

Waco Metropolitan Area Regional Sewerage System (WMARSS)

Central WWTP Capacity Expansion and Improvements Pre-Bid Meeting

JANUARY 28, 2010



R·W·BECK

An SAIC Company



Agenda

- Introduce WMARSS, HDR, Inc., and Program Management Staff
- Program History
- Administrative Overview
- Technical Overview
- Other General Information
- Questions and Answers



Introductions

- WMARSS and City of Waco Staff
- HDR, Inc. Staff
- Program Management Staff



Program History

- WMARSS Member Cities
 - Waco, Lacy Lakeview, Bellmead, Hewitt, Woodway, Lorena, Robinson
- Central WWTP is WMARSS' only operating WWTP
- WMARSS Average Permitted Flow Limit is 37.8 MGD



Program History

- After preliminary engineering, projects selected for implementation:
 - Expand Central Plant by 7.2 MGD (flow equalization basin conversion, activated sludge modifications, headworks improvements); *Design Engineer: HDR, Inc.*
 - Not part of this project:
 - Construct Flat Creek Interceptor from Flat Creek Lift Station at IH-35 to Central Plant; *Design Engineer: Walker Partners*
 - Construct 1.5 MGD Satellite WWTP on Bull Hide Creek with related Interceptor; *Design Engineer: LAN, Inc.*



Administrative Overview

- Schedule
 - Today at 3:00 pm - Site Visit to Central WWTP
 - Pre-qualification materials for Biosolids Removal Contractor due by February 1st
 - Monday, February 8th - last day to submit written questions
 - Thursday, February 11th - Bids due and opened at 2:00 pm - bids opened at Water Utilities Department (Riverside Plant) - 200 Colcord, Building 100, Waco, Texas



Administrative Overview

- Completed items to be included with Sealed Bid*:
 - Exhibit A: Bidder's Questionnaire
 - Bid for Lump Sum Contracts
 - Bid Form
 - Bid Bond
 - Drug-Free Workplace Act Certification
 - Requirements for Corporations
 - Agreement to Execute Contract
 - Minority/Women Owned Business Certification
 - Conflict of Interest Questionnaire



Administrative Overview

- All questions shall be submitted in writing to Tara Hickey at thickey@rwbeck.com or by fax at 512.450.0515
- Addendum will be issued by email
- Addendum will also be available at www.wmarss.com under “Contracting Opportunities”



Technical Overview

- Improvements consist of:
 - Activated Sludge Modifications
 - Allows for increase capacity by 7.2 MGD to average daily flow of 45 MGD through restoration of Aeration Basin No. 5 and return activated sludge (RAS) modifications
 - Flow Equalization Basin
 - Convert existing Sludge Lagoon No. 3 to handle peak storm events
 - Requires biosolids removal prior to construction
 - Headworks Improvements
 - Allows screening of peak flows before diverting to flow equalization basin



Technical Overview

- Activated Sludge Modifications
 - Replace diffusers in Aeration Basin No. 5
 - Install motor-operated slide gates to automate the change to step feed mode
 - Install flow meters and flow control valves to aid in flow balancing between aeration basins and flow pacing of RAS



Technical Overview

- Flow Equalization Basin
 - Convert existing Sludge Lagoon No. 3
 - Requires removal of approximately 180,000 C.Y. of sludge by pumping from Lagoon No. 3 to Lagoon No. 1 and through hauling and disposal by land application
 - See AA-2 and AA-3
 - 60-inch peak-flow diversion line
 - 18-inch peak-flow return line
 - CIP junction boxes
 - Valve vaults (2) - plug valves



Technical Overview

- Headworks Improvements
 - Equipment
 - Mechanical Bar Screen No. 3, Conveyor, Washer Compactor, Motor-operated slide gates, Motor-operated weir and gates
 - 36-inch temporary bypass piping
 - Concrete repair and coating for headworks splitter box
 - Demolition
 - 16-inch return pump station discharge line, grating, handrails, sluice gates, aeration basin piping, stairs, hydraulic drive system, screening discharge chute



Technical Overview

- Additive Alternates to Base Bid:
 - AA-1: MCC-2 (supports Influent P.S.) and MCC-5 (supports Digester P.S.)
 - AA-2: Biosolids Removal for Lagoons No. 1 and No. 3 - reference Section 02594
 - AA-3: Hauling and Disposal of Biosolids for Lagoons No. 1 and No. 3 - reference Section 02595
 - AA-4: Replacement of 200 LF of 24-inch RCCP for Primary Clarifier Influent Piping



Other General Information

- Contractor must prepare and implement Stormwater Pollution Prevention Plan (SWPPP)
- Contractor must provide temporary power generation for critical loads being replaced and at sludge lagoons, if required
- Engineer's Opinion of Probable Construction Cost: \$8.241M
 - Base Bid ~ \$6.755M
 - Bid Alternates ~ \$1.486M
- Liquidated Damages: \$1,000/day
- 500 Calendar Days to Final Completion
- Geotechnical Report included in Bid Documents



Bid Opening

- Thursday, February 11th - Bids due and opened at 2:00 pm - bids opened at Water Utilities Department (Riverside Plant) - 200 Colcord, Building 100, Waco, Texas

Questions and Answers

- Questions open to all

