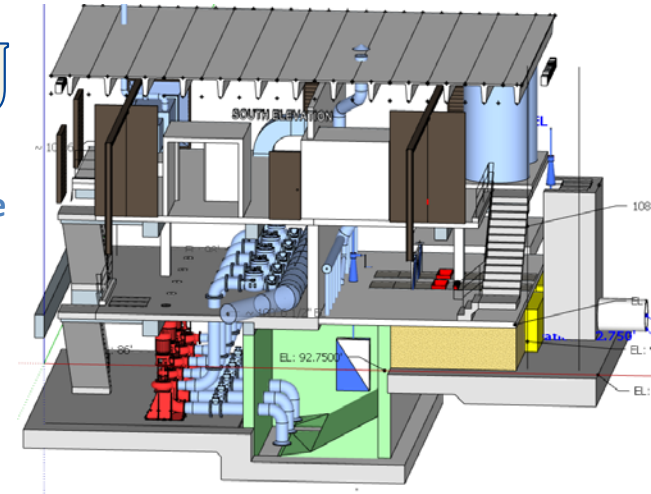


Pump Station Improvements Mandatory Pre-SOQ Meeting

August 1, 2018



RESCU
Regional Environmental
Sewer Conveyance Upgrade



Menlo Park Pump Station



Belmont Pump Station



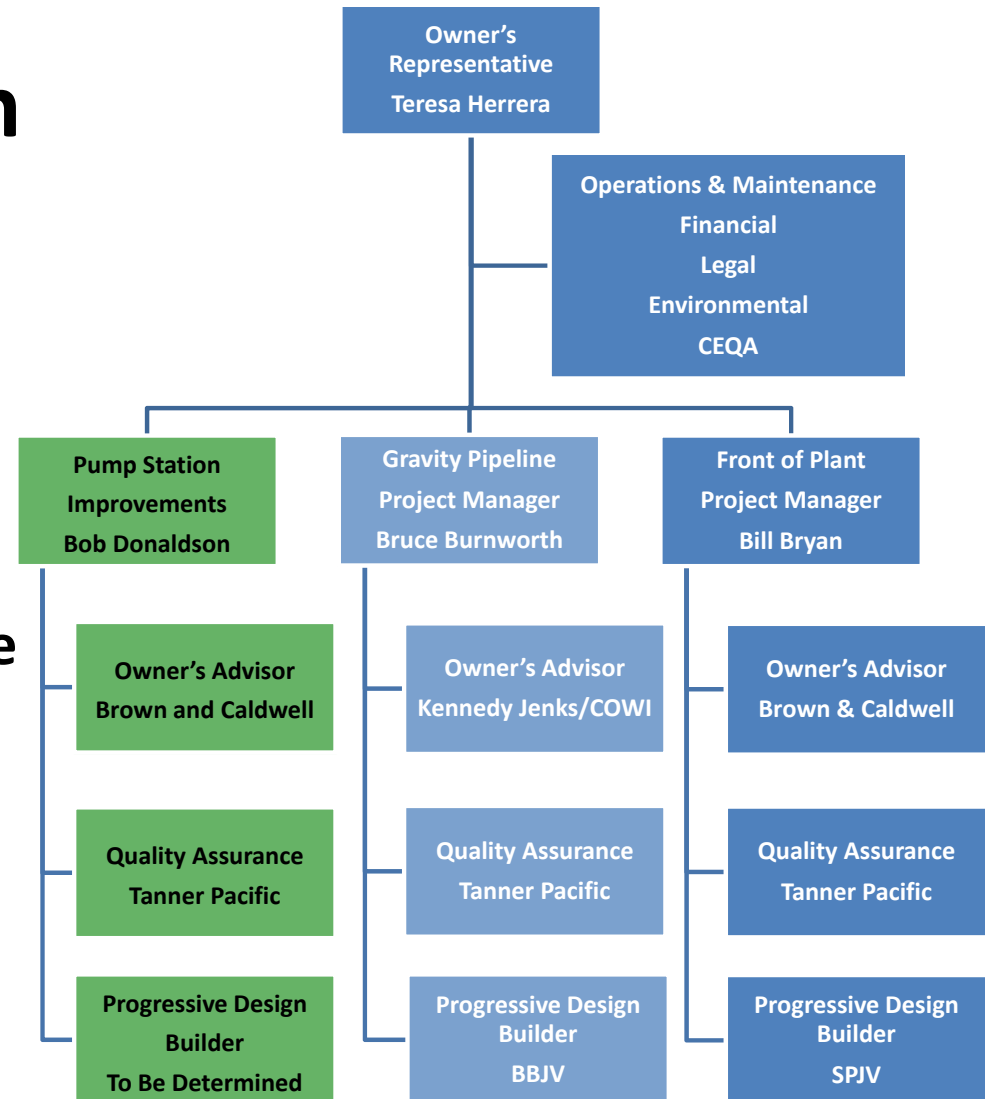
Redwood City Pump Station

Agenda

- **Introduction** (Kim)
- **Pump Station Improvement Project – Overview** (Charlie)
- **Procurement Process and Stages** (Bob)
- **Key Parts of the RFQ** (Bob)
- **Estimates, Budgets and Pricing** (Bob)
- **Available Information** (Bob)
- **Questions** (Please ask along the way)

SVCW PSI Project Team

- **SVCW Owner's Representative**
Teresa Herrera
- **Project Manager**
Bob Donaldson
Collaborative Strategies Consulting, Inc.
- **Owner's Advisor**
Charlie Joyce
Brown and Caldwell
- **Connecting Project - Gravity Pipeline**
SVCW Project Manager
Bruce Burnworth
Owner's Advisor
Mark Minkowski
Kennedy/Jenks



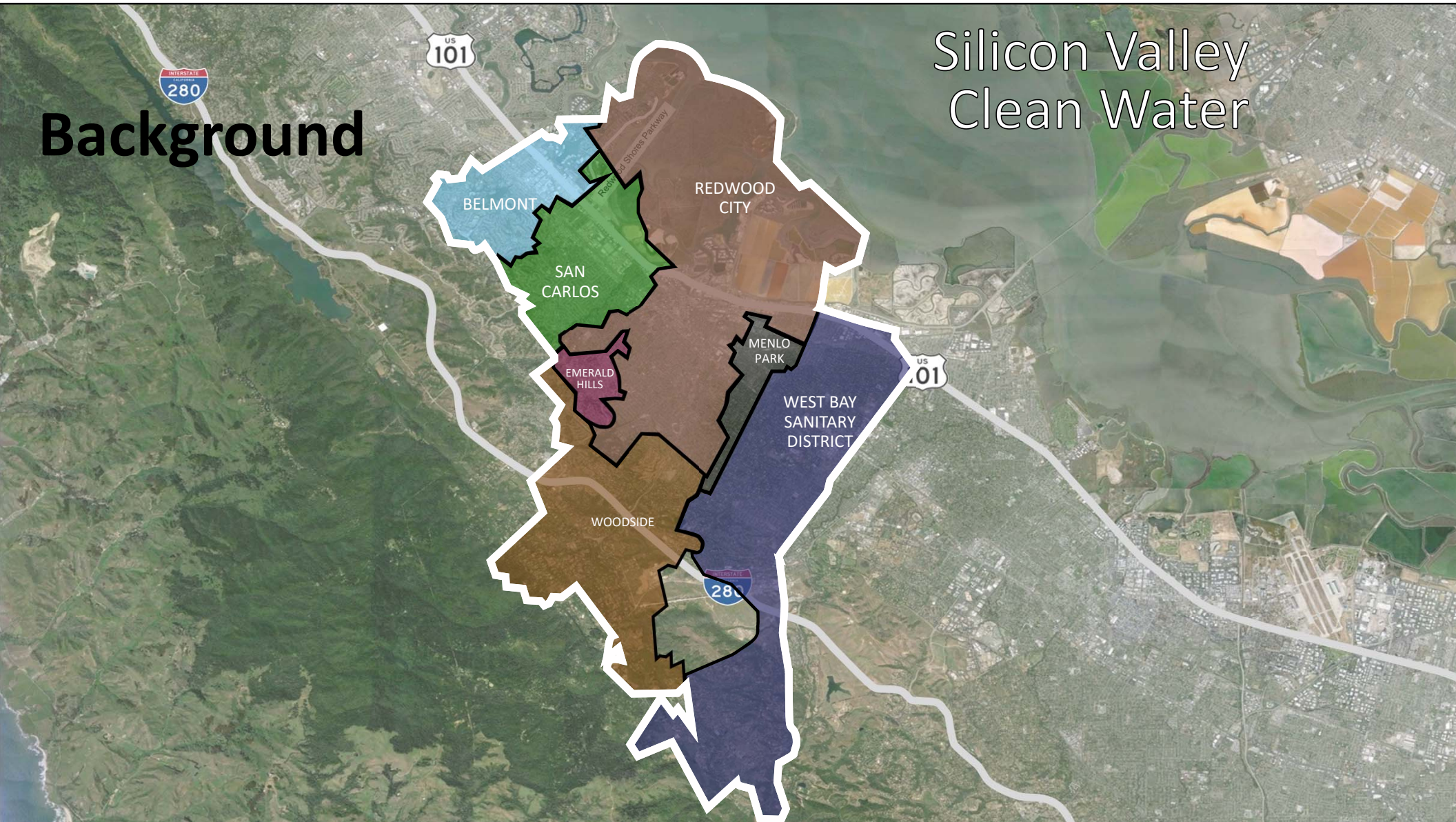
PSI Project – Overview

- Background
- Flows
- Project Elements – by location
 - Existing
 - Project Concept
- Status of EIR, Permits and Easements
- Availability of SVCW Funding
- RFQ items
- Site Visits



Background

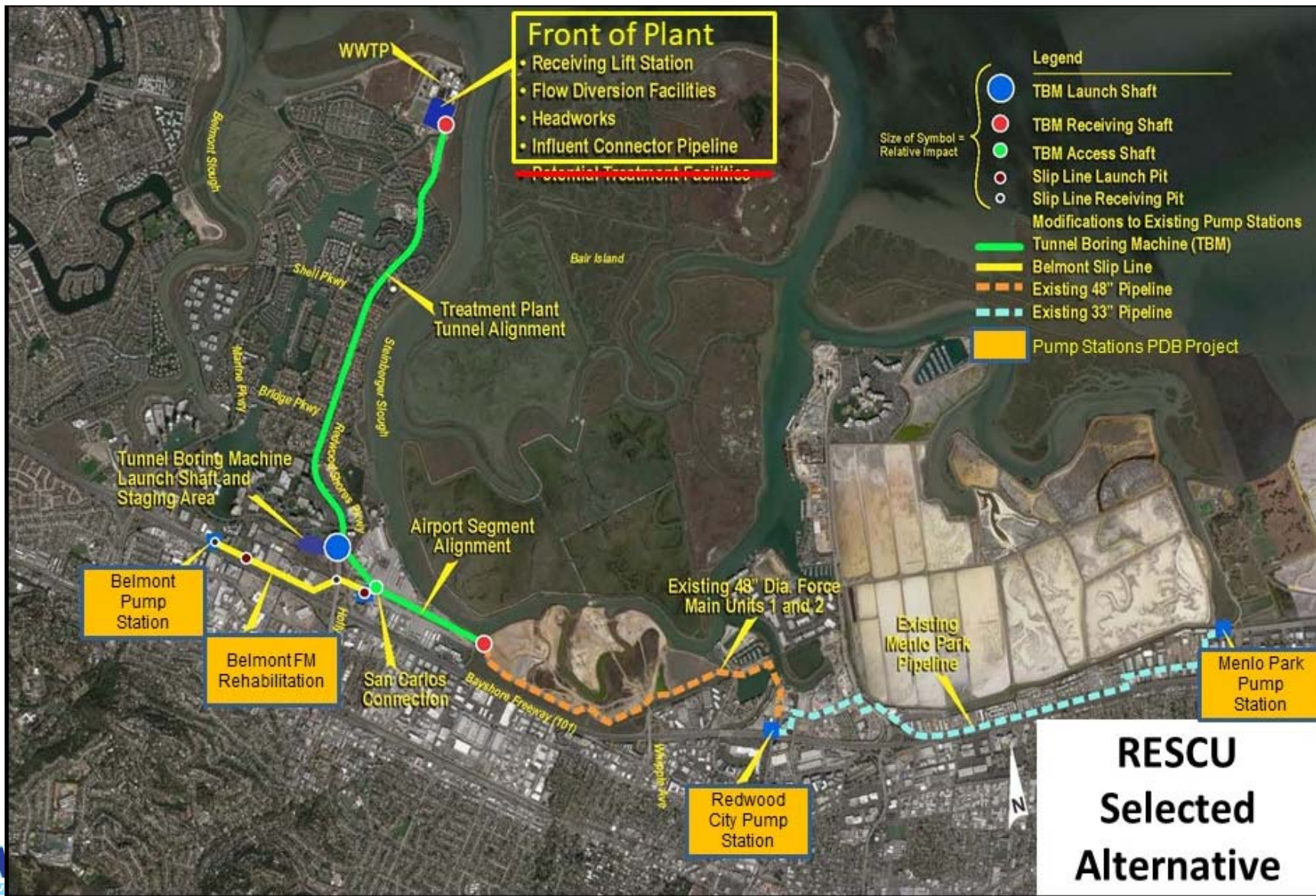
Silicon Valley Clean Water





Problem we need to Solve

- ❖ 4 pump stations with a Booster Pump Station and Influent Lift Pumps – High Maintenance Needs
- ❖ Joints every 12 ft in RCP Force Main thru YBM
 - Design useful life = 25 to 50 years (ASCE; EPA)
 - Pipe is 45 years old
 - Currently operating at 2.5 times design pressure
 - 64 leaks so far; rate of failure is increasing
 - Leaks are time-consuming, disruptive and expensive to repair . . . potentially catastrophic.



RESCU Success Factors



“Success” - **collaboratively** implementing an **appropriate balance** of the following:

- **Cost:** Provide a complete functional conveyance system that meets the goals of the Program at the **lowest practical capital and lifecycle cost**.
- **Operations:** Produce projects that are **easy, efficient, and effective to operate**.
- **Maintenance:** Produce projects that **minimize required maintenance**.
- **Safety:** Implement projects that are **safe** to construct, operate, and maintain.
- **Schedule:** Place new wastewater conveyance system projects into operation with **best practical safe speed**, while maintaining the present level of service with existing facilities.
- **Stakeholder Impacts:** Solicit, evaluate, and respond to stakeholder’s concerns, and implement a Program that **best meets the combined needs of stakeholders while reaching the Program’s goals**.



Pump Station Improvement Project Objectives



- **Quality:** The PSI Project to reliably receive, pump, and convey wastewater over a **50-year service life**, and that fully complies with environmental requirements.
- **Cost:** **Design to Budget.**
- **Schedule:** Bring new facilities **online in coordination** with the GP Project so **existing failing pipeline and pump stations** can be taken out of operation as early as reasonably possible.
- **Risk:** Assign to the party best able to **manage the risk.**
- **Safety:** Implement an effective safety program incorporating **best practice industry practices.**
- **Accountability:** Design-Builder to provide for **a single point of accountability** for performance of all services under Stage 1 and Stage 2. SVCW to provide a single point of accountability for all direction to the Design-Builder.
- **Collaboration:** Implement an **integrated design process** that collaboratively includes SVCW management, engineering, **operations and maintenance** as well as the Design-Build contractor and engineer to develop a design that **optimally achieves SVCW success factors and PSI requirements.**
- **Innovation:** **design innovation and construction / sequencing options** to be considered that may lead to capital or life cycle **cost savings**, and/or to **improved functionality**

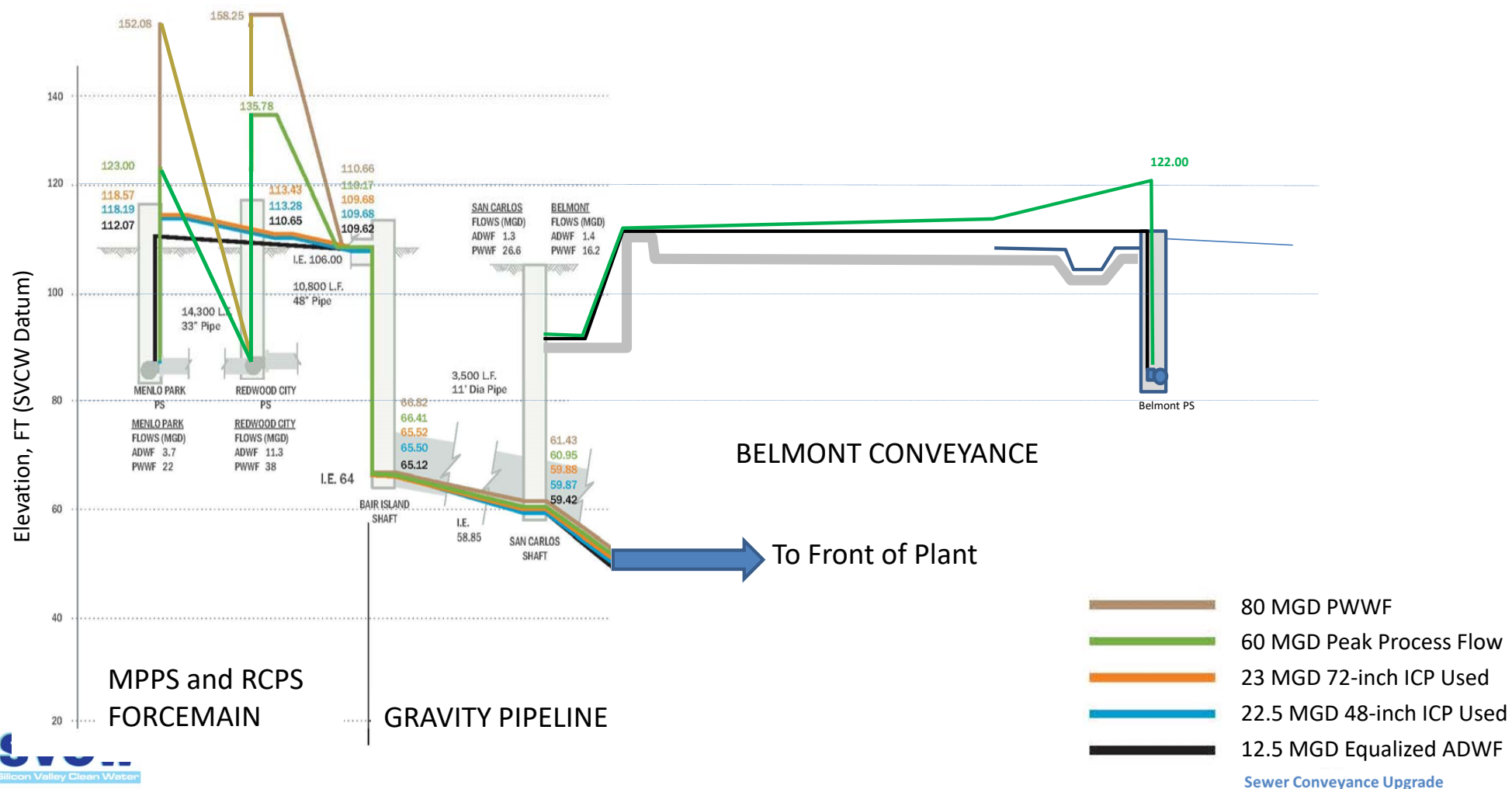


PSI Conceptual Flow Conditions

Flow Condition	MPPS (mgd)		RCPS (mgd)		BPS (mgd)	
	Exist	Future	Exist	Future	Exist	Future
Average DWF	3.7	4.6	4.5	8.0	1.4	1.8
Peak DWF – hourly	10.2	10.0	11.1	14.5	3.2	3.6
Min DWF – hourly	0.2		0.9		0.3	
PWWF – hourly		22	38	60		16.3

- Existing – October 2015
- Future – 2040
 - RCPS PWWF includes MPPS flows

PSI Conceptual Hydraulic Gradeline



- Project Planning Report – see SVCW.org



MPPS Site Aerial



MPPS Site

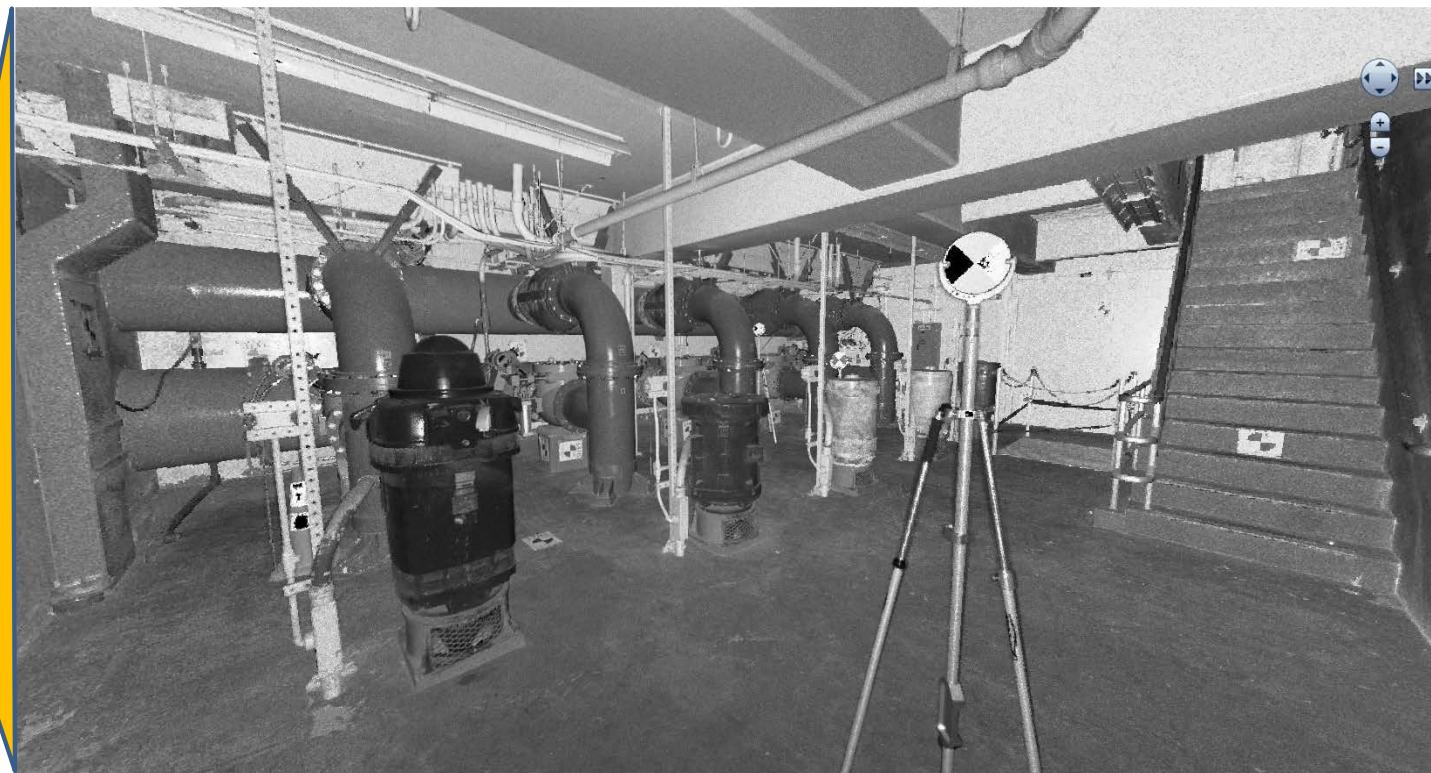
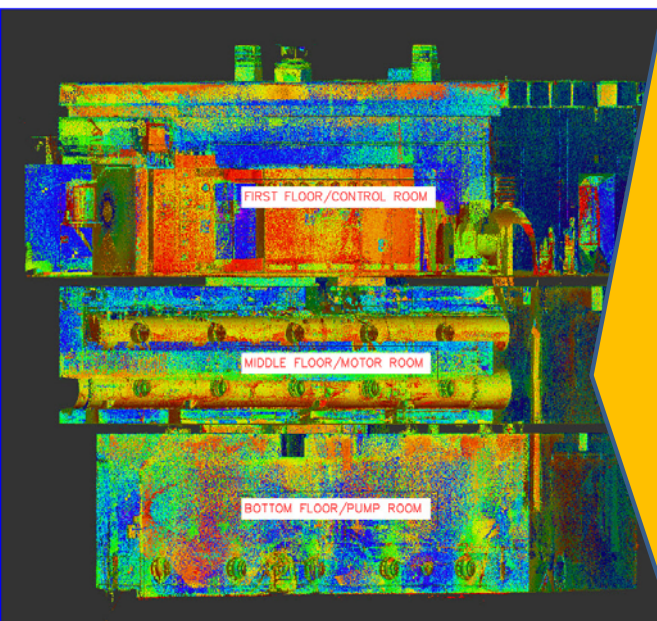


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MPPS Data – Lidar of Pump, Motor, Electrical Rooms

Menlo Park Pump Station Project

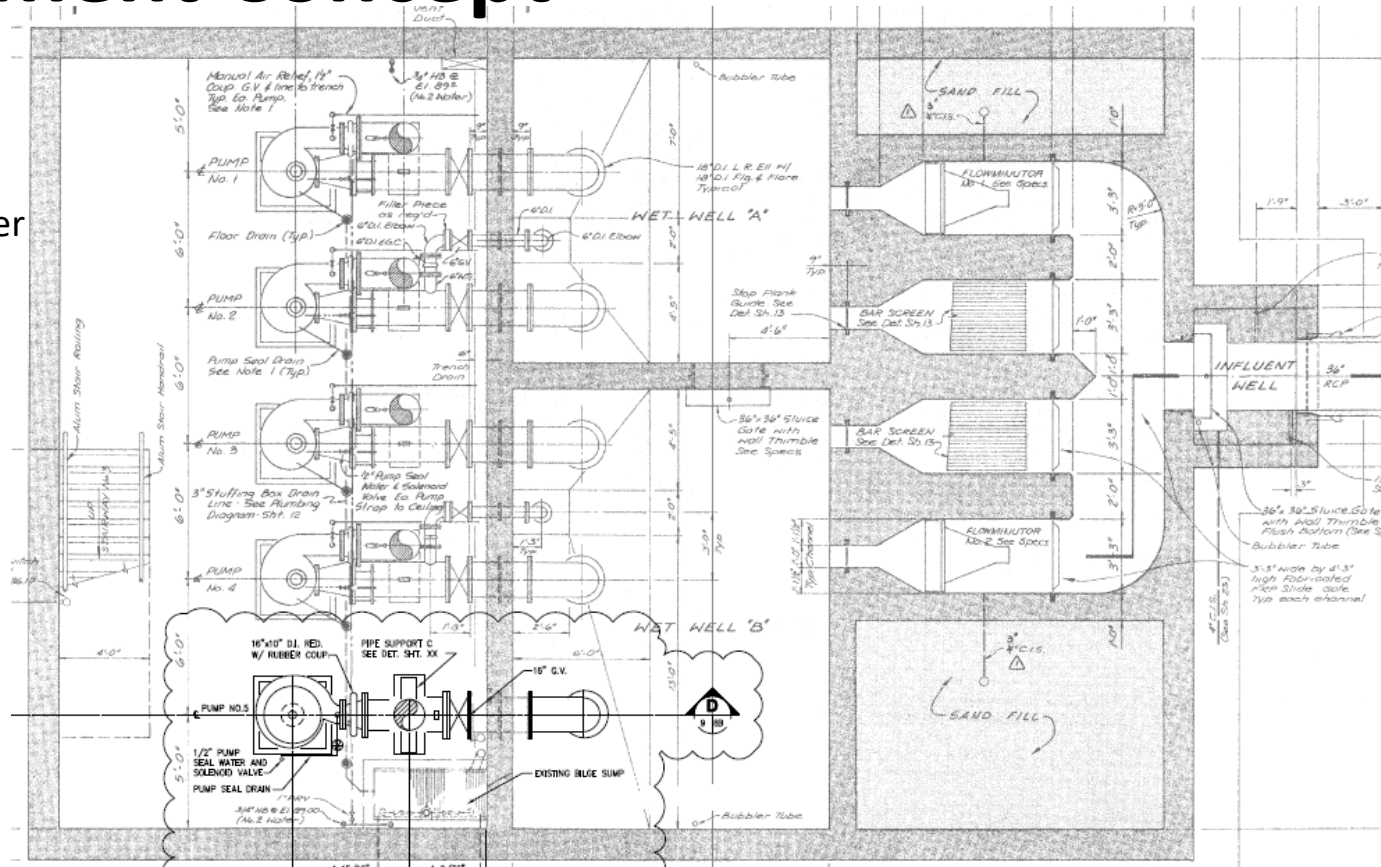
TruView 3D Laser Scanning Web Portal - Select the floor link below to enter the TruView Scenes



MPPS Motor Room

MPPS Improvement Concept

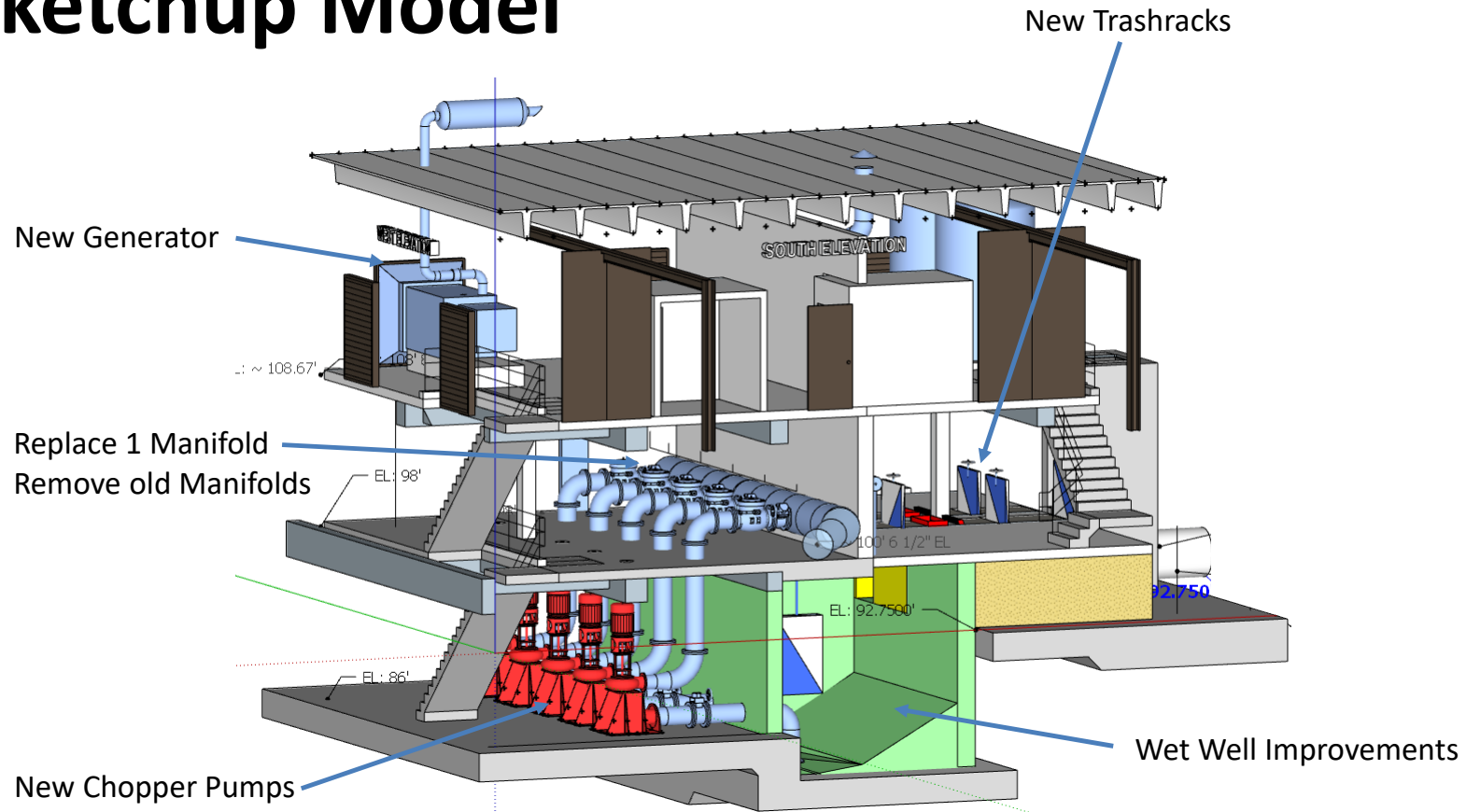
- Modify inlet channels / wet wells
- Install removable trashracks
- Add odor control
- *Replace 5 -85 HP pumps with chopper dry pit pumps
- Replace piping in pump station
- Remove dual manifolds
- New flow meter
- New sampling ports and sampler
- New seismic upgrades to building
- Civil site improvements / flood protection
- New electrical, including standby generator
- New Instrumentation and Controls
- New CARVs located along Force Main



MPPS Record Drawings

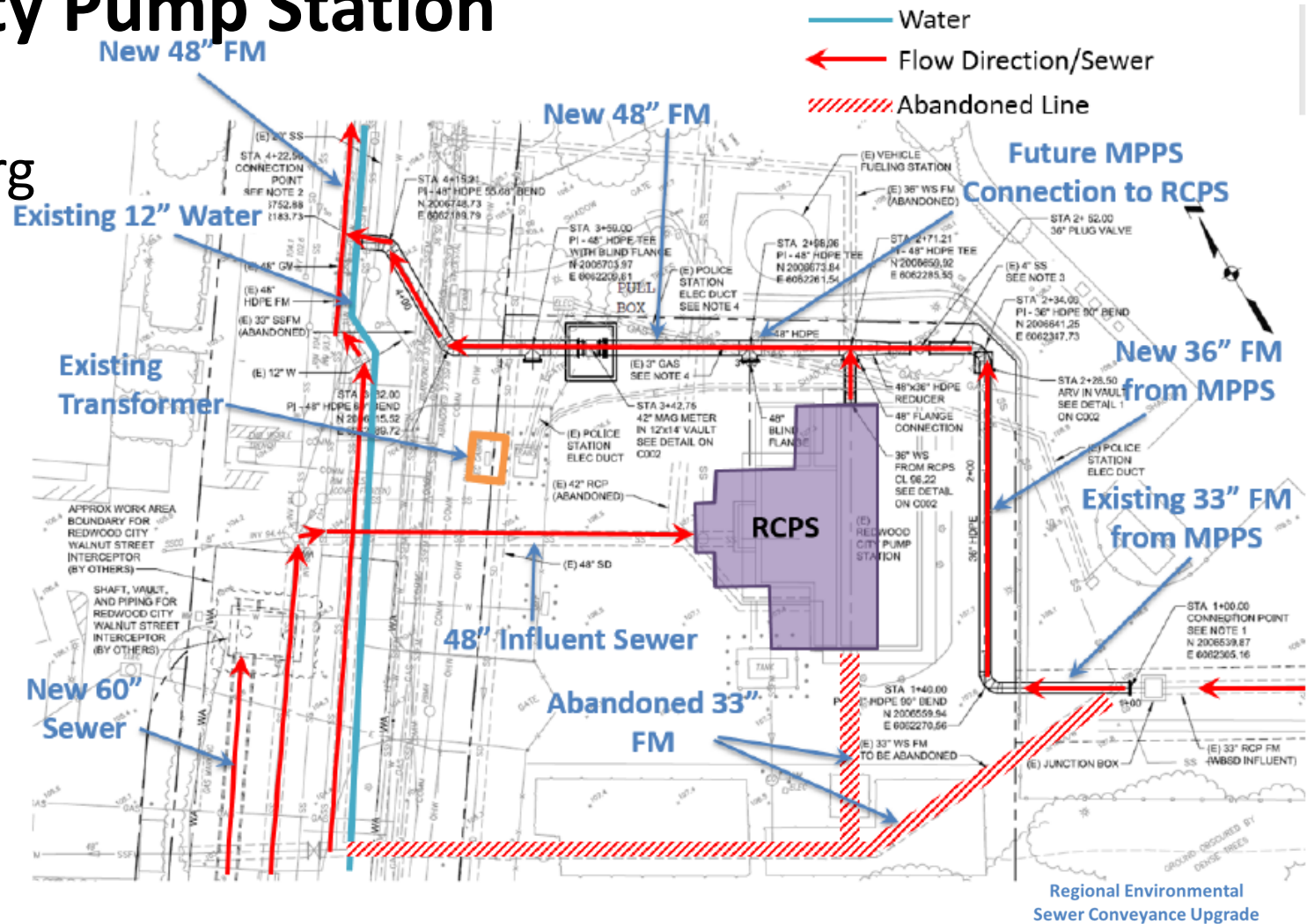
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MPPS Sketchup Model



Redwood City Pump Station

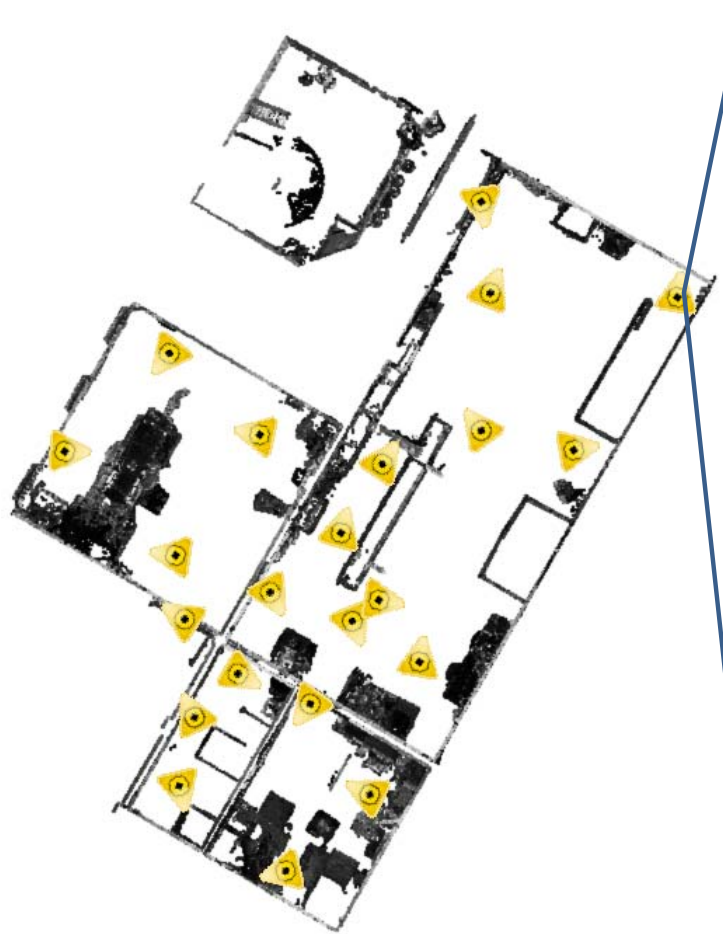
- PPR– SVCW.org



RCPS - Site

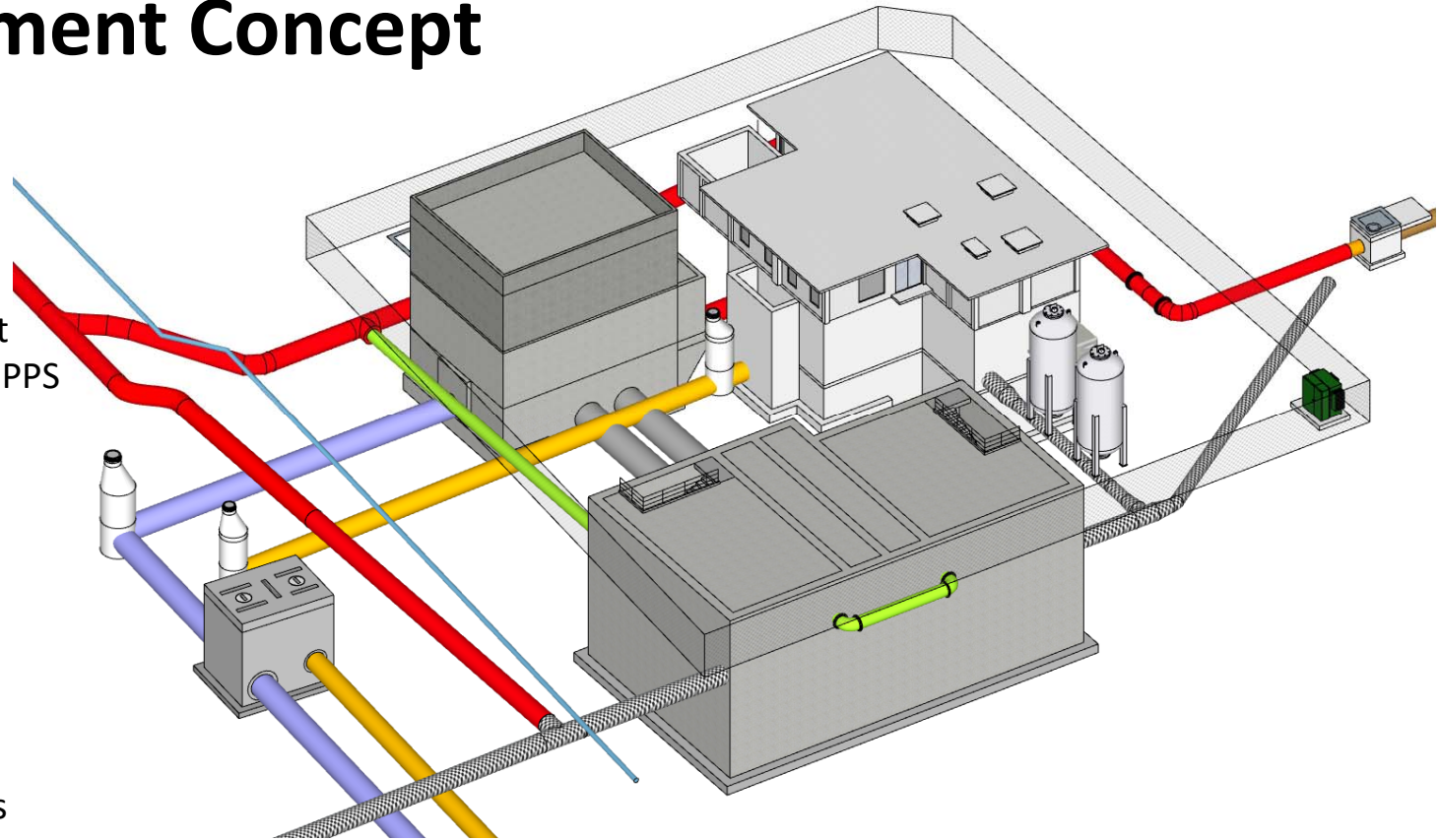


RCPS Data – Lidar of Pump, Motor, Electrical Rooms



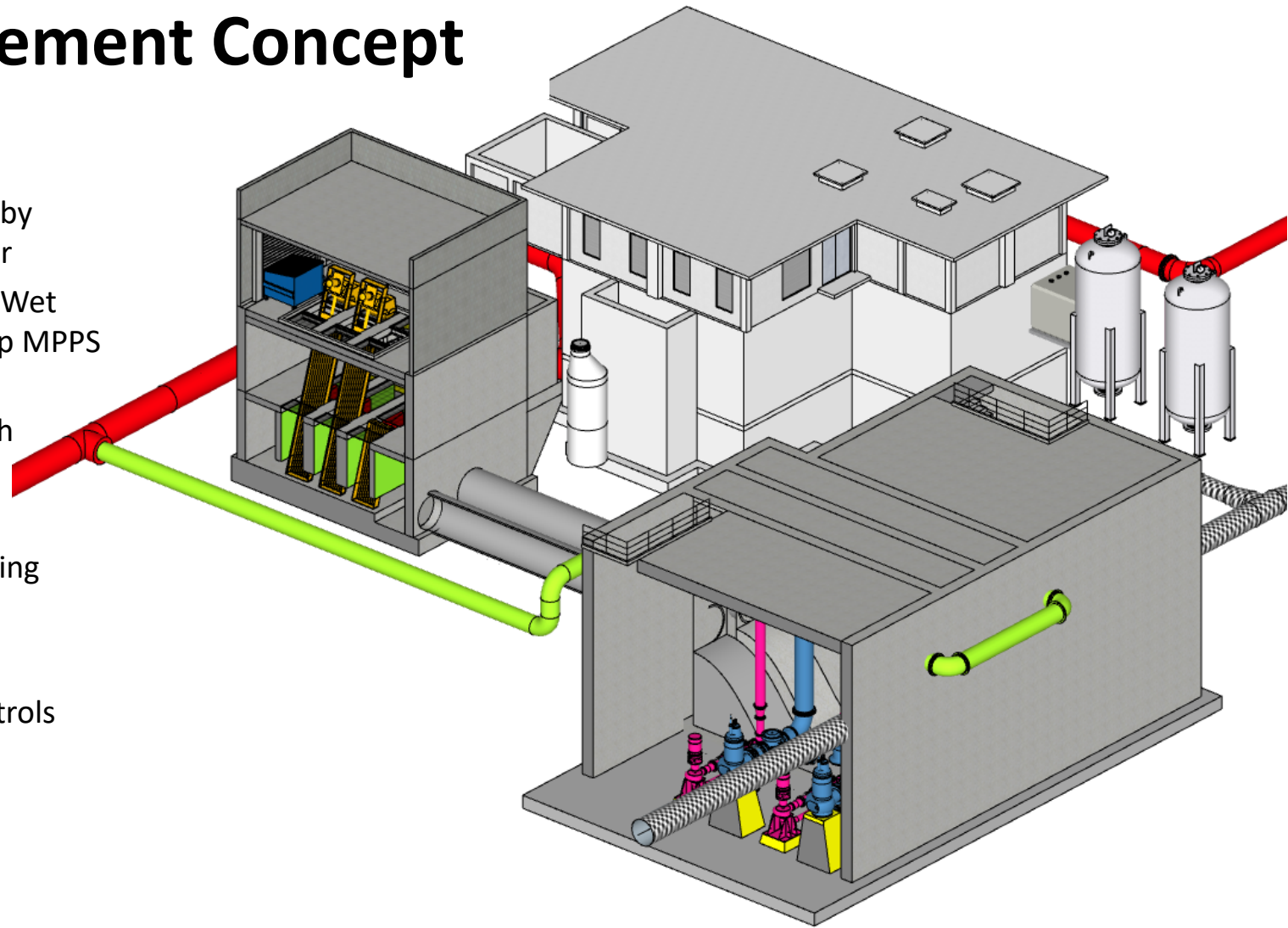
RCPS Improvement Concept

- Connect to 60-inch Sewer
- *New Screens
- New electrical, including standby generator, relocate transformer
- *4 - 50 HP Dry and 4 - 400 HP Wet Weather pumps - Double pump MPPS wet weather flow
- *Dual trench style wetwell with dry pit submersibles
- New flow meter and sampler
- New seismic upgrades to building
- New Odor Control
- New Surge Control
- New Instrumentation and Controls
- Civil site improvements / flood protection



RCPS Improvement Concept

- Connect to 60-inch Sewer
- *New Screens
- New electrical, including standby generator, relocate transformer
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- *Dual trench style wetwell with dry pit submersibles
- New flow meter and sampler
- New seismic upgrades to building
- New Odor Control
- New Surge Control
- New Instrumentation and Controls
- Civil site improvements / flood protection



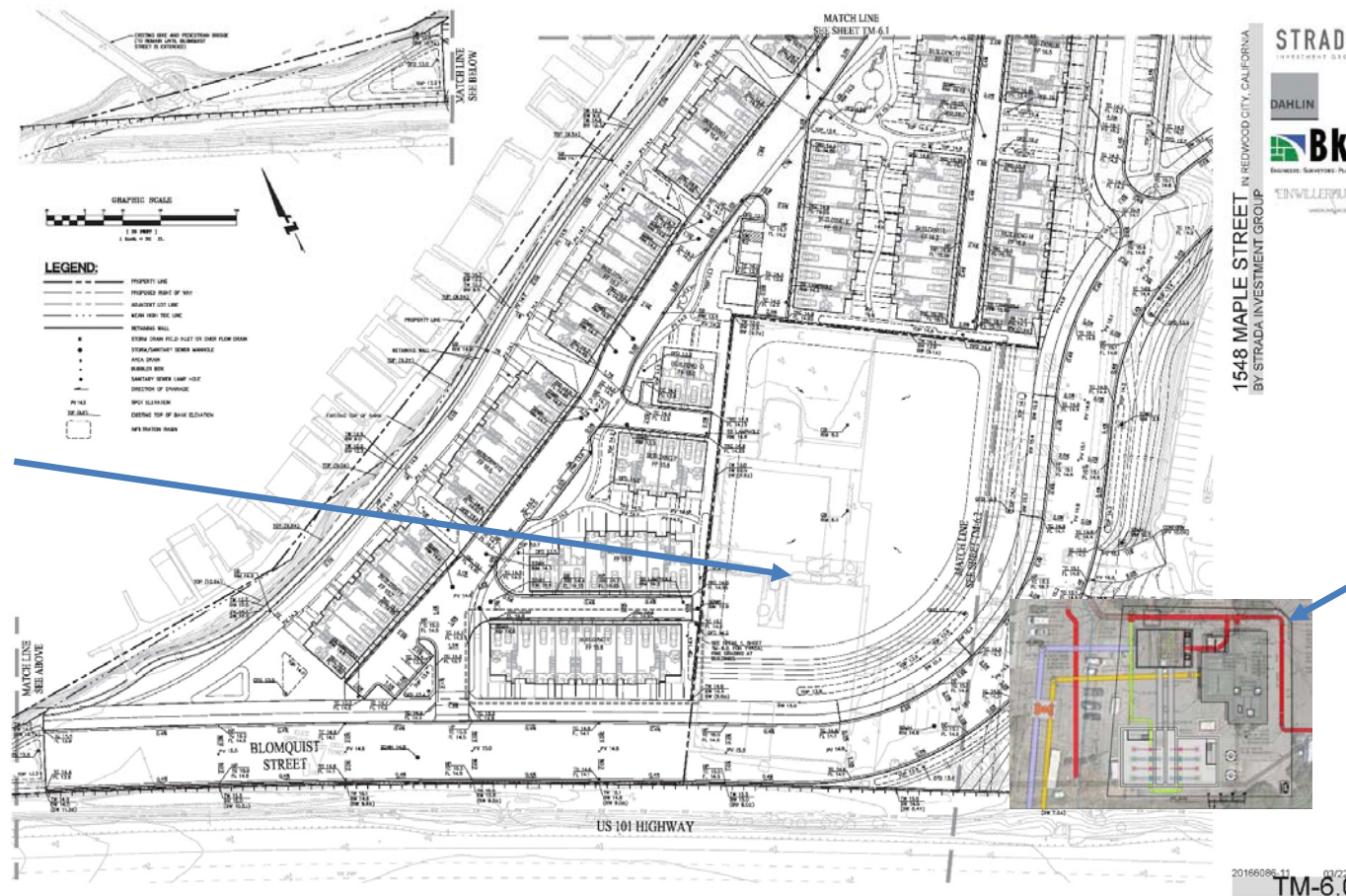
RCPS – Local Project(s) Coordination

San Mateo
Correctional
Facility and
Homeless
Shelter

RCPS



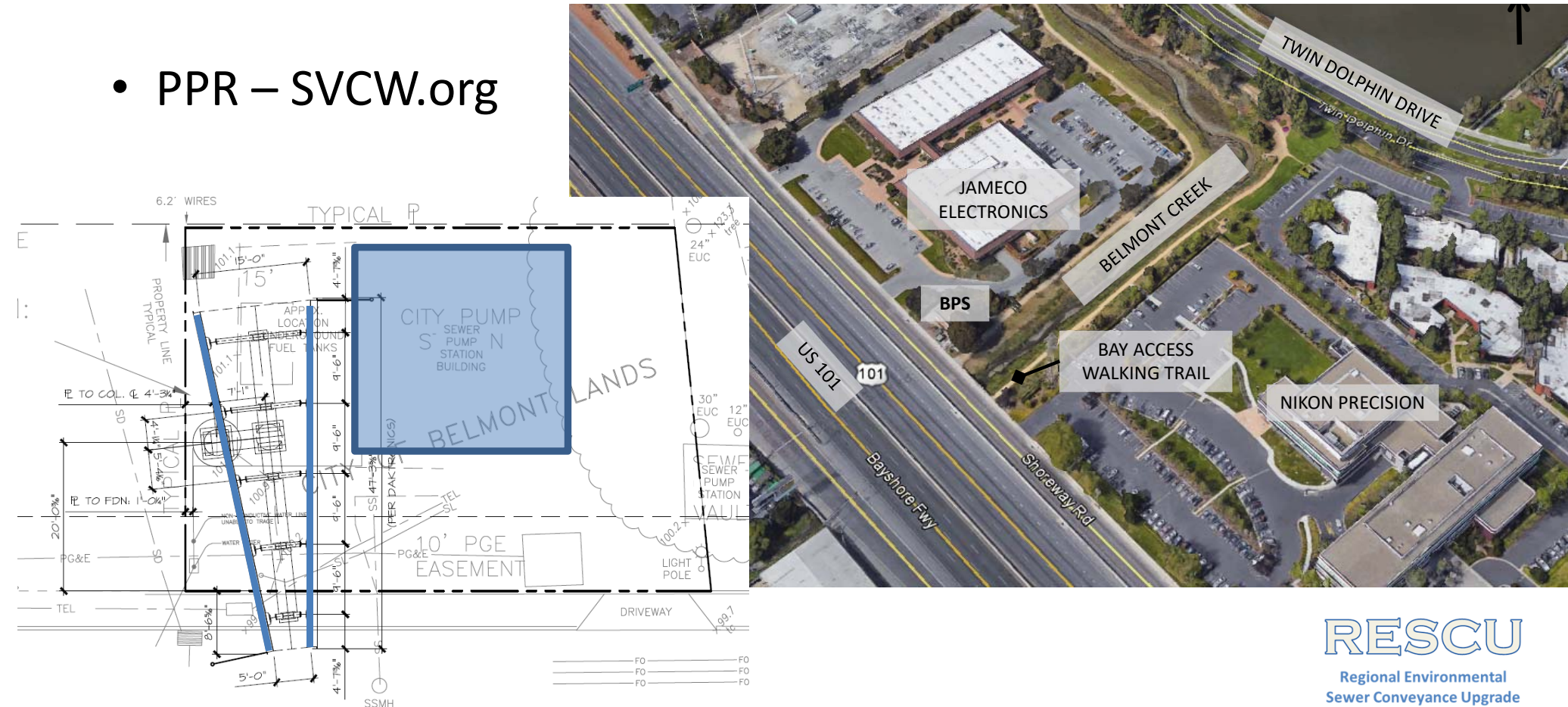
March 2018.



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Belmont Pump Station - Site

- PPR – SVCW.org

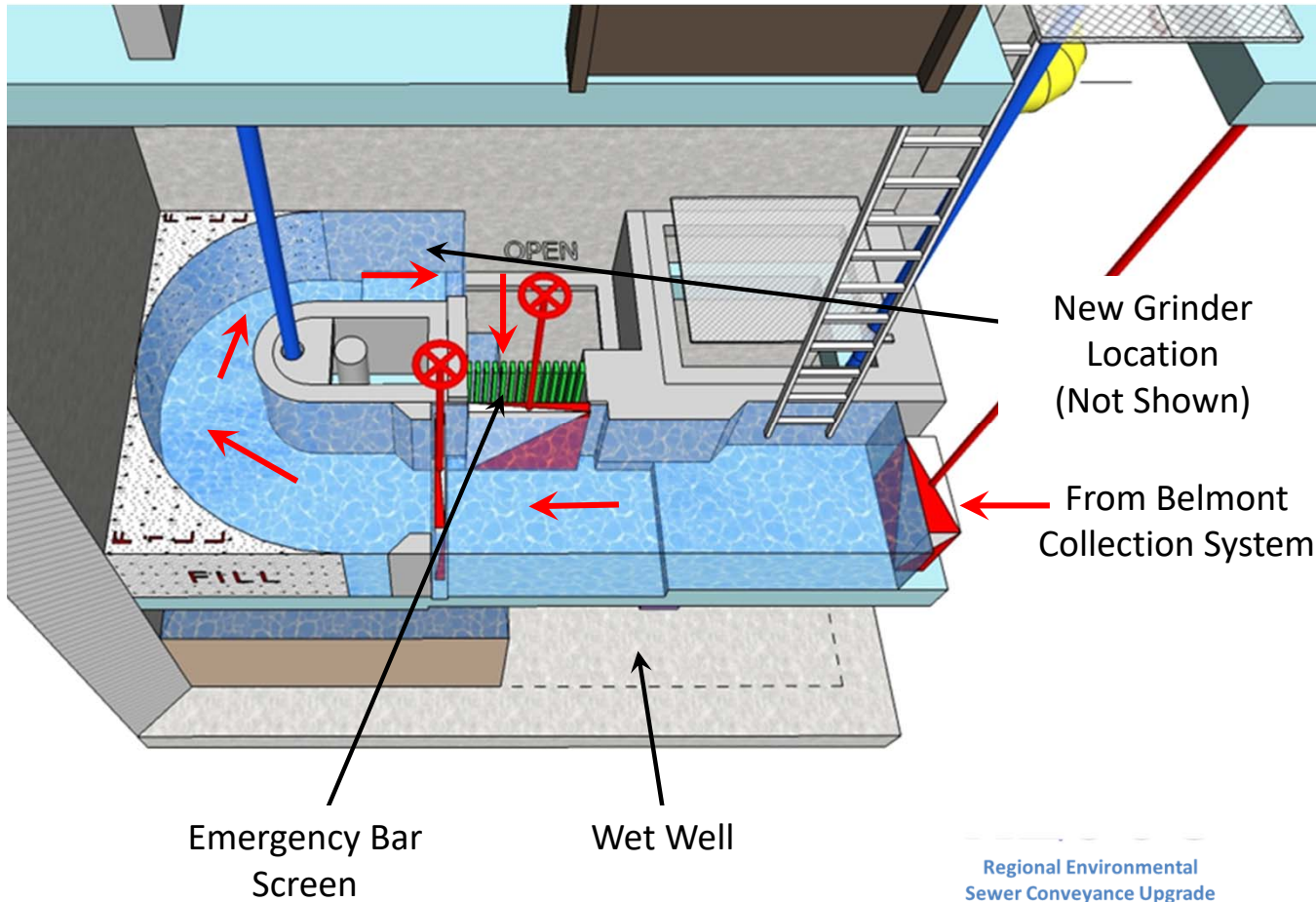




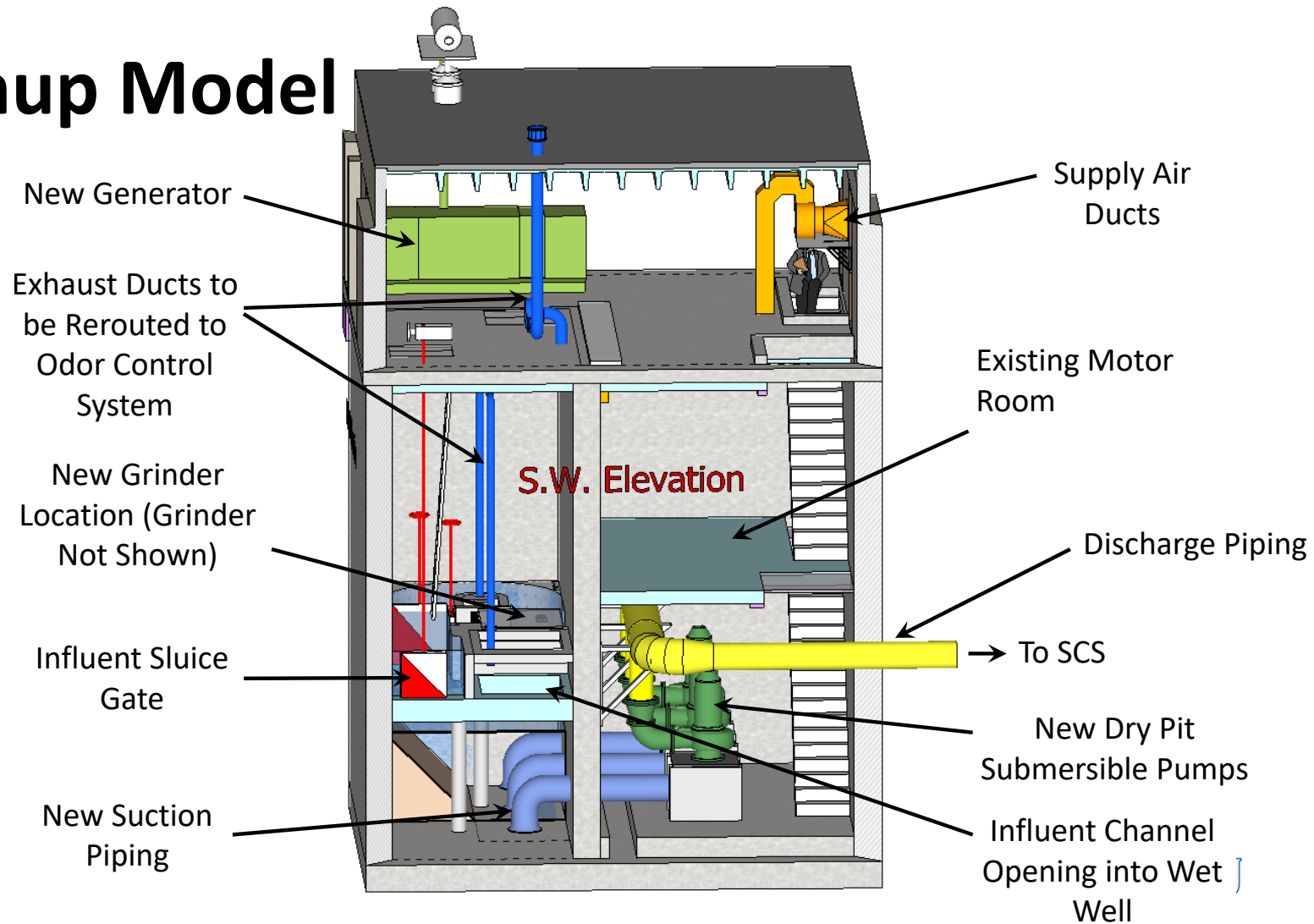
BPS Street View

BPS – Improvement Concept

- 3 new dry pit submersibles -75 HP
- New grinder
- New odor control
- Relocate flow meter and sampler to San Carlos PS site
 - Part of GP Project
- New generator



BPS Sketchup Model



Belmont Force Main



- 1,150 ft of 24-inch FM – CIPP Rehabilitation
- 3,550 ft of 54-inch FM – HDPE Slipline Rehabilitation

LEGEND	
	EXISTING SAN CARLOS 36-INCH SEWER
	SLIPLINE 54-INCH FM
	CIPP 24-INCH FM
	EXISTING 54-INCH FM- TO BE ABANDONED



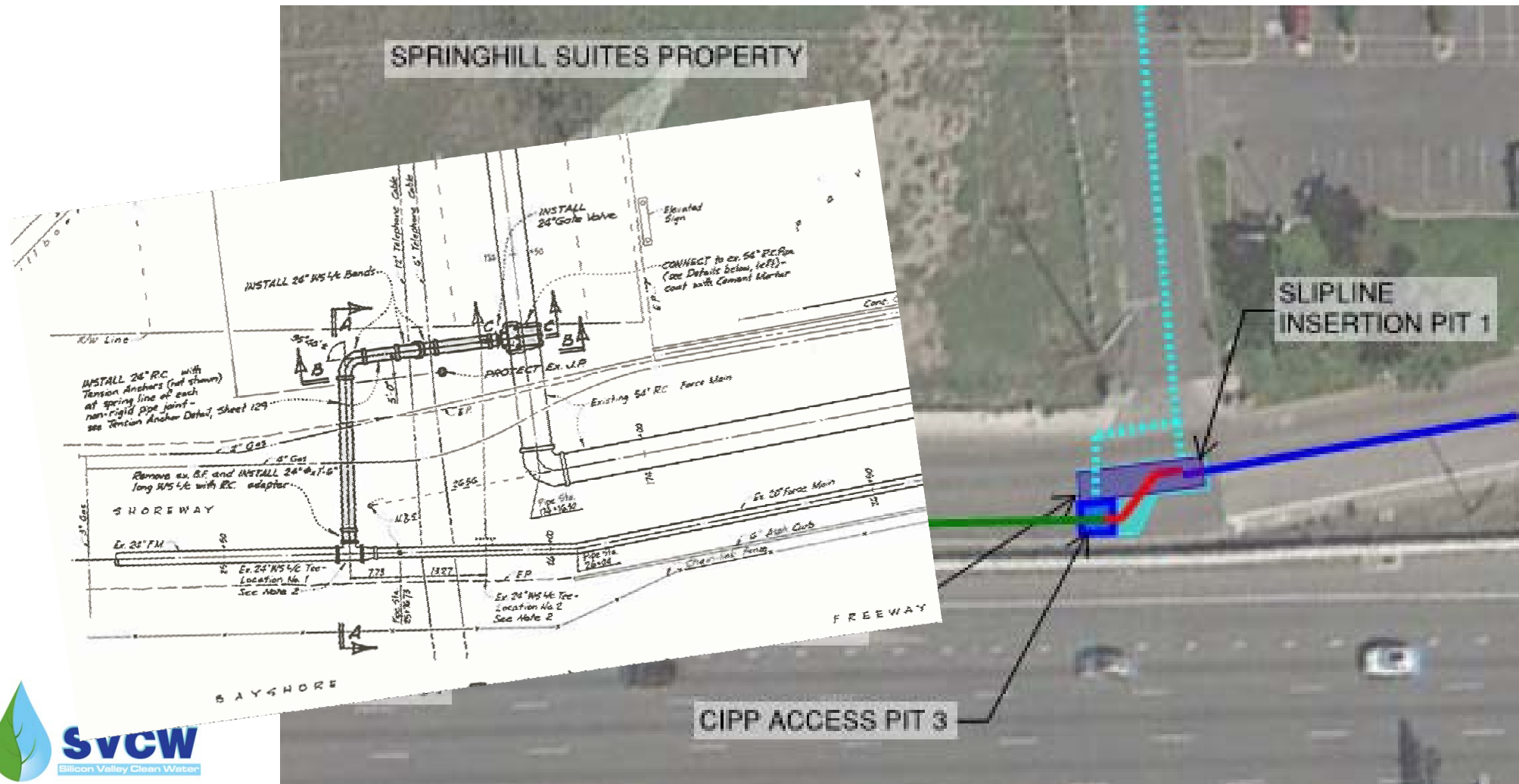
- Belmont PPR-SVCW.org

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CIPP Access at BPS



Belmont Tee Connection



Holly and US-101 Access Pit



PSI Facilities

	<i>Pumps / Hydraulics</i>	<i>Odor Control</i>	<i>Electrical</i>	<i>Instrumentation</i>	<i>Seismic</i>	<i>Site Civil</i>
<ul style="list-style-type: none"> Menlo Park Pump Station (MPPS) <ul style="list-style-type: none"> – Dry Pit - Chopper pumps 	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> Redwood City Pump Station (RCPS) <ul style="list-style-type: none"> – Screens – Wet well/dry pit submersible 	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> Belmont Pump Station (BPS) <ul style="list-style-type: none"> – Dry pit submersible 	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> Belmont Force Main (BFM) 	✓					

Current Project Concept

- SVCW will share the studies and alternatives developed to-date including summary planning reports and current project concepts
- We expect to work collaboratively with the PDB during Stage 1 to refine these concepts to best meet SVCW objectives and D-B to budget



Focus Areas during early PDB Preconstruction Services (Stage 1)

- PS Configuration(s)
- Hydraulic conditions - Modeling, Surge, Physical Modeling
- Pump and equipment sizing
- Construction timing and sequencing
- Coordination with GP Construction
- Project cost control and schedule

Why Progressive Design Build

- Coordinate and accelerate completion of overall Project relative to DBB delivery
- Promote a cooperative and collaborative relationship between SVCW and the PDB team
- Incorporate ongoing cost modeling and take a “design-to-budget” approach
- Flexibility for phased design and construction
- Early and ongoing staff involvement and training



Funding

- SVCW has bonding capacity to obtain bonds for entire program
- SVCW is pursuing less expensive funding
 - SRF
 - WIFIA



RFQ/RFP Process

- Step 1:
 - RFQ issuance,
 - Pre-submittal meeting
 - Reference checking
 - Interviews with selected Respondents,
 - Shortlisting of **up to three** Respondents.
- Step 2:
 - RFP issuance to short-listed Respondents,
 - Confidential Meetings and Site Visits
 - Reference checking
 - Interviews
 - Selection of winning Respondent
 - Negotiation of Progressive Design Build Contract
(Stage 2 pricing via amendment)

Anticipated Procurement Schedule

- Issue RFQ
- Pre-SOQ Presentation Site Visit
- 2nd site Visit
- SOQ Submission
- SOQ Interview and Shortlist
- RFP Issued
- Proposals Due
- PDB Interviews
- PDB Team Selected
- Stage 1 NTP
- Stage 2 Approval

July 16

August 1 - MANDATORY

August 8 - Available to August 1 attendees

August 24

Week of September 24

Week of October 1

December 10

Early January 2019

January 11, 2019

Late February 2019

January 2020

Construction: ~Three years



Stage 1/Stage 2 with Phases

- Stage 1
 - Collaboratively bring the design from a 5% to 10% level to a 60% to 70% level
 - Negotiate Stage 2 Contract Pricing and Schedule
- Stage 2
 - Final design (100%)
 - Construction
 - Testing and Start-up including 3-6 month cooperation of facilities.
- Construction Phases
 - As needed to move project forward

Design Progression during Preconstruction

- Selected PDB Entity is encouraged to propose alternative designs within defined direction
- Selected PDB Entity is encouraged to propose cost savings and optimization improvements
- Selected PDB Entity must develop collaborative relations with SVCW Operations and Maintenance

PDB Roles and Responsibilities-1 of 2

Collaborate, complete, and timely delivery

- Design and Construction Documents
- Hydraulic modeling – analytical and physical
- Augment geotech data and design recommendations
- Supervise Project Team
- Obtain required governmental approvals and permits, unless acquired by SVCW
- Implement practices and activities to address environmental and permitting requirements



PDB Roles and Responsibilities-2 of 2

Collaborate, complete, and timely delivery

- Maintain security of sites
- Coordinate with utility providers
- Provide and implement Safety Plan, SWPPP and other plans as required
- Construct the PSI Project
- Perform system integration, programming, SCADA development using CID
- Conduct startup and commissioning, operational training, and Acceptance Testing
- Implement and maintain all quality management and control requirements, including special inspections
- Allow continued conveyance of wastewater flows at all time



Current PSI Delivery Schedule

	2018	2019	2020	2021	2022	2023	2024
Progressive Design Build Teams							
Procure Progressive Design-Builder	■						
Coordination with GP Team		■	■	■	■		
Gravity Pipeline Accepts Flows					■		
Stage 1 - Design/GMP Negotiation		■					
Stage 2							
Design Finalization			■				
Construction-MPPS and RCPS			■	■	■		
Construction-BPS and FM					■	■	
Extended Testing and Training					■	■	■

Key Parts of the RFQ

- Project or RESCU Success Factors
 - A successful project is a balance of these
- Pump Station Improvement Project Objectives
 - Collaboration and Operations and Maintenance involvement are key
- Availability and use of background information
 - SVCW Website Based
 - Planning reports and the EIR
 - Proposers should not be limited by the concepts shown, unless directed approach identified
- Required elements of SOQ



Required Elements in RFQ

- Team structure
 - (responsible designers and construction principals for the PSI)
- Key personnel and resumes for above
- Experience collaborating with owners
- Experience collaborating with interdependent projects
- Experience collaborating with Operations and Maintenance
- Demonstrated methods of delivered project safety

Pass - fail items- financial, insurance, bonding, etc.



SOQ Evaluation Criteria

- Responsiveness to RFQ - Pass/Fail
- Minimum Qualifications – Pass/Fail
- SOQ Scored Evaluation Criteria 100 points
 - Team Structure and Leadership, Experience Working Together, and D-B Experience 20 points
 - Collaboration with Owners and Owners' O&M 20 points
 - Relevant Design Qualification and Experience 25 points
 - Relevant Construction and Post-Construction Experience 25 points
 - Safety Experience on Similar Projects 10 points
- Reference Checks 50 points
- SOQ Interviews 100 Points



Team Structure and Leadership

- Team Leadership
- Interfacing with other projects
- Team organization and alignment of responsibilities
- Team continuity
- Experience working together
- DB experience
- Design office location and coordination of design team

Attachment B: Design Builder Minimum Qualification Requirements Questionnaire

- 24 Questions
- DB Entity will be disqualified if the answer to any of the following questions is a “No”, except as otherwise stated in the RFQ.



Relevant Construction and Post Construction Experience

- Construction experience on similar projects
- Installation of electrical systems in highly corrosive environments
- Experience with tight working pump stations
- Experience with Bay Mud materials
- Coordination of construction with other inter-facing projects
- Integration of designers in construction
- Bypass planning and installation
- BIM during design and construction
- Environmental monitoring
- Startup, testing, and commissioning
- Acceptance testing



Safety Experience on Similar Projects

- Most recent 3 years of Workers' Compensation EMR and/or Experience Modification Factor and/or Severity DART rates
- 3 years history of items requested in the RFQ regarding safety, illnesses, citations, and worker's compensation experience
- Safety record on similar projects
- Overview of safety program
- Provide support documentation as an Appendix of the SOQ

Reference Checking

- Reference projects – CONFIRM the contact information
- At least 5 and no more than 10 projects
- Follow the guidelines for types of projects to represent in your references

SOQ - Interviews

- Purpose: Meet teams and further assess qualifications
- Highest ranking SOQs will be invited to an SOQ interview (based on scoring)
- RFQ Interview will include:
 - Presentation
 - Q&A on SOQ and follow up
 - Live Scenario Exercise
- Uses same scoring system as SOQ evaluations

Comments on Draft Term Sheet

- Draft Term Sheet and Responsibility Matrix comments considered in preparing contract in RFP
- Comments welcome now and up to SOQ Submittal

SOQ Confidentiality

- All SOQs will be kept confidential until recommendation for award of a contract is announced
- Financial statements will remain confidential

Available at eBidboard

- Addendum posted to eBidboard
- Registration on eBidboard required to obtain addenda
- Addenda notifications sent to those registered on eBidboard



PSI RFQ is the formal procurement document for the project

- This presentation is not part of the RFQ
- The RFQ (and any Addenda) take precedence over any differences between any presentations and the RFQ.

Project Cost and Schedule

- Reduce PSI cost
- Accelerate PSI schedule
 - Connect MPPS and RCPS when GP takes flow
 - Connect BPS and BFM within a year after existing FM available for rehabilitation
- Achieve 50 year service life
- Achieve diurnal and wet weather flows
 - Existing
 - 2040

Available at SVCW.ORG

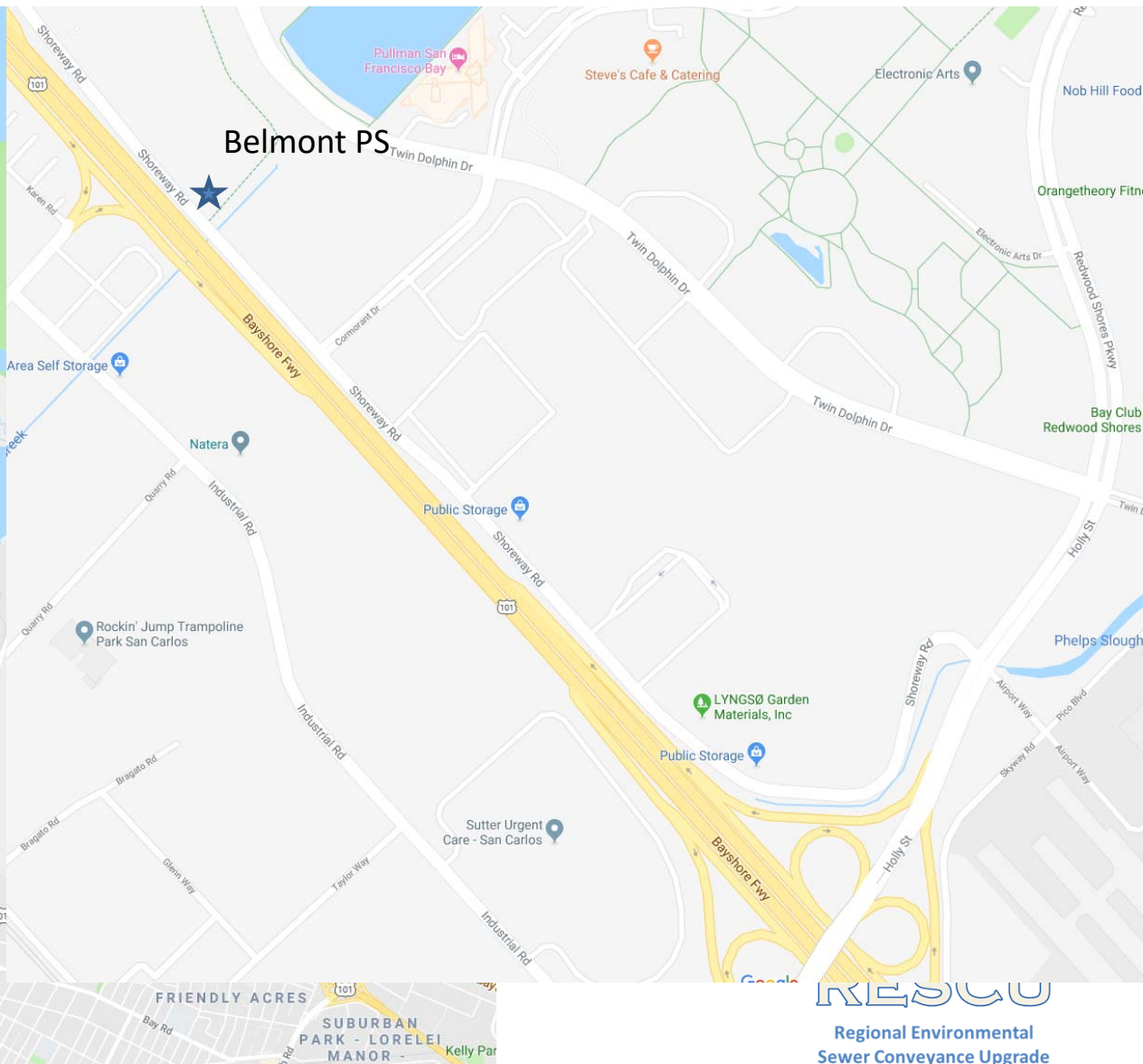
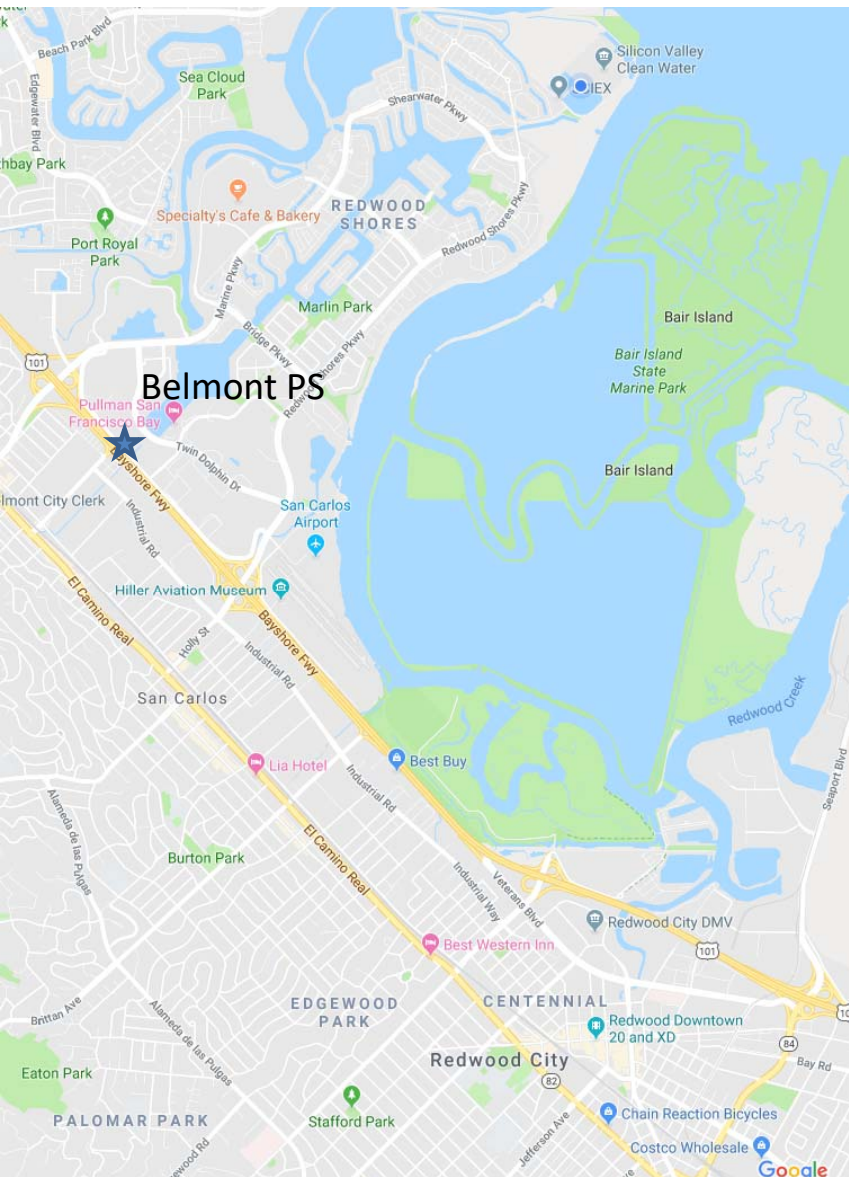
- Now
 - RFQ and Addendums also on eBidboard.com – Pump Station Improvements Project
 - Final Adopted EIR
 - Notice to Prospective Designers and Contractors
 - Pre-RFQ Presentation and Sign-in list
 - List of Ineligible Firms
 - Project Planning Reports
 - Geotechnical Data
 - Includes detailed cost estimates; capital and life cycle
 - Details outstanding issues at time of PPR
- During SOQ preparation
 - Current concept updates to PPRs
 - Pre SOQ presentation and Pump Station site visit maps

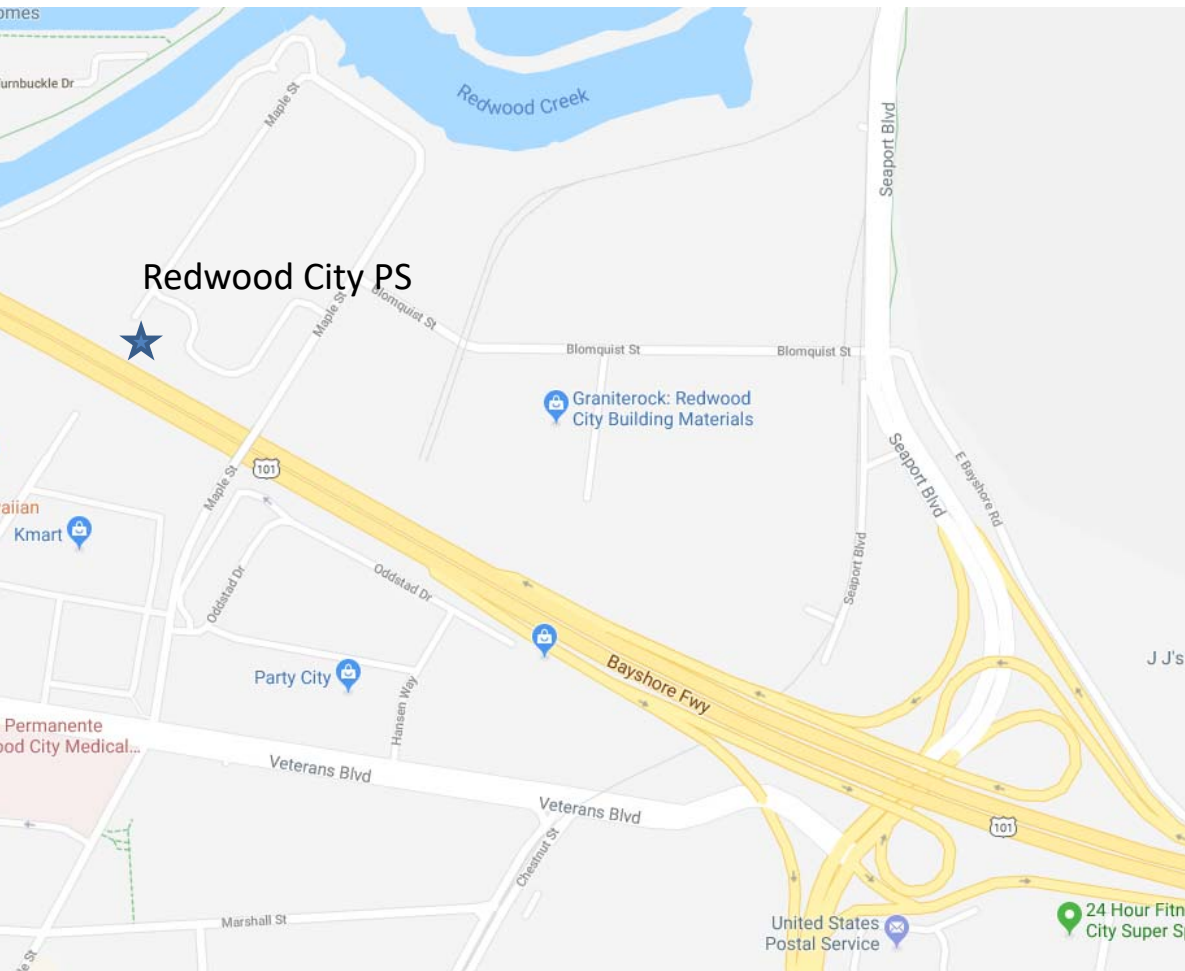


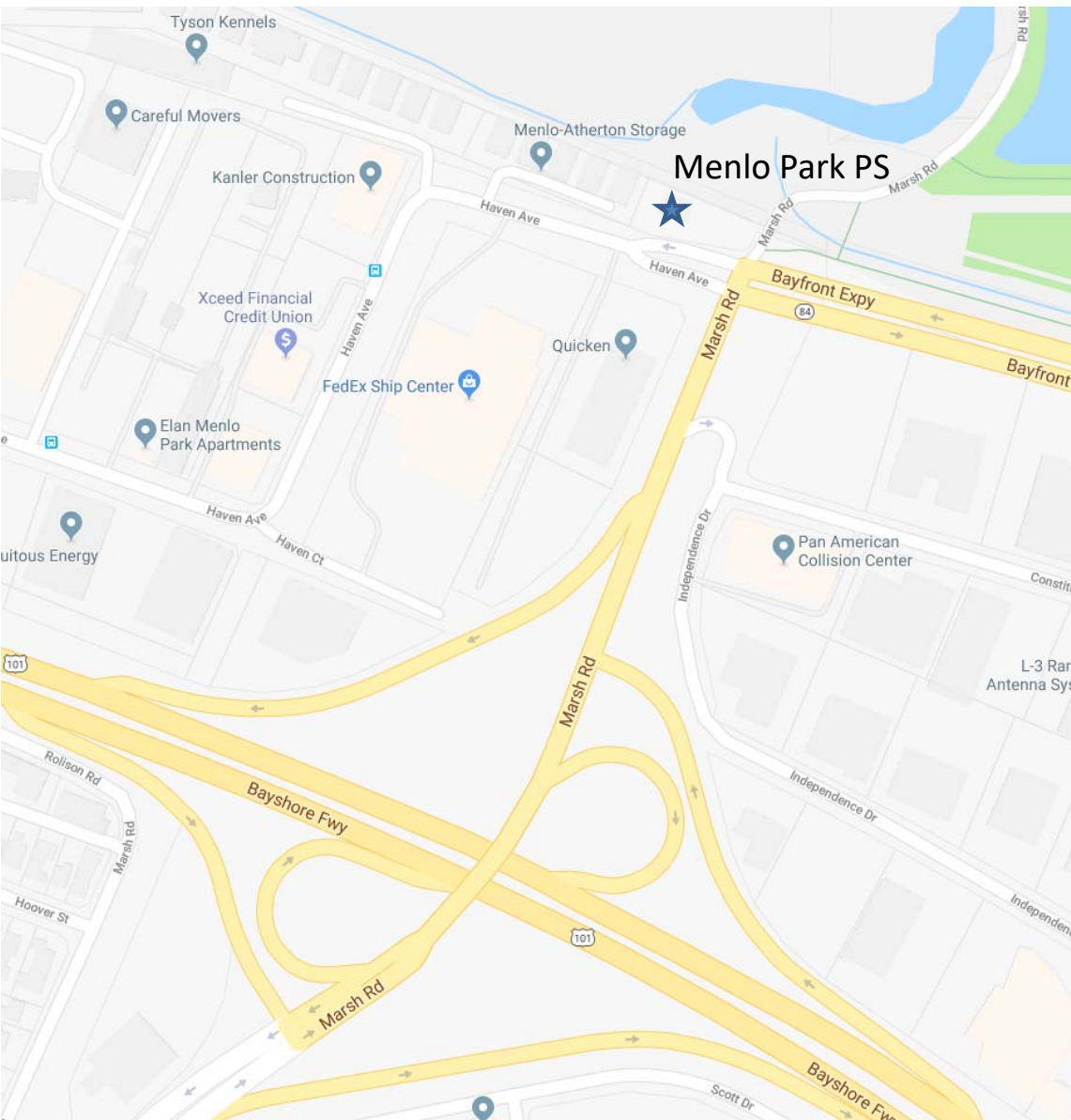
Pump Station Site Visits – Today and August 8

- Today
 - **Sign up for a rotation** – Limited space, access, and parking
 - Available for **~3 hours today** after the meeting – Spread out
 - These are working Pump Stations – **Be SAFE!**
- August 8 – Added Site Visit for today's attendees (by firm) only
 - **1 hour each Pump Station site**
 - 9:00 a.m. MPPS
 - 10:00 a.m. RCPS
 - 11:00 a.m. Belmont PS
- Questions at the site – Submit in writing per RFQ
- PS location map - see handout









More questions?

Pumpstations@svcw.org

Thank you for your interest!



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