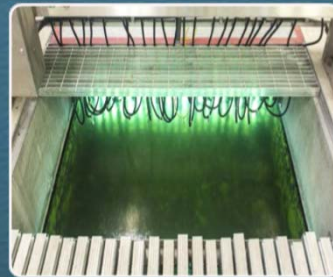


RWCF Modifications Project

AECOM **W. M. LYLES CO.**
— a joint venture —

Council Water Committee
March 12, 2019



Project Objectives

- Replace or rehabilitate aging treatment facilities, thereby extending the useful life of the RWCF
- Reduce or eliminate unnecessary treatment processes to streamline operations
- Comply with effluent limitations specified in the RWCF NPDES permit
- Improve working conditions and operations support facilities for increased efficiency
- Improve energy efficiency and reduce reliance on the external energy providers
- Implement a project that reflects the priorities and funding capacity of the City

Project Goals

- Upgrades to:
 - Increase the reliability of the liquid and solids treatment processes
 - Improve treatment reliability of existing and projected flows
 - Reduce energy costs and provide reliable renewable energy alternatives
 - Reduce nitrate plus nitrite (N plus N) concentrations in the final effluent to comply with National Pollutant Discharge Elimination System (NPDES) limitations

Project Development

- Key Milestones

- Determine Flows and Loads (2035 and 2045): 3-2017
- 10% Facility Process Description & Cost Estimate: 8-2017
- 25% Design & Cost Estimate: 3-2018
- 50% Design & Cost Estimate: 7-2018
- 65% Design with Phase 2 Price: 1-2019
- Phase 2 negotiation final: 2-2019
- Council Consider Award Phase 2A Contract: 3-26-2019
- Council Consider Award Phase 2B Contract: 6-2019

- Parallel Activities

- Council Consider EIR Certification at 3-26-2019 Council Meeting
- Council Consider Cost of Service Study at 3-26-2019 Council Meeting

Project Characteristics

- Moved Tertiary Treatment to Main Plant (East) Side of River
 - No Added Cost
 - Significant Benefit for Plant Operations
- Rehab/Refurbish Existing Headworks
- New Influent Pump Station and Grit
- Primary Clarifier Rehabilitation
 - Returning 2 Clarifiers Back into Service
- Moved New Biological Treatment to South Property
 - Meet NPDES Permit Criteria
 - Provides Interim Operational Flexibility During Construction
 - Potential to Save Cost Due to Construction Efficiencies
 - Ready Future Expansion Capability

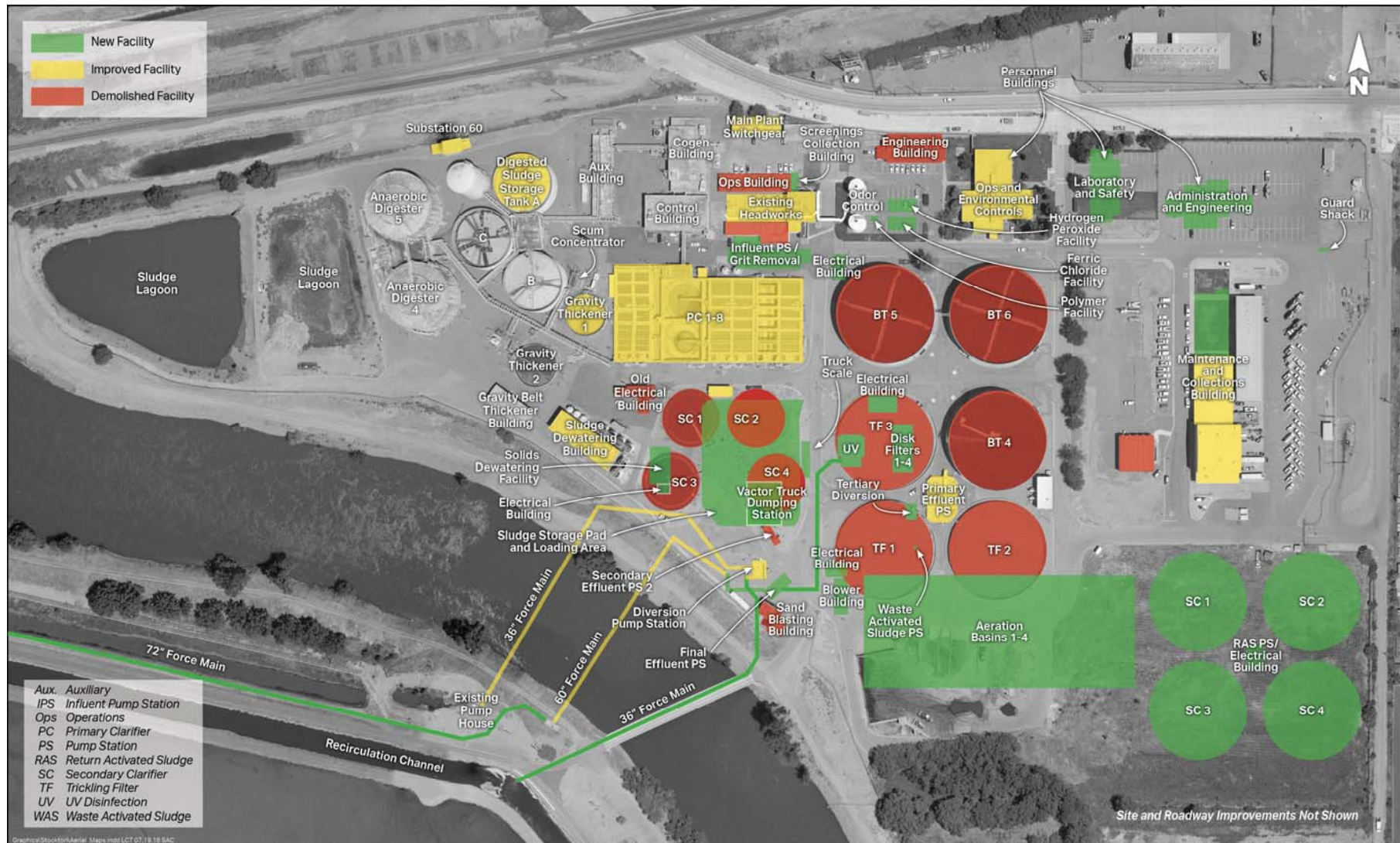
Project Characteristics

- Repurpose Biotower PS, Secondary Eff PS, Gravity Thickener No. 1
- Located New Solids Handling Adjacent to Existing
- Treatment Wetlands Will Not be Used in Treatment Process
- Existing Ponds and Treatment Wetlands will Provide Evaporative Relief of High Flows. Ponds will be dry most of year.
- River Discharge via Existing Outfall Initially
 - Scoping New Outfall Feasibility, not part of project at this time

Project Characteristics

- Personnel Facilities
 - Lab & Admin – New
 - Maintenance/Collections – Expansion
 - Operations – Remodel
 - Stores
- Anticipated Operational Cost Savings
 - Approximately \$1M/yr to \$2.5M/yr

Overall Site Plan



Building Renderings



Phase 1

- Phase 1 Complete
 - 65% Complete Design
- 65% Guaranteed Maximum Price (GMP)
 - \$190M
 - \$165M Construction
 - \$25M Engineering and Construction Management (CM)

Phase 2

- November 2016 Progressive Design Build Contract
 - Established 2 Phases: Phase 1 and Phase 2
 - Phase 1: 65% Design
 - Phase 2: Final Design and Construction
- Current Status
 - Recommend splitting Phase 2 into Phase 2A and 2B
 - Allows for continued advancement of project to achieve permit-required compliance by June 2024.
 - Phase 2A will advance the design to a 90% complete
 - Phase 2B will finalize the design and construct the facilities

Contract Amendment No. 1

- Adjust contract to reflect Phase 2A and 2B
- Establishes Scope, Fee and Schedule for Phase 2A
- Establishes contract requirements for the GMP
- Retains the “Off-Ramp” opportunity in the event of unsuccessful Phase 2B negotiations
- Provides Preliminary Scope for Phase 2B Engineering and Construction Management

Council Consideration

- Award Phase 2A of the Progressive Design-Build Contract in the amount of \$6,026,561, between the City and AECOM/W.M. Lyles, Joint Venture (JV)
- Authorize the City Manager to execute Amendment No. 1 to Progressive Design-Build Contract
- Authorize the City Manager to take appropriate actions to carry out the purpose and intent of the resolution

