Main Street WWTP Replacement Feasibility Study
Presentation Outline

- Purpose of Study
- Treatment Process
  - Typical Plant Layouts & Components
- Proposed Plan & Alternatives
- Effluent Disposal Alternatives
- Plan Summary
Primary Purpose of Study

- Determine Most Feasible Engineered Solution to Main Street WWTP
- Determine Approximate Cost of the Solution
• The Selected WRF Process
  • Aerobic Process
  • Upset Storage Pond
  • AWT Technology - Tertiary Treatment
  • Highest Quality Effluent
Major Plan Considerations

- WWTP Site Proximity to Population
- WWTP Site Amenable to Transmission System Redirection
- WWTP Site Proximity to Effluent Disposal Opportunities
- Plan Flexibility and Long Range Viability
Proposed Plan

Proposed “Central” WRF
Proposed “East” WWTP
Alt. # 1 = 20 MGD
Proposed Regional L.S.
Proposed 36” Main
Existing Power Easement
Bayou Marcus WRF
Devilliers Street Lift Station
Industrial Area
Proposed Plan

- Proposed "Central" WRF
- Proposed "East" WWTP
- Alt. # 2 = 15 MGD
- Existing Power Easement
- Proposed Regional L.S.
- Proposed 36" Main
- Proposed 24" Main
- Blue Angel L.S.
- Warrington L.S.
- Devilliers Street Lift Station
- Bayou Marcus WRF
- Exist. 20" Main
Major Considerations – Effluent Disposal

- Disposal Site Proximity to Population
- Disposal Site Proximity to Existing and Proposed WWTF
- Existing Irrigation Opportunities
- Potential Reuse Opportunities
- Permitting Issues
- Plan Flexibility and Long Range Viability
Proposed Plan – Effluent Disposal

Potential Effluent Disposal Sites
Acreage = 1340 Ac.

Potential Industrial Reuse = 11 mgd

Proposed “Central” WRF
Potential Industrial Reuse = 5 mgd

Proposed “East” WWTP
Potential Industrial Reuse = 6 mgd

Existing Power Easement

Proposed Effluent Disposal Header

300 Ac.

640 Ac.

200 Ac.

200 Ac.
Plan Summary

- **WWTP Site Location**
  - Location in Existing Industrial Area
  - Minimal Social Impacts
  - Amenable to Transmission System Redirection – Establishes Long Term “Backbone” Infrastructure
  - Proximity to Potential Industrial Reuse
  - Proximity to Effluent Disposal Areas

- **Treatment Plant**
  - All New Construction
  - Best Available & Proven Technology
  - Energy Efficient
  - Reliable Performance
  - Redundant Systems
  - Process Upset Storage
Plan Summary

**Effluent Disposal**
- Significant Industrial Reuse Opportunities
- Available Disposal Sites
- No Direct Surface Water Discharge
- Shared Effluent Disposal Pipeline
- Future Public Reuse
- No Increase to Permitted Capacity of Bayou Marcus
- No Increase to “Central” Plant Capacity

**Overall Plan Summary**
- Viable Long-Term Plan
- Flexible and Adaptable
- Environmentally Progressive
Subsequent Plan Implementation Phases

• Cost / Benefit Analysis

• Funding Analysis & Plan

• Secure Funding

• Construction Document Preparation
And last but not least...

Thank You!

ECUA
Environment Service

Hatch Mott MacDonald

Baskerville-Donovan, Inc.

Jacobs