



The meeting teleconference will begin shortly

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or by calling **(888) 788-0099** using meeting ID **753 841 573**

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Public comments, suggestions or questions regarding technical issues may be
emailed to comments@sbumwd.com



Please use the chat feature in the Zoom toolbar to let the moderator know that you would like to make a comment during the meeting.



Your microphone will be muted during the meeting to reduce background noise. Click on the microphone icon to unmute your microphone if needed.



Call to Order

Board of Directors Workshop - Engineering
Tuesday, May 12, 2020

Chairperson – Director Kielhold
Vice-Chair – Director Hayes



Introductions

Following the introduction of Directors and District staff, participants may use this time to state their name and agency/affiliation in order to be included in the formal record of attendees.

Public Comment

Any person may address the Board on matters within its jurisdiction.

- *Please use the chat feature on the Zoom toolbar or digitally raise your hand to let the moderator know you would like to make a comment.*



Summary of Previous Meeting (Pg. 3)

Board of Directors Workshop – Engineering
April 14, 2020

Discussion Item 4.1 (Pg. 5)

Aaron Jones, Associate Engineer

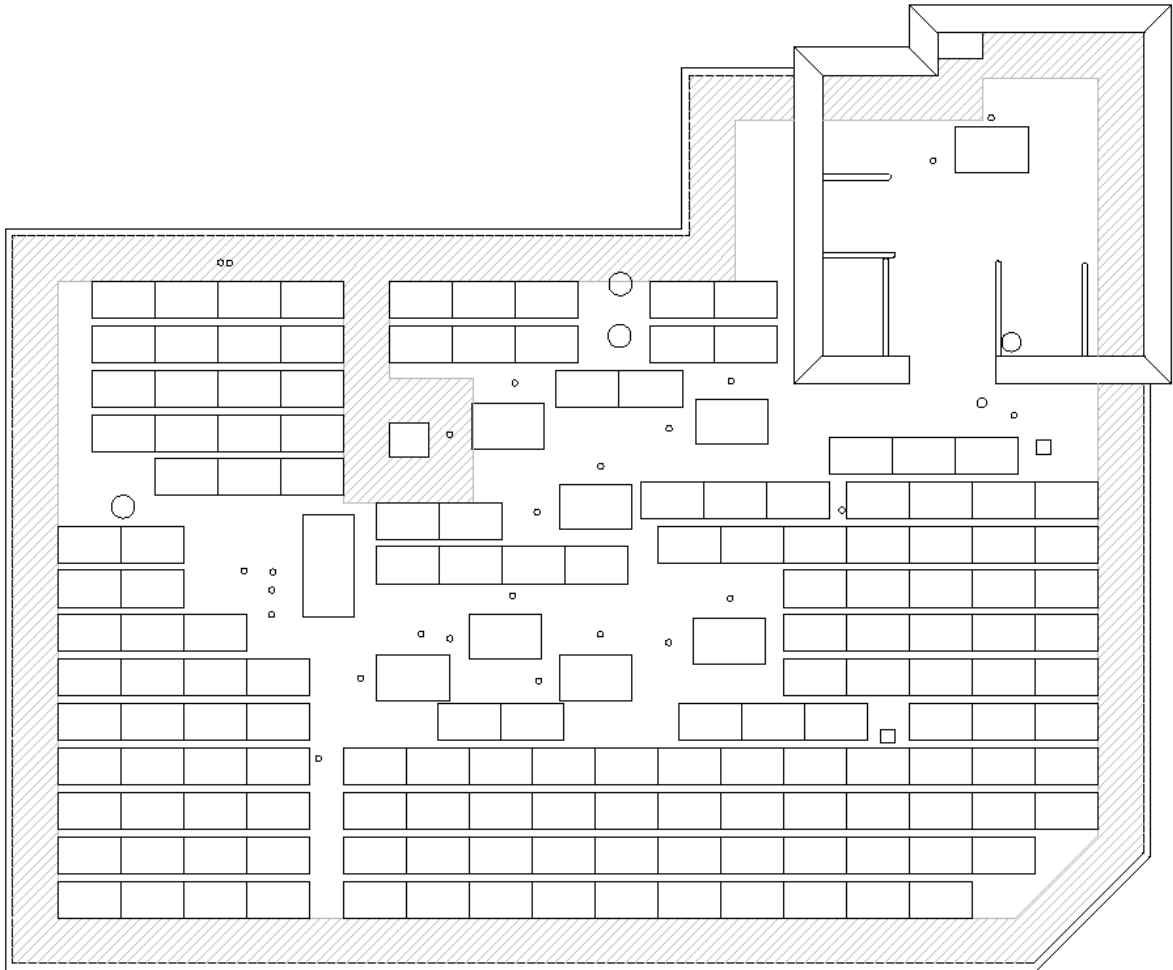
Consider Engineering Design Services for Solar Panels on Valley District's Administration Building

Staff Recommendation

Direct staff to forward a contract for design of Solar Panels on the Administration Building with Vision Civil Engineering with the associated fees of \$7,800 to an upcoming Board of Directors meeting.



Proposed Roof Layout – 153 Panels, 60-cell type modules
Capacity: 48kW (peak)
Total Annual Production: 80,500 kWh



153 LONGI LR6-60HBD

Bill Components



- Customer Charge
- TOU Meter Charge
- Demand Charges
- Delivery Service
- Energy

Key Information:

- Estimated payback period for 48 kW Solar System: 8.5-13 years
- Anticipated life span of equipment: 20-25 years
- Estimated installation costs: \$130,000-\$150,000

Next steps if the Board would like to proceed:

- Hire Vision Civil Engineering to complete solar system design and specifications (design costs: \$7,800)
- Once plans are complete, Staff will bid project.
- Once bids are received, Staff will propose a contract for installation at a future meeting for the Boards consideration.

Director Comments and Discussion



**T. Milford
Harrison**
President



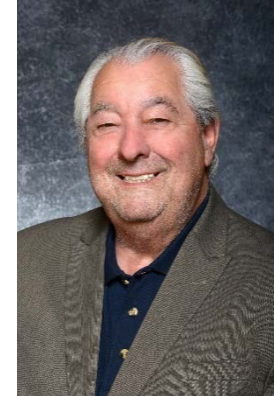
**Paul
Kielhold**
Vice President



**Susan
Longville**
Treasurer



**June
Hayes**
Director



**Gil
Navarro**
Director

Staff Recommendation

Receive Direct staff to forward a contract for design of Solar Panels on the Administration Building with Vision Civil Engineering with the associated fees of \$7,800 to an upcoming Board of Directors meeting.

Discussion Item 4.2 (Pg. 12)

Wen Huang, Chief Engineer

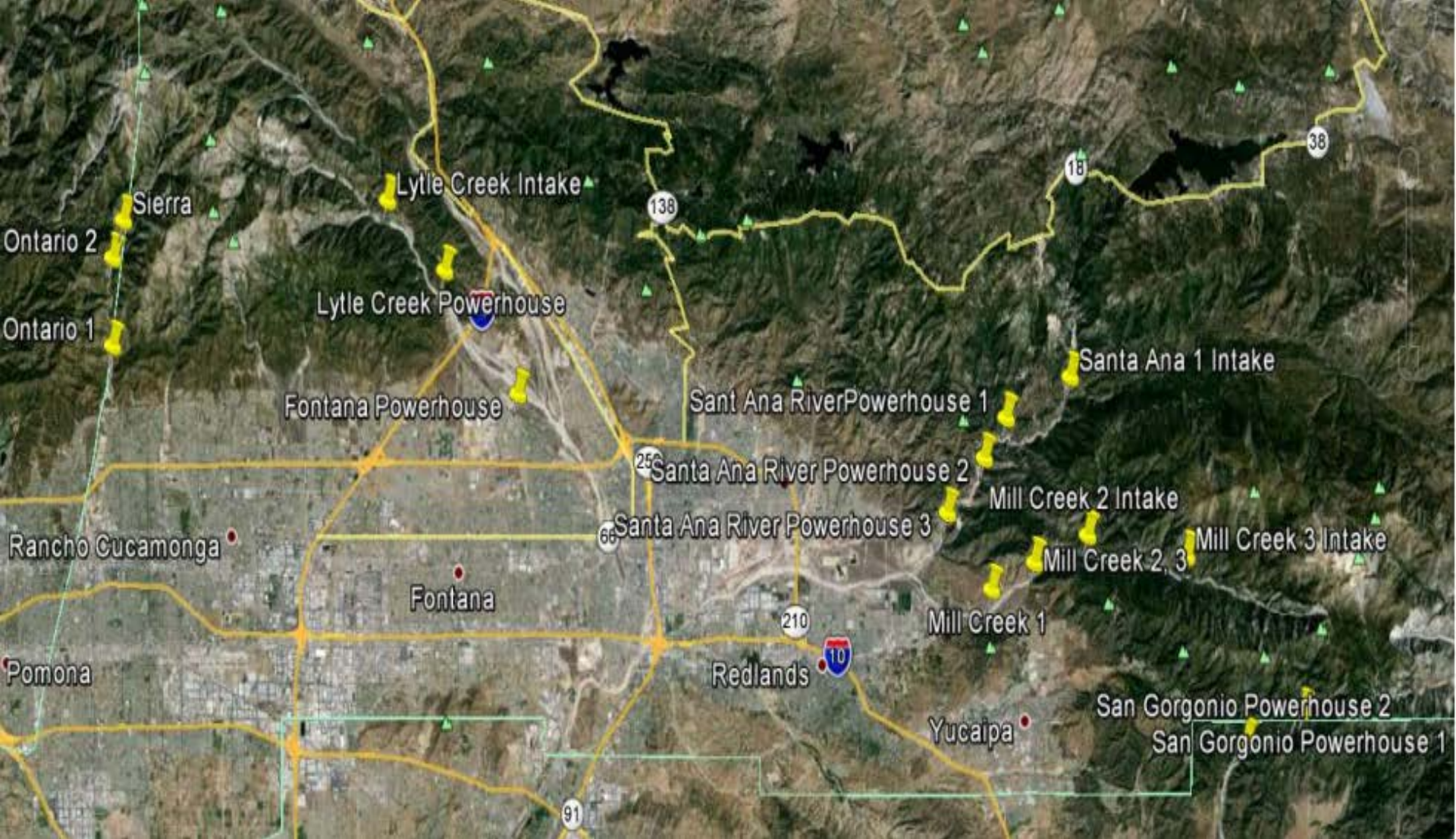
Consider Evaluation of Options for Small Hydropower Plant Divesture by Southern California Edison

Staff Recommendation

Staff recommends that the Board of Directors direct staff to continue and complete the evaluation and bring recommendations back to the Board of Directors for consideration in future workshops.

Background

- Local Water Users were working collaboratively with SCE to minimize downtimes of their hydroelectric generation plants (hydroplants) to increase water supply reliability and improve water quality;
- Local Water Users learned that SCE's is planning to divest certain small hydropower projects;
- SCE's planned "East-End" divestiture may include one or more hydroplants in Santa Ana River, Mill Creek, Lytle Creek, and San Antonio Creek; and
- Local Water Users may have the First Right of Refusal on taking over the hydroplants through historical arrangements and water rights.



SCE East End Hydropower Plants

Potential Benefits

- “Control our own destiny” in regard to upstream water management on SAR, Mill Creek, Lytle Creek, etc.
- Make improvements to the hydro facilities to increase water supply reliability and water quality for local users
- May help Valley District streamline the Santa Ana Sucker Translocation Project (which is mitigation for other water projects)
- Lower Cost renewable energy generation



Proposed Water Users Consortium

- **Interested Parties:** San Bernardino Valley Municipal Water District, San Bernardino Valley Water Conservation District, Bear Valley Mutual Water Company, Crafton Water Company, City of Redlands, Yucaipa Valley Water District, East Valley Water District.
- **Pending:** Fontana Water Company (and potentially West Valley Water District and City of Rialto) and San Antonio Water Company

Strategies

- Present a unified front, consortium engaging with a single voice
- Detailed review of all historical documents showing either “blockers” or “preference”
- Engage in bi-lateral negotiations
 - Demonstrate local and technical expertise and strong financial backing
 - Push for exclusivity and a short diligence period
 - Detailed site assessments are absolutes
- Gain support internally and from local stakeholders & representatives
- Detail regulatory approval process
 - Water rights, CPUC, FERC, Interconnection, PPA

Phased-Development Plan

Near-term (<1-2 years)

- Phase I (May - Jul) - Water Users Consortium formation, strategy development, understand legal position, facilities due diligence
- Phase II (Jul - TBD) – SCE bilateral negotiations/response to public bid
- Phase III (TBD) – Bid Preparation and Site Assessments
- Phase IV (TBD) – Final Sale and Transfer

Long-term (2-4 years)

- Phase V (TBD) - Repair, Rehabilitation, Retrofit activities
- Phase VI (TBD) - Project Startup and Commissioning

Next Steps

- Review of Documents
 - Technical Review - NLine Energy (if concept approved, Proposal to be considered ASAP)
 - Legal Position Review – Downey Brand
 - Cost-sharing framework
- Formalize a Consortium and consider governance structure
- Declare interest in the facilities
- Request bi-lateral, exclusive engagement
- “Time is of the essence”

Director Comments and Discussion



**T. Milford
Harrison**
President



**Paul
Kielhold**
Vice President



**Susan
Longville**
Treasurer



**June
Hayes**
Director



**Gil
Navarro**
Director

Staff Recommendation

Staff recommends that the Board of Directors direct staff to continue and complete the evaluation and bring recommendations back to the Board of Directors for consideration in future workshops.

Discussion Item 4.3 (Pg. 20)

Brent Adair, Project Manager

Update on the Citrus Reservoir Floating Cover System Project

Staff Recommendation

Receive and file.

Background

- On November 6, 2018, the Board of Directors authorized procurement of the Rhombo Hexoshield floating cover system. Since then, over 3.7 million balls out of a total of 7.5 million balls have been deployed in the reservoir.
- On December 17, 2019, the Board of Directors approved a budget of \$295,000 for the 2020 Annual Facility Maintenance and Repair Program, of which \$280,000 was budgeted for implementation of corrective measures for the floating cover system at the Citrus Reservoir.
- On March 12, 2020, staff provided an update on the initial draining of the Citrus Reservoir and installation of the floating debris boom and net system.

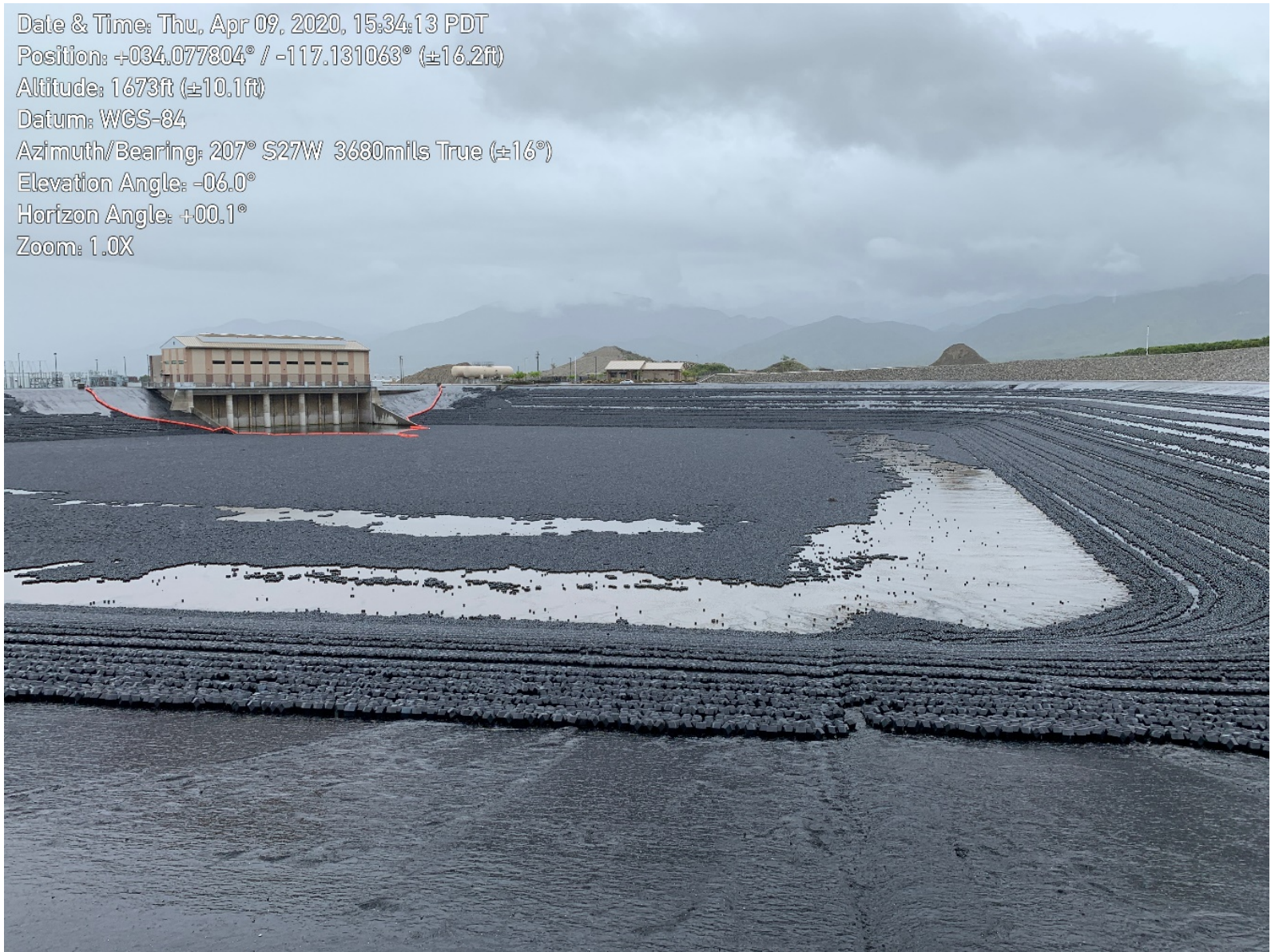
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Altitude: 1656ft (± 20.7 ft)
Datum: WGS-84
Azimuth/Bearing: 241° S61W 4284mils True ($\pm 14^\circ$)
Elevation Angle: +04.2°
Horizon Angle: +00.4°
Zoom: 1.0X



Date & Time: Wed, Apr 01, 2020, 09:30:47 PDT
Position: +034.080086° / -117.132528° ($\pm 15.9\text{ft}$)
Altitude: 1653ft ($\pm 10.6\text{ft}$)
Datum: WGS-84
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Elevation Angle: -06.1°
Horizon Angle: $+00.4^\circ$
Zoom: 1.0X

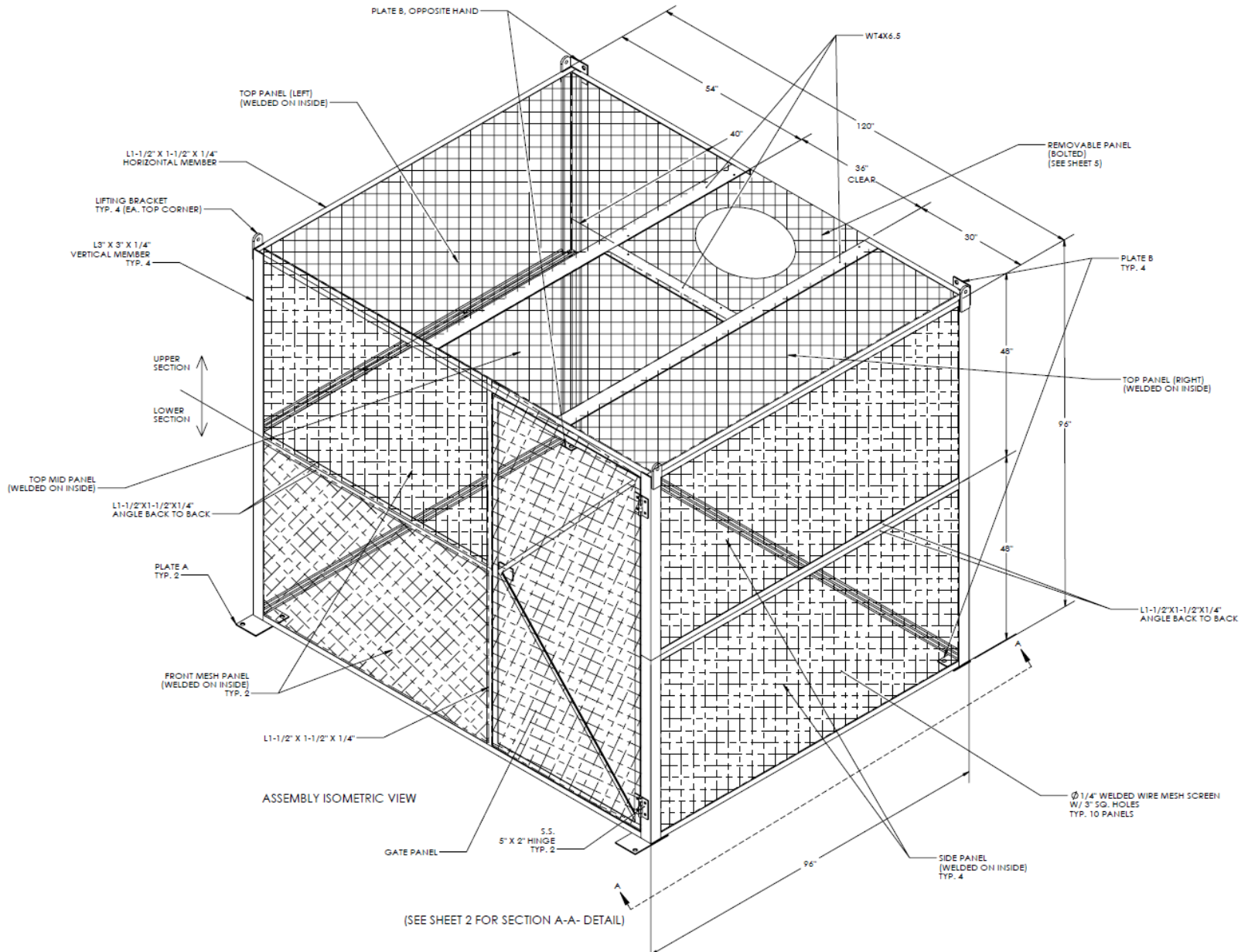


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Altitude: 1673ft (± 10.1 ft)
Datum: WGS-84
Azimuth/Bearing: 207° S27W 3680mils True ($\pm 16^\circ$)
Elevation Angle: -06.0°
Horizon Angle: $+00.1^\circ$
Zoom: 1.0X









Date & Time: Thu, Apr 30, 2020, 11:54:38 PDT
Position: +034.079879° / -117.132309° (±35.7ft)
Altitude: 1658ft (±4.7ft)
Datum: WGS-84
Azimuth/Bearing: 186° S06W 3307mils True (±13°)
Elevation Angle: -03.0°
Horizon Angle: +01.2°
Zoom: 1.0X



Date & Time: Thu, Apr 30, 2020, 11:55:56 PDT
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Altitude: 1653ft (±5.7ft)
Datum: WGS-84
Azimuth/Bearing: 296° N64W 5262mils-True (±13°)
Elevation Angle: +17.8°
Horizon Angle: +02.8°
Zoom: 1.0X





BUDGET REVIEW

Citrus Reservoir Floating Cover System Project

	Amount	Percent (%) of Budget	
Original Authorized Budget Amount	\$ 280,000	100%	
Dewatering Pump Rental	\$ 59,087	21.1%	
Pump Screen Fabrication (8 total)	\$ 82,366	29.4%	
Miscellaneous Materials and Rentals	\$ 25,000	8.9%	
Total Estimated Project Costs	\$ 166,453	59.4%	
Over/Under Budget	\$ (113,547)		

Director Comments and Discussion



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Staff Recommendation
Receive and file.



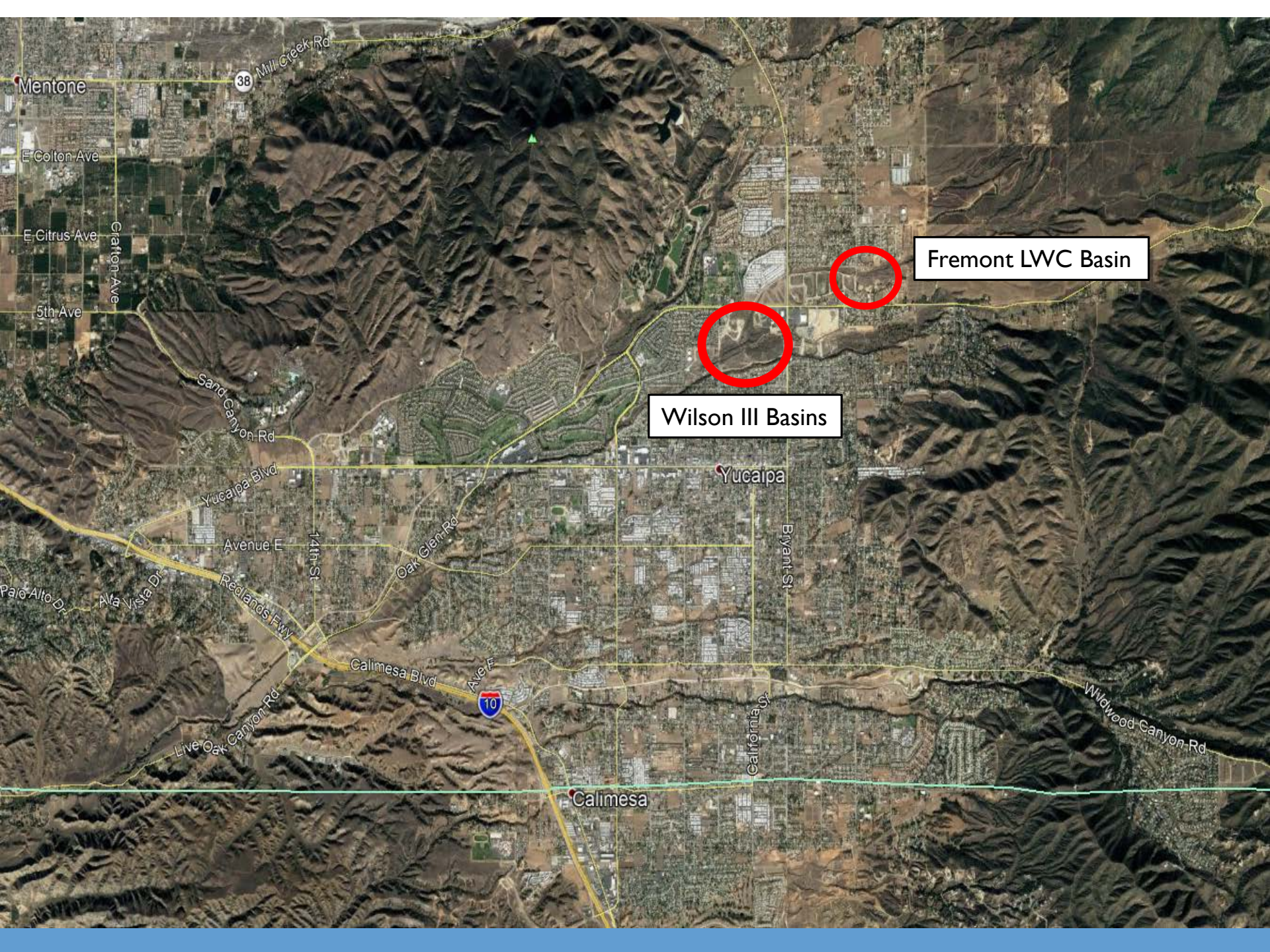
Discussion Item 4.4 (Pg. 22)

Matt Howard, Water Resources Senior Project Manager

Update on City of Yucaipa Stormwater Recharge Basins

Staff Recommendation

Receive and file.



Mentone

38 Mill Creek Rd

E Colton Ave

E Citrus Ave

5th Ave

Clarion Ave

Fremont LWC Basin

Wilson III Basins

Yucaipa

Sand Canyon Rd

Yucaipa Blvd

Avenue E

14th St

Oak Glen Rd

Bryant St

Pajo Alto Dr

Alta Vista Dr

Redlands Fwy

Calimesa Blvd

Ave F

10

California St

Live Oak Canyon Rd

Calimesa

Wildwood Canyon Rd



Wilson III Basins

Wilson Basins

Fremont LWC Basin

Oak Glen Creek Basins

Previous Discussions

January 14 Workshop – Engineering

- Board is supportive of these projects
- Investigate project funding under LRIP

February 13 Workshop – Resources

- Board is supportive of these projects and funding
- Recommendation to further quantify the benefits, measure the stormwater captured & recharged

May 12 Workshop – Engineering

- Update on LRIP application status
- Update on measuring the amount of stormwater captured in the Basins

Updates on the LRIP Projects

Wilson III Basins: LRIP application requesting a hybrid approach, which provides upfront lump sum funding and will require the City of Yucaipa to outline planned performance metrics.

Fremont LWC Basin: LRIP application will request the traditional LRIP payment approach

The planned measurement devices include staff gauges at the inlet and outlets of the stormwater basins, gated outlets, and removable stop logs that will be used to calculate recharge



Planned Wilson III Basins

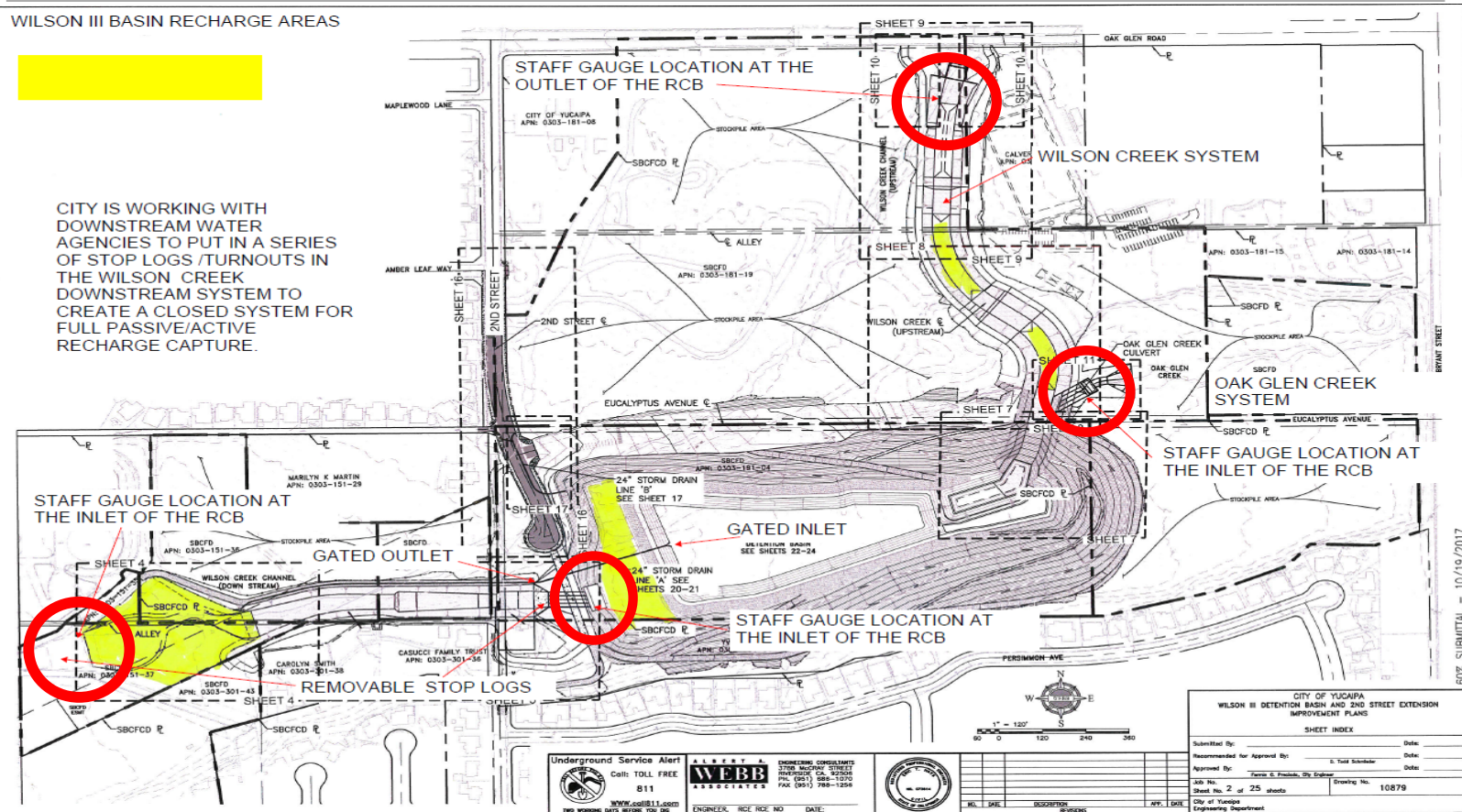


Planned Wilson III Basins

WILSON III BASIN RECHARGE AREAS



CITY IS WORKING WITH DOWNSTREAM WATER AGENCIES TO PUT IN A SERIES OF STOP LOGS /TURNOUTS IN THE WILSON CREEK DOWNSTREAM SYSTEM TO CREATE A CLOSED SYSTEM FOR FULL PASSIVE/ACTIVE RECHARGE CAPTURE.



602 SUBMITTAL - 10/19/2017

 <p>Underground Service Alert Call: TOLL FREE 811 www.call811.com TWO WORKING DAYS BEFORE YOU DIG</p>	 <p>ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS 3700 MURPHY STREET POMONA, CA 91768 PHONE: (951) 788-1200 FAX: (951) 788-1256</p>		<p>NO. DATE SUBMITTED SUBJECTS APP. DATE</p>	
			<p>City of Yucaipa Engineering Department</p>	

CITY OF YUCAIPA WILSON III DETENTION BASIN AND 2ND STREET EXTENSION IMPROVEMENT PLANS			
SHEET INDEX			
Submitted By:		Date:	
Recommended for Approval By:		Date:	
Approved By:	Terese S. Finkels, City Engineer	Date:	
NO.:	Sheet No. 2 of 25 sheets	Drawing No.:	10879

Completed Fremont LWC Basin



Completed Fremont LWC Basin



Director Comments and Discussion



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Staff Recommendation
Receive and file.



Future Business



Adjournment
