



# Digested Sludge Dewatering Facility Approval of Amended and Restated Contract CIP

*Treatment Plant Advisory Committee Item No. 5.A.*

February 10, 2022



San José-  
Santa Clara  
Regional  
Wastewater  
Facility

# Project History – PMP and Biosolids Transition Planning

2013

## Approval of Plant Master Plan

- Incorporated Milpitas Guiding Principles
- Recommended new Biosolids Management Program

2015

## Approval of Biosolids Transition Strategy

- Proceed with temperature-phased anaerobic digestion (TPAD) process, **New Dewatering Facility**, retirement of lagoons and drying beds, postponement of on-site thermal and greenhouse drying facilities, and procurement of various off-site disposition service contracts

## Approval of Odor Control Implementation Plan

- Completion of Phase 1 and decommissioning of lagoons and drying beds needed to achieve RWF's odor goal and fence line (Phase 1: DTFU, New Headworks, **New Dewatering Facility**, and East PC Rehabilitation)

2019

## Approval of Design-Build Contract with Walsh Construction Company (Prelim. Services) & Completion of Biosolids Disposition Market Assessment

- Limited capacity around SF Bay Area with no single service provider with sufficient capacity
- Increasing prices to beneficially use biosolids

2021

## Approval of Dewatered Biosolids Management Strategy

- Procure short-term contracts for off-site beneficial use of the RWF's dewatered biosolids, develop an on-site fertilizer facility, and permit local natural and working lands to receive biosolids

## Issued RFP for Transportation and Beneficial Use Services for Dewatered Biosolids

2022

## Senate Bill 1383 Regulations Take Effect

- Goal: Reduce short-lived climate pollutants in landfills
- Organic waste definition includes biosolids and its use as ADC is considered landfill disposal

# Drivers for Dewatering Facility

- Position RWF to have multiple and diversified end use options
- Reduce Odors in the Community
- Reduce footprint of Biosolids Processing area and enable other land use
- Provide Flexibility to respond to regulatory changes and market preferences

# Current and Future Biosolids Management



Newby Island Landfill (ADC)

Current Practice: ~3,000 truck trips to transport 50k-60k wet tons of biosolids from drying beds for ADC to Newby Island Landfill (75%-80% dry)

Future Practice: ~5,000 truck trips to transport ~120k wet tons of biosolids from the Dewatering Facility for beneficial use (20%-25% dry)

Lagoons  
(~3 years)

Regional  
Wastewater Facility

Drying Beds  
(~6 months)

DF

# Design Build Contract - 2 Phases

## Original Contract

### Preliminary Services Phase

- Awarded in June 2019 to Walsh
- \$7.4M plus 10% contingency, including:
  - Permitting,
  - Subsurface investigations
  - Condition assessments
  - Design to 60%
  - GMP
- Status: Completed Nov. 2021
- Early Work Package for \$10.0M initiated in July 2021

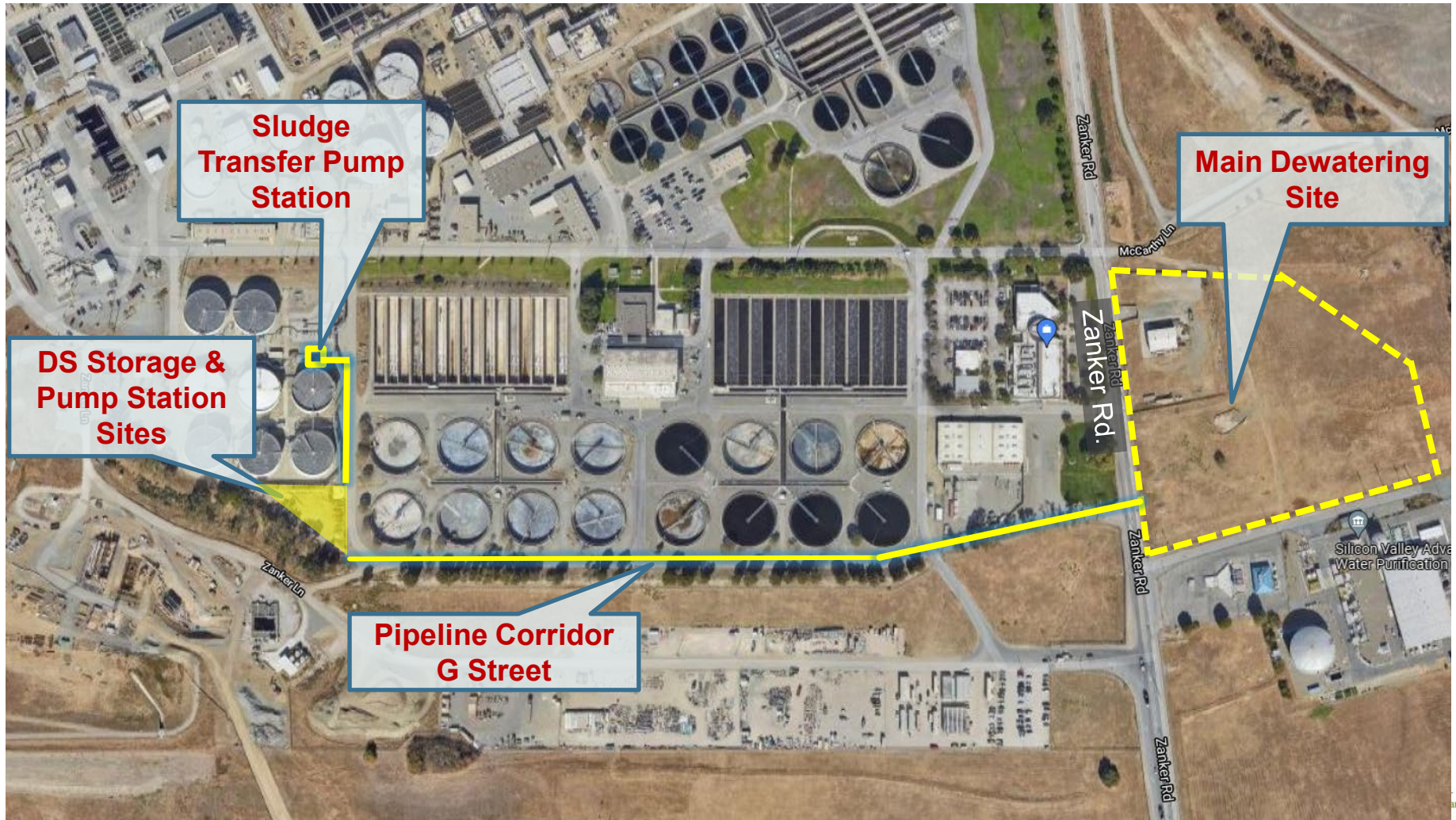


## Amended Contract

### Design-Build Phase

- \$131M (includes EWP) plus 10% contingency
- Including:
  - Permitting
  - Construction
  - Engineering Services
  - Startup and commissioning
  - Acceptance testing
  - Transitional Services
- Notice to Proceed: March 2022
- Final Completion: July 2025

# Dewatering Project Overview – Site Location



# Rendering of New Dewatering Facility



Cake Conveyors

2nd Floor Dewatering Building  
(Centrifuges, Process Area)

Cake Bins and  
Load out Bays

SVAWPC

1st Floor Dewatering Building  
(Centrifuge Feed Pumps and  
Polymer Blenders)

Personnel Area

Electrical Room

Zanker Road

# View of Access from Zanker Road





# Front View of Dewatering Facility from Zanker Road



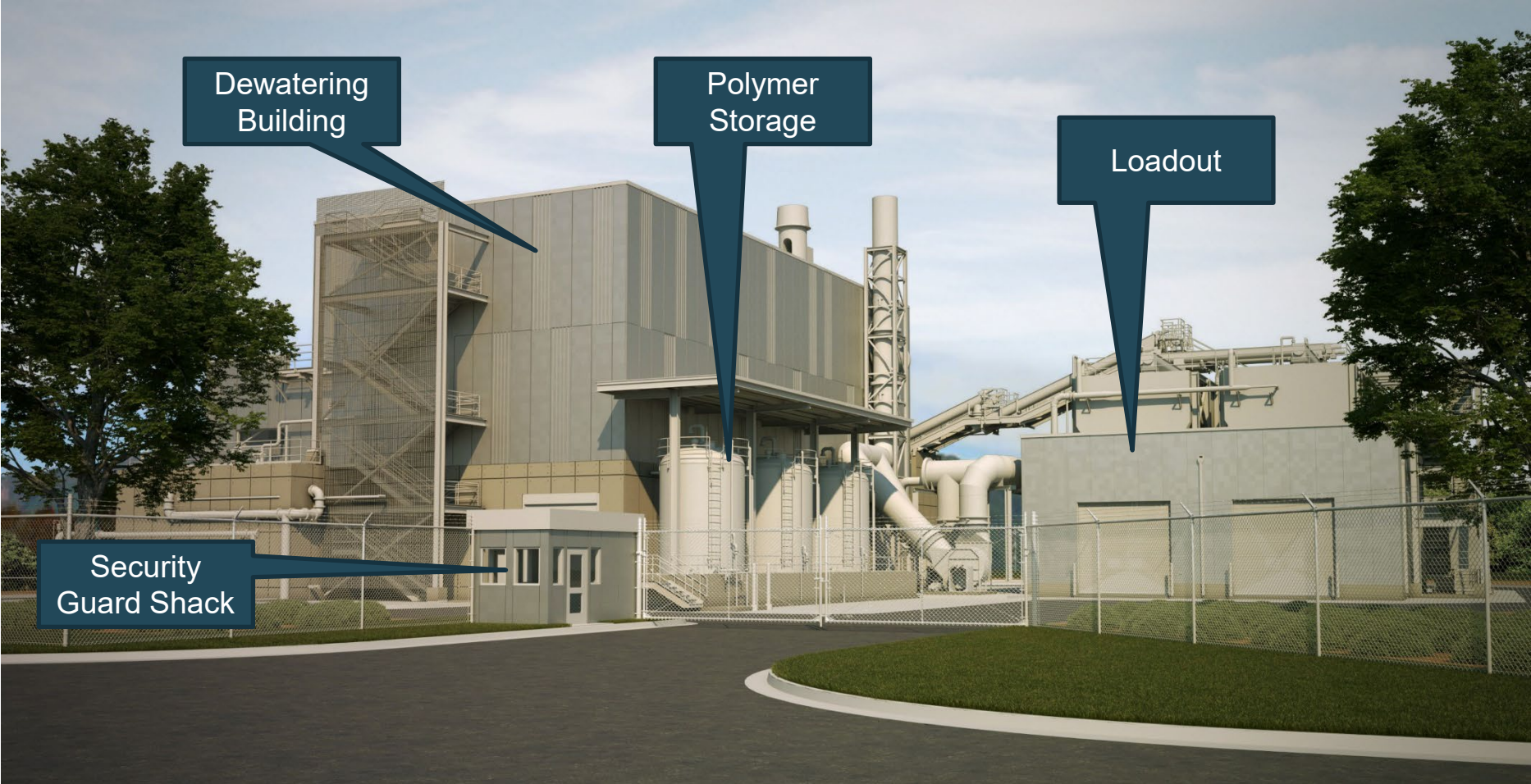
# Truck Entrance to Dewatering Facility

Dewatering Building

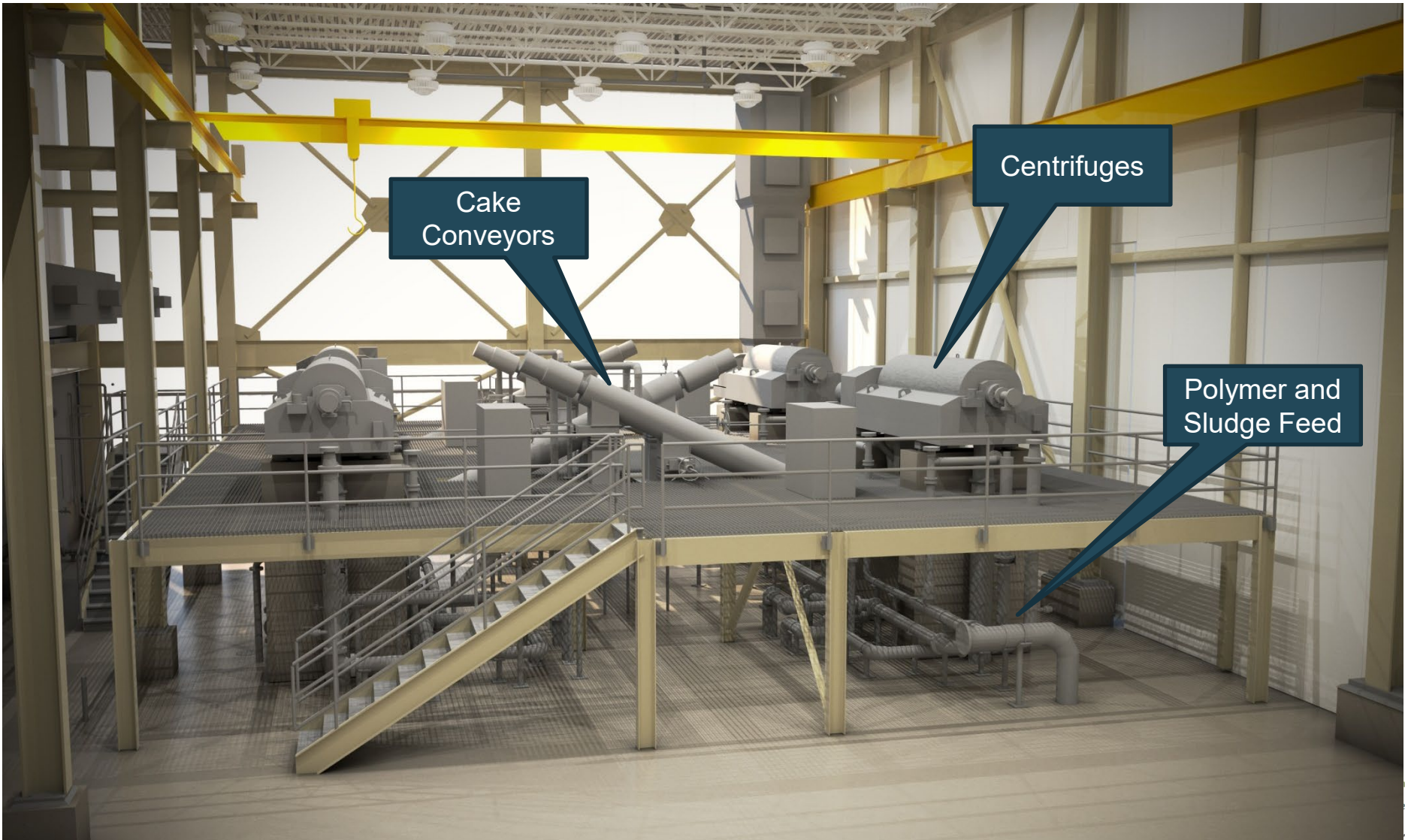
Polymer Storage

Loadout

Security Guard Shack



# View of Centrifuges for Dewatering Sludge



Cake  
Conveyors

Centrifuges

Polymer and  
Sludge Feed

# Amended Contract Negotiations

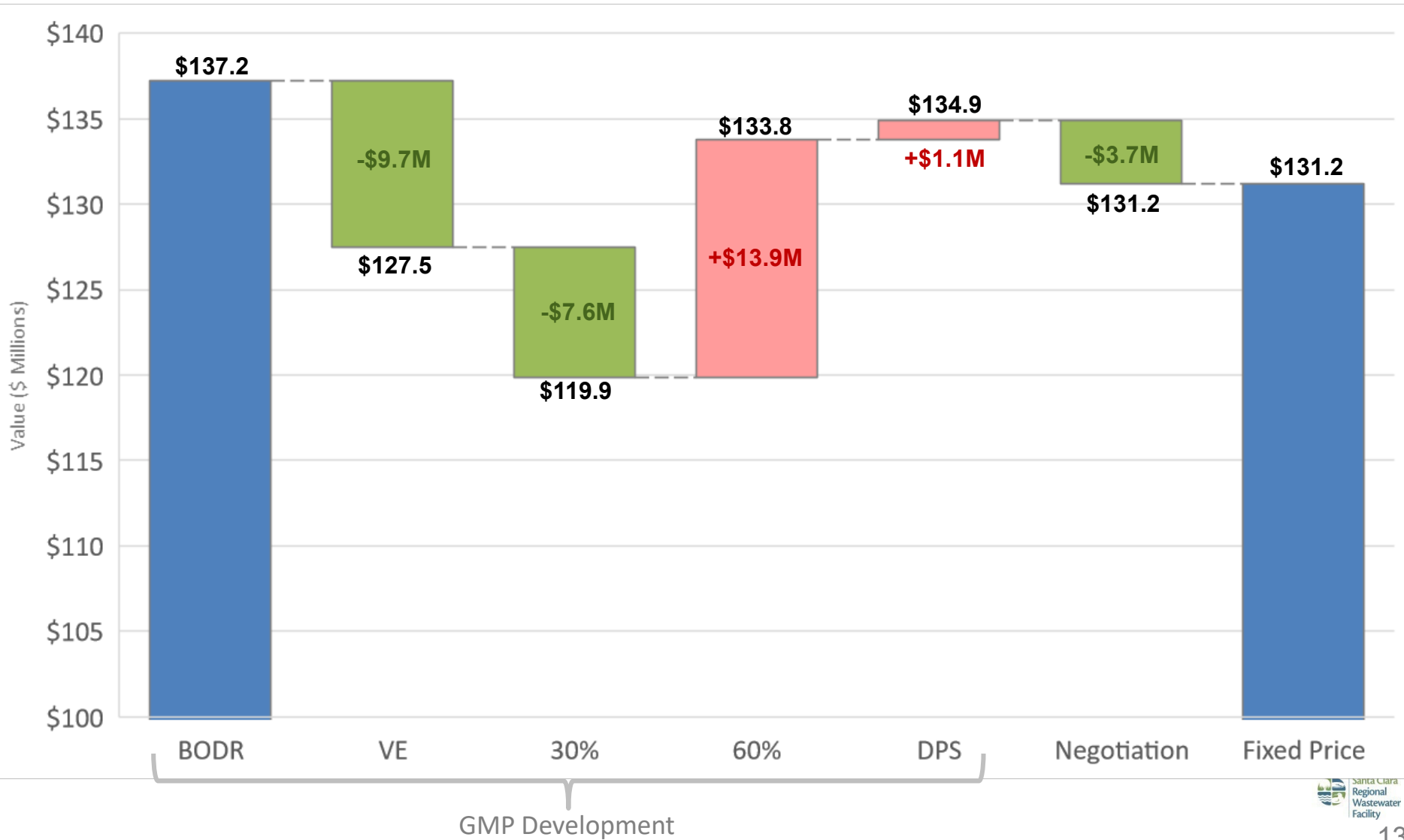
## ■ Issues and Challenges:

- Market conditions due to COVID impacts have led to supply chain issues resulting in higher cost escalation and schedule impacts:
  - » *Lack of inventory leading to longer material/equipment procurement times*
  - » *Subcontractor bid prices expiring within 30 to 60 days compared to usual 90-120 days*
  - » *Higher subcontractors' bids e.g Glazing, HVAC, Fencing, Curb and Gutter, Landscaping, Paving, Electrical, Misc. Metals.*

## ■ Steps taken to ensure fair pricing:

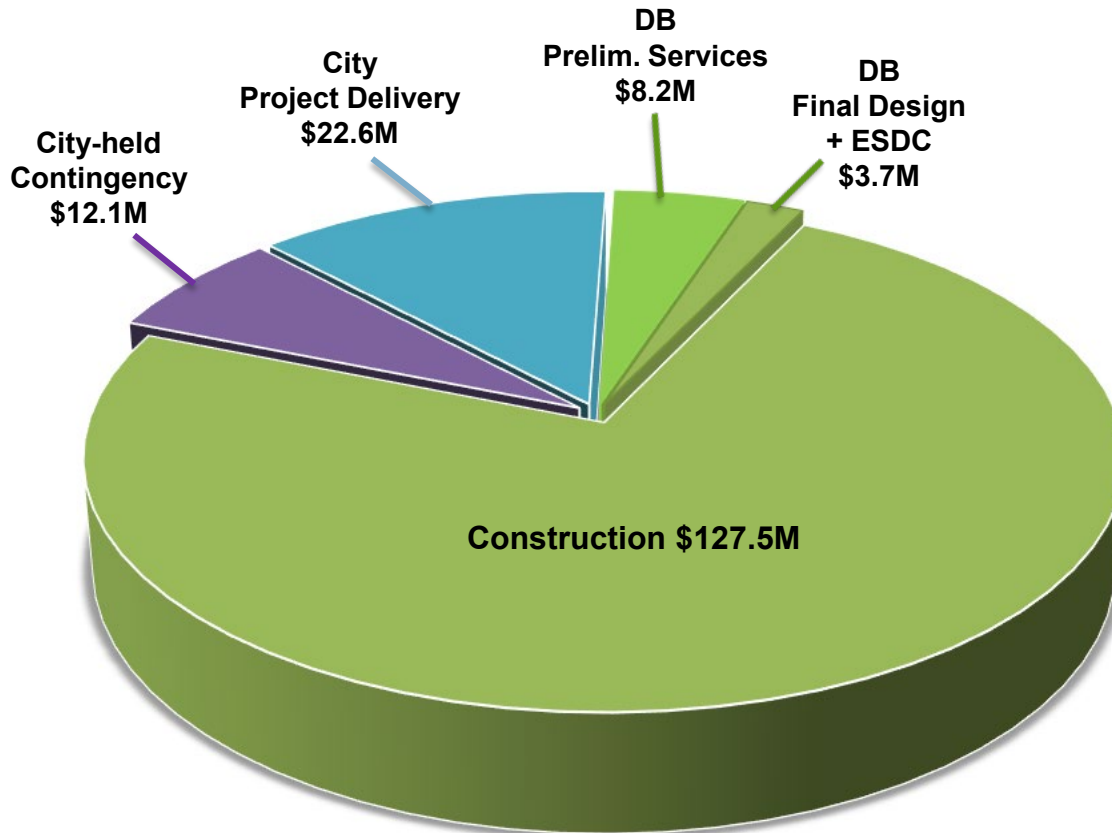
- Open book pricing by design-builder (early cost model)
- Value Engineering (Program Practice)
- Independent cost estimate reviews, analyses and benchmarking (Program Practice)
- Competitive bidding of subcontractor and supplier packages
- Collaborative risk management: DB contingency; market escalation risk
- Negotiation of Fixed Price Contract:
  - » *Reduced Walsh's Price from \$134.7M to \$131.2M*
  - » *Increased Walsh's Delay Liquidated Damage from \$1,000 per day to \$7,000 per day*

# Cost Evolution of Price



# Project Cost Summary

**Total Project Cost: \$174M**



## Fixed Price Build-Up

- Final Design (60-100%)
- Engineering Services During Construction
- Construction
  - Direct Costs
  - General Conditions
  - Overhead and Profit
  - DB Contingency
  - Escalation
  - Allowances

**Total Fixed Price: DB Final Design + ESDC (\$3.7M) + Construction (incl. EWP) (\$127.5M) = 131.2M**

# Recommendation

1. Approve the Amended and Restated Design-Build Contract (Amended Contract) with Walsh Construction for the final design, construction, commissioning and acceptance testing of the Digester Sludge Dewatering Project at the San José-Santa Clara Regional Wastewater Facility with a base Fixed Price of \$131,161,646.
2. Approve a ten percent construction contingency (excluding the EWP price) in the amount of \$12,115,379 for adjustments to the base Fixed price in accordance with the Amended Contract.