Wastewater Treatment Plant Upgrade and Expansion Project

Public Works Commission Study Session
July 12, 2017
Agenda

- WWTP Upgrade & Expansion Project
- Special Use Permit Process
  — Questions & Feedback
Wastewater Treatment Plant Upgrade & Expansion Project
Clean Water Program Drivers & Goals

Replace Aging Infrastructure

Provide Higher Levels of Treatment & Capacity Assurance

Address Sustainability, Climate Change, & Biosolids/Energy

Collection System

WWTP

RWQCB Cease & Desist Order NPDES Permit

Reusable Clean Water Partnerships

Infrastructure Sustainability Metrics
WWTP Site Location
WWTP Site Location

Wastewater Treatment Plant Upgrade and Expansion Site

Existing Wastewater Treatment Plant

San Francisco Bay

3rd Avenue

Seal Slough

Private Property
Technology Approach; Dual Purpose Facilities for Improved Year-Round Operations – Dry Weather
Technology Approach; Dual Purpose Facilities for Improved Year-Round Operations – Wet Weather

Dual use facilities maximize City’s investment and improve plant operations.
1. HEADWORKS (PRELIMINARY TREATMENT)
2. DUAL-USE CLARIFIERS (PRIMARY TREATMENT)
3. BIOLOGICAL NUTRIENT REMOVAL (BNR)
4. MEMBRANE BIOREACTOR (MBR)
5. DUAL-USE CONTACT TANK
6. FLOW EQUALIZATION BASIN
7. ODOR CONTROL
8. CHEMICAL SYSTEMS
9. EXISTING DISINFECTION IMPROVEMENTS
10. ADMINISTRATION BUILDING
11. MAINTENANCE WAREHOUSE

* Existing facilities to be demolished prior to start of major construction are shown in red.
Architectural & Landscape Design

Highlights juxtaposition of industrial and natural water treatment systems
Community Access

Pedestrian Access Improvements and Educational Components
Administration Building

Public Interface; Gateway to the WWTP
Inspired by City’s sustainable initiative for healthy environmental, economic and social development

- Pursuing LEED Silver Certification
- Following ENVISION guidelines for sustainable infrastructure
System Wide Approach and Robust Treatment for Odor Control

- Cover and Vent Headworks, PCs and EQ
- Two Stage Treatment with Biotrickling Filters & Carbon Scrubbers

Chemical Injection and Vapor Phase Treatment in the Collection System
Alternative Delivery by Integrated Team

City of San Mateo and Partners

Clean Water Program (City and CH2M)

Designer HDR

Construction Manager at Risk SUNDT
Project Evolution – Where We Are

2009 Regional Water Quality Control Board (RWQCB) issues Cease and Desist Order to eliminate sewer overflows by 2018

2013 NPDES Permit – Elimination of Blending at the WWTP by 2020


2015 Validation Study

2016 Facility Plan & Conceptual Planning Report

2016 PEIR Approved

2017 Design Notice to Proceed

2018 Design

Spring Special Use Permit Council Public Hearing

Multi-year Construction Duration

Site Prep

2018
Special Use Permit (SUP) Process – Why?

- Required by PEIR (Certified by Council June 2016)
- City Zoning Code requires that public facilities in the Shoreline ("S") Zoning District require the approval of a Special Use Permit
- Permit processed by the City of San Mateo Planning Division
Special Use Permit Process – Two Stages

Pre-Application
- Neighborhood Meeting (Completed June 12)
- *Planning Commission Study Session (August 8)*

Formal Application
- *Development Review Board (DRB)*
  - Planning, Building, Public Works, Fire, Police, Landscaping
- Planning Commission Public Hearing
- *City Council Public Hearing*
Special Use Permit Tentative Schedule

- **5/12**: Pre-Application Submitted
- **6/12**: Neighborhood Meeting
- **7/12**: PWC Study Session
- **8/8**: Planning Commission Study Session
- **9/8**: Formal Application Submitted
- **9/11–29**: DRB Review Round #1
- **10/23–11/3**: DRB Review Round #2
- **11/27–12/8**: DRB Review Round #3
- **6/4**: CC Public Hearing (Final Action)
- **5/8**: PC Public Hearing (Recommendation to CC)
- **8/7**: Initial Study to City
- **8/18**: City determines necessity of additional CEQA Review
- **June 2016**
  - PEIR Approved
- **2017**
  - Preapplication Process Activities
- **2018**
  - CEQA Process Activities
  - Formal Application Process Activities
Questions & Feedback