

Tab 1

Agenda Item: Consider approval of Amendment No. 3 to SLAR-CC Project

Objective: Approve Amendment 3 to Hazen and Sawyer for the Salt Lake Aqueduct Replacement – Cottonwoods Connection Project.

Background: On June 13, 2022 the Board approved a professional services agreement for \$2,355,136 to Hazen and Sawyer to design the Salt Lake Aqueduct Replacement – Cottonwoods Connection (SLAR-CC) Project.

- The Board approved Amendment No. 1, which included Right-of-way (ROW) support and additional engineering, for \$611,162 on January 23, 2023.
- The Board approved Amendment No. 2, which included additional geotechnical support and additional engineering, for \$129,385 on June 12, 2023.

District staff is acting as the project manager, with Salt Lake City Department of Public Utilities (SLCDPU) staff assisting. Salt Lake City is paying the consultant directly after invoice review and payment recommendation by District staff.

Various additional work efforts have been identified. The draft Amendment 3 was received on June 27, 2023 and was reviewed by District and Salt Lake City staff.

Task 200: Additional Survey Work \$39,140

Ground elevations require revision due to the extensive tree canopy creating errors in the aerial surveys used to determine ground contours. In addition, the historic winter weather has caused some survey markings to be redone because of weather-related delays.

Task 300: Project Management and Coordination – Schedule Extension \$20,080

SLCDPU has delayed the reconstruction of the BCWTP by at least two years, relaxing some immediacy for getting the design done before January 2024. Furthermore, additional design scope items being added required additional project management oversight by the consultant. The schedule has been extended by approximately three months.

Task 300: Pipeline Design – McEntire and 7000 S. Turnouts \$46,830

The construction in Ft. Union Blvd. has become complex. To minimize future impacts from the project the connection vaults from the new SLAR-CC to the McEntire and 7000 S. turnouts will be constructed as part of this project and hence need design. The design will include, in addition to the structure itself, all the mechanical, electrical, and instrumentation elements to avoid confusion in the future when SLAR-CC is converted to finished water.

Task 300: Site Civil Design – LCWTP Civil Improvements \$87,940

The construction of CC-2 through the LCWTP was originally planned to simply restore the pipeline trench. However, upon further consideration, it is deemed prudent to design additional

site improvements at the LCWTP, including grading repair, stormwater drainage improvements, new curb and gutter, new access gates, a new pedestrian access gate, an updated entrance sign, and various landscaping improvements.

Task 300: Drainage Control – 10 MGR to Nutree \$48,770

During field reconnaissance activities, significant unknown backyard improvements were discovered in the SLAR-CC corridor. These improvements will not be replaced, thus additional runoff calculations and drainage controls will have to be designed.

Task 300: Additional Surge Analysis \$18,400

After the initial surge analysis was performed, SLCDPU determined additional transient analyses would be required to confirm the sizing of the surge tank during Phase 3 operations.

Task 300: NEPA Clearance \$98,620

Because SLCDPU is seeking federal funding for its portion of the project, NEPA clearance is now required.

Task 300: Fort Union Blvd. Space Planning and Coordination \$38,400

To facilitate coordination and cooperation with Cottonwood Heights City's planned Ft. Union Blvd. improvements (specifically an extension to the city's storm drain system), additional project communication, design analysis, and design details are required.

Task 400: Additional Bidding Support \$8,370

The SLAR-CC project has been broken into several bid schedules to accommodate various deadlines, partial bidding options, and construction sequencing. Additional support from the consultant is required to support the bidding efforts.

Total \$406,550

The following table summarizes how each task will be paid by MWDSLS and SLCDPU. These shared costs are obtained by assigning each task an algorithm for sharing. These algorithms include:

- (B) a sharing agreement between SLCDPU and MWDSLS made on October 10, 2022 to share the cost as 60.3% MWDSLS and 39.7% as SLCDPU.
- (R) a sharing arrangement based exclusively on capacity sharing (35 mgd exclusive to SLCDPU of the total 145 mgd capacity of the SLAR pipeline) as 75.9% MWDSLS and 25.1% SLCDPU.
- (M) exclusively MWDSLS costs.
- (S) exclusively SLCDPU costs.

SLAR-CC Amendment No. 3 Cost Sharing

Description	Share: <i>by Cost</i>			<i>by Percent</i>		
	Code	MWDSLS	SLCDPU	Total	MWDSLS	SLCDPU
Preliminary Design Report (30% Design)		23,601	15,539	39,140	60.3%	39.7%
Preliminary Design		23,601	15,539	39,140	60.3%	39.7%
D220.3 - Additional Survey Work	B	23,601	15,539	39,140	60.3%	39.7%
Pipeline Design		157,695	201,345	359,040	43.9%	56.1%
Project Management and Coordination		12,108	7,972	20,080	60.3%	39.7%
D310.3 - Project Management and Coordination	B	12,108	7,972	20,080	60.3%	39.7%
Pipeline Design - MWD Specific		145,587	37,953	183,540	79.3%	20.7%
D321.2 - Pipeline Design - McEntire and 7000S T	B	28,238	18,592	46,830	60.3%	39.7%
D321.3 - Site Civil Design - LCWTP Civil Improver	M	87,940	-	87,940	100.0%	0.0%
D321.4 - Drainage Control - 10MG to Nutree	B	29,408	19,362	48,770	60.3%	39.7%
Pipeline Design - SLC Specific		-	155,420	155,420	0.0%	100.0%
D322.2 - Additional Surge Analysis	S	-	18,400	18,400	0.0%	100.0%
D322.3 - NEPA Clearance	S	-	98,620	98,620	0.0%	100.0%
D322.4 - Fort Union Blvd. Space Planning and Co	S	-	38,400	38,400	0.0%	100.0%
Bidding Services		5,047	3,323	8,370	60.3%	39.7%
Bidding Services		5,047	3,323	8,370	60.3%	39.7%
D420.3 - Contractor Pre-Selection - Additional Bi	B	5,047	3,323	8,370	60.3%	39.7%
Grand Total		186,344	220,206	406,550	45.8%	54.2%

where share code:

		MWDSLS	SLCDPU
<i>B</i>	<i>by agreement 10/10/2022</i>	<i>60.3%</i>	<i>39.7%</i>
<i>C</i>	<i>by capacity 35/145 mgd</i>	<i>75.9%</i>	<i>24.1%</i>
<i>M</i>	<i>by MWDSLS</i>	<i>100.0%</i>	<i>0.0%</i>
<i>S</i>	<i>by SLCDPU</i>	<i>0.0%</i>	<i>100.0%</i>

Committee Activity: The Engineering Committee discussed this amendment on September 5, 2023.

Recommendation: The Engineering Committee forwards a positive recommendation to the board to amend the SLAR-CC professional services project scope to include \$406,550 for the Amendment 3 tasks.

Attachment:

- Amendment 3 scope

July 24, 2023

Kelly Stevens, PE
Metropolitan Water District of Salt Lake & Sandy
3430 East Danish Road
Cottonwood Heights, UT 84093

Re: Amendment No. 3 – Cottonwoods Connection Project

Dear Mr. Stevens:

As Hazen has been working toward the 60-percent design deliverable, there have been changes to the BCPS design and overall construction schedule. MWDSLs has identified additional design components at the LCWTP to be included in the project design. A summary of Amendment 3 includes:

- Additional effort required to complete the survey work and survey deliverable, including rework caused by the historic winter for survey and potholing activities.
- Additional Project Management services required because of the schedule changes resulting from the BCWTP design and construction schedule change.
- Design for the McEntire and 7000 South turnout vaults and piping (without final connection).
- Space planning and coordination with Cottonwood Heights City for the Fort Union corridor, including possible accommodation for CHC's storm drain as part of this bid package.
- Addition of LCWTP Site Civil Improvements.
- Additional grading and drainage control on the slope between 10 MGR and Nutree after removal of unknown backyard improvements by almost all residences in this stretch.
- Additional bid services to support multiple bid schedules.
- Additional surge analysis scenarios after preliminary surge review
- NEPA clearance work for SLCDPU's grant (if needed)

The purpose of this Amendment 3 is to amend the existing contract to complete these additional services that were not included in the original contract. Enclosed for your review and approval is Hazen's proposed detailed scope of work and fee (refer to Attachment A-3). The total amendment amount proposed for these additional services is \$406,550. This would increase the total contract not-to-exceed budget from \$3,095,683 to \$3,502,233.

Sincerely,



Jeremy Williams, PE
Project Manager/Senior Associate



Benjamin Romero, PE
Principal-in-Charge/Vice President

Attachment A-3

Metropolitan Water District of Salt Lake & Sandy Salt Lake Aqueduct Replacement – Cottonwoods Conduit Amendment No. 3 – Scope of Services

Task 200 – Additional Survey Work

The sheer number of trees and wooded areas along the alignment led to a significantly larger post-processing effort to provide reliable contours along the alignment. The historic winter complicated ground work to fill in data from the drone survey, and also impacted subsurface utility investigations by covering survey markers, delaying pothole excavations, and requiring constant rescheduling and remarking. The budget requested in this amendment is to cover additional post processing, additional ground work, and lost time and rework due to the historic winter.

- Approximately half of the amount requested by the surveyor is for additional post-processing work, mostly along the SLAR alignment.
- The remaining amount requested by the surveyor is for weather delays and rework caused by the historic winter.

Task 300 – Schedule Extension, Additional Project Management

SLCDPU has updated the design and construction schedule for the BCWTP, extending the previous schedule by at least two years. To maintain project momentum while providing the project team with time for additional project features, MWDSLS and SLCDPU are extending the overall design schedule by approximately three months, with bid advertising in February 2024. Hazen will provide continued project management services during the extended design period including managing and coordinating the team member's activities to keep the project on schedule and within budget.

Deliverables

- Monthly invoices, minutes for bi-weekly PM meetings, and schedule updates

Assumptions

- Does not include additional workshops or meetings outside of current bi-weekly core PM meetings.
- Geotechnical work is complete and no additional effort by Gerhart Cole is required.
- Design will be modified slightly to facilitate one bid package with multiple bid schedules to prioritize pipeline construction in Wasatch Blvd/Big Cottonwood Canyon Rd prior to UDOT's planned pavement project and associated construction moratorium.

Task 300 – McEntire and 7000 South Turnout Vaults and Mechanical

Cottonwood Heights City is planning Fort Union Blvd improvements in the SLAR and CC-1 locations including replacement of existing storm drain pipeline, roadway widening and paving, and curb and gutter on the north side. To minimize additional traffic and residential impacts in the future after these improvements are constructed, Hazen will incorporate additional design drawings, details, and specifications to facilitate construction of the McEntire and 7000 South turnout vaults and mechanical requirements required for future (finished water conveyance) connection to the existing SLA Turnouts.

Deliverables

- Additional information will be shown on 90%, 100%, and Bid Documents deliverables.

Assumptions

- Four (4) additional drawings are required:
 - One structural, one mechanical, and one electrical/I&C drawing plan for both turnouts (three total)
 - One drawing with site plans for both turnouts
- Vaults will be shown on overall project P&ID.
- Final connection details will be shown to ensure compatibility and function for future use only. No connection to existing turnouts will be completed as part of Phase 1.

Task 300 – Fort Union Corridor Space Planning and Coordination

To facilitate coordination with Cottonwood Heights City's planned Fort Union Blvd improvements, specifically an extension of the storm drain system to the west, Hazen will provide additional coordination and collaboration with the City and their design consultant. This will include space planning for CC-1 and the proposed future 36-inch storm drain pipeline through the congested corridor and incorporation of the alignment of the storm drain pipeline on the CC-1 plan and profile drawings.

Deliverables

- No additional deliverables are required, the proposed future storm drain pipeline will be shown on the contract deliverables (90-, and 100-percent).

Assumptions

- No additional drawings are required.
- The proposed 36-inch storm drain pipeline alignment will be shown on the plan view.
- The City's engineering consultant will provide input on pipe design requirement including size, approximate elevation, location of manholes, laterals, and other information required to accurately plan the storm drain and CC-1 pipelines.

Task 300 – LCWTP Site Civil Improvements

The original design scope assumed trench restoration only for CC-2. Through coordination with MWDSLS and identification of additional LCWTP Capital Improvement Projects, MWDSLS requested additional site projects to be included in the Cottonwoods Connection project design. Hazen will complete and incorporate site civil design drawings, details, and specifications for the LCWTP including repaving the existing Administration Building parking lot and LCWTP entrance access pavement including grading repair and improvement, storm water drainage improvements, curb and gutter, replacement access gates (loop only for gate 1, gate and loop for gate 2), new pedestrian access gate between the SLA PS area and the Admin parking lot, and landscaping improvements (design provided by others).

Deliverables

- Additional site and profiles (drainage, west entrance, etc.) drawing and details will be included in the 90%, 100%, and Bid Documents deliverables.
- An interim informal submittal just for new site civil items between the 60% and 90% deliverables.

Assumptions

- 9 additional drawings are required, see attached drawing list.
- Hazen will advance the drawings and details for these improvements to the extent possible pending additional survey and schedule; however, the drawings may not be at 60% level of detail. An interim informal submittal of the LCWTP Site Civil Improvements between the 60% and 90% deliverable will be provided to allow additional MWDSLS review and comment.
- Site plans will be at 20 scale; other drawings will be at appropriate scale to show necessary detail required for construction.
- Potholing on LCWTP (if needed) will be completed by MWDSLS with CRS performing survey of potholes.
- Additional field survey is required for drainage elevations.
- Hazen will provide LCWTP sign site design, MWDSLS is responsible for replacement sign.
- One day site visit to confirm MWDSLS requested improvements is required. At a minimum curb and gutter on both sides of the plant entrance road; new pavement from Danish to plant entrance gate, demolition of guard shack, and a pedestrian gate between plant and Administration building (near FW Pump Station) will be included.
- Drainage of road improvements and tie-in to existing V-Ditch are based on existing grades and no significant grading changes are required.
- No electrical design is required. Electrical details only will be provided for replacement of traffic loops, etc.

Task 300 – Drainage Control – 10 MGR to Nutree

Significant unknown backyard improvements in the alignment between approximately the 10 MGR and Nutree as part of easement acquisition. Site walks revealed several underground ‘bunkers’ on terraces between backyards along this stretch. During construction, these homeowner improvements will be

removed and not replaced, including the retaining walls, so runoff calculations and drainage controls will have to be designed for this area. A grading plan will be included along the alignment to show these improvements along with how the easement area will tie into existing homeowner property elevations.

Deliverables

- Additional drainage plans will be shown on the drawings and details will be included in the 90%, 100%, and Bid Documents deliverables.

Assumptions

- 2 additional drawings are required, see attached drawing list.
- Site plans will be at 20 scale; other drawings will be at appropriate scale to show necessary detail required for construction.
- Existing homeowner property improvements, including retaining walls, will not be replaced.
- Runoff calculations will be performed so that adequate drainage controls can be designed to handle storm flows.
- Stackable precast retaining wall blocks, or other similar methods, may be used to maintain a modified terraced slope. Otherwise, new grading along the easement will generally follow the existing hillside slope and tie in to existing residential lot elevations.

Task 300 – Additional Surge Analysis Scenarios

Hazen is completing a hydraulic transient analysis of the SLAR-CC from the BCPS connection to the LCWTP connection point for Phase 1. After the initial analysis, SLCDPU determined that additional transient analysis should be performed to confirm surge tank sizing will work for Phase 3 operation. This additional scope will include the following:

- Revising the Phase 1 transient model to reflect an alternate connection to the LCWTP. This update will include assessing the application of a discharge check valve or atmospheric vent to improve transient mitigation.
- Building a scenario for Phase 3 operation of the BCWTP Pump Station to 10 MG Reservoir for northbound SLAR service. This scenario will be utilized to determine if surge tank sizing at BCWTP is sufficiently sized for Phase 1 and Phase 3 operation.

Deliverables

- Results will be included in the Hydraulic Transient Design Memorandum (DM-1).

Assumptions

- The initial analysis will be performed based on available pump station information provided by the BCPS design consultant, and will be refined once required information is available

Task 300 – NEPA Clearance

See attached detailed scope and fee breakdown (5 pages).

Deliverables

- Draft and Final EA

Assumptions

- No work will be performed until the grant award is certain

Task 400 – Additional Bidding Support Services

To facilitate a combined bid package with multiple bid schedules, Hazen anticipates additional time responding to bid questions, preparing and distributing the addendum(s) as required, maintaining a bidder log as required, assisting MWDSLS during the bid opening, and participating in the evaluation of contractor bids and providing a written recommendation of award to MWDSLS based on our evaluation of the bids, related costs and other factors for the MWDSLS team to consider in making a final award decision. Hazen will lead the review of any substitutions identified by the contractor in close collaboration with MWDSLS. Once contractor bids are submitted and opened, Hazen will prepare conformed documents for issuance to the selected contractor.

Deliverables

- Bid Award letter of recommendation.
- Final Conformed Drawings and specifications.

Assumptions

- Revised specification language, if required, will be provided in letter form; revised specifications will be issued with the Conformed Documents.
- Conformed Documents will be completed within two weeks of project bid date.

Cost of Services

The total fee for completion of the additional scope of services as described herein shall be a not-to-exceed amount as shown in the fee estimate table. The cost of services for all Tasks shall be on a time-and-materials basis based on the rate schedule submitted as part of the original contract. The following table presents an estimated breakdown by task.

Period of Performance

The period of performance for the original contract design scope of work and the additional design scope of work items outlined herein concludes in June 2024 (except for CC-1) with the issuance of the Conformed Contract Documents. Completion of design documents for CC-1 is per the previously revised schedule in November 2023. See attached updated project schedule for detailed schedule line items.



SLAR-CC, Amendment 3 FEE - DRAFT

MWDSLS
SLCDPU

	Ben R.	Jeremy W.	Jerimy B.	Jay J.	Crystal B.	Briana P.	Josh W.	Bethany L.	Parry	Wyatt	Sam	Tyler B.	Maggie S.	Jason H.	Travis R.	Chris P.
	PIC	PM	DM	Senior TA QA/QC	Hydr. & Surge Analysis	Hydr. & Surge Analysis	Civil Design Lead	Civil Design Support	Struct. Design Lead	Senior Struct. TA, QA/QC	Struct. Design Support	Mech Design Lead	Mech Design Support	Elec/I&C Design Lead	Elec/I&C Design Support	Cost Est
	\$285	\$275	\$235	\$275	\$190	\$140	\$215	\$175	\$195	\$275	\$175	\$195	\$140	\$215	\$140	\$235
Task 200: Preliminary Design																
220 Additional survey work		8	12										8			
Task 200 - SUBTOTAL	0	8	12	0	0	0	0	0	0	0	0	0	8	0	0	0
Task 300: Pipeline Design																
310 Project Management and Coordination		32	48													
32A Pipeline Design - McEntire and 7000S Turnouts	2	4	12	8			4	24	6	8	24	6	24	4	16	8
32A Site Civil Design - LCWTP Civil Improvements	2	6	6	8			40	80	4	54	12		12	6	12	8
32A Drainage Control - 10 MGR to Nutree	2	6	6	8			32	80	4		8					8
32B Additional Surge Analysis		8	8		16	64							8			
32B NEPA Clearance		4														
32B Fort Union Blvd Space Planning and Coordination		16	24				24						80			
Task 300 - SUBTOTAL	6	76	104	24	16	64	100	184	14	62	44	6	124	10	28	24
Task 400: Bidding Services																
420 Additional Bidding Support		4	4					8			8		8	6	8	
Task 400 - SUBTOTAL	0	4	4	0	0	0	0	8	0	0	8	0	8	6	8	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMENDMENT 3 TOTAL	6	88	120	24	16	64	100	192	14	62	52	6	140	16	36	24



SLAR-CC, Amendment 3 FEE - DRAFT

Hazen	Katie H	Chris C	Henry C	Jorie	Kenneth	Hazen				CRS	SWCA		
	NEPA QC	NEPA Lead	NEPA Support	Admin Word Proc	CAD Tech	Labor Hours	Labor Cost	ODC's	Subtotal	Survey and Aerial	NEPA	Sub Subtotal	Total
	\$250	\$195	\$140	\$150	\$150								
Task 200: Preliminary Design													
220 Additional survey work						28	\$ 6,140	\$ -	\$ 6,140	\$ 30,000		\$ 33,000	\$ 39,140
						0	\$ -	\$ -	\$ -			\$ -	\$ -
Task 200 - SUBTOTAL	0	0	0	0	0	28	\$ 6,140	\$ -	\$ 6,140	\$ 30,000	\$ -	\$ 33,000	\$ 39,140
Task 300: Pipeline Design													
310 Project Management and Coordination						80	\$ 20,080	\$ -	\$ 20,080			\$ -	\$ 20,080
32A Pipeline Design - McEntire and 7000S Turnouts					120	270	\$ 46,830	\$ -	\$ 46,830			\$ -	\$ 46,830
32A Site Civil Design - LCWTP Civil Improvements					180	430	\$ 79,690	\$ -	\$ 79,690	\$ 7,500		\$ 8,250	\$ 87,940
32A Drainage Control - 10 MGR to Nutree					120	274	\$ 48,770	\$ -	\$ 48,770			\$ -	\$ 48,770
32B Additional Surge Analysis				8		112	\$ 18,400	\$ -	\$ 18,400			\$ -	\$ 18,400
32B NEPA Clearance	52	276	180			512	\$ 93,120	\$ -	\$ 93,120		\$ 5,000	\$ 5,500	\$ 98,620
32B Fort Union Blvd Space Planning and Coordination					80	224	\$ 38,400	\$ -	\$ 38,400			\$ -	\$ 38,400
Task 300 - SUBTOTAL	52	276	180	8	500	1902	\$ 345,290	\$ -	\$ 345,290	\$ 7,500	\$ 5,000	\$ 13,750	\$ 359,040
Task 400: Bidding Services													
420 Additional Bidding Support						46	\$ 8,370	\$ -	\$ 8,370			\$ -	\$ 8,370
						0	\$ -	\$ -	\$ -			\$ -	\$ -
Task 400 - SUBTOTAL	0	0	0	0	0	46	\$ 8,370	\$ -	\$ 8,370				\$ 8,370
						0	\$ -	\$ -	\$ -			\$ -	\$ -
						0	\$ -	\$ -	\$ -			\$ -	\$ -
AMENDMENT 3 TOTAL	52	276	180	8	500	1976	\$ 359,800	\$ -	\$ 351,430	\$ 37,500	\$ 5,000	\$ 46,750	\$ 406,550



July 24, 2023

Kelly Stevens, PE
Metropolitan Water District of Salt Lake & Sandy
3430 East Danish Road
Cottonwood Heights, UT 84093

Re: Cottonwoods Connection Project: NEPA Support

Dear Mr. Stevens:

We are pleased to submit this proposal for professional engineering services associated with National Environmental Policy Act (NEPA) support per the anticipated United States Department of Environmental Protection Agency (EPA) grant funding for the proposed Cottonwoods Connection Project. The paragraphs below present details of the proposed scope of work.

Project Understanding and Background. The Metropolitan Water District of Salt Lake & Sandy (MWDSLS) and the Salt Lake City Department of Public Utilities (SLCDPU) are undertaking the Cottonwoods Connection Project that involves construction to place a new pipeline that parallels the Salt Lake Aqueduct (SLA) between the Big Cottonwood Water Treatment Plant (BCWTP) at the mouth of Big Cottonwood Canyon and the Little Cottonwood Water Treatment Plant (LCWTP) in Cottonwood Heights. The proposed Cottonwoods Connection Project will receive grant funding from the EPA through the Drinking Water State Revolving Fund. Therefore, the Responsible Entity (RE; MWDSLS on behalf of SLCDPU) is required to conduct an environmental review to determine whether it complies with NEPA and related laws and authorities. NEPA requires that the impact on the natural environment be evaluated. The detailed scope of services to be performed by Hazen, the schedule for performance of those services, and the associated engineering fee are provided in the remainder of this letter proposal.

Scope of Services. Hazen will perform several activities to aid in complying with NEPA for the proposed project. These activities include:

- Develop the Environmental Assessment (EA) in accordance with EPA procedures for implementing NEPA (40 CFR Part 6).
- Supporting finalization of the NEPA process through Notice of Intent to Request for Release of Funds (NOI-RROF) and Notice of Finding of No Significant Impact (FONSI), and the Request for Release of Funds (RROF).
- Providing overall management of the project during environmental review process.

Task 1 – Develop Project Description

Hazen will develop a project description for the proposed Cottonwoods Connection Project. The project description shall provide location specific information and geographic boundaries, as well as delineation of activities included in the scope of the project. Hazen will also develop a figure showing the project

limits of disturbance and location. Materials already prepared during Predesign will be modified for this task.

Task 2 – Record Compliance with Federal Cross-Cutting Agencies

Hazen will review relevant NEPA statutes, executive orders, and regulations to determine if formal compliance steps or mitigation are required. For each statute, executive order and regulation, Hazen will complete a compliance determination and include any source determinations as necessary as an appendix to the EA.

Task 3 – Conduct Assessment of Environmental Factors

Hazen will conduct an assessment of relevant land development, socioeconomic, community facilities, or natural environmental factors. It is anticipated that formal compliance would be required for Endangered Species (Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402) and Historic Preservation (National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800), wetlands, streams, water quality, hydrology, wildlife and habitat, vegetation, floodplains, and environmental justice. Based on site conditions and the project scope, it is not anticipated that formal compliance would be required for any other listed statutes, executive orders, and regulations.

Hazen will use information from the design team, desktop surveys, and existing site and field investigations/surveys to determine the qualitative and quantitative significance of the effects of the project on the character, features, and resources of the project area. Determinations of impacts for each factor will use the following impact code: (1) minor beneficial impact; (2) no impact anticipated; (3) minor adverse impact, may require mitigation, and (4) significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

For any factors where a determination is made that a minor adverse impact may occur, Hazen will coordinate with MWDSLS and any regulatory agencies, as appropriate, to identify proposed mitigation. Hazen will include any identified mitigation measures in the EA. Hazen will coordinate with the MWDSLS to ensure that any identified mitigation measures adopted by the RE will be incorporated into project contracts or other relevant documents and a mitigation plan.

Fieldwork will be performed by a two-person team of biologists to obtain natural resources information from the project site and adjacent areas, and review and/or obtain available information from various resources. Wetland delineations per the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual and stream surveys will be performed during the field evaluation. Threatened and endangered species surveys will be conducted during the field effort.

Task 4. Environmental Assessment (EA) Preparation

Hazen will draft an Environmental Assessment (EA) that complies with in accordance with 40 CFR Part 6.205. The completed EA will be submitted to the MWDSLS for review and comment.

Task 5. Environmental Review

After the Draft EA is completed, several steps are required prior to finalization of the environmental review and funds may be approved for release. Hazen shall develop a Notice of Intent to Request for Release of Funds (NOI-RROF) and Notice of Finding of No Significant Impact (FONSI) using the current EPA-recommended format. MWDSLS will send notices to interested individuals and groups; appropriate tribal, local, state, and Federal agencies; and Regional Offices of the EPA having jurisdiction. The list of interested groups will be developed by Hazen staff. MWDSLS will also publish the notices in a newspaper of general circulation in the affected community.

Once the notices are published, a public comment period of 30 days is required. The RE will consider any comments received. Hazen will coordinate with MWDSLS to edit the EA for any modifications, as appropriate, in response to comments before completion of the environmental certification process. Hazen will prepare the Request for Release of Funds (RROF) form using the current EPA-recommended format. MWDSLS will submit the RROF to EPA.

Task 6. Project Management and Meetings

Hazen will provide overall management of the project and maintain interim communications with MWDSLS throughout the duration of the project. This includes interim conference calls, coordination calls to discuss data acquisition, interagency coordination and other topics required to facilitate the environmental review process.

Schedule. The publication of the NEPA EA is anticipated to be completed approximately nine months after the notice to proceed, contingent on timely direction and responsiveness to questions from MWDSLS, as well as the ability to schedule meetings and get feedback from regulators and agencies.

Other scope items will be scheduled with various permit review agencies and/or depend on review agency input, the schedule for which is unknown at this time. The remaining services will be performed by Hazen in a timely manner as scheduled and agreed to with MWDSLS.

Fee. The proposed not-to-exceed fee is shown in Table 1. The breakdown of the budget by subtask is provided in **Table 1**.

**TABLE 1
Fee Estimate**

Task	Estimated Hours	Proposed Budget
Task 1: Develop Project Description	32	\$6,240
Task 2: Record Compliance with Federal Cross-Cutting Agencies	48	\$8,370
Task 3: Conduct Assessment of Environmental Factors	34	\$6,850
Task 4: Environmental Assessment Preparation	288	\$50,880
Task 5: Environmental Assessment Review	68	\$12,050
Task 6: Project Management and Meetings	42	\$8,730
Subconsultant Services		\$5,500
Total	508	\$98,620

Assumptions. The following assumptions apply to the scope of services:

1. EPA assistance falls under 40 CFR Part 6 environmental review. This allows the assumption of authority to perform the environmental review by responsibility entity (RE), which are units of general local government, such as a town, city, county, tribe or state. The RE is responsible for the scope and content of the review and making the finding. The certifying officer or the responsible entity signs the review and takes legal responsibility for the review. For this project, the RE is MWDSL. The certifying officer will be identified at a later date.
2. The proposed project is subject to an environmental assessment (EA) level of review. The project is not covered under a categorical exclusion or exemption. The EA will be prepared according to the suggested format to be used by RE to document completion of an Environmental Assessment for EPA-Assisted Projects 40 CFR Part 6.
3. No public hearing is anticipated. Public comments will be accepted through the 30-day comment period following the Notice of FONSI (NOI-FONSI) and Notice of Intent to Request for Release of Funds (NOI-RROF).
4. The resource evaluation will not include detailed air quality, noise, or traffic assessments.

5. The services of a Qualified Architectural Historian and a Reconnaissance Survey for Historical Architecture will not be required.
6. It is assumed that Phase 1 or 2 archaeological surveys are not included.
7. Up to 40 hours are budgeted to respond to public and agency comments.

We appreciate the opportunity to work with MWDSL and SLCDPU on this project. If you have any questions regarding this proposal, please contact this office at (385) 342-1082.

Very truly yours,



Jeremy S. Williams, PE
Senior Associate
(385) 342-1082

cc: File

Agenda Item: Consider approval of Arc Flash Analysis and Breaker Coordination Study

Objective: Award the Arc Flash Analysis and Breaker Coordination Study to Powmation.

Background: An arc flash analysis helps determine the degree to which a worker may be exposed to potential arc flash hazards and Personal Protective Equipment requirements. The District has no arc flash-related employee injuries on record. NFPA (National Fire Protection Agency) 70E is an electrical safety standard that defines an Incident Energy Analysis as “a component of an arc flash risk assessment used to predict the incident energy of an arc flash for a specified set of conditions.” The standard recommends reviewing the Incident Energy Analysis for accuracy “at intervals not to exceed 5 years.” A full arc flash analysis is recommended at the installation of, and when changes are made, to an electrical system. The District recently completed a power monitoring upgrade at the LCWTP and is nearing completion of at the POMWTP. An updated arc flash analysis is appropriate given these modifications.

A breaker coordination study helps the District to have the correct settings for all electrical breakers. The scope of work includes updated electrical one-line diagrams and panel schedules. The breaker coordination study is also appropriate given system modifications and recent power supply issues at the LCWTP.

The District utilized the State of Utah’s Cooperative Contracts Approved Vendor List. A scope of work was sent to all vendors on the list (five in total) on July 20, 2023. Two vendors attended a mandatory site visit on July 31, 2023. Two bids were received and opened on August 8.

Bidder	Bid Total
Electrical Engineering Automation Technology (dba Powmation)	\$149,700.00
CTI Electric	\$281,523.00

Staff reached out to several vendors in 2022 while preparing this task for the fiscal year budget. Several vendors declined to bid citing workload. Staff believes that may be one reason for CTI Electric’s bid. Staff reviewed the bids, including provided scopes, and are confident both vendors are capable of meeting the project requirements. Award is recommended to the low bidder, Powmation.

The budget for this study is \$200,000.00.

Committee Activity: The Engineering Committee discussed this item on September 5, 2023.

Recommendation: The Engineering Committee forwards a positive recommendation to the board to award \$149,700.00 to Powmation for the arc flash analysis and breaker coordination study.

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Packet
Last Update: September 5, 2023

Agenda Item: Consider approval of JSSD Amendment No. 2

Objective: Seek approval to enter into the Second Amendment to November 1, 2006 Agreement Regarding Use of Ontario Drain Tunnel Water.

Background: The Jordanelle Special Services District (JSSD) uses the District's Ontario Drain Tunnel (ODT) water under a 2006 agreement. An amendment in 2010 addressed JSSD financial difficulties. This second amendment addresses JSSD's obligations under the 2010 amendment. See attached table from counsel for a summary of amendments.

Committee Activity: The Engineering Committee discussed this item on September 5, 2023.

Recommendation: The Engineering Committee forwards a positive recommendation to the board to enter into the second amendment as described.

Attachments:

- Second Amendment to November 1, 2006 Agreement Regarding Use of Ontario Drain Tunnel Water
- Amendment Summary Table

SECOND AMENDMENT TO NOVEMBER 1, 2006 AGREEMENT REGARDING USE OF ONTARIO DRAIN TUNNEL WATER

THIS SECOND AMENDMENT (“**Second Amendment**”) to the Agreement Regarding Use of Ontario Drain Tunnel Water Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy dated effective November 1, 2006 (“**Agreement**”) is entered into as of this ____ day of _____, 2023, by and between JORDANELLE SPECIAL SERVICE DISTRICT (“**JSSD**”) and METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY (“**MWDSLS**”). JSSD and MWDSLS may also be referred to as a Party or collectively as the Parties.

AMENDMENT PURPOSE

JSSD and MWDSLS entered into the Agreement to allow JSSD to use MWDSLS’s water from the Ontario Drain Tunnel No. 2 (“**ODT Water**”). In turn, JSSD will make-up the portion of the ODT Water consumed by JSSD’s use of the ODT Water by delivering water from other JSSD water supplies to MWDSLS’s points of diversion. A copy of the Agreement is attached as Exhibit A hereto. JSSD and MWDSLS entered into a First Amendment to November 1, 2006 Agreement Regarding Use of Ontario Drain Tunnel Water on November 17, 2010 amending certain terms of the Agreement to accommodate for a financial crisis that JSSD was experiencing due to the national financial crisis in 2008 (“**First Amendment**”). A copy of the First Amendment is attached as Exhibit B hereto.

The Parties acknowledge that real estate development, and in turn, the demand for water and wastewater service in the JSSD service area has not proceeded at the pace anticipated by the Parties in the Agreement or the First Amendment and that the conditions anticipated by the Parties regarding the use of the ODT Water by JSSD and, specifically, JSSD’s ability to deliver reuse water to make-up the water supply to MWDSLS are not fully in place. Accordingly, the Parties wish to amend the terms of the Agreement and the First Amendment as set forth herein.

AMENDED TERMS

In consideration of the mutual covenants contained herein and certain consideration deemed sufficient by the Parties, the Parties amend the Agreement and the First Amendment as follows, all remaining terms of the Agreement and the First Amendment remaining in full force and effect.

1. Deferral Payments for 2008 and 2009 Water Years. The Parties acknowledge that JSSD has made all payments as they have become due as required under paragraph 1 of the First Amendment and that the terms of paragraph 1 of the First Amendment remain in effect pursuant to which JSSD will continue to pay MWDSLS the sum of One Hundred Thousand Dollars (\$100,000.00) annually on or before the first day of February each year until the principal owed for the 2008 and 2009 water years is paid in full.

2. Lease Payment Index to CPI. Paragraph 2 of the Agreement anticipates that beginning November 2, 2015, the lease payments due from JSSD to MWDSLS will be indexed to and increase annually with the Consumer Price Index as calculated by the United States Bureau of Labor Statistics for the Western Census Region (“CPI”). The Parties did not apply the CPI to the lease payments starting in November 2015 and have not applied any increase to the lease payment since November 2015. MWDSLS has agreed not to seek reimbursement for the potential increases in the lease payments dating back to November 2015. The Parties have implemented 3% annual increases to the lease payment beginning as of July 1, 2020. Going forward the lease payments will be increased by the CPI each year. If for any reason the CPI is no longer available, MWDSLS will, after reasonable efforts to consult with JSSD, select another reliable and generally accepted official measure of inflation for the Western United States.

3. Reuse Authorization Contract. This Second Amendment shall constitute a “reuse authorization contract” for the purpose of sections 73-3c-202(1) and 73-3c-102(5)(b) of the Utah Code. MWDSLS consents to JSSD’s reuse of its ODT water rights, including Water Right Nos. 55-11103, 55-2602, and 55-9568 and Change Application No. a45046; provided, however, that JSSD’s reuse shall be consistent with MWDSLS’s underlying ODT water rights.

4. JSSD Reuse Application. JSSD will, as soon as practicable and in coordination and consultation with MWDSLS, file any necessary discharge and reuse permits required to make the MWDSLS water supply whole using in whole or in part reuse water from the JSSD wastewater treatment facility constructed near the base of Jordanelle Dam. Upon final approval of required discharge and reuse permits, JSSD will to the greatest extent practicable reuse the full quantity of the ODT water authorized by the State Engineer at least one year in each seven-year period.

5. Paramount Obligation of JSSD to Make MWDSLS Water Supply Whole. Paragraph 5 of the First Amendment gave JSSD a hiatus in its obligation to make MWDSLS’ water supply whole until the 2020 water year. MWDSLS waives any claim relating to the delay of JSSD in making the MWDSLS water supply whole for the water years 2020, 2021 and 2022. JSSD will immediately begin to make MWDSLS’ water supply whole beginning as of July 1, 2023. JSSD has expressed concern about the difficulties it may face in making the MWDSLS water supply whole on a weekly basis as described in paragraph 5 of the Agreement. Once JSSD has started to make the MWDSLS water supply whole, the parties will meet and negotiate in good faith an amendment that will give JSSD greater flexibility in terms of the timing for making the MWDSLS water supply whole, while also not giving MWDSLS make up water above what it would have received under its ODT water rights during high flow periods, including periods of Provo River Project extra allotment, when MWDSLS can neither use that water nor store that water.

6. JSSD Take or Pay Obligations. Paragraphs 7.b. through 7.d. of the First Amendment are modified as follows: JSSD will take or pay for at least 1,000 acre-feet of ODT Water annually beginning November 1, 2025, under the terms described in the Agreement. Beginning November 1, 2026, and each year thereafter, JSSD will take or pay for at least an additional 250 acre-feet of MWDSLS ODT water until JSSD is taking or paying for all available MWDSLS ODT water.

7. Change Application to Serve North Village Special Service District and Twin Creeks Special Service District. JSSD will prepare and submit for MWDSLs review and approval a change application to allow the ODT water to be used to serve the North Village Special Service District and Twin Creeks Special Service District. MWDSLs approval of the change application will not be unreasonably denied, conditioned, or delayed. Nothing in this provision or the approval of the described change application should be interpreted as modifying JSSD's obligations to make the MWDSLs water supply whole, or its obligations described in paragraph 3. above.

This Amendment is effective as of the date written above.

JORDANELLE SPECIAL SERVICE DISTRICT

Max Covey, General Manager
Date: _____

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

Annalee Munsey, General Manager
Date: _____

STATE OF UTAH)
 : ss
COUNTY OF WASATCH)

On this ____ day of _____, 2023, Max Covey personally appeared before me and having been duly sworn affirmed that he is the General Manager of the Jordanelle Special Service District, and that he has been duly authorized to execute, and has executed, the foregoing Second Amendment to November 1, 2006 Agreement Regarding Use of Ontario Drain Tunnel Water on behalf of Jordanelle Special Service District.

Notary Public

STATE OF UTAH)
 : ss
COUNTY OF SALT LAKE)

On this ____ day of _____, 2023, Annalee Munsey personally appeared before me and having been duly sworn affirmed that she is the General Manager of the Metropolitan Water District of Salt Lake & Sandy, and that she has been duly authorized to execute, and has executed, the foregoing Second Amendment to November 1, 2006 Agreement Regarding Use of Ontario Drain Tunnel Water on behalf of the Metropolitan Water District of Lake & Sandy.

Notary Public

**AGREEMENT
REGARDING USE OF ONTARIO DRAIN TUNNEL WATER
BETWEEN JORDANELLE SPECIAL SERVICE DISTRICT
AND
METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY**

THIS AGREEMENT REGARDING USE OF ONTARIO DRAIN TUNNEL WATER, dated effective November 1st, 2006 (this "Agreement"), by and between METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY, a metropolitan water district organized and existing under the laws of the state of Utah ("MWDSLS"), and JORDANELLE SPECIAL SERVICE DISTRICT, a special service district created by Wasatch County, Utah, and existing under the laws of the state of Utah ("JSSD").

AGREEMENT PURPOSES

JSSD was created for the purpose of providing governmental services, including culinary water service and water reclamation, to the properties within JSSD's boundaries. JSSD owns or leases the rights to beneficially use a substantial portion of the water flowing from the Ontario No. 2 Drain Tunnel ("ODT"). JSSD owns, operates and maintains a water treatment plant near the ODT portal. JSSD is planning and will construct, own and operate, a waste water treatment facility near Jordanelle Reservoir.

MWDSLS provides supplemental wholesale treated water to its two member cities, Salt Lake City and Sandy City. MWDSLS has recently purchased certain rights to use a portion of the water flowing from ODT. MWDSLS diverts that water from the Provo River at three points of diversion below Deer Creek Dam.

Because water from ODT is foreign to the Provo River/Utah Lake/Jordan River drainage, JSSD and MWDSLS believe that JSSD could use this water in its service area, treat the portion of this water used indoors that is not consumed, discharge it to Provo River, and make up any consumed portions of the water from other waters available to JSSD. In this manner the water supplies of JSSD would be increased, without diminishment of the water supplies available for use by MWDSLS and its member cities. Subject to the terms and conditions below, MWDSLS has agreed to allow JSSD to use MWDSLS ODT water and make up any consumed portions in perpetuity. This Agreement is intended to memorialize the understanding of the parties with respect to such use of MWDSLS ODT water by JSSD.

AGREEMENT TERMS

NOW THEREFORE, in consideration of the mutual promises contained in this Agreement, the parties agree as follows:

1. 2005 ODT Agreement.

Nothing in this Agreement is intended to modify, alter or amend the "Agreement Regarding Ontario Drain Tunnel Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy" dated February 25, 2005, except as expressly described in this Agreement.

2. Lease of MWDSLS ODT Water.

Subject to the terms and conditions of this Agreement, MWDSLS hereby leases to JSSD all ODT water physically available at the exit portal of ODT under MWDSLS ODT water rights in perpetuity, for the purpose of a one time use of that water in the JSSD

service area, as that service area may from time to time change. For the right and opportunity to use MWDSLS ODT water one time, and the right to treat that water in JSSD's waste water treatment facility, JSSD will pay to MWDSLS from and after the effective date of this Agreement the sum of Two Hundred Dollars (\$200) for each acre-foot (AF) of MWDSLS water that exits the ODT portal, as determined by the Provo River Commissioner records, whether or not that water is actually used by JSSD. The first lease payment will be received by MWDSLS on or before January 1, 2008 for the partial water year ending on October 31, 2007. Thereafter, lease payments will be received by MWDSLS annually on or before January 1 of each year for MWDSLS ODT water leaving the ODT portal during the preceding water year ending on October 31. Beginning with water leased on or after November 1, 2015, the lease payments will be indexed to, and increase annually with, increases in the Consumer Price Index (CPI) as calculated by the United States Bureau of Vital Statistics for the Western states. If such CPI is not available, the closest equivalent official United States information will be used.

3. Warranties and Representations.

MWDSLS makes no warranties or representations whatsoever regarding the quantity or quality of any water that will be available for use by JSSD under this Agreement.

4. JSSD Option for Additional Use of MWDSLS ODT Water.

At JSSD's sole option, JSSD may choose to use MWDSLS ODT water more than once. For each AF of MWDSLS ODT water used by JSSD a second time or more,

MWDSLS will receive from JSSD an additional lease payment of One Hundred Dollars (\$100) per AF, as determined by the Provo River Commissioner records, escalated with inflation as described in paragraph 2 above.

5. Paramount Obligation of JSSD to Make MWDSLS Water Supply Whole.

JSSD will, as a condition for any diversion or use of MWDSLS ODT water by JSSD, provide water and necessary approvals such that water available to MWDSLS at its points of diversion at the Salt Lake Aqueduct, Olmstead Diversion and Provo Reservoir Canal Diversion, will not be less than the MWDSLS share of the flow of ODT water that would have been available at those points of diversion absent this Agreement. The MWDSLS water supply will be kept whole on a weekly basis. If reasonably requested by MWDSLS, the water to be provided by JSSD to make up for MWDSLS ODT water that is consumed by JSSD will be at JSSD's option either: a) water that is in all respects as suitable for reuse by MWDSLS as the consumed MWDSLS ODT water, or b) water that is Provo River Project water.

6. JSSD Responsibility for Regulatory Approvals.

JSSD will be solely responsible for reasonably, diligently and timely filing for, pursuing and obtaining any and all change applications, reuse applications, discharge permits or other approvals, licenses or permits necessary for the implementation of this Agreement, however, JSSD will not be obligated to pursue any judicial review action. At no time will JSSD file any document relating to any MWDSLS water right without the prior written approval of MWDSLS. Such MWDSLS approval will not be unreasonably withheld or unreasonably denied. MWDSLS will have the right, but not the obligation,

to manage any filing, processing or prosecution of any change application, reuse application or similar application filed with the Utah State Engineer as to any MWDSLS water right, and may, after meeting with and conferring with JSSD, terminate any such filing, processing or prosecution if MWDSLS determines that such application may adversely impact or impair any MWDSLS water right. The parties will keep each other timely advised regarding the filing, processing and prosecution of any applications, approvals or permits, and any judicial review actions, relating to the implementation of this Agreement. JSSD will reimburse MWDSLS for out of pocket costs, including attorney's fees and expert fees reasonably incurred by MWDSLS with respect to any and all judicial review actions, involving MWDSLS ODT water rights, that result from the implementation of this Agreement.

7. JSSD Option to Terminate For Failure to Obtain Necessary Regulatory Approvals.

If despite reasonably diligent efforts by JSSD all necessary change applications, reuse applications, discharge permits or other approvals, licenses or permits necessary for the implementation of the one time use of MWDSLS ODT water as described in paragraph 2 above have not been obtained on or before March 1, 2010, JSSD may, in JSSD's sole and absolute discretion, after meeting with and conferring with MWDSLS, terminate this Agreement. JSSD may, in JSSD's sole and absolute discretion, after meeting with and conferring with MWDSLS, extend the deadline for the exercise of this option from March 1, 2010 an additional year at a time, for up to three (3) additional years. Pending the exercise of the described option to terminate JSSD will pay the lease

payments described above pending obtaining the necessary regulatory approvals. Any failure of JSSD to obtain necessary applications, permits or approval to use MWDSL ODT water more than once will not give rise to any option of JSSD to terminate this Agreement.

8. General.

(a) Entire Agreement.

This Agreement constitutes the entire agreement between the parties and supersedes all prior understandings, representations, or agreements of the parties regarding the subject matters described in this Agreement.

(b) Further Acts.

The parties will perform those acts and/or sign those documents reasonable and necessary to effectuate the terms of this Agreement.

(c) Assignment.

Neither party may assign this Agreement, or any rights, duties, or obligations under this Agreement, without the prior written consent of the other. Consent will not be withheld if: (i) the proposed assignee is a governmental entity that is the successor in interest to all of the assignor's operational interests; and, (ii) at the time of the assignment, the assignor is not in default of this Agreement. Any assignment made in violation of this subparagraph or in violation of law will be void. Notwithstanding the foregoing, either party may pledge or assign this Agreement as security for its bonding or other financing

activities. This Agreement will bind and inure to the benefit of the parties hereto and their respective successors and assigns.

(d) No Agency or Partnership.

This Agreement does not create any kind of joint venture, partnership, agency, or employment relationship between the parties.

(e) Legal Compliance.

The parties will comply with all applicable federal, state, and local laws and ordinances in the performance of this Agreement. Any terms which the parties as governmental entities are mandated by law to include in this Agreement will be considered part of this Agreement.

(f) Amendment.

This Agreement cannot be amended except by a written instrument signed by the parties.

(g) Remedies.

Any dispute between the parties regarding this Agreement will first be submitted to an advisory committee appointed by the Board of Trustees of both parties for review and recommendation. If the dispute is not resolved in that manner, it will then be submitted to non-binding mediation. If the dispute is not resolved by mediation, all remedies at law or in equity which are otherwise appropriate will be available to the parties. Notwithstanding the preceding, either party may bring suit regarding this Agreement to avoid extinguishment of claims and/or defenses due to the expiration of applicable limitations.

(h) Late Payment.

Any payment under this Agreement not made when due will bear simple, annual interest at one percent (1%) above the Utah Public Treasurer's Investment Fund Rate, commencing the day after the due date and accruing until paid in full.

(i) Severability.

In the event a court, governmental agency, or regulatory agency with proper jurisdiction determines that any provision of this Agreement is unlawful, that provision will terminate. If a provision is terminated, but the parties can legally, commercially, and practicably continue to perform this Agreement without the terminated provision, the remainder of this Agreement will continue in effect.

(j) Force Majeure.

Neither party shall be deemed in violation of this Agreement if it is prevented from performing any of its obligations by reason of major earthquakes or other similar natural disaster; strikes or other labor unrest; power failures; civil or military emergencies

(k) Notices.

Any notice, communication, or payment required or allowed by this Agreement will be in writing and shall be mailed, hand-delivered, e-mailed, or faxed to each party as follows:

To MWDSLs Michael L. Wilson, General Manager
Metropolitan Water District of Salt Lake & Sandy
3430 East Danish Road
Sandy, UT 84093
Fax No: (801) 942-3674
Email: wilson@mwdsls.org

To JSSD: Dan H. Matthews, Manager
Jordanelle Special Service District
P. O. Box 519
Heber City, UT 84032
Fax No: (435) 333-0514
Jssd1@xmission.com

Each party may change the designation of the addressee or the address for that party by providing written notice of the change.

(l) Authority.

Each individual executing this Agreement represents and warrants that he has been duly authorized to sign this Agreement in the capacity and for the entity identified. Each signer also represents and warrants that this Agreement has been duly approved by that signer's Board of Trustees.

(m) No Third-Party Beneficiaries.

The parties intend that this Agreement benefit only them, and they do not intend there to be any third-party beneficiaries.

(n) Interpretation.

This Agreement is not intended to be interpreted for or against either party.

(o) No Waiver.

In the event of any legal, equitable or administrative action or proceeding brought by any party against the other party under this Agreement, the prevailing party will be entitled to recover the reasonable fees of its attorneys and experts, and any costs incurred in such action or proceeding, including costs of appeal, if any, in such amount as the court or administrative body having jurisdiction may award.

(p) Interlocal Cooperation Agreement.

The parties do not believe the Interlocal Cooperation Act applies to this Agreement, as this Agreement does not establish an interlocal entity, does not involve the joint ownership of real or personal property, and does not involve a joint or cooperative undertaking. The parties do not intend for the Interlocal Cooperation Act to apply. To assure enforceability of this Agreement in the event the Interlocal Cooperation Act applies to this Agreement, the parties agree as follows:

(i) This Agreement will be authorized by resolution of the governing body of each party, pursuant to Section 11-13-202.5(1)(b) of the Interlocal Cooperation Act;

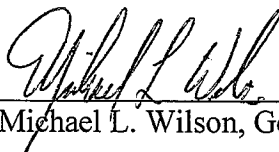
(ii) A duly executed original counterpart of this Agreement will be filed with the keeper of records of each party pursuant to Section 11-13-209 of the Interlocal Cooperation Act.

(iii) For purposes of Section 11-13-207(1) of the Interlocal Cooperation Act, the General Manager of MWDSL and the Manager of JSSD are designated as joint administrators of this Agreement.

(iv) This Agreement has been submitted to the attorneys authorized to represent the parties for review as to proper form and compliance with applicable law, pursuant to Section 11-13-202.5(3) of the Interlocal Cooperation Act prior to execution.

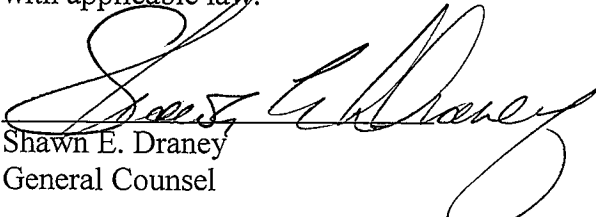
(v) This Agreement is intended to be perpetual. To the extent that Section 11-13-216 of the Interlocal Cooperation Act applies, the parties agree that to the greatest extent allowed by law this Agreement shall automatically renew for consecutive terms, and the parties will take all steps reasonable and necessary to extend or renew this Agreement in perpetuity.

METROPOLITAN WATER DISTRICT OF SALT
LAKE & SANDY



Michael L. Wilson, General Manager

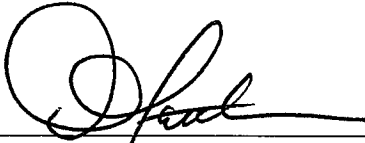
Approved as to form and compliance
with applicable law.



Shawn E. Draney
General Counsel

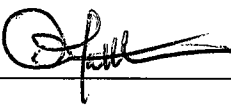
Signature Page
JSSD/MWD Ontario Drain Tunnel Agreement

JORDANELLE SPECIAL SERVICE DISTRICT




Dan H. Matthews, Manager

Approved as to form and compliance
with applicable law:



STATE OF UTAH)
 : ss
COUNTY OF SALT LAKE)

On this 8th day of November, 2006, Michael L. Wilson personally appeared before me and acknowledged that he is the General Manager of the Metropolitan Water District of Salt Lake & Sandy; he has been duly authorized to execute the foregoing Agreement Regarding Use of Ontario Drain Tunnel Water Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy on behalf of the Metropolitan Water District of Salt Lake & Sandy; and he executed the same for and on behalf of the Metropolitan Water District of Salt Lake & Sandy.

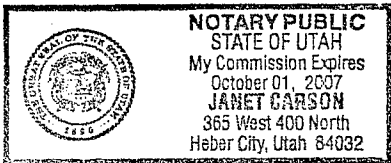
 **ROBYN CLAYTON**
NOTARY PUBLIC • STATE of UTAH
8943 CHESHIRE DRIVE
SANDY UT 84093
MY COMMISSION EXPIRES: 09-26-2009



NOTARY PUBLIC

STATE OF UTAH)
COUNTY OF Wasatch) : ss

On this 8 day of November 2006, Dan H. Matthews, personally appeared before me and acknowledged that he is the Manager of the Jordanelle Special Service District; he has been duly authorized to execute the foregoing Agreement Regarding Ontario Drain Tunnel Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy on behalf of the Jordanelle Special Service District; and he executed the same for and on behalf of the Jordanelle Special Service District.



Janet Carson
NOTARY PUBLIC

FIRST AMENDMENT TO
November 1, 2006
AGREEMENT REGARDING USE OF
ONTARIO DRAIN TUNNEL WATER

THIS FIRST AMENDMENT ("Amendment") is entered into as of this 17 day of ~~November~~, 2010, by and between METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY ("MWDSLS") and JORDANELLE SPECIAL SERVICE DISTRICT ("JSSD").

AMENDMENT PURPOSES

The parties entered into an agreement entitled "Agreement Regarding Use of Ontario Drain Tunnel Water Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy" with an effective date of November 1, 2006 ("2006 ODT Agreement.") The 2006 ODT Agreement allows JSSD to use MWDSLS' share of Ontario Drain Tunnel No. 2 ("ODT") water and make up the water consumed by JSSD from other water supplies available to JSSD. The 2006 ODT Agreement terms are "take or pay" for the first JSSD use. JSSD is to pay for each acre-foot (AF) of MWDSLS ODT water available for use, whether the water is in fact used by JSSD or not. Due to a slow-down in real estate development, and resulting defaults and delays in payments by others to JSSD, the parties wish to revise the terms of the 2006 ODT Agreement as described here.

AGREEMENT TERMS

In consideration of the mutual covenants contained here the parties amend the 2006 ODT Agreement as described here. Except as expressly described here, all terms of the 2006 ODT Agreement remain in full force and effect.

1. Deferral of Payment for 2008 and 2009 Water Years. The amount of MWDSLS ODT water available for use by JSSD during the 2008 water year was 3,566 AF. The principal owed by JSSD to MWDSLS for the 2008 water year is the liquidated sum of Seven Hundred and Thirteen Thousand Two Hundred Dollars (\$713,200.00). The amount of MWDSLS ODT water available for use by JSSD during the 2009 water year was 3,989 AF. The principal owed by JSSD for the 2009 water year is the liquidated sum of Seven Hundred and Ninety-Seven Thousand Eight Hundred Dollars (\$797,800.00). Immediately upon signing this Amendment, and prior to December 1, 2010, JSSD will pay to MWDSLS the sum of One Hundred Thousand Dollars (\$100,000.00). Such timely payment is a pre-condition to MWDSLS signing this Amendment. On or before each first day of February beginning in 2011 JSSD will pay to MWDSLS the sum of One Hundred Thousand Dollars (\$100,000.00). Such payments shall be credited first to the outstanding and unpaid principal owed by JSSD for the 2008 water year, and

thereafter shall be credited to the outstanding and unpaid principal owed by JSSD for the 2009 water year. Upon timely and full payment of the principal owed for the 2008 and 2009 water years as described, all interest as to the 2008 and 2009 water years will be automatically forgiven.

2. Conditions of Deferral. Any deferral of payments by JSSD to MWDSLS as described in this Amendment may only be deferred to the extent described expressly here.

a. It is a condition of deferral that the agreements between JSSD and MWDSLS, including the February 25, 2005 Agreement Regarding Ontario Drain Tunnel Between Jordanelle Special Service District and Metropolitan Water district of Salt Lake & Sandy, and the 2006 ODT Agreement, as modified by this Amendment:

i. have not, in whole or in part, been materially breached by JSSD or its successor without timely, full cure; and

ii. have not, in whole or in part, been terminated, revoked or cancelled by JSSD, except according to the express terms of such contracts or for material breach by someone other than JSSD or its successor; and

iii. have not been rejected in bankruptcy, assigned in bankruptcy, or repudiated, by JSSD or its successor, except according to the express terms of such contracts or for material breach by someone other than JSSD or its successor; and

iv. neither JSSD nor its successor purport to have terminated, revoked, cancelled, rejected in bankruptcy, assigned in bankruptcy, or repudiated any of the described contracts, except according to the express terms of such contracts or for material breach by someone other than JSSD or its successor; and

v. no notice of termination or intent to terminate has been issued by JSSD or its successor regarding any of the described contracts, except as consistent with the express terms of such contract.

b. MWDSLS is contemplating acquiring by exchange Salt Lake City's interest in the ODT water right that is the subject of the Water Supply Agreement dated May 19, 1997 between JSSD and Salt Lake City, together with Salt Lake City's rights under that SLC/JSSD Water Supply Agreement. JSSD is currently in arrears on payments due under the terms of that SLC/JSSD Water Supply Agreement. JSSD will not get more in arrears on payments under that SLC/JSSD Water Supply Agreement, and will bring payments under that agreement current on or before December 31, 2012. While MWDSLS is pursuing the acquisition of the Salt Lake City rights under the SLC/JSSD Water Supply Agreement, up to May 19, 2015, and thereafter if MWDSLS is

successful on or before May 19, 2015 in acquiring the rights of Salt Lake City under that agreement, and excepting only the arrears in JSSD payments prior to December 31, 2012 as described, it is a condition of deferral that such SLC/JSSD Water Supply Agreement:

- i. has not, in whole or in part, been materially breached by JSSD or its successor without timely, full cure; and
- ii. has not, in whole or in part, been terminated, revoked or cancelled by JSSD, except according to the express terms of such contract or for material breach by someone other than JSSD or its successor; and
- iii. has not been rejected in bankruptcy, assigned in bankruptcy, or repudiated, by JSSD or its successor, except according to the express terms of such contract or for material breach by someone other than JSSD or its successor; and
- iv. neither JSSD nor its successor purport to have terminated, revoked, cancelled, rejected in bankruptcy, assigned in bankruptcy, or repudiated the contract, except according to the express terms of such contract or for material breach by someone other than JSSD or its successor; and
- v. no notice of termination or intent to terminate has been issued by JSSD or its successor regarding the contract, except as consistent with the express terms of such contract.

c. If any of these conditions of deferral are not met JSSD shall be deemed in default of the 2006 ODT Agreement as amended by this Amendment. JSSD will cure such default within thirty (30) calendar days of receipt of written notice by MWDSLS of default. If JSSD does not cure, MWDSLS may, at its sole option, and in addition to any other remedies available to MWDSLS, declare all deferred amounts immediately due and payable.

3. Elimination of JSSD Take or Pay Obligations. The parties agree to eliminate JSSD's take or pay payment obligation under the 2006 ODT Agreement to MWDSLS effective as of November 1, 2009 and replace it with a commitment of JSSD to make best efforts to return to full performance under the 2006 ODT Agreement. MWDSLS will attempt to find temporary replacement buyer or buyers for MWDSLS ODT water. Upon advance notice that is reasonable in light of those temporary MWDSLS arrangements, JSSD may, at its sole option, return to a commitment for taking or paying for ODT water available under MWDSLS rights in blocks as JSSD chooses. JSSD will consult with MWDSLS before making any new commitment to purchase or lease water or water rights from any person or entity other than MWDSLS, excepting only small transactions, defined as commitments to purchase or lease made in any one calendar year totaling less than 50 AF/year, and not exceeding total commitments of more than

200 AF/yr. Excepting the defined small transactions, JSSD will not make any new commitment to purchase or lease water or water rights from any source, without first returning to full compliance with the 2006 ODT Agreement. JSSD will not make any modification or amendment of any JSSD commitment to purchase water, excepting only reductions in JSSD obligations, without first consulting with MWDSLS.

4. Modification of Interest. The amounts that are deferred consistent with this Amendment, and during deferral as expressly allowed by this Amendment, will not earn interest. All other amounts will earn interest at 8% per annum, compounded annually, beginning thirty (30) days after payment is due. These changes in interest terms are a permanent change to the 2006 ODT Agreement.

5. Temporary Modification of Obligation of JSSD to Make MWDSLS Water Supply Whole. Subject to paragraph 7 below, the paramount JSSD obligation to make the MWDSLS water supply whole described in paragraph 5 of the original 2006 ODT Agreement is suspended, with respect to any one-time use of MWDSLS ODT water only, until the beginning of the 2020 water year, November 1, 2019. Until that date, if JSSD makes a one-time use of MWDSLS ODT water, and to the extent a portion or all of that water is consumed or is not available in the Provo River system, JSSD has no obligation to make the MWDSLS water supply whole. However, to the extent some MWDSLS water is used by JSSD, but not consumed, MWDSLS claims the right to recover any return flow that is foreign, directly or by exchange, and to reuse such foreign return flow. JSSD will act reasonably to cooperate with MWDSLS to assist MWDSLS regarding such claim, recovery, and use.

6. Modification of Obligation of JSSD for Regulatory Approvals. To the extent JSSD intends to use MWDSLS water, JSSD has the obligation to file and pursue any necessary change applications reasonably approved by MWDSLS. Subject to paragraph 7 below, reuse applications and discharge applications are not required to be filed or pursued by JSSD, as described in paragraph 6 of the 2006 ODT Agreement. JSSD's right to terminate described in paragraph 7 of the 2006 ODT Agreement is suspended until three (3) years after the date when JSSD has completed its waste water treatment facility near the base of Jordanelle Dam, filed and reasonably and diligently pursued all necessary, change, discharge and reuse permits that would be required for JSSD to make a one-time use of MWDSLS ODT water and make the MWDSLS water supply whole. However, the option to terminate may be exercised only after reasonable efforts to consult with MWDSLS, and only after all amounts deferred as described in this Amendment have been fully paid to MWDSLS. Exercise of this option to terminate shall be accomplished by written notice to MWDSLS.

7. MWDSLS Option to Terminate. If JSSD does not meet the following interim steps for eventual return to full performance of the 2006 ODT Agreement, then, after consultation with JSSD, and upon written notice within sixty (60) days after the interim step due date in question, MWDSLS may, in its sole discretion, and as a sole remedy, terminate any future MWDSLS and JSSD obligations under the 2006 ODT Agreement, excepting only the

JSSD obligation to pay deferred principal and interest for the 2008 and 2009 water years as described in paragraphs 1 and 2 above. MWDSLS may, in its sole discretion, and in lieu of such termination for JSSD's failure to meet an interim step deadline, and upon written notice to JSSD, delay the date for JSSD to meet such interim step for an additional year. MWDSLS may, in its sole discretion, make successive annual delays. Any described termination of the 2006 ODT Agreement by MWDSLS shall not affect in any regard the rights of JSSD to deferral of amounts owed by JSSD to MWDSLS for the 2008 and 2009 water years and forgiveness of interest as described in paragraphs 1 and 2 above. The interim steps for JSSD's eventual return to full performance of the 2006 ODT Agreement are:

a. JSSD files, on or before November 1, 2015, in good and reasonably complete form, all reasonable and necessary change, reuse and other applications with the Utah State Engineer necessary for JSSD to make the MWDSLS water supply whole as described in paragraph 5 of the original 2006 ODT Agreement.

b. JSSD agrees to take or pay for at least 500 AF of MWDSLS ODT water annually, for the water year beginning November 1, 2016 under terms described in the 2006 ODT Agreement, but subject to paragraph 5 above temporarily relieving JSSD of making the MWDSLS water supply whole.

c. JSSD agrees to take or pay for at least 1,000 AF of MWDSLS ODT water annually, for the water year beginning November 1, 2021 under terms described in the 2006 ODT Agreement, but subject to paragraph 5 above temporarily relieving JSSD of making the MWDSLS water supply whole.

d. JSSD agrees to take or pay for all MWDSLS ODT water available as described in the 2006 ODT Agreement, from and after the water year beginning November 1, 2025.

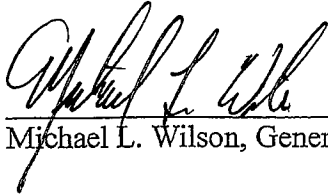
8. Obligation to Budget. JSSD staff will include in the first draft of every annual budget an appropriation or appropriations in the amounts necessary to pay the amounts due to MWDSLS as described in the 2006 ODT as modified by this Amendment.

9. Relationship to Other Agreements. The agreements between JSSD and MWDSLS, including the February 25, 2005 Agreement Regarding Ontario Drain Tunnel Between Jordanelle Special Service District and Metropolitan Water District of Salt Lake & Sandy, and the 2006 ODT Agreement, as modified by this Amendment, as well as the Water Supply Agreement dated May 19, 1997 if MWDSLS timely acquires Salt Lake City's interest in the water right that is the subject of that agreement, and Salt Lake City's rights under the agreement, may not be assigned or affirmed separately in bankruptcy or otherwise.

This AMENDMENT is effective the day and date first written above.

METROPOLITAN WATER DISTRICT
OF SALT LAKE & SANDY

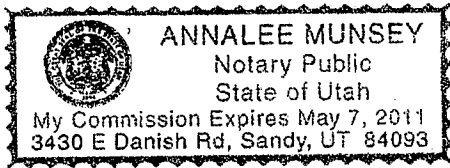
JORDANELLE SPECIAL SERVICE
DISTRICT


Michael L. Wilson, General Manager


Dan H. Matthews, Manager

STATE OF UTAH)
 : ss.
COUNTY OF SALT LAKE)

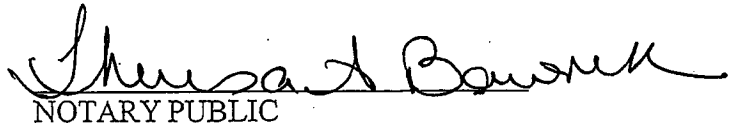
On the 24 day of January, 2010, personally appeared before me Michael L. Wilson, known by me to be the General Manager of the Metropolitan Water District of Salt Lake & Sandy, and having been duly authorized to execute the foregoing Amendment, executed the same for and on behalf of the Metropolitan Water District of Salt Lake & Sandy.

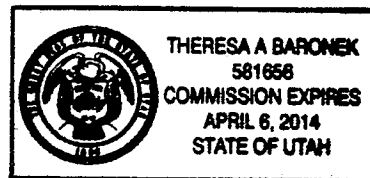



NOTARY PUBLIC

STATE OF UTAH)
 : ss.
COUNTY OF WASATCH)

On the 17 day of November, 2010, personally appeared before me Dan H. Matthews, known by me to be the Manager of the Jordanelle Special Service District, and having been duly authorized to execute the foregoing Amendment, executed the same for and on behalf of the Jordanelle Special Service District.


NOTARY PUBLIC



Topic	2006 Agreement	2010 First Amendment	2023 Second Amendment
Deferral	--	JSSD will pay \$100,000/year toward the amounts owed for the 2008 and 2009 water years (\$713, 200 and \$797,800), with all interest forgiven upon full, timely payment of the principal. (¶ 1) There were several conditions imposed on this deferral. (¶ 2)	Acknowledges all payments required so far have been made. JSSD will continue to make the described payments. (¶ 1)
Take or pay obligation	\$200/AF of District water that exits the ODT portal, with first payment by January 1, 2008, for the partial water year ending October 31, 2007. (¶ 2)	<ul style="list-style-type: none"> • Take or pay obligation under the 2006 Agreement replaced with commitment of JSSD to make best efforts to return to full performance under that agreement. • JSSD can return to commitment to take or pay in blocks as JSSD chooses. • JSSD will consult with District before making new commitments to purchase or lease other WRs (other than < 50 AF/year, 200 AF/year total) and will not make new commitments without first returning to full compliance. • JSSD will not modify any other commitments (except reductions in obligations) without consulting with District. (¶ 3)	The take or pay obligations described as interim steps in ¶ 7(b) through (d) are amended as follows: JSSD will take or pay for at least 1,000 acre-feet of ODT Water annually beginning November 1, 2025. Beginning November 1, 2026, and each year thereafter, JSSD will take or pay for at least an additional 250 acre-feet of the District ODT water until JSSD is taking or paying for all available District ODT water. (¶ 6)
Interest	--	Other than the deferral payments, all amounts earn interest at 8% per annum, compounded annually, 30 days after payment is due. (¶ 4)	--
Price increase	Beginning with water leased on or after November 1, 2015, lease payments will be indexed to and increased annually with increases in CPI. (¶ 2)	--	<ul style="list-style-type: none"> • District agrees not to seek reimbursement for any potential increase in lease payments dating back to November 2015, which

			<p>were not increased as provided in ¶ 2.</p> <ul style="list-style-type: none"> • Have implemented a 3% annual increase to lease payments beginning July 1, 2020. • Going forward, lease payments will be increased by CPI. <p>(¶ 2)</p>
Warranties	District makes no warranties regarding quantity or quality of water available. (¶ 3)	--	--
Reuse	JSSD may, at its option, use District ODT water more than once with an additional lease payment of \$100/AF so used, escalated as described above. (¶ 4)	--	Constitutes a “reuse authorization contract” for the purpose of Utah Code §§ 73-3c-202(1) and 73-3c-102(5)(b). The District consents to JSSD’s reuse of its ODT WRs with condition reuse shall be consistent with the District’s underlying ODT water rights. (¶ 3)
Paramount obligation to make District supply whole	<ul style="list-style-type: none"> • JSSD will provide water and necessary approvals such that water available to the District at its PODs at SLA, Olmstead Diversion, and Provo Reservoir Canal Diversion will not be less than the District’s flow of ODT water that would have been available at those PODs. • Will be kept whole on a weekly basis. • Upon reasonable request by District, will be water that is as suitable for reuse by District as consumed ODT water or PRP water. <p>(¶ 5)</p>	<ul style="list-style-type: none"> • Suspended with respect to one-time use of District ODT water until the 2020 water year. • If JSSD uses District ODT water but does not consume it, the District has the right to recover any return flows that is foreign and reuse such foreign return flow. JSSD will reasonably cooperate to assist the District. <p>(¶ 5)</p>	<ul style="list-style-type: none"> • The District waives any claim relating to JSSD’s delay in making the District water supply whole for the water years 2020, 2021, and 2022. • JSSD will begin making the District’s water supply whole July 1, 2023. • Once JSSD does so, the parties will meet and negotiate in good faith an amendment that gives JSSD greater flexibility in timing compared to the weekly basis required under the prior agreement. <p>(¶ 5)</p>
Regulatory Approvals	<ul style="list-style-type: none"> • JSSD solely responsible for reasonably, diligently, and timely 	<ul style="list-style-type: none"> • To the extent JSSD intends to use District ODT water, JSSD has the 	<ul style="list-style-type: none"> • JSSD will as soon as practicable and in coordination and

	<p>filing for, pursuing, and obtaining all necessary approvals.</p> <ul style="list-style-type: none"> • JSSD is not required to pursue judicial review actions. • JSSD will not file any document regarding District WRs without prior approval of District. • District has the right but not obligation to manage filing of applications. • Parties will keep each other apprised of status. • JSSD will reimburse the District for out of pocket costs regarding judicial review actions. <p>(¶ 6)</p>	<p>obligation to file and pursue any necessary approvals.</p> <ul style="list-style-type: none"> • JSSD is not required to file or pursue reuse and discharge applications. <p>(¶ 6)</p>	<p>consultation with the District, file any necessary discharge and reuse permits required to make the District water supply whole using in whole or in part reuse water from the JSSD wastewater treatment facility.</p> <ul style="list-style-type: none"> • Upon final approval of required discharge and reuse permits, JSSD will to the greatest extent practicable reuse the full quantity of the ODT water authorized by the State Engineer at least one year in each seven year period. <p>(¶ 4)</p>
<p>JSSD option to terminate or extend</p>	<ul style="list-style-type: none"> • If necessary approvals are not obtained by March 1, 2010, despite reasonable efforts, JSSD can terminate the agreement in its sole discretion. (Does not apply to reuse applications) • JSSD can at its sole option extend the deadline for exercise of its option from March 1, 2010, for one year at a time up to 3 years. <p>(¶ 7)</p>	<ul style="list-style-type: none"> • Suspended until 3 years after when JSSD completes its waste water treatment facility, filed and pursued all necessary applications to make one-time use of District ODT water and make the District whole. • The right to terminate can only be exercised after reasonable efforts to consult with the District and after all deferral payments are made. <p>(¶ 6)</p>	<p>--</p>
<p>District option to terminate</p>	<p>--</p>	<p>If JSSD fails to meet any of four identified interim steps, the District can either terminate the 2006 Agreement (except for deferral payments) or extend the deadline to meet the interim step for a year, with the possibility of successive delays. The interim steps are (a) filing all necessary change, reuse, and other</p>	<p>--</p>

		applications by November 1, 2015; (b) agreeing to take or pay at least 500 AF/year for water year beginning November 1, 2016, subject to Paragraph 5's temporary relief of paramount obligation; (c) agreeing to take or pay at least 1,000 AF/year for water year beginning November 1, 2021, subject to Paragraph 5's temporary relief of paramount obligation; and (d) agreeing to take or pay at all District ODT water under the 2006 Agreement beginning November 1, 2025. (§ 7)	
Obligation to Budget	--	JSSD will include in the first draft of every annual budget an appropriation sufficient to pay amounts due to the District. (§ 8)	--
Change Application re: North Village SSD and Twin Creeks SSD	--	--	JSSD will provide the District a draft change application to allow ODT water to be used to serve the North Village Special Service District and Twin Creeks Special Service District. The District's approval won't be unreasonably denied, conditioned, or delayed. (§ 7)

Metropolitan Water District of Salt Lake & Sandy
Board Meeting Information
Last Update: September 6, 2023

Agenda Item: Consider approval of capital budget transfers

Objective: To discuss capital budget transfers for the SLAR easement procurement and managed aquifer recharge project.

Background:

Easement Procurement

The FY24 budget for SLAR easement acquisition is \$400,000. The FY25 budget is \$100,000. With acquisition now underway and an appraisal in hand, staff forecasts acquisition to be \$3 million. Staff requests a transfer of \$2.6M from Capital Project Reserves to accommodate easement procurement. Staff plan to use loan revenues, anticipated prior to June 30, 2024, to cover this expense.

Managed Aquifer Recharge

The fiscal year 2024 MAR budget of \$7,272,721 includes:

- \$450,000 for design,
- \$900,000 for well construction, and
- \$5,922,721 for surface infiltration basin (SIB) construction

With the setback in well construction the contractor did not spend the FY2023 project budget as expected. The balance to completion, including all current change orders, is \$1,293,141.85. An amount of \$60,601.05 also remains in the 5% project contingency. Although the consultant is well within their budget, inspection and design related to the second well may also require additional consultant resources. Staff requests a transfer of \$500k from Capital Project Reserves to complete well construction in fiscal year 2024.

Committee Activity: The Engineering Committee discussed this item on September 5, 2023.

Recommendation: The Engineering Committee forwards a positive recommendation to the board for a capital transfer of \$2.6M for SLAR easement procurement and \$500k to complete the MAR wells bid package. The transfer will be funded from Capital Project Reserves.

Attachment: Capital Transfer Summary Spreadsheet

Capital Budget Transfer
Metropolitan Water District of Salt Lake & Sandy
Last Updated: August 1, 2023

	FY24 Original	Prior Transfers		Spent/ Encumbered as	Amount Remaining as of	09/18/2023 Proposed	Proposed
	Budget	In/(Out)	Revised Budget	of 08/01/2023	08/01/2023	Transfer In/(Out)	Revised Budget
NON-CAPACITY IMPROVEMENT PROJECTS							
SLAR-CC Easement Procurement	\$ 400,000.00	\$ -	\$ 400,000.00	\$ -	\$ 400,000.00	\$ 2,600,000.00	\$ 3,000,000.00
SCS Hardware and Software Replacement	\$ 100,000.00	\$ -	\$ 100,000.00	\$ 98,406.71	\$ 1,593.29	\$ -	\$ 100,000.00
LCC Replacement and Intake Modifications	\$ 200,000.00	\$ -	\$ 200,000.00	\$ -	\$ 200,000.00	\$ -	\$ 200,000.00
POMWTP PC/S Hardware Replacement	\$ 250,000.00	\$ -	\$ 250,000.00	\$ 207,888.80	\$ 42,111.20	\$ -	\$ 250,000.00
Fleet Replacement Program	\$ 200,000.00	\$ -	\$ 200,000.00	\$ -	\$ 200,000.00	\$ -	\$ 200,000.00
Little Dell Dam Improvements	\$ 400,000.00	\$ -	\$ 400,000.00	\$ -	\$ 400,000.00	\$ -	\$ 400,000.00
Repair and Replace	\$ 850,873.00	\$ -	\$ 850,873.00	\$ 390,039.01	\$ 460,833.99	\$ -	\$ 850,873.00
Non-Capacity Improvement Projects Total	\$ 2,400,873.00	\$ -	\$ 2,400,873.00	\$ 696,334.52	\$ 1,704,538.48	\$ 2,600,000.00	\$ 5,000,873.00
CAPACITY IMPROVEMENT PROJECTS							
Managed Aquifer Recharge Design and Construction	\$ 7,272,721.00	\$ -	\$ 7,272,721.00	\$ -	\$ 7,272,721.00	\$ 500,000.00	\$ 7,772,721.00
Capacity Improvement Projects Total	\$ 7,272,721.00	\$ -	\$ 7,272,721.00	\$ -	\$ 7,272,721.00	\$ 500,000.00	\$ 7,772,721.00
OTHER CAPITAL IMPROVEMENT PROJECTS							
Jordan Aqueduct System and 150th South Pipeline	\$ 2,974,643.00	\$ -	\$ 2,974,643.00	\$ -	\$ 2,974,643.00	\$ -	\$ 2,974,643.00
Central Utah Project (CUP) Capital	\$ 3,815,423.00	\$ -	\$ 3,815,423.00	\$ -	\$ 3,815,423.00	\$ -	\$ 3,815,423.00
Other Capital Improvement Projects Total	\$ 6,790,066.00	\$ -	\$ 6,790,066.00	\$ -	\$ 6,790,066.00	\$ -	\$ 6,790,066.00
Grand Total	\$ 16,463,660.00	\$ -	\$ 16,463,660.00	\$ 696,334.52	\$ 15,767,325.48	\$ 3,100,000.00	\$ 19,563,660.00

Notes:

Agenda Item: Consider approval of changes to Policies & Procedures Chapter 16

Objective: Consider update to P&P 16 related to retaining walls.

Background: On August 7, 2023 the Board of Trustees heard an appeal from the contractor for Jason Woods. The appeal related to installing Verti-block retaining walls within the SLA Corridor. These walls were used in 2020 by Salt Lake County within the SLA Corridor for the Mt. Olympus Trailhead. Verti-block, or similar, is being considered for the SLA Corridor where removal of existing nonconforming retaining walls is required during the SLAR-CC project. These scenarios suggest a possible change to the District's Policies and Procedures (P&P). Recommended action regarding P&P Chapter 16 (Regulations for Non-District Use of the Aqueduct Corridors) is the responsibility of the Engineering Committee.

P&P 16, Section 16-7.4.a.iii, describes retaining walls, and currently reads

- iii) Retaining Walls. Free standing (i.e., without footing or foundation) rock retaining walls less than three feet tall used for grading and not supporting a building, road, driveway, or structure may be permitted within Aqueduct Corridors if they will not violate District rights. Concrete or masonry retaining walls should be excluded from Aqueduct Corridors.

Verti-block is a gravity retaining system that can be implemented in both reinforced and non-reinforced configurations. The purpose, soil type, and up-slope topography determine maximum non-reinforced wall height. The standard block size is four feet long, three feet deep, and two feet tall, and weighs 1,760 pounds. Deeper block is used for taller walls and less stable soils. Geofabrics and engineered fills are also available to further bolster the efficacy of the walls. Drains must also be properly engineered for each wall.

The variability in wall design necessitates review on a case-by-case basis. In all cases, the District's ability to operate, maintain, repair, and replace the pipeline in a timely manner must be considered. Proposed policy revisions are shown below in blue.

- iii) Retaining Walls. Except for District purposes, retaining walls shall not be permitted within District fee lands. Where the District does not own fee, non-reinforced, Free standing gravity (i.e., without footing or foundation) modular block or rock retaining walls less than three feet tall used may be allowed on a case-by-case basis for grading and that is not supporting a building, road, driveway, or structure may be permitted within Aqueduct Corridors if they will not violate District rights. Concrete or masonry retaining walls should be excluded from Aqueduct Corridors.

To accommodate design variability, proposed revisions to the P&P 16 further rely on the attached standard specification which addresses the engineering detail. The proposed changes suggest the District's General Manager has the authority to make case-by-case determinations.

Committee Activity: The Engineering Committee discussed this item on September 5, 2023.

Recommendation: The Engineering Committee forwards a positive recommendation for the recommend changes to P&P 16.

Attachments:

- Standard Specification 31 42 00 – Gravity Retaining Walls and Rockeries

SECTION 31 42 00**GRAVITY RETAINING WALLS AND ROCKERIES**

Last Updated: August 10, 2023

Part 1 GENERAL**1.1 SECTION INCLUDES**

- A. General requirements regarding gravity retaining walls and rockeries on District lands and interest in lands.

1.2 GENERAL

- A. Except for District purposes, gravity retaining walls and rockeries shall not be permitted on District lands.
- B. Gravity retaining walls and rockeries should be considered by staff on a case-by-case basis and in compliance with District Policies & Procedures Chapter 16, Section 7.4.a.iii and this standard specification.
- C. City, county, and other jurisdictional authorities should be considered with the application of this section. Where such authorities maintain ordinances, codes, or guidelines related to gravity retaining walls or rockeries, the stricter of said ordinances, codes, or guidelines and this section governs.
- D. Gravity retaining walls and rockeries should only be considered for landscaping purposes (i.e., tiering of sloped property) and not used to provide stability for structures (e.g., homes, swimming pools, courts, sheds, garages), either consequential or intentional.
- E. Allowance of gravity retaining walls and rockeries is contingent on constructability of these features. The District and property owner must have access to reasonably construct and deconstruct the wall without risk of damage to nearby structures.

Part 2 PRODUCTS**2.1 GRAVITY RETAINING WALLS**

- A. Definition.
 - 1. Gravity retaining wall is defined as interlocking blocks without reinforcement or foundation, generally set on a leveling course and filled with angular gravel.
- B. Height.
 - 1. The height of the gravity retaining wall shall be measured from the bottom of the lowest block to the highest point of the wall.
 - 2. Permitted elevation varies by topography, distance from District facilities, and local codes and ordinances. Generally, gravity retaining walls should be less than six feet tall.
 - 3. Walls horizontally closer than two times the lower wall height should be considered a single wall.
 - 4. The maximum gradient within the separation distance should be

4H:1V.

- C. Block.
 - 1. Verti-Block standard block or Equal. Standard block measures 4 feet by 2 feet on the face and 3 feet deep and weighs 1,760 pounds.
 - 2. Gravel infill as per manufacturer's recommendations.
 - 3. A gravel or sand leveling course is permitted.
 - 4. Block bury depth shall be as per manufacturer's recommendations.
 - 5. Footings and foundations are not permitted.
- D. Drainage.
 - 1. Grade drainage surfaces away from wall and District facilities.
 - 2. Drainage piping and related materials shall be installed within the bottom cavity or leveling pad or behind the block as per manufacturer's recommendations.
- E. Backfill.
 - 1. Backfill shall be as per manufacturer's recommendations.
 - 2. Geotextile filters may be used.
 - 3. Geogrid mesh or similar products for slope stabilization and earth retention should not be used.
- F. Design.
 - 1. Design of gravity retaining wall shall be submitted to District for review and comment prior to seeking approval from other agencies.
 - 2. Design drawings shall be stamped by an engineer licensed in the State of Utah.

2.2 ROCKERIES

- A. Definition.
 - 1. Rockery is defined as an earth retaining and/or protection structure comprised of interlocking, dry-stacked rocks without mortar or steel reinforcement.
- B. Height.
 - 1. The height of the rockery shall be measured from the bottom of the lowest block to the highest point of the rockery.
 - 2. Permitted elevation varies by topography, distance from District facilities, and local codes and ordinances. Generally, rockeries should be less than six feet tall.
 - 3. Rockeries horizontally closer than two times the lower rockery height should be considered a single rockery.
 - 4. The maximum gradient within the separation distance should be 4H:1V.
- C. Rock.
 - 1. Rock utilized in a rockery shall not exceed 3 feet in any direction.
 - 2. A gravel or sand leveling course is permitted.
 - 3. Rock bury depth shall be as per engineer's recommendations.
 - 4. Footings and foundations are not permitted.
- D. Drainage.

1. Grade drainage surfaces away from rockery and District facilities.
 2. Drainage piping and related materials shall be installed behind the rockery.
- E. Backfill.
1. Backfill shall be as per manufacturer's recommendations.
 2. Geotextile filters may be used.
 3. Geogrid mesh or similar products for slope stabilization and earth retention should not be used.
- F. Design.
1. Design of rockeries shall be submitted to District for review and comment prior to seeking approval from other agencies.
 2. Design drawings shall be stamped by an engineer licensed in the State of Utah.

Part 3 EXECUTION

3.1 INSPECTION

- A. District requires on-site inspection during construction of all gravity retaining walls or rockeries.
- B. A minimum 48 business hours' notice shall be provided to the District prior to construction.
- C. Inspection occurs only during business hours.

3.2 INSTALLATION

- A. Materials shall be installed as per manufacturer's recommendations.
- B. Leveling course shall be rock or sand. Concrete is not permitted.

3.3 AGREEMENT

- A. An agreement is required prior to construction. Agreement shall include the following provisions:
 1. Remove District liability if walls are removed or damaged.
 2. Property owner is responsible to re-establish, repair, or replace walls, grading, landscaping, and other supported uses.
 3. Property owner is responsible for additional costs related to operation, maintenance, repair or replacement of District facilities resulting from the gravity retaining wall or rockery.
- B. The agreement shall include the appropriate engineer-stamped drawings pertaining to the wall or rockery.

Metropolitan Water District of Salt Lake & Sandy
FY2024 CAPITAL PROJECTS REPORT
September 2023

Last updated: September 5, 2023

Routine Non-Capacity Improvement Projects

SCS Hardware and Software Replacement Project (LC067)

Purpose: Replace and update security control system hardware at LCWTP and POMWTP.

Update: New card readers are installed. The contractor is finishing punch list items.

District Project Manager:	Darin Klemin	
Design Engineer / Contractor:	Avtec	
Final Completion Date:	September 30, 2023	
Project Budget:	\$600,000.00	
Contract Amount:	\$584,126.40	
Change Orders / Percent:	\$0.00 / 0.0%	
	FY23	FY24
FY Budget:	\$600,000.00	\$100,000.00
Spent to Date:	\$409,529.29	\$0.00
District Purchases:	\$4,813.50	\$0.00
Expenses to Date / Percent Spent:	\$414,342.79 / 69.1%	

LCC Replacement and Intake Modifications

Purpose: Replace the raw water Little Cottonwood Conduit and modify the lower intake structure.

Update: The project contract was approved at the August 8, 2023 board meeting. This is a multi-year project (through FY2026).

District Project Manager:	Gardner Olson
Design Engineer:	Bowen Collins & Assoc.
Preliminary Design Completion Date:	June 30, 2024
FY2024 Budget:	\$200,000.00
FY2024 Contract Amount:	\$200,000.00
Change Orders / Percent:	\$0.00 / 0.0%
Spent to Date:	\$0.00
District Purchases:	\$0.00
FY2024 Expenses to Date / Percent Spent:	\$0.00 / 0.0%

POMWTP PC/S Hardware Replacement Project

Purpose: Replace and update Process Control / SCADA system hardware at POMWTP.

Update: Equipment is on order. This is the second year of a two-year project.

District Project Manager:	Gardner Olson	
Design Engineer / Contractor:	SKM	
Final Completion Date:	June 30, 2024	
	FY23	FY24
FY Budget:	\$200,000.00	\$250,000.00
Contract Amount:	\$182,358.73	\$207,888.80
Change Orders / Percent:	\$0.00 / 0.0%	\$0.00 / 0.0%
Spent to Date:	\$156,665.00	\$0.00
District Purchases:	\$4,813.50	\$0.00
Expenses to Date / Percent Spent:	\$156,665.00 / 34.8%	

Fleet Program Replacement:

Purpose: Purchase two trucks and two SUVs.

Update: Two trucks were received in August 2023. Staff is preparing to purchase two SUVs.

District Project Manager:	Michael Carter
Project Budget:	\$200,000.00
Project Spent to date:	\$97,290.74 / 48.6%

Little Dell Dam Improvements:

Purpose: Salt Lake City plans to replace a control panel in FY24.

Update: No progress reported to date.

District Project Manager:	Bernard Mo, SLCDPU
Project Budget:	\$400,000.00
Project Spent to date:	\$0.00 / 0.0%

Repair and Replace

LCWTP Ozone Control Valve Replacement

Purpose: Control valves on the LCWTP ozone system were inspected in 2021. The valves are wearing from use, with five of the eleven valves identified for replacement over the next four years, beginning with ozone destruct.

Update: Staff is preparing quotes.

District Project Manager:	Gardner Olson
Project Budget:	\$12,000.00
Project Spent to date:	\$0.00 / 0.0%

LCWTP Update Fuel Tank and Dispenser Monitoring Hardware

Purpose: The District's fuel tank and dispenser monitoring hardware was installed in 2011. The equipment is at the end of its life and the software is no longer supported. This project will replace both with a more current, reliable, and supported system.

Update: Staff plans to prepare an RFP to procure this item.

District Project Manager:	Michael Carter
Contractor:	TBD
Final Completion Date:	June 30, 2024
Project Budget:	\$65,000.00
Contract Amount:	TBD
Project Spent to date:	\$0.00 / 0.0%

LCWTP Flash Mix Replacement

Purpose: The LCWTP flash mixers introduce and mix chemical into water upstream of flocculation. One flash mixer gear box was replaced in FY23. The second will be replaced in FY24.

Update: Staff is obtaining quotes.

District Project Manager:	Andy Reidling
Project Budget:	\$50,000.00
Project Spent to date:	\$0.00 / 0.0%

POMFWP RVSS Replacement

Purpose: The Point of the Mountain Finished Water Pump Station has five pumps - two are operated with variable frequency drives (VFD) and three with reduced-voltage soft starts (RVSS). The equipment has reached the end of its design life and is experiencing increased maintenance and operation issues. One RVSS was replaced in FY22 and the two VFDs were replaced in FY23. Staff plans to replace the remaining two RVSS, one each in FY24 and FY25.

Update: Equipment is on order.

District Project Manager:	Scot Collier
Contractor:	EMC
Final Completion Date:	June 30, 2024
Project Budget:	\$110,000.00
Contract Amount:	\$87,285.16.00
Spent to Date:	\$0.00
Other Costs:	\$0.0
Project Spent to date:	\$0.0 / 0.0%

CCTV Hardware Replacement

Purpose: The District's closed circuit television (CCTV) security system is 20 years old at LCWTP and 14 years old at POMWTP. The equipment has exceeded its expected life and is no longer supported by the manufacturer. The remaining two years of this project will split camera replacement at POMWTP.

Update: Equipment is on order.

District Project Manager:	Brian Pehrson
Contractor:	Avtec
Final Completion Date:	June 30, 2024
Budget:	\$130,000.00
Contract Amount:	\$116,836.02
Change Orders / Percent:	\$0.00 / 0/0%
Spent to Date:	\$0.00
District Purchases:	\$0.00
Project Spent to Date:	\$0.00 / 0.0%

UPS Replacement

Purpose: Two UPS systems at the LCWTP are scheduled for replacement.

Update: Equipment is on order.

District Project Manager:	Scot Collier
Project Budget:	\$60,000.00
Project Spent to date / Percent Spent:	\$0.00 / 0.0%

Lab Equipment Replacement

Purpose: The lab department requires replacement of an organics laboratory dishwasher, auto titrator, microscope, and inductively coupled plasma mass spectrometry (ICP/MS) instrument. The purge and trap and autosampler installed in FY23 experienced issues, were returned, and will be replaced.

Update: Staff received the ICP/MS and microscope. Installation is expected in early September. Staff ordered the autotitrator and purge and trap and autosampler. Staff is obtaining quotes for an organics laboratory dishwasher.

District Project Manager:	Jeff Matheson
Project Budget:	\$283,500.00
Project Spent to date / Percent Spent:	\$185,917.67 / 65.6%

Annual Network Server Replacement

Purpose: The District operates servers on multiple networks. These servers have a life expectancy of seven years. New servers host the most critical services for the first three to five years of the lifecycle and then are moved to a less critical role for the remainder of the life cycle.

Update: Staff is obtaining quotes.

District Project Manager:	Darin Klemin
Project Budget:	\$70,000.00
Project Spent to date / Percent Spent:	\$0.00 / 0.0%

FY23 Carryover – Caustic Recirculation Pump: The pump was received in FY23. No further activity is anticipated for this line item.

District Project Manager:	Steve Slack
Project Budget:	\$20,373.00
Project Spent to date / Percent Spent:	\$0.00 / 0.0%

Miscellaneous: No activity to date.

District Project Manager:	Ammon Allen
Project Budget ¹ :	\$50,000.00
Project Spent / Percent Spent:	\$0.00 / 0.0%

Non-Routine O&M (Selected Projects)

LCWTP Arc Flash Coordination

Purpose: LCWTP Arc Flash Coordination: The National Fire Protection Association (NFPA) Standard for Electrical Safety in the Workplace mandates reviewing the arc flash study of a facility a maximum of every five years. Recent changes at the LCWTP make this effort timely.

Update: A recommendation will be presented at the Sept. 18 board meeting.

District Project Manager:	Gardner Olson
Contractor:	TBD
Final Completion Date:	June 30, 2024
Project Budget:	\$200,000.00
Contract Amount:	TBD
Project Spent to date:	\$0.00 / 0.0%

Financial Strategist

Purpose: Application assistance for WIFIA funding for MWDSLS long term Capital Finance program.

Update: No activity to date.

District Project Manager:	Wayne Winsor
Contractor:	TBD
Final Completion Date:	June 30, 2024
Project Budget:	\$100,000.00
Contract Amount:	TBD
Project Spent to date:	\$0.00 / 0.0%

IT Master Plan

Purpose: The Information Technology department has many project needs. A master plan will be developed to prioritize and define these projects.

Update: The project table of contents / index is created. Assessment of the District's server rooms / data centers is underway.

District Project Manager:	Ryan Nicholes
Contractor:	Hazen and Sawyer
Final Completion Date:	June 30, 2024
Project Budget:	\$150,000.00
Contract Amount:	\$149,905.00
Project Spent to date:	\$5,760.00 / 3.8%

MWDSLS Multi-hazard Mitigation Plan

Purpose: A facility-wide hazard mitigation plan will identify the effect of natural and non-natural hazards on District facilities, and will make the District eligible for federal planning and construction grants.

Update: The plan was re-advertised for public comment through August 10, 2023. No comments were received. Additional consultant assistance is required to address FEMA comments and resubmit the plan.

District Project Manager:	Wayne Winsor		
Design Engineer:	Elwell Consulting Group		
Final Completion Date:	December 31, 2023		
Project Budget:	\$207,323.00		
Fiscal Year:	2022	2023	2024
Spent:	\$35,218.69	\$162,855.99	\$12,920.00
Project Spent to date / Percent Spent:	\$210,994.68/ 101.8%		

Capacity Improvement Projects

Managed Aquifer Recharge Pilot Testing and Phase 1 (LC063)

Purpose: The District will construct two infiltration basins and an injection well at the LCWTP. These facilities will recharge an estimate 29 acre-feet of water into the aquifer per day. The water can then be extracted through any number of customer-owned wells down-gradient and within the same aquifer.

Update: The replacement ASR well will be drilled in two phases – a 20” diameter pilot hole followed by a 28” reamed hole. As of September 5, the reamed hole was 661 feet deep.

The surface infiltration basin contractor began mass excavation on August 14. Piping is also being installed. A temporary haul road was constructed to access the site for improved safety and efficiency. Staff and the contractors are coordinating schedules to minimize disruption to both contractors.



Aug 29: Overall site progress.



Aug 30: Excavation on the north surface infiltration basin.



Aug 29: Southwest tie-in to existing ASR piping.

Design			
District Project Manager:	Ammon Allen		
Design Engineer:	Hansen, Allen and Luce		
Final Completion Date:	December 31, 2024		
Implementation Plan Spent (FY21):	\$77,968.09		
Engineering Design Contract Amount:	\$961,937.15		
Fiscal Year:	2022	2023	2024
Spent to date:	\$78,431.03	\$420,598.75	\$30,807.65
Engineering Design Spent to date:	\$607,805.52 / 55.1%		

Wells Construction		
Contractor:	Hydro Resources	
Final Completion Date:	October 31, 2023	
Contract Amount:	\$3,674,441.00	
Change Orders / Percent:	\$123,121.00 / 3.4%	
	2023	2024
Wells Spent to date	\$2,504,420.15	\$0.00
Total Spent to date:	\$2,504,420.15 / 65.9%	

SIB and Infrastructure Construction	
Contractor:	COP Construction
Final Completion Date:	February 16, 2024
Contract Amount:	\$5,550,687.00
Change Orders / Percent:	\$0.00 / 0.0%
SIB and Infrastructure Spent to date:	\$767,650.00 / 13.8%

Other Project Costs	
Contractor:	SKM
Final Completion Date:	March 30, 2024
Budget:	\$94,500.00
Contract Amount:	TBD
Change Orders / Percent:	\$0.00 / 0.0%
SKM Spent to date:	\$0.00 / 0.0%
District Purchases	\$1,204.00
Total Other Costs Spent to date:	\$1,204.00 / 1.3%

Total Project Budget:	\$10,821,309.10
ARPA Grant:	\$3,000,000.00
ASR Reserve (as of June 30, 2022):	\$4,115,104.90
Non-ASR Reserve:	\$3,706,204.20
Total Project Spent to date:	\$3,899,998.96 / 35.9%

Other Capital Improvement Projects

Salt Lake Aqueduct Replacement / Cottonwoods Conduit (SLAR-CC):

Purpose: The Big Cottonwood Water Treatment Plant (BCWTP) is in need of replacement. The SLAR-CC is a pipeline that connects the BCWTP and the Little Cottonwood Water Treatment Plant (LCWTP) to bring raw water from Big Cottonwood Creek to the LCWTP for treatment. Without this infrastructure the District will incur an additional demand of up to 24,000 ac-ft annually during the BCWTP replacement.

Update: The 60% project design was received and reviewed. We expect the 90% design to be delivered on September 19, 2023. Pipe preselection documents began advertising on September 6, 2023. Bidder prequalification documents are under review. Design contract Amendment 4 is under review and will go to the Engineering Committee on September 27, 2023. The amendment includes two additions:

- easement acquisition costs due to appraisals being done on all parcels appraised over \$10,000, and
- design drawings to the tie-in point with the Little Cottonwood Conduit Replacement upstream of the grit basin header.

Appraisals are under review and are actively being performed for the new SLAR easement. We have also begun negotiations on the first parcel.

Staff is also working with our financial strategist to procure project funding.

Design			
District Project Manager:	Kelly Stevens		
Design Engineer:	Hazen and Sawyer		
Final Completion Date:	30-Jun-24		
Original Contract Amount:	\$ 2,355,137.00		
Contract Amendments:	\$ 1,095,050.30		
Total Contract Amount:	\$ 3,450,187.30		
Fiscal Year:	2022	2023	2024
Spent to Date:	\$ 36,856.25	\$ 1,999,946.56	\$ 165,877.50
Engineering Spent to Date:		\$ 2,202,680.31 / 63.8%	

Public Engagement			
District Project Manager:	Kelly Stevens		
Design Engineer:	Wall Consulting Group		
Final Completion Date:	30-Jun-24		
Original Contract Amount:	\$ 108,388.75		
Contract Amendments:	\$ -		
Total Contract Amount:	\$ 108,388.75		
Fiscal Year:	2022	2023	2024
Spent to Date:	\$ 4,455.46	\$ 32,879.88	\$ 6,314.48
Engagement Spent to Date:		\$ 43,649.82 / 40.3%	

**Jordan Valley Water Conservancy District (JVWCD)
Jordan Aqueduct System and 150th South Pipeline – Capital Projects**

The District is responsible for 2/7 of Jordan Aqueduct (JA) system improvements which include JA Reaches 1 – 4, Jordan Valley Water Treatment Plant (JVWTP), and the JA Terminal Reservoir. The District is responsible for one half of improvements associated with the 150th South pipeline. Projects identified for FY2024 include:

Major Rehabilitation or Replacement of Existing Facilities

• JA Normal, Extraordinary Maintenance and Replacement	\$ 142,857
• 150 th South Pipe Normal Maintenance and Replacement	\$ 62,500
• JA TR Basins 3, 4 Roof Deck Joint Sealant Replacement	\$ 142,857
• JVWTP Normal, Extraordinary Maintenance and Replacement	\$ 342,857
• JVWTP Floc/Sed Basins 3-6 Mechanical Equipment Replacement	\$ 385,714
• JVWTP Floc/Sed Basins 1-2 Mechanical Equipment Replacement	\$ 285,714

New Non-Capacity Facilities (Compliance/Functional Upgrade)

• JVWTP Filter and Chemical Feed Upgrades	\$ 885,714
• JVWTP Floc/Sed 1-2 Seismic Upgrade	\$ 662,143
• Jordan Aqueduct Seismic Resiliency	\$ 14,286

JVWTP Project Management Expenses \$ 50,000

Total Request FY2024: \$2,974,643

This report is taken from JVWCD’s August 2023 board packet and covers June 14, 2023 to July 14, 2023.

The JVWTP Filter and Chemical Feed Upgrade project is working toward 30% design. Technical memos were delivered on ozone, chemical feed improvements, and filter improvements.

The consultant completed fluid dynamic modeling for the Sedimentation Basins 1-2 Seismic and Capacity Upgrades project. The consultant is preparing 90% drawings. Results from a FEMA grant application are expected within 30 days.

The Sedimentation Basins 3-6 Equipment Replacement is proving successful. Effluent turbidities continue to improve as raw water turbidities stabilize and chemical dosages are optimized. Settled water turbidities show an improvement of 50% over previous operation. Filter backwash requirements have been reduced. Final completion is awaiting some additional engineering work to optimize operation and provide maintenance access platforms.