

# WRF Lift Station & Offsite Pipelines



**Pre-Proposal Meeting  
February 9, 2017**

# Project Background



- **City is planning for a new Water Reclamation Facility**
- **Draft Water Reclamation Facility Master Plan (November 2016)**
  - **Available at [Morrobaywrf.com](http://Morrobaywrf.com)**
- **A lift station and force main is required to transport wastewater from the end of the collection system to new WRF**

# WRF Project Community Goals



- Produce Tertiary Disinfected Wastewater
- Produce Reclaimed Wastewater Cost-Effectively
- Allow for Onsite Composting
- Design for Energy Recovery
- Design to Treat for Contaminants of Emerging Concern
- Allow for other Municipal Uses
- Ensure Compatibility with Neighboring Land Uses
- Operational within 5 years
  - *Project on schedule for beginning operation in 2021*

# Project Schedule – 2016-17



Key Milestone	Scheduled Date	Actual Date
Draft Facility Master Plan	December 2016	November 2016
Draft Master Water Reclamation Plan	March 2017	On Schedule
Draft EIR Released	August 2017	On Schedule
Final EIR Certified	November 2017	On Schedule

# Project Schedule – 2018-21



Key Milestone	Scheduled Date	Actual Date
Award Contract for D-B Phase I WRF Improvements (Onsite Facilities)	May 2018	On Schedule
Begin Phase I WRF Project Design (Onsite Facilities)	August 2018	On Schedule
Project Construction Begins	June 2019	On Schedule
Completion of Phase I WRF Improvements	May 2021	On Schedule

# RFP Basics



- RFP available at [www.morrobaywrf.com](http://www.morrobaywrf.com)
- Professional Engineering Design Services for
  - Lift station, force main, & brine/wet weather disposal pipeline
- Questions:
  - Submit all questions to Mike Nunley, WRF Program Manager  
[mnunley@mknassociates.us](mailto:mnunley@mknassociates.us)
  - Deadline for questions: 5 PM February 24, 2017
  - Answers will be posted to project website by March 1, 2017
- Due to City Public Works Dept. by 2 PM March 8, 2017

# WRF Project Site Map



# Major Design Tasks

- **Coordination with City for selection of lift station location**
- **Hydraulic analysis**
- **Pump selection**
- **Wetwell design**
- **Control building design**
- **Odor control design**
- **Design of backup power supply**
- **Pipeline alignment verification**
- **Force main pipeline design**
- **Brine discharge pipeline design**



# Alternative Lift Station Sites



- 8 sites analyzed in Draft FMP
- Locations near existing WWTP most efficient and least expensive
- Floodplain issues to be mitigated
- CCC supportive of location

# Main Scope of Work

- Review and verify the preliminary design criteria from Draft WRF Master Plan
- Develop Site Alternatives Study for lift station site
- Prepare Concept Design Report
- Prepare construction documents (plans, specs, and cost opinions) at 60%, 90%, and 100% completion

# Preliminary Hydraulic Criteria



Category	Prelim. Design Value
Pump Station Firm Capacity (1), mgd	7.05
Peak Hour Dry Weather Flow, mgd	1.50
Peak Season Dry Weather Flow, Average Day, mgd	1.05

## Notes:

- (1) Firm capacity is the design flow with duty pumps in operation (not including standby pumps)
- (2) Historical flows for 1995 – 2009.

# Preliminary Force Main Criteria



Category	Prelim. Design Value
Diameter, inch	16
Material	Butt-fused HDPE, or DIP
Pipeline pressure class, psi	250
Length, miles	2.92

# Prelim Brine/Wet weather pipe criteria



Category	Prelim. Design Value
Pressure Segment – between WRF and Quintana/Kings Ave	
Diameter, inch	16
Material	PVC, HDPE, DIP
Gravity Segment – Quintana/Kings Ave to Ocean Outfall	
Diameter, inch	18
Available Slope (ft/ft), average	0.125
Material	PVC, HDPE, RCP, DIP

# Known Issues

- I/I – Design flow considerations
- Floodplain
- High groundwater
- Congested utilities – verify minimum separation available
- Quintana/Morro Bay Blvd Round-a-bout
- Traffic and business considerations for construction
- Highway 1 crossing
  - City will coordinate CalTrans permitting

# Related Efforts

- **WRF Project EIR –**
  - **Biological/cultural assessments – currently underway**
- **Collection system flow monitoring**
- **WRF Design/Build**

# Scope of Work

- 1. Project meetings and coordination**
- 2. Site Alternatives Evaluation**
- 3. Easement acquisition support**
- 4. Survey, Geotechnical Investigation, and potholing**
- 5. Concept Design Report**
- 6. Construction plans, specifications, and cost opinion**
- 7. Permitting support**
- 8. Bid and construction phase support**



# Evaluation Criteria

- **Understanding of Scope (15)**
- **Past performance/related experience (10)**
- **Technical Expertise (25)**
- **Proposed approach (25)**
- **Recent experience (10)**
- **Conformance with City's contract requirements (10)**
- **Good Faith effort to comply with City's DBE program (5)**

# RFP Requirements



- 40 pages (exclusions)
- Information for all subconsultants
- Fee schedule, labor breakdown, estimated fees
- Statement of disqualifications
- Exceptions to standard agreement

# Project Schedule



Milestone	Date
Pre-Proposal Meeting	Feb 9, 2017 at 10 AM
Written Questions Due	Feb 24, 2017 at 5 PM
Responses to Questions Posted	Mar 1, 2017 at 5 PM
Proposals due	Mar 8, 2017 at 2 PM
Consultant Interviews (at City's Option)	Week of Mar 15 (tentative)
Consultant Selection / Council Approval	April 11, 2017
Notice to Proceed	April 12, 2017

# Project Schedule, continued



Milestone	Date
Final Concept Design Report	June 2018
60% Plans, Specifications, and Cost Opinion	August 2018
90% Plans, Specifications, and Cost Opinion	October 2018
Completion of Construction Documents and Bid Package	December 2018
Bid Opening	March 2019
Construction Completed	September 2020

Questions?