Georgetown Wet Weather Treatment Station
(Control for Brandon and S. Michigan Combined Sewer Overflows)

Presented to Metropolitan Water Pollution Abatement Advisory Committee
December 10, 2014
Agenda:

- Project Overview
- Status
  - Project site
  - Cost control measures
- Questions
Purpose of Project

• “Control of Brandon and South Michigan Street CSO Outfalls in accordance with WAC 173-245-020(22)”

• WAC defines control as “no more than one event per year over a twenty year average” or treatment that is at least equal to primary treatment standards.

• Achieve all consent decree requirements
Consent Decree Requirements

Project defined as:
• CSO Treatment and Conveyance – 66 MGD peak
• High rate clarification treatment

Compliance Schedule:
• Submission of Facilities Plan by December 31, 2015
• Completion of Bidding by December 31, 2017
• Construction Completion by December 31, 2022
• Achievement of Performance Standard by December 31, 2024 or two full wet seasons.
Characteristics of Treated Discharge

- Long term averages
  - ~20 treated events/year
  - 1/year discharge from existing CSOs
  - ~65-70 MG/average year (95% of total)
- Intermittent and short duration
  - 50% less than 4 hours
  - 91% less than 12 hours
Project Elements (what is being proposed)

- Influent conveyance
- Flow equalization
- Influent pump station
- Screening
- High rate clarification system
  - Ballasted Sedimentation
- Ultra-violet disinfection
- Ancillary facilities including, odor control, redundant electrical supplies, chemical storage, air handling
- Effluent conveyance
- Outfall structure
## Schedule

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<th>Consent Decree Milestone</th>
<th>Completion Date</th>
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<tr>
<td>Facility Plan</td>
<td>12/31/2015</td>
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<td>Completion of Bidding</td>
<td>12/31/2017</td>
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<td>Construction Completion</td>
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<tr>
<td>Achievement of Performance Std.</td>
<td>12/31/2024</td>
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![Project Timeline Diagram](image)
Project Status – Current Activities

- Project team applied site selection criteria to guide the selection of the proposed facility site
- Analysis of flow and load data; water quality sampling and analysis
- Confirm regulatory standards and requirements with Department of Ecology
- Develop conceptual site layouts, hydraulic profile, operational strategies
- Form a community design advisory group
Project Status – Staff
Recommended Site P13/OF 3A

- Environmental review to be completed on this recommendation
- Shortest conveyance
- Undeveloped
- On-site staging possible
- For sale/lease
- Allows for consolidated facilities
- Community support
Project Status – Cost Control Activities

• As recommended by the King County Auditor’s Office, WTD management, and Carollo Engineer’s, the project team has/will implement several cost control strategies.

• Will or have reviewed several potentially cost saving technical alternatives including:
  • Minimize conveyance length - Implemented
  • Review the use of submersible pumps
  • Use passive means to divert flow to GWWTS
    • Consolidated diversion facilities
  • Raise the HGL of the plant to avoid pumped discharge and minimize excavations – Implemented
  • Eliminate degritting facilities – Implemented
  • Review how equipment is enclosed
Questions?

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