ 2,683.00 | | 10,732.0 |
| | 10" Flanged Gate Valve | 4 | EA | \$ 2,222.00 | | 8,888.00 |
| | 8" Flanged Gate Valve | 10 | EA | \$ 1,398.00 | | 13,980.00 |
| | 30" MJ Butterfly Valve 36" MJ Butterfly Valve | 19 | EA EA | \$ 18,418.0 \$ 26,120.0 | | 349,942.00 26,120.00 |
| | 24" MJ Butterfly Valve | 14 | EA | \$ 7,268.0 | _ | 101,752.00 |
| | 24" MJ Gate Valve | 1 | EA | \$ 16,200.0 | + | 16,200.00 |
| | 20" MJ Gate Valve | 6 | EA | \$ 11,564.0 | + | 69,384.0 |
| | 16" MJ Gate Valve | 2 | EA | \$ 4,747.0 | | |
| | 12" MJ Gate Valve | 1 | EA | \$ 2,707.0 | | 2,707.00 9,494.00 |
| | 10" MJ Gate Valve | 4 | EA | \$ 2,423.0 | | 9,692.00 |
| | 8" MJ Gate Valve | . 5 | EA | \$ 1,371.0 | | 6,855.0 |

Valve Package Breakdown

| BID ITEM NUMBER | Package | DESCRIPTION | Estimated Qty. | Unit | Unit Price (Enter unit price on all Items even If estimated quantity is zero) | Extension |
|-------------------|----------------|--|----------------|---------|---|-----------------|
| 1 | 2B | 10" Gate Valve - MJ | 4.00 | EA | \$ 2,423.00 | \$ 9,692.0 |
| 2 | 2B | 24" Butterfly Valve - MJ | 1.00 | EA | \$ 7,268.00 | \$ 7,268.0 |
| 3 | 2B | 30" Butterfly Valve - MJ | 3.00 | EA | \$ 18,418.00 | \$ 55,254.0 |
| 4 | 2B | 36" Butterfly Valve - MJ | 1.00 | EA | \$ 26,120.00 | \$ 26,120.0 |
| 5 | 2C | 8" Gate Valve - MJ | 2.00 | EA | \$ 1,371.00 | \$ 2,742.0 |
| 6 | 2C | 30" Butterfly Valve - MJ | 8.00 | EA | \$ 18,418.00 | \$ 147,344.0 |
| 7 | 3A | 8" Gate Valve - MJ | 1.00 | EA | \$ 1,371.00 | \$ 1,371.0 |
| 8 | 3A | 30" Butterfly Valve - MJ | 7.00 | EA | \$ 18,418.00 | \$ 128,926.0 |
| 9 | 3B | 16" Gate Valve - MJ | 2.00 | EA | \$ 4,747.00 | \$ 9,494.0 |
| 10 | 3B | 24" Butterfly Valve - MJ | 2.00 | EA | \$ 7,268.00 | \$ 14,536.0 |
| 11 | 3B | 30" Butterfly Valve - MJ | 1.00 | EA | \$ 18,418.00 | \$ 18,418. |
| 12 | 4A | 24" Butterfly Valve - MJ | 4.00 | EA | \$ 7,268.00 | \$ 29,072.0 |
| 13 | 4B | 24" Butterfly Valve - MJ | 7.00 | EA | \$ 7,268.00 | \$ 50,876.6 |
| 14 | 4B | 24" Gate Valve - MJ | 1.00 | EA | \$ 16,200,00 | \$ 16,200. |
| 15 | 5 | 8" Gate Valve - MJ | 2.00 | EA | \$ 1,371.00 | \$ 2,742. |
| 16 | 5 | 12" Gate Valve - MJ | 1.00 | EA | \$ 2,707.00 | \$ 2,707. |
| 17 | 5 | 20" Gate Valve - MJ | 6.00 | EA | \$ 11,564.00 | \$ 69,384. |
| 28 | Meter Stations | 8" Gate Valve - Flanged | 10.00 | EA | \$ 1,398.00 | \$ 13,980. |
| 29 | Meter Stations | 10" Gate Valve - Flanged | 4.00 | EA | \$ 2,222.00 | \$ 8,888. |
| 30 | Meter Stations | 12" Gate Valve - Flanged | 4.00 | EA | \$ 2,683.00 | \$ 10,732. |
| 31 | Meter Stations | 16" Gate Valve - Flanged | 4.00 | EA | \$ 5,812.00 | \$ 23,248. |
| 32 | Meter Stations | 24" Gate Valve - Flanged | 2.00 | EA | \$ 16,849.00 | \$ 33,698. |
| 33 | | Electronic Submittals | 1.00 | LS | Included | Includ |
| 34 | | O&M Manuals per specifications | 1.00 | LS | Included | Includ |
| 35 | | Year Warranty starting on date of delivery | 1.00 | LS | Included | Includ |
| | | | | | Subtotal: | \$ 682,692. |
| | | | | | Sales Tax (7%): | \$ 47,788. |
| 36 | | Extended Monthly Warranty | 42,00 | монтн | | \$ 32,550. |
| 37 | | 25% Supply Bond (enter percentage to be applied to subtotal value) | | Percent | .75% of Material Costs and Ext. Warranty | \$ 5,364 |
| ALT ADD/DEDUCT #1 | | Warehouse Storage Fees | 12.00 | MONTH | \$ 1,500.00 | \$ 18,000. |
| | | | • | | Total: | \$ 786,394. |

Section 6: Schedule 4 – Clarifications, Assumptions, Exclusions

Package 2B

GMP and project schedule provided are contingent on easements **acquired** so that gopher tortoise relocation, clearing and grubbing and material deliveries can occur before the full mobilization takes place. As noted in the documents, some Property parcels are still in the process of being acquired. The anticipated date of release is noted on the attached parcel spreadsheet.

Package 4A

GMP and project schedule provided are contingent on easements **acquired** so that gopher tortoise relocation, clearing and grubbing and material deliveries can occur before the full mobilization takes place. As noted in the documents, some Property parcels are still in the process of being acquired. The anticipated date of release is noted on the attached parcel spreadsheet.

Permitting costs other than for gopher tortoises are excluded from these costs. All other permits should be available no later than September 1st, 2025.

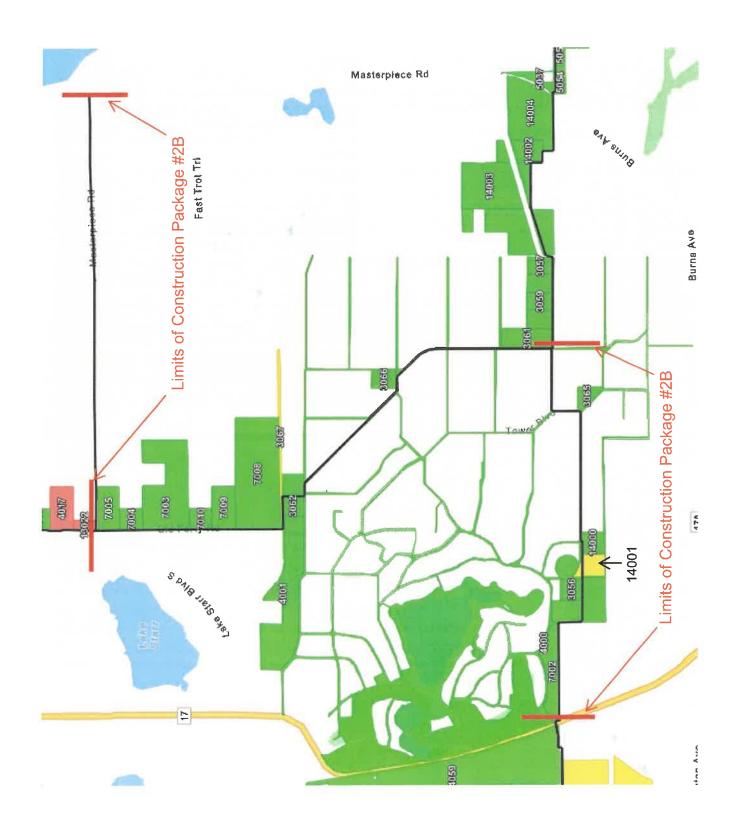
No species mitigation efforts have been included other than gopher tortoise survey and allowance for relocation.

No cost has been included in the GMP Engineer or Owner-related facilities.

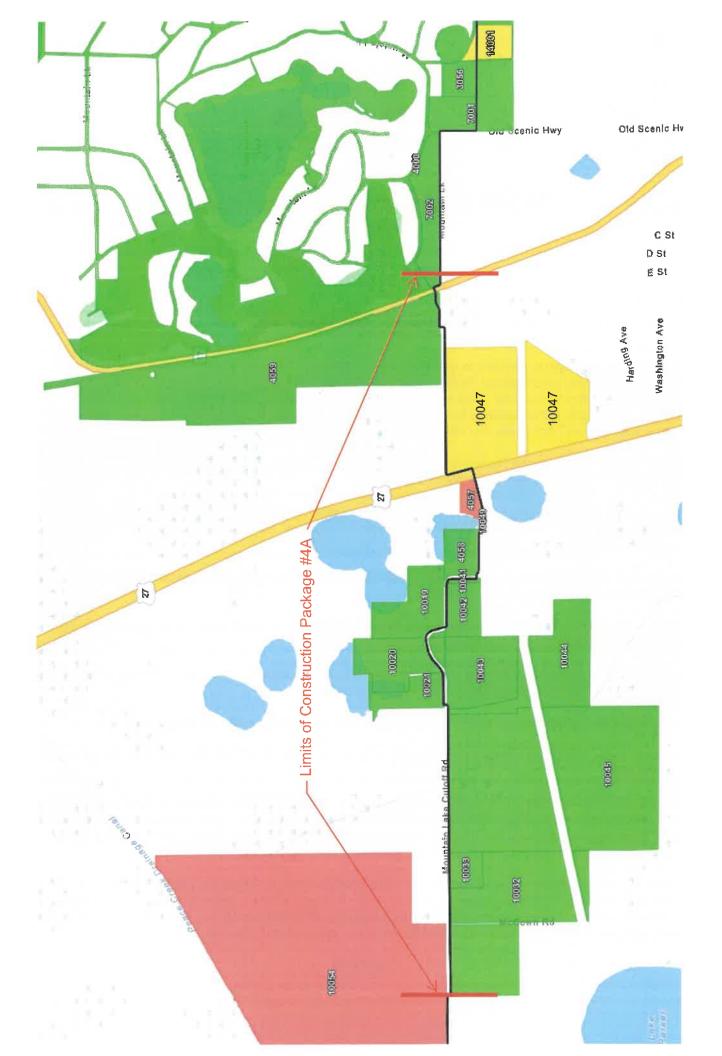
The GMP is based on a unit price agreement with a Limited NTP date of June 2025 and a Conditional NTP date of August 2025 for Package 2B and September 2025 for Package 4A.

The following pages are partial overview parcel maps and Addenda as prepared during the bidding process.

| Parcel Unique ID(s) | Parcel Number(s) | Current Status | Anticipated Release Date | Conditions of Construction |
|------------------------|--|----------------|-----------------------------|---|
| 7002 | 272922866300035010 | Acquired | | |
| 4000 | 27292286630001180 | Acquired | | Meeting on 8/10/23 (follow-up meeting 11/7/23) - Work only between May 1st to November 30th, Mondays/Tuesdays preferred for open cut work; no bollards along access road; final restoration at completion of open cut (includes pavement restoration and final overlay); maintain access for visitors and emergency vehicles at all times; notify Bok Tower contacts at least 2 weeks before start of work (David Price 863-734-1200, Melissa Robillard 863-734-1202). ARV to be located east of driveway with green pedestal-type enclosure. |
| 7001 | 272922866300016160 | Acquired | | |
| 3056 | 272922866300016140 | Acquired | | |
| 14001 | 272922866300016150 | Pending | 5/18/2025 | |
| 14000 | 272922866300040010 | Acquired | | |
| 3065 | 272922866300043060 | Acquired | | |
| 3061 | 272922866300045010 | Acquired | | Add note to limit number of trees removed from TCE's (\$500/tree removed during construction). |
| 3066 | 272922866300051050 | Acquired | | Add note to limit number of trees removed from TCE's (\$500/tree removed during construction). |
| 3063 | 272922866300052020 | Acquired | | |
| 3062 | 272922866300052010 | Acquired | | |
| 4001 | 272922866300029030 | Acquired | | |
| 3067 | 272924000000012010 | Pending | 5/18/2025 | |
| | 272913000000042010, | | | |
| 7003, 7004, | 272913000000043030, | | | |
| 7005, 7008, | 272913000000043010, | Acquired | | |
| 7010 | 272924000000032000, 27292486850000010 | | | |
| | | | | Contact owner before starting construction (Glen Brannen P: 863-557-5010). Install silt fence at back of TCE. |
| 7009 | 272924000000033010 | Acquired | | |
| 13022 | 272913000000034030 | No progress | 8/1/2025 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |



| Parcel Unique ID(s) | Parcel Number(s) | Current Status | Anticipated Release Date | Conditions of Construction |
|------------------------|--------------------|----------------|-----------------------------|--|
| 10032 | 27293200000011010 | Acquired | | Both parcels - Install temporary fencing at back of TCE to retain livestock, replace existing 5-strand wire fence with 6-strand wire fence. Parcel 10032 - Demo existing entry walls bordering driveway (do not replace), replace existing entry gate. |
| 10033 | 27293200000011020 | Acquired | | Replace existing fence with 6-strand wire fence, 3" spacing between each barb, posts spaced 10 feet apart. |
| 10045 | 272933000000031010 | Acquired | | |
| 10044 | 27293300000014020 | Acquired | | Both parcels - Install temporary fencing at back of TCE to retain livestock, replace existing 5-strand wire fence with 6-strand wire fence. Parcel 10032 - Demo existing entry walls bordering driveway (do not replace), replace existing entry gate. |
| 10043 | 272933000000013000 | Acquired | | |
| 10021 | 272928870100000010 | Acquired | | Install 6-foot temporary chain link fence at back of TCE (chickens, peacocks and dogs). |
| 10020 | 272928000000024070 | Acquired | | Install silt fencing along the northern boundary of the Temporary Construction Easement before construction commences. |
| 10019 | 272928000000022020 | Acquired | | Install temporary fencing at back of TCE to retain livestock/cattle, replace existing fence with 5 strand barbed wire on 6" posts spaced 18' apart (similar to existing). |
| 10042 | 27293300000011020 | Acquired | | Install temporary fencing at back of TCE to retain livestock/cattle, replace existing fence with 5 strand barbed wire on 6" posts spaced 18' apart (similar to existing). |
| 10041 | 27293300000011010 | Acquired | | |
| 4058 | 272934000000033010 | Acquired | | |
| 10049 | 272934875501000650 | Acquired | | |
| 4057 | 272934000000031010 | No Progress | 9/18/2025 | |
| 10047 | 27293400000013010 | Pending | 5/18/2025 | Replace fence immediately following pipeline installation and notify FWS if repairs are needed. Replace native soils removed during trench excavation including surface material. |
| 4059 | 272922866300062002 | Acquired | | |





SE LFA Wellfield Project – SETM Package 2B ADDENDUM #1 04/18/2025

Questions/Responses

Question 1: Your attention is directed to the Invitation Bid Manual, Paragraph 3.e.i (Required Licenses/Certifications), which states: "Bidder must have all required licenses/certifications to bid on the work. Licenses must be active at the time of bid opening...". We are currently certified by the State of Florida Department of Business & Professional Regulation (DBPR) as a General Contractor. Would this certification suffice to submit our bid? Are there any other licenses/certifications that we need to bid on this solicitation?

Response 1: Please refer to the Florida Statutes for required licensing. Both projects have a minimum of 50% self-performance requirement per the contract documents.

Question 2: The material supply market is seeing levels of volatility that are unpredictable due to speculation and changing trade tariffs that are impacting both cost and availability. How will the Owner intend to address changes in law and associated tariff impacts that occur post-bid?

Response 2: The contractor would need to demonstrate that any price increases/impacts comply with the force majeure provision of the contract.

Question 3: There is no bid item or measurement of payment for the ERUSA Meter Assembly. Clarify if the contractor is to include this detail and meter assembly in the bid.

Response 3: The Bid Form and the Measurement and Payment Section 01 20 01 have been updated through this addendum to include the meter assembly as a lump sum item.

Question 4: Bid item 13b is for 10" HDPE (Open Cut), clarify where this location is on the plans.

Response 4: Refer to profiles for the directional drills shown on pages PP65-89. This refers to the connections between the drills.

Question 5: There is a general note on the plans that states, "DO NOT REMOVE ANY TREES IN EASEMENT UNLESS APPROVED BY OWNER OR ENGINEER." Can this be clarified? Can the amount of trees to be removed on the plan sheets, with this general note, be clarified? Will the trees that are not approved by the owner or engineer to be removed be required to have tree protection per the standard detail?

Response 5: Typically, trees in the permanent easement and trees in the temporary construction easement can be removed. The note is intended to caution the contractor that no trees should be removed while working within the grove roads, which are the easements shown on Drawings PP-014 through 027 and PP-045 through 064. Any trees removed for the work on these drawings must be reviewed with the Owner first.

Question 6: There is a general note on the plans that states, "CONTRACTOR TO COORDINATE WITH LANDOWNER ON GROVE IRRIGATION LOCATION." Can the irrigation pipe size, coverage, and type be clarified?

Response 6: We have requested information from grove owners on the location of irrigation pipelines. Any information received is reflected in the drawings, but not all pipelines are indicated. Any irrigation lines that are to be relocated are to be coordinated with the owner.

Question 7: Without any temporary traffic control plans, should the contractor assume, due to the FDOT clear zone requirements, that temporary asphalt will need to be installed at HDD locations along Masterpiece Rd in order to install temporary k-wall?

Response 7: The means and methods of the installation, including traffic control, are to be determined by the contractor. The traffic control must comply with FDOT Standards and Specifications <u>and</u> per Polk County rules.

Question 8: Will there be a water source from filling and flushing the water mains to be installed on this project? If yes, where are these water sources located?

Response 8: Water pipelines exist on Masterpiece Road, belonging to Polk County Utilities, and on Old Scenic Highway, belonging to the City of Lake Wales. The contractor shall coordinate with these utilities for a construction meter and any associated costs.

Question 9: Can the contractor tap into the existing water main along Masterpiece Rd in order to have a water source for the HDDs?

Response 9: The pipeline belongs to Polk County Utilities. The contractor can coordinate with the utility for access and a construction meter, and any associated costs.

Question 10: Will root pruning be required per the detail in the orange groves?

Response 10: If the excavation will expose the roots, then follow the root pruning detail. If the tree is to be removed, then root pruning does not apply.

Question 11: The measurement of payment item No 29 states "Furnish all labor, equipment, and materials for the removal and re-installation of fence to existing or better condition as shown on the drawings for all fence types encountered." the existing chain link fence along Old Scenic Hwy is green vinyl chain link fence. Clarify if all fences are to be reinstalled as a galvanized chain link fence per detail MA-05 or match the existing.

Response 11: The fence detail in MA-05 only applies to the new fence for the meter assembly on Drawing DET-007. Fences along the pipeline are to be replaced in the same or better condition.

Question 12: Please specifically identify all the materials that will be owner-direct purchased that are not reflected on the bid form. For bidding, this must be identified before the bid.

Response 12: The valves are the only current ODP and Owner Furnished materials. All other materials required to complete the scope of work should be included in the Contractor's estimate, but the owner reserves the right to directly purchase any additional materials upon contract award.

Question 13: Is there an environmental survey or a listed species survey report available for the project area?

Response 13: Contractor to follow the conditions of the Environmental Resource Permit and Biological Opinion. These will be provided to the contractor once available. Wetland limits and best management practices are provided on the plans. The contractor is responsible for the gopher tortoise survey and relocations. Requirements for work on State Lands are provided in the Key Notes.

Question 14: The specs has specific models called out on 33 00 14 – 2.6, A4. These are single body ARV's. However, section 2.6, I calls for an air and vacuum valve with an externally mounted air release valve. The specification contradicts itself. What kind of ARV is wanted? Three inch and larger combination air valves for clean water service shall consist of an air and vacuum valve with an externally mounted air release valve. The valves shall be Apco/Valve and Primer "Single Body Combination Air Valves" for 3 inch and "Custom Combination Air Valves" for 4 inch and larger, Multiplex "Crispin Dual Air Valves", ARI "No. D-060-HF", or Val-Matic "Dual Body Combination Air Valves". Unless otherwise specified or indicated on the DRAWINGS, valves shall be provided with surge check discs on the valve inlet to restrict the exhaust air flow rate."

Response 14: Single body combination valves from the manufacturers listed are acceptable.

Question 15: Refer to the bid form, Pay Items 11a and 14. It notes that these items are 'NOT IN THIS CONTRACT'. Have they been installed? If not, when will they be installed?

Response 15: These items are not part of the work. They were removed.

Question 16: Will the owner provide the contractor with free water for testing and chlorination? If not, what is the fee per gallon?

Response 16: Water pipelines exist on Masterpiece Road, belonging to Polk County Utilities, and on Old Scenic Highway, belonging to the City of Lake Wales. The contractor shall coordinate with these utilities for a construction meter and any associated costs.

Question 17: Refer to the project specification and sheet DET-007. There are no electrical or I & C specifications included. Please confirm that the proposed I & C or electrical equipment shown and noted is not part of this project.

Response 17: Correct, no electrical or I&C work is required. Refer to revised DET-007 issued with this addendum.

Question 18: Is pigging required for this project?

Response 18: Pigging is not required, however, that does not preclude the contractor from utilizing means and methods necessary to sufficiently clean and disinfect the pipeline per the project and AWWA standards.

Question 19: Refer to bid form pay item 25a, Dirt Road Restoration. Can the existing dirt be reused for restoration? Or does the existing dirt road have to be completely removed and replaced?

Response 19: Areas that require Unpaved Road Restoration shall match the detailed requirements and the description in the Measurement and Payment Section. Native soils meeting the requirements may be used.

Question 20: Refer to bid form pay item 25c, Clay Road Restoration. Can the existing clay be reused for restoration? Or, does the existing clay road have to be completely removed and replaced?

Response 20: Areas that require Clay Road Restoration shall match the detailed requirements and the description in the Measurement and Payment Section. Native soils meeting the requirements may be used.

Question 21: SE LFA Wellfield Project - SETM Package 2B and 4A show the same time and date for bid submittals. Can one of these projects' bid dates be pushed back 2 weeks?

Response 21: No. Both projects must be approved by the board of directors by a certain date to prevent any delays to the overall project completion.

Additional Bidder Information/Clarification:

- The bid due date is 5/1/2025 @ 2:00 PM.

| and with full k | | er has carefully reviewed the informa g of the intent to submit a Bid Proposa to complete all work as bid. | |
|-----------------|-----------|--|------|
| - | | | |
| | SIGNATURE | PRINT NAME/TITLE | DATE |

SECTION 01 20 01 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This section covers methods of measurement and payment for items of Work under the Contract.
- B. Separate payment will be made only for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work, shall be included in the scope of the appropriate listed work items.
- C. Unless specifically called out as a separate Pay Item on the bid form, no separate payment will be made for the following items and the cost of such work shall be included in the applicable Pay Items or work (including but not limited to):
 - 1. Submittals and coordination with permitting agencies
 - 2. Bonds, insurances and indemnification
 - 3. Erosion control and maintenance of BMPs, NOI/NOT
 - 4. Field engineering, surveying, layout, vertical and horizontal utility verification, signed and sealed as-built documents and close out documentation.
 - 5. Field offices, overhead and qualified supervision, laydown and storage facilities.
 - 6. Site sanitary facilities, debris and trash disposal.
 - 7. Excavation, including necessary surface improvements removal.
 - 8. Sheeting, shoring or bracing
 - 9. Dewatering, testing and disposal or treatment of surplus water
 - 10. Backfill materials, sampling and density testing, disposal of unsuitable materials, compaction and grading.
 - 11. Night work, if required.
 - 12. Clean-up and restoration
 - 13. Refill materials except as specified hereinafter
 - 14. Testing and placing system in operation
 - 15. Locating, protection, support, repair, and replacement of existing utilities and facilities not shown on the plans to be relocated including poles.
 - 16. Public safety, accessibility and maintenance of traffic
 - 17. Landscaping, temporary fencing, driveway, signage, mailboxes, ornamentation, etc. removal and replacement.

1.2 ESTIMATED QUANTITIES

A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done, and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work performed and materials actually furnished and the estimated amounts thereof, as described in the supplementary conditions.

1.3 TAXES AND PERMITS

A. The Bidder's attention is directed to the fact that the tax laws of the State of Florida, including but not limited to Chapter 212, Florida Statutes, apply to this bid matter and that all applicable taxes and fees shall be deemed to have been included in Bidder's proposal.

1.4 RETAINAGE

A. Refer to Agreement.

1.5 PROJECT LINE ITEMS

A. PAY ITEM NO. 1 - Mobilization/Demobilization

- Description: The work specified in this Item consists of the preparatory work 1. and operations in mobilizing for beginning and ending work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to and from the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these specifications, and State and local laws and regulations. The costs of bonds, any required insurance, indemnification and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this Section. The cost of assistance to the Engineer or Owner shall also be included under this Pay Item. The costs of any other pre-construction or post- construction expense necessary to the start or completion of the work, excluding the cost of construction materials, shall also be included under this Pay Item. The cost of all other work as shown and specified that is not specifically included under other Pay Items shall also be included under this Pay Item. This Pay Item will include mobilization and demobilization for all parts or phases of the total project.
- 2. Measurement: The quantity of mobilization to be paid for under this Pay Item shall be measured as one lump sum quantity. Partial payments will be made therefore in accordance with the following:

| Percent of Original Contract Amount Earned (Work installed and not including stored materials) | Allowable Percent of the Lump Sum price for Mobilization/Demobilization |
|---|---|
| 5 | 25 |
| 10 | 50 |
| 35 | 75 |
| 65 | 90 |
| 90 | 100 |

Payment for Mobilization will be subject to retainage as described in these Contract Documents. Payment for Mobilization/Demobilization will be limited to five percent of the original contract amount for the Project.

3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.

B. PAY ITEM NO. 2 – Gopher Tortoise Survey

- Description: The work covered by this item consists of a Florida Fish and Wildlife Conservation Commission (FWC) 100 percent gopher tortoise burrow survey conducted by a FWC Authorized Gopher Tortoise Agent within the proposed disturbed areas (consisting of the Project footprint) and includes a 25-foot buffer protection area extending beyond the Project footprint. This survey should be conducted in accordance with the State of Florida rules and guidelines (please refer to the FWC guidelines regarding gopher tortoises). Survey work shall include, but is not limited to, travel to the project site, onsite inspections, and a hardcopy report with map illustrating the survey results of the burrow locations. Multiple trips to the project site are included in this Bid Item if necessary, to ensure the 90-day limit on the inspection is not expired prior to construction. All work shall conform to Section 01 73 10.
- 2. Measurement: Payment will be made at the lump sum price shown in the Bid Form for the Gopher Tortoise Survey.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Gopher Tortoise Survey.

C. PAY ITEM NO. 3 - Preconstruction Video

- 1. Measurement: Measurement will be based on the satisfactory submittal of a comprehensive pre-construction video detailing the pre-construction site conditions and adjacent areas that may be impacted by construction.
- 2. Payment: Payment will be made at a lump sum price shown in the Bid form for Preconstruction video upon acceptance.

D. PAY ITEM NO. 4 - Survey/As-built Drawings

- 1. Description: The cost for preparation of the as-built drawings, survey and construction layout. This item includes material, labor and certification to prepare the "As-built Drawing", field verification of existing underground facilities, construction stakeout of the proposed pipe and to survey the new pipe after it has been installed. Prior to acceptance of the project, the contractor shall submit two prints, and one set of electronic documents of AutoCAD formatted drawings marked as "As-built Drawings" which include the original design and all deviations that occurred during construction. The as-built drawings shall include vertical and horizontal alignment of all water mains, valves, tees, bends, reducers, air release valves, sample points, repair sleeves and other pertinent structures or appurtenances. Pipe runs in excess of 500 feet without fittings shall include vertical alignment and grade information. Record drawings shall be certified by a Professional Land Surveyor licensed in the State of Florida.
- 2. Measurement: Payment will be made at the lump sum price shown in the bid form for the Survey/Record drawings item.
- 3. Payment: Payment will be made at the lump sum price shown in the bid form for the Survey/Record drawings item.

E. PAY ITEM NO. 5 - Maintenance of Traffic

- Description: Work shall include furnishing all labor, materials and equipment 1... required to submit for approval a signed and sealed MOT plan and implement the plan to cover the required work from commencement to final closeout in accordance with the latest edition of the FDOT Standard Plans and U.S. DOT, Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). The work includes all items of work necessary for complete maintenance of traffic including, but not limited to, signed and sealed MOT plan, labor and equipment to meet FDOT clear zone requirements, traffic control devices, warning devices, barrier wall, crash attenuators, safety devices, barricading, certified flagmen, onsite supervision that maintains FDOT TTC certification, signage, lighting, messaging, temporary ADA walkways, removal of existing pavement markings, installation and removal of temporary pavement striping (paint), markings and reflective markers, traffic signal relocation and adjustments for MOT phasing, and all materials and construction necessary to create temporary connections for street, driveways and pedestrian traffic. The pay item for "Maintenance of Traffic" shall include all work necessary for maintenance of vehicular traffic and pedestrian traffic, unless otherwise specified to be paid under other bid items.
- 2. Measurement: Payment will be made at the lump sum price shown in the Bid Form for Maintenance of Traffic as shown on the plans, specified, and required for construction activities.
- 3. Payment: Payment will be made in accordance with the following schedule.

| Percent of Original Contract Amount Earned | Allowable Percent of the Lump Sum price for Maintenance of Traffic |
|---|--|
| 10 | 25 |
| 35 | 50 |
| 65 | 75 |
| 90 | 100 |

F. PAY ITEM NO. 6 - Clearing and Grubbing

Description: Furnish all labor, equipment, and materials for the removal and proper disposal of all above ground vegetation including but not limited to trees, shrubs, brush, bushes and any other vegetation. Areas to receive clearing and grubbing shall include all areas to be occupied by the proposed improvements, areas for fill and site grading, and borrow sites. Remove trees outside of these areas only as indicated on the Drawings or as approved in writing by the Engineer. Along the proposed pipelines as indicated on the plans, the contractor shall remove the surface materials only to such widths as will permit a trench to be excavated and afford sufficient room for proper efficiency and proper construction. All applicable regulations shall be followed. Where sidewalks, driveways, pavements and curb and gutter are encountered, care shall be taken to protect against fracture or disturbance beyond working limits. All fractured, broken or disturbed surfaces caused by construction operations are considered ancillary and shall be restored to their original condition prior to completion of the work at the Contractor's expense.

Exercise extreme care during the clearing and grubbing operations. Do not damage existing structures, pipes or utilities.

Grubbing shall consist of removing and disposing of stumps, roots larger than 1.5" in diameter, and matted roots. Remove to a depth of not less than 18" below the original surface level of the ground. All depressions excavated below the original ground surface for or by the removal of such objects shall be refilled with suitable material and compacted to a density conforming to the surrounding ground surface.

All combustible debris and refuse from site preparation operations shall be removed to legal offsite disposal areas.

- 2. Measurement: The quantity of Clearing and Grubbing to be paid for under this Item shall be measured as one lump sum quantity.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for Clearing and Grubbing, as designated on the plans, and acceptably completed.

J. PAY ITEM NO. 7 – Erosion and Sedimentation Control

1. Description: The work consists of all labor, equipment, material, installation, maintenance, replacement and removal of approved erosion control devices from commencement to final acceptance.

Construct and maintain temporary erosion and sedimentation control measures so as to prevent pollution of water, detrimental effects to public and private property adjacent to the project and damage to the Work. Coordinate temporary control measures with permanent control features when applicable.

Use temporary erosion and sedimentation controls that include, but are not limited to, grassing, sodding, mulching, sandbagging, slope drains, sediment basins and checks, berms, synthetic hay bales, floating turbidity barriers, staked turbidity barriers and silt fences.

Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective which will ensure that pollution will be either eliminated or maintained within acceptable limits as established by federal, state and local requirements and by the Owner.

- 2. Measurement: The quantity of Erosion Control to be paid for under this Item shall be measured as one lump sum quantity on a percent complete basis.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Erosion Control, and acceptably completed. Partial payments will be made on a pro-rated monthly amount based on contract time.

K, PAY ITEM NO. 8 - Existing Utility Location, Relocations & Support

Description: Contractor shall furnish all labor, materials, and equipment 1. necessary to physically locate all utilities in the immediate area using nondestructive digging equipment, supplies, and personnel experienced in the use of subsurface utility engineering (SUE) to determine precise horizontal and vertical positions of utilities, specified herein, and/or as directed by the Engineer. The Contractor shall perform utility locates at least seven (7) calendar days in advance of construction in order to request clarification, if required from the Engineer. The Engineer will have three (3) calendar days to respond. This construction scheduling will allow all necessary decisions to be made prior to the Contractor's crews reaching the work area and having a delay claim. Contractor shall provide proof of physically locating existing utilities prior to construction before the monthly payment application is considered. Included shall be Sunshine locate tickets and pictures showing flagged utilities and excavation with time/date stamp referenced to stations on plans.

The work includes equipment to paint/mark the position of the underground utility, vacuum excavation equipment that includes air tools (water jet, air lance) to break up the surface and soil. The vacuum excavation equipment involves removing the disturbed soil and temporarily storing it. The exposed underground utility is examined and pertinent data such as size, type, material, and depth is gathered. A marker such as an iron rod and cap or nail and disk are placed next to the test hold and the depth measurement is taken to this point. The stored soil is then returned to the excavated test hole and the surface is returned to its original state; asphalt patch is tamped into the hole when applicable. Markings such as paint and/or lathe and ribbon are left near the hole for future identification.

- Measurement: The quantity of Existing Utility Location, Relocations & Support to be paid for under this Item shall be measured as one lump sum quantity.
- Payment: Payment for subsurface utility locate will be lump sum for the work based on percent complete. Assume all lines to be located are active lines and service must be maintained at all times possible.
- L. PAY ITEM NO. 9 Ductile Iron Pipe Installed by Open Cut Excavation
 - 1. Description: Furnish all material, labor and equipment, construct, test, and maintain complete all new ductile iron pipe water main pipe as shown on the Plans, specified and directed by the ENGINEER.

The work consists of furnishing all labor, equipment and materials and installing pipe by open cut or insertion into a casing pipe that has been installed under another Pay Item. The unit price shall include all costs necessary to install the pipe including survey; color audiovisual preconstruction record; layout drawings; removal of sidewalks, driveways, curbs, curb and gutter; clearing and grubbing; tree removal; root pruning; clearing of the right-of-way; protection of property; protection, relocation, repair and/or replacement of utilities; protection, repair and replacement of sprinklers; protection, repair and replacement of storm sewerage facilities, water mains, sanitary sewers and house laterals, and force mains not shown on the Plans to be removed and replaced or relocated; protection, repair and replacement of petroleum lines, gas mains, cable television lines, telephone lines, fiber optic cables, electric cables and other utilities; protection of existing structures; protection and replacement of all miscellaneous surface improvements including but not limited to mailboxes, bird baths, patios, fences, shrubs, etc.; sheeting, shoring, and bracing; temporary or permanent thrust restraint for existing pressurized utility conduits; furnishing, off-loading and protection of pipe; dewatering; excavation; pipe bedding, including all sand, crushed stone; materials; furnishing and installing joint restraints; polyethylene encasement of ductile iron pipe; polyethylene encasement of pipe thrust restraints; pipework; backfilling, compaction and testing; detectable marking tape; pipeline markers; tracer wire and locate boxes; temporary leakage test plugs; temporary blow-offs or flushing assemblies; water for construction, filling and testing; making all pipe connections; installation and removal of plugs and bulkheads; connections to previously completed adjoining work; pressure testing, and disinfection; placing the new water main in service; removing and salvaging existing appurtenances at connection points as shown; furnishing and installing "Buried Utility" warning markers at limits of electric power line rights-of-way and at ditch crossings; temporary and nonpermanent pavement replacement: reconstruction or re-grading of road shoulders and ditches; removal and disposal of surplus excavated material; survey for record drawings; compliance with permits; and all other work incidental to the installation of the water main complete in place as shown on the Plans, specified and directed by the ENGINEER.

The work does not include: other work paid for separately under other pay items, such as valves; ductile iron fittings, air release assemblies; blow off

assemblies; HDPE water main installed by horizontal directional drilling; steel pipe water main; corrosion protection systems; casing pipe for jacked and bored casings; removing and backfilling existing asphalt pavement; milling existing asphalt pavement; asphalt pavement surface restoration; dirt or gravel driveway restoration; concrete sidewalk replacement; curb or curb and gutter replacement; concrete driveway replacement; asphalt driveway replacement; sodding; seeding and mulching; traffic control;;. When specified, shown or ordered by the ENGINEER in writing, such work will be paid for under other Pay Items.

- Measurement: The length of Ductile Iron by Open Cut Excavation to be measured for payment will be the horizontal length in linear feet of pipe measured along the centerline of the pipe through valves and fittings in place, including restraints in accordance with the plan documents, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the various pipe types and sizes completed, tested and accepted.

M. PAY ITEM NO. 10 - PVC Pipe Installed by Open Cut Excavation

 Description: Furnish all material, labor and equipment, construct, test, and maintain complete all new PVC pipe water main pipe as shown on the Plans, specified and directed by the ENGINEER.

The work consists of furnishing all labor, equipment and materials and installing pipe by open cut or insertion into a casing pipe that has been installed under another Pay Item. The unit price shall include all costs necessary to install the pipe including survey; color audiovisual preconstruction record: layout drawings; removal of sidewalks, driveways, curbs, curb and gutter; clearing and grubbing; tree removal; root pruning; clearing of the right-of-way; protection of property; protection, relocation, repair and/or replacement of utilities; protection, repair and replacement of sprinklers; protection, repair and replacement of storm sewerage facilities, water mains, sanitary sewers and house laterals, and force mains not shown on the Plans to be removed and replaced or relocated; protection, repair and replacement of petroleum lines, gas mains, cable television lines, telephone lines, fiber optic cables, electric cables and other utilities; protection of existing structures; protection and replacement of all miscellaneous surface improvements including but not limited to mailboxes, bird baths, patios, fences, shrubs, etc.; sheeting, shoring, and bracing; temporary or permanent thrust restraint for existing pressurized utility conduits; furnishing, off-loading and protection of pipe; dewatering; excavation; pipe bedding, including all sand, crushed stone; materials; furnishing and installing joint restraints; polyethylene encasement of pipe thrust restraints; pipework; backfilling, compaction and testing; detectable marking tape; pipeline markers; tracer wire and locate boxes; temporary leakage test plugs; temporary blow-offs or flushing assemblies; water for construction, filling and testing; making all pipe connections; installation and removal of plugs and bulkheads; connections to previously completed adjoining work; pressure testing, and disinfection: placing the new water main in service; removing and salvaging existing appurtenances at connection points as shown; furnishing and installing

"Buried Utility" warning markers at limits of electric power line rights-of-way and at ditch crossings; special temporary and nonpermanent pavement replacement; reconstruction or re-grading of road shoulders and ditches; removal and disposal of surplus excavated material; survey for record drawings; compliance with permits; and all other work incidental to the installation of the water main complete in place as shown on the Plans, specified and directed by the ENGINEER.

The work does not include: other work paid for separately under other pay items, such as valves; ductile iron fittings, air release assemblies; blow off assemblies; HDPE water main installed by horizontal directional drilling; steel pipe water main; corrosion protection systems; casing pipe for jacked and bored casings; removing and backfilling existing asphalt pavement; milling existing asphalt pavement; asphalt pavement surface restoration; dirt or gravel driveway restoration; concrete sidewalk replacement; curb or curb and gutter replacement; concrete driveway replacement; asphalt driveway replacement; sodding; seeding and mulching; traffic control;;. When specified, shown or ordered by the ENGINEER in writing, such work will be paid for under other Pay Items.

- Measurement: The length of PVC Pipe by Open Cut Excavation to be measured for payment will be the horizontal length in linear feet of pipe measured along the centerline of the pipe through valves and fittings in place, including restraints in accordance with the plan documents, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the various pipe types and sizes completed, tested and accepted.
- N. PAY ITEM NO. 11 Steel Pipe Installed by Open Cut Excavation (NOT USED ON THIS PROJECT)
- O. PAY ITEM NO. 12 Corrosion Protection Systems (NOT USED ON THIS PROJECT)
- P. PAY ITEM NO. 13 H.D.P.E. Potable Water Transmission Main by HDD
 - 1. Description: Furnish all pipe materials, equipment, and services, to construct, test and maintain complete all HDPE water main pipe installed by horizontal directional drilling (HDD), as shown on the plans, specified and directed by the ENGINEER. The work consists of furnishing all labor, equipment and materials, and fusing and installing H.D.P.E. Potable Transmission Main by HDD. The unit price shall include all costs necessary to install the pipe including survey layout; materials, including HDPE adapters; work required by connection details, clearing and grubbing; tree removal; root pruning; shoring and bracing; pipe; off-loading and protection of pipe; excavation; backfilling; dewatering; cutting and removal of pavement and other surface improvements including sidewalks, driveways, etc; sheeting; bracing; utility crossings; bentonite material and drilling fluids; guidance system, HDD plan submittal, clearing of the right-of-way; protection of property; protection, repair and replacement of utilities; protection, repair and replacement of sprinklers; temporary leakage test plugs; temporary blow-offs: pressure testing; and disinfection.

- 2. Measurement: The quantities of HDD pipe to be paid for under this Item shall be the horizontal length as shown on the plans from adapter to adapter installed and approved. If additional length is installed for the Contractor's convenience, such additional length shall be measured for payment under the appropriate pay item for adjacent pipe installed in open cut trench.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the various pipe sizes.
- Q. PAY ITEM NO. 14 Jack and Bore Steel Casing (NOT USED ON THIS PROJECT)
- R. PAY ITEM NO. 15 Below Grade Bacteriological Sampling Assembly
 - Description: Furnish all labor, equipment and materials for the complete installation of each sample test station as shown in the contract drawings and necessary for successful testing and sampling of the completed water main in accordance with the applicable standards.
 - 2. Measurement: The quantities of sampling stations to be paid for under these Items shall be the number of each type and size measured in place, completed and accepted.
 - 3. Payment: Payment will be made at the unit price bid for each sampling station installed, tested and accepted.
- S. PAY ITEM NO. 16 Water Main Testing and Disinfection
 - 1. Description: The contractor shall furnish all labor, equipment and materials necessary to perform the required testing, cleaning, and disinfection of the new Potable Water Main as detailed in specification sections 33-11-10 and 33-13-00.
 - 2. Measurement: The quantity of Water Main Testing/Disinfection to be paid for under this Item shall be measured as one lump sum quantity.
 - 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Water Main Testing/Disinfection, as detailed in specification sections 33-11-10 and 33-13-00, and acceptably completed. Partial payments will be made on a pro-rated amount based on successful testing and clearance.

T. PAY ITEM NO. 17 - Valves

1. Description: The work consists of furnishing all labor, equipment and materials to install and test valves as shown, specified in Specification 33 14 00. The main line valves will be supplied by the owner. The unit price shall include the cost of the jointing materials, including rings, bolts and gaskets, bolting materials for flanged valves; polywrap, filter fabric, installation costs, roadway box, concrete support and concrete valve box pad with bronze disc, operator extension stems so nuts are no more than 3 feet below surrounding grade, excavation, backfilling and dewatering.

- Measurement: The quantities of valves to be paid for under these Items shall be the number of each type and size measured in place, completed and accepted.
- Payment: Payment will be made at the unit price bid for each type valve of the various sizes.

U. PAY ITEM NO. 18 - Ductile Iron Fittings

- Description: The work consists of furnishing all labor, equipment and materials and installing ductile iron fittings on ductile iron and PVC pipelines. The unit price shall cover the cost of furnishing the fittings, bends and sleeves, transportation, jointing materials, glands, bolts, gaskets, and polyethylene wrap. All fittings shall be installed with restrainers.
- 2. Measurement: The quantity of ductile iron fittings, bends, and sleeves to be measured for payment under this Item shall be the number of each measured in place, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid for each type fitting of the various sizes.

V. PAY ITEM NO. 19 – 2" Flushing Valve Outlets

- Description: Furnish all materials, labor and equipment to construct, test, and complete the flushing valve outlet assemblies shown on the Plans, specified and directed by the ENGINEER. Conform flushing valve outlet assemblies to the details shown on the plans for the various sizes and types. The unit price shall include all connections, nipples, valves, fittings, taps, polywrap, above ground enclosure if required, piping, bollards if shown or specified, dewatering, excavation, backfill, concrete pads, brass nameplates, disinfection and testing, placing the flushing valve assembly in service, and all other work incidental to the complete installation of the flushing valve assembly as called for on the Drawings.
- 2. Measurement: The quantities of flushing valve assemblies to be paid for under this Item shall be the actual number of the respective air release assemblies measured in place, completed, and accepted.
- 3. Payment: Payment will be made at the unit price bid for each flushing valve assembly.

W. PAY ITEM NO. 20 - Air Release Assemblies

Description: Furnish all materials, labor and equipment to construct, test, and complete the air release valve assemblies shown on the Plans, specified and directed by the ENGINEER. Conform Air Release Valve Assemblies to the details shown on the plans for the various sizes and types. The work consists of furnishing all labor, equipment and materials and installing air release assemblies. The unit price shall include all connections, nipples, valves, fittings, taps, polywrap, above ground enclosure if required, piping, bollards if shown or specified, dewatering, excavation, backfill, concrete pads, brass nameplates, disinfection, and testing, placing the air valve

- assembly in service, and all other work incidental to the complete installation of the air release assembly as called for on the Drawings.
- 2. Measurement: The quantities of air release assemblies to be paid for under this Item shall be the actual number of the respective air release assemblies measured in place, completed, and accepted.
- 3. Payment: Payment will be made at the unit price bid for each air release assembly.

X. PAY ITEM NO. 21 - Blow Off Assemblies

- Description: Furnish all materials, labor and equipment to construct, test, and complete the blow off assemblies shown on the Plans, specified and directed by the ENGINEER. Conform Blow Off Assemblies to the details shown on the plans for the various sizes and types. The work consists of furnishing all labor, equipment and materials and installing the blow off assemblies. The unit price shall include all connections, valves, fittings, taps, polywrap, manhole frame and cover, piping, bollards if shown or specified, dewatering, excavation, backfill, concrete pads, brass nameplates, disinfection and testing, placing the blow off assembly in service, and all other work incidental to the complete installation of the blow off assembly as called for on the Drawings.
- 2. Measurement: The quantities of blow off assemblies to be paid for under this Item shall be the actual number of the respective blow off assemblies measured in place, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid for each blow off assembly.

Y. PAY ITEM NO. 22 - Asphalt Roadway Repair

- 1. Description: The work consists of all labor, equipment, and material necessary for saw cutting, removing and disposing of existing roadway material, And the replacement of the existing asphalt pavement, base, and subgrade as detailed in the drawings and accepted by the applicable entity having jurisdiction.
- Measurement: The quantity to be measured for payment shall be the area in square yards of pavement removed and replaced within the payment limits shown and described, completed and accepted.
- 3. Payment: Payment will be made based on the contract unit price per square yard.

Z. PAY ITEM NO. 23 – Milling and Overlay of Existing Asphalt Pavement

Description: The work consists of all labor, equipment, and material specified
for the milling of the existing asphalt including hauling off, and stockpiling or
otherwise disposing of the milled material. and installing the final lift of super
pave asphaltic concrete surface course (overlay) on the milled surfaces of
the existing undisturbed roadway as shown, specified and directed and in
accordance with the latest edition of the FDOT standard plans and

- specifications. The work shall also include furnishing and installing pavement markings to match existing site conditions
- Measurement: The quantity to be measured for payment shall be the area in square yard of milling and overlay completed and accepted within the pay limits shown on the plans and in accordance with details shown on the drawings
- 3. Payment: Payment will be made at the contract unit price per square yard.

AA.PAY ITEM NO. 24 - Curb or Curb and Gutter

- Description: The work consists of all labor, equipment and materials for the construction of Curb or Curb and Gutter in accordance with FDOT Standard Specifications and as directed by the Engineer.
- Measurement: The quantity of curb or curb and gutter to be measured for payment will be the number of lineal feet of curb or curb and gutter acceptably replaced within the payment limits for surface restoration shown and as directed by the Engineer. Curb associated with traffic separators will not be measured for payment under this pay item.
- 3. Payment: Payment will be made at the contract unit price per linear foot.

BB.PAY ITEM NO. 25 - Unpaved Road Restoration

- Description: The work consists of all labor, equipment and materials for the construction of 12-inch thick compacted dirt, gravel, or clay driveway or road as shown, specified and directed. The unit price includes restoring in kind utilizing existing material or stabilizing, if necessary, to achieve the specified LBR rating. Unpaved road or driveway with no shell or gravel present shall be installed to have a minimum LBR of 40. Unpaved road or driveway with shell, gravel, or crushed asphalt or concrete mixed in shall be installed to have a minimum LBR of 100. Removal and disposal of dirt, clay, or gravel is included in the bid items for pipelines.
- Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yard of unpaved road or driveway placed in the work within the payment limits for surface restoration shown or as directed by the Engineer.
- 3. Payment: Payment will be made at the contract unit price per square yard.

CC. PAY ITEM NO. 26 - Concrete Sidewalk Replacement

- Description: The work consists of all labor, equipment and materials for the construction of concrete sidewalk as shown in the Contract drawings. Removal and disposal of concrete sidewalk is included in the Bid Items for pipeline construction.
- 2. Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yards of such concrete sidewalk placed in the work within the payment limits for surface restoration shown or as directed by the Engineer.

- Payment: Payment will be made at the contract unit price per square yard.
- DD. PAY ITEM NO. 27 Concrete Driveway Replacement.
 - 1. Description: The work consists of all labor, equipment and materials installed as shown, specified, and directed for the construction of concrete driveway, as directed by the Engineer. Removal and disposal of concrete driveway is included in the Bid Items for pipeline construction.
 - 2. Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yards of such concrete driveway placed in the work within the payment limits for surface restoration shown to the nearest expansion joint outside of the excavation or as directed by the Engineer.
 - 3. Payment: Payment will be made at the contract unit price per square yard.

EE.PAY ITEM NO. 28 – Asphalt Driveway replacement.

- Description: The work consists of all labor, equipment and materials installed as shown, specified, and directed for the construction of asphalt driveway, as directed by the Engineer. Removal and disposal of asphalt driveway is included in the Bid Items for pipeline construction.
- Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yard of such asphalt driveway placed in the work within the payment limits for surface restoration shown or as directed by the Engineer.
- 3. Payment: Payment will be made at the contract unit price per square yard.

FF. PAY ITEM NO. 29 - Fencing removal and re-installation

- 1. Description: Furnish all labor, equipment, and materials for the removal and re-installation of fence to existing or better condition as shown on the drawings for all fence types encountered.
- Measurement: Quantity shall be measured in actual linear footage of fence removed and re-installed in accordance with the drawings and specifications for all fence types. Extra fence disturbed by construction operations beyond the limits as shown on the drawings will not be measured for payment.
- 3. Payment: Payment will be made at the contract unit price per linear foot upon completion.

GG. PAY ITEM NO. 30 - Sodding

- Description: The work consists of furnishing all labor, equipment and materials and placing, staking, rolling, and watering grass sod complete in place to match existing regardless of grass type (St. Augustine/Bahia/etc.) within the work area. Refer to the Drawings and the Drawing General Notes for additional information on placement.
- 2. Measurement: The quantity of Sodding to be paid for under this Pay Item shall be measured as one lump sum quantity.

3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.

HH. PAY ITEM NO. 31 – Seed and Mulch

- Description: The work consists of furnishing all labor, equipment and materials and handling, placing, and watering seed and mulch complete in place to match existing regardless of grass type (Bermuda/Bahia/etc.) within the work area limits. Refer to the Drawings and the Drawing General Notes for additional information on placement.
- 2. Measurement: The quantity of seed and mulch to be paid for under this Pay Item shall be measured as one lump sum quantity.
- 3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.

II. PAY ITEM NO. 32 - Gopher Tortoise Permitting and Relocation

- Description: The work covered by this item consists of all coordination, work, materials, and equipment necessary to survey, permit and relocate Gopher Tortoises in accordance with State of Florida laws, rules and guidelines. All work shall conform to Section 01 73 10. This item will be treated as a allowance, against which the Owner, at their discretion, may direct work not shown on the plans.
- 2. Measurement: The quantities of unspecified work to be paid under this item shall be compensated based on actual cost verified by invoice, completed and accepted. The value of the allowance shall be Eighty thousand and 00/100 Dollars (\$80,000.00).
- 3. Payment: This item if required during the course of the project to facilitate the project, and will be paid only after written authorization and verified invoice to include the item in the progress payments.

JJ. PAY ITEM NO. 33 – Utility Pole Protection

- Description: The work covered by this item consists of all coordination, work, materials, and equipment necessary to coordinate the protection of utility poles and guy wires along the project route as noted in the plans with the facility owner. This item will be treated as an allowance, against which the Owner/CMAR, at their discretion, may direct work not shown on the plans.
- Measurement: The quantities of unspecified work to be paid under this item shall be compensated based on actual cost verified by invoice from the utility provider, completed and accepted. The not to exceed value of this item shall be Eighty thousand and 00/100 Dollars (\$80,000.00).
- 3. Payment: This item is for allowance if required during the course of the project to facilitate the project and will be paid only after written authorization and verified invoice to include the item in the progress payments.

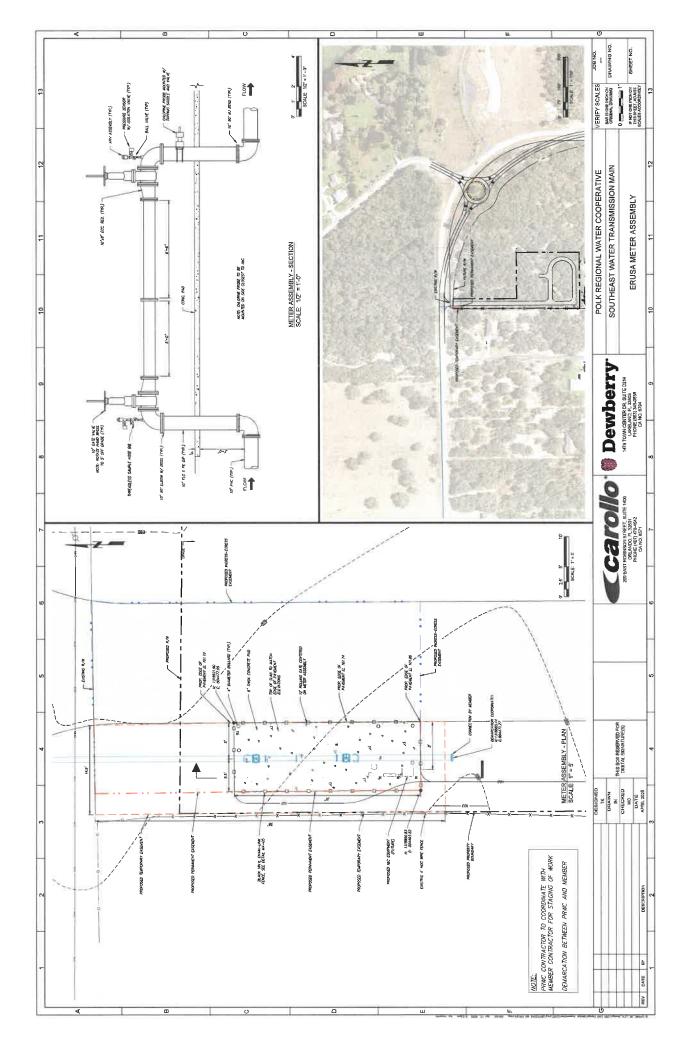
KK.PAY ITEM NO. 34 – Meter Assembly Installation

- 1. Description: The work consists of furnishing all labor, materials, and equipment necessary to install the meter assembly as detailed in the drawings and specifications. The price shall include coordination with other contractors, locating the meter site, grading, concrete slab, piping, fittings, valves, taps, fencing, surface restoration, and testing.
- 2. Measurement: The quantity of Meter Assembly Installation to be paid for under this Item shall be measured as one lump sum quantity and include piping up to five feet outside of the concrete slab or as otherwise indicated on the drawings.
- 3. Payment: Payment will be made at a lump sum price shown in the Bid form for Meter Assembly Installation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

- END OF SECTION -





SE LFA Wellfield Project – SETM Package 2B ADDENDUM #2 04/25/2025

Clarification

PAY ITEM NO. 35 - ALTERNATE: Remobilization at the direction of CMAR

- 1. Description: The work covered by this item consists of complete demobilization and remobilization at the direction of the CMAR if any remaining pipe installation or associated activities are unavailable due to property acquisition. This does not consider site moves to account for constraints already provided in the documents that should be included in the mobilization pay item.
- 2. Measurement: The quantity of Remobilization at the direction of CMAR to be paid for under this Item shall be measured as one lump sum quantity.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for Remobilization at the direction of CMAR only when directed.

Additional Bidder Information:

The bid due date is 5/1/2025 @ 2:00 PM.

| The undersigned hereby certifies that Bidder has carefully reviewed the information provided herein and has full knowledge and understanding of the intent to submit a Bid Proposal and can enter a contract with the PRWC either directly or indirectly to complete all work as bid. |
|---|
| |



SE LFA Wellfield Project – SETM Package 4A ADDENDUM #1 04/18/2025

Questions/Responses

Question 1: Your attention is directed to the Invitation Bid Manual, Paragraph 3.e.i (Required Licenses/Certifications), which states: "Bidder must have all required licenses/certifications to bid on the work. Licenses must be active at the time of bid opening...". We are currently certified by the State of Florida Department of Business & Professional Regulation (DBPR) as a General Contractor. Would this certification suffice to submit our bid? Are there any other licenses/certifications that we need to bid on this solicitation?

Response 1: Please refer to the Florida Statutes for required licensing. Both projects have a minimum of 50% self-performance requirement per the contract documents.

Question 2: Please specifically identify all the materials that will be owner-direct purchased that are not reflected on the bid form. For the purposes of bidding, this must be clearly identified prior to the bid.

Response 2: The valves are the only current ODP and Owner Furnished materials. All other materials required to complete the scope of work should be included in the Contractor's estimate, but the owner reserves the right to directly purchase any additional materials upon contract award.

Question 3: When do you anticipate the NTP to be issued based on the ODP order, expecting it to be executed by 5/23/25?

Response 3: Limited NTP is anticipated to be August 2025.

Question 4: The specs has specific models called out on 33 00 14 – 2.6, A4. These are single body ARV's. However, section 2.6, I calls for an air and vacuum valve with an externally mounted air release valve. The specification contradicts itself. What kind of ARV is wanted? Four inch and larger combination air valves for clean water service shall consist of an air and vacuum valve with an externally mounted air release valve. The valves shall be Apco/Valve and Primer "Single Body Combination Air Valves" for 3 inch and "Custom Combination Air Valves" for 4 inch and larger, Multiplex "Crispin Dual Air Valves", ARI "No. D-060-HF", or ValMatic "Dual Body Combination Air Valves". Unless otherwise specified or indicated on the DRAWINGS, valves shall be provided with surge check discs on the valve inlet to restrict the exhaust air flow rate."

Response 4: See attached revised Section 33 14 00.

Question 5: The material supply market is seeing levels of volatility that are unpredictable due to speculation and changing trade tariffs that are impacting both cost and availability. How will the Owner intend to address changes in law and associated tariff impacts that occur post-bid?

Response 5: The contractor would need to demonstrate that any price increases/impacts comply with the force majeure provision of the contract.

Question 6: Where is the closest water source on the project that the contractor can use for the HDD's and dewatering well point installations?

Response 6: Water for use during construction is the responsibility of the Contractor. The City of Lake Wales has water available at Mountain Lake Cutoff and US-27. The contractor must obtain a temporary meter from the City.

Question 7: Will any pipeline on this project be connecting to be live, and will the contractor be able to utilize this water to flush, pig, and chlorinate the line?

Response 7: The transmission main will not connect to any live lines.

Question 8: PAVT-01 Detail on Page DET-005A of the plans states 1.5" of resurface, bid form Pay item 24 states and calls for Mill existing Asphalt down 2-inches. Please clarify what item is to be followed for Milling Depths?

Response 8: PAVT-11 is to be used for County Road crossings. It requires milling existing pavement to a depth of 2".

Question 9: Will there be a laydown yard secured by the owner for storing materials or will this be the responsibility of the contractor?

Response 9: Laydown areas are the responsibility of the Contractor.

Question 10: According to Detail PAVT-09 on plan sheet DET-006A, Asphalt Driveway Repair: SURFACE MATERIAL AND THICKNESS TO MATCH EXISTING OR 1" MIN, have cores been taken to identify driveway thickness? If not, is the contractor to assume 1" thickness?

Response 10: Assume 1" minimum thickness for the bid.

Question 11: Bid Item 13 Corrosion Protection Systems is a lump sum. Where on the plans is this system located? Is there a corrosion protection system detail?

Response 11: Bid Item 13 Corrosion Protection Systems does not apply to this construction package. See attached revised Section 01 20 01 Measurement and Payment. Pay Item numbers were revised to match the Bid Form.

Question 12: The Plans have Detail PVC-01 Isolation Valve Detail (20" and Less) on Sheet DET-007A, Should the contractor follow this detail for 24" Valves or will a detail be provided?

Response 12: See attached detail MISC-13 – Isolation Valve Detail – Butterfly Valve.

Question 13: Is there an environmental survey or listed species survey report available for the project area?

Response 13: Contractor to follow the conditions of the Environmental Resource Permit and Biological Opinion. These will be provided to the contractor once available. Wetland limits and best management practices are provided on the plans. The contractor is responsible for the gopher tortoise survey and relocations. Requirements for work on State Lands are provided in the Key Notes. See (PP-95 to PP-101).

Question 14: Refer to the bid form, Pay Items 25, 27 and 30. It notes that these items are 'NOT IN THIS CONTRACT'. Have they been installed? If not, when will they be installed?

Response 14: These Pay Items are not required.

Question 15: Will the owner provide the contractor with free water for testing and chlorination? If not, what is the fee per gallon?

Response 15: Water for use during construction is the responsibility of the Contractor.

Question 16: Is pigging required for this project?

Response 16: Pigging is required.

Question 17: Refer to the bid form, pay item 26a, Dirt Road Restoration. Can the existing dirt be reused for restoration? Or does the existing dirt road have to be completely removed and replaced?

Response 17: Suitable existing material may be reused.

Question 18: Refer to bid form pay item 26b, Clay Road Restoration. Can the existing clay be reused for restoration? Or does the existing clay road have to be completely removed and replaced?

Response 18: Suitable existing material may be reused.

Question 19: Refer to Drawing PP-093. It notes to remove and replace the fire hydrant. What pay item should these costs be included in?

Response 19: This will be paid under Pay Item 9, PVC Pipe Installed by Open Cut Excavation.

Question 20: Refer to Drawing PP-102. It notes to remove and replace the concrete ditch block. What is the size? Can a detail be provided for replacement purposes?

Response 20: Dimensions to match the existing ditch block.

Question 21: Refer to the contract drawings. On several pages, it shows Key Notes #2, Key Notes #1 & Key Notes #2, state "Contractor to install temporary fencing at the back of the temporary construction easement before removal of the existing fence. Following construction, replace the existing fence in like kind at the back of the permanent utility easement. What type of temporary fence is required? Also, if the existing fence can be salvaged, can it be reused for permanent replacement?

Response 21: Fencing requirements vary. Refer to Key Notes on plans for specific requirements. For those areas without specific requirements, the temporary fencing must be like kind to the permanent fence. Temporary fencing must be coordinated with the property owners. The existing fencing may be used for as the permanent replacement only if it has not been damaged in any way.

Question 22: SE LFA Wellfield Project - SETM Package 2B and 4A show the same time and date for bid submittals. Can one of these project's bid dates be pushed back 2 weeks?

Response 22: No. Both projects must be approved by the board of directors by a certain date to prevent any delays to the overall project completion.

Question 23: Is silt fence required on both sides of the proposed water main installation in open areas? Also, is this required for dirt and clay roads? Please specify where it is necessary for each.

Response 23: Silt fencing to be installed per the approved Stormwater Pollution Prevention Plan, which is the responsibility of the Contractor.

Question 24: There is an owner allowance for Utility Pole Protection. Please confirm that this is to be paid by the County directly to the utility owner and that the only responsibility by the contractor is to coordinate only.

Response 24: The contractor is responsible for any utility pole protection. The allowance item will be utilized to reimburse the contractor once the contractor provides sufficient backup documentation.

Additional Bidder Information/Clarification:

The bid due date is 5/1/2025 @ 2:00 PM.

The undersigned hereby certifies that Bidder has carefully reviewed the information provided as included herein and with full knowledge and understanding of the intent to submit a Bid Proposal and can enter into a contract with the PRWC either directly or indirectly to complete all work as bid.

| SIGNATURE | PRINT NAME/TITLE | DATE |
|-----------|------------------|------|

SECTION 01 20 01 - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This section covers methods of measurement and payment for items of Work under the Contract.
- B. Separate payment will be made only for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work, shall be included in the scope of the appropriate listed work items.
- C. Unless specifically called out as a separate Pay Item on the bid form, no separate payment will be made for the following items and the cost of such work shall be included in the applicable Pay Items or work (including but not limited to):
 - 1. Submittals and coordination with permitting agencies
 - 2. Bonds, insurances and indemnification
 - 3. Erosion control and maintenance of BMPs, NOI/NOT
 - 4. Field engineering, surveying, layout, vertical and horizontal utility verification, signed and sealed as-built documents and close out documentation
 - 5. Field offices, overhead and qualified supervision, laydown and storage facilities
 - 6. Site sanitary facilities, debris and trash disposal
 - 7. Excavation, including necessary surface improvements removal.
 - 8. Sheeting, shoring or bracing
 - 9. Dewatering, testing and disposal or treatment of surplus water
 - 10. Backfill materials, sampling and density testing, disposal of unsuitable materials, compaction, and grading
 - 11. Night work, if required
 - 12. Clean-up and restoration
 - 13. Refill materials except as specified hereinafter
 - 14. Testing and placing system in operation
 - 15. Locating, protection, support, repair, and replacement of existing utilities and facilities not shown on the plans to be relocated including poles
 - 16. Public safety, accessibility and maintenance of traffic
 - 17. Landscaping, driveway, signage, mailboxes, ornamentation, etc. removal and replacement

1.2 ESTIMATED QUANTITIES

A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done, and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work performed and materials actually furnished and the estimated amounts thereof, as described in the supplementary conditions.

1.3 TAXES AND PERMITS

A. The Bidder's attention is directed to the fact that the tax laws of the State of Florida, including but not limited to Chapter 212, Florida Statutes, apply to this bid matter and that all applicable taxes and fees shall be deemed to have been included in Bidder's proposal.

1.4 RETAINAGE

A. Refer to Agreement.

1.5 PROJECT LINE ITEMS

A. PAY ITEM NO. 1 - Mobilization/Demobilization

- 1. Description: The work specified in this Item consists of the preparatory work and operations in mobilizing for beginning and ending work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to and from the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these specifications, and State and local laws and regulations. The costs of bonds, any required insurance, indemnification and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this Section. The cost of assistance to the Engineer or Owner shall also be included under this Pay Item. The costs of any other pre-construction or post- construction expense necessary to the start or completion of the work, excluding the cost of construction materials, shall also be included under this Pay Item. The cost of all other work as shown and specified that is not specifically included under other Pay Items shall also be included under this Pay Item. This Pay Item will include mobilization and demobilization for all parts or phases of the total project.
- 2. Measurement: The quantity of mobilization to be paid for under this Pay Item shall be measured as one lump sum quantity. Partial payments will be made therefore in accordance with the following:

| Percent of Original Contract | Allowable Percent of the Lump Sum |
|-------------------------------------|---------------------------------------|
| Amount Earned (Work installed, | price for Mobilization/Demobilization |
| including bonds and insurance, | price for wicomzation/Demobilization |
| and not including stored materials) | |
| 5 | 25 |
| 10 | 50 |
| 35 | 75 |
| 65 | 90 |
| • • • | |
| 90 | 100 |

Payment for Mobilization will be subject to retainage as described in these Contract Documents. Payment for Mobilization/Demobilization will be limited to five percent of the original contract amount for the Project.

3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.

B. PAY ITEM NO. 2 - Gopher Tortoise Survey

- Description: The work covered by this item consists of a Florida Fish and Wildlife Conservation Commission (FWC) 100 percent gopher tortoise burrow survey conducted by a FWC Authorized Gopher Tortoise Agent within the proposed disturbed areas (consisting of the Project footprint) and includes a 25-foot buffer protection area extending beyond the Project footprint. This survey should be conducted in accordance with the State of Florida rules and guidelines (please refer to the FWC guidelines regarding gopher tortoises). Survey work shall include, but is not limited to, travel to the project site, onsite inspections, and a hardcopy report with map illustrating the survey results of the burrow locations. Multiple trips to the project site are included in this Bid Item if necessary, to ensure the 90-day limit on the inspection is not expired prior to construction. All work shall conform to Section 01 73 10.
- 2. Measurement: Payment will be made at the lump sum price shown in the Bid Form for the Gopher Tortoise Survey.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Gopher Tortoise Survey.

C. PAY ITEM NO. 3 - Preconstruction Video

- 1. Measurement: Measurement will be based on the satisfactory submittal of a comprehensive pre-construction video detailing the pre-construction site conditions and adjacent areas that may be impacted by construction.
- 2. Payment: Payment will be made at a lump sum price shown in the Bid form for Preconstruction video upon acceptance.

D. PAY ITEM NO. 4 – Survey/As-built Drawings

- 1. Description: The cost for preparation of the as-built drawings, survey and construction layout. This item includes material, labor and certification to prepare the "As-built Drawing", field verification of existing underground facilities, construction stakeout of the proposed pipe and to survey the new pipe after it has been installed. Prior to acceptance of the project, the contractor shall submit two prints, and one set of electronic documents of AutoCAD formatted drawings marked as "As-built Drawings" which include the original design and all deviations that occurred during construction. The as-built drawings shall include vertical and horizontal alignment of all water mains, valves, tees, bends, reducers, air release valves, sample points, repair sleeves and other pertinent structures or appurtenances. Pipe runs in excess of 500 feet without fittings shall include vertical alignment and grade information. Record drawings shall be certified by a Professional Land Surveyor licensed in the State of Florida.
- 2. Measurement: Payment will be made at the lump sum price shown in the bid form for the Survey/Record drawings item.
- 3. Payment: Payment will be made at the lump sum price shown in the bid form for the Survey/Record drawings item.

E. PAY ITEM NO. 5 - Maintenance of Traffic

- Description: Work shall include furnishing all labor, materials and equipment 1. required to submit for approval a signed and sealed MOT plan and implement the plan to cover the required work from commencement to final closeout in accordance with the latest edition of the FDOT Standard Plans and U.S. DOT. Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). The work includes all items of work necessary for complete maintenance of traffic including, but not limited to, signed and sealed MOT plan, labor and equipment to meet FDOT clear zone requirements, traffic control devices, warning devices, barrier wall, crash attenuators, safety devices, barricading, certified flagmen, onsite supervision that maintains FDOT TTC certification, signage, lighting, messaging, temporary ADA walkways, removal of existing pavement markings, installation and removal of temporary pavement striping (paint), markings and reflective markers, traffic signal relocation and adjustments for MOT phasing, and all materials and construction necessary to create temporary connections for street, driveways and pedestrian traffic. The pay item for "Maintenance of Traffic" shall include all work necessary for maintenance of vehicular traffic and pedestrian traffic, unless otherwise specified to be paid under other bid items.
- 2. Measurement: Payment will be made at the lump sum price shown in the Bid Form for Maintenance of Traffic as shown on the plans, specified, and required for construction activities.
- 3. Payment: Payment will be made in accordance with the following schedule.

| Percent of Original Contract Amount Earned | Allowable Percent of the Lump Sum price for Maintenance of Traffic |
|---|--|
| 10 | 25 |
| 35 | 50 |
| 65 | 75 |
| 90 | 100 |

F. PAY ITEM NO. 6 - Clearing and Grubbing

Description: Furnish all labor, equipment, and materials for the removal and proper disposal of all above ground vegetation including but not limited to trees, shrubs, brush, bushes and any other vegetation. Areas to receive clearing and grubbing shall include all areas to be occupied by the proposed improvements, areas for fill and site grading, and borrow sites. Remove trees outside of these areas only as indicated on the Drawings or as approved in writing by the Engineer. Along the proposed pipelines as indicated on the plans, the contractor shall remove the surface materials only to such widths as will permit a trench to be excavated and afford sufficient room for proper efficiency and proper construction. All applicable regulations shall be followed. Where sidewalks, driveways, pavements and curb and gutter are encountered, care shall be taken to protect against fracture or disturbance beyond working limits. All fractured, broken or disturbed surfaces caused by construction operations are considered ancillary and shall be restored to their original condition prior to completion of the work at the Contractor's expense.

Exercise extreme care during the clearing and grubbing operations. Do not damage existing structures, pipes or utilities.

Grubbing shall consist of removing and disposing of stumps, roots larger than 1.5" in diameter, and matted roots. Remove to a depth of not less than 18" below the original surface level of the ground. All depressions excavated below the original ground surface for or by the removal of such objects shall be refilled with suitable material and compacted to a density conforming to the surrounding ground surface.

All combustible debris and refuse from site preparation operations shall be removed to legal offsite disposal areas.

- 2. Measurement: The quantity of Clearing and Grubbing to be paid for under this Item shall be measured as one lump sum quantity.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for Clearing and Grubbing, as designated on the plans, and acceptably completed.
- J. PAY ITEM NO. 7 Erosion and Sedimentation Control
 - 1. Description: The work consists of all labor, equipment, material, installation, maintenance, replacement and removal of approved erosion control devices from commencement to final acceptance.

Construct and maintain temporary erosion and sedimentation control measures so as to prevent pollution of water, detrimental effects to public and private property adjacent to the project and damage to the Work. Coordinate temporary control measures with permanent control features when applicable.

Use temporary erosion and sedimentation controls that include, but are not limited to, grassing, sodding, mulching, sandbagging, slope drains, sediment basins and checks, berms, synthetic hay bales, floating turbidity barriers, staked turbidity barriers and silt fences.

Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective which will ensure that pollution will be either eliminated or maintained within acceptable limits as established by federal, state and local requirements and by the Owner.

- 2. Measurement: The quantity of Erosion Control to be paid for under this Item shall be measured as one lump sum quantity on a percent complete basis.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Erosion Control, and acceptably completed. Partial payments will be made on a pro-rated monthly amount based on contract time.

K. PAY ITEM NO. 8 - Existing Utility Location, Relocations & Support

Description: Contractor shall furnish all labor, materials, and equipment 1. necessary to physically locate all utilities in the immediate area using nondestructive digging equipment, supplies, and personnel experienced in the use of subsurface utility engineering (SUE) to determine precise horizontal and vertical positions of utilities, specified herein, and/or as directed by the Engineer. The Contractor shall perform utility locates at least seven (7) calendar days in advance of construction in order to request clarification, if required from the Engineer. The Engineer will have three (3) calendar days to respond. This construction scheduling will allow all necessary decisions to be made prior to the Contractor's crews reaching the work area and having a delay claim. Contractor shall provide proof of physically locating existing utilities prior to construction before the monthly payment application is considered. Included shall be Sunshine locate tickets and pictures showing flagged utilities and excavation with time/date stamp referenced to stations on plans.

The work includes equipment to paint/mark the position of the underground utility, vacuum excavation equipment that includes air tools (water jet, air lance) to break up the surface and soil. The vacuum excavation equipment involves removing the disturbed soil and temporarily storing it. The exposed underground utility is examined and pertinent data such as size, type, material, and depth is gathered. A marker such as an iron rod and cap or nail and disk are placed next to the test hold and the depth measurement is taken to this point. The stored soil is then returned to the excavated test hole and the surface is returned to its original state; asphalt patch is tamped into the hole when applicable. Markings such as paint and/or lathe and ribbon are left near the hole for future identification.

- 2. Measurement: The quantity of Existing Utility Location, Relocations & Support to be paid for under this Item shall be measured as one lump sum quantity.
- Payment: Payment for subsurface utility locate will be lump sum for the work based on percent complete. Assume all lines to be located are active lines and service must be maintained at all times possible.
- L. PAY ITEM NO. 9-10 PVC Pipe Installed by Open Cut Excavation
 - Description: Furnish all material, labor and equipment, construct, test, and maintain complete all new PVC water main pipe as shown on the Plans, specified and directed by the ENGINEER.

The work consists of furnishing all labor, equipment and materials and installing pipe by open cut or insertion into a casing pipe that has been installed under another Pay Item. The unit price shall include all costs necessary to install the pipe including survey; color audiovisual preconstruction record; layout drawings; removal of sidewalks, driveways, curbs, curb and gutter; protection of property; protection, relocation, repair and/or replacement of utilities; protection, repair and replacement of sprinklers; protection, repair and replacement of storm sewerage facilities, water mains, sanitary sewers and house laterals, and force mains not shown on the Plans to be removed and replaced or relocated; protection, repair and replacement of petroleum lines, gas mains, cable television lines, telephone lines, fiber optic cables, electric cables and other utilities; protection of existing structures; protection and replacement of all miscellaneous surface improvements including but not limited to mailboxes, bird baths, patios, fences, shrubs, etc.; sheeting, shoring, and bracing; temporary or permanent thrust restraint for existing pressurized utility conduits; furnishing, off-loading and protection of pipe; dewatering; excavation; pipe bedding, including all sand, crushed stone; materials; furnishing and installing joint restraints; polyethylene encasement of ductile iron pipe; polyethylene encasement of pipe thrust restraints; pipework; backfilling, compaction and testing; detectable marking tape; pipeline markers; tracer wire and locate boxes; temporary leakage test plugs; temporary blow-offs or flushing assemblies; water for construction, filling and testing; making all pipe connections; installation and removal of plugs and bulkheads; connections to previously completed adjoining work; pressure testing, and disinfection; placing the new water main in service; removing and salvaging existing appurtenances at connection points as shown; furnishing and installing "Buried Utility" warning markers at limits of electric power line rights-of-way and at ditch crossings; temporary and nonpermanent pavement replacement; reconstruction or re-grading of road shoulders and ditches; removal and disposal of surplus excavated material; survey for record drawings; compliance with permits; and all other work incidental to the installation of the water main complete in place as shown on the Plans, specified and directed by the ENGINEER.

The work does not include: other work paid for separately under other pay items, such as valves; ductile iron fittings, air release assemblies; blow off assemblies; HDPE water main installed by horizontal directional drilling;

steel pipe water main; corrosion protection systems; casing pipe for jacked and bored casings; removing and backfilling existing asphalt pavement; milling existing asphalt pavement; asphalt pavement surface restoration; dirt or gravel driveway restoration; concrete sidewalk replacement; curb or curb and gutter replacement; concrete driveway replacement; asphalt driveway replacement; sodding; seeding and mulching; traffic control. When specified, shown or ordered by the ENGINEER in writing, such work will be paid for under other Pay Items.

- Measurement: The length of PVC Installed by Open Cut Excavation to be measured for payment will be the horizontal length in linear feet of pipe measured along the centerline of the pipe through valves and fittings in place, including restraints in accordance with the plan documents, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the various pipe types and sizes completed, tested and accepted.

M. PAY ITEM NO. 10-13 - Corrosion Protection Systems Not Used

1. Description: Furnish all labor, equipment and materials for the installation of corrosion protection systems for steel, duetile and PVC pipe as shown on the plans and specified. The lump sum price for each corrosion protection system shall include all materials, installation and testing to provide a fully functioning corrosion protection system for the pipelines, and shall include anodes, wire and conduit, test stations, electrical isolation devices, joint bonding where required, acceptance testing, commissioning and record drawings. The work shall also include survey layout, clearing and grubbing, excavation, backfilling, sheeting, shoring, bracing, and other incidental work required for the corrosion protection systems.

Corresion protection systems for steel and ductile iron piping with bonded joints shall utilize magnesium anode beds for cathodic protection. Appurtenances such as air release systems and blow offs shall be included in the corresion protection systems. Corresion protection systems for PVC pipe with ductile iron fittings shall include magnesium anodes on the buried metallic fittings, restraints and values, where shown on the plans or specified.

- Measurement: The quantity of Corrosion Protection Systems to be paid for under this Item shall be measured as one lump sum quantity, for each system provided in the Bid Form.
- 3. Payment: Payment will be made at the lump sum price bid for each corrosion system.
- N. PAY ITEM NO. 44-14 H.D.P.E. Pipe Installed by HDD
 - 1. Description: Furnish all pipe materials, equipment, and services, to construct, test and maintain complete all HDPE water main pipe installed by horizontal directional drilling (HDD), as shown on the plans, specified and

directed by the ENGINEER. The work consists of furnishing all labor, equipment and materials, and fusing and installing H.D.P.E. Potable Transmission Main by HDD. The unit price shall include all costs necessary to install the pipe including survey layout; materials, including HDPE adapters; work required by connection details, clearing and grubbing; tree removal; root pruning; shoring and bracing; pipe; off-loading and protection of pipe; excavation; backfilling; dewatering; cutting and removal of pavement and other surface improvements including sidewalks, driveways, etc; sheeting; bracing; utility crossings; bentonite material and drilling fluids; guidance system, HDD plan submittal, clearing of the right-of-way; protection of property; protection, repair and replacement of utilities; protection, repair and replacement of sprinklers; temporary leakage test plugs; temporary blow-offs; pressure testing; and disinfection.

- 2. Measurement: The quantities of HDD pipe to be paid for under this Item shall be the horizontal length as shown on the plans from adapter to adapter installed and approved. If additional length is installed for the Contractor's convenience, such additional length shall be measured for payment under the appropriate pay item for adjacent pipe installed in open cut trench.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the various pipe sizes.

O. PAY ITEM NO. 42-15 - Jack and Bore Steel Casing

- Description: The work consists of furnishing all labor, equipment and materials for the installation of steel casing by the method of boring and jacking. The unit price shall include all costs necessary to install the casing including survey layout, clearing and grubbing, tree removal, root pruning, dewatering, excavation of jacking and receiving pits, backfilling, sheeting, shoring, bracing, casing pipe, welding, casing spacers, end plugs or seals, reaction blocks, braces, and barricades.
- 2. Measurement: The quantities of jack and bore casing to be paid for under this Item shall be the horizontal length within the limits as shown on the plans installed and approved. If additional length is installed for the Contractor's convenience, such additional length shall not be measured for payment. Carrier pipe shall be measured and paid under a separate item.
- 3. Payment: Payment will be made at the unit price bid per linear foot of the installed casing.

P. PAY ITEM NO. 13-16 – Below Grade Bacteriological Sampling Assembly

- Description: Furnish all labor, equipment and materials for the complete installation of each sample test station as shown in the contract drawings and necessary for successful testing and sampling of the completed water main in accordance with the applicable standards.
- 2. Measurement: The quantities of sampling stations to be paid for under these Items shall be the number of each type and size measured in place, completed and accepted.

3. Payment: Payment will be made at the unit price bid for each sampling station installed, tested and accepted.

Q. PAY ITEM NO. 44-17 - Water Main Testing and Disinfection

- 1. Description: The contractor shall furnish all labor, equipment and materials necessary to perform the required testing, cleaning, and disinfection of the new Potable Water Main as detailed in specification sections 33-11-10 and 33-13-00.
- 2. Measurement: The quantity of Water Main Testing/Disinfection to be paid for under this Item shall be measured as one lump sum quantity.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for the Water Main Testing/Disinfection, as detailed in specification sections 33-11-10 and 33-13-00, and acceptably completed. Partial payments will be made on a pro-rated amount based on successful testing and clearance.

R. PAY ITEM NO. 45-18 - Valves

- 1. Description: The work consists of furnishing all labor, equipment and materials to install valves as shown, specified in Specification 33 14 00. The valves are to be furnished by the Owner. The unit price shall include the cost of the jointing materials, including rings, bolts and gaskets, bolting materials for flanged valves; polywrap, filter fabric, installation costs, roadway box, concrete support and concrete valve box pad with bronze disc, operator extension stems so nuts are no more than 3 feet below surrounding grade, excavation, backfilling and dewatering.
- 2. Measurement: The quantities of valves to be paid for under these Items shall be the number of each type and size measured in place, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid for each type valve of the various sizes.

S. PAY ITEM NO. 46-19 - Ductile Iron Fittings

- 1. Description: The work consists of furnishing all labor, equipment and materials and installing ductile iron fittings on ductile iron and PVC pipelines. The unit price shall cover the cost of furnishing the fittings, bends and sleeves, transportation, jointing materials, glands, bolts, gaskets, and polyethylene wrap. All fittings shall be installed with restrainers.
- 2. Measurement: The quantity of ductile iron fittings, bends, and sleeves to be measured for payment under this Item shall be the number of each measured in place, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid for each type fitting of the various sizes.

T. PAY ITEM NO. 47-21 - Air Release Assemblies

- Description: Furnish all materials, labor and equipment to construct, test, and complete the air release valve assemblies shown on the Plans, specified and directed by the ENGINEER. Conform Air Release Valve Assemblies to the details shown on the plans for the various sizes and types. The work consists of furnishing all labor, equipment and materials and installing air release assemblies. The unit price shall include all connections, nipples, valves, fittings, taps, polywrap, above ground enclosure if required, piping, bollards if shown or specified, dewatering, excavation, backfill, concrete pads, brass nameplates, disinfection, and testing, placing the air valve assembly in service, and all other work incidental to the complete installation of the air release assembly as called for on the Drawings.
- Measurement: The quantities of air release assemblies to be paid for under this Item shall be the actual number of the respective air release assemblies measured in place, completed, and accepted.
- 3. Payment: Payment will be made at the unit price bid for each air release assembly.

U. PAY ITEM NO. 48-22 - Blow Off Assemblies

- Description: Furnish all materials, labor and equipment to construct, test, and complete the blow off assemblies shown on the Plans, specified and directed by the ENGINEER. Conform Blow Off Assemblies to the details shown on the plans for the various sizes and types. The work consists of furnishing all labor, equipment and materials and installing the blow off assemblies. The unit price shall include all connections, valves, fittings, taps, polywrap, manhole frame and cover, piping, bollards if shown or specified, dewatering, excavation, backfill, concrete pads, brass nameplates, disinfection and testing, placing the blow off assembly in service, and all other work incidental to the complete installation of the blow off assembly as called for on the Drawings.
- Measurement: The quantities of blow off assemblies to be paid for under this Item shall be the actual number of the respective blow off assemblies measured in place, completed and accepted.
- 3. Payment: Payment will be made at the unit price bid for each blow off assembly.

V. PAY ITEM NO. 19-23 - Asphalt Roadway Repair

- 1. Description: The work consists of all labor, equipment, and material necessary for saw cutting, removing and disposing of existing roadway material, and the replacement of the existing asphalt pavement, base, and subgrade as detailed in the drawings and accepted by the applicable entity having jurisdiction.
- Measurement: The quantity to be measured for payment shall be the area in square yards of pavement removed and replaced within the payment limits shown and described, completed and accepted.

3. Payment: Payment will be made based on the contract unit price per square yard.

W. PAY ITEM NO. 20-24 - Milling and Overlay of Existing Asphalt Pavement

- 1. Description: The work consists of all labor, equipment, and material specified for the milling of the existing asphalt including hauling off, and stockpiling or otherwise disposing of the milled material, and installing the final lift of super pave asphaltic concrete surface course (overlay) on the milled surfaces of the existing undisturbed roadway as shown, specified and directed and in accordance with the latest edition of the FDOT standard plans and specifications. The work shall also include furnishing and installing pavement markings to match existing site conditions
- Measurement: The quantity to be measured for payment shall be the area in square yard of milling and overlay completed and accepted within the pay limits shown on the plans and in accordance with details shown on the drawings
- 3. Payment: Payment will be made at the contract unit price per square yard.

X. PAY ITEM NO. 21-26 - Unpaved Road Restoration

- Description: The work consists of all labor, equipment and materials for the construction of 6-inch thick compacted dirt driveway as shown, specified and directed. The unit price includes restoring dirt driveways in kind utilizing existing material or stabilizing, if necessary, to achieve the specified LBR rating. Dirt driveways with no shell or gravel present shall be installed to have a minimum LBR of 40. Dirt driveways with shell, gravel, clay, or crushed asphalt or concrete mixed in shall be installed to have a minimum LBR of 100. Removal and disposal of dirt or gravel driveway is included in the bid items for pipelines.
- 2. Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yard of dirt driveway placed in the work within the payment limits for surface restoration shown or as directed by the Engineer.
- 3. Payment: Payment will be made at the contract unit price per square yard.

Y. PAY ITEM NO. 22-28 – Concrete Driveway Replacement.

- Description: The work consists of all labor, equipment and materials installed as shown, specified, and directed for the construction of concrete driveway, as directed by the Engineer. Removal and disposal of concrete driveway is included in the Bid Items for pipeline construction.
- 2. Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yards of such concrete driveway placed in the work within the payment limits for surface restoration shown to the nearest expansion joint outside of the excavation or as directed by the Engineer.
- 3. Payment: Payment will be made at the contract unit price per square yard.

- Z. PAY ITEM NO. 23-29 Asphalt Driveway Replacement.
 - Description: The work consists of all labor, equipment and materials installed as shown, specified, and directed for the construction of asphalt driveway, as directed by the Engineer. Removal and disposal of asphalt driveway is included in the Bid Items for pipeline construction.
 - Measurement: The quantity to be measured for payment under this Bid Item will be the area in square yard of such asphalt driveway placed in the work within the payment limits for surface restoration shown or as directed by the Engineer.
 - 3. Payment: Payment will be made at the contract unit price per square yard.

AA.PAY ITEM NO. 24-31 – Fencing Removal and Re-installation

- Description: Furnish all labor, equipment, and materials for the removal and re-installation of fence to existing or better condition as shown on the drawings.
- 2. Measurement: Quantity shall be measured in actual linear footage of fence removed and re-installed in accordance with the drawings and specifications. Extra fence disturbed by construction operations beyond the limits as shown on the drawings will not be measured for payment.
- 3. Payment: Payment will be made at the contract unit price per linear foot upon completion.

BB.PAY ITEM NO. 25-32 - Sodding

- Description: The work consists of furnishing all labor, equipment and materials and placing, staking, rolling, and watering grass sod complete in place to match existing regardless of grass type (St. Augustine/Bahia/etc.) within the work area. Refer to the Drawings and the Drawing General Notes for additional information on placement.
- 2. Measurement: The quantity of Sodding to be paid for under this Pay Item shall be measured as one lump sum quantity.
- 3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.

CC. PAY ITEM NO. 26-33 – Seed and Mulch

- Description: The work consists of furnishing all labor, equipment and materials and handling, placing, and watering seed and mulch complete in place to match existing regardless of grass type (Bermuda/Bahia/etc.) within the work area limits. Refer to the Drawings and the Drawing General Notes for additional information on placement.
- 2. Measurement: The quantity of seed and mulch to be paid for under this Pay Item shall be measured as one lump sum quantity.

- 3. Payment: The quantities, as determined above, shall be paid for at the Pay Item lump sum price set out in the Proposal, which price and payment constitutes full compensation for all the work described herein.
- DD. PAY ITEM NO. 27-34 Gopher Tortoise Permitting and Relocation
 - Description: The work covered by this item consists of all coordination, work, materials, and equipment necessary to permit and relocate Gopher Tortoises in accordance with State of Florida laws, rules and guidelines. All work shall conform to Section 01 73 10. This item will be treated as an allowance, against which the Owner, at their discretion, may direct work not shown on the plans.
 - 2. Measurement: The quantities of unspecified work to be paid under this item shall be compensated based on actual cost verified by invoice, completed and accepted. The value of the allowance shall be Fifty thousand and 00/100 Dollars (\$50,000.00).
 - 3. Payment: This item if required during the course of the project to facilitate the project and will be paid only after written authorization and verified invoice to include the item in the progress payments.

EE.PAY ITEM NO. 28-35 – Utility Pole Protection

- Description: The work covered by this item consists of all coordination, work, materials, and equipment necessary to coordinate the protection of utility poles and guy wires along the project route as noted in the plans with the facility owner. This item will be treated as an allowance, against which the Owner/CMAR, at their discretion, may direct work not shown on the plans.
- 2. Measurement: The quantities of unspecified work to be paid under this item shall be compensated based on actual cost verified by invoice from the utility provider, completed and accepted. The not to exceed value of this item shall be Eighty thousand and 00/100 Dollars (\$80,000.00).
- 3. Payment: This item is for allowance if required during the course of the project to facilitate the project and will be paid only after written authorization and verified invoice to include the item in the progress payments.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

- END OF SECTION -

SECTION 33 14 00 - WATER UTILITY TRANSMISSION & DISTRIBUTION EQUIPMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies the following appurtenances:
 - 1. Valves General
 - 2. Butterfly Valves Class 150B
 - Gate Valves
 - Valve boxes
 - 5. Operating nut extension stem guide
 - 6. Combination air release and vacuum relief valves ball float type
 - 7. Brass and Bronze Fittings
 - 8. Pipe Restraint
 - 9. Pipe couplings
 - 10. Flow Control Valves

1.2 REFERENCES

- A. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail. The most recent issuance of the references below and reference herein shall prevail.
- B. American National Standards Institute (ANSI)
 - 1. ANSI B1.1, Unified Inch Screw Threads (UN and UNR Thread Form).
 - 2. ANSI B16.1, Cast Iron Pipe Flanges and Flanged Fittings, Class 125 and 250.
 - 3. ANSI B16.34, Valves Flanged, Welding and Threaded End.
 - 4. ANSI B16.5, Steel Pipe Flanges, Flanged Valves, and Fittings.
 - 5. ANSI B18.2.1, Square and Hex Bolts and Screws (Inch Series).
- C. American Society for Testing and Materials (ASTM)
 - 1. ASTM A48, Gray Iron Castings.
 - 2. ASTM A53, Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
 - ASTM A126, Gray Iron Castings for Valves, Flanges and Pipe Fittings.
 - 4. ASTM A240, Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.

- 5. ASTM A276, Stainless and Heat-Resisting Steel Bars and Shapes.
- 6. ASTM A307, Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
- 7. ASTM A536, Ductile Iron Castings.
- 8. ASTM B62, Composition Bronze or Ounce Metal Castings.
- 9. ASTM B124, Copper and Copper Alloy Forging Rod, Bar, and Shapes.
- 10. ASTM B584, Copper Alloy Sand Castings for General Applications.
- 11. ASTM B687, Brass, Copper, and Chromium-Plated Pipe Nipples.
- 12. ASTM D2133, Acetal Resin Injection Molding and Extrusion Materials.

D. American Water Works Association (AWWA)

- AWWA C111, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
- 2. AWWA C207, Steel Pipe Flanges for Waterworks Service Sizes 4-inch through 144-inch.
- 3. AWWA C509, Resilient Seated Gate Valves for Water Supply Service.
- 4. AWWA C512, Air-Release, Air/Vacuum, and Combination Air Valves for Waterworks Service.
- 5. AWWA C550, Protective Epoxy Interior Coatings for Valves and Hydrants.
- 6. AWWA C800, Underground Service Line Valves and Fittings.

E. National Sanitation Foundation (NSF)

NSF 61, Drinking Water System Components, Health Effects.

F. Federal Specification

1. Federal Specification WW-P-460, Pipe Fittings; Brass or Bronze (Threaded) Classes 125 and 25.

1.3 SUBMITTALS

A. Submit shop drawings in accordance with Section 01 33 00, Submittal Procedures.

B. Action Submittals

- Dimensioned fabrication Drawings showing the entire assembly including, but not limited to, a materials list, sizes, piping connections, ASTM designations where appropriate, thicknesses, construction, and description of major components and other structural members, appurtenances, and devices.
- 2. Performance data for each device over the specified range of pressure, capacity and flows.
- 3. Installation procedures.

- 4. Factory test reports.
- 5. Manufacturer affidavit of compliance to the specifications and requirements herein.
- 6. Valve Submittal Requirements
 - a. Valve name, size, parts, materials, valve coefficient (Cv), pressure rating, identification number (station) and specification section number.
 - b. Valve actuator including size, manufacturer, model number, and mounting. Manufacturer calculations in sizing operators.
 - c. Assembly drawings showing relationship of valve handles, handwheels, stem extensions, and operating nuts.
 - d. Lining and coating product literature.
 - e. A tabular valve schedule indicating the station and model number of proposed valve to be installed at each station including, direction to turn open, pressure rating classification, nominal size, operator orientation, operator type, actuator turndown ratio, and number of turns to close.
 - f. Manufacturer certified material and pressure test performance reports.

1.4 QUALITY ASSURANCE

- A. Single Manufacturer: Provide valves or appurtenances by the same manufacturer where two or more valves or appurtenances of the same type are required.
- B. Unit Responsibility: A single manufacturer for each item specified shall be made responsible for coordination of design, assembly, testing and furnishing of each item of the same kind.
- C. Conform factory testing to the applicable requirements of ASTM, AWWA, and ANSI standards.

1.5 DELIVERY, HANDLING, AND STORAGE

A. General

- Deliver equipment and materials in a clean and undamaged condition and store off the ground. Close-up ends of equipment at the factory and maintain closed until installed. Replace defective or damaged materials with new materials at no additional cost to the Owner or Owner's representative.
- Take care in loading, transporting, and unloading to prevent injury to the valve, appurtenances, or coatings. Do not drop equipment. Examine valves and appurtenances before installation. Do not install any equipment that is found to be defective. Repair damage to coatings. Apply manufacturer recommended lubricants where required.
- 3. Coat all gears, bearing surfaces, and other surfaces not to be painted with a heavy coat of grease or other suitable rust resistant coating unless otherwise

- specified herein. Maintain this coating required to prevent corrosion during any period of storage and installation.
- 4. Remove and replace any defective equipment with non-defective equipment at no additional cost to the Owner or Owner's representative.

PART 2 - MATERIALS

2.1 VALVES - GENERAL

- A. Valves to include name of manufacturer, nominal size, and rated working pressure cast or stamped on the body. Valves to include an arrow showing direction of opening and the word OPEN cast or stamped on the valve body, operator, and extension stem centering plate.
- B. Valves to open by turning LEFT (counter-clockwise).
- C. Valves shall be suitable for frequent operation and service involving long periods of inactivity. Valves shall be capable of operating satisfactorily with flows in either direction. Valves shall be suitable for use with potable water.
- D. Ensure that valves and appurtenances are compatible with the pipe and fittings at each location.
- E. Valves for potable water use shall consist of a red-colored operating nut and plate.

2.2 BUTTERFLY VALVES – CLASS 150B

- A. Tight closing, rubber-seated butterfly valves in conformance with AWWA C504. Valves shall be bubble-tight, satisfactory for applications involving throttling service operation and for applications involving valve operation after long periods of inactivity.
- B. Acceptable Manufacturers:
 - DeZurik BAW Series Butterfly
 - 2. M&H (McWane) 4500/1450
 - 3. Pratt (Mueller) Lineseal III/ BV (Ground Hog)
 - 4. Val-Matic 2000 Series
- C. Service: Working pressure rating 150 psi. Suitable for frequent operation as well as service involving long periods of inactivity. Capable of operating satisfactorily with flows in either direction. Rated for zero leakage past the seat.
- D. Valve Bodies: In compliance with AWWA C504, Class 150B, short body pattern. Disc stops on the body will not be allowed.
- E. Valve Discs: Valve discs shall conform to AWWA C504. Valve disc shall seat at 90 degrees to the pipe axis.
- F. Valve Seat

- In accordance with AWWA C504, all seats shall be of a new natural or synthetic rubber compound and may be reinforced by the valve manufacturer.
- 2. The mating seat surface shall be stainless steel.
- 3. Seats shall be a full-circle 360 degrees. Valve seats shall be field adjustable around the full 360-degree circumference and replaceable without dismantling operator, disc or shaft and without removing the valve from the line. The seat shall be fully adjustable and replaceable in the field with the use of a standard wrench. No special tools shall be required. Valve seat designs in the body that require the use of epoxy to retain the seat or fillers to increase seat compression are not considered mechanically retained, field replaceable, or adjustable, and will not be accepted. Valves with seat designs that are located on the disc will not be acceptable.
- G. Valve Shaft: In accordance with AWWA C504, all shafts shall be turned, ground and polished and constructed of ASTM A276 Type 304 stainless steel.
- H. Shaft Seal: In accordance with AWWA C504, shaft seals shall be replaceable without removing the valve shaft.
- Valve Bearings: Valve bearings shall conform to all applicable requirements of AWWA C504.
- J. Valve Operating Nut Extension Shaft
 - 1. All valves that have an operating nut at a depth greater than five feet below finish grade shall have an operating nut extension shaft. The shaft shall bring an operating nut to 8 inches below finished grade. The operating nut extension shaft shall be made of carbon steel meeting manufacturer's recommendations. Bolt the operating extension to the valve nut.

K. End Connections

- 1. Exposed Valves and Buried Valves on Steel Pipelines
 - Flanges dimensioned and drilled in accordance with ANSI B16.1 Class 125 and machined to a flat surface with a serrated finish in accordance with AWWA C207.
 - b. Fasteners, bolts, and nuts shall be ASTM A276 Type 304 stainless steel.

L. Manual Valve Actuators

- Unless otherwise specified, valves shall be furnished with manual actuators in accordance with AWWA C504 and designed and sized to develop the required output torque sufficient to seat, unseat and rigidly hold the disc in any intermediate position. The maximum velocity for actuator design shall be 16 fps.
- 2. Actuators shall be designed to operate temporarily in a submerged condition in ten feet of water. The actuators shall be equipped with 2 inch square

operating nuts, sized 1-15/16 inch square at the top, 2 inch square at the base, and 1-3/4 inch in height. Valves shall open with a right (clockwise) rotation of the nut.

M. Actuator Gearing

- 1. All gearing of the manual actuator shall be totally enclosed and factory sealed with a lubricant in accordance with the manufacturer's recommendation.
- 2. Primary gearing shall be of the traveling-nut type and shall be self-locking and designed to transmit twice the required actuator torque without damage to the faces of the gear teeth or the contact faces of the screw or nut. Traveling-nut type actuators shall have steel drive screws and an internally threaded bronze or ductile-iron nut. Actuators shall be enclosed.

N. Actuator Operation

- 1. Minimum number of turns for complete opening or closing of valve disc shall not be less than 40 for all valves.
- 2. Maximum input torque required to fully open or close the valve shall not exceed 150 foot-pounds when applied to the operating nut.
- O. Markings: In accordance with AWWA C504, markings shall be permanently attached to the valve. The valve nameplate shall include normal valve data and the number of turns required to operate the valve.
- P. Lining and Coating: Epoxy lined in accordance with AWWA C550 and certified to NSF 61. Epoxy coated in accordance with AWWA C116 to a minimum of 10 mils thickness. Shop coat machined flange faces with a rust preventive compound.
- Q. Shipping and Storage: After coating is completed, a lubricant compatible with the rubber seal shall be applied to surface of this seal and the mating metal surface to prevent bonding of the two surfaces during shipment and storage. Following application of the seal lubricant, the valve disc shall be placed in a slightly open position for shipment.

2.3 GATE VALVES

A. General

- 1. Valves shall be iron body, resilient seated gate valves with non-rising stems in accordance with AWWA C509. If the resilient seats are bonded to the gates, the gates shall be totally encapsulated with the material, with the exception of any guide tabs or slots. Valve bodies shall be designed to allow lifting of the valves by the bonnet flange, gland flanges or other appurtenances. Valves shall open with a right (clockwise) rotation of the nut.
- 2. Acceptable Manufacturers:
 - a. American Flow Control Series 2500
 - b. Mueller Series A-2361

M&H/Kennedy/Clow (McWane) Series 7571 C.

B. Service

All valves shall be suitable for frequent operation as well as service involving 1. long periods of inactivity. Valves shall be capable of operating satisfactorily with flows in either direction, and shall provide zero leakage past the seat. The operating pressure for all sizes shall be 250 psig.

C. Valve Stems

Valve stems shall be threaded and supplied with non-rising stems having a minimum yield strength of 40,000 psi and a minimum elongation in 2 inches of 12% and shall be made of bronze per ASTM B763, Copper Alloy No. C99500 or stainless steel per ASTM A276, Type 304 or 316. Valves shall be supplied with 2-inch square wrench nut in accordance with AWWA C509 except where shown on the Drawings.

D. Stem Seals

1. The stem seal shall consist of two (2) O-rings, designed to permit replacement of the seal above the thrust collar with the valve under pressure in the full-open position. The stem seal shall be in accordance with AWWA C509.

E. Valve Operating Nut Extension Shaft

All valves that have an operating nut at a depth greater than five feet below finish grade shall have an operating nut extension shaft. The shaft shall bring an operating nut to 8 inches below finished grade. The operating nut extension shaft shall be made of similar material and size to the valve operating shaft. Bolt the operating extension to the valve nut.

F. End Connections and Materials

1. **Exposed Valves**

- Flanges sized and drilled in accordance with ANSI B16.1 Class 125, and machined to a flat surface with a serrated finish in accordance with AWWA C207.
- Fasteners, bolts, and nuts shall be ASTM A276 Type 304 stainless b.

Buried Valves 2.

Unless otherwise indicated or shown on the Drawings, mechanical a. joint ends conforming to ANSI A21.11 (AWWA C111) with tee-head bolts and hexagon nuts fabricated from a high strength, low alloy steel known in the industry as "Cor-Ten".

G. Bonnet and Gland Fasteners

1. Bonnet and gland bolts and nuts shall be stainless steel per ASTM A276, Type 304.

H. Gaskets

 The flat gaskets, either ring type or full faced type, required at the bonnet connections shall be impermeable premium rubber gasket sheet such as Garlock Red SBR Rubber Sheet. Gaskets for mechanical joint ends shall be in accordance with AWWA C111.

I. Brass and Bronze Components

- 1. Brass and bronze components of valves and appurtenances in contact with water and brass or bronze used in any part of a valve in buried or submerged service shall be alloys containing less than 16% zinc and 2% aluminum.
 - a. Acceptable alloys shall be in accordance with the following ASTM designations: B61, B62, B98 (Alloy A, B, or D), B139 (Alloy A), B143 (Alloy 1-B), B164, B194, B292 (Alloy A), and B127.
 - b. Stainless Steel alloy 18-8 may be substituted for bronze at the option of the manufacturer with the acceptance of the Owner or Owner's representative.

J. Painting

 Epoxy lined in accordance with AWWA C550 and certified to NSF 61. Epoxy coated in accordance with AWWA C116 to a minimum of 10 mils thickness. Shop coat machined flange faces with a rust preventive compound.

2.4 VALVE BOXES

A. General

- 1. Three piece adjustable slip type, 5-1/4 inch diameter, and without a flange.
- Covers marked with the word "WATER".
- 3. Fabricated of gray cast iron in compliance with ASTM A48 Class 35B or A126 or ductile iron in compliance with ASTM A536 Grade 80-55-06.
- 4. AASHTO H-20 traffic rated.
- 5. Design shall not transmit shock or stress to the valve. Centered plumb over the valve operating nut with the box cover flush with the surface of the pavement.
- 6. Debris cap: Supplied with each valve box. Manufactured by SW Services, Inc., Debris CapTM, Model DC457. No substitutions accepted. Color-coding:
 - a. Blue for potable water

2.5 OPERATING NUT EXTENSION STEM GUIDE

A. Adjustable stem guides to provide support for valve extension stems, adjustment range 2 inches to 36 inches, carbon steel meeting manufacturer's recommendations, and suitable for 2 inch outside diameter stems. Manufacturer: Trumbull Industries. Inc.

2.6 COMBINATION AIR RELEASE AND VACUUM RELIEF VALVES – BALL FLOAT TYPE

- A. Description and Service
 - Combination air release and vacuum valve manufactured in accordance with AWWA C512. The large orifice allows air to escape during pipeline filling and enter during drainage of the pipeline. Orifice closes water-tight when liquid enters the valve. The small orifice releases small pockets of air after the pipeline is filled and under pressure.
 - 2. Equipped with an integral surge alleviation mechanism that automatically dampens surge pressures due to rapid air discharge or the subsequent rejoining of separated water columns.
 - 3. Manufactured in conformance with NSF 61 for potable water service.
 - Acceptable Manufacturers (150 psi operating pressure or less):
 - a. Two Inch to Three Inches
 - 1) Apco/Valve and Primer "No. 145C/147C/149C
 - 0)2)_Val-Matic, No. 201C
 - 3) Multiplex "Crispin Type PL
 - b. Larger than Three Inches
 - Multiplex "Crispin Dual Air Valves".
 - 2) ARI "No. D-060-HF"
 - 0)3) Val-Matic "Dual Body Combination Air Valves"
 - Air release valves for working pressures below 20 psi shall be provided with soft seats
- B. Valve Body and Cover: Single body type. Cast iron ASTM A126, Grade B. Bosses for tapping pipe threads shall be cast integrally with each valve body and cover. Body secured by stainless steel 304 tie rods, bolts, and nuts.
- C. Internal Parts: Float shall be stainless steel per ASTM A240. Needle shall be fabricated from oil resistant synthetic rubber equal to Buna N. Plug shall be bronze per ASTM B124. Lever frame shall be Delrin/Cast iron per ASTM D2133/ASTM A126 GR. B or approved equivalent.
- D. Valve Seat: Fabricated from oil resistant synthetic rubber equal to Buna-N or EPDM.
- E. Valve and Orifice Sizes

- 1. Valve Size: as indicated on Drawings
- F. Inlet: Tapered iron pipe thread conforming to AWWA C800 for valve inlets 3-inches or less.
- G. Guard Valve and Connection Pipe: Guard valve to be used with air valve shall be full body stainless steel ball valve with female iron pipe threads and stainless steel handle, or approved equivalent. Connections between the air valve and the guard valve shall be made using brass nipples with tapered iron pipe threads conforming to AWWA C800. Brass nipple above the guard valve shall be provided with a 1/2-inch outlet with 1/2-inch ball valve to serve as a sample port.
- H. Minimum Operating Pressure Rating: 150 psi
- I. Four inch and larger cCombination air valves larger than three inches for clean water service shall consist of an air and vacuum valve with an externally mounted air release valve. The valves shall be Apco/Valve and Primer "Single Body Combination Air Valves" for 3 inch and "Custom Combination Air Valves" for 4 inch and larger, Multiplex "Crispin Dual Air Valves", ARI "No. D 060 HF", or Val Matic "Dual Body Combination Air Valves". Unless otherwise specified or indicated on the DRAWINGS, valves shall be provided with surge check discs on the valve inlet to restrict the exhaust air flow rate.
- J. A shutoff valve shall be provided in the piping leading to each air valve. Shutoff valves 2 inches and smaller shall be ball valves. Shutoff valves 3 inches and larger for clean water service shall be gate valves. Each 4-3-inch and larger combination air valve shall be provided with a shutoff valve between the air and vacuum valve and the air release valve
- K. Painting: Prepare all internal and external ferrous surfaces except finished or bearing surfaces for coating by sandblasting to a near white metal finish per SSPC-SP-10. Coat with a two-part thermosetting polyamide epoxy in two or more uniform coats to a minimum dry film thickness of 10 mils. Epoxy coating shall conform to AWWA C550 and shall be Ameron 400, Tnemec Series 140F Pota-Pox Plus, or Corvel ECA-1626.

2.7 BRASS AND BRONZE FITTINGS

- A. General: Brass goods shall be manufactured in accordance with AWWA C800. Bronze goods shall be manufactured using copper alloy UNS No. C83600 commercially known as 85-5-5 in accordance with ASTM B62.
- B. Threaded brass nipples and fittings: Brass nipples shall conform to ASTM B687 and shall be threaded with American Standard taper pipe threads (NPT). Brass fittings shall conform to ANSI B16.15 and shall be manufactured from ASTM B584, Federal Specification WW-P-460, Alloy C84400. Brass fittings shall be rated to 200 psi.
- C. Ball Valves: Ball valves 1/2-inch to 4-inches in diameter shall be bronze, standard port ball valve, quarter-turn open or close operation, rated 600 psi WOG, MSS SP-110. Two-piece, end entry, full port ASTM B584–C84400 bronze and NPT threaded end connections. Provide Type 316 stainless steel handle.

2.8 PIPE RESTRAINT

A. High Tensile Strength Rods

 High tensile strength rods shall conform to ASTM A 193, Grade B7 (Fy = 105,000 psi).

B. Stud Bolts and Nuts

- Stud Bolts: Stud bolts shall conform to ASTM A193, Grade B7. Stud bolts 5/8-inch through 7/8-inch in diameter shall have UNC threads. Stud bolts one inch and larger in diameter shall have eight UN threads per inch. Maximum allowable bolt stress is 40,000 psi in accordance with AWWA M11, Chapter 13.
- 2. Nuts: Nuts shall conform to ASTM A 194, Grade 2H.

C. Mechanical Joint and Push-On Joint Restraint Devices

- All mechanical restraint devices shall be manufactured of high-strength ductile-iron conforming to ASTM A536 Grade 65-45-12. Wedges shall be contoured to provide exact fit on the pipe, and shall be manufactured of ductile iron, heat treated to a hardness of 370 BHN minimum. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to AWWA C111 and C153 and also AWWA C151 ductile iron pipe and AWWA C900 PVC pipe.
- 2. The restraint mechanism shall consist of numerous individually activated gripping surfaces to maximize restraint capability. The gripping surfaces shall be wedges designed to spread the bearing surface around the full circumference of the pipe. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuating of restraining devices. When the nut is sheared off, a standard hex nut shall remain. Alternatively, the restraint device for PVC pipe may consist of split restraint rings which incorporate a series of machined serrations (not "as-cast") on the inside diameter to provide positive restraint, exact fit, and 360-degree contact and support of the pipe wall.
- 3. Paragraph 33 05 31.16-2.2.D. lists the allowable, or approved equal, push-on joint restraint devices for C900 PVC pipe. Push-on joint restraint devices for C900 PVC pipe which utilize a bell ring which bears directly on the bell of the PVC pipe will not be allowed. Both restraint rings, behind the bell and on the spigot, shall utilize gripping wedges or machined serrations to restrain the push-on joint.
- 4. The mechanical restraint device shall have a working pressure equivalent to the full rated pressure of the pipe on which they are installed with a minimum safety factor of 2:1.
- 5. The mechanical joint (fittings) restraint devices shall be of the type listed below or equal, approved by the Owner or Owner's representative prior to bidding:

- a. For Ductile Iron Pipe: EBAA Iron, Inc. Megalug Series 1100 (4"-36") or Tyler/Union Tuf Grip TLD Series 1000.
- b. For C900 PVC Pipe: EBAA Iron, Inc. Megalug Series 2000PV, Uni-Flange 1300 Fitting Restrainer, or Uni-Flange 1500 Series.
- 6. The push-on joint restraint devices shall be of the type listed below:
 - For Ductile Iron Pipe: EBAA Iron, Inc. Series 1700 Bell Restrainer or Sigma LOK Series PWP
 - For C900 PVC Pipe: EBAA Iron, Inc. Series 1500 & 1600 Bell Strainer Series 2000, 2200, 2800 or Uni-Flange Series 1350/1360/1390 Bell Restrainer.

2.9 PIPE COUPLINGS

- A. General: Specifically made for the type of pipe with which it is to be used and have the same or greater pressure rating as that of the piping where it is to be installed.
- B. Construction
 - 1. In accordance with AWWA C219, unless otherwise specified.
 - a. Material: Steel
 - b. Middle Ring
 - 1) Thickness: 1/4-inch, minimum.
 - 2) Length:
 - a) Either 5 or 7 inches long for sizes up to and including 30 inches
 - b) 10 inches long for sizes greater than 30 inches for standard steel couplings.
 - c) 16 inches long for long-sleeve couplings.
 - c. Followers
 - Single-piece contoured mill section welded.
 - 2) Cold-expanded as required for the middle rings.
 - Of sufficient strength to accommodate the number of bolts necessary to obtain adequate gasket pressures without excessive rolling such design as to provide positive confinement of the gasket.
 - 4) Bolts and Nuts: Bolts and nuts shall be carbon steel, ASTM A307 Grade B. Bolts shall have regular unfinished square or hexagonal heads, and nuts shall have regular square or hexagonal dimensions, all in accordance with ANSI/ASME B18.2.1 for wrench head bolts and nuts and wrench openings. All bolts and nuts shall be threaded in accordance with ANSI/ASME B1.1 for screw threads, coarse-threaded series, class 2A and 2B fit. Minimum bolt lengths shall be the sum of the

mating flange maximum thicknesses, the gasket, and the depth of the nut plus 1/8-inch.

- 5) Coating: Factory epoxy-coated.
- 6) Gaskets
 - a) Rubber-compound material that will not deteriorate from age or exposure to air under normal storage or use conditions.
 - (1) Meet the following specifications:
 - (2) Color Jet Black.
 - (3) Surface Non-blooming.
 - (4) Durometer Hardness 74 ± 5.
 - (5) Tensile Strength 1000 psi minimum.
 - (6) Elongation 175 percent minimum.

C. Pipe Preparation

- 1. Plain ends, smooth and round for a distance of 12 inches from the ends of the pipe.
- 2. Outside diameter not more than 1/64 inch smaller than the nominal outside diameter of the pipe.
- 3. Outside diameter of new pipe to be joined to existing pipe shall match the outside diameter of the existing pipe at the coupling.
- D. Immune to attack by impurities normally found in water.
- E. Meet the requirements of ASTM D2000, AA709Z, meeting Suffix B13 Grade 3, except as noted above.
- F. Compatible with the piping services and fluid utilized.
- G. Restrained Joints: Provide mechanical joint thrust restraint as specified in Section 33 05 01.02 Ductile Iron Pipe and Fittings, unless otherwise specified.
- H. Manufacturers: EBAA Iron Series 3800 Restrainer, or Romac Alpha, Macro XL.
- I. Coupling bolts shall be high-strength, low-alloy steel with heavy, semi-finished hexagonal nuts conforming to AWWA CIII (ANSI A21.11).

2.10 FLOW CONTROL VALVES

- A. Manufacturers: Cla-Val Model 131EG-22BCDEPSY KC D.S. SSB or approved equal.
- B. Description: Valve will be an electronically controlled valve designed to accept a remote 4-20mA flow feedback signal from an upstream meter and a 4-20mA flow setpoint from the PLC/SCADA system. The valve will be positioned using an electronic controller. This controller will be manufactured and supplied by the valve manufacturer. The

controller will accept a 4-20ma flow signal from the meter installed in the upstream piping. It compares this flow signal with a set point input and positions the valve accordingly. This flow set point signal can be a remote 4-20ma input or set manually on the face of the controller. The Owner will be able to monitor this flow remotely. All external wiring, monitoring and transmission of signals will be provided by a separate contract. In the event of a power outage, the valve will close.

- C. Valve body: The main valve will be 3"-12" full ported globe body valve. It will be ductile iron and have stainless steel trim. All internal and external ferrous metal surfaces will have a fusion bonded epoxy coating. The main valve will have 150ansi flanged ends rated to 250 psi. It will have a single operating chamber that is separated from line pressure by the diaphragm. The stem seat and cover bearing will all be one piece solid stainless steel. There shall be no snap ring type seats. The cover will have a locating lip for ease of maintenance and alignment. The main valve stem will be fully guided throughout its' entire stroke by a bearing in the seat and a bearing in the main valve cover. The main valve will be of the packless design. There shall be no o-rings on the diaphragm assembly. The main valve body, cover and the diaphragm washer and disc retainer shall have concentric circles to grip the diaphragm.
- D. Pilot system: The pilot system will be controlled by an electronic controller. This controller will require 24VDC and have an internal loop power supply. It will monitor flow from the meter and will compare the flow signal with the flow set point and pulse solenoids to position the valves. The pilot system will consist of 2 solenoids, one that pulses to exhaust pressure off the cover of the main valve and one that pulses to load the cover. When flow is applied to the cover the valve goes towards the closed position. Conversely, when flow is exhausted from the cover the valve goes towards the open position. There shall also be hydraulic opening and closing speed controls for smooth operation. The controller will be a 24VDC controller. It will be manufactured and supplied by the valve manufacturer. The controller is proportional and will have cycle times and dead bands to allow for smooth positioning of the valve. The pilot control system solenoids will be two way and have manual bypass valves for manual operation of positioning the valve. In the event of an emergency and a severe drop in upstream pressure, this valve will check closed drip tight preventing a reversal of flow. The solenoids will be supplied as NO/NC. In the event of a power loss the valve will close slowly to drip tight.
- E. Cavitation analysis: The manufacturer shall provide a computerized cavitation analysis to ensure the valve will operate cavitation damage free throughout the entire flow range for each site. This analysis will illustrate valve position, seat velocity and DP.
- F. Warranty: The valve shall have a 3 year warranty from date of shipment. The electrical components will have a standard 1 year warranty.

PART 3 - EXECUTION

3.1 EQUIPMENT AND MATERIALS

A. Material Delivery, Storage, and Protection:

- All piping materials, fittings, valves, and accessories shall be delivered in a 1. clean and undamaged condition and stored off the ground. Replace all defective or damaged materials with new materials.
- 2. Coat all gears, bearing surfaces, and other surfaces not to be painted with a heavy coat of grease or other suitable rust resistant coating unless otherwise specified herein. Maintain this coating required to prevent corrosion during any period of storage and installation.

B. Field Painting and Coating

- 1. Field painting includes coating as specified herein, and touch-up work to repair any damage to shop painting or coating. It also includes supplying the proper types of lubricants where required.
- 2. In accordance with Section 09 90 04 for additional requirements.

C. Handling and Installations – General

- Take care in loading, transporting, and unloading to prevent damage to the 1. valves and appurtenances, or coatings. Equipment shall not be dropped. All valves and appurtenances shall be examined before installation, and no piece shall be installed which is found to be defective. Any damage to the coatings shall be repaired as directed by the Owner or Owner's representative.
- D. If any defective equipment is discovered after it has been installed, it shall be removed and replaced with non-defective equipment. Ends of equipment shall be closed up at the factory and maintained that way until installed.

VALVES 3.2

- A. Install valves in conformance with manufacturer's recommendations and instructions. Set valves plumb. Install with valve boxes.
- B. Factory test all valves prior to shipment at a minimum of 1.5 times the rated working pressure.
- C. Field test all valves to the method and test pressure of adjoining pipe prior to installation.
- D. Test and demonstrate that valves open and close smoothly with operating pressure on one side and atmospheric pressure on the other, in both directions for two-way valve and applications.
- E. Inspect air and vacuum valves as pipe is being filled to verify venting and seating is fully functional.
- F. Count and record number of turns to open and close valve; account for any discrepancies with manufacturer's data.

3.3 VALVE BOXES

- A. Install valve boxes vertically and centered over the operating nut. Adjust top elevation to the finished surface of roadway or other final surface.
- B. Adequately support boxes during backfilling to maintain vertical alignment.
- C. Clean valve box of debris and obstructions before installing debris cap. Install debris cap in accordance with the manufacturer's instructions. Ensure handle is in full counter-clockwise (retracted) position when placing cap into riser. Rotate handle 180 degrees clockwise to lock into position.

3.4 OPERATING NUT EXTENSION STEM GUIDE

A. Mount as shown in the Drawings. Install guides at 6-foot vertical separation.

3.5 COMBINATION AIR VACUUM AND AIR RELEASE VALVES

A. Install combination air and vacuum valves in a vertical arrangement in conformance with the manufacturer's recommendations and instructions, and as shown on the drawings.

3.6 PIPE COUPLINGS

A. For sleeve-type flexible couplings, thoroughly clean the pipe ends for a distance of at least 10 inches. Clean soapy water may be used as a gasket lubricant. The follower and gasket, in that order, shall be slipped over each pipe end a distance of 8 inches from the end and the middle ring shall be placed on the already installed pipe end until it is properly centered over the pipe joint. The other end then shall be inserted into the middle ring and brought to its installed alignment or grade so that it is properly positioned in relation to the pipe already installed. The gaskets and followers shall then be pressed evenly and firmly into the middle ring flares. After bolts have been inserted and finger tightened, nuts shall be tightened progressively and uniformly around the joint with a torque wrench in sequence as specified by the manufacturer.

3.7 ELECTRONIC MARKER SYSTEM

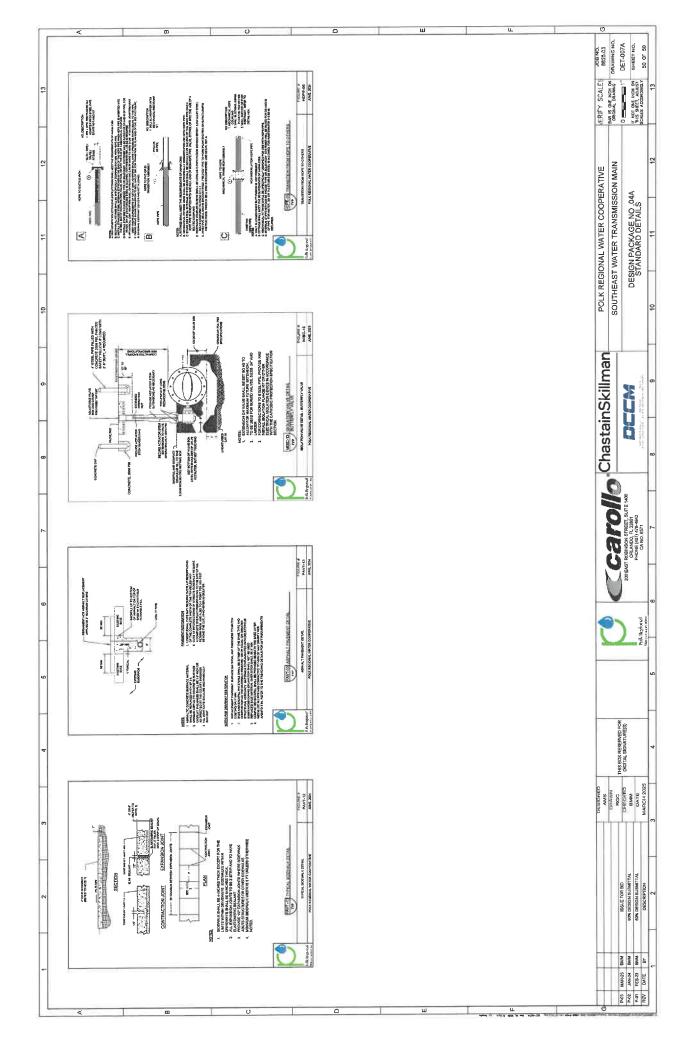
- A. Install in accordance with manufacturer's recommendations at locations where indicated in the Drawings. Install to maximum 3 feet of cover.
- B. Prior to burying, remove identification number tag, record stationing of installation location, and submit to Owner or Owner's representative.
- C. Prior to burying, record information directly on marker using a 3M® Dynatec® iD enabled locator and at the direction of the Owner or Owner's representative.

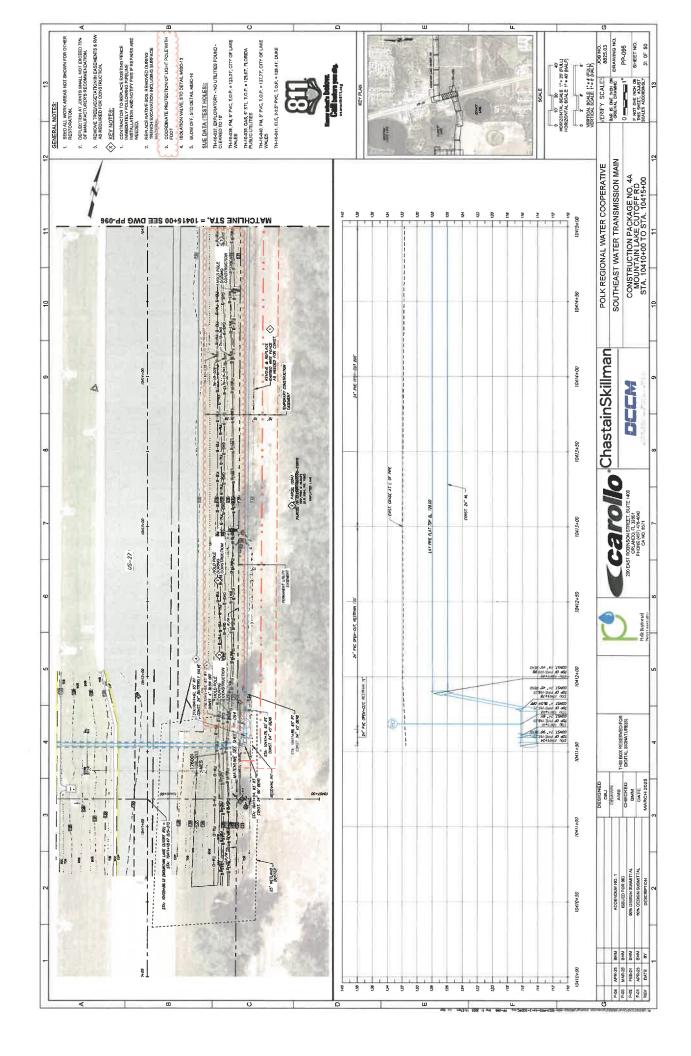
3.8 FINAL CLEAN-UP AND FIELD TESTING

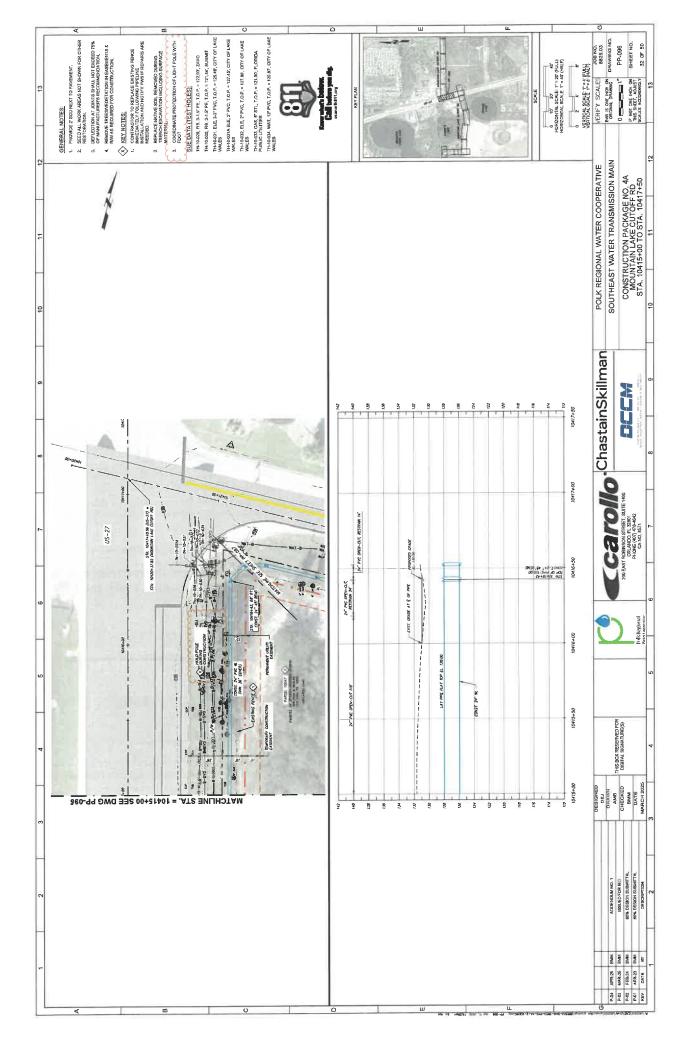
A. Clean and hydrostatic field-test valves and appurtenances as part of the work specified for the pipeline as a complete system.

B. Perform hydrostatic field testing with air valves functional and open. Keep blow-off isolation valves open during hydrostatic testing. Test blow-off branch piping to the branch end flanges.

- END OF SECTION -









SE LFA Wellfield Project – SETM Package 4A ADDENDUM #2 04/22/2025

Clarification

Pigging will <u>not</u> be required on this project. Flushing will be required per specification 33 13 00 in the project specifications.

Additional Bidder Information:

- The bid due date is 5/1/2025 @ 2:00 PM.

The undersigned hereby certifies that Bidder has carefully reviewed the information provided herein and has full knowledge and understanding of the intent to submit a Bid Proposal and can enter a contract with the PRWC either directly or indirectly to complete all work as bid.

| SIGNATURE | PRINT NAME/TITLE | DATE |
|-----------|------------------|------|
| | | |



SE LFA Wellfield Project – SETM Package 4A ADDENDUM #3 04/25/2025

Clarification

PAY ITEM NO. 36 - ALTERNATE: Remobilization at the direction of CMAR

- 1. Description: The work covered by this item consists of complete demobilization and remobilization at the direction of the CMAR if any remaining pipe installation or associated activities are unavailable due to property acquisition. This does not consider site moves to account for constraints already provided in the documents that should be included in the mobilization pay item.
- 2. Measurement: The quantity of Remobilization at the direction of CMAR to be paid for under this Item shall be measured as one lump sum quantity.
- 3. Payment: Payment will be made at the lump sum price shown in the Bid Form for Remobilization at the direction of CMAR only when directed.

Additional Bidder Information:

The bid due date is 5/1/2025 @ 2:00 PM.

| The undersigned hereby certifies that Bidder has carefully reviewed the information provided herein and has full knowledge and understanding of the intent to submit a Bid Proposal and can enter a contract with the PRWC eithe Hirectly or indirectly to complete all work as bid. |
|--|
| |

SIGNATURE PRINT NAME/TITLE DATE

Section 7: Bid Package 2B & 4A – CMAR CPM Schedule

Please see the following pages for the CPM Schedule for Bid Packages 2B and 4A. This is preliminary and based on the CMAR's overall project schedule. Project schedules from successful bidders will be requested and submitted following final subcontract negotiations.

| | | | | | PRWC | PRWC GMP #4 | | | | Project Run 12 | Project ID: SETM 5/08/25 Run 12-May-25 at 10:49 | 10:49 |
|----------------|--|------|-------|-------------|------------|------------------------------------|--|--|--|---------------------------------------|--|-------|
| Activity ID | Activity Name | Orig | Rem | Start | Finish | Activity % Total Complete Float | 2025 J Juli A S O N D J F N | 2026 M A M J Jul A S O N D | 2027 J F M A M J Jul A S | 7 Q N | 2028 F M A | 7 |
| SETM 5/08/25 | | | | | | | | | | | | |
| Milestones | | | | | | | | | | | | |
| GC.90.2040 | Construction Package 4A Substantial | 0 | 0 | | 02-Apr-27 | | | | ◆ Construction Package ◆ | Package 4A.Substantial | | |
| GC.90.2090 | Construction Package 2B Substantial | 0 | 0 | | 03-Aug-27 | 0% 137 | | | • Construction | uction Package | Package 2B Substantial | tial |
| Procurement | | | | | | | | | | | | |
| GMP Approx | GMP Approval and Administrative NTP | | | | | | | | | | | |
| A1070 | GMP #4 Approval and Administrative NTP (Packages 4A, 2B, and Valves) | 32 | 31 02 | 02-May-25 A | 20-Jun-25 | 11.43% 119 | GMP #4 Approval and Administral | istrative NTP (Packages 4A, 2B, and Valves | (Signature) | | | |
| Constructio | onstruction Package NTP | | | | | | | | | | | |
| N.1020 | Construction Package 28 NTP | 0 | | 11-Aug-25 | | | Construction Package 2B NTP | | | | | |
| N.1040 | Construction Package 4A NTP | 0 | 0 | 23-Sep-25 | | 0% 212 | ◆ Construction Package 4A NTP | 64ANTP | | | | |
| Easement | Easement Acquisition and Permitting | | r | | | - 1 | | | | | · • • • • • • • • • • • • • • • • • • • | |
| E.1020 | Construction Package 28 Acquisition and Permitting | 400 | - | | 08-Aug-25 | _ 1 | Construction Package 2B Acquisition and Permitting | Acquisition and Permitting | | | | |
| E,1040 | Construction Package 4A Acquisition and Permitting | 400 | 95 03 | 03-May-24 A | 22-Sep-25 | 76.25% 212 | Construction Packag | Construction Package 4A Acquisition and Permitting | | | | |
| Serm Pipelines | ines | | | | | | | | | | | |
| S.1160 | Submit Ductile Iron Pipe | 20 | 20 2 | 23-Jun-25 | 21-Jul-25 | 0% 211 | Submit Ductile Iron:Pipe | | | | | |
| 8.1170 | Submit Buried Valves | 50 | + | | 21-Jul-25 | 4. | Submit Buried Valves | | | | | |
| 5,1180 | Submit Air Release Assembly | 20 | + | 23-Jun-25 | 21-Jul-25 | 0% 497 | Submit Air Release Assembly | | | | | |
| \$.1190 | Submit Blow Off Assembly | 50 | + | 23-Jun-25 | 21-Jul-25 | 0% 497 | Submit Blow Off Assembly | | | | | |
| \$.1200 | Submit Filling & Testing Plan | 9 | H | 23-Jun-25 | 16-Sep-25 | | Submit Filing & Testing Plan | Plan Pan | | | | |
| A 416n | Annous Dudie Iron Dine | 5 | ÷ | ł | 04-4111-25 | | Approve Ductile fron Pipe | | | | | |
| 27 27 | Approve Cucume 1001 Tipe | 2 5 | 1 | + | 25 July 20 | - 1 | Approve Buried Velice | | | | | |
| A. 130 | Approve burley valves | 2 5 | + | + | or-nug-25 | | diameter of the state of the st | | | | | |
| 4 190 | Approve Au Keinesse Asserting | 2 5 | - | | 04-Aug-25 | | Approve Allow Off Assembly | A | | | | |
| 25.0 | Oppose Discontinuing | 2 8 | + | | 11-Dec-25 | | odid effet | Train Dine Manufacturing | | | | |
| 200 | Initial Yelloo Manufacturing | 180 | + | - | 22-Apre-26 | | | Initial Valva Manufacturing | | | | |
| 0.1120 | Air Delease Manufacturing | 5 5 | - | - | 14 lan-26 | | ं व | | | • • • • • • • • • • • • • • • • • • • | · · · · · · · · · · · · · · · · · · · | |
| D 1140 | Blow Off Manufacturing | 112 | - | -1- | 14-Jan-26 | | Blow | Blow Off Manufacturing | | | | |
| C.2000 | Clearing | 90 | + | 11-Aug-25 | 22-Sep-25 | | Clearing | | | | | |
| A.1200 | Approve Filing & Testing Plan | 20 | 20 1 | 17-Sep-25 | 14-Oct-25 | 0% 559 | Approve Filing & Testing Plan | Testing Plan | | | | |
| C,2010 | Fence Relocation | 50 | 20 2 | 23-Sep-25 | 20-Oct-25 | 0% 137 | Fence Reldcation | | | | | |
| C.2020 | Erosion Control Installation | 50 | 20 2 | 21-Oct-25 | 17-Nov-25 | 0% 137 | Erosion Control Installation | rol Installation | | | | |
| C.2030 | Crew Mobilization | \$ | - | 18-Nov-25 | 03-Dec-25 | 0% 137 | Crew, Mobilization | Ilization | | | | |
| C.2040 | Unload and Stage Material | 09 | 9 | 04-Dec-25 | 03-Mar-26 | 0% 137 | | Unload and Stage Material | | | | |
| C.2050 | Utility Retocation | 50 | 20 | 04-Mar-26 | 31-Mar-26 | 0% 137 | . 点。 | Utility Relocation | | | | |
| C.1140 | 10" Pipe Installation - Masterpiece to ERUSA Delivery Point | 75 | 75 | 01-Apr-26 | 16-Jul-26 | 0% 137 | | 10" Pipe Installation | 10" Pipe Installation - Masterplece to ERUSA Delivery Poin | oint: | | |
| C.4060 | 30" Pipe Installation - N/W Intersection to Tower Blvd | 15 | 15 | 17-Jul-26 | 06-Aug-26 | 0% 137 | | 30" Pipe Instella | 30" Pipe Installation - N/W Intersection to Tower BMd | | • • • • • • • • • • • • • • • • • • • | |
| C.4070 | 30" Pipe Installation - Tower Blvd | 8 | 8 | 07-Aug-26 | 18-Aug-26 | 0% 137 | | 30" Pipe Installation - Tower Blvd | lation - Tower Blvd | | | |
| Actual Work | | _ | | | ď | Page 1 of 2 | | Data Date: 08-May-25 TACK flace: Activities Not Startad or In Drowess CAMD #4 MRS | for in Drontess CMD #4 MRS | | | |
| Remaining Work | Vork • • Milestone | _ | | | | | | IAON likelo, netvines iver cientos | d of itt Pluginess, Givin and Wiles. | | | |

| 44 | 30" Pipe Installation - Tower Bhd to Old Scenic Hwy | + | 10 01:10 | | | | |
|-------------------|---|---------|--------------|--------------|-------------|--|---|
| | | 50 50 | | .6 28-Od-26 | 0% 137 | 200 | Pipe Installation - Towar Blvd to Old Scenic Hwy |
| | | + | + | + | | | |
| | 30" Pipe Installation - Old Scenic Hwy | -1 | 30 29-Oct-26 | 6 11-Dec-26 | 0% 137 | 30 Pipe Installation - Old Scenic Hwy | n - Old Scenic Hwy |
| 1 | 36" Pipe Installation - NAW Intersect to Old Forty Rd | 85 85 | 5 14-Dec-26 | :6 16-Apr-27 | 0% 137 | 98 | 36" Pipe Installation - N/W Intersect to Old Forty Rd |
| 1 | 30" Pipe Installation - Old Forty Rd to Masterplece | 45 45 | 5 19-Apr-27 | .7 21-Jun-27 | 0% 137 | | 30" Pipe Installation - Old Forty Rd to Masterpier |
| - | Cleaning & Testing | 30 30 | 0 22-Jun-27 | 7 03-Aug-27 | 0% 137 | | Cleaning & Testing |
| | Final Surface Restoration | 20 20 | 0 04-Aug-27 | 7 31-Aug-27 | 0% 147 | | Final Surface Restoration |
| 7 - | PST | 30 30 | 0 01-Sep-27 | 7 13-0d-27 | 0% 147 | | Punchist |
| ľ | | | | | | | |
| S.1260 Submit | Submit Ductile Iron Pipe | 20 20 | 0 23-Jun-25 | 5 21-Jul-25 | 0% 316 | Submit Ductie Iron Pipe | |
| S.1270 Submit | Submit Buried Valves | 20 2 | 20 23-Jun-25 | 5 21-Jul-25 | 0% 226 | Supmit Buried Valves | |
| S,1280 Submit | Submit Air Release Assembly | 20 2 | 20 23-Jun-25 | 5 21-Jul-25 | 0% 487 | Submit:Air Release Assembly | |
| S.1290 Submit | Submit Blow Off Assembly | 20 20 | 0 23-Jun-25 | 5 21-Jul-25 | 0% 487 | Submit Blow Off Assembly | |
| S.1300 Submit | Submit Filling & Testing Plan | 09 09 | 0 23-Jun-25 | 5 16-Sep-25 | 0% 559 | Submit Filling & Teging Plan | |
| A.1250 Approv | Approve Ductile Iron Pipe | 10 10 | 0 22-Jul-25 | 5 04-Aug-25 | 0% 316 | Aprove Dudile Iron Pipe | |
| A.1260 Approv | Approve Buried Valves | 10 10 | 0 22-Jul-25 | 5 04-Aug-25 | 0% 226 | Approve Buried Valves | |
| A.1270 Approv | Approve Air Release Assembly | 10 1 | 10 22-Jul-25 | 5 04-Aug-25 | 0% 487 | 🛄 Approve Air Release Assembly | |
| A.1280 Approv | Approve Blow Off Assembly | 10 10 | 0 22-Jul-25 | 5 04-Aug-25 | 0% 487 | Approve Blow Off Assembly | |
| D.1190 Initial P | Initial Pipe Manufacturing | 06 06 | 0 05-Aug-25 | .5 11-Dec-25 | 0% 316 | Inttal Pipe Manufacturing | |
| D.1200 Initial Va | Initial Valve Manufacturing | 180 180 | 30 05-Aug-25 | .5 22-Apr-26 | 0% 226 | Initial Valve: Manufacturing | |
| D.1210 Air Rek | Air Release Manufacturing | 112 112 | 2 05-Aug-25 | .5 14-Jan-26 | 0% 487 | Air Release Manufacturing | |
| D,1220 Blow O | Blow Off Manufacturing | 112 112 | 2 05-Aug-25 | .5 14~Jan-26 | 0% 487 | Blow Off Manufacturing | |
| S.1380 Approv | Approve Filling and Testing Plan | 10 1 | 10 17-Sep-25 | S 30-Sep-25 | 0% 228 | Approve Filling and Testing Plan | |
| C,4000 Clearing | | 30 | 30 23-Sep-25 | .5 03-Nov-25 | 0% 212 | Clearing | |
| C.4010 Fence | Fence Relocation | 30 30 | 0 04-Nov-25 | .5 17-Dec-25 | 0% 212 | Ferroa Relocation | |
| C.4020 Erosion | Erosion Centrol Installation | 30 30 | 0 18-Deo-25 | 5 02-Feb-26 | 0% 212 | Erosion Control Installation | |
| C.4030 Craw N | Crew Mobilization | 10 10 | 0 03-Feb-26 | 6 17-Feb-26 | 0% 212 | Crew Mobilization | |
| C.4040 Unload | Unload and Stage Materials | 9 09 | 0 18-Feb-26 | 6 12-May-26 | 0% 212 | Unload and Stage Materials | |
| C.4050 Utility R | Utility Relocation | 20 20 | 0 18-Feb-26 | 6 17-Mar-26 | 0% 252 | Cility Relocation | |
| C.4100 24" Pip | 24* Pipe Installation - Scenic Hwy Bore | 15 15 | 5 13-May-26 | .6 03~Jun-26 | 0% 212 | 24" Pipe Installation -: Scenic Hwy Bore | |
| C.4240 24" Pip | 24" Pipe Installation - Scenic Hwy Bore to US-27 | 15 15 | 5 04-Jun-26 | 8 24-Jun-26 | 0% 212 | 24* Pipe Installation - Scenic Hwy Bore to U | . US-27 |
| C,4190 24" Pip | 24" Pipe Installation - US-27 Bore | 20 2 | 20 25-Jun-28 | 8 23-Jul-28 | 0% 212 | 24" Pipe Installation - U.S.27 Bipe | |
| C,4180 24" Pip | 24" Pipe Installation - US-27 to 10354+58 HDD | 38 | 8 24-Jul-26 | 5 16-Sep-26 | 0% 212 | | 310354+58 HDD |
| C.4140 24" Pip | 24" Pipe Installation - 10354+58 HDD | 15 15 | 5 17-Sep-26 | 6 07-Oct-26 | 0% 212 | 24" Ptpe Installation - 10354+58 HDD | 1+58 HDD |
| C.4150 24" Pip | 24" Pipe Installation - 10333+30 HDD | 15 15 | 5 08-Oct-26 | 8 28-0d-26 | 0% 212 | 24" Pipe Installation - 10333+30 HDD | 333+30 HDD |
| C.4160 24" Pip | 24" Pipe Installation - 10354+58 HDD to 10333+30 HDD | 15 15 | 5 29-Oct-26 | 8 18-Nov-26 | 0% 372 | 24" Pipe Installeton - 1 | 24" Pipe Installation - 10354+58 HDD to 10333+30 HDD |
| C.4200 24" Pip | 24" Pipe Installation - W Mtn Lk Cutoff to Conner Rd | 40 40 | 0 29-Oct-26 | 6 29-Dec-26 | 0% 212 | 24" Pipe Installat | 24" Pipe Installation - W With Lk Cutoff to Conner Rd |
| C.4210 24" Plp | 24" Pipe Installation - Conner Rd to end of 4A | 35 35 | 5 30-Dec-26 | 6 19-Feb-27 | 0% 212 | 247 Pipe II | 24" Pipe Installation - Conner Rd to end of 4A |
| C.4370 Cleanin | Cleaning & Testing | 30 30 | 0 22-Feb-27 | 7 02-Apr-27 | 0% 212 | | Cleaning & Testing |
| C.4380 Final St | Final Surface Restoration | 40 40 | 0 05-Apr-27 | 7 28-May-27 | 0% 212 | | Efinal Surface Restoration |
| C.4390 Punchlist | ক | 30 30 | 0 01-Jun-27 | 7 13-Jul-27 | 0% 212 | | Punchilist |
| | | | | | | | |
| Actual Work | Critical Remaining Work | | | | Page 2 of 2 | Data Date: 08-May-25 | 0000 |