NOTICE OF REQUEST FOR PROPOSALS

Little Cottonwood Water Treatment Plant Rebuild Project
Construction Manager/General Contractor

Owner

Metropolitan Water District of Salt Lake & Sandy
3430 East Danish Road
Cottonwood Heights, Utah 84093

Engineer

Stantec Consulting
2890 E Cottonwood Parkway #300
Salt Lake City, UT 84121

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1. Introduction

The Metropolitan Water District of Salt Lake & Sandy (Owner) issues this solicitation for the Little Cottonwood Water Treatment Plant Rebuild Project (Project) and invites responses from interested parties to this Request for Proposals (RFP)[1].

This RFP is posted on the Utah Public Procurement Place (U3P). A link to the U3P posting may be found on the Owner's website.

Firms interested in providing construction manager/general contractor (CM/GC) services for the Project should submit their Proposal according to the requirements set forth in this RFP, including the format and content guidelines in Section 6. Proposals will be reviewed, evaluated, and ranked using a best-value selection process, as described in Section 7, for award of the Little Cottonwood Water Treatment Plant Rebuild Project Construction Manager/General Contractor Agreement which is provided as RFP Attachment B.

The Project is to be designed and constructed in two phases using the CM/GC delivery method.

Phase I preconstruction services encompass constructability reviews, value engineering, estimating, risk management, and scheduling activities. Phase I is completed when there is agreement on the Project schedule and guaranteed maximum price (GMP).

Phase II construction services, in which the CM/GC assumes the general contractor role, encompasses further design review, risk management, procurement of subcontractors and vendors, equipment procurement, self-performance of certain elements of the construction (where permitted and at the Owner's discretion), and full construction and commissioning, which may occur in a single or multiple GMP packages, at the discretion of the Owner.

The Owner's objectives for this delivery method are:

- **Relationship.** Foster a collaborative relationship between the Owner, Engineer, and CM/GC early in the project. The Owner's Project Team has established four core project values known under the acronym CAFÉ: **C**ollaboration, **A**ccountability, **Fl**exibility, and **E**ngagement.
- **Cost transparency.** Ensure a transparent "open-book" process for all project costs, including subcontractor bids and self-performed work, and where the Owner is provided with frequent cost estimates leading up to the GMP.
- **Constructability.** Utilize the CM/GC's expertise to identify design conflicts, improve buildability, and reduce the likelihood of contingency requests during construction.
- **Market conditions.** Receive real-time data on labor availability, material lead times, and potential supply chain disruptions to refine project planning.
- **Project controls.** Develop and maintain a master schedule and cost tracking system to ensure the project meets completion dates and budget requirements. Obtain a cost-loaded schedule from the CM/GC after GMP is accepted.
- **Risk allocation.** Ensure that risks are identified, allocated, and quantified. Ensure that risk registers are maintained. The risk register shall be the basis for project contingency costs.

[1] In no event will the Owner be liable for any costs incurred by any Proposer or any other party in developing or submitting a Proposal.

2. Project Overview

Owner is a public water system providing wholesale finished drinking water to its two member cities, Salt Lake City and Sandy City. The Little Cottonwood Water Treatment Plant (LCWTP) is located at the mouth of Little Cottonwood Canyon at 3430 East Danish Road, Cottonwood Heights, Utah 84093.

2.1 Background

With the capability to treat up to 150 million gallons of water per day (MGD), the LCWTP has safely delivered clean drinking water to residents in the Salt Lake Valley since 1960. Today, treated water from the LCWTP reaches approximately 500,000 people daily.

To accommodate changing water quality regulations, improved water reliability, and aging infrastructure, the LCWTP has undergone several improvements over the years. These include:

- filter rehabilitation (early 1990s),
- waste-wash-water improvements (mid-1990s),
- electrical upgrades (late 1990s),
- new chemical storage and feed systems (early 2000s), and
- upgrades to the inlet and outlet works (mid-2000s).

While many areas of the plant have been improved over time, the flocculation and sedimentation basins (including much of the mechanical equipment), filtration complex, and ancillary support buildings are original.

The age and condition of the original structures and facilities now presents a growing risk to the operability and resiliency of the LCWTP. Therefore, in 2026, the Owner hired Stantec to assess, plan, prioritize, and design a rebuild of features presenting a risk to the LCWTP, constituting the Project. The Project Basis of Design Report was published on June 30, 2026 and can be found in Attachment A[2].

2.2 Project Objectives

The Project includes three primary objectives:

1. Reconstruct portions of LCWTP to maintain service and protect staff during and following a hazard event. (Although primarily defined as an earthquake, a hazard event is any other type of natural disaster including landslide, wildfire, etc.).
2. Upgrade the performance of chemical feed, flocculation, sedimentation, and filtration processes.
3. Improve electrical and process control systems.

The CM/GC will collaborate closely with the Owner and its Engineer to develop a design that achieves the Owner's objectives at a mutually agreeable GMP for delivery of the Project objectives. CM/GC services are further described in Section 3 – CM/GC Services.

2.3 Budget and Funding

The Engineer's Class 5 opinion of probable construction cost (OPCC) is shown in the table below.

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[2] The Owner is providing these documents only for the purpose of informing Proposal development and does not confer a license or grant for any other use.

Item	Item Title	Percentage	Amount	Comment
1	Direct Construction Cost		$461,600,000	Cost of Work
2	Owner's Additional Planning-Level Contingency	25%	$115,400,000	25% of Item 1
3	Total Project Direct Construction Cost		$577,000,000	Item 1 + Item 2
4	Total Construction Support Costs (Job Office Overhead)	10%	$57,700,000	10% of Item 3
5	Estimated Cost of the Work		$634,700,000	Item 3 + Item 4
6	CM/GC Fee	10%	$63,500,000	10% of Item 5
7	Cost of the Work with CM/GC Fee		$698,200,000	Item 5 + Item 6
8	CM/GC Contingency Allowance	2.5%	$17,500,000	2.5% of Item 7
9	Estimated Guaranteed Maximum Price		$715,700,000	Item 7 + Item 8
10	Owner's Contingency Allowance	2.5%	$17,900,000	2.5% of Item 9
11	Total Construction Contract Award		$733,600,000	Item 9 + Item 10
12	Federalization Adder	10.00%	$73,400,000	10% of Item 11
13	**Total Federalized Construction Contract Award**		**$807,000,000**	**Item 11 + Item 12**
14	Low Range	-50%	$403,500,000	-50% of Item 13
15	High Range	100%	$1,614,000,000	+100% of Item 13

The Owner may use any combination of traditional bonding, State Revolving Fund (SRF), other state funds, Water Infrastructure Finance and Innovation Act (WIFIA) funds, Building Resilient Infrastructure and Communities (BRIC) funds, and other available state and/or federal funds to provide the capital funding needed for the Project. If the Project utilizes or may utilize federal funding for the work or products covered under this RFP, then the Project is subject to the provisions of Article 19 of the Supplementary Conditions (00800), including Schedule 19.04 (attached as Exhibit D to the Supplementary Conditions), as well as any requirements of the applicable funding agreement(s). CM/GC shall be prepared for any combination of funding and ramifications thereof, including compliance with Article 19 of the Supplementary Conditions regarding federal funding.

Depending upon available funding, Owner may choose to reduce the design scope as each revised, estimated GMP is received through design, deferring a portion of the scope. Preliminary (30%) design will be completed for the entire project priced in the OPCC above. Sixty-percent design may be reduced in scope to meet Owner’s available funding based on CM/GC’s 30% GMP. Similarly, 90% design may be reduced based on CM/GC’s 60% GMP. Scope reduction will be based on Owner’s facility/process priority, with the intent to focus on the areas of highest importance first. Deferred design may be revisited following award of, or periodically throughout, construction.

2.4 Permits

The table[3] below summarizes permits that are anticipated or potentially required for the design, construction, and operation of the Project.

[3] Stantec Table 2-1 – Permitting Matrix (Overview of Permitting Requirements January 2026)

Permit or Approval	Agency / Authority Having Jurisdiction (AHJ)	Project Phase to Initiate Acquisition	Permit Obtained by Whom	Requirement Conditions	Anticipated Permit Timeline
Construction Approval	Utah Division of Drinking Water	Preconstruction	Owner	Required	30+ days
Building Permit	City of Cottonwood Heights	Preconstruction	Owner	Required	7-14 days of plan review time
Water System Operating Permit	Utah Division of Drinking Water	Prior to plant operation	Owner	Required for operation	30+ days
Stream Alteration Permit	Utah Division of Water Rights	8-12 months prior to construction	Owner	Required if project alters the bed or banks of a natural stream	20+ days
National Environmental Policy Act	U.S. Environmental Protection Agency	Preliminary Design	Owner	Required if using Federal funding	Environmental Assessment takes 6-12 months. More time needed if it has significant impacts.
Section 106 (Cultural Resources)	U.S. Bureau of Reclamation (USBR), U.S. Bureau of Land Management, Utah State Historic Preservation Office	Preliminary Design	Owner	Required if using Federal funding	30-day review period if no historic properties are found or are adversely affected.
Section 7 (Endangered Species Act Resources Biological Opinion)	U.S. Fish and Wildlife Service (USFWS)	Preliminary Design	Owner	Required if using Federal funding	90-120 days
Unified Fire Authority Fire Prevention Permit	Unified Fire Authority (UFA)	Preconstruction	CM/GC	Required	7-14 days of plan review
Utah Pollutant Discharge Elimination System (UPDES) General Construction	Utah Department of Environmental Quality (UDEQ)	Preconstruction	CM/GC	Required	14 days
UPDES Construction Dewatering/	Utah Department of Environmental Quality (UDEQ)	Preconstruction	CM/GC	Required	30 days
Demolition Notification Form	Division of Air Quality	Construction	CM/GC	Required	10 working days prior to demolition

2.5 Anticipated Project Schedule

Owner expects to procure a CM/GC partner in order to facilitate completion of a complex design, construction, and startup process prior to commencement of the 2034 Winter Olympics, which will be held in Salt Lake City. The following schedule provides an anticipated timeline of milestones, subject to change.

	Critical Task	Completion Date	Responsibility/Attendance
30% Design	Perform 30% preliminary design	June 30, 2027	Engineer/Owner, CM/GC
60% Design	Perform 60% intermediate design	June 30, 2028	Engineer/Owner, CM/GC
90% Design	Perform 90% design	December 31, 2028	Engineer/Owner, CM/GC
Guaranteed Maximum Price	Multiple Work Packages	Varies on Work Package(s) timing.	CM/GC
Construction	CM/GC construction Agreement award (if GMP accepted by Owner)	Varies on Work Package(s) timing.	Owner/CM/GC
	Construction Substantial Completion	December 31, 2032	CM/GC/Owner, Engineer

A master/baseline schedule shall be established by the CM/GC together with the Engineer and Owner leading up to GMP. Once the final GMP is approved CM/GC shall establish a cost-loaded schedule.

3. CM/GC Services

This RFP seeks CM/GC preconstruction and procurement services. These services (CM/GC Services) are described in Exhibit A of Attachment B.

As discussed above in Section 2.3, a portion of the scope may be deferred. Because of this possibility, CM/GC Services will be authorized through Task Orders, as set out in Attachment B. A Task Order for CM/GC Services for 30% design will be issued contemporaneously with the award of the Agreement.

The scope of CM/GC Services is the basis for Phase I pricing, which shall be submitted in accordance with RFP Section 6.3.10.

4. Roles and Responsibilities

The table[4] below describes the roles and responsibilities of the Owner and CM/GC for Project services to encourage Project success. Roles and responsibilities are more fully described in Attachment B.

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	Owner	CM/GC
Project Management	• Make day-to-day decisions • Approve design and construction plans • Manage contracts with Owner Advisor, Engineer, and CM/GC • Provide Project funding • Approve scope changes • Coordinate with Owner operations	• Single point of contact with the Owner's Project Manager for construction-related items • Develop and implement Project management and quality management plans • Perform risk management and mitigation activities including risk allocation and risk register during pre-construction and construction. • Establish and maintain contingency request management plan • Develop and implement Project health and safety practices • Facilitate resolution of Project issues and challenges
Preconstruction Services	• Manage interface between design and construction teams • Review Phase I deliverables and submissions • Furnish existing studies and data including record drawings, preliminary studies, etc. • Provide access to site/easements • Obtain government approvals and permits for which the Owner is responsible • Review early Works Packages and Guaranteed Maximum Price (GMP) proposals; negotiate early Works Packages and GMP in good faith	• Prepare and maintain a Project cost model and Project schedule • Provide constructability input during Phase I • Prepare equipment and subcontract procurement plan • Develop early Works Packages and Guaranteed Maximum Price (GMP) proposals; negotiate early Works Packages and GMP in good faith • Provide additional Owner-requested, Project-specific services necessary for Project success • Value engineering • Develop early Work Packages
Construction Services	• Participate in construction Project meetings • Monitor construction activities • Coordination of engineering services during construction • Ensure timely responses to construction documents (e.g. submittals, requests for information, notices) as defined in the Agreement	• Deliver constructed Work • Manage self-performing and subcontracted Work • Manage craft labor • Maintain site safety and security • Coordination with Engineer • Obtain government approvals and permits for which the CM/GC is responsible • Provide warranty coverage for constructed Work
Commissioning and Startup	• Lead the team in the early development of the facility commissioning plan with responsibilities clearly delineated • Manage Engineer's preparation of facility Operations & Maintenance (O&M) manual • Engage meaningfully in commissioning, startup and training activities and prepare for hand-off from CM/GC	• Coordinate construction activities with and lead assigned testing, commissioning, startup, and training activities, coordinating with Owner's O&M staff for planning and to minimize impacts • Provide timely and complete submission of manufacturer's equipment O&M materials

5. Procurement Process

This Section describes the communication expectations and schedule for this procurement process. A mandatory pre-Proposal site meeting will be required for all Proposal submittals. Following the submission of Proposals, Proposers will be short-listed for interviews as discussed below. Once interviews are complete, the preferred Proposer will be selected, as discussed below.

5.1 Communications

All communication should be submitted through U3P. Administrative questions pertaining to U3P, the posting, and to RSVP to the pre-Proposal meeting may be directed to the Owner as follows:

Elizabeth Woodall
Administrative Assistant
801-942-9600
woodall@mwdsls.gov

No oral communications from the Owner, Engineer, or other individuals are binding.

5.2 Schedule

• RFP Issued	Tuesday, August 11, 2026
• Pre-Proposal Site Meeting (Mandatory)	Tuesday, August 25, 2026, 2:00 p.m.
• Deadline for Questions	Thursday, September 3, 2026
• Final Addendum (if any)	Thursday, September 10, 2026
• Proposal Deadline	Tuesday, September 22, 2026
• Short-List Notification/Notice for Interview	Thursday, October 8, 2026
• Interviews	October 26 - November 5, 2026, by invitation
• Final Selection Notification	Thursday, November 5, 2026
• Anticipated Notice to Proceed	Tuesday, December 15, 2026

5.3 Pre-Proposal Meeting and Site Tour

A pre-Proposal meeting and site tour will be held at the LCWTP, 3430 East Danish Road, Cottonwood Heights, Utah 84093 on Tuesday, August 25, 2026 starting at 2:00 p.m. MDT lasting until 4:30 p.m. **The pre-Proposal meeting and site tour is mandatory**. Attendees will have the opportunity to tour the Project site to familiarize themselves with site conditions and constraints. This will be the only opportunity for Proposers to visit the site prior to the Proposal deadline. Proposers are required to notify the Owner 48 hours prior to the meeting of the number of individuals who will attend the site tour on behalf of the Proposer. Each Proposer is limited to a maximum of **five** attendees.

5.4 Interviews

Proposers whose scoring meets the requirements described in Section 7.3 will qualify to be interviewed. Those selected for interviews will be notified by phone by October 8, 2026. Interviews will be held at the LCWTP and scheduled for a maximum of three hours between 8:00 a.m. and 5:00 p.m. on the dates described in Section 5.2 above. The Owner will provide guidelines, expectations, and sample questions to assist proposers with interview preparation.

6. Proposal Requirements

Proposals should follow the format, content, and submittal guidelines outlined below. Failure to do so may result in the Proposal being considered nonresponsive[5].

[5] Owner reserves the right to waive irregularities deemed reasonable and in its best interest.

6.1 Submittal Location and Deadline

Complete Proposals should be submitted via U3P. Questions regarding U3P, references, or other administrative items should be directed to the Owner contact as described in Section 5.1. The submission deadline is **2:00 p.m. on Tuesday, September 22, 2026**.

6.2 Format

Proposals should adhere to the following format:

- **File type**: Proposals must be submitted as a single PDF file.
- **Font size**: Minimum font size shall be 11 pt.
- **Bookmarks**: The submitted PDF must contain bookmarks for each section listed in Section 6.3.
- **Page Size**: 8½" x 11". 11"x17" counts for two pages.
- **Page limit**: The Proposal must not exceed 35 total pages, excluding the transmittal letter, index or table of contents, front and back covers, title pages/separation tabs, and appendices. Divider pages should not include required RFP content or they will be included in the page count.

6.3 Content

The content requirements included in this RFP are the minimum content requirements for the Proposal. The Proposal should include relevant information that is directly related to the Proposal requirements. Proposals are encouraged to showcase company values, character, and creativity. However, Proposals should not contain standard marketing or other general materials. The Proposal must include the following information in the order listed below:

1. Transmittal Letter
2. Executive Summary
3. CM/GC Profile
4. Project Team Structure and Key Personnel
5. Relevant Project Experience
6. Project Approach
7. Appendix A: Supporting Financial and Company Documentation
8. Appendix B: Resumes
9. Appendix C: Comments on the form of Agreement (if any)
10. Appendix D: Pricing Information
11. Appendix E: Letter of Commitment

6.3.1 Transmittal Letter

The Proposal must include a transmittal letter (two-page maximum) on the Proposer's letterhead, signed by a representative of the Proposer authorized to commit the Proposer to the obligations contained in the Proposal. The transmittal letter must include the **name, address, phone number, and email address for the Proposer contact** and must specify who would be the CM/GC's signatory to any contract documents executed with the Owner. The transmittal letter may include other information deemed relevant by the Proposer.

6.3.2 Executive Summary

An executive summary (three-page maximum) should include an overview of the key elements of the Proposal. The executive summary cannot be used to convey any additional information not found elsewhere in the Proposal.

6.3.3 CM/GC Profile

The following information should be provided by the Proposer. In the case of a joint venture, provide the information for both parties. Records and additional documentation supporting this Section of the Proposal should be included in Appendix A – Supporting Financial and Company Documentation.

General Information

- Lines of business and service offerings
- Locations of home and other offices
- Average number of employees (professional and non-professional) over the past three years in the office(s) that are going to support the Project
- Years in business
- Legal Structure
  - Identify organization structure (e.g. corporation, LLC, general partnership)
  - Describe how this structure or similar has been used to deliver similar projects
  - Provide information on party(ies) who hold an interest greater than or equal to 10% of the organization
- Project Office Location
  - Identify where the Proposer's Project office will be during Phase I
  - Identify where construction management Work will be performed during Phase I

Safety

- Describe the Proposer's safety program including safety statistics
- Provide records indicating categories of accidents and their incidence or frequency rate for the past three years
- Provide the experience modification rate (EMR[6]) calculated by the National Council on Compensation Insurance or similar rating bureau for the last three years
- Provide the days-away-from-work injury[7] incidence rate for the last three years, calculated by multiplying the number of days-away-from-work injuries for the particular year by 200,000 and then dividing the product by the person-hours worked for that year

Financial

Financial documentation, later outlined in Section 6.3.7, pertains to factors or events that have the potential to adversely impact the Proposer's or Proposer's joint-venture partner's ability to perform its

[6] EMR is also referred to as the experience modification rating, experience modification factor, experience modifier or X-mod. If this value is greater than the industry average of 1.0, the Proposer may provide mitigating information to explain the reasons for the EMR rating.

[7] A day-away-from-work injury is an injury that prevents an employee from returning to their next regularly scheduled shift.

contractual commitments. If any of the questions below are answered in a manner that indicates unfavorable factors or events are present, the Proposer must (1) describe in detail the unfavorable factor or event and (2) provide sufficient information to demonstrate that the unfavorable factor or event will not adversely impact the Proposer's ability to perform its contractual commitments.

- Are there any pending or past (within five years) legal proceedings and judgments, or any contingent liability that could adversely affect the financial position or ability to perform contractual commitments to the Owner?
- Has the Proposer failed to complete any contract or has any contract been terminated due to alleged poor performance or default within the past five years?
- Has the Proposer been debarred within the past five years, or is it currently under consideration for debarment on public contracts by the federal government or by any state or local government?

Self-Performance

The Owner intends for CM/GC to self-perform least 40% of the total scope of Work under the Contract Documents, as determined on a monetary basis (see Article 10 of Attachment B – Agreement). Please indicate which portions of the Work shall be self-performed.

Key Firms

Identify and provide general information for subcontractors and subconsultants included on the Project Team. Include EMR safety records for the past three years for any Key Firm anticipated to be responsible for construction activities. The Owner is primarily interested in selecting a CM/GC partner and those key firms which are considered a core part of the preconstruction Work. Key Firms fulfill key roles that must be identified in Proposer's Proposal and are committed to work on the Project if Proposer is selected as the CM/GC

The following Key Firms and/or subcontractors are not to be included in the CM/GC's Proposal

- Electrical/Instrumentation
- Integration/Programming
- Public Engagement
- Survey

These contractors will be selected with the help of the Owner following selection of a CM/GC.

6.3.4 Project Team Structure and Key Personnel

This Section should highlight how the Key Personnel's qualifications and experience provide a unique benefit for the Project and proposed Project approach. The Proposer should describe the division of services between the CM/GC and each of the Key Firms (identify each Key Firm's services). Include organizational chart(s) explaining the reporting relationships and responsibilities of the CM/GC and Key Firms during Phases I and II. The Project Team are the CM/GC, Key Firms (such as subcontractors and subconsultants), and Key Personnel identified in the Proposer's Proposal. Key Personnel are those individuals, employed by the CM/GC or Key Firms included on the Project Team, who would fill certain key roles in delivery of the Project and related services, including the positions described in the RFP.

At least one organizational chart should identify all Key Personnel with firm affiliations. Suggested Key Personnel include, at a minimum, the following:

- **Project Director** – accountable for successful delivery of the project

- **Project Manager** – responsible for the overall delivery of the project including planning, design review, construction, and commissioning
- **Preconstruction Manager** – responsible for constructability review; risk identification; and allocation, permit setup, cost estimating, procurement, and construction price development. This Work is identified as Phase I – Preconstruction
- **Construction Manager** – responsible for the delivery of the construction phase of the Project, risk identification and allocation, safety, quality management, and managing team resources and schedule. This Work is identified as Phase II – Construction. To the extent possible, the Construction Manager should have some involvement in Phase I – Preconstruction Work
- **Site Superintendent** – assigned to the project full time in the field to manage, make safe, and provide quality control for all construction activities, trades, subcontractors, and team field staff on the Project site
- **Commissioning and Startup Manager** – responsible for the commissioning and startup and maintaining of all plant operations during construction
- **Quality Manager** – responsible for development, implementation, and management of the Project quality plan
- **Safety Manager** – responsible for project safety and development and implementation of the Project safety plan

Please explain in the Proposal any changes to the above list.

Describe Key Personnel by name and how the experience of each aligns with the proposed role. Specifically discuss the Project Manager's experience leading similar teams. While discussing Key Personnel, the Proposer should explain how the Project Manager will integrate the CM/GC team with the Owner and Engineer. Provide an explanation of how the Preconstruction and Construction Managers will perform the Project hand-off.

Provide a brief explanation of the Project Team's prior experience working on projects together. Preference will be given to teams that include Key Personnel that have worked together on prior projects.

6.3.5 Relevant Project Experience

The Proposer should include a minimum of **four** reference project descriptions that demonstrate experience with relevant projects of similar scope and/or scale for municipal clients in the United States, completed or under construction in the last ten years. Projects provided must be of the collaborative delivery model with a strong preference towards CM/GC (CMAR). Owner is looking for recent similar project in which Key Personnel were involved. Each project description should contain at least the following information:

- Project name and location
- Name of Client
- Client reference and contact information
- Engineer's PM reference and contact information
- Delivery model
- Contract dates and phases of the project during which services were provided
- Role of CM/GC and/or Key Firms

- Initial and final contract value and reason(s) for change
- Scheduled and actual completion dates and an explanation if they differ
- Description of project showing relevance
- Names of Key Personnel that participated in the project and are included in this Proposal, along with a clear description of their roles and responsibilities

For each reference project included in the Proposal, the Proposer must coordinate submission of a Project Performance Evaluation Form from the project client reference. This form is intended to be delivered from the project client reference directly back to the Owner for reference verification. It will not be included with the proposal document uploaded to U3P. This form can be found in Attachment E – Project Performance Evaluation Form.

In addition to the project descriptions, the Proposal should include a summary table cross-referencing the Project Team (CM/GC, Key Firms, and Key Personnel) with participation in the reference projects.

6.3.6 Project Approach

The Proposer should demonstrate its understanding of the Project and provide a conceptual approach for providing its services.

Project Understanding

- Discuss work elements critical to the Project’s success and the Proposer’s approach to managing these elements and mitigating risks for Project success.
- Identify specific constructability and value engineering ideas that may enhance ability to meet Project objectives.

Collaborative Delivery Approach

- Discuss the Proposer’s approach to establishing a collaborative relationship with the Owner and Engineer during preconstruction and construction services. This should include the Proposer’s approach to communication with Owner.

Cost Model

- Describe the process for developing the cost model and construction price qualification. Include the Proposer’s approach to risk management, open-book pricing, and contingency development.
- Discuss potential strategies to the successfully navigate, maximize and manage federal funding options throughout the Project.

Procurement & Self-Performance

- Describe the Proposer’s procurement approach, including initial ideas on packaging and phasing.
- Describe which components of the Project the Proposer plans to self-perform and the Proposer’s plan to demonstrate best value for any work self-performed.
- Describe the Proposer’s approach to selecting and managing subcontractors and equipment vendors and maximizing the use of qualified, local contractors on the project. (Local contractors, vendors, or subcontractors are those whose offices are located within a 100 mile-radius of the LCWTP site).

Maintenance of Plant Operations (MOPO)

- Describe the Proposer's approach to developing a plan to maintain facility and building/staff operations during construction. (Illustrate with specific examples, key risks and opportunities related to MOPO). Describe the risks and approach to mitigating those risks.
- Describe the Proposer's process for developing MOPO. Describe the communication plan with the Owner staff regarding shutdowns, temporary utility relocations and other related efforts.
- Describe how the Proposer will keep people and equipment safe and efficient at the facility, and provide staff access to their workplace.
- Provide a continuity plan between preconstruction and construction services.
- Describe Proposer's commitment to implementing preconstruction MOPO to construction MOPO.
- Provide the process for developing a commissioning and startup plan.

Project Documentation and Asset Management

- Provide a brief description of how the Proposer's use of technology, software, and other related services will benefit the Project during preconstruction, construction, startup, commissioning, and long-term O&M. Include plans for document organization during preconstruction and construction and the transfer thereof at project closeout.
- Highlight key ideas for assimilation of Project documentation into an asset management program.

6.3.7 Appendix A – Supporting Financial and Company Information

Appendix A should include all records and documents supporting the Proposer's profile as well as the following required documents:

- **Company Licenses:** Provide proof of appropriate General Contractor license and documentation that the Proposed company is legally registered, in good standing, and authorized to do business in the State of Utah.
- **Financial Statements:** Provide annual financial statements for the past three years. For publicly traded companies, references to US Securities and Exchange Commission 10-K filings and any recent 10-Q and 8-K fillings are adequate. For entities that are not publicly traded, provide annual audited financial statements for the same period. If the Proposer is a joint venture, LLC, or partnership, such financial statements must be provided for each partner or member.
- **Payment and Performance Bonds:** Provide a letter issued by the Proposer's surety company to verify the availability of a bond of at least $800 million for this Project. The surety must be authorized by law to do business in Utah and must have an A.M. Best Company Financial Strength Rating (FSR) of A-, IX or better. The surety company must be listed in the US Department of Treasury's Circular 570.
- **Insurance:** Provide a letter from the Proposer's insurance company stating its ability to acquire and provide the minimum limits for the required insurance provided in the Supplementary Conditions (00800). The required insurance must be obtained and maintained from insurance companies that have an A.M. Best Rating of A-, IX or better and are duly licensed or authorized in Utah.
- **Legal Proceedings and Judgements:** Provide a sworn statement from the Proposer's general counsel to the effect that there are no pending or past (within five years) legal proceedings or

judgments or any contingent liability that could adversely affect the financial position or ability to perform contractual commitments to the Owner.

6.3.8 Appendix B – Resumes

Provide resumes for all Key Personnel. Limit resumes to two pages or fewer per individual and include the following information:

- Academic and professional proposals
- Professional registration(s) as applicable
- Tenure with organization and industry
- Experience as it relates to the Project and the individual's specified role on the Project

6.3.9 Appendix C – Agreement Comments (optional)

Proposers may include a detailed markup of the Agreement, including exhibits, of requested revisions by the Proposer. Such comments may take any form that is convenient to the Proposer.

If included, Appendix C must explain the reason for each requested revision and the associated benefits to the Owner. Any proposed revisions should allocate risk more efficiently, improve parties' understanding of risk allocation, improve clarity of terms where ambiguity or uncertainty may arise during the term's application or interpretation, or similar.

The Owner is not obligated to accept any requested revisions submitted by the Proposer when negotiating and finalizing the Agreement. The Owner may also request additional revisions during negotiations before finalizing the Agreement, including amending contract provisions in light of applicable funding sources. Although the Owner may undertake negotiations of the Agreement in light of any proposed changes requested through Appendix C, Appendix C will be treated as an offer that the Owner can accept as-is without further negotiations or revision.

6.3.10 Appendix D – Pricing Information

Those Proposers selected for the interview shall provide the relevant pricing information forms in Attachment D – Pricing Information Form(s). The pricing information shall be provided by 5:00 p.m. **seven days** prior to the Proposer's interview date. The information shall be submitted electronically to Elizabeth Woodall at the email in Section 5.1. Pricing should be provided for the scope of services detailed in Exhibit A of Attachment B for the **full scope** of the Project as set out in Anticipated Project Schedule (Section 2.5), above. As discussed above, Owner intends to issue a Task Order for 30% design CM/GC Services contemporaneous with the award of the Agreement, which will be based on Attachment D. The Owner then intends to solicit preconstruction costs from the successful CM/GC with each design milestone, which will be incorporated into applicable Task Orders. Proposers are reminded to provide a work breakdown structure[8] for proposed preconstruction pricing, including labor rate escalations for the life of the project. Any proposed scope additions shall be priced out separately.

Please be advised that the Owner is not interested in proposed fees or rates that provide excessive discounts from the CM/GC's anticipated actual costs for the requested services, and may consider such an approach nonresponsive.

6.3.11 Appendix E – Letter of Commitment

The Proposal should include a letter of commitment formally committing to maintain team consistency for the full duration of the LCWTP Rebuild Project. The letter should include a guarantee that Key Personnel

[8] Work breakdown structure must include an itemized budget by task including individual hours and hourly rates.

listed in Section 6.3.4 assigned to the preconstruction phase will remain actively engaged through Project construction, commissioning, startup, and completion.

7. Evaluation and Selection

The Proposals will be reviewed and evaluated by the Owner, with assistance provided by outside advisors if desired by the Owner, according to the requirements and criteria outlined in this RFP. During the Proposal evaluation, the Owner may submit questions or requests for clarification to one or more Proposer. Failure of the Proposer to respond in a timely manner may be grounds for elimination from further consideration.

7.1 Responsiveness

Each Proposal will be reviewed to determine whether it is responsive to the RFP. Failure to comply with the requirements of this RFP may result in rejection of the Proposal for non-responsiveness. At its discretion, the Owner may ask a Proposer for clarification or additional information to remedy a deficiency or waive a failure to a meet a requirement of the RFP.

7.2 Minimum Requirements (Pass/Fail)

Responsive Proposals will be reviewed to determine if they meet the minimum requirements outlined below. At its discretion, the Owner may ask a Proposer for clarification or additional information to remedy a deficiency and waive a failure to a meet a pass/fail requirement of the RFP.

Any Proposal that does not satisfy all of the following minimum requirements may be rejected:

- CM/GC must demonstrate it has the bonding capacity described in Section 6.3.7.
- CM/GC must demonstrate it can provide the insurance coverage described in Section 6.3.7.
- CM/GC must have an unqualified audit opinion, and no substantial doubt about the ability to continue as a going concern.
- CM/GC must not have unfavorable debarment status.
- CM/GC and other Key Firms must be licensed in Utah for the type of work to be performed.

7.3 Proposal Evaluation

The selection committee will evaluate and rank the responsive Proposals that satisfy the minimum requirements by applying the weighted comparative scoring evaluation criteria outlined below.

1. Transmittal Letter	Not scored.
2. Executive Summary	Not scored.
3. CM/GC Profile	11%
4. Project Team Structure and Key Personnel, including Letter of Commitment	38%
5. Relevant Project Experience	17%
6. Project Approach	34%
Appendix A – Supporting Financial and Company Documentation	Pass/Fail.
Appendix B – Resumes	Scored as part of 4.
Appendix C – Agreement Comments	Not scored.

Proposals will be comparatively evaluated using the analytical hierarchy process (AHP) for each of the weighted criteria. The resulting percentage rank/preference score for each Proposal will be normalized to a point score, where the highest rank percentage score earns the maximum available points and subsequent rank scores earn a point score proportional by rank percentage.

The maximum point score for Proposal evaluation is 60 points. Firms who score between 40 and 60 points will be selected for interviews.

7.4 Interview and Pricing Evaluation

The Owner will provide interview evaluation criteria, guidelines, expectations, and sample questions to assist Proposers with interview preparation. This document will be shared with Proposers at the time of notification for interview.

Those selected for interviews will provide pricing information in accordance with the direction provided in Section 6.3.10 above. Pricing information will not be viewed by the Owner until after the interview.

A maximum point score for the interview and pricing evaluation is 40 points. Interviewees will be comparatively evaluated using AHP for each of the weighted criteria outlined below. The resulting percentage rank/preference score for each Proposal will be normalized to a point score, where the highest rank percentage score earns the maximum available points and subsequent rank scores earn a point score proportional by rank percentage.

Interview and Pricing scoring will be based on the following weighted criteria below:

1. Creativity in Problem Solving (Solve a Problem)	22%
2. Clarity and Innovation on Presented Topics (Team and Approach)	13%
3. Quality of Responses (Q&A)	22%
4. Interaction, Collaboration, Teamwork and Performance	37%
5. Pricing Information	6%

Selection will be made based on a combined score of both the Proposal Evaluation (Section 7.3) and the Interview and Pricing Evaluation (Section 7.4).

After the selection process is complete, the Owner will either select the top-ranked Proposer for contract award based on its scope, fee, and/or Agreement comments or negotiate the scope, fee, and/or final terms of the Agreement as set out in Section 6.3.9. If negotiations with the top-ranked Proposer are not successful, the Owner may select or negotiate with the second highest-ranked Proposer, and so on.

8. Conditions for Proposers

8.1 Owner Authority

Owner is a Utah special district governed by Title 17B of the Utah Code, and specifically Chapter 1 and Chapter 2a, Part 6. The procurement process for this Project is authorized under Title 63G, Chapter 6a of the Utah Code, and specifically Part 7.

8.2 Rights of the Owner

In connection with this procurement process, including the receipt and evaluation of proposals and award of the Agreement, Owner reserves to itself (at its sole discretion) all rights available to it under applicable law, including without limitation, with or without cause and with or without notice, the right to:

- Cancel, withdraw, postpone, or extend this RFP, in whole or in part, at any time prior to the execution of the Agreement, without incurring any obligations or liabilities.
- Modify the procurement schedule.
- Waive deficiencies, informalities, and irregularities in a Proposal and accept and review a non-responsive Proposal.
- Suspend and terminate the procurement process or terminate evaluations of proposals received.
- Allow corrections to data submitted with any proposal.
- Hold meetings and interviews, and conduct discussions and correspondence, with one or more of the Proposers to seek an improved understanding of any information contained in a proposal.
- Seek or obtain, from any source, data that has the potential to improve the understanding and evaluation of the Proposals.
- Seek clarification from any Proposer to fully understand information provided in the proposal and to help evaluate and rank the Proposers.
- Reject a Proposal containing exceptions, additions, qualifications, or conditions not called for in the RFP or otherwise not acceptable to the Owner.
- Conduct an independent investigation of any information, including experience, included in a proposal by contacting project references, accessing public information, contacting independent parties, or any other means.
- Request additional information from a Proposer during the evaluation of its proposal.

8.3 Obligation to Keep Project Team Intact

Owner expects all Key Firms and Key Personnel proposed to be available to provide services for this Project. Proposers are advised that all Key Firms and Key Personnel identified in the Proposal shall remain on the Project Team for the duration of the procurement process and execution of the Project.

Key Personnel are committed to the Project and changes may not be accepted, unless they no longer work for the firm or Owner otherwise agrees that a change is appropriate. If extraordinary circumstances require a change, it must be submitted in writing to the Owner, which, at its sole discretion, will determine whether to authorize a change, recognizing that certain circumstances (such as termination of employment) may occur that are beyond the Proposer’s control.

8.4 Addenda

If any revisions to the RFP or procurement process become necessary or desirable (at the Owner’s sole discretion), the Owner may issue written addenda. The Owner will issue any such addenda through U3P. It is each Proposer’s responsibility to obtain all addenda prior to submitting its Proposal.

8.5 GRAMA

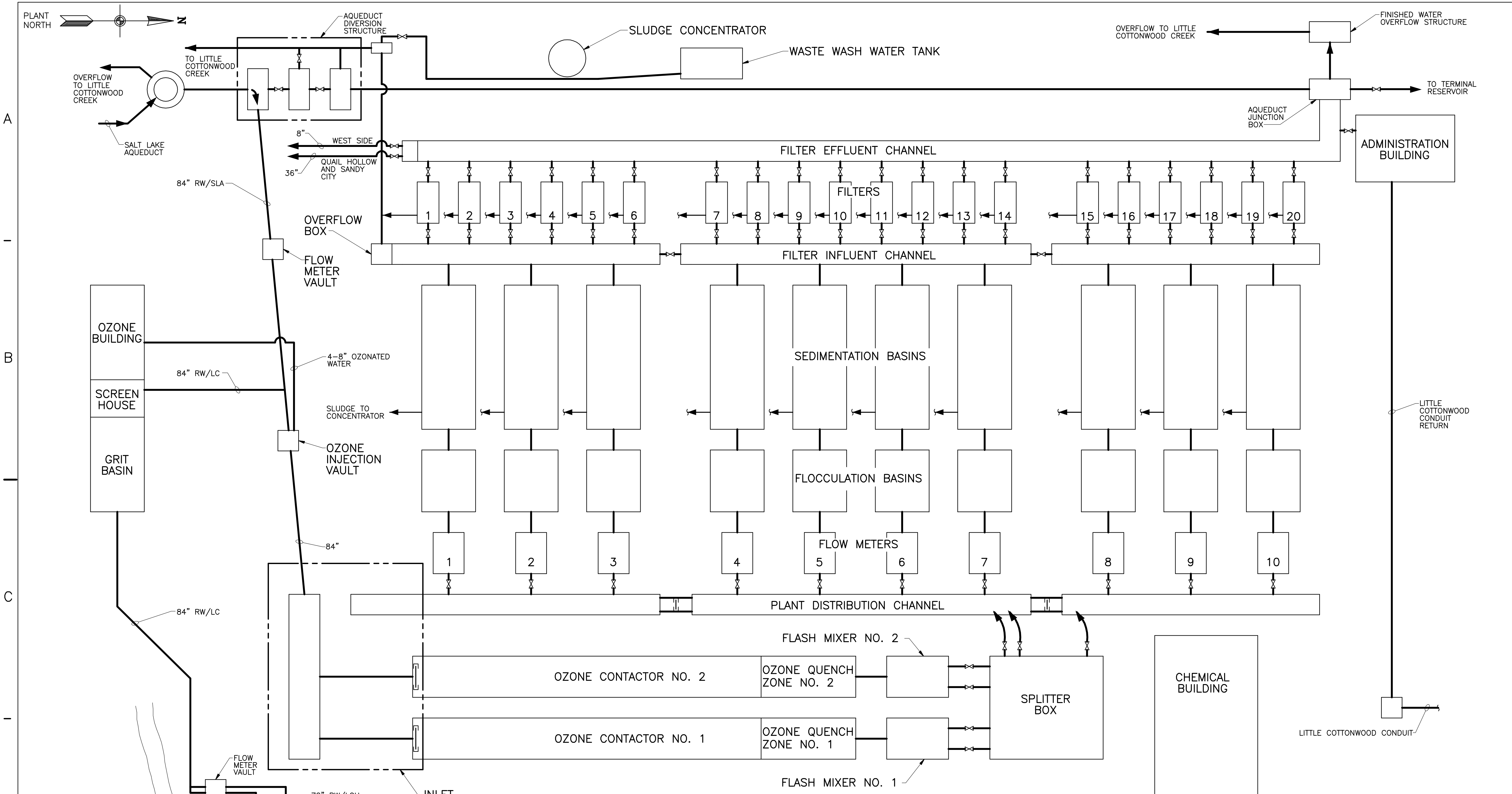
Owner is subject to the Utah Government Records Access and Management Act, Title 63G, Chapter 2 of the Utah Code (GRAMA). If a Proposer claims any portion of its Proposal contains proprietary information, it is responsible to understand and implement any protection provided by GRAMA, including Section 63G-2-309 (https://le.utah.gov/xcode/Title63G/Chapter2/63G-2-S309.html), as that section may be amended. Owner will not be bound by any instructions or watermarks, stamps, or similar designations contained in a Proposal, but rather, will only be governed by GRAMA and Owner's GRAMA regulations. All materials become the property of Owner and may be returned at Owner's option.

Attachment A – Project Background Documents

Proposers shall review the index of Project background documents to support Proposal development. The Owner may also update the index of Project background documents from time to time with new information via addenda to the RFP or during Phase I.

Document Number	Document Title
001	Existing LCWTP Plant Flow Diagram and Hydraulic Profile
002	LCWTP Rebuild – Basis of Design Report – June 2026

Upon execution of the Agreement between the Owner and the CM/GC, a Non-disclosure Agreement (NDA) will also be signed in the form included as Attachment C.



RECORD DRAWINGS

Revisions Drawn by SR REDDELL Date JUNE 2006

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

REV	DATE	BY	APP	DESCRIPTION
	06/06	SRR	RCF	RECORD DRAWING

PREPARED FOR

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

CH2MHILL

DESIGNED: DESIGN R.FRANKENFIELD; DRAW L.BENTHIN

REVIEWED: CHECKED K.HEFFERNAN; APPROV R.BRAUER

VERIFY SCALE
IF BAR IS NOT ONE INCH ON ORIGINAL DRAWING, 0 1" DRAWING IS NOT TO SCALE

THE ORIGINAL DRAWING WAS STAMPED BY RODNEY BRAUER UTAH P.E. 371371

LITTLE COTTONWOOD WTP EXPANSION

GENERAL PROCESS FLOW DIAGRAM

DISTRICT IDENTIFICATION NUMBER LC011

PROJECT NO. 173698

SCALE: NO SCALE

DATE: 11-16-2003

DRAWING NO. G-21

SHEET NO. 21

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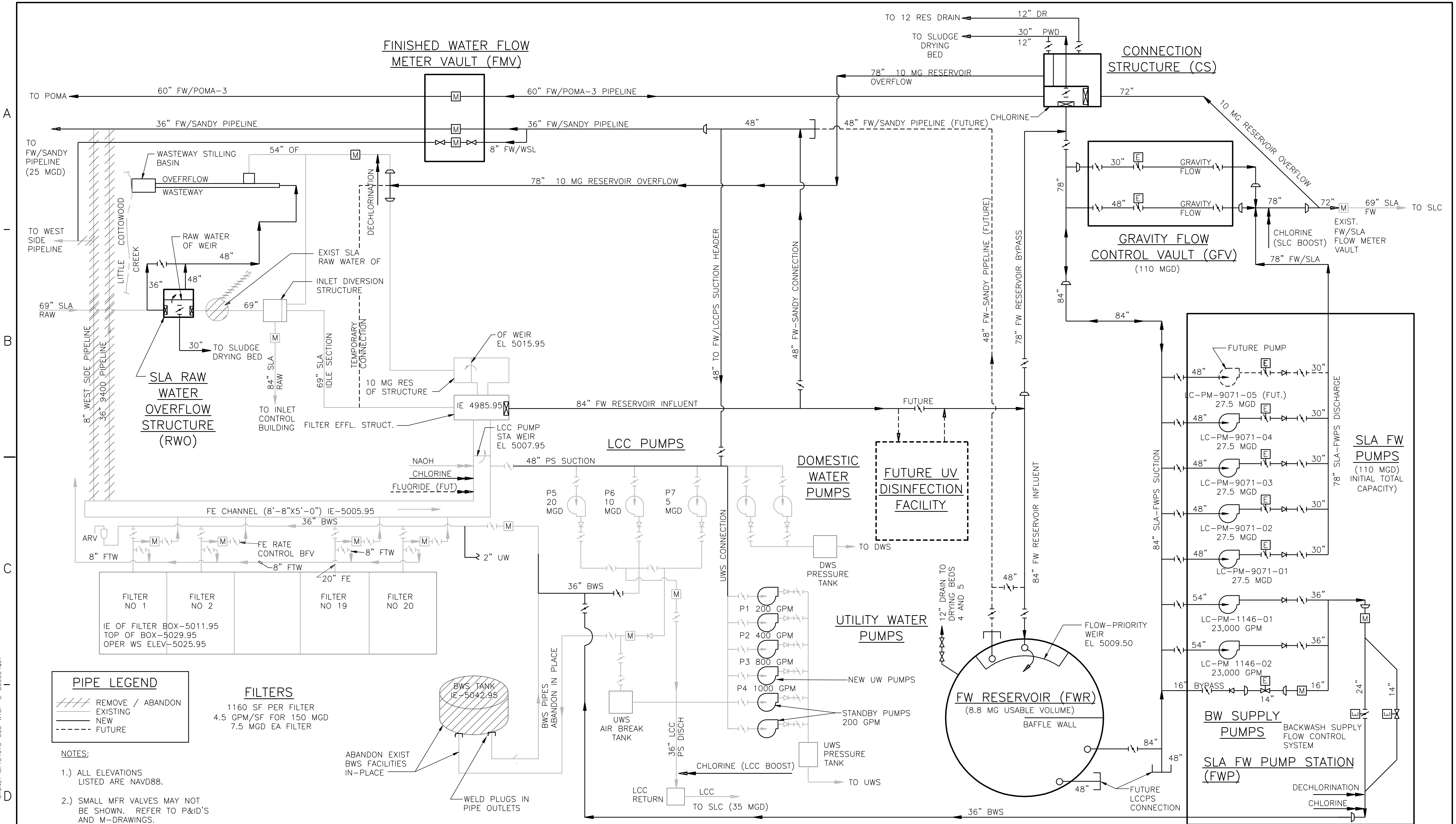

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REV	DATE	BY	APP	DESCRIPTION
	3-08	JSN	SDL	CONFORMED TO CONSTRUCTION RECORDS
	9-04	JSN	SDL	BID ISSUE

FD134073
D134073

PREPARED FOR

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

BLACK & VEATCH Corporation
Aurora, Colorado

DESIGNED — DESIGN JSN, DRAW DKB
REVIEWED — CHECKED WLK, APPROV SDL

VERIFY SCALE
IF BAR IS NOT ONE INCH ON ORIGINAL DRAWING, DRAWING IS NOT TO SCALE

PROFESSIONAL ENGINEER No.5592653-2202 SHAWN DENE LaBONDE STATE OF UTAH

LITTLE COTTONWOOD WTP ON-SITE IMPROVEMENTS

GENERAL
CIVIL
PROCESS FLOW DIAGRAM

DISTRICT IDENTIFICATION NUMBER LC020
PROJECT NO. 134073

SCALE: NO SCALE
DATE: 9-16-04
DRAWING NO. G-C-02
SHEET NO. 07

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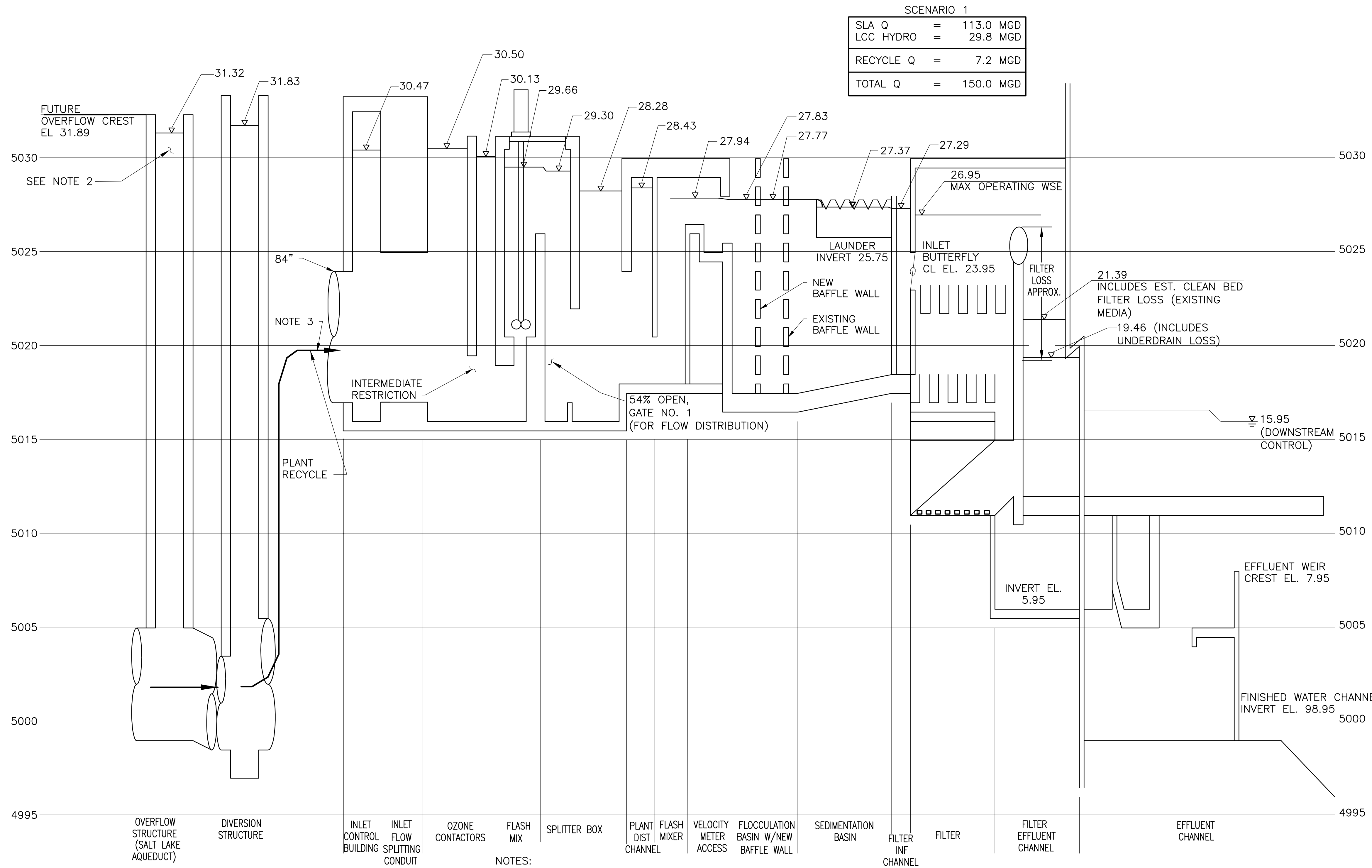

NOTES:
1. ALL WATER SURFACE ELEVATIONS REPRESENT THE HYDRAULIC GRADE LINE UNLESS INDICATED OTHERWISE. ELEVATIONS NOTED ARE BASED ON NAVD'88 DATUM (ADD 5000.00 FT FOR ACTUAL ELEVATION).
2. WATER LEVEL AT OVERFLOW=30.26 WHEN 142.8MGD PASSES THROUGH GRIT BASIN AND SCREEN HOUSE.
3. MAIN FLOW FROM DWG G-23 ENTERS PROFILE AT THIS LOCATION.

RECORD DRAWINGS

Revisions Drawn by SR REDDELL Date JUNE 2006

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

REV	DATE	BY	APP	DESCRIPTION
	06/06	SRR	RCF	RECORD DRAWING

PREPARED FOR

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

CH2MHILL

DESIGNED: DESIGN S.POLSON; DRAW K.DAVIS

REVIEWED: CHECKED K. HEFFERNAN; APPROV R. BRAUER

VERIFY SCALE
IF BAR IS NOT ONE INCH ON ORIGINAL DRAWING, 0 1" DRAWING IS NOT TO SCALE

THE ORIGINAL DRAWING WAS STAMPED BY RODNEY BRAUER UTAH P.E. 371371

LITTLE COTTONWOOD WTP EXPANSION

GENERAL
HYDRAULIC PROFILE FROM
SALT LAKE AQUEDUCT

DISTRICT IDENTIFICATION NUMBER LC011

PROJECT NO. 173698

SCALE: NO SCALE

DATE: 11-16-2003

DRAWING NO. G-22 SHEET NO. 22

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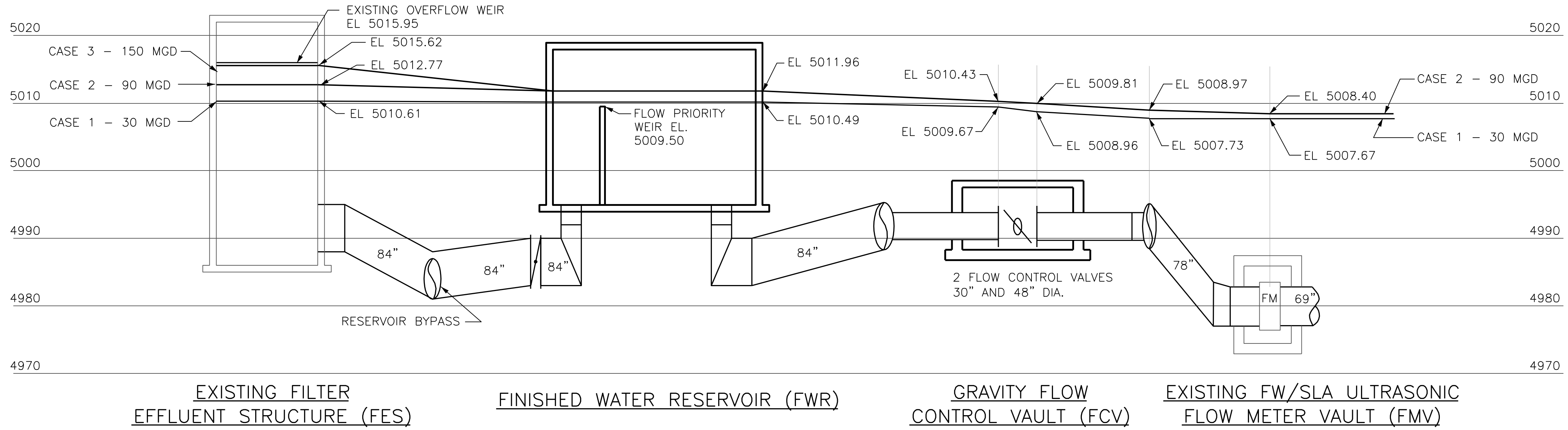
CASE 1: 1-30" VALVE 80-DEGREES OPEN
FLOW = 30 MGD TO FW/SLA

CASE 2: BOTH VALVES FULL OPEN
FLOW = 90 MGD TO FW/SLA

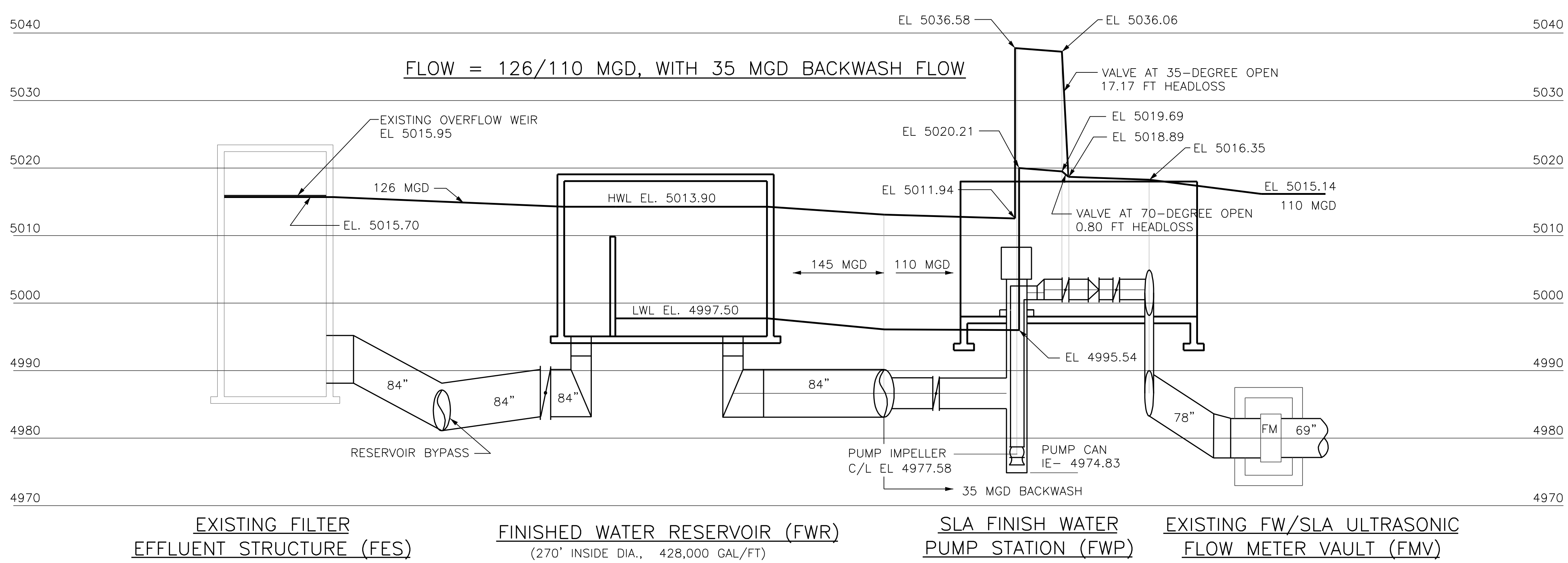
CASE 3: FLOW = 150 MGD FROM FILTER EFFLUENT STRUCTURE TO FW RESERVOIR, 90 MGD TO FW/SLA



HYDRAULIC PROFILE – GRAVITY FLOW

NO SCALE

FLOW = 126/110 MGD, WITH 35 MGD BACKWASH FLOW



HYDRAULIC PROFILE – PUMPED FLOW

NO SCALE

REV	DATE	BY	APP	DESCRIPTION
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	9-04	JSN	SDL	BID ISSUE

PREPARED FOR

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY

BLACK & VEATCH Corporation
Aurora, Colorado

DESIGNED: DESIGN JSN, DRAW DKB
REVIEWED: CHECKED WLK, APPROV SDL

VERIFY SCALE
IF BAR IS NOT ONE INCH ON ORIGINAL DRAWING, DRAWING IS NOT TO SCALE

PROFESSIONAL ENGINEER No.5592653-2202 SHAWN DENE LaBONDE STATE OF UTAH

LITTLE COTTONWOOD WTP ON-SITE IMPROVEMENTS

GENERAL
CIVIL
HYDRAULIC PROFILES

DISTRICT IDENTIFICATION NUMBER LC020
PROJECT NO. 134073

SCALE: AS NOTED
DATE: 9-16-04
DRAWING NO. G-C-01
SHEET NO. 06

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Basis of Design Report

Little Cottonwood Water Treatment Plant Rebuild Project
Phase 1: Basis of Design

Prepared for:
Metropolitan Water District of Salt Lake & Sandy

Prepared by:
Stantec

Date:
June 29, 2026

Project/File:
181301792

Stantec Consulting Services Inc.

Revision Record

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
0	Draft	M. Bertoch	5/22/26	J. Gelmini	5/26/26	D. Hatch	5/28/26
1	Final	M. Bertoch	6/29/26	T. Spivak	6/29/26	B. Jeppson	6/29/26

Disclaimer

The conclusions in the Report titled Basis of Design Report are Stantec’s professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient’s own risk.

Stantec has assumed all information received from Metropolitan Water District of Salt Lake & Sandy (the “Client”) and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec’s contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:

Signature

Jennifer Gelmini, PE

Printed Name

Reviewed by:

Signature

Brad Jeppson, PE

Printed Name

Approved by:

Signature

Mark Graham, PE

Printed Name

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Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
AACE	Association for the Advancement of Cost Engineering
ACH	Aluminum Chlorohydrate
AHP	Analytic Hierarchy Process
AWWA	American Water Works Association
BCC	Big Cottonwood Creek
BODR	Basis of Design Report
BRIC	Building Resilient Infrastructure and Communities Program
BW	Backwash
BWW	Backwash Waste
C	Celsius
$CaCO_3$	Calcium Carbonate
CFE	Combined Filter Effluent
CFS	Cubic Feet per Second
CIP	Capital Improvement Program
CM/GC	Construction Manager/General Contractor
CO_2	Carbon Dioxide
CT	Contact Time
CUWCD	Central Utah Water Conservancy District
D	Depth
DB	Design-Build
DBB	Design/Bid/Build
DBC	Disinfection Contact Basin
DBP	Disinfection Byproduct
DDW	Division of Drinking Water
DEG	Design Engineering Guideline
EJCDC	Engineers Joint Contract Documents Committee
EPA	Environmental Protection Agency
ESDC	Engineering Services During Construction
EQ	Equalization
FEMA	Federal Emergency Management Agency
ft	feet
FTW	Filter to Waste
FWPS	Finished Water Pump Station
gal	Gallons
GMP	Guaranteed Maximum Price
gpm	Gallons per Minute
HAA	Haloacetic Acids
HADES	Hydraulic Analysis Design and Evaluation System
HP	Horsepower
HPC	Heterotrophic Plate Count
HVAC	Heating, Ventilation, and Air Conditioning
I/O	Input/Output

Acronym / Abbreviation	Full Name
IA&E	Industrial, Automation & Electrical
IFE	Individual Filter Effluent
JA	Jordan Aqueduct
JVWTP	Jordan Valley Water Treatment Plant
L	Length
LCC	Little Cottonwood Creek
LCWTP	Little Cottonwood Water Treatment Plant
LOS	Level of Service
LOX	Liquid Oxygen
MCC	Motor Control Center
MCE	Maximum Considered Earthquake
Metro Water	Metropolitan Water District of Salt Lake & Sandy
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MG	Million Gallons
MGD	Million Gallons per Day
min	Minutes
mL	Milliliters
mm	Millimeters
MOPO	Maintenance of Plant Operations
MPN	Most Probable Number
NIOSH	National Institute for Occupational Safety and Health
NPV	Net Present Value
NTU	Nephelometric Turbidity Unit
O&M	Operations and Maintenance
O_3	Ozone
OOS	Out of Service
OPCC	Opinion of Probable Construction Cost
OSHG	On-Site Sodium Hypochlorite Generation
PACl	Polyaluminum Chloride
PD	Preliminary Design
PDB	Progressive Design-Build
PEX	Cross-Linked Polyethylene
PFD	Process Flow Diagram
PLC	Programmable Logic Controller
POM	Point of the Mountain Aqueduct
POMWTP	Point of the Mountain Water Treatment Plant
ppd	Pounds per Day
PRA	Provo River Aqueduct
PRV	Pressure Regulating Valve
PVC	Polyvinyl Chloride
RAA	Running Annual Average
RIO	Remote Input/Output
RWSLA	Raw Water Salt Lake Aqueduct
SCADA	Supervisory Control and Data Acquisition
scfm	Standard Cubic Feet per Minute

Acronym / Abbreviation	Full Name
sec	Seconds
sf	Square Feet
SLA	Salt Lake Aqueduct
SLC	Salt Lake City
SLR	Surface Loading Rate
SOP	Standard Operating Procedure
SOR	Surface Overflow Rate
SRF	State Revolving Fund
SU	Standard Units (pH)
T&O	Taste & Odor
TBD	To Be Determined
TDH	Total Dynamic Head
TM	Technical Memorandum
TOC	Total Organic Carbon
TTHM	Total Trihalomethanes
UGS	Utah Geological Survey
UPS	Uninterruptible Power Supply
UOSHA	Utah Occupational Safety & Health Administration
USGS	United States Geological Survey
UV	Ultraviolet
WCDA	Water Collaborative Delivery Association
WIFIA	Water Infrastructure Financing and Innovation Act
WTP	Water Treatment Plant
WFZ	Wasatch Fault Zone
WWW	Waste Wash Water

1 Introduction

This document summarizes the Basis of Design for the Little Cottonwood Water Treatment Plant (LCWTP) Rebuild Project. The focus of the current phase of work has been to develop level of service goals, assess the physical and operational conditions of existing assets, establish project delivery methods, evaluate and select site layout and treatment process alternatives, evaluate hydraulic considerations, identify project prioritization, sequencing, and packaging methodology, develop the Class 5 opinion of probable construction cost, and detail funding opportunities and financial planning. This effort has been informed through collaboration with Metropolitan Water District of Salt Lake & Sandy (Metro Water) staff through a series of workshops and technical memorandums (TMs). This Basis of Design Report (BODR) documents the results of these efforts and establishes the fundamental design basis for the Rebuild Project. It can be considered a “roadmap” for the subsequent Phase 2 preliminary design.

2 Background

2.1 Metropolitan Water District of Salt Lake & Sandy

The Metropolitan Water District of Salt Lake & Sandy (Metro Water) was formed on August 30, 1935, pursuant to the provisions of the Metropolitan Water District Act of Utah. Electors residing within the corporate limits of Salt Lake City voted for the creation of the Metropolitan Water District of Salt Lake City. It is a nonprofit, governmental entity charged with developing long-range supplemental water supplies for its member cities, Salt Lake City and Sandy City.

Metro Water receives water supply from Little Cottonwood Canyon, Bell Canyon, the Provo River Project, the Ontario Drain Tunnel, Little Dell Reservoir, and the Central Utah Project. Through the Provo River Project, Metro Water is the largest shareholder of the Provo River Water Users Association. The Provo River Project includes the Salt Lake Aqueduct, Deer Creek Dam, Provo Reservoir Canal, and the Transbasin Diversions. The Central Utah Project includes Jordanelle Reservoir, Jordan Aqueduct, and the Jordan Valley Water Treatment Plant (JVWTP). Table 1 is a summary of raw water sources from 2022-2025.

Table 1. Summary of Raw Water Sources

Acre Feet	2022	2023	2024	2025
Little Cottonwood Creek	17,739	16,975	24,000	24,917
Bell Canyon Creek	221	160	33	373
Ontario Drain Tunnel	2,778	3,372	4,298	2,850
Provo River Project	44,226	40,895	42,319	51,327
Central Utah Project Municipal & Industrial	20,000	20,000	20,000	20,000
Central Utah Project Utah Lake System	3,100	3,100	3,100	3,100
Total	**88,064**	**84,502**	**93,750**	**102,567**

As shown in Figure 1, Metro Water owns and operates two water treatment facilities – the LCWTP and the Point of the Mountain Water Treatment Plant (POMWTP). Metro Water also owns a two sevenths (2/7) interest in, but does not operate, the JVWTP.

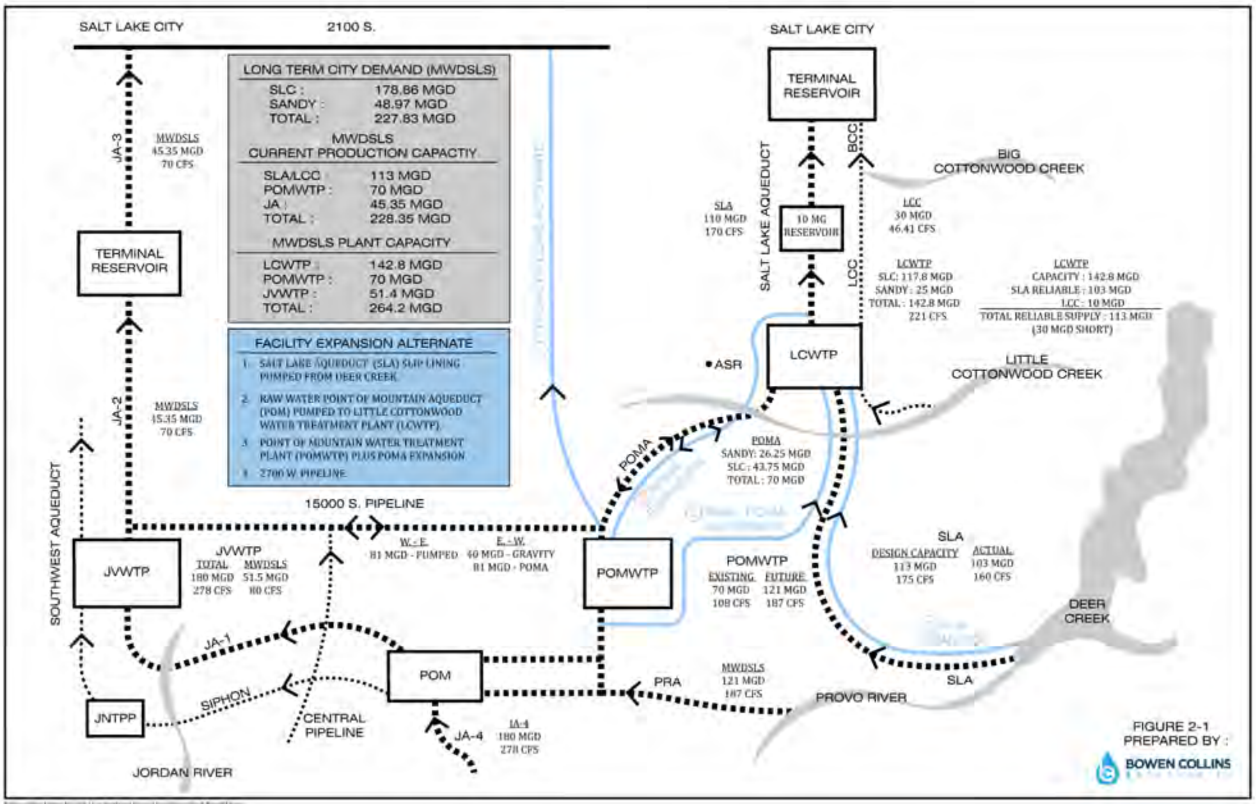


Figure 1. Metro Water System Schematic (Source: Facility Demand Analysis, February 2019)

2.2 Little Cottonwood Water Treatment Plant

The LCWTP was constructed in 1960 and was originally designed to treat 113 million gallons per day (MGD). The capacity of the plant was increased to 150 MGD in 2007. The improvements to the plant included a new 9-million-gallon treated water reservoir, addition of ozone disinfection facilities, construction of a new diversion structure on Little Cottonwood Creek, improved flash mix and flocculation processes, and new raw water grit removal and screen facilities. The plant is strategically positioned in line with the Salt Lake Aqueduct such that raw (untreated) water can enter the plant and finished (treated) water can be transported to terminal reservoir, all by gravity. The plant, located at the mouth of Little Cottonwood Canyon, also treats water from Little Cottonwood Creek and Bell Canyon through the Murray Hydropower Intake and Little Cottonwood Creek Intake. The administration office building and laboratory are also located at the LCWTP.

The LCWTP is a conventional treatment facility, as shown in Figure 2, employing ozone, coagulation/flocculation, conventional sedimentation, and dual-media granular media filtration. Disinfection is provided by chlorine gas. Residuals are managed by equalizing, thickening, and discharging to earthen drying beds. Clarified water is stored in a wetwell and recycled to the head of the plant at approximately 5 percent of the current plant flow.

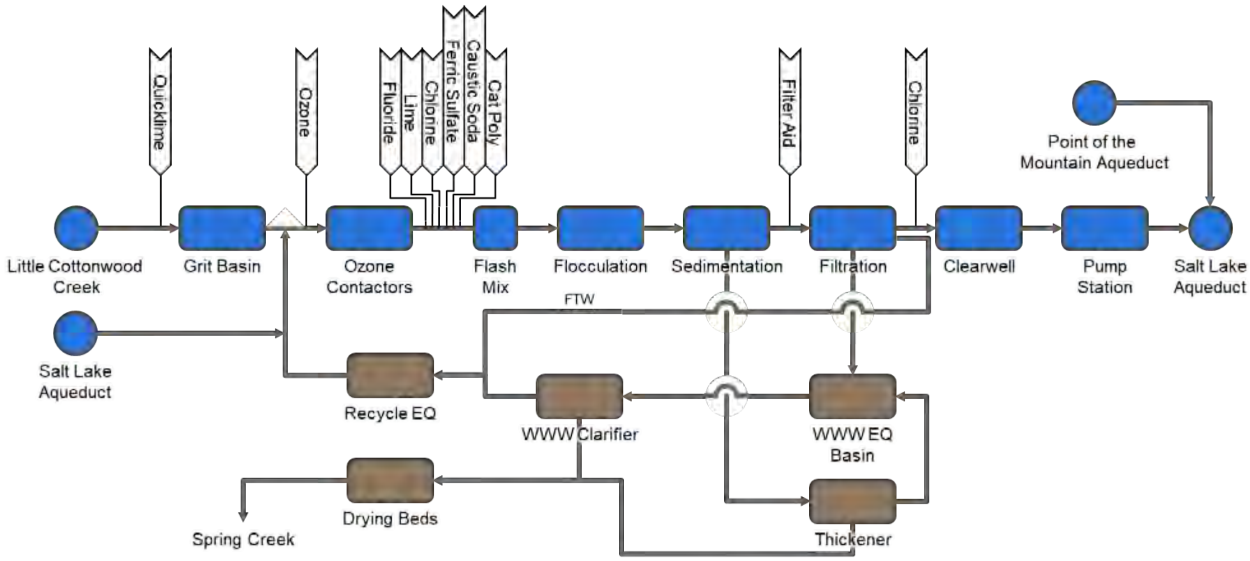


Figure 2. Existing LCWTP Process Flow Diagram

While the plant is strategically located to efficiently capture the raw water supply from the Salt Lake Aqueduct and the Little Cottonwood Creek, it is also located adjacent to the Wasatch Fault Zone (WFZ), which increases the risk of structural damage and interruption of operations from seismic activity. Figure 3 shows te location of the plant with respect to mapped fault traces. The original structures were not designed to meet current seismic code requirements and have been identified as having a significant risk of failure from the design earthquake event.

Figure 3. Wasatch Fault Zone (Source: Geotechnical / Geological Study Little Cottonwood Water Treatment Plant Rebuild Project – Phase 1, Gerhart Cole, April 2026)

3 Little Cottonwood Water Treatment Plant Rebuild Project Background

Since 1960, the LCWTP has consistently delivered safe drinking water to residents of Salt Lake City and Sandy City. Currently, over 400,000 residents receive water from the LCWTP. While Metro Water has made critical improvements to the plant over time, the core process area, several critical structures, and ancillary facilities are original, including the flocculation and sedimentation basins (as well as much of the mechanical equipment), Filter Building, “Old” Chemical Building, and Lab Building. As stated previously, the design of the original facilities does not meet current seismic resiliency standards.

The LCWTP Rebuild Project has three primary objectives.

- Reconstruct LCWTP to maintain service during and following a hazard event, such as a large earthquake which is the primary hazard for LCWTP.
- Upgrade the performance of chemical feed, flocculation, sedimentation, and filtration processes.
- Improve electrical and process control systems.

The Rebuild Project does not add capacity to LCWTP; rather, it is a repair and replacement project that will improve the reliability of the current 150 MGD capacity. The Rebuild Project includes the following phases of work.

- Phase 1 – Basis of Design
- Phase 2 – Preliminary Design
- Phase 3 – Detailed Design
- Phase 4 – Bidding Services
- Phase 5 – Construction Services
- Phase 6 – Commissioning and Startup

The sections that follow summarize the work of Phase 1 – Basis of Design.

3.1 Raw Water Quality

The water quality data summarized below was provided by Metro Water to identify the conditions that the rebuilt LCWTP will need to treat. Data for post-wildfire total organic carbon (TOC) comes from the City of Fort Collins, Colorado and the Central Utah Water Conservancy District (CUWCD) since the Little Cottonwood watershed has not had a major wildfire event recently.

Raw water turbidity data from April 2020 to July 2025 for the Murray Hydropower Intake, Little Cottonwood Creek, Deer Creek, and LCWTP Flash Mix are presented in Figure 4. Turbidity data at the LCWTP Flash Mix are presented in Figure 5. Turbidity for Little Cottonwood Creek, Deer Creek, and the LCWTP Flash Mix average 2 to 3 Nephelometric Turbidity Units (NTU) with LCWTP Flash Mix less than 10 NTU 99 percent of the time and peaking at 20 NTU. Turbidity for the Murray Hydropower Intake has peaked above 1,000 NTU during storm events (based on instrument reading data collected by operators as recently as August 2024), however, the analog 4-20 mA signal logged in the SCADA system peaks at 200 NTU as shown in the figure below. Turbidity spikes from storm events typically last around 8 hours according to feedback from operators.

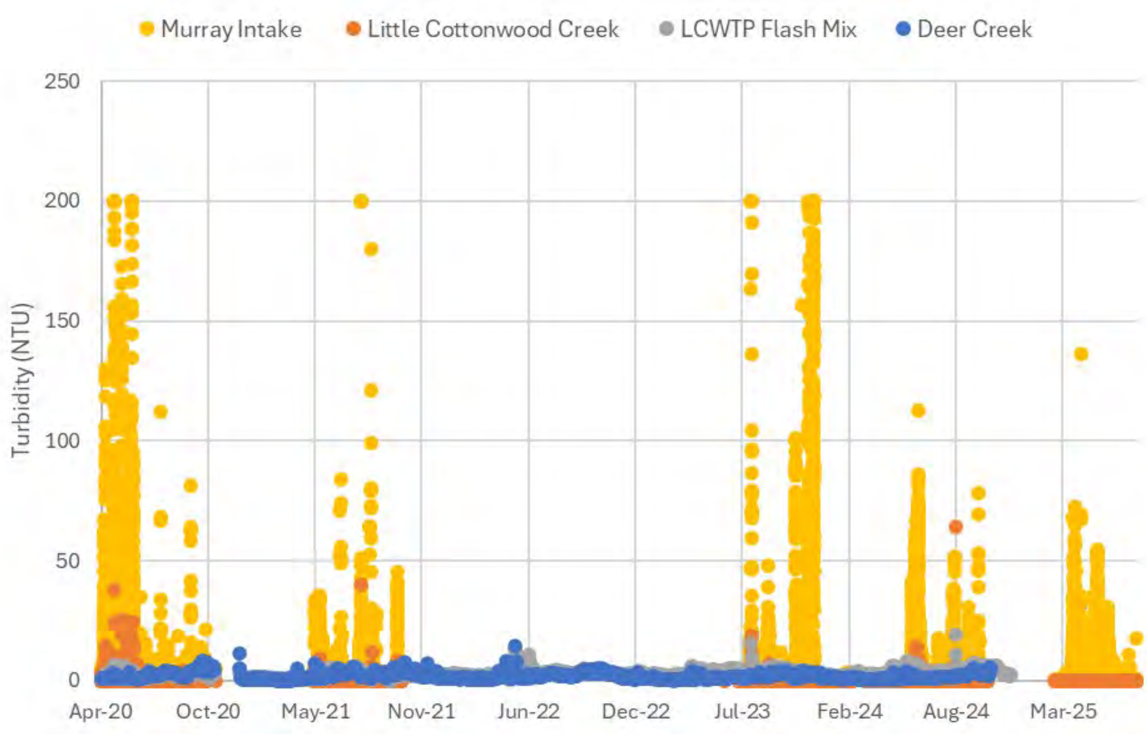


Figure 4. Raw Water Turbidity

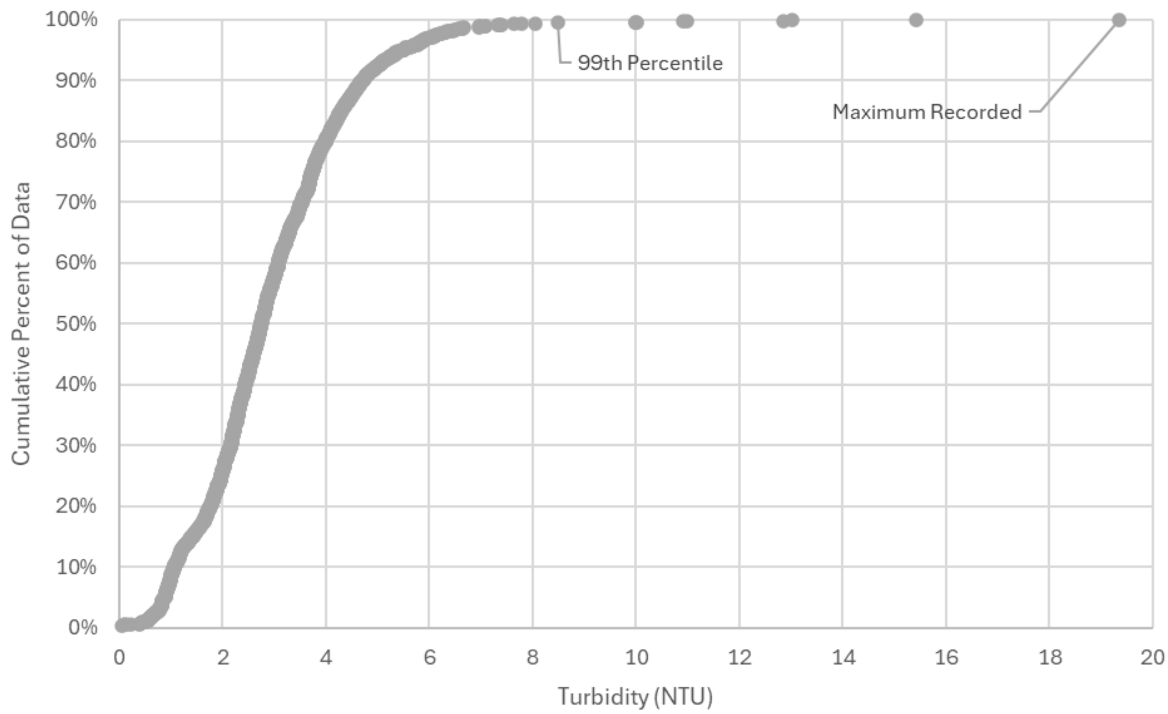


Figure 5. LCWTP Flash Mix Turbidity

Raw water alkalinity data for the Raw Water Salt Lake Aqueduct (RWSLA), Little Cottonwood Creek, and the mixed raw water source are presented in Figure 6. LCWTP raw water pH data from January 2020 to December 2024 are presented in Figure 7. Raw water pH averages 7.9.

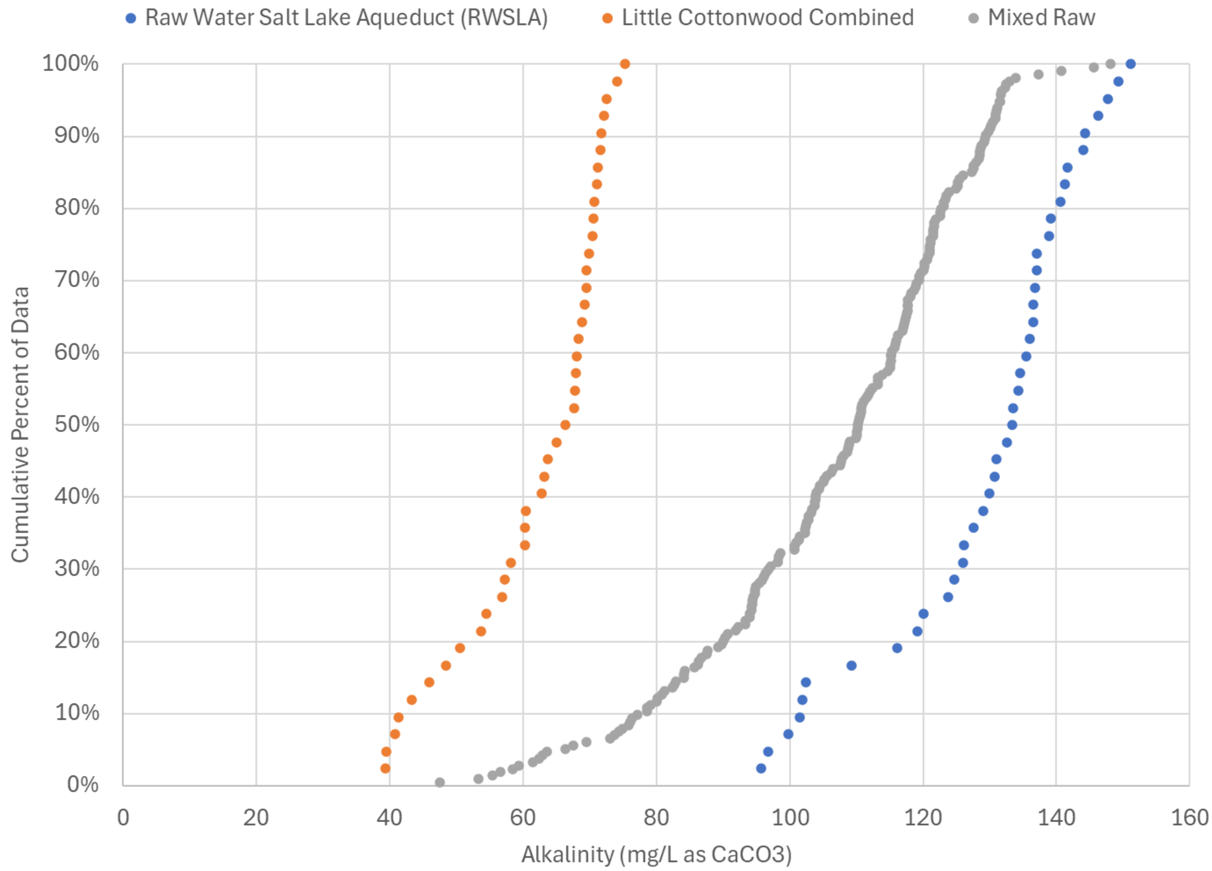


Figure 6. Raw Water Alkalinity

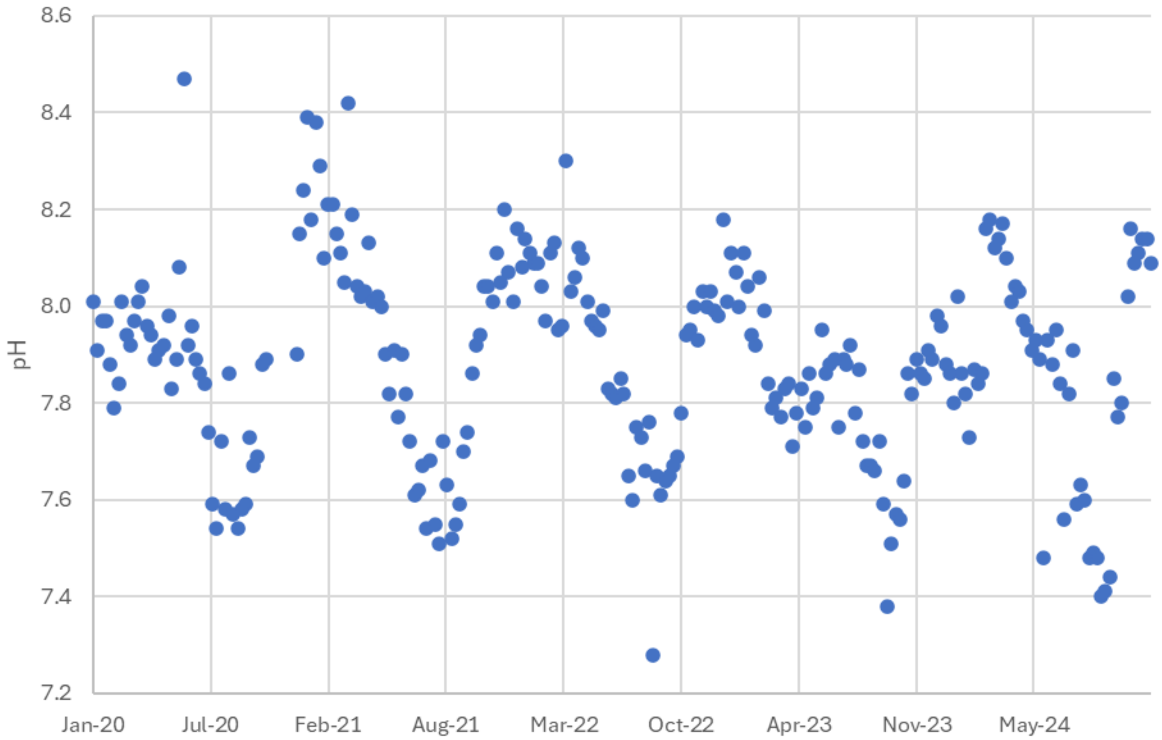


Figure 7. Raw Water pH

Raw water TOC for the RWSLA, Little Cottonwood Creek, and the mixed water source are presented in Figure 8. The historic maximum raw water TOC is approximately 3.5 milligrams per liter (mg/L).

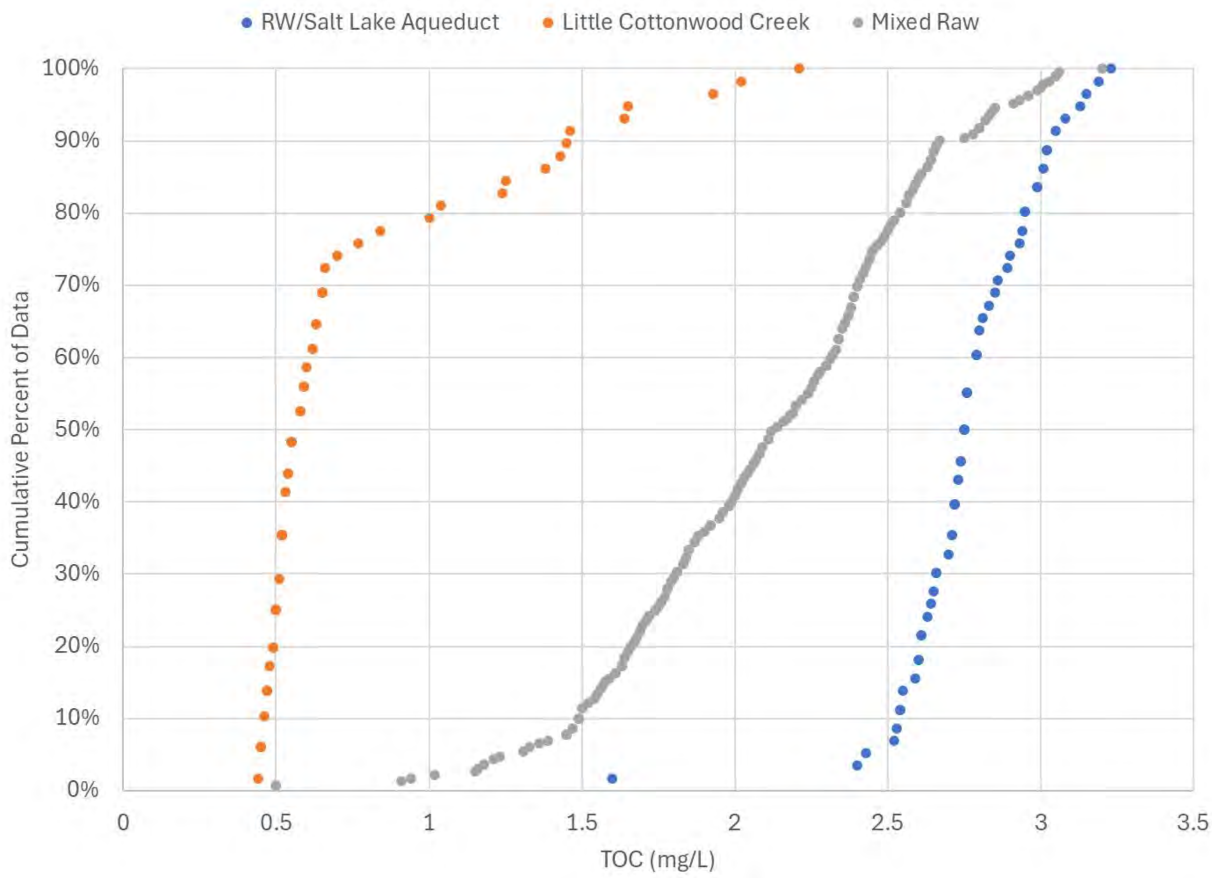


Figure 8. Raw Water TOC

Erosion of soils and displaced organic materials from wildfires can lead to elevated TOC concentrations during post-wildfire storm events. Water quality impacts from wildfires will vary depending on many factors including topography, vegetation, and severity of fire. To assess potential impacts, data from two similar watersheds were evaluated: the South Fork Cache la Poudre Watershed near the City of Fort Collins, Colorado and the Strawberry Watershed in Uintah County, Utah. Both watersheds observed a peak in TOC after wildfires with a return to baseline levels within a few years.

Table 2 is adapted from the City of Fort Collins's 2019 Technical Report on the South Fork Cache la Poudre Watershed Post-Wildfire Recovery. The City of Fort Collins found that it took about six years for TOC at their intake monitoring site and South Fork site to return to baseline conditions after the 2012 High Park Wildfire.

Table 2. South Fork Cache la Poudre Watershed TOC Pre- and Post-Wildfire

	Intake Site TOC (mg/L)	**South Fork Site TOC (mg/L)**
Baseline (Pre-Wildfire)	3.6	3.2
2014 – 2017 (Post-Wildfire)	4.8	4.7
2018 (Post-Wildfire)	3.3	4.0

Figure 9 shows the TOC at Central Utah Water Conservancy District's (CUWCD's) Starvation Reservoir before and after the 2018 Dollar Ridge Fire. TOC levels increased immediately after the fire but returned to baseline within two years.

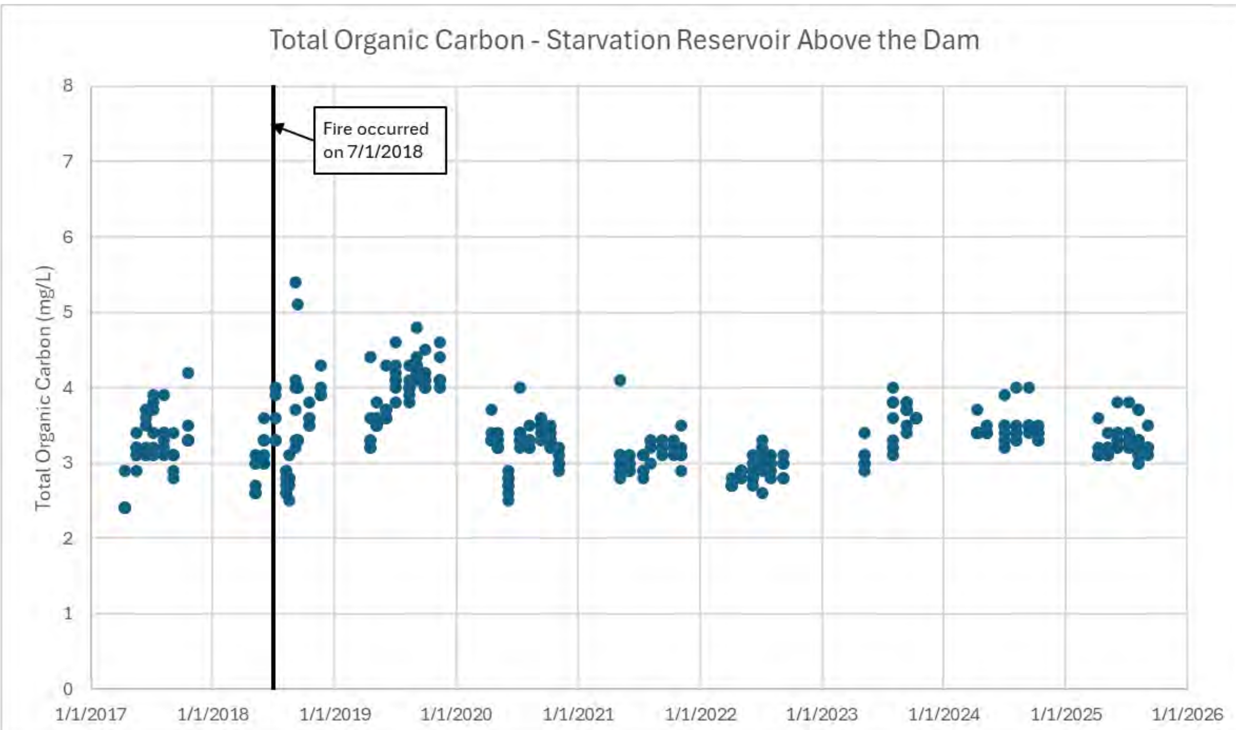


Figure 9. TOC after the 2018 Dollar Ridge Fire

Based on the TOC levels experienced by CUWCD and the City of Fort Collins, raw water TOC levels are expected to be elevated by approximately 40 percent in the 2-10 years post-wildfire.

3.2 Level of Service Goals

Level of service (LOS) goals were developed to define performance targets for each part of the treatment process. These goals were designed to balance risk, regulatory compliance, and fiscal responsibility, providing a foundation for project success and stakeholder confidence. The goals are summarized in Table 3 and are discussed in detail in the LCWTP Initial Level of Service Goals TM (see Appendix A).

Table 3. Summary of Level of Service Goals

Category	Description	Performance Target
Production Capacity	Peak Day Capacity	150 MGD @ 6.1 °C
	Cold Weather Production (November – March)	50 MGD @ ≤ 4 °C
	Peak Day Production during Construction	90 MGD
Water Quality	Short-term Maximum Raw Water Turbidity	1,000 NTU for 8 hours
	Long-term Maximum Raw Water Turbidity	10 NTU
	Settled Water Turbidity	1 NTU max, 95% of time
	Individual Filter Effluent Turbidity	0.1 NTU max, 95% of time
	Combined Filter Effluent Turbidity	0.07 NTU max, 95% of time
	Raw Water Alkalinity Range	40 – 150 mg/L $CaCO_3$
	Raw Water pH Range	7.4 – 8.4 SU
	Filter Effluent pH	7.8 SU
	Maximum Raw Water TOC (normal conditions)	3.5 mg/L
	Assumed Maximum Raw Water TOC (post-wildfire conditions)	5 mg/L
	Clearwell Effluent TOC	RAA < 1.9 mg/L
	Summer Filter Run Time (for purposes of backwash scheduling and recycling)	> 48 hours
	TTHMs Leaving LCWTP	< 20 µg/L
	TTHMs in Distribution System	< 80 µg/L
	HAAs Leaving LCWTP	< 15 µg/L
	HAAs in Distribution System	< 60 µg/L
	Positive Coliform Samples	0
	HPC	<10 MPN/mL
Hazard Resiliency	Seismic Performance	Produce 50 MGD within 3 days of Maximum Considered Earthquake (MCE)
	Electric Power Outage	24 hours
	Supply Chain or Transportation Disruption	7 days
Safety	Confined Spaces	No entry into permit-required confined spaces required for normal O&M
	Fall Protection	No personal fall protection required for normal O&M
	Chemical Safety	No exposure to hazardous chemicals during normal O&M
	Ergonomics	All normal O&M follows NIOSH and UOHSA recommendations
Sustainability	Rating System	Envision-Informed (see Note 1)

Note 1: Envision is a sustainability framework designed to better understand and recognize a project's contribution to sustainability and identify opportunities to improve performance. Envision-Informed is an informal approach based on utilizing the Envision process without seeking a formal certification.

4 Physical and Process Condition Assessments

A physical condition assessment of existing LCWTP assets was performed to help guide alternative development and prioritization of needed improvements. Condition assessment methodology and findings are detailed in the LCWTP Condition Assessment TM (see Appendix B). The condition assessment included on-site visual inspections of buildings, structures, and component groups (i.e., group of like equipment that are part of a unit process). Figure 10 illustrates the risk scoring matrix that was used for each asset. The risk score was calculated as the sum of the condition score and the consequence of failure score. The risk score ranges from 2 to 10 and is defined below along with a general recommendation for risk mitigation.

- 2: Minimal risk (no action needed)
- 3-4: Low risk (confirm contingency plans are in place and repair parts are available)
- 5-6: Moderate risk (develop plans to reduce the consequence of failure; consider overhaul, replacement, or providing a shelf-spare)
- 7-8: High risk (Implement near-term actions to reduce the consequence of failure, overhaul or provide a shelf-spare)
- 9-10: Severe risk (Immediate action recommended to reduce the consequence of failure, overhaul or provide a shelf-spare)

Risk Score		Condition Score (Probability of Failure)				
		1 Very Good	2 Good	3 Fair	4 Poor	5 Very Poor
Consequence of Failure	1 Minimal Impact	2	3	4	5	6
	2 Low Impact	3	4	5	6	7
	3 Moderate Impact	4	5	6	7	8
	4 High Impact	5	6	7	8	9
	5 Severe Impact	6	7	8	9	10

Figure 10. Condition Assessment Risk Matrix

Figure 11 presents a map summarizing building, structure, and component group risks identified on site.

Figure 11. Building, Structure, and Component Group Risk Locations

4.1 Physical Condition Assessment Findings

Approximately 36 percent of the buildings and structures were found to have risks in the severe (risk score of 9-10) or high (risk score of 7-8) range; these are summarized in Table 4. The original water-bearing structures and original buildings with staff offices have the highest risk due to their poor seismic condition and high life safety consequence of failure. Approximately 44 percent of the component groups were found to have risks in the severe (risk score of 9-10) or high (risk score of 7-8) range; these risks are summarized in Table 5.

Table 4. Summary of High and Severe Risk Structures and Buildings

[redacted]

Table 5. Summary of High and Severe Risk Component Groups

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

4.2 Process Condition Assessment Findings

An evaluation of LCWTP unit processes was conducted based on recent WTP operating data and discussions with Metro Water engineering, operations, and maintenance staff. Current performance challenges with each unit process were identified as well as any near-term improvements that should be implemented prior to construction to facilitate reliable operation during construction. Recommendations are largely based on findings from the physical condition assessment described above. The process evaluation is detailed in the Process and Capacity Evaluation TM (see Appendix C). A summary of the recommended near-term process improvements that should be considered prior to construction is provided in Table 6. Also listed is the proposed implementation strategy to address each deficiency. Items listed as “Metro Water” are those that are anticipated to be addressed by Metro Water staff, either during preliminary design (PD), as part of the Rebuild Project, or incorporated into the O&M program.

Table 6. Recommended Near-Term Process Improvements

Location	Description	Implementation Strategy
Ozone	Repair the influent isolation gates to mitigate leaking into the out-of-service contactor. (North Layout)	Construction, CM/GC
Ozone	To confirm the contactors are up to code: • Visual condition assessment of reinforced concrete inside the channels. • Followed by concrete testing, if needed. • Analytical check of elements of the channel prior to full bill of health.	Construction, CM/GC
Ozone	Solids build-up should be removed from ozone contact channels and a system designed for future maintenance if the channels are to remain in operation long-term. (North Layout)	Construction, CM/GC
Flash Mix	Perform jar testing to optimize coagulant / coagulant aid chemical type and dose.	Metro Water (during PD)
Flocculation	Perform jar testing to evaluate the addition of flocculant aid.	Metro Water (during PD)
Flocculation	Procure additional spare parts for the gear and chain components of the flocculators.	Metro Water (during PD)
Sedimentation	Consider installation of baffles to improve settleability during construction. Likely not needed based on loading rates.	Construction, CM/GC
Sedimentation	Update SOP: If one of the chain and flight sludge collector systems fail during construction, solids can accumulate until new parts arrive and then the basin can be drained and cleaned. Plant capacity would drop to 75 MGD during repairs.	Metro Water (O&M)
Process Water Pump	Replace the starter on Engine Driven Pump 1. Alternatively, resolve the connection issues between the generators and the existing auto-transfer switch.	Metro Water (O&M)
Lime	Addition of a pre-heater for the slaking water.	Metro Water (O&M)
LOX	Repair or replace LOX Tank 2.	Construction, CM/GC
Caustic Soda	Repair the Caustic Day Tank.	Metro Water (O&M)
Caustic Soda	Replace the Caustic Transfer Pump and Dilution Mixing Pump with a different pump style (e.g., pneumatic type).	Metro Water (O&M)
Caustic Soda	Add a supplemental static mixer to provide effective mixing.	Metro Water (O&M)
Filter Building	Evaluation of options to remediate asbestos ceiling material	Metro Water (O&M)

5 Project Delivery

5.1 Delivery Method Evaluation

A range of project delivery methods were evaluated for the Rebuild Project as detailed in the Project Delivery Alternatives TM (see Appendix D). Alternative methods are authorized under Section 63G-6a-1302 of the Utah Procurement Code. These rules give public agencies broad authority to select the most appropriate project delivery method for a particular project, with the requirement that the agency prepare a written justification for the chosen method and document consideration of key factors including schedule, budget, and staff capabilities.

The following delivery methods were evaluated for the Rebuild Project:

- Conventional Design/Bid/Build (DBB)
- Construction Manager/General Contractor (CM/GC)
- Design-Build (DB)
- Progressive Design-Build (PDB)

Advantages and disadvantages for each delivery method are summarized in Table 7.

Table 7. Advantages and Disadvantages of Project Delivery Methods

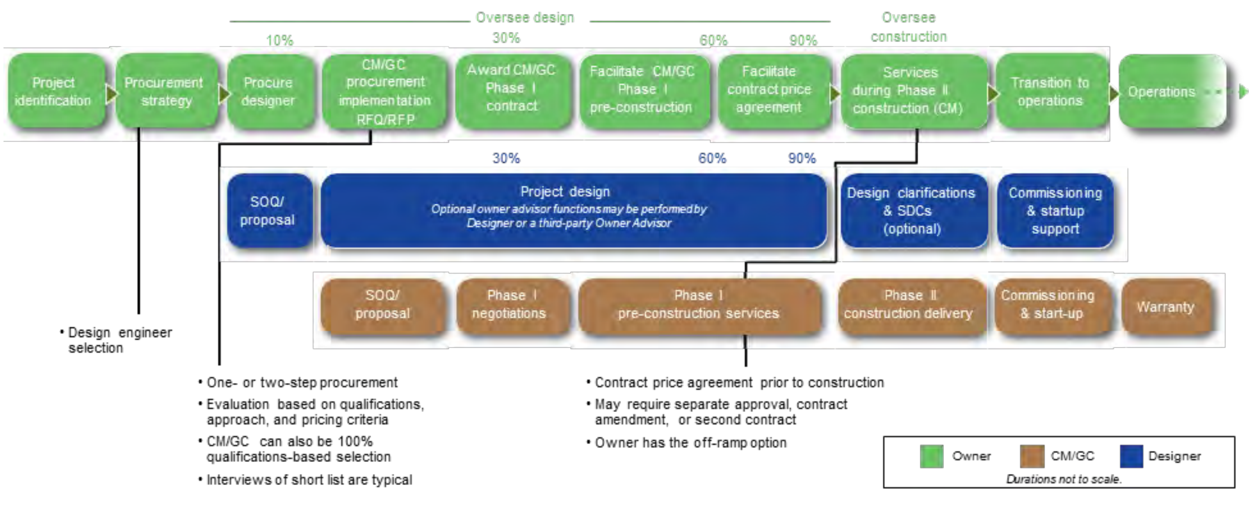
Delivery Method	Advantages	Disadvantages
DBB	• Owner and contractor familiarity with delivery method • High level of owner control over design elements • Project scope fully defined at commencement of construction • Competitive bidding environment • Procurement typically handled by owner's staff (no consultant) • DDW is familiar with delivery method	• Sequential (e.g., longer) project schedule • Construction cost only determined at bid time (engineer's estimate along the way) • Selection based on low bid from a contractor that may not be the most qualified • No construction contractor input during design • Greater potential for disputes and change orders • Owner warrants design to contractor

Delivery Method	Advantages	Disadvantages
CM/GC	• Qualifications-based selection of designer and construction manager • Collaborative relationships and teamwork leading to shared ownership of project challenges • Reduced chance of disputes and litigation • Contractor input into design • Open-book cost development • Cost model established earlier in project • Shortened schedule potential • Ability to design and deliver project to fixed budget • DDW is familiar with delivery method	• Owner still holds design risk on project • Negotiating GMP can be difficult • Managing multiple contracts by owner • Performance guarantees not available • Potential public concerns or perceptions with cost development process • No fixed-price at time of contractor selection • Less opportunity for cost savings than DB • Limited cost savings over traditional DBB
DB	• Best value-based selection (qualifications and price) • Potential to shorten schedule • Transfer of design-related performance risk to DB team • Single point of responsibility for both design and construction • Performance guarantees available • Innovation from DB team allows potential cost savings • Price competition (lump sum bid) and price established at time of award	• DB contract price established prior to complete design typically leading to higher risk contingency included in the bid • Process to procure design-builder is more complicated and costly than DBB or PDB • Existing conditions and permitting uncertainty prior to contract award • Owner-initiated changes in design will result in change orders • Design-builder is not involved in preliminary engineering • DDW is not familiar with delivery method
PDB	• Qualifications-based selection of designer and construction manager • Collaborative relationships and teamwork leading to shared ownership of project challenges • Reduced chance of disputes and litigation • Contractor input into design • Open-book cost development • Cost model established earlier in project • Shortened schedule potential • Ability to design and deliver project to fixed budget • Combined responsibility for design and construction	• Owner holds design risk on project • Owner manages both design and construction contracts • Performance guarantees not available • Negotiating GMP can be difficult • Potential public concerns or perceptions with cost development process • No fixed price at time of contractor selection • Less opportunity for cost savings than DB • Limited cost competition for construction services. • Designer is under contract to (or part of the same company as) the contractor • DDW is not familiar with delivery method

Based on the evaluation findings, CM/GC delivery is recommended for the Rebuild Project. The key drivers for selecting CM/GC delivery are the benefits associated with early collaboration with the contractor to coordinate complex construction and sequencing, the ability to procure long-lead items early, and the identification of temporary works necessary to rebuild LCWTP while maintaining minimum water production (90 MGD) during peak demand periods.

5.2 CM/GC Implementation Considerations

A typical CM/GC procurement and delivery sequence, adapted from the Water Collaborative Delivery Association (WCDA) *Construction Manager at Risk Procurement Guide*, is shown in Figure 12. Contractor selection occurs early in design (often around the 30 percent milestone) to enable collaborative design development and preparation for negotiation of a Guaranteed Maximum Price (GMP). Further considerations for CM/GC delivery are detailed in the CM/GC Implementation TM (see Appendix E).



Source: WCDA. Construction Management at-Risk Procurement Guide. 2022

Figure 12. CM/GC Design and Construction Activity Sequence

6 Treatment Processes

Treatment processes alternatives were evaluated for addressing the deficiencies that were identified in the physical and process condition assessments. Through a series of workshops, evaluation criteria were developed and treatment process alternatives were selected for further development in Phase 2 – Preliminary Design. The treatment process evaluation is detailed in the Process and Site Layout Alternatives Evaluation TM (see Appendix F).

6.1 Alternatives Analysis

6.1.1 Identification and Development

In a series of workshops, Metro Water and Stantec walked through the proposed process flow diagram (PFD) for the Rebuild Project as shown in Figure 13. For each process, critical design criteria were identified and discussed. If multiple options were feasible, that process was identified for alternatives development (as indicated in blue). Criteria or detailed technology selections that were determined to have minimal impact on sizing and layout were deferred to Phase 2 – Preliminary Design (as indicated in purple). Process decisions that were selected and would not be further evaluated are indicated in red.

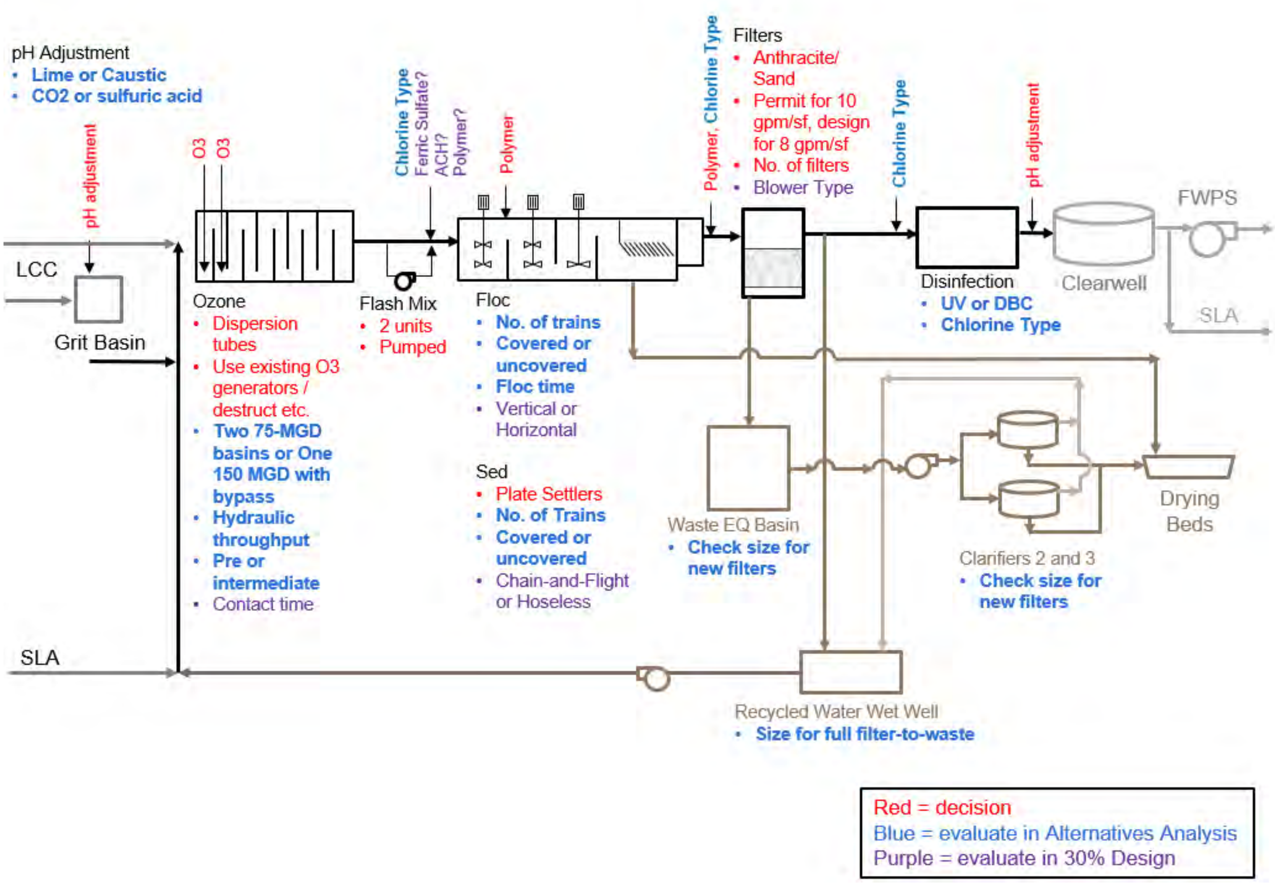


Figure 13. PFD for LCWTP Rebuild Alternatives Analysis

6.1.2 Eliminated Alternatives

Intermediate ozonation was considered as an alternative to the current operation of pre-ozonation, but was eliminated for the following reasons:

- Pre-ozonation provides benefits of pre-oxidation. Without pre-ozonation chlorine would need to be fed at the head of the plant.
- Metro Water has observed improved flocculation and sedimentation performance with pre-ozonation.
- Metro Water has observed a drop of 0.02 NTU filter effluent turbidity with pre-ozonation.
- Metro Water has observed longer filter runs with pre-ozonation.
- Cyanotoxins and their interaction with ozone are not a concern because the LCWTP source waters do not have these characteristics.

6.1.3 Evaluation

Evaluation criteria were developed collaboratively with Metro Water staff and each alternative was evaluated both quantitatively, using weighted scoring, and qualitatively, through facilitated discussion during workshops. Fatal flaw screening was applied, where applicable, to eliminate alternatives that could not meet regulatory or operational requirements. Evaluation criteria included regulatory, permitting, water quality improvements, hazard mitigation, operations and maintenance (O&M) resources, community impacts, maintenance of plant operations (MOPO), environmental stewardship, and capital/life cycle costs. More details on the evaluation methodology can be found in the Process and Site Layout Alternatives Evaluation TM (Appendix F).

6.2 Treatment Processes Alternatives

6.2.1 Ozone

Ozone will continue to be utilized to provide pre-oxidation, disinfection for *Giardia* (see Section 6.2.5.2), and taste and odor control. The existing system was verified to have adequate capacity for anticipated dosing conditions and will remain in place with minor improvements to operability and ease of maintenance.

As discussed later in Section 7, a range of site layout alternatives were evaluated. Some layouts with the floc/sed basins located on the north end of the existing basins would allow the existing ozone channel to remain in operation. However, layouts with new floc/sed basins located on the south end of the site would require the ozone channel to be relocated, and therefore, options for new ozone contactors were considered as discussed below. Under the assumption of needing new ozone contactors, two options for redundancy were evaluated: a single basin sized for 150 MGD with a bypass or two basins sized for 75 MGD each. Both options assumed a design hydraulic residence time of 10 minutes. The two-basin option was selected primarily based on benefits of the added redundancy. The ozone generation and destruct systems are not recommended for replacement during the Rebuild Project based on acceptable conditions noted during the condition assessment, however, capacity for peak disinfection demands should be verified. This is the concept that will be further developed in Phase 2 – Preliminary Design. Preliminary design criteria for operations during construction and the Rebuild design are included in Table 8.

Table 8. Pre-Ozonation Preliminary Design Criteria

Criteria	During Construction	Rebuild
Number of Ozone Contactor Basins	2 + 0	Use existing
Max Hydraulic Capacity per Basin, MGD	90	90
Ozone Contactor Volume (per basin), gal	525,000	525,000
Hydraulic Residence Time - Max Flow, All Available Basins Online, min	16.8	9.5
Annual Average Ozone Dose (2020-2024), mg/L	1.15	Use existing
Winter Average Ozone Dose (2020-2024), mg/L	0.87	Use existing
Injection Type	Side-stream	Use existing
Injectors	4 + 0	Use existing
Injector Pumps	4 + 1	Use existing
Oxygen Source	Liquid Oxygen (LOX)	Use existing
Number of LOX Tanks	2 (1 OOS)	1 +1 (Replace 2nd LOX tank)
LOX Tank Capacity (each), gal	21,000	Use existing
Number Of Vaporizers	3 + 0	Use existing
Number Of Ozone Generators	2 + 0	Use existing
Number Of Destruct Units	2 + 1	Use existing

6.2.2 Flash Mix

The flash mix evaluation included a status quo option (vertical mixing) and a pumped flash mix system. Pump mix was selected based on better performance and simple operation. Two pump mix units will be located at the head of the plant. Preliminary design criteria for the pump mix are included in Table 9 and will be further developed in Phase 2 – Preliminary Design.

Table 9. Flash Mix Preliminary Design Criteria

Criteria	During Construction	Rebuild
Type	Chamber with Vertical Mixer	Pumped
Number	1 + 0	2 + 0
Max Capacity per Flash Mix, MGD	90	75
Velocity Gradient, G, 1/sec	1,100	750 or higher

6.2.3 Flocculation and Sedimentation

6.2.3.1 Number of Trains

The number of flocculation/sedimentation trains was evaluated to identify the configuration that best supports O&M efficiency, including basin cleaning and draining, adequate turndown for proper floc formation, plant redundancy, and seasonal operating needs. A three-train and four-train configuration were evaluated. Because there is not a significant cost difference between three and four basins, the evaluation focused primarily on qualitative criteria.

The four-train configuration was selected based largely on operational flexibility during winter conditions. Metro Water's standard operating procedure is to keep a minimum of two basins online, to provide flexibility if a basin unexpectedly needs to be taken out of service. Average winter finished water production is 32 MGD. Keeping two trains online at 16 MGD each is a 57 percent reduction from the design flow of 37.5 MGD per basin. This keeps the basins operating within a reasonable range of their design conditions.

6.2.3.2 Flocculation Time

Flocculation times of 30 minutes and 45 minutes were evaluated at a flow of 150 MGD. The Division of Drinking Water (DDW) requires a minimum flocculation time of 30 minutes. However, flocculation kinetics slow in cold water, and some utilities prefer to design for 45 minutes of flocculation to provide more consistent performance under all operating conditions. A longer flocculation time also provides additional buffering for changes in raw water quality, such as turbidity spikes or seasonal increases in organic loading.

Compared to a 45-minute flocculation time, which requires larger basins, the 30-minute option is less expensive to construct and operate, requires less equipment, drains and fills more quickly, and is easier to clean and maintain. In addition, basins designed for 30 minutes of flocculation at 150 MGD will provide 45 minutes of flocculation time under winter conditions (50 MGD max with two basins online).

Based on this balance between performance and cost, the 30-minute flocculation time was selected as it meets DDW requirements while appropriately managing risk through operational flexibility rather than additional capital investment.

6.2.3.3 Sedimentation Basins

Conventional sedimentation, plate settlers, and ballasted sedimentation were considered viable sedimentation processes for the LCWTP Rebuild and evaluated during the Process Alternatives Workshop series. Plate settlers were recommended as they provide a reduced footprint compared to conventional sedimentation basins, good turbidity removal, and consistency with POMWTP operations.

6.2.3.4 Basin Covers

Uncovered, partially covered, and fully covered flocculation/sedimentation basins were evaluated. Covering the basins prevents debris from entering the water, protects operators from harsh weather conditions, heat, and wildlife during maintenance activities, and reduces UV degradation of chlorine residual. However, leaving the basins uncovered provides easier crane access and avoids the added cost associated with buildings and HVAC systems.

The option to fully or partially cover the flocculation/sedimentation basins ranked highest for O&M resources, as covered basins will reduce debris accumulation and provide sheltered working conditions for maintenance staff. The option to leave the basins uncovered ranked highest for environmental stewardship, since it will not require additional building materials or ongoing energy consumption for HVAC.

Fully covering the basins represents the highest capital cost, followed by partial coverage. These costs are driven primarily by building materials and HVAC systems. The option to leave the basins uncovered will incur no additional capital cost.

For preliminary design, the basins will be shown as fully covered. The final selection will be made based on the 30 percent project prioritization effort.

6.2.3.5 Preliminary Design Criteria

Preliminary design criteria for the flocculation and sedimentation basins are included in Table 10 and will be further developed in Phase 2 – Preliminary Design.

Table 10. Flocculation/Sedimentation Preliminary Design Criteria

Criteria	During Construction	Rebuild
Flocculation		
Flocculator Type	Horizontal Paddlewheel	Note 1
Number of Flocculation Basins	6	4
Max Capacity per Basin, MGD	15	37.5
Max Capacity, MGD	90	150
Hydraulic Retention Time (@ Max Flow)	33	30
Stages Per Basin	4	Note 1
Sedimentation		
Sedimentation Type	Conventional	Inclined Plates
Number of Sedimentation Basins	6	4
Max Capacity per Basin	15	37.5

Criteria	During Construction	Rebuild
Max Capacity, MGD	90	150
Plate Efficiency	N/A	90%
Effective Surface Loading Rate (SLR) At Max Flow, gpm/sf	N/A	0.3
Sludge Recirculation Pumps	None, gravity flow	Gravity flow
Sludge Removal System Type	Chain and flight	Note 1

Note 1: Design criteria decision will be made during 30% design

6.2.4 Filtration

Conventional and high-rate filtration alternatives were discussed in the Process Alternatives Workshop series with Metro Water staff. A strong preference for high-rate filtration was expressed to reduce the number of filters required. The new filters will use a dual media design of anthracite and sand and designed to operate up to 10 gpm/sf. Preliminary design criteria for filtration are included in Table 11 and will be further developed in Phase 2 – Preliminary Design.

Table 11. Filtration Preliminary Design Criteria

Criteria	During Construction	Rebuild
Number of Filters	20	11 + 1
Unit Filtration Rate, gpm/sf	2.84	8
Maximum Permitted Unit Filtration Rate, gpm/sf	6	10
Individual Filter Area, sf	1,160	1,200
Media 1 Type	Anthracite	Anthracite
Media 2 Type	Sand	Sand
Blower Type	Rotary Lobe	Note 1
Blower Number	1 + 2	1 + 1
Blower Capacity (each), scfm	3,800	Note 1

Note 1: Design criteria decision will be made during 30% design

6.2.5 Disinfection

Details for sizing of disinfection contact basin (DCB) or disinfection contact pipe (DCP) and contact time (CT) calculations will be provided in the Preliminary Design Report (PDR) at the conclusion of the 30 percent design.

6.2.5.1 Virus Inactivation

It is recommended that virus inactivation should continue to be accomplished with chlorine as it is very efficient for virus inactivation and requires a low contact time (CT). However, the chlorine addition location will be moved downstream of the filters, where TOC concentrations will be lower. This will reduce the potential for disinfection byproduct (DBP) formation and reduce the chlorine dose requirements, improving water quality while reducing chemical costs.

6.2.5.2 Giardia Inactivation

Four alternatives for *Giardia* inactivation were evaluated. The first and second alternatives assume the use of ultraviolet (UV) disinfection located either at the combined filter effluent (CFE) or at the individual filter effluent (IFE). Both configurations incorporate redundancy and would provide virus inactivation in a downstream chlorine contact pipe. Figure 14 shows the treatment train for the CFE alternative and Figure 15 shows the treatment train for the IFE alternative.

The third alternative is a baffled chlorine DCB sized to provide full inactivation of both *Giardia* and viruses, with a target dose of 1 mg/L of chlorine. In this alternative, contact time will be driven by *Giardia* inactivation as it is much longer for *Giardia* compared to virus inactivation, which is why a baffled basin is recommended instead of a pipe. Figure 16 shows the treatment train for this alternative.

The fourth alternative uses ozone for *Giardia* inactivation. The analysis assumes use of the existing ozone generation systems and ozone contactors with chlorination in a new contact pipe downstream of the filters. Figure 17 shows the treatment train for this alternative.

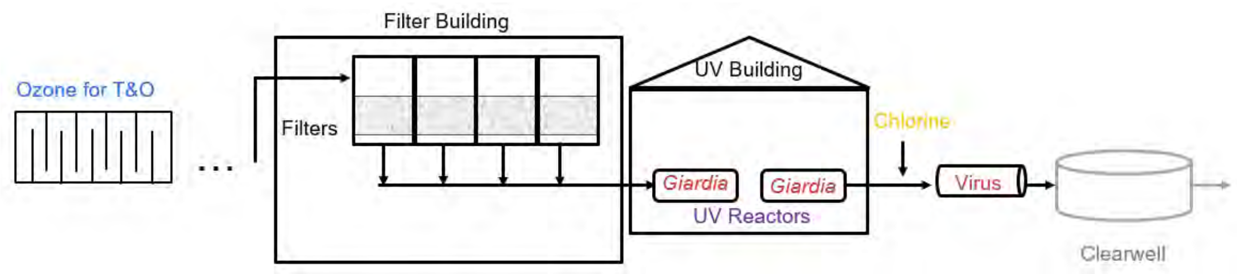


Figure 14. UV (CFE) with Chlorine Contact Pipe Treatment Train

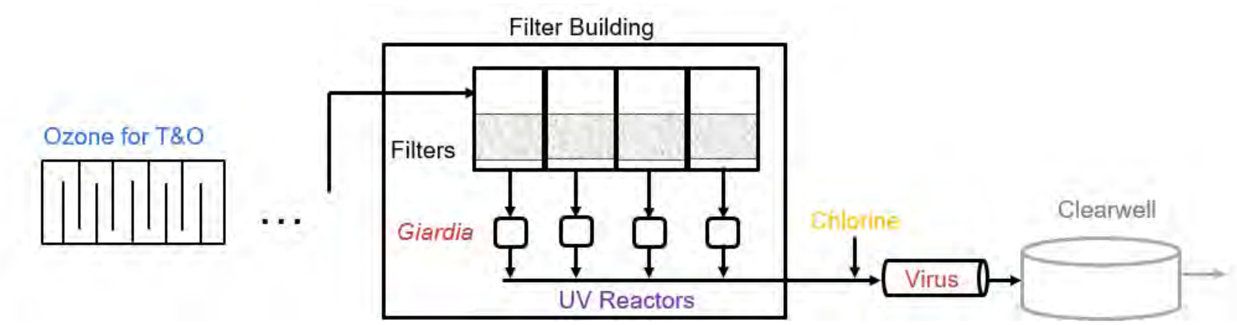


Figure 15. UV (IFE) with Chlorine Contact Pipe Treatment Train

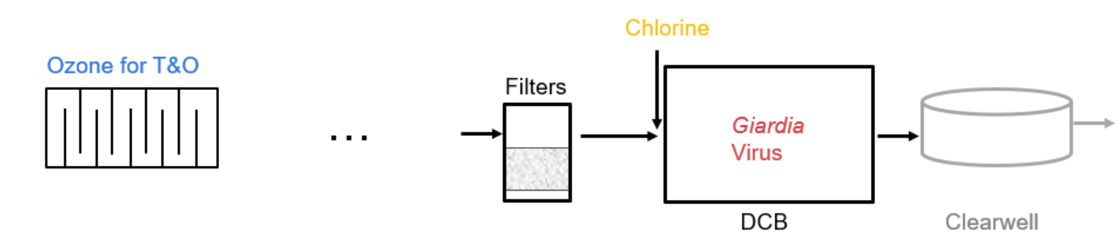


Figure 16. Chlorine DCB Treatment Train

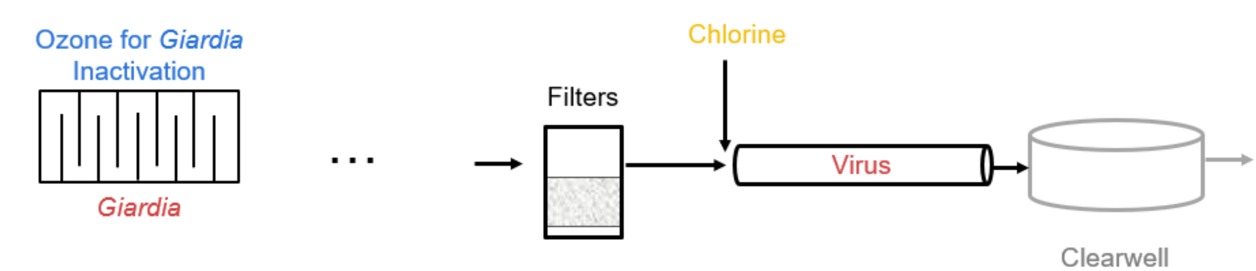


Figure 17. Ozone Disinfection with Chlorine Contact Pipe Treatment Train

The UV disinfection alternatives were eliminated due to the increased energy demand, higher monitoring and reporting requirements, power reliability risks, and the cost associated with additional structures and equipment.

Initially, Alternative 4 (Figure 17) was selected. However, plant staff commented that the Ozone Generation Facility experiences periodic power outages and therefore a reliable backup *Giardia* inactivation strategy would be necessary and required by DDW. Two backup disinfection options were evaluated:

- Option 1: Include a DCB sized for *Giardia* inactivation that would be operated only when the ozone system is offline. While this approach is expected to have the highest capital cost of the two options, it keeps the chlorine additional location downstream of the filter, reducing DBP formation potential. During 30% design, methods for optimizing virus inactivation will be evaluated (e.g., provide a bypass channel sized for virus inactivation, bypass the basin entirely and size the finished water pipe for virus inactivation).

- Option 2: Install a chlorine feed line at the head of the plant. This would be a minimal increase in cost compared to Figure 17 but if an ozone outage occurs during a high TOC event, the potential for DBP formation could be high and the chlorine demand could be high. In 30% design, calculations would need to confirm that the smaller floc/sed basins will provide sufficient contact time for *Giardia* inactivation under all operating conditions. The increase in chlorine demand would need to be incorporated into the design of the onsite hypochlorite generation system (see the next section for discussion on chlorine type).

Metro Water prefers the operational flexibility and reduced risk associated with the ozone plus DCB option (Option 1), which will be further evaluated as the preferred basis of design for disinfection. Metro Water would like to revisit and confirm this preference once costs are better defined for the DCB during the 30% design phase. The proposed 30% design is shown in Figure 18.

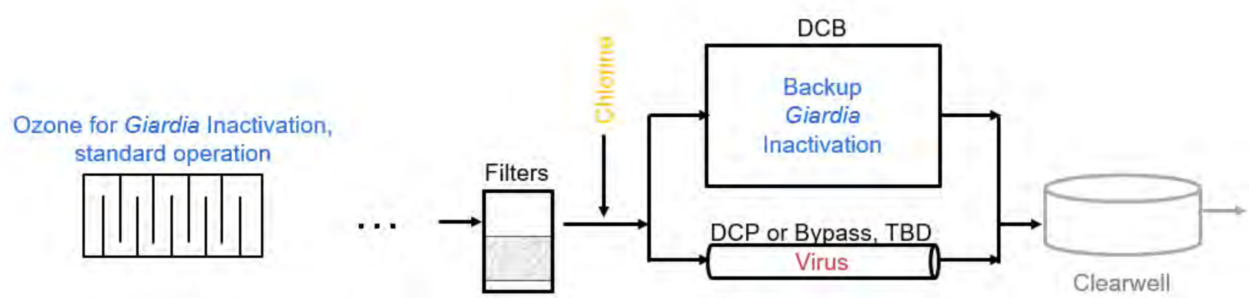


Figure 18. Ozone Giardia Inactivation with DCB Backup

6.2.5.3 Chlorine Type

As noted above, chlorine is recommended for virus inactivation. Three alternatives for chlorine were evaluated: chlorine gas, bulk sodium hypochlorite at 12.5 percent (bulk hypochlorite), and on-site sodium hypochlorite generation (OSHG).

Metro Water currently uses chlorine gas for disinfection at LCWTP but has expressed a desire to replace it due to the inherent safety and hazard concerns for staff and the nearby residential community associated with gaseous chlorine.

Bulk hypochlorite had the lowest upfront capital cost, but it had the highest annual operating costs due to the much higher cost of purchasing bulk hypo. Additionally, bulk hypochlorite (12.5 percent strength) is considered a hazardous material and poses more safety concerns for handling compared to OSHG (i.e., safety, O&M, water quality, and environmental impacts). Another disadvantage is the risk of chemical scarcity and/or price spikes due to supply chain issues such as natural disasters impacting chlorine manufacturing plants, freight delays, market shortages, etc. Currently, there is only one main supplier of bulk hypochlorite in the Wasatch Front area.

OSHG, on the other hand, had the highest upfront capital cost, but the lowest net present value (NPV) over a 20-year period. Availability and cost of materials required for OSHG (salt, water, and electricity) are relatively stable compared to bulk hypochlorite. For these reasons, OSHG was identified as the preferred source of disinfection and will be carried forward as the basis of design. Preliminary design criteria for the OSHG system are presented in Table 12 and will be further developed in Phase 2 – Preliminary Design. Note: Options for expediting construction of the OSHG system early in construction should be evaluated to mitigate safety risks recently identified associated with the chlorine gas system.

Table 12. OSHG Disinfection Preliminary Design Criteria

Criteria	Value
Application Point	Pre-filters Clearwell
Avg / Max Flow (MGD)	60 / 150
Avg / Max Dose (mg/L)	0.5 / 1.0 (Pre-filters) 0.5 / 1.0 (Clearwell)
Pounds of Chlorine per Day (ppd)	500 (Avg Flow & Avg Dose) 2,500 (Peak Flow & Max Dose)
OSHG Generators	Two 1,500 ppd units
Salt Storage	One 75-ton tank
Hypochlorite Storage	Two 23,000-gallon tanks

6.2.6 Solids Handling

6.2.6.1 Recycled Water System

The existing recycled water system was evaluated to determine whether it can remain as-is or requires upgrades for the rebuilt plant. Currently, filter-to-waste (FTW) from the filters and decant from Clarifiers 2 and 3 are routed to the recycled water wet well. Capacity of the existing recycled water wet well is 40,000 gallons. There are three recycle pumps in the wet well (two duty, one standby). The duty pumps have a capacity of approximately 2,000 gpm each and the standby pump has a capacity of approximately 1,000 gpm. FTW flow to the wet well is currently limited hydraulically due to the combined FTW pipe being undersized. There is also no flow meter on this pipe to measure FTW rates. However, plant operators ran several tests in 2023 to evaluate FTW rates on three filters. FTW flows were approximately 1620, 990, and 870 gpm for durations of 60, 100, and 30 minutes, respectively. For the rebuilt plant, it is recommended to FTW at a higher rate, ideally at the maximum design filtration rate, and for a shorter duration, ideally 20 to 30 minutes. Inputs and assumptions used for the recycled water system evaluation are summarized in Table 13.

Table 13. Inputs and Assumptions for Recycled Water System Evaluation

	Existing LCWTP Procedure	Recommended Procedure
FTW Rate	~1.0 gpm/sf	8.0 gpm/sf
FTW Duration	~60 minutes	30 minutes
Volume per FTW	~72,000 gallons	288,000 gallons
Number of FTW Stored in Existing Recycled Water Wet Well	~0.56	0.14

Notes:
1. Assumed 1,200 sf per filter.
2. Decant from Clarifiers 2 and 3 not included in evaluation.

The existing recycled water wet well capacity was evaluated using both the existing and recommended procedures in Table 13. Outflow from the wet well was accounted for using the existing duty recycle pumps (4,000 gpm total pumping capacity). The wet well capacity was found to be exceeded using the recommended procedure as the existing recycle pumps cannot keep up with the increased FTW rate. Up to 4 gpm/sf FTW rate can be used before the wet well capacity is exceeded. Upgrades to the existing recycled water system for additional pumping and storage will be further evaluated and design criteria will be developed during Phase 2 – Preliminary Design.

6.2.6.2 Backwash Waste System

The existing backwash waste (BWW) system was evaluated to determine whether it can remain as-is or requires upgrades for the rebuilt plant. Currently, BWW from the filters is routed to the waste equalization (EQ) basin for storage and then pumped to Clarifiers 2 and 3. Capacity of the existing waste EQ basin is 311,000 gallons. There are three equalization pumps in the basin (two duty, one standby). The duty pumps have a capacity of approximately 1,125 gpm each and the standby pump has a capacity of approximately 500 gpm. The existing backwash (BW) procedure consists of an air / water wash step at approximately 3.5 gpm/sf for 3 to 4 minutes followed by a high-rate wash step at approximately 17.5 gpm/sf for 8 to 12 minutes. The American Water Works Association (AWWA) Research Foundation provides guidance on recommended BW steps in the study titled Optimum Backwash of Dual Media Filters and GAC Filter-Adsorbers with Air Scour. Inputs and assumptions used for the BWW system evaluation are summarized in Table 14.

Table 14. Inputs and Assumptions for Backwash Waste System Evaluation

	Existing LCWTP Procedure	Recommended Procedure
Air / Water Wash Rate	3.5 gpm/sf	5.0 gpm/sf
Air / Water Wash Duration	4 minutes	4 minutes
High-Rate Wash	17.5 gpm/sf	16.0 gpm/sf
High-Rate Wash Duration	12 minutes	10 minutes
Total Volume per BW	268,000 gallons	216,000 gallons
Number of BW Stored in Existing Waste EQ Basin	1.16	1.44

Notes:

1. Assumed 1,200 sf per filter.
2. Recommended backwash procedure from *AWWA Research Foundation: Optimum Backwash of Dual Media Filters and GAC Filter-Adsorbers with Air Scour*.
3. AWWA recommends high-rate wash step to target 20% media expansion (rate depends on media design).

The existing waste EQ basin capacity was evaluated using both the existing and recommended procedures in Table 14. Outflow from the basin was accounted for using the existing duty equalization pumps (2,250 gpm total pumping capacity). The existing waste EQ basin capacity was found to not be exceeded using the existing procedure or the recommended procedure. The BWW system will be left as is for the rebuilt plant.

6.2.7 Chemical Systems

Chemical systems were evaluated to identify which chemicals could remain in existing buildings without need for expansion and which chemicals would require new or rebuilt facilities. This information is summarized in Table 15. Further evaluation of the pH adjustment chemicals is detailed in the sections below.

Table 15. Chemical Facility Needs

Chemical	Facility Needs	Facility Location	New Components
Lime	Existing (relocated)	Near Head of Process Along Road	New building, existing components relocated
CO_2	New	Skids Near Flash Mix, Tanks Along Road	Two 120-Ton Cylinders, 2 Solution Feed Panels
Floc Aid	New	Near Flash Mix	Totes, Feed Pumps
Filter Aid	New	Near Flash Mix	Totes, Feed Pumps
Chlorine	New	In FWPS	Onsite Hypo Generators, Hypo Storage, Brine Tank, Feed Pumps
Ozone	Existing, plus repair Tank 2	Ozone Building, LOX Storage	Repair Tank 2 (21,000 gallons)
Caustic	Existing, plus new raw water pumps	New Chemical Building	New pumps to dose caustic to raw water
Primary Coagulant	Existing	New Chemical Building	
Cationic Polymer	Existing	Fluoride Building	

6.2.7.1 Chlorine

The evaluation of chlorine options are discussed in Section 6.2.5.2. See Section 7.3.1.1 for discussion of the proposed repurposing of the FWPS for the OSHG system.

6.2.7.2 Raw Water pH Chemical - Base

When an acidic coagulant is used, a basic chemical is added to bring the coagulated water to the optimal pH range for effective treatment. While the ideal coagulation pH varies by coagulant, a target pH near 7 is commonly used[1]. Two alternatives were evaluated for increasing raw water pH: lime and caustic soda. Under both alternatives, caustic soda will continue to be used for finished water pH adjustment.

The existing lime dosing point is located at the grit basin and treats only Little Cottonwood Creek (LCC) water. Operations staff have observed improved treatment performance when lime is applied and expressed a preference for relocating the dosing point to treat combined raw water. To provide sufficient mixing time between pH adjustment and coagulant addition, the proposed dosing location is upstream of the ozone basin. In addition, pH instrumentation is recommended downstream of the dosing point to better control the process.

The existing lime system is housed in a seismically vulnerable building, but the system is otherwise in good condition. To maximize use of existing infrastructure, the lime equipment will be relocated to a new building, and the lime silo can be placed outside.

[1] The ideal pH range for LCWTP will be established during jar testing during Phase 2 – Preliminary Design, based on the specific water chemistry.

Based on the evaluation detailed in Appendix F, the relocated lime system was selected for Phase 2 – Preliminary Design. The design will also include new pumps to dose caustic soda to the raw water dosing location. This will provide a backup if the lime system is unavailable.

6.2.7.3 Raw Water pH Chemical - Acid

Ferric sulfate is currently used at LCWTP for coagulation, which is acidic and lowers the process water pH below the target range for coagulation. In order to raise the pH into the target range for effective coagulation, lime is added at the grit basins. However, operations staff are evaluating the potential use of less acidic coagulants, such as polyaluminum chloride (PACl) and aluminum chlorohydrate (ACH). Depending on coagulant dose and raw water chemistry, use of a less acidic primary coagulant may necessitate the addition of an acid to achieve optimal treatment conditions. The need for acidic pH adjustment will be established during jar testing that will occur during Phase 2 – Preliminary Design.

Two alternatives for acid addition were evaluated: carbon dioxide (CO_2) and sulfuric acid. LCWTP does not currently have an existing CO_2 or sulfuric acid system; therefore, either alternative would require a new installation, and acid addition would replace lime and/or caustic dosing for pH adjustment.

Although sulfuric acid is less expensive than CO_2 and remains a viable alternative, it requires additional caution during handling and operation. CO_2 was selected for Phase 2 – Preliminary Design based primarily on the safety risks associated with sulfuric acid.

7 Site Layout

As part of the alternatives analysis, multiple conceptual site layouts were developed and evaluated. The proposed layout alternatives are not intended to represent final facility locations; rather, they illustrate general orientations based on preliminary process sizing. The intent of these layouts is to support comparison of feasible footprints, assess constructability and MOPO implications, and inform subsequent preliminary design decisions. Site layout alternatives were developed using process “blocks” sized from preliminary design criteria for the selected treatment process alternatives in Section 6.

7.1 Evaluation Criteria

Layouts were evaluated using criteria developed in collaboration with Metro Water including MOPO, constructability, sequencing flexibility, hazard mitigation, hydraulic efficiency, environmental stewardship, and layout efficiency and expandability, each weighted to calculate a final score. Evaluation criteria and weighting are summarized in Table 16. The site layout evaluation is detailed in the Process and Site Layout Alternatives Evaluation TM (see Appendix F).

Table 16. Site Layout Evaluation Criteria

Evaluation Criteria	Rubric	Weight
MOPO	0. Potential fatal flaw. Alternative would have an unacceptable impact on existing WTP operations or would not allow plant to maintain 90 MGD capacity. 1. Alternative will require a significant amount of additional work and/or resources (not otherwise required) to maintain production capacity. 2. Alternative will require a moderate amount of additional work and/or resources (not otherwise required) to maintain production capacity. 3. Alternative will require little/no additional work and/or resources (not otherwise required) to maintain production capacity.	2
Constructability	0. Potential fatal flaw. Alternative appears to have insurmountable constructability challenges 1. Alternative has major constructability challenges compared to other alternatives 2. Alternative has similar constructability challenges compared to other alternatives 3. Alternative has fewer constructability challenges compared to other alternatives	1
Sequencing Flexibility	0. Potential fatal flaw. 1. Alternative severely restricts sequencing flexibility compared to other alternatives 2. Alternative provides moderate sequencing flexibility compared to other alternatives 3. Alternative has improved sequencing flexibility compared to other alternatives	2
Hazard Mitigation	0. Potential fatal flaw. Alternative would introduce a new or increase an existing site hazard to an unacceptable level. 1. Alternative would require significant mitigation of identified site hazard 2. Alternative would require moderate mitigation of identified site hazard 3. Alternative would not require mitigation of identified site hazard	1
Hydraulic Efficiency	0. Potential fatal flaw. 1. Alternative has lower hydraulic efficiency than current treatment plant and would likely require additional pumping within the WTP to maintain current hydraulic gradeline 2. Alternative has approximately same level of hydraulic efficiency as current WTP 3. Alternative has higher hydraulic efficiency compared to existing hydraulic gradeline	3
Environmental Stewardship	1. Alternative provides little to no opportunity to repurpose/reuse existing facilities 2. Alternative provides moderate opportunity to repurpose/reuse existing facilities 3. Alternative provides multiple opportunities to repurpose/reuse existing facilities	1

Evaluation Criteria	Rubric	Weight
Layout Efficiency & Expandability	0. Potential fatal flaw. Alternative is unacceptably inefficient from an O&M perspective or does not allow for future expansion of the WTP 1. Alternative is generally inefficient from an O&M perspective and does not easily accommodate future expansion of the WTP 2. Alternative is moderately efficient from an O&M perspective and would accommodate future expansion of the WTP 3. Alternative is highly efficient from an O&M perspective and would easily accommodate future expansion of the WTP	3

7.2 Constraints and Additional Considerations

Once the process blocks were established, several primary constraints guided their arrangement. Foremost is the requirement to maintain at least 90 MGD of treatment capacity throughout construction, which restricts the number of existing floc/sed trains that can be taken offline during construction to a maximum of four. Layouts should also avoid conflicts with existing critical infrastructure and buildings not designated for demolition, while ensuring realistic construction access and staging throughout phased implementation.

Beyond these core constraints, additional considerations influenced the refinement of each layout, including:

- Minimizing demolition of existing filters where feasible
- Reducing the amount of early-phase demolition where possible
- Maintaining appropriate setbacks from the slope on the south-west side of the site based on preliminary recommendations from the slope stability evaluation
- Limiting impacts to critical buried utilities
- Minimizing excavation depth
- Minimizing imported fill

7.3 Layout Alternatives

The site layout alternatives that were developed and evaluated can be grouped into two approaches: the South Layouts and the North Layouts.

The South Layout alternatives placed the new flocculation/sedimentation basins at the south end of the existing basins, which would allow the flocculation/sedimentation basins to be closer to the head of the plant, resulting in a more consolidated overall process layout. However, these layouts would require demolition of up to eight filters on the south end in order to maintain six active process basins during construction, construction of new ozone contactor basins, and place new facilities closer to the identified at-risk south-west slope. In addition, construction access would be very challenging and likely require demolition of existing filters to create an entry into the construction area. They also locate the new process areas farther from existing and proposed staff buildings, which may reduce operational efficiency. Figure 19, Figure 20, and Figure 21 show the South Layout alternatives. Table 17 summarizes the scoring for the South Layout alternatives.

Table 17. South Layout Alternatives Scoring Summary

Evaluation Criteria	South Layout 1 Score	South Layout 2 Score	South Layout 3 Score
MOPO	4	4	2
Constructability	2	1	1
Sequencing Flexibility	4	4	4
Hazard Mitigation	2	1	2
Hydraulic Efficiency	9	6	3
Environmental Stewardship	1	1	1
Layout Efficiency & Expandability	6	3	3
Total	**28**	**20**	**16**

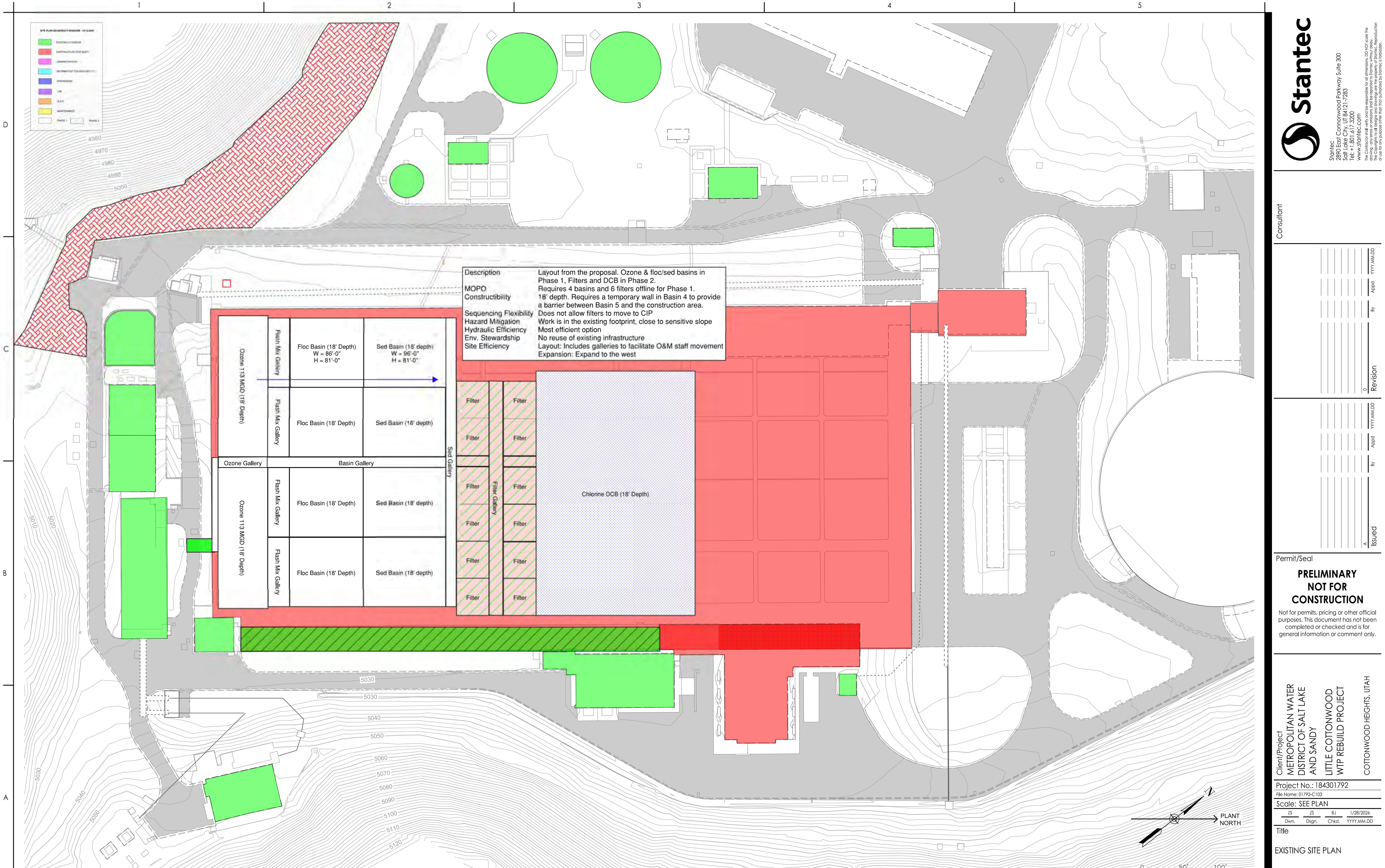


Figure 19. South Layout 1: Baseline

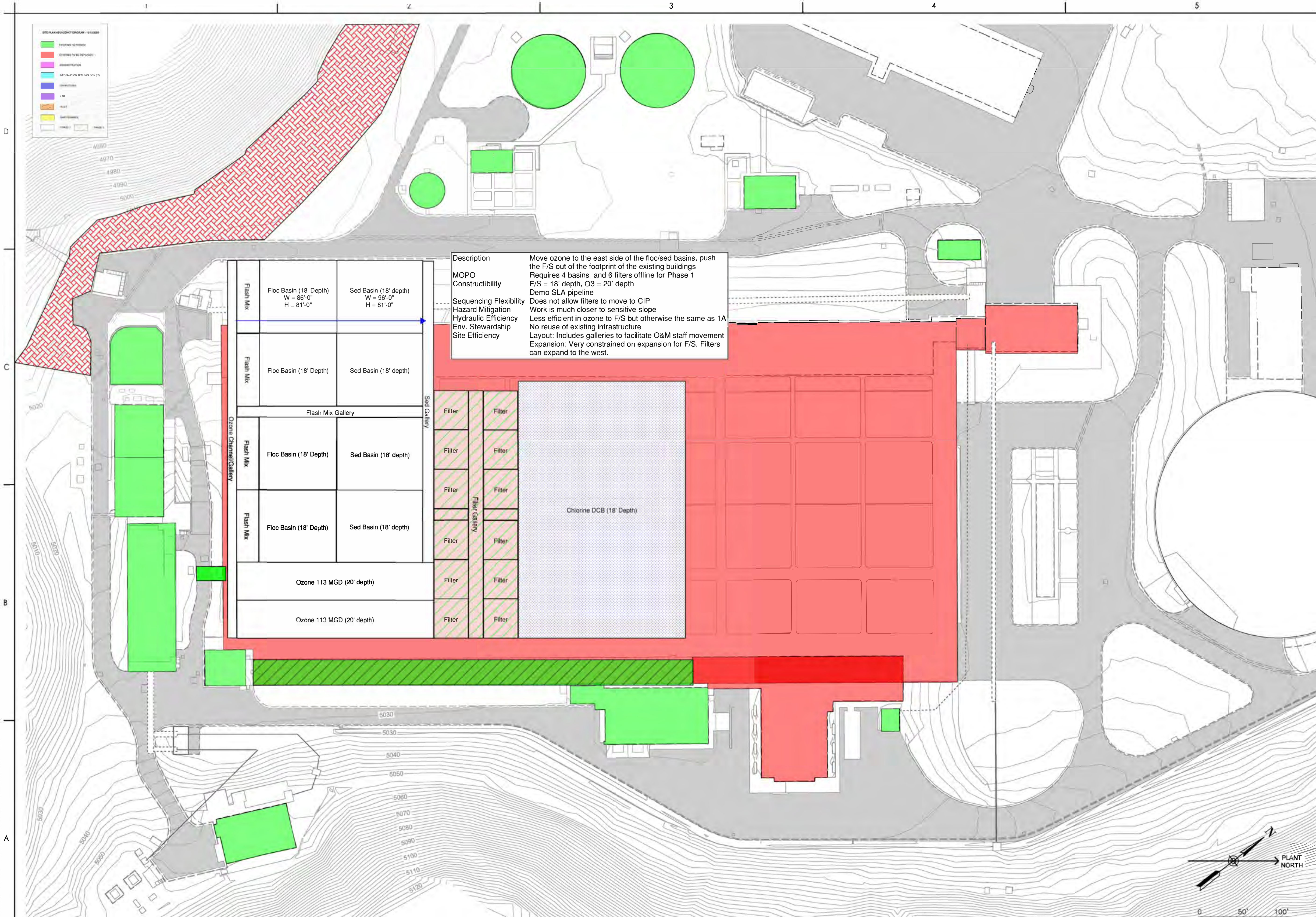


Figure 20. South Layout 2: Compressed East Ozone

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LITTLE COTTONWOOD WTP REBUILD PROJECT
COTTONWOOD HEIGHTS, UTAH

Project No.: 184301792

Scale: SEE PLAN

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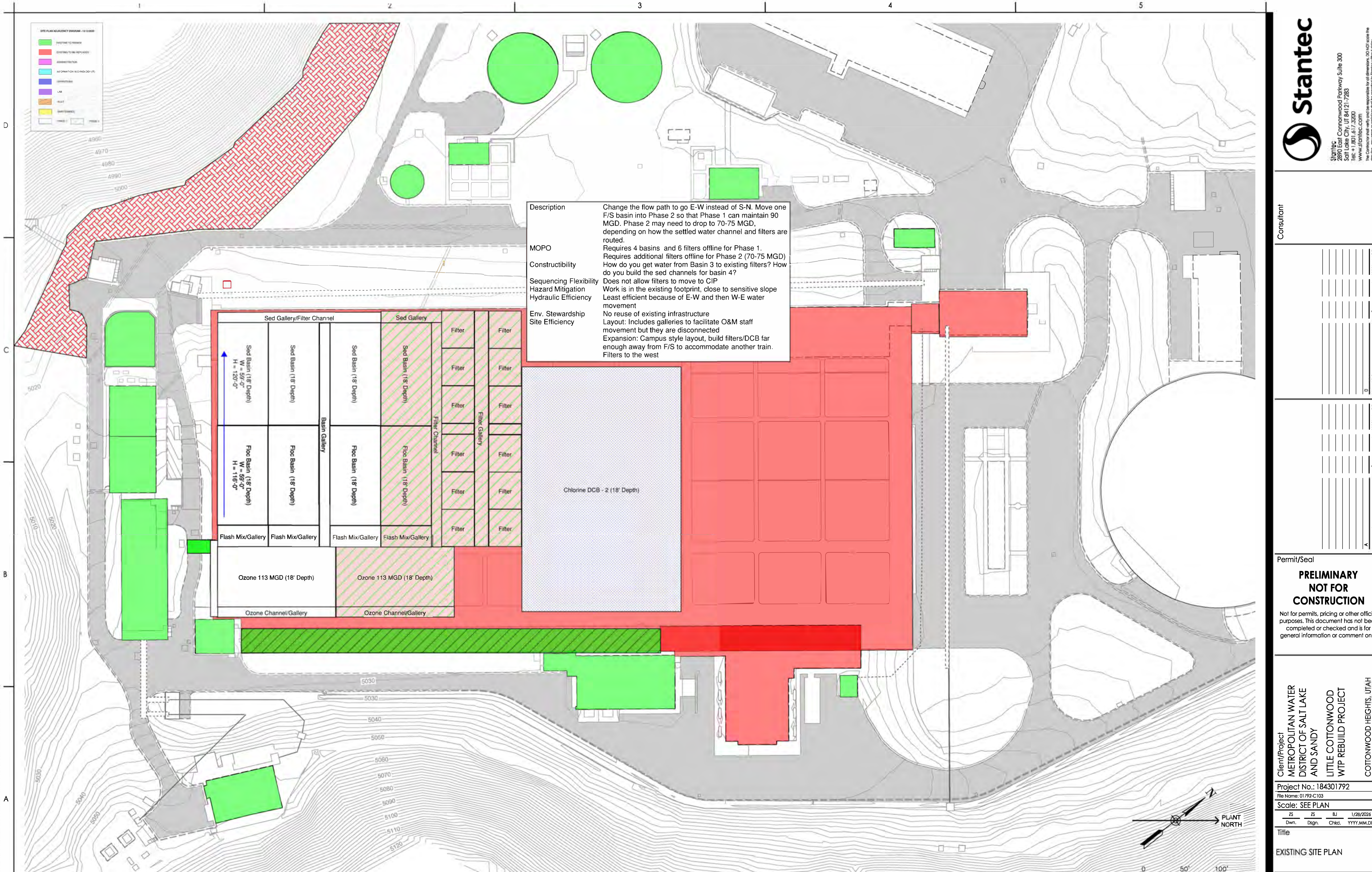

Figure 21. South Layout 3: Phased E-W Flow

The North Layout alternatives placed the new flocculation/sedimentation basins within the footprint of the existing north four basins and extend into the paved area. This requires demolition of the existing garage to accommodate the process footprints, necessitating the relocation of the critical utilities, equipment, and processes currently housed there. Additionally, once demolition and construction are completed, the flocculation, sedimentation, and filtration process areas would be further from the head of the plant, however, this is mitigated since the north layouts allow the reuse of the existing ozone contact channels. The north layouts provide improved construction access and ultimately, easier delivery routes for chemicals. In addition, the north layouts would allow for all existing filters to remain operational during construction. Finally, the north layouts place the new facilities closer to existing and proposed staff buildings, improving operational proximity. Figure 22 and Figure 23 show the North Layout alternatives. Table 18 summarizes the scoring for the North Layout alternatives.

Table 18. North Layout Alternatives Scoring Summary

Evaluation Criteria	North Layout 1 Score	North Layout 2 Score
MOPO	6	6
Constructability	3	3
Sequencing Flexibility	6	4
Hazard Mitigation	3	3
Hydraulic Efficiency	6	9
Environmental Stewardship	2	2
Layout Efficiency & Expandability	6	9
Total	**32**	**36**

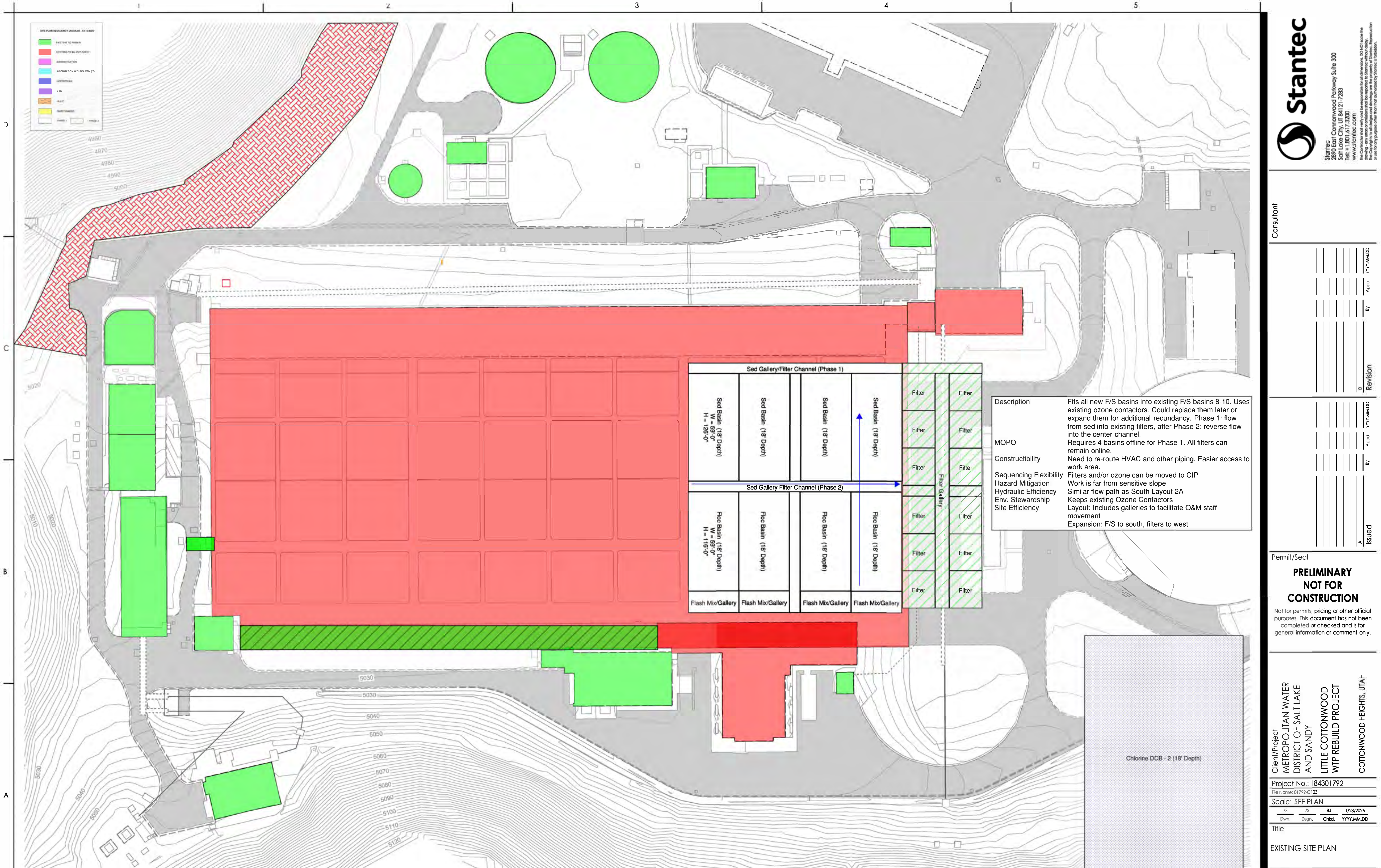

Figure 22. North Layout 1: E-W Flow

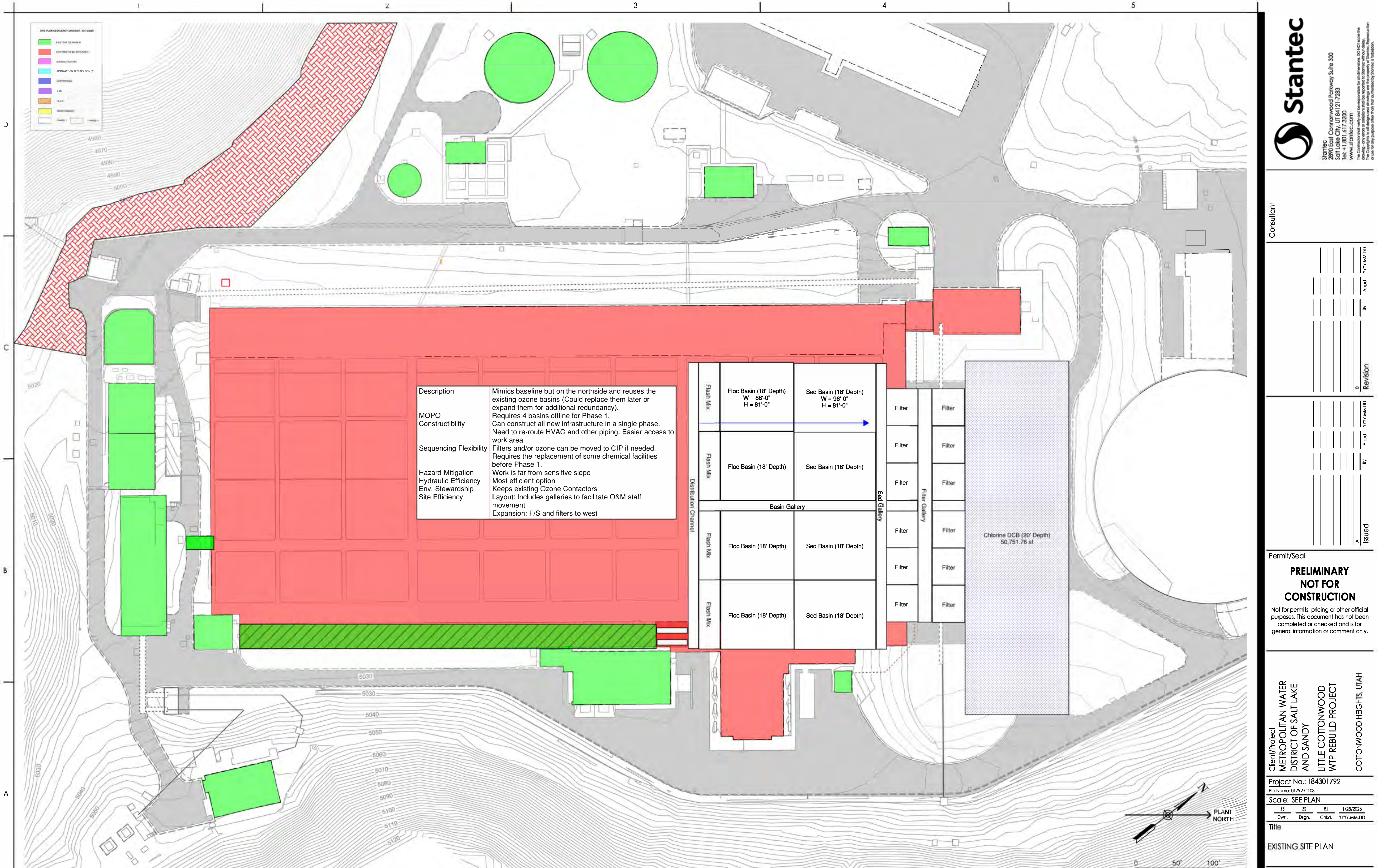

Figure 23. North Layout 2: N-S Flow

7.3.1 Selected Layout

Based on scoring and discussion during workshops with Metro Water staff, the North Layout 2, shown in Figure 24 with ancillary facilities and comments incorporated from Metro Water staff, is the preferred alternative. This layout had the highest overall score with improved construction access, the ability to maintain existing filters in operation during construction of the new basins, and MOPO benefits being key differentiators. The North Layout 2 allows sufficient space to maintain Basin No. 7 offline as a safety buffer between operating Basins No. 1-6 and the new construction. In this configuration, flow proceeds continuously from south to north, eliminating the directional turns required in other layouts. This layout also offers the option to construct the new filters during Phase 1 construction, which would remove the need for later mobilization and reduce overall sequencing complexity.

This layout is not intended to be final or exact but help to generally identify where new facilities could be located. Siting and locations will continue to be refined during Phase 2 – Preliminary Design in collaboration with the CM/GC.

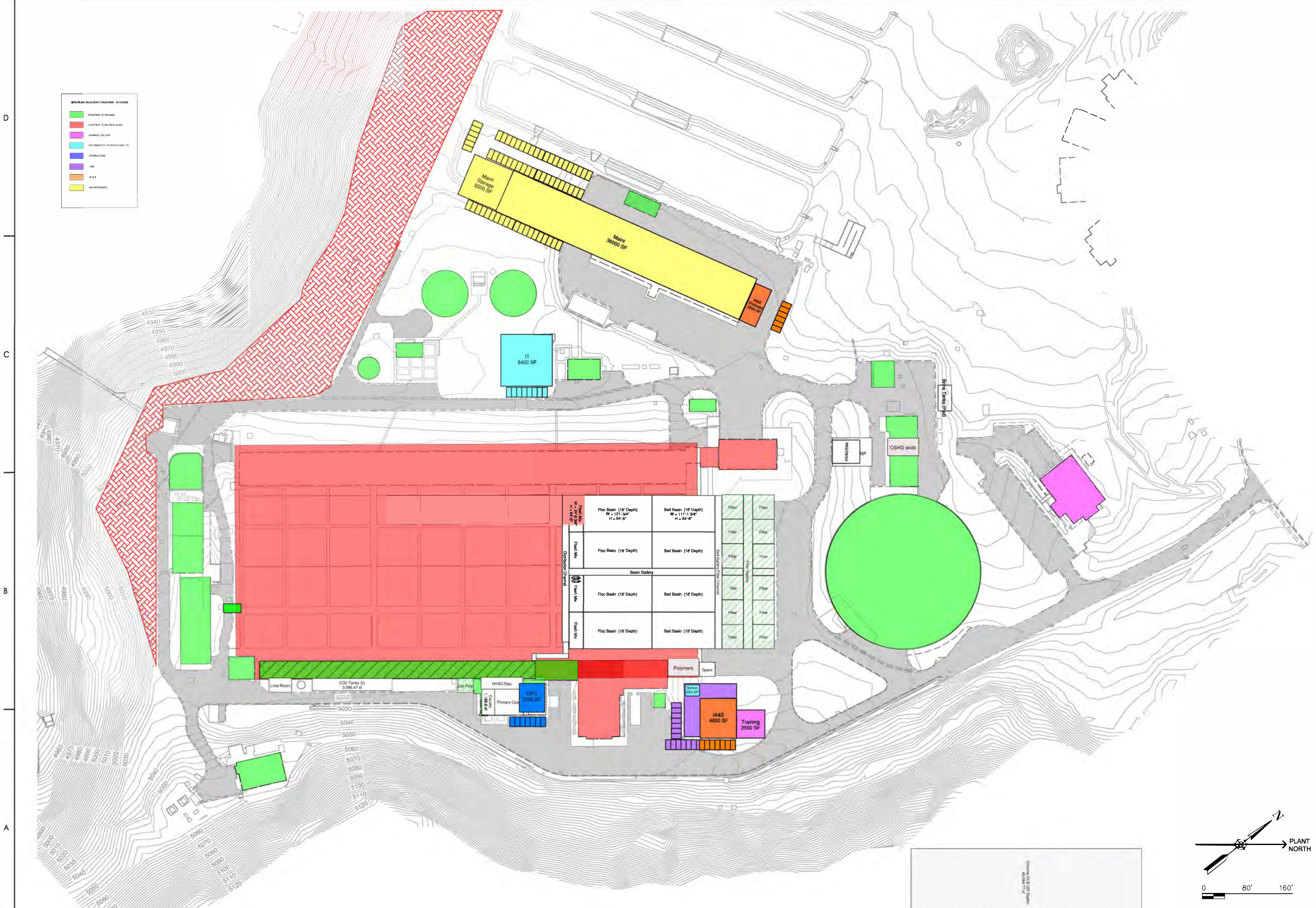

Figure 24. North Layout 2: Selected Site Layout Alternative

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Scale: SEE PLAN

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7.3.1.1 Supporting Facilities

Based on the North Layout 2 alternative shown in Figure 24, the proposed location for the new laboratory is northeast of the existing Old Chemical Building. This could potentially be combined into a multi-level building with Industrial, Automation & Electrical (IA&E) functions and a training space. The west end of the existing Finished Water Pump Station (FWPS) structure is proposed to be repurposed to house the OSHG systems, with additional chemical storage constructed adjacent to it. A new polymer building is located next to the new filter facilities. The Maintenance Building would also be expanded to accommodate projected future needs. Additional IA&E shop space and storage are provided as part of the Maintenance Building expansion. A dedicated IT facility is proposed near the Electrical Building. Operations staff would continue to occupy the New Chemical Building. A more detailed layout of supporting facilities will be developed in the subsequent phase of design, and adjustments to this proposed concept may be made to improve site access and constructability.

8 Hydraulics

Plant hydraulic modeling and analysis was performed using Stantec's Hydraulic Analysis Design and Evaluation System (HADES) software (Version 4.4) to confirm the existing hydraulic profile and identify hydraulic constraints that may need to be addressed during construction. This evaluation is detailed in the Process and Capacity Evaluation TM (see Appendix C).

The hydraulic model was developed from the inlet control building at the upstream end to the Finished Water Reservoir. Model runs were performed at the rated plant capacity (150 MGD) to allow for comparison to the existing hydraulic profile and identify constraints at the worse-case condition.

The following key hydraulic constraints were identified through the evaluation:

- No changes to the maximum water surface elevation in the Finished Water Reservoir are recommended.
- There is a 30-inch pipe between Filters 1-6 and 7-14 that will limit the ability to send flow from Sedimentation Basins 4-7 to Filters 1-6 if needed during construction.
- Flow distribution between the flash mix and the flocculation basins can be improved during the rebuild.
- The flow splitter box downstream of the flash mix cannot be taken offline without taking all of the flocculation and sedimentation basins offline if needed during construction.

The hydraulic profile through the plant after the rebuild is complete will be similar to current conditions. Further hydraulic analysis will be performed during Phase 2 – Preliminary Design.

9 Prioritization, Packaging & Sequencing

Potential funding constraints may preclude construction of all identified components of the Rebuild Project in the first phase of construction. Hence, some components may need to be deferred into Metro Water's capital improvement program (CIP) for later implementation. A preliminary evaluation of project prioritization, packaging, and sequencing was conducted to help guide phased construction and provide a starting point for engagement with the CM/GC contractor. This evaluation is detailed in the Project Prioritization, Packaging, and Sequencing TM (see Appendix G).

9.1 Prioritization

Projects identified from the condition and process assessments were prioritized to help guide decisions about which projects provide the highest value and/or risk mitigation and therefore should be prioritized in the first phase of construction. Projects were evaluated on the following criteria:

- Seismic Resiliency/Life Safety: Degree to which a project increases the seismic resiliency of the treatment plant or process and/or to which it decreases the life safety risk of WTP staff.
- Process Improvements: Degree to which a project improves the treatment processes (includes improvements to water quality, operation, and/or maintenance).
- Electrical, Instrumentation, and Controls Improvements: Degree to which a project improves the reliability of electrical, instrumentation, and controls systems.

Each project was evaluated against the above criteria and assigned a score from 0 to 4 measuring how well the project achieves or supports the overall Rebuild Project objectives. The overall rubric score for each project was assigned as the maximum of the individual criteria scores. Based on the results of this preliminary scoring, the projects were then placed into "rubric score" bins and further evaluated by Metro Water staff using the Analytic Hierarchy Process (AHP), a pairwise process, to rank each project. The pairwise scores were scaled to 0.0 to 0.99, representing the results of the ranking process completed by Metro Water staff. The final priority score for each project was calculated by adding the rubric score and scaled pairwise score as shown in Table 19. The projects that directly address seismic resiliency, process improvements, and electrical system improvements were ranked the highest priority.

Table 19. Project Prioritization Results Summary

ID	Main Project Name	Rubric Score	Pairwise Score	Scaled Pairwise Score	Priority Score
07-04	Build New Flash Mix, Floc/Sed Basins	4	22.35%	0.99	**4.99**
10-25	Build New Filters	4	14.20%	0.49	**4.49**
17-29	Expand Electrical Building and Replace Switchgear	4	13.72%	0.46	**4.46**
00-07	Build New Lab Building	4	12.46%	0.38	**4.38**
15-13	Build New OSHG System (FWPS)	4	11.37%	0.31	**4.31**
00-15	Build New IA&E Building	4	10.41%	0.25	**4.25**
00-17	Abandon Old Chemical Building/Relocate Staff and Equipment	4	9.15%	0.17	**4.17**
15-18	Demolish Old Chemical Building	4	6.34%	0.00	**4.00**
00-34	Build New IT Building	3	14.94%	0.99	**3.99**
12-28	Upgrade Filter-to-Waste Recycle System	3	14.30%	0.88	**3.88**
21-22	Repairs To Existing Ozone Contactors	3	13.90%	0.81	**3.81**
16-27	Construct Disinfection Contact Basin	3	12.21%	0.53	**3.53**
15-21	Replace North LOX Tank	3	12.09%	0.50	**3.50**
07-23	Cover Floc/Sed	3	11.98%	0.49	**3.49**
15-19	Relocate Lime System	3	11.46%	0.40	**3.40**
10-26	Demolish Existing Filters	3	9.13%	0.00	**3.00**
00-32	Expand Maintenance Building	2	26.58%	0.99	**2.99**
07-24	Demolish Remaining Existing Floc/Sed Basins	2	20.07%	0.47	**2.47**
00-11	Demolish Existing Lab	2	19.64%	0.44	**2.44**
15-20	Build New CO2 System	2	19.53%	0.43	**2.43**
00-33	Build New Training Space	2	14.18%	0.00	**2.00**

9.2 Packaging & Sequencing

A preliminary evaluation of construction packaging and sequencing was conducted to inform the overall implementation plan for the Rebuild Project and to provide a starting point for the CM/GC to further refine and optimize the actual construction sequencing.

Potential construction packages were evaluated to support the development of a proposed sequencing plan. Table 20 summarizes potential construction packages that should be considered and discussed further with the Project Team, including the CM/GC, as the Rebuild Project progresses. This list includes only those projects that have a clear rationale for packaging with other projects. It is not meant to be an exhaustive list of all projects or potential packages that may be identified during future collaboration with the CM/GC. The project numbers are defined in the Project Prioritization, Packaging, and Sequencing TM in Appendix G.

Table 20. Potential Construction Packages

Package Name	Description	Project ID
Early Work Package – Electrical and Communications	Installation of new power and fiber loops, new switchgear	17-30, 17-31, 17-29 (switchgear)
Early Work Package – Buildings	Construction of Electrical Building, IT Building, IA&E Building to support Electrical and Communications Package.	00-15, 00-34, 17-29 (expand Electrical Building)
Early Work Package – Minor Seismic Retrofits	Equipment anchorage, supports, bracing, etc. to improve life safety and resiliency in existing structures that will not be replaced in the Rebuild Project.	22-35
Early Work Package – Utility Relocation	Relocate existing utilities that are currently located within the footprint of proposed new facilities.	00-37, 07-02
Final Demo – Building Demolition	Demolition of replaced structures could be done late in the Rebuild Project as a package (unless demo is required to be done earlier to accommodate new facilities).	15-18, 07-24, 00-11

A preliminary sequencing plan was developed by grouping the projects into phases: Early Work, Main Work (Early, Mid, and Late), and Final Demolition. The preliminary sequencing plan is shown in Figure 25.

Early work projects include electrical and communications infrastructure improvements needed to upgrade existing obsolete and redundant-lacking systems and relocating some existing facilities and utilities where new improvements are proposed. The bulk of the work is accomplished in the “Main” construction phase and is generally sequenced to focus on the highest priority improvements first. Demolition work is sequenced toward the end of the Rebuild Project, unless it needs to be accomplished earlier to accommodate new facilities.

ID	Project Name	Early Work	Early Main	Mid Main	Late Main	Final Demo
00-39	Early Equipment Procurement					
00-15	Build New IA&E Building					
17-30	Add Redundant Power Loop					
17-31	Add Fiber Loop					
00-34	Build New IT Building					
17-29	Expand Electrical Building and Replace Switchgear					
21-22	Repairs To Existing Ozone Contactors					
16-12	Demolish 2 FW Pumps					
15-01	Build New Floc/Filter Aid Polymer Building					
07-02	Relocate Garage Utilities					
00-37	Relocate Yard Pipes					
22-35	Minor Seismic Retrofits					
00-38	Address Process Critical Deficiencies					
00-07	Build New Lab Building					
00-33	Build New Training Space					
15-13	Build New OSHG System (FWPS)					
00-16	Build New Radio Tower					
15-19	Relocate Lime System					
00-17	Abandon Old Chemical Building/Relocate Staff and Equipment					
00-32	Expand Maintenance Building					
07-03	Demolish Existing Floc/Sed 8-10 and Garage					
07-04	Build New Flash Mix, Floc/Sed Basins					
10-25	Build New Filters					
07-23	Cover Floc/Sed					
13-09	Build New Utility Water and LCC Pumps					
00-08	Abandon Existing Lab/Relocate Staff					
15-21	Replace North LOX Tank					
12-28	Upgrade Filter-to-Waste Recycle System					
15-20	Build New CO2 System					
05-05	Build Pipe/Channel from Ozone Contactor to New Flash Mix					
05-06	Demolish Existing Flash Mix					
17-10	Relocate Existing Electrical and Comms Equipment From Lab					
10-26	Demolish Existing Filters					
16-27	Construct Disinfection Contact Basin					
00-36	Site Civil					
15-18	Demolish Old Chemical Building					
07-24	Demolish Remaining Existing Floc/Sed Basins					
00-11	Demolish Existing Lab					

Blue = Early Work, Green = Main Project Work, Yellow = Demolition

Figure 25. Preliminary Sequencing Plan

10 Project Cost Estimate

Planning-level cost estimates for design, preconstruction services, and construction and have been prepared by the Project team to support Metro Water in establishing an appropriate budget for the Rebuild Project.

10.1 Opinion of Probable Construction Cost

An opinion of probable construction cost (OPCC) for the complete Rebuild Project was prepared based on the selected treatment process alternatives and selected site layout alternative described in this BODR. The OPCC conforms to the Association for the Advancement of Cost Engineering (AACE) Class 5 guidelines, with an anticipated accuracy range of -50 percent to +100 percent. This range is appropriate for conceptual-level planning with a project definition of less than 2 percent. Table 21 summarizes the main assumptions and markups that were established as the basis of the estimated direct construction cost.

Table 21. OPCC Cost Assumptions and Markups

Assumption/Markup	Amount	Notes
Design Contingency Factor	30%	Accounts for un-itemized project scope
Project Complexity Factor	10%	Accounts for project complexities associated with existing facility and MOPO requirements[1]
Market Volatility Factor	0%	Accounts for volatile market conditions (if applicable)
Federalization Factor	10%	Accounts for additional material and equipment cost, plus administration costs for complying with federal funding requirements
Sale/Use Tax	7.45%	Applied to 50% of direct costs as an approximate measure of materials
Annual Escalation Factor	5%	Average annual escalation to mid-point of construction
Baseline Cost Data Date	Jan 2026	Representative date for cost data
Assumed Midpoint of Construction	Jan 2030	Assumed construction period from 2028 – 2032
Note 1: Includes challenges associated with maintaining existing operations during construction, protection of existing facilities/utilities, special sequencing requirements, etc.		

The OPCC for the complete Rebuild Project is summarized in Table 22. A detailed breakdown of the OPCC is provided in Appendix H.

Table 22. OPCC

Item	Item Title	Percentage	Amount	Comment
1	Direct Construction Cost		$461,600,000	Cost of Work
2	Owner's Additional Planning-Level Contingency	25%	$115,400,000	25% of Item 1
3	Total Project Direct Construction Cost		$577,000,000	Item 1 + Item 2
4	Total Construction Support Costs (Job Office Overhead)	10%	$57,700,000	10% of Item 3
5	Estimated Cost of the Work		$634,700,000	Item 3 + Item 4
6	CM/GC Fee	10%	$63,500,000	10% of Item 5
7	Cost of the Work with CM/GC Fee		$698,200,000	Item 5 + Item 6
8	CM/GC Contingency Allowance	2.5%	$17,500,000	2.5% of Item 7
9	Estimated Guaranteed Maximum Price		$715,700,000	Item 7 + Item 8
10	Owner's Contingency Allowance	2.5%	$17,900,000	2.5% of Item 9
11	Total Construction Contract Award		$733,600,000	Item 9 + Item 10
12	Federalization Adder	10.00%	$73,400,000	10% of Item 11
13	**Total Federalized Construction Contract Award**		**$807,000,000**	**Item 11 + Item 12**
14	Low Range	-50%	$403,500,000	-50% of Item 13
15	High Range	100%	$1,614,000,000	+100% of Item 13

The Class 5 cost estimate presented herein is based on the perception of current conditions at the Project location. This estimate reflects an opinion of probable costs at this time and is subject to change as the Project design matures. The Project team has no control over variances in the cost of labor, materials, equipment, services provided by others, contractor's methods of determining prices, competitive bidding or market conditions, practices, or bidding strategies. The Project team cannot and does not warrant nor guarantee that proposals, bids, or actual construction costs will not vary from the cost presented herein. The OPCC will be updated during Phase 2 – Preliminary Design.

10.2 Preconstruction Phase and Construction Support Costs

Table 23 summarizes estimated preconstruction phase and construction support costs, including design, CM/GC preconstruction services, public outreach, and engineering services during construction (ESDC).

Table 23. Preconstruction Phase and Construction Support Costs

Item	Item Title	Percentage	Amount	Comment
1	Design Phase Services	5%	$40,000,000	5% of Total Construction Contract
2	CM/GC Preconstruction Services	1%	$6,300,000	1% of Estimated Cost of Work
3	CM/GC Procurement Services	0.25%	$1,600,000	0.25% of Estimated Cost of Work
4	Engineering Services During Construction/Inspections[1]	5%	$40,000,000	5% of Total Construction Contract
5	Public Outreach Services		$500,000	TBD - placeholder
6	Total Precon Phase and Construction Support Cost		$88,400,000	Sum of above values

[1]Does not include full CM services

10.3 Discussion

As discussed previously, the OPCC presented herein is considered a planning-level cost estimate and will continue to be refined in conjunction with the CM/GC during the preliminary and final design phases of the Project. Metro Water should continue to explore funding options as discussed in Section 11 of this BODR. Depending upon funding availability and acceptable impacts on member city rates, Metro Water may ultimately choose to defer non-critical elements of the Rebuild Project to be implemented as part of the capital improvement program (CIP). However, it should be noted that, all else equal, deferred costs will increase with time and without the economy of scale afforded by a large project like the Rebuild Project.

11 Funding Alternatives and Financial Modeling

An evaluation of funding opportunities was conducted to identify funding sources that are well-aligned with the scope and overall objectives of the Rebuild Project. In addition, a dynamic financial model was developed to understand the impacts on member cities and customers from various project budget/funding scenarios.

11.1 Funding Alternatives

The analysis of funding alternatives for the Rebuild Project identified a broad universe of potential funding sources, with a total of 23 eligible programs spanning federal and state grants, loans, and other financing mechanisms as shown in Figure 26.

Figure 26. Evaluation of Eligible Funding Programs Scoring Results

This evaluation effort determined that, while many programs are technically eligible, the Rebuild Project is realistically competitive for a smaller subset of approximately 6 to 8 priority programs. High-priority opportunities include the grants and loans available through the new Utah Unified Water Infrastructure Plan process, including the State Revolving Fund (SRF); the Environmental Protection Agency's (EPAs) Water Infrastructure Financing and Innovation Act (WIFIA) program, and select resilience-related grants such as the Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities program (BRIC) and the Bureau of Reclamation's WaterSMART programs. These programs were prioritized based on alignment with project needs, funding capacity, affordability, and administrative effort, with loans generally offering larger funding capacity and grants providing targeted but smaller contributions.

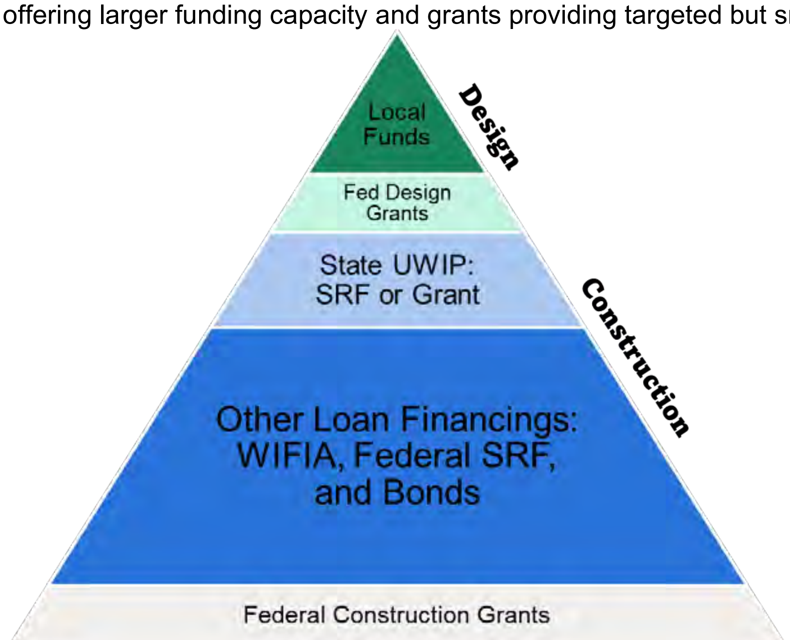

Figure 27. Funding Strategy

The recommended overall funding strategy reflects a multi-source, layered approach that combines local funding, grants, and low-interest financing to balance affordability and funding certainty (Figure 27). The strategy emphasizes pursuing grants for early design phases, while relying on a blend of government-backed loans (i.e., SRF and WIFIA) and Revenue Bonds to fund construction. Given their lower award amounts and unpredictability due to discretionary competitive selection, federal grants for construction are considered supplemental sources to off-set financing needs rather than foundational sources. State funding opportunities are expected to contribute, but are likely limited in capacity, reinforcing the need to integrate multiple debt-financing tools (i.e., Revenue Bonds, WIFIA). The approach also highlights sequencing funding sources over time, such as using Revenue Bonds or SRF loans to initiate cash flow and incorporating WIFIA later to take advantage of flexible repayment and interest accrual structures. Overall, the strategy prioritizes flexibility, cash flow management, and maximizing funding optionality.

Federalization is a key consideration in the funding strategy, as pursuing federal funding introduces both opportunities and tradeoffs. Federal grants and loan programs, such as WIFIA, can provide substantial funding capacity but trigger additional requirements, including Davis-Bacon wages, Buy America provisions, and federal administrative oversight. These requirements can increase project costs, with estimated premiums ranging from approximately 8 to 18 percent depending on project size and scope. Larger projects, over $50M, have federal premiums on the lower end of the range. Despite these added costs, federalization should not be precluded in the Rebuild Project's early design phases as interest rates may change over the course of project development. Importantly, federal requirements can be limited to the specific sub-projects of the overall Rebuild Project funded by federal sources.

Based on the funding strategy recommendations, the following actions are proposed to maximize funding opportunities in alignment with the Project schedule.

Phase 1 – Basis of Design (2025-2026)

- **Prepare, Submit, and Update UWIP Application:** Begin compiling all required documentation and project details for the UWIP priority list and submit to the Utah Project Portal. Proactive development of the Project submission will help to secure eligibility for upcoming state funding cycles. The December 31st, 2025 deadline was the most critical for any project seeking funding within the next year, but Metro Water should enter preliminary information for the Project as soon as possible. Given the Project is in early phases and readiness is a criterion for funding selection, it is likely funding will not be committed until future years. Once submitted, Metro Water can continue to update the Project in the Utah Project Portal through the next phases.
- **Engage State Representatives and Funding Agencies:** Initiate and maintain active and consistent communication with the WDCC, Utah Division of Drinking Water, and other relevant state agencies and representatives. This will clarify UWIP requirements, upcoming announcements, strengthen advocacy, and ensure the project remains visible and competitive within the evolving funding landscape.
- **Apply for Planning and Design Grants:** Pursue WaterSMART Project Design Grants and other early-phase funding opportunities to offset design costs and support environmental review activities. While subject to change based on the federal administration, the next cycle is expected in early 2026 based on the annual pattern of funding notices and recent updates following the FY24 cycle closure in late summer 2025.

Phase 2 – Preliminary Design (2027)

- **Develop Financial Plan Scenarios and Align Funding Activities:** Model various combinations of loans, grants, and local contributions to evaluate impacts on affordability, cash flow, and ratepayer burden. Identify funding milestones with the Project schedule to ensure that applications for major loan programs (SRF, WIFIA) are timed to support design completion and construction phases. Evaluate the Project against the prioritization criteria on the UWIP and refine application in the Utah Project Portal.
- **Prepare Environmental Documents:** Identifies any potential impacts early and allows time for cross-cutter agency reviews and permitting. Having these documents available can expedite federal grant and loan award timelines.

Phase 3 – Detailed Design (2028)

- **Prepare for Full Loan Application Development and Execution:** As design advances, prepare comprehensive loan applications for the SRF and WIFIA programs (if federal funding has been reconsidered). The federal SRF through the State will remain separate from UWIP and WIF process. Coordinate with state and federal contacts to ensure readiness for application windows and anticipate compliance requirements. Target loan execution to coincide with the Projects bidding and construction start.
- **Construction Grant:** Continue to update the Project through the Utah Project Portal to request State WIF funds for construction.

Additional detail may be found in Appendix I, Funding Opportunities and Strategy Technical Memorandum.

11.2 Financial Modeling

The funding strategy was carried forward into a preliminary financial modeling effort which evaluated a range of capital cost scenarios and funding source combinations to understand impacts on Metro Water's revenue sufficiency and customer affordability. The financial modeling framework compared "what-if" scenarios that varied total project costs including the addition of federal cost premiums, timing of costs, and combinations of funding sources, including Revenue Bonds, SRF, and WIFIA (Figure 28). These scenarios demonstrated how different capital cost and funding structures affected potential rate and customer bill increases over a long-term, 20-year planning horizon.

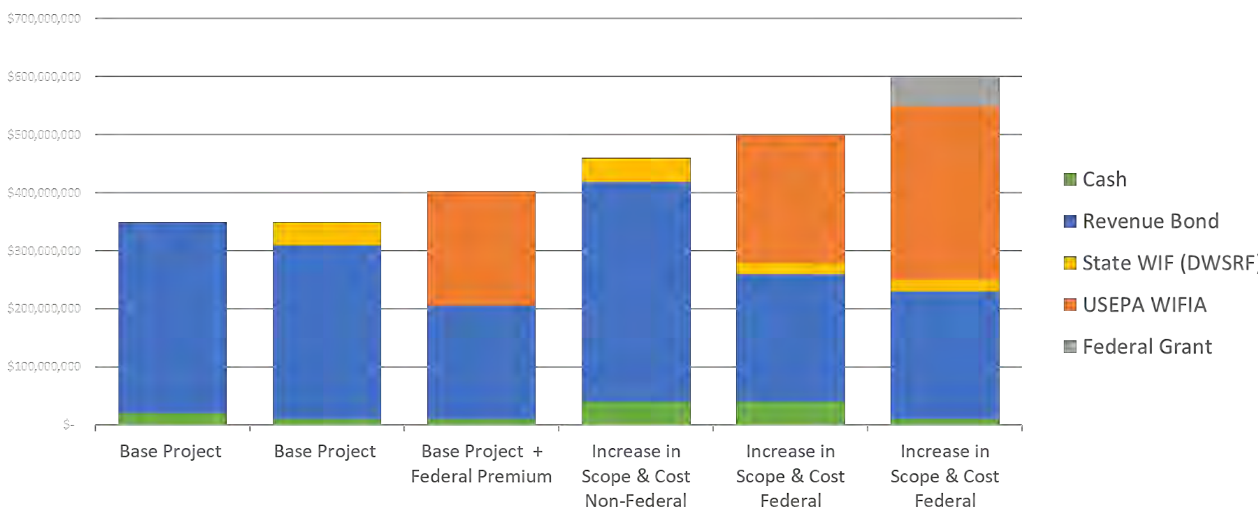

Figure 28. Representation of Project Cost and Funding Scenarios in 2028 – 2032

For the scenario modeling, an $800M total project cost was assumed for the Rebuild Project (modeling was initiated before the OPCC was complete). Initial model scenarios assumed that the Project could be implemented in two phases of construction: Phase 1 of construction between 2028 and 2032 and Phase 2 of construction between 2038 and 2042, however, this strategy will be revisited as project details and costs are refined. For the preliminary analysis, all debt was modeled with a 30-year term, with interest rates of 4.5 percent for Revenue Bonds and 5 percent for WIFIA, and no deferral of any other projects on the CIP.

Initial financial model outputs indicate that financing structure affects rate trajectories, particularly in early years of project implementation. For example, scenarios that incorporated WIFIA financing showed lower initial rate increases compared to Revenue Bond-only approaches, which required higher near-term increases. Despite these variations, cumulative rate impacts and customer bill impacts across all scenarios, including those with higher total project costs, were generally comparable as shown in Table 24. These results indicate that financing choices primarily influence the timing and distribution of rate increases rather than total long-term burden.

Table 24. Initial Outputs of Financial Modeling of Project Cost and Funding Scenarios

Metric	Baseline – Bond Financing	SRF + Bond Financing	SRF + WFIA + Bond Financing	Add'l $100M with SRF + Bond Financing	Add'l $100M with SRF + WIFIA + Bond Financing	Add'l $200M with SRF + WIFIA + Bond Financing
LCWTP Phase 1 Total (2028-2032)	$350 million	$350 million	$402.5 million	$450 million	$504 million	$605 million
LCWTP Phase 2 Total (2038-2042)	$450 million	$450 million	$450 million	$350 million	$350 million	$250 million
Cumulative Rate Increase	143.7%	143.5%	146.5%	141.6%	145.5%	144.4%
Salt Lake City Bill as % of MHI in 2046	1.20%	1.20%	1.22%	1.19%	1.21%	1.21%
Sandy Bill as % of MHI in 2046	0.81%	0.81%	0.82%	0.81%	0.82%	0.82%

As the Rebuild Project progresses into design, this iterative and dynamic financial modeling process will continue to support sustainable financial decisions, as illustrated in Figure 29. Data inputs and assumptions will be updated through Phase 2 – Preliminary Design based on market conditions and Metro Water's cash-flow projections. These refinements are intended to inform decisions by Metro Water to balance project scope and cost, funding mix, and affordability. Ultimately, financial modeling helps identify an optimal solution that achieves the Rebuild Project's goals in alignment with financial capacity and ratepayer tolerance.

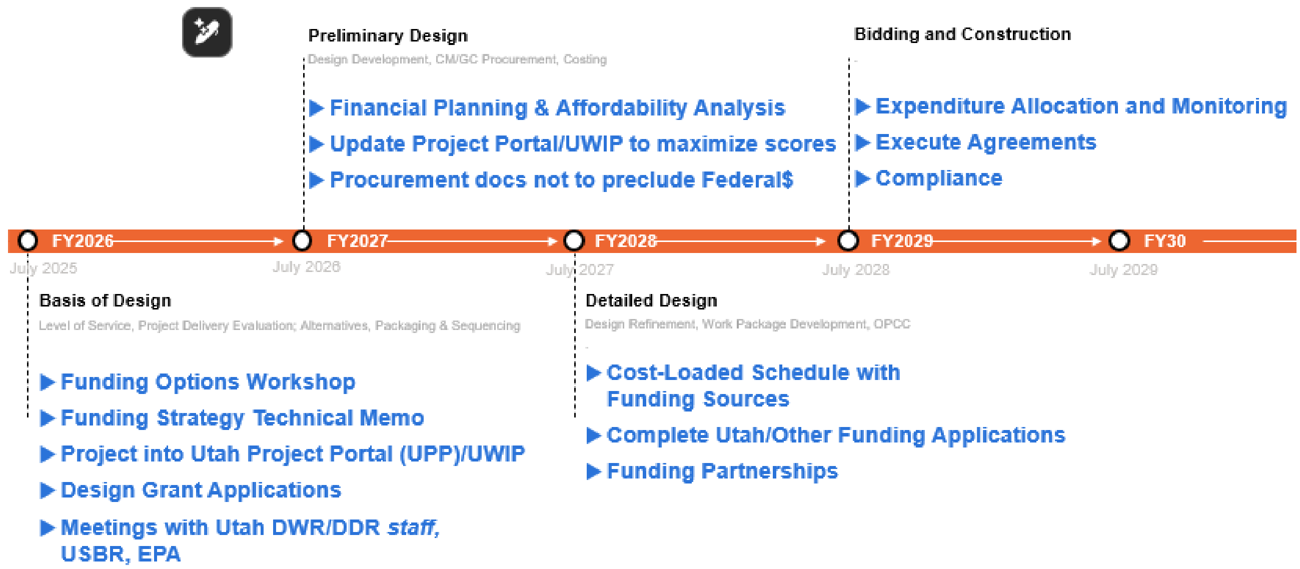

Figure 29. Project Funding and Financial Planning Actions by Project Phase

12 Next Steps

The next phase in the development of the Rebuild Project is Phase 2 – Preliminary Design, which will advance the design to approximately a 30 percent level. Phase 2 is anticipated to include the following key milestones.

- Submission of the BODR to Utah DDW
- Bench and pilot testing to support design development for chemical treatment and filtration design criteria
- Conduct tours of existing water treatment plants
- Development of drawings and specifications to 30 percent
- Selection of and on-boarding a CM/GC partner
- Refinement of estimated construction costs
- Confirmation of a funding strategy
- Reevaluate project prioritization and confirm scope for detailed design
- Development of a Preliminary Design Report and submission to DDW

12.1 Project Schedule

The Rebuild Project is a multi-year effort to replace aging infrastructure and facilities, with the goal of improving seismic resiliency, process performance, and electrical and control systems. The Project consists of the following phases of work:

- Phase 1 – Basis of Design (current phase)
- Phase 2 – Preliminary Design
- Phase 3 – Detailed Design
- Phase 4 – Procurement Services
- Phase 5 – Construction
- Phase 6 – Start-up and Commissioning

The Rebuild Project is targeted for completion by the end of 2032. A preliminary project schedule is presented in Figure 30.

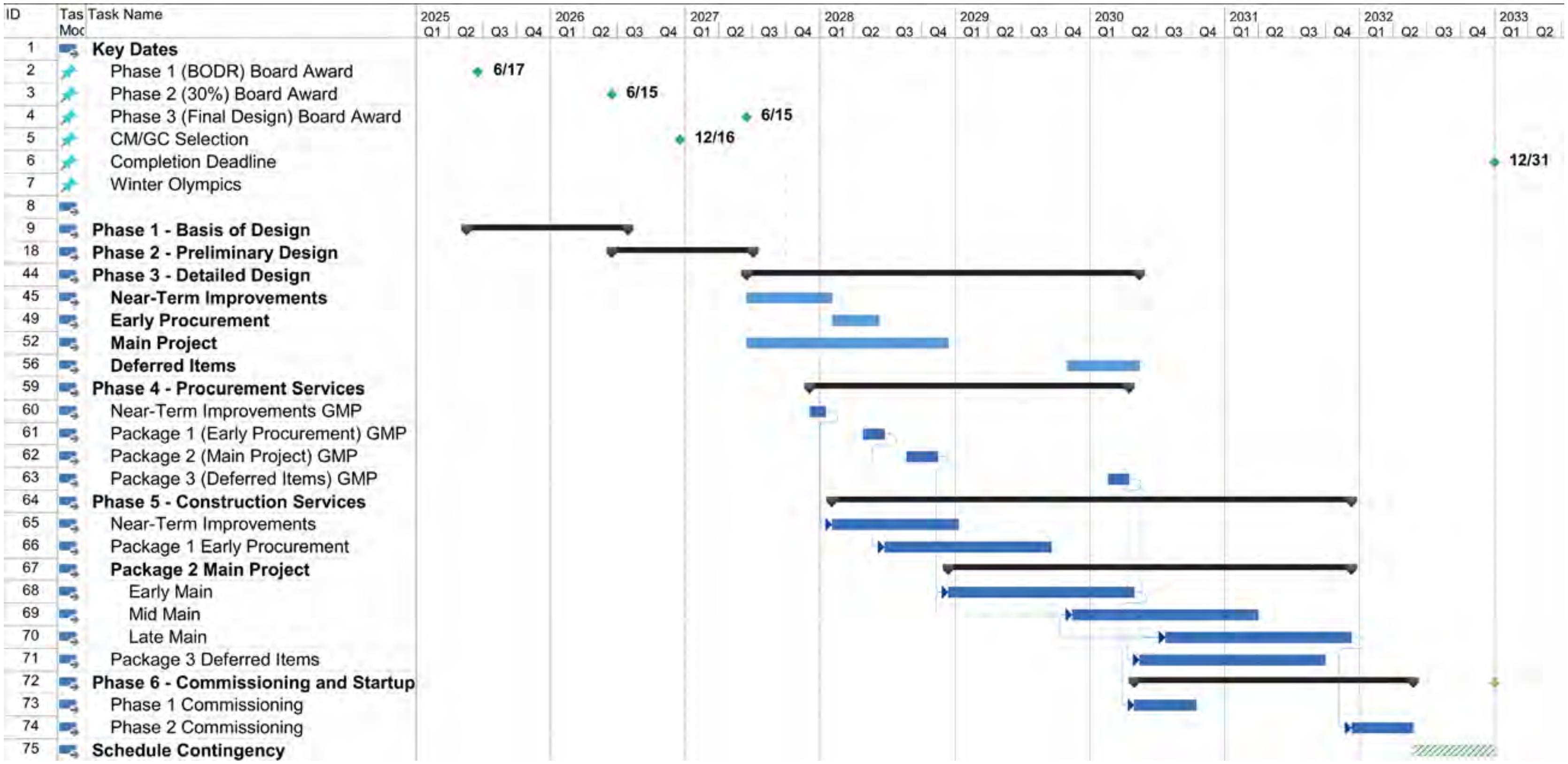

Figure 30. Project Schedule

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec Consulting Services Inc.
801 Jones Franklin Road, Suite 300
Raleigh NC 27606-3394
stantec.com

Attachment B – Agreement

The Agreement includes:

- Exhibit A Scope of CM/GC Services,
- Exhibit B Basis of Compensation,
- 00700 Standard General Conditions of the CM/GC Contract,
- 00800 Supplementary Conditions of the CM/GC Contract,
- 00800 Exhibit A Software and Data Format Requirements for Electronic Document Exchange,
- 00800 Exhibit B 00610 Performance Bond,
- 00800 Exhibit B 00620 Payment Bond,
- 00800 Exhibit C 00638 Chlorine Risk Management Requirements,
- 00800 Exhibit D Schedule 19.04 Federal Flow Down Requirements and FAR Part 52 Clauses.

Additional future documents are anticipated under Contract Amendments.

Little Cottonwood Water Treatment Plant
Rebuild Project
Construction Manager/General Contractor Agreement

Table of Contents

THIS AGREEMENT made and entered into as of the ____ day of ____________, 2026, by and between Metropolitan Water District of Salt Lake & Sandy, a Utah special district (Owner) and __________________________, a _________corporation qualified to do business and doing business in the State of Utah (CM/GC).

Wherever used in the Agreement, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the Standard General Conditions (00700) and Supplementary Conditions (00800).

Terms

Owner and CM/GC, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1 - The Project

The Project, of which CM/GC Services and the Work under the Contract Documents are a part, is generally described as follows:

A. Project: Little Cottonwood Water Treatment Plant Rebuild Project (the Project).

B. Owner Project No: LC070

C. Project address limits: 3430 East Danish Road, Cottonwood Heights, Utah 84093.

D. Brief Project description: the Project may include, but is not limited to, the following activities:

1. Replacement of the flash mix, flocculation, sedimentation, and filtration processes.
2. Replacement of main power switch gear, load centers, PLC equipment, fiber, and electrical distribution.
3. Construction of a new laboratory building and additional storage, training, control, and office spaces.
4. Relocation or replacement of chemical systems including lime feed and chlorine.
5. Construction of a new disinfection contact basin.
6. Construction or relocation of various civil, mechanical, electrical, and other miscellaneous support disciplines.

E. Funding: Funding for the Project may be obtained from federal sources.

Article 2 - Owner's Project Team

Owner has retained Stantec to design the Project, to assume all duties and responsibilities of Engineer during the construction of the Project, and to have the rights and authority assigned to Engineer in the Contract Documents. The Owner will retain the services of an Owner's Advisor who will also act as Owner's representative or, assume all duties and responsibilities of advisor to Owner and construction contract administrator on behalf of Owner, and have the rights and authority assigned to Owner's Advisor in the Contract Documents. The Owner, Owner's Advisor, and Engineer are collectively known as the Owner's Project Team (OPT). Additional Owner's representatives or advisors may be added to the OPT at a future date.

Article 3 - CM/GC Services

3.1 Scope of CM/GC Services

A. CM/GC will perform the CM/GC Services set forth in Exhibit A, Scope of CM/GC Services, as authorized through Task Orders. CM/GC will perform other specified CM/GC Services as expressly set forth in a Contract Amendment. Services rendered by CM/GC to meet its general construction and management obligations are not CM/GC Services, and are not compensated as CM/GC Services, unless expressly designated as such.

B. CM/GC Services are categorized in Exhibit A as Basic Preconstruction Services, Additional Preconstruction Services, Basic Procurement Services, Additional Procurement Services, and Special Services.

3.2 General Provisions Regarding Task Orders

A. Task Orders will be prepared by Owner and Engineer describing CM/GC Services to be performed in accordance with the approved Task Order.

B. All CM/GC Services to be performed by CM/GC must be authorized by the issuance of a Task Order specifying or referencing the scope of CM/GC Services to be performed.

C. Owner will issue each Task Order using the Task Order form provided by the Owner, which will describe the CM/GC services to be performed, the compensation to be paid, the time for performance, the deliverables to be provided, and other applicable terms, if any.

D. Owner will compensate CM/GC for CM/GC Services authorized through Task Orders for each hour earned at the Billing Rates and expenses provided in Exhibit B – Table 3, Table of Costs. Such compensation is subject to the not-to-exceed amount included in the Task Order.

E. CM/GC is not entitled to compensation for providing CM/GC Services that Owner has not authorized.

3.3 First Task Order

A. The first Task Order, authorizing the commencement of CM/GC Services, will include specified Basic Preconstruction Services and Basic Procurement Services through 30% design.

3.4 Payment for CM/GC Services

A. Preparation and Submittal of Invoices

1. CM/GC will prepare and submit invoices for CM/GC Services to Owner on a monthly basis in a format acceptable to Owner.
2. CM/GC may not submit invoices and is not entitled to compensation for CM/GC Services unless Owner has authorized such services through execution of a Task Order.
3. CM/GC will provide documentation acceptable to the Owner to allow Owner to verify CM/GC's charges included in invoices.

B. Payments

1. Payment for CM/GC Services compensated using hourly billing rate basis:

    a. Owner shall pay CM/GC an amount equal to the cumulative hours charged to the Project by CM/GC's personnel times hourly billing rates for each applicable classification.

    b. Hourly billing rates include all of the following: salaries and wages paid to personnel in each billing classification, the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.

    c. The amounts paid to CM/GC under this Article are deemed to include full compensation for CM/GC's overhead and profit associated with such labor and expenses.

    d. Owner has the right to reject any expenses not specifically identified on the Task Order. If CM/GC deems an expense necessary for the Project that is not identified on the Task Order, CM/GC shall first receive approval from Owner in writing. Such approval shall not increase the price of the Task Order without an amended Task Order. Equipment purchased by CM/GC specifically for, and invoiced to, the Project shall be provided to Owner in working condition at the conclusion of the Project. One-way mileage charged to the Project shall be no more than that from the CM/GC's primary local office [Inserted by CM/GC]to the Project destination. Meals and miscellaneous personal expenses associated with travel, if invoiced to the Project, shall be included within a per diem rate and not individually invoiced.

C. Time of Payment

1. Owner will make payments for undisputed CM/GC Services within 14 days after receiving an approved invoice from the Engineer.

2. If Owner fails to make any payment due CM/GC for CM/GC Services within 30 days after receipt of CM/GC's invoice, then:

    a. Amounts due CM/GC will be increased at the rate of 1.0% per month, or the maximum rate of interest permitted by law, if less, from said thirtieth day; and

    b. CM/GC may, after giving 7 days' written notice to Owner, suspend services under this Agreement until Owner has paid all amounts due for services, expenses, and other related charges in full. Owner waives any and all claims against CM/GC for this suspension.

3. Owner may withhold only the contested portions of an invoice and must pay the undisputed portion of the invoice.

D. Compensation for CM/GC Services discussed in Article 3 is not compensation for the Work and is not included in the Guaranteed Maximum Price (GMP). No retainage will be withheld from payments of CM/GC Services; however, such payments are subject to the set-off provisions in General Conditions Article 15.

Article 4 - Compensation for Performance and Completion of the Work

4.1 Compensation

A. Owner shall compensate CM/GC for performance and completion of the Work in accordance with the Contract Documents. Payment for Work will consist of the following:

1. Payment for Construction Support Costs in accordance with Article 5,
2. Payment for Cost of the Work as provided in Article 6, and
3. Payment of a CM/GC Fee as set forth in Article 7 and in Exhibit B Table 1.

4.2 Unforeseen Costs

A. This Agreement establishes a Contingency Allowance for use in paying for unforeseen costs as set forth in Article 8.

4.3 Compensation Amounts

A. The amounts for CM/GC's compensation summarized in Paragraph 4.1 are subject to additions and deletions as provided in the Contract Documents, up to limitations established in the GMP as provided in Article 11.

Article 5 - Construction Support Costs

5.1 Construction Support Costs

A. Construction Support Costs (field overhead or "general conditions" costs) are those costs associated with, and in support of, construction that are not directly related to specific construction activities. Construction Support Costs are compensable as Cost of the Work and must be included by CM/GC in proposed Work Authorizations submitted to the Owner for approval and issuance. Construction Support Costs include without limitation

1. CM/GC project management costs, including project managers, superintendents, field engineering staff, and clerical support located at the Site;
2. Management of Subcontractors and Suppliers;
3. Management of delegated professional design services, if any;
4. Costs associated with safety programs, including safety managers and safety representatives;
5. Quality management not specifically designated to be covered in a Work Authorization;
6. Costs associated with obtaining construction related permits, or paying patent fees or royalties, if not specifically designated to be covered in a Work Authorization;
7. Costs for permit inspections, and other inspections required by Laws and Regulations not specifically designated to be covered in a Work Authorization;
8. Compliance with Laws and Regulations;
9. Taxes, other than those specifically designated to be covered in a Work Authorization;

10. Contract Document administration costs, including costs for:

    a. Meetings, reporting, notifications, and other communication and coordination;

    b. Document management;

    c. Submittals, record data, and other documentation;

    d. Creating and maintaining Project schedules per Article 4 of the General Conditions;

    e. Changes to the Contract Documents per Article 11 of the General Conditions;

    f. Applications for Payment per Article 15 of the General Conditions;

    g. Maintenance of Record Documents; and

    h. Other Contract Document administration costs included in the Contract Documents;

11. Costs associated with CM/GC temporary facilities and temporary infrastructure at the Site;

12. Costs for Site maintenance, storage of materials, waste disposal, environmental controls, management of water, protection of Site and adjacent property, cleaning during construction, and final cleaning;

13. Costs associated with substantial completion, partial utilization, and final completion; and

14. Costs associated with general warranty, guarantees, and correction of defective work during the Correction Period.

B. The organization of the Work into Work Packages will not result in changes to the CM/GC's compensation for Construction Support Costs.

C. Overall amount for total Construction Support Costs is shown in Exhibit B, Table 1, line 2.

5.2 Fixed Construction Support Costs

A. Fixed Construction Support Costs are those costs which are not time sensitive and will not increase if the performance of the Work extends beyond the Construction Period designated for Substantial Completion of the Work described in Article 13. The amount for Fixed Construction Support Cost will be documented and determined prior to and during the GMP negotiations.

5.3 Time-Sensitive Construction Support Costs

A. Time-Sensitive Construction Support Costs are those costs which will increase if the performance of the Work extends beyond the Construction Period designated for Substantial Completion described in Article 13. The amount for Time-Sensitive Construction Support Costs will be documented and determined prior to and during the GMP negotiations.

B. The Construction Support Costs Extended Rate is determined by dividing the Time-Sensitive Construction Support Costs by the projected number of days in the Construction Period.

CM/GC will be entitled to additional compensation for Time-Sensitive Construction Support Costs at the Construction Support Costs Extended Rate. This will be documented and determined prior to and during the GMP negotiations, if the extended time is associated with a compensable delay under the provisions of the General Conditions.

5.4 Changes in Construction Support Costs

A. Owner and CM/GC acknowledge that the Construction Support Costs stipulated amounts set forth in this Agreement's Exhibit B, Table 1, line 2, (Construction Support Costs Contract Amounts) and the Construction Support Costs Extended Rate (determined as set forth in Paragraph 5.3.B) are approximations of actual costs intended to liquidate and stipulate CM/GC's compensation for Construction Support Costs, encourage efficiency and cost control, and reduce Owner's and CM/GC's administrative and accounting effort. The Construction Support Costs Contract Amounts and the Construction Support Costs Extended Rate will not be increased except in cases in which CM/GC demonstrates:

1. CM/GC project management costs, including project managers, superintendents, field engineering staff, and clerical support located at the Site;

2. Such increase in costs has not otherwise been compensated in a Work Authorization, Contract Amendment, or Contingency Allowance.

5.5 Compensation for Construction Support Costs

A. Payments for Fixed Construction Support Costs will be made in equal monthly increments determined by dividing the Fixed Construction Support Costs Contract Amount by the projected number of months in the Construction Period. No payment will be made for Fixed Construction Support Costs in excess of the Fixed Construction Support Costs Contract Amount unless this Amount is adjusted in accordance with provisions in Paragraph 5.4.

B. Payments for Time-Sensitive Construction Support Costs will be made in equal monthly increments determined by dividing the Time-Sensitive Construction Support Costs Contract Amount by the projected number of months in the Construction Period. No payment will be made for Time-Sensitive Construction Support Costs in excess of the Time-Sensitive Construction Support Contract Amount unless this Amount is adjusted in accordance with provisions in Paragraph 5.4.

C. Payments will be made for Time-Sensitive Construction Support Costs associated with compensable delays under the provisions of the General Conditions at the Construction Support Costs Extended Rate as described in Paragraph 5.3.B.

Article 6 - Cost of the Work

6.1 Purposes for Determination of Cost of the Work

A. The term Cost of the Work is defined in the General Conditions, Article 1, as the sum of eligible costs incurred by CM/GC for the performance of the Work, as allowed by the Cost of the Work provisions set forth in the Agreement; such provisions are set forth in this Article 6. Cost of the Work is determined for each Work Authorization, subject to any limits described in this Article. The provisions of this Article are used for two distinct purposes:

1. To determine Cost of the Work for purposes of CM/GC's base compensation for construction under this Agreement; or

2. When needed to determine the value of a Change Proposal, Change Order, Claim, set-off, or other adjustment to the GMP. When the value of any such adjustment is determined based on Cost of the Work, CM/GC is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. For purposes of determining CM/GC's base compensation, Cost of the Work applies only to Work that has been duly authorized in a Work Authorization.

C. The Cost of the Work will include only those items identified in Paragraph 6.2.

6.2 Cost of the Work

A. Payroll Cost - Payroll costs for employees in the direct employ of CM/GC performing Work described in Work Authorizations, and excluding those efforts covered in Construction Support costs per Paragraph 5.1. Payroll costs will be based on actual amounts paid as indicated on Certified Payroll reports. Payroll costs are to include salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation insurance, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturdays, Sundays, or legal holidays, will be included in the above to the extent authorized by Owner.

B. Incorporated Equipment and Material Cost - Cost of all materials and equipment furnished or incorporated in the Work, including costs for transportation and storage prior to delivery to the Site. Cost for proper storage at the Site is to be included in Construction Support Cost per Paragraph 5.1. Cost for equipment is to include Suppliers' services for submittals, factory and field testing and inspections, installation checks, start-up assistance, and training, if any. All cash discounts accrue to CM/GC unless Owner deposits funds with CM/GC with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and CM/GC shall make provisions so that they may be obtained.

C. Consumable Equipment and Material Cost - Cost, including transportation and maintenance, of all materials, supplies, equipment, tools, and machinery at the Site, which are consumed in the performance of the Work, less market value of such items used but not consumed which remain the property of CM/GC. In establishing costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. CM/GC will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such items.

D. Subcontractor Cost - Payments made by CM/GC to Subcontractors for Work performed by Subcontractors. CM/GC shall obtain competitive bids from subcontractors acceptable to Owner and CM/GC and shall deliver such bids to Owner, which will then determine which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as CM/GC's Cost of the Work and fee as provided in this Article 6.

E. Construction Equipment Cost - Cost of providing construction equipment and machinery to construct the Work described in the Work Authorization.

1. Include all the costs for transporting, loading, unloading, assembly, dismantling, and removal of the equipment and machinery with Consumable Equipment and Material Cost per Paragraph 6.2.C.

2. Construction equipment and machinery cost will be billed at rates approved by the Owner as part of each Work Authorization.

   a. All operating costs will include costs for fuel, maintenance, parts, and associated labor. Billing rates for equipment fueling and maintenance do not include payroll costs for equipment operators, which will be included in Payroll cost per Paragraph 6.2.A.

   b. Costs for equipment and machinery owned by CM/GC or a Subcontractor cannot exceed the rates shown for equipment in the Equipment Watch Cost Recovery Rental Rate Blue Book, (https://equipmentwatch.com/blue-book-cost-recovery) An hourly rate will be computed by dividing the monthly rates by 176. These rates will include all operating costs per Paragraph 6.2.E.2.a.

   c. Payment for rented equipment will be in accordance with rental agreements as to price, including any surcharge or special rates applicable to overtime use of the construction equipment or machinery, and all such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.

   d. No markup is allowed on equipment rented or leased from any company owned in total or in part by CM/GC or a Subcontractor, or is owned by the same holding company or a company with a close legal affiliation to CM/GC or Subcontractor, since markups are included in rental or lease rates.

   e. Equipment used for Site maintenance is to be included in Construction Support Costs. Equipment used for multiple Work Authorizations must be billed on the basis of time worked on each Work Authorization.

3. With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Guaranteed Maximum Price (changed Work), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

F. Supplemental Costs which consist of the following:

1. The proportion of necessary transportation, travel, and subsistence expenses of CM/GC's employees incurred in the discharge of duties connected with the Work Authorization.

2. Costs of special consultants including engineers, architects, testing laboratories, and surveyors, employed or retained for services specifically related to the Work Authorization and expressly excluding costs incurred by consultants performing CM/GC Services.

3. Sales, consumer, use, and other similar taxes related to the Work, and for which CM/GC is liable, as imposed by Laws and Regulations.

4. Deposits lost for causes other than the negligence of CM/GC, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable.

5. Royalty payments and fees for permits, patents, and licenses directly related to a Work Authorization.

6. The cost of premiums for performance, payment, and warranty bonds obtained by CM/GC as a requirement of a Work Authorization, in addition to the bonds purchased for the construction as a whole within the scope of Construction Support Costs per Paragraph 5.1.A.11. Final compensation for such premium costs will be based on reconciled costs at the conclusion of the Work.

7. Cost for any Subcontractor bonds that must be required to protect Owner's and CM/GC's interests in the event of a Subcontractor default associated with a Work Authorization. Final compensation for such premium costs will be based on reconciled costs at the conclusion of the Work.

8. The cost of premiums for Builder's Risk insurance and other Work Authorization–specific insurance that CM/GC is required by the Contract Documents to purchase and maintain, but not including costs of commercial general liability, automobile liability, and contractor's pollution liability insurance which are covered as Construction Support Costs per Article 5. The compensation for worker's compensation is included as part of payroll costs per Paragraph 6.1.A.1. Final compensation for such premium costs will be based on reconciled costs at the conclusion of the Work.

6.3 Specific Exclusions from Cost of the Work

A. The following items are not included in the Cost of the Work. This express itemization does not confer Cost of the Work or compensable status to otherwise ineligible items not listed here. Cost for any items not included in the Cost of the Work are to be included in the CM/GC Fee unless specifically itemized at Construction Support Costs described in Article 5.

1. Payroll costs and other compensation of CM/GC's officers, executives, principals, general managers, project managers, superintendents, safety managers, safety representatives, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by CM/GC, whether at the Site or in CM/GC's principal or branch office for general administration of the Work. The payroll costs and other compensation excluded here are to be considered administrative costs covered by Construction Support Cost or the CM/GC Fee.

2. Expenses of CM/GC's principal and branch offices.

3. Any part of CM/GC's capital expenses, including interest on CM/GC's capital employed for the Work and charges against CM/GC for delinquent payments.

4. Costs due to the negligence of CM/GC, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable.

5. Cost for the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property not paid from CM/GC's Contingency per Article 8.

6. Expenses incurred in preparing and advancing Claims.

7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 6.3.

8. Costs recovered or reimbursed under other Construction Support Cost or Cost of the Work provisions.

6.4 Compensation for the Cost of the Work

A. Compensation for the Cost of the Work is based on the amount earned for Work completed for each Work Authorization.

Article 7 - Construction Manager/ General Contractor Fee

7.1 CM/GC Fee

A. The CM/GC fee is a specified percentage of the Cost of the Work as shown in Exhibit B Table 1. No fee will be payable on the basis of costs itemized as excluded in Paragraph 6.3.

Article 8 - CM/GC Contingency Allowance

8.1 CM/GC Contingency Allowance

A. The CM/GC Contingency Allowance funds, shown in Exhibit B Table 1 - Estimated Guaranteed Maximum Price, are for the exclusive use of CM/GC while executing the Work, to reimburse CM/GC for costs due to unforeseen causes, unintentional errors, or events which cannot specifically be anticipated at the time Work Authorizations are issued.

B. The CM/GC Contingency Allowance funds may be used by CM/GC for costs sustained by either CM/GC itself or a Subcontractor, at CM/GC's discretion. The CM/GC contingency funds may not be used for costs which are reimbursable or recoverable under other provisions of the Contract Documents.

C. Without excluding other possible uses of the CM/GC Contingency Allowance, the following uses are expressly acknowledged as eligible uses of the CM/GC Contingency Allowance funds:

1. Losses and damages, and related expenses, caused by damage to the Work, not compensated by insurance or otherwise, sustained by CM/GC or a Subcontractor in connection with the performance of the Work;

2. Corrective work, regardless of fault if non-conformance is unintended;

3. Subcontractor defaults;

4. Overruns in Construction Support Costs;

5. Builder's Risk deductibles;

6. Verified excusable errors in estimates; or

7. Non-compensable overtime and other acceleration costs.

D. CM/GC shall replenish the CM/GC Contingency Allowance by restoring money withdrawn with money recovered (1) from bonds and insurance coverage payments for such expenditures, and (2) from defaulting Subcontractors or Suppliers.

E. The CM/GC Contingency Allowance will not be used to fund Owner-directed changes in the Work. Such changes will be administered through the contractual procedures established for changes in the scope of the Work, including expenditures from the Owner's Contingency Allowance, if any, Work Authorizations as modified by Change Order, and Contract Amendments or other modifications that impact the Guaranteed Maximum Price.

F. The CM/GC Contingency Allowance will not be used to recover the cost of items that are compensable as a Cost of the Work.

G. The CM/GC Fee does not apply to expenditures from the CM/GC Contingency Allowance. CM/GC will not be entitled to any additional overhead, profit, or other markup on any CM/GC Contingency Allowance expenditure.

H. The designated CM/GC Contingency Allowance, as duly replenished, is the maximum amount available to CM/GC to recover eligible costs under this Article; Owner will not increase the CM/GC Contingency Allowance or otherwise reimburse CM/GC for eligible costs incurred in excess of the CM/GC Contingency Allowance.

I. CM/GC will submit applications for reimbursement from the CM/GC Contingency Allowance to Owner, in a format acceptable to Owner, together with appropriate documentation. Payments from the CM/GC Contingency Allowance will be recorded in the Application for Payment.

Article 9 - Work Authorizations

9.1 General Provisions Regarding Work Authorizations

A. Work Authorizations will be based on Work Packages prepared by Owner and Engineer describing equipment and materials to be purchased for installation or Work to be performed in accordance with the approved Work Authorization.

B. All Work to be provided by CM/GC must be authorized by the issuance of a Work Authorization specifying or referencing the scope of Work to be conducted.

C. Owner will issue each Work Authorization using the Work Authorization form provided by the Owner.

D. The Work Authorization will indicate the compensation to which CM/GC is entitled for providing the authorized Work.

E. CM/GC is not entitled to compensation for providing Work that Owner has not authorized.

9.2 First Work Authorization

A. The first Work Authorization, authorizing the commencement of construction, will include, in addition to authorization for a specific Work Package, or multiple specific Work Packages, the authorization of expenditures by CM/GC for Agreement-specific (1) performance and payment bond premiums (2) Builder's Risk premiums, if CM/GC is required to purchase and maintain Builder's Risk insurance, and (3) premiums for other specific insurance policies required by the Agreement.

B. Owner insurance requirements are set forth in Supplementary General Conditions Article 6.

Article 10 - Procurement of Subcontractor; CM/GC Self-Performance of Authorized Work

10.1 Performance of the Authorized Work

A. Owner intends for CM/GC to self-perform at least 40% of the total scope of Work under the Contract Documents, as determined on a monetary basis. This percentage applies to the Contract Documents as a whole and does not impose a requirement for specific Work Authorizations.

B. CM/GC may not self-perform more than 60% percent of the total scope of Work under this Contract, as determined on a monetary basis. This percentage applies to the Contract Documents as a whole and does not impose a limitation on specific Work Authorizations. CMAR may self-perform all of the Work in a single Work Authorization so long as the percentage of Work on the total scope of Work for the Contract is within these limitations.

C. The Owner must approve, in writing, all subcontracts.

10.2 Performance of Negotiated Work

A. Owner in its sole discretion may allow CM/GC to negotiate the cost of self-performed Work with the Owner. Negotiated self-performed Work shall be subject to a GMP agreed upon in advance by Owner and CM/GC and in accordance with best-value practices.

1. Negotiation of the cost of self-performed Work shall be subject to an open book review in which the CM/GC's labor burden hourly rates for each job type, equipment usage rates, and direct material costs are established and agreed upon by CM/GC and Owner. CM/GC agrees to provide all reasonable information requested by Owner for full transparency on CM/GC's cost to complete negotiated self-performed Work.

2. Owner, at its own expense, may hire a qualified third-party estimator or any other consultant or advisor Owner deems appropriate to verify CM/GC's proposed labor rates, equipment rates, direct material costs, or any other information provide by CM/GC in support of the proposed cost of negotiated self-performed Work.

B. In its sole discretion, Owner may allow CM/GC to contract with a pre-qualified or captured Subcontractor for specific Work, materials, or equipment under negotiated terms without competitive bidding. If Owner allows this option, the Subcontractor's labor burden hourly rates for each job type, equipment rates, direct material costs, bond rate, and insurance rates, shall be established and agreed upon by CM/GC, Owner, and Subcontractor, for full transparency on the Subcontractor's cost to complete the Work. Subcontractor labor, insurance, and bond rates are subject to audit by Owner. Negotiated Subcontractor-performed work shall be subject to a GMP agreed upon in advance by Owner and in accordance with best-value practices.

10.3 Performance of Competitive Work

A. For all other work, CM/GC will solicit and receive competitive bids on the Work included in each Work Authorization, including the purchase of materials and equipment. CM/GC will prepare bid packages supporting the Work Authorization and make opportunities available to

Subcontractors and Suppliers in a way that will increase competition and allow bids by trade contractors or specialty entities. CM/GC may prepare bid packages for Work the CM/GC may wish to self-perform, so long as doing so will not limit bidding by competing bidders (prospective subcontractors). Bid packages shall not be advertised without Owner's prior approval. Owner may, at Owner's sole discretion, require modifications to the bid package prior to advertisement.

B. CM/GC may bid on Work Packages, or portions thereof, if fully qualified to self-perform the subject Work.

  1. CM/GC must submit its bids 3 days in advance of receiving other bids, and in the same manner that other bids are to be submitted.

C. Bids are to be opened in the presence of the Owner and Engineer.

D. CM/GC will award contracts to Subcontractors and Suppliers for the Work under the Work Authorization to the responsible bidder through a best-value selection process. CM/GC may self-perform Work when CM/GC is identified as providing the best value using the best-value selection process.

Article 11- Guaranteed Maximum Price

11.1 General

A. Subject to the provisions of Article 4, CM/GC guarantees that the maximum amount payable by Owner (GMP) for the sum of the amounts below will be the binding GMP established by the process stated in Paragraphs 11.2 and 11.3.

  1. Construction Support Cost Amount (Article 5);
  2. Cost of the Work (Article 6);
  3. CM/GC Fee (Article 7); and
  4. CM/GC's Contingency Allowance Amount (Article 8).

B. The Estimated GMP indicated in Exhibit B Table 1 - Estimated Guaranteed Maximum Price is a preliminary figure as of the Effective Date of the Contract. The GMP will be revised as the design is continued and completed.

C. A binding GMP will be established at any time agreeable to Owner and CM/GC, but not later than the following:

  1. If the Work is performed under Work Packages released and authorized concurrently for the complete Project, then the binding GMP will be established on the basis of Contract Documents that are 90% complete.
  2. If the Work will be authorized over time, as the design for individual Work Packages is completed, in a series of incremental Work Authorizations (fast tracking or similar design/construction process) then the binding GMP will be developed in a series of incremental changes as the design for each Work Package reaches 90% completion, culminating, when all Work Packages have been authorized, in a binding GMP for the Contract.

11.2 Owner's Construction Budget

A. Owner's Advisor will establish an updated Owner's Construction Budget (Budget) based on the CM/GC's procurement strategy which identifies Work Packages used to construct the Work. Owner, working with CM/GC, will update this Budget with actual amounts for each line item as Work Authorization amounts identified in the updated Budget are determined.

B. Owner's Advisor will revise the Budget to incorporate Change Orders or authorized allocation of contingency funds which change the funds available for Budget line items. When amounts for all Work Authorizations have been determined and the binding GMP is established for the Contract, the Budget must correlate to GMP line items, and the Budget must equal the GMP.

C. CM/GC will identify variances between the budgeted amount and actual amounts as Work Authorization amounts are determined.

1. Positive variances are created when actual cost for a Work Authorization is less than the budgeted amount. Positive variances identify unused funds that can be used to offset negative variances.

2. Negative variances are created when actual cost for a Work Authorization is more than the budgeted amount. Negative variances identify where additional funds are needed. Unused funds from positive variances can be used to offset these negative variances.

3. Net variances for the Contract are used to determine the current status of the Owner's Construction Budget.

   a. A net positive variance for the Contract represents a savings to the Owner. A final Contract Amendment will be issued at the completion of the Contract (Final Payment) to adjust the GMP to the actual amount of Contract costs.

   b. A net negative variance for the Contract represents the amount for which the CM/GC is at risk, and no additional compensation will be made to the CM/GC.

11.3 Options for Costs Exceeding the Owner's Budget

A. The GMP resulting from the tabulation of cost for self-performed CM/GC Work, bids for Work by Subcontractors and Suppliers, Construction Support Costs, CM/GC Contingency Allowances, and CM/GC Fee cannot exceed the Owner's Construction Budget. The Owner may exercise any of the following options at the sole discretion of the Owner if the proposed Guaranteed Maximum Price exceeds the Owner's Construction Budget:

1. Approve an increase in the Owner's Construction Budget in writing.

2. Authorize rebidding or renegotiation for some or all parts of the Project within a reasonable time without an increase in the Guaranteed Maximum Price.

3. Cooperate in the revision of the scope of the Project to reduce the actual cost of construction to the Owner's Construction Budget.

4. Abandon the Project, in whole or in part, and terminate this Contract in accordance with applicable termination for convenience provisions.

B. If Owner selects the option described in Paragraph 11.3.A.1, CM/GC shall proceed with performance of the Work, and provide CM/GC Services as described in these Contract Documents without additional compensation for Procurement Services. Other fees and expenses related to the Cost of Work will be adjusted in accordance with the revised Cost of Work.

C. If Owner selects the option described in Paragraph 11.3.A.2, Owner and CM/GC shall proceed with rebidding or renegotiation of some or all parts of the Project. The OPT will work with CM/GC to determine if rebidding or restructuring Work Packages is likely to lead to lower bid prices; if so determined, CM/GC will rebid selected original Work Packages or restructured Work Packages identified as having the potential to reduce the overall cost of construction to the Owner's Construction Budget. CM/GC will advise the OPT of the likely impact to the schedule resulting from rebidding Work Packages. CM/GC will provide CM/GC Services for rebidding these Work Packages without additional compensation.

D. If Owner selects the option described in Paragraph 11.3.A.3, CM/GC shall assist the OPT in studies to revise the scope of the Project to bring the Project cost within the Owner's Construction Budget. CM/GC will provide research and cost estimates to evaluate the potential cost savings of each proposed change in scope for Work Packages and advise the OPT of the likely impact to the schedule resulting from rebidding Work Packages and changes in Contract Times that will result from the changed Work Packages. CM/GC will provide CM/GC Services for consultation in modifying the Project scope and rebidding these Work Packages without additional compensation.

E. CM/GC shall revise the project schedule to incorporate delays caused by actions taken to bring the Project within the Owner's Construction Budget.

11.4 Conversion of Cost of Work to a Lump Sum Amount

A. If Owner and CM/GC mutually agree, compensation for all Work on the Project, or for any Work Authorization, may be converted to a lump sum (stipulated amount). If compensation for all Work on the Project is converted to a lump sum amount, this lump sum amount will include costs for Construction Support Cost, Cost of the Work, the CM/GC Fee, and all other costs associated with the Contract, all as if bid as a lump sum amount. CM/GC will no longer have access to CM/GC Contingency Allowance funds and bears all risk associated with delivering the Work for the lump sum amount.

B. If a Work Authorization is converted to a lump sum amount, this lump sum amount will include costs for Cost of the Work, the CM/GC Fee, and all other costs associated with the Work Authorization, all as if bid as a lump sum amount; provided, however, that Construction Support Costs will continue to be compensated per Paragraph 5.05.

C. The following will continue to apply for conversions to lump sum covered in Paragraphs B and C:

1. The Cost of the Work provisions in Article 6 will continue to apply to pricing certain Change Orders and other similar matters, as set forth in Paragraph 6.1.A.2.
2. Construction Support Costs Extended Rate provisions of Paragraph 5.4 will continue to apply for Change Orders.
3. Owner's Contingency will continue to be available per Article 12.

Article 12 - Owner's Contingency Allowance

12.1 Owner's Contingency Allowance

A. Owner's Contingency Allowance is used at the sole discretion of the Owner to cover unforeseen costs, Owner-directed changes in the scope of the Work, or any other unanticipated change in the Contract Price. These funds can only be accessed by the CM/GC when and to the specific extent authorized by the Owner.

B. The Owner's Contingency Allowance is to be included in the Contract Amount awarded and may be, at the Owner's sole discretion, part of the CM/GC's GMP.

Article 13 - Payment Procedures

13.1 Submittal and Processing of Payments

A. Billing and payment for CM/GC Services are addressed in Article 3. The provisions in this Article 13 pertain to billing and payment for the Work.

B. CM/GC shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will indicate the amount of the CM/GC Fee then payable. Applications for Payment will be processed by Owner as provided in the General Conditions.

13.2 Progress Payments; Retainage

A. Owner shall make progress payments on the basis of CM/GC's Applications for Payment as recommended by Engineer within 30 days of receiving a recommended invoice from Engineer during construction as provided in Article 13, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract.

B. Progress payments on account of the Cost of the Work will be made for each Work Authorization.

1. Prior to Substantial Completion, for each Work Authorization progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

    a. **95%** percent of the value of the Work completed, with the balance being retainage.

2. Upon completion of the Work under a Work Authorization, including completion of all punch list items, Owner shall pay an amount sufficient to increase total payments to CM/GC to **100%** percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less **200%** percent of Owner's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

13.3 Final Payment

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Article 15 of the General Conditions.

13.4 Consent of Surety

A. Owner will not make final payment or return or release retainage at Substantial Completion or any other time, unless CM/GC submits written consent of the surety to such payment, return, or release.

13.5 Interest

A. All amounts not paid when due will bear interest at the rate of **1.5%** percent per annum.

Article 14 - Documentation and Audit

14.1 Documentation

A. Whenever the Cost of the Work for any purpose is to be determined pursuant to this Contract, CM/GC and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices.

B. CM/GC will provide documentation of all Costs of the Work with the Application for Payment as directed by the Owner.

14.2 Audit

A. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all CM/GC's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and the CM/GC Fee. CM/GC shall preserve all such documents for a period of three years after the final payment by Owner. Subcontractors performing Work on a Cost of the Work basis will afford such access to Owner, and preserve such documents, to the same extent required of CM/GC.

Article 15 - Contract Times

15.1 Contract Times - Dates

A. The dates by which the Work will be substantially complete, and by which the Work will be completed and ready for final payment, will be set out in a Contract Amendment and comply with provisions of Article 15.

15.2 Liquidated Damages

A. Contract language will be included in the Contract Amendment for GMP No. 1.

B. CM/GC and Owner recognize that all time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and CM/GC agree that as liquidated damages for delay, but not as a penalty:

1. Substantial Completion - CM/GC shall pay Owner $**5,000** for each day that expires after the time, as duly adjusted pursuant to the Contract, specified above for Substantial Completion, until the Work is substantially complete.

2. Completion of Remaining Work - After Substantial Completion, if CM/GC shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, as duly adjusted pursuant to the Contract, for completion and readiness for final payment, CM/GC shall pay Owner $**1,000** for each day that expires after such time until the Work is completed and ready for final payment.

3. If Owner recovers liquidated damages for a delay in completion of the Project or a specified Milestone by CM/GC, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages, if any, specified in this Agreement.

Article 16 - Contract Documents

16.1 Contents

A. The Contract Documents consist of all of the following:

1. This Agreement.

2. General Conditions.

3. Supplementary Conditions.

4. Exhibits to this Agreement.

   a. Exhibit A, Scope of CM/GC's Services; and

   b. Exhibit B, Basis of Compensation.

5. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:

   a. Executed Task Orders, including any exhibits identified as Drawings, Specifications, or other Contract Documents

   b. Contract Amendments;

   c. General Requirements (Division 01 of the Specifications);

   d. Executed Work Authorizations, including any exhibits identified as Drawings, Specifications, or other Contract Documents;

   e. Work Authorization Modifications including

      1) Work Change Directives;

      2) Change Orders; and

      3) Field Orders.

   f. The Request for Proposals.

   g. CM/GC's Proposal.

   h. Performance and Payment Bonds.

i. Warranty Bonds, if any.

B. The order of precedence for the Contract Documents is set forth in Supplementary Conditions.

C. There are no Contract Documents other than those listed above in this Article 16.

D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract Documents.

Article 17 – Representation, Certification, and Special Provisions

17.1 CM/GC's Representations

A. To induce Owner to enter into this Agreement, CM/GC makes the following representations:

1. CM/GC has examined and carefully studied the request for proposals, basis of design report, Contract Documents, and other documentation, reports and drawings provided by the Owner.

2. CM/GC is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

3. CM/GC has considered the information known to CM/GC itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Proposal Documents; with respect to the effect of such information, observations, on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by CM/GC; and (c) CM/GC's safety precautions and programs.

4. Based on the information and observations referred to in the preceding paragraph, CM/GC will verify that no further examinations, investigations, explorations, tests, studies are necessary for the performance of the Work at the Guaranteed Maximum Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents. If further examination, investigations, explorations, tests, studies are deemed necessary by the CM/GC, it will endeavor to perform such activities.

5. CM/GC is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the available documents provided by the Owner.

6. CM/GC will give Owner's Advisor written notice of all conflicts, errors, ambiguities, or discrepancies that CM/GC has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Owner's Advisor is acceptable to CM/GC.

7. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

8. CM/GC's entry into this Agreement constitutes an incontrovertible representation by CM/GC that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

17.2 CM/GC’s Certifications

A. CM/GC certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing this Agreement. For the purposes of this Paragraph 17.2:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the proposal process or in the Agreement execution;

2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the Proposal process or the execution of the Contract to the detriment of Owner, (b) to establish proposal Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Proposers, with or without the knowledge of Owner, a purpose of which is to establish proposal prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the proposal process or affect the execution of the Contract.

B. Pursuant to Utah Code Section 63G-27-201, CM/GC certifies that it is not currently engaged in a boycott of the State of Israel or an economic boycott. CM/GC agrees not to engage in a boycott of the State of Israel for the duration of this Agreement. CM/GC agrees to notify Owner in writing if it begins engaging in an economic boycott.

17.3 Special Provisions

A. CM/GC shall comply with all applicable federal, state, and local laws and ordinances, and shall not discriminate against any person on the basis of race, color, or national origin in the performance of this Agreement.

B. Any terms which Owner is mandated by applicable statute or regulation to include in this Agreement, including any terms which are mandated by applicable provisions of the Utah Procurement Code, United States Code, or Code of Federal Regulations shall be considered a part of this Agreement.

C. Article 19 of the Supplementary Conditions includes provisions that apply if the Project utilizes, may utilize, is reimbursed with, or is otherwise subject to Federal Funds, as set out in Section 19.01.

(signatures on next page)

IN WITNESS WHEREOF, Owner and CM/GC have signed this Agreement. This Agreement will be effective on__________________________, which is the Effective Date of the Contract.

Owner:

Metropolitan Water District of Salt Lake & Sandy

By: ____________________
(individual's signature)

Date: ____________________
(date signed)

Name: ____________________
(typed or printed)

Title: ____________________
(typed or printed)

Attest: ____________________
(individual's signature)

Title: ____________________
(typed or printed)

Address for giving notices:

3430 East Danish Road
Cottonwood Heights, Utah 84093

Designated Representative:

Name: ____________________
(typed or printed)

Title: ____________________
(typed or printed)

Address:

Phone: ____________________

Email: ____________________

CM/GC:

____
(typed or printed name of organization)

By: ____________________
(individual's signature)

Date: ____________________
(date signed)

Name: ____________________
(typed or printed)

Title: ____________________
(typed or printed)

Attest: ____________________
(individual's signature)

Title: ____________________
(typed or printed)

Address for giving notices:

Designated Representative:

Name: ____________________
(typed or printed)

Title: ____________________
(typed or printed)

Address:

Phone: ____________________

Email: ____________________

License No.: ____________________
(where applicable)

State: ____________________

Exhibit A

Scope of CM/GC Services

Article 1– Basic Preconstruction Services

1.1 Project Management

A. Participate in Project Meetings.

1. Participate in Project kick-off meeting. Be prepared to discuss CM/GC's team and organization's structure, assignments for responsibilities, and CM/GC's plan for implementation of Preconstruction Services.

2. Participate in periodic meetings with Owner, Owner's Advisor, and Engineer (collectively, Owner's Project Team or OPT) to review progress, coordinate efforts, and discuss planned activities for the next period. It is anticipated that these progress meetings will occur monthly.

B. Provide administration of Agreement for CM/GC Preconstruction Services, including Applications for Payment, progress reporting, management of CM/GC staff, schedule for services, and deliverables.

1.2 Review of Preliminary Design Documents

A. As a priority first task, review Engineer's Preliminary Design Progress in its current form.

1. Provide input and advice, according to the general requirements of Paragraph 1.3.D below, regarding the Preliminary Design Document's content concerning coordination of utilities work (both above-ground utilities and underground facilities), underground facilities procedure, and mitigation of utilities conflicts, for Engineer's use in the Final Design Phase of Engineer's services.

2. Recommend strategies for the division of the Work under design into Work Packages, and for phased design and authorization of construction of such Work Packages (fast tracking). Work collaboratively with the OPT to finalize the number of Work Packages and their approximate scope, and the schedule for preparation, authorization, and completion of such Work Packages.

1.3 Design-Related Preconstruction Services

A. Attend periodic design meetings to provide consultation on aspects of the design that will impact the budget, schedule, and quality of the completed Work.

B. Advise, assist, and provide recommendations on all aspects of the planning and design of the Work. Consult with the OPT regarding Site use and improvements, and the selection of materials, building systems, and equipment.

C. Provide recommendations: on construction feasibility; regarding actions designed to minimize adverse effects of labor or material shortages; on time requirements for procurement, installation, and construction completion; and on factors related to construction cost including estimates of alternative designs or materials, preliminary budgets, and possible opportunities for savings.

D. Review in-progress design documents, including the documents variously described as preliminary design documents, preliminary design report, design development documents, and the interim final drafts of the Drawings and Specifications, and provide input and advice on constructability, materials and equipment selections, and availability. Provide timely suggestions for modifications to improve:

1. Ability to bid the Work:
    a. Identify Work elements that may be difficult to price as presented in the design documents. Provide suggestions to reduce risk and to obtain better pricing from Subcontractors and Suppliers.
    b. Provide suggestions on Work Packages to improve biddability, however, Engineer will not subdivide work into Work Packages for specific trades.
    c. Determine that specified products are readily available and notify Engineer if equal or substitute materials might be available.
2. Constructability, including sequencing or coordination issues:
    a. Adequacy of details for construction;
    b. Potential conflicts during construction;
    c. Feasibility of construction;
    d. Construction sequencing;
    e. Ability to coordinate among Subcontractors and Suppliers; and
    f. Coordination between Contract Documents.
3. Operability:
    a. Ability to minimize disruptions to existing operations;
    b. Ability to complete construction connections to existing facilities or utilities;
    c. Modifications to facilitate initial start-up and/or performance testing; and
    d. Ability of Owner to operate/maintain the facility when completed.
4. Possible use of patented, licensed, or copyrighted products.
5. Requirements for Subcontractor and equipment and materials procurement.
6. Completeness, consistency, and clarity.

E. Subsurface conditions and Underground Facilities
1. Review information made available by Owner.
    a. Review information pertaining to subsurface or physical conditions at the Site. Inform Owner’s Advisor of additional examinations, investigations, explorations, testing, or studies (Supplemental Investigations) of subsurface or physical conditions at the Site that CM/GC concludes would be beneficial if conducted prior to commencement of construction. See General Conditions Paragraph 5.03.E.
    b. Review information pertaining to Underground Facilities. Collaborate with the Engineer to improve the accuracy and completeness of information regarding Underground Facilities that Engineer incorporates into Work Authorizations in accordance with General Conditions Paragraph 5.05.
2. Owner’s Advisor will issue a Work Authorization for any necessary potholing, exploratory excavations, or other field investigations related to Paragraph E if necessary.

F. Research potential substitutes, furnish data and prepare a Preconstruction Substitute Request prior to a Work Authorization requesting the Owner's Advisor to authorize the use of other items of equipment or material in accordance with General Conditions Paragraph 7.09.

G. Provide review comments in writing using the processes or procedures prescribed by the Owner's Advisor. Verify that the Project design can be executed within the Owner's Construction Budget, within the allotted Contract Times, and with available labor, equipment, and materials.

H. Electrical, Instrumentation, and Control

1. Review information made available by Owner.

    a. Review information pertaining to existing electrical switch gear, distribution, and load centers.

2. Coordinate with OPT to facilitate and ameliorate the design of all new electrical gear, feeders, load centers, Motor Control Centers and other related electrical, instrumentation and control equipment.

3. Coordinate with the OPT to facilitate and ameliorate the electrical maintenance of plant operations during and after construction.

I. Report to Owner's Advisor and Engineer any elements of the design that appear to be in error or appear to require engineering review and possible resulting modification.

J. The CM/GC is not responsible for design of the Project. The CM/GC does not control the project design or contents of the Contract Documents and does not assume responsibility or liability for the project design by performing these reviews. The CM/GC's review of the project design and Contract Documents and providing recommendations are only advisory to the OPT.

1.4 Construction Management Plan and Implementation

A. Provide and implement a written Construction Management Plan that incorporates the following elements:

1. CM/GC's organization for the Construction Phase of the project, including assigned responsibilities and level of authority within Project management;
2. Communication plan, including plans for distribution of documents, implementation of Action Item and Decision registers, frequency of reporting, and project controls;
3. Document management plan that incorporates Communications Plan and contractual Electronic Data Protocols;
4. Construction contract administration;
5. Cost management;
6. Time management;
7. Quality management;
8. Risk management;
9. Safety management;
10. Site management and environmental controls;
11. Regulatory requirements and permits;
12. Procurement Strategy Plan; and

13. Start up and commissioning program.

B. Work with the OPT to incorporate requirements of the General Conditions and General Requirements (Division 01 of the Specifications) into the plan. Reference provisions in the General Conditions and General Requirements as appropriate. Prepare a draft plan and submit for review and comment by the OPT. Respond to comments and incorporate changes suggested by review comments as appropriate.

1.5 Construction Contract Administration

A. Work with the OPT to incorporate requirements of the General Conditions and General Requirements into administration of the Contract. Review the Owner's Construction Management Plan and suggest changes as appropriate.

B. Communications

1. Assist the Owner's Advisor with planning Project meetings, participate in these meetings and provide documentation as requested by the Owner's Advisor.

2. Plan, schedule, and document meetings held with Subcontractors and Suppliers. Include the members of the OPT as appropriate.

1.6 Cost Management

A. Immediately following on-boarding of the CM/GC, preliminary design documents (in their draft or current form) will be made available for review. Within 60 days after receipt of said preliminary design documents, provide a preliminary evaluation of the Owner's program and budget requirements to determine that CM/GC will be able to construct the facilities described in that program within the Owner's Construction Budget (Budget) using conceptual estimating techniques. Discuss this initial review of the Budget with the OPT. The result of this evaluation and review will be a Baseline Project Cost Model (PCM).

B. The Baseline PCM and subsequent updates to the PCM shall be developed and maintained using industry standard cost estimating software throughout Phase 1 – Preconstruction.

C. Work with Owner's Adviser to update the Baseline Project Cost Model with supporting data for review by the OPT at the following intervals:

1. Completion of preliminary design documents by the Engineer and approval by the Owner.

2. Completion of design development documents by the Engineer and approval by the Owner.

3. At appropriate intervals agreed to by the OPT and CM/GC during the preparation of the Construction Documents to determine that changes to the design can be constructed within the Budget.

D. The Baseline PCM shall identify all Project tasks and develop a preliminary work breakdown structure needed to complete the Project and estimate the costs, duration, and sequence of tasks to the OPT. Include the following with Baseline PCM submission:

1. Draft Site Logistics Plan

2. Draft Construction Emergency Response Plan and Site Safety Plan

3. Draft Quality Management Plan that ensures conformance to the contract documents

4. Draft Environmental Management Plan detailing programs for a stormwater pollution prevention plan and handling other environmental issues (dust, on-site chemicals and fuel, etc.) if required to comply with permits and regulations applicable to the Project

E. Assist Owner's Adviser in preparing an updated line-item PCM based on the CM/GC's proposed Procurement Strategy Plan prepared per Paragraph 1.13. This PCM is to include a line item for each anticipated Work Package, as well as line items for Construction Support Costs, the CM/GC Fee, and CM/GC Contingency Allowances and other costs, if any, that will be incorporated into the GMP for the Project.

F. Assess current construction market to determine risk associated with the PCM. As an example, volatility in the cost of selected materials or equipment may drive cost above the Budget. Identify areas where costs may be lower than original estimates and if cost savings may be used to balance the Budget. Report the cost of various design and construction alternatives to the Owner, including the CM/GC's assumptions in preparing its analysis, a variance analysis between budget and preliminary Budgets, and recommendations for any adjustments to the PCM. Work with the OPT to consider costs relating to efficiency, usable life, maintenance, energy, and operation as part of the cost analysis.

G. Notify the Owner and the Owner's Advisor immediately if any updates to the Project Cost Model will cause the projected GMP to exceed the Budget. Make appropriate recommendations to the OPT if cost projections exceed the Budget.

H. Provide the Budget-related services set out in Paragraph 11.04 of the Agreement.

I. The CM/GC's methods used to prepare PCM shall be coordinated with the methods used by the Engineer to prepare the Opinion of Probable Cost (OPC) so as to be able reconcile both the PCM and OPC at the key milestones described in Paragraph 1. 6 C. above. The CM/GC and the Engineer shall reasonably cooperate one another in this effort.

1.7 Time Management

A. Provide a preliminary master schedule for the Contract. Incorporate the Owner's Advisor's preliminary schedule and the schedule for design into the preliminary master schedule. Include allowances for reasonable periods required for the review and approval of items by the OPT and for approvals of governmental authorities having jurisdiction over the Project. Prepare the preliminary master schedule in a way that the detailed construction schedule can be incorporated into the master schedule as the Project becomes better defined.

B. Identify critical design Milestones that must be met to keep the Project on schedule. Coordinate and integrate the preliminary project schedule with the services and activities of the OPT and CM/GC. Update the preliminary project schedule as design develops to indicate proposed activity sequences and durations, Milestone dates for receipt and approval of pertinent information, submittal of a GMP Proposal, preparation and processing of Shop Drawings and Samples, delivery of materials or equipment requiring long-lead time procurement, and the Owner's occupancy requirements.

C. Make appropriate recommendations to the Owner and Owner's Advisor if preliminary project schedule updates indicate that previously approved schedules may not meet Contract Time requirements.

D. Revise the master schedule after the GMP is established.

1.8 Quality Management

A. Prepare CM/GC's Quality Control Plan (CQCP) in accordance with the General Requirements.

1. Describe the quality control organization and lines of authority. CQCP is to identify the quality control manager and other key individuals involved in CM/GC's quality control effort. Provide the services of a dedicated quality control manager unless Owner's Advisor determines that quality control manager may combine quality control duties with

other responsibilities. If quality control manager is to serve in other capacities, identify those other responsibilities and the percentage of time spent in each role. Describe the qualifications of the quality control manager (in resume format) to demonstrate experience with quality management activities and performance on successful projects.

2. Provide the name and qualifications, in resume format, of other persons assigned a quality control function. Define the roles and responsibilities and authorities for each person and the types of Work or portions of the work for which each person is responsible.

3. Describe CM/GC's approach to managing quality during construction. Describe how CM/GC will integrate quality control procedures into the execution of the Work, provide testing and inspection required to control the quality of the Work in progress and verification or acceptance testing as required by the Contract Documents and CQCP.

4. Include a testing plan with details of tests to be provided. Designate the organization (Owner, Owner's Advisor, CM/GC, or Testing Agency) responsible for each type of testing. Coordinate CQCP Testing Plan with testing to be provided by the Owner.

5. Describe CM/GC approach for managing defective Work, including notification and documentation procedures, development and implementation of corrective action plans and documentation that record corrective action has been successful in producing Work that complies with the Contract Documents.

6. Describe the approach for scheduling, reviewing, certifying, and managing documentation provided by Subcontractors and Suppliers. Include the approach for managing the quality of submittals, documentation procedures, and process for tracking and keeping documentation up to date.

1.9 Risk Management

A. Analyze construction risks to assess risk impact and develop appropriate risk management strategies to minimize associated costs.

B. Identify additional information that will help with risk assessment.

C. Provide recommendations for appropriate allocation of construction risks.

D. Review possible impacts associated with the use of patented, licensed, or copyrighted products.

E. Review legal requirements for subcontractor and equipment procurement for risk impacts.

F. Suggest procurement strategies to minimize risk.

G. In conjunction with the Owner's Initial Risk Register, develop and maintain a Project Risk Register during Phase 1 - Preconstruction.

H. Lead monthly meetings with the OPT to update risks, mitigation activities, and potential cost and schedule impacts. Risk Register shall be used to inform and develop appropriate and Project-specific contingency values throughout – Phase 1 development.

1.10 Safety Management

A. Provide a project-specific Health and Safety Plan for the Contract to address the safety concerns associated with construction activities, including potential hazards, that complies with applicable Laws and Regulations. Write the manual with the ability to readily update the plan to incorporate needed revisions on a regular basis.

B. The Health and Safety Plan is to include at least the following information:

1. Background information identifying the CM/GC, Project description, and location;
2. Management accountability structure with authority to implement safety plans, stop work, or make other safety-related decisions;
3. Role of safety representative (see General Conditions, Paragraph 7.16);
4. Provide descriptions of qualifications and certifications related to the performance of safety representatives;
5. Objectives of the Health and Safety Plan;
6. Administration and enforcement of the Health and Safety Plan;
7. Applicability of the Health and Safety Plan to various personnel categories, including the workforce, visitors, and members of the OPT;
8. List of conditions at the Site that may pose a hazard to anyone, hazard types, and those potentially exposed;
9. Procedures for first aid and medical attention;
10. Emergency notifications procedures based on hazard type which specify the entity to be notified for each situation;
11. Site access control requirements to prohibit unauthorized persons from entering the Site;
12. Orientation and training requirements for workers, visitors, and members of the OPT;
13. Hazard communications and awareness plan;
14. Required safety certifications for each type of work;
15. CM/GC’s safety training program and effort to create and maintain a culture of safety;
16. CM/GC’s written safety guidelines for project-specific issues as defined by Laws and Regulations;
17. Plan for conducting safety inspection and the audit frequency and schedule;
18. Process for conducting a Job Hazard Analysis for work activities and implementing countermeasures to ensure safety, including checklist specific the Project and type of work; and
19. Accident / incident reporting procedures including monthly reporting.

C. Incorporate Owner’s Site safety requirements as appropriate.

1.11 Site Management and Environmental Controls

A. Develop a plan for managing the Site during construction. The plan should address, at a minimum, management of the following:

1. Office space for CM/GC, Subcontractors, and, if required by Contract, the OPT;
2. Water, sanitation, electrical, internet, and other utilities for CM/GC’s and OPT's operations at the Site;
3. Storage facilities, parking, and, if required by Contract, parking for the OPT, and construction equipment storage and maintenance;
4. Protection of existing structures, trees and other landscaping, buildings, utilities, and Underground Facilities;
5. Site security, Site safety, and emergency responses;

6. Temporary roads, temporary signage, barricades, fencing, and other devices to manage traffic to and within the Site, including provisions for delivery of materials and equipment, and maintenance during construction;
7. Environmental conditions including storm water management, pollution control, care of water, soil management, and other temporary controls and their removal when no longer required;
8. Reference data and control points; and
9. Cleaning during construction and containment and disposal of waste materials.

B. Review plan with Owner's Advisor and Owner to identify potential conflicts with operating other facilities, on-going and anticipated construction by other entities. Revise if necessary.

1.12 Regulatory Requirements and Permits

A. Review regulatory requirements and permits required for construction. Develop a written plan for meeting applicable Laws and Regulations and obtaining permits. List the permit requirements, entities responsible for obtaining permits, documentation required for permits and cost for obtaining and complying with these requirements.

B. Incorporate the associated cost into the Cost of Work and inform the Owner so these can be incorporated into the Owner's Construction Budget, or the Owner's Construction Budget may be adjusted as required.

C. Incorporate time for obtaining permits into the project schedule to ensure permits can be obtained and regulatory requirements met in time for the orderly progression of Work.

1.13 Procurement Strategy Plan

A. Provide input to OPT regarding the current construction market, bidding climate, status of key Subcontractor and Supplier markets, and other local economic conditions.

B. As the design develops, organize the Work into Work Packages that will (1) allow for phased construction that will shorten the overall completion schedule for the Work, (2) encourage price competition by prospective Subcontractors and Suppliers, and (3) enhance the quality and safety of the Work.

C. Develop Subcontractor and Supplier interest in the Project consistent with state Laws and Regulations. Furnish the Owner's Advisor a list of possible Subcontractors and Suppliers, from whom competitive bids will be requested for each principal portion of the Work. Identify preferred providers based on CM/GC's previous experience for quality of work, on-time delivery, and ability to complete work within bid amounts. Submission of this list is for information and discussion purposes only and not for prequalification. The review of this list will not require the OPT to investigate the qualifications of proposed Subcontractors and Suppliers, nor does it waive the right of Owner to later object to or reject any proposed Subcontractor or Supplier when bids are considered. CM/GC may submit a Change Proposal for any increase in the Guaranteed Maximum Price if this change is made after the GMP has been established.

D. Recommend to the OPT a schedule for procurement of long-lead time items required to meet the project schedule. Assist the OPT with the procurement of these long-lead items by obtaining competitive bids for these items under a separate Work Authorization.

E. Identify critical elements of the Work that may require special procurement processes, such as prequalification of Subcontractors or Suppliers, requirement of certified or prequalified installers, or alternative contracting methods.

F. Advise the Owner of market conditions, bid issues, design issues, or other factors which may have had an impact causing bid prices to be higher than estimated. Discuss opportunities for bringing the Project within budget with the Owner and the Owner's Advisor, in consultation with the Engineer to assist with deciding on how to proceed.

1.14 Construction Management Software

A. CM/GC shall provide, manage, support, and deliver a construction management software.

B. Software shall include integration with Engineer's computer aided design (CAD) and building information modeling (BIM) systems.

C. Post-Construction/Commissioning/Startup, software shall be capable of delivering all necessary files, drawings, models, etc. to the Owner in an organized and digestible package without requiring the owner to maintain any type of software licensing

Article 2 – Additional Preconstruction Services

2.1 Value Engineering Studies

A. Participate in at a minimum three Value Engineering reviews/workshops, to occur at the 30%, 60%, and 90% design phases as is necessary to assist in identifying ways to improve value to the Owner or reduce the cost for the project. Provide cost estimates to quantify potential cost savings to reduce the overall cost for the Project.

B. Assist OPT in conducting a workshop to identify potential changes that could reduce the cost of the Project or increase the value of the Project by more than the cost of the changes. Present selected alternatives for more detailed evaluation. The detailed evaluation will consider cost, ability to implement the changes, technical analysis, and the impact of changes on the Project. Ideas that pass the technical and economic analysis, and merit incorporation into the design of the Project, will be presented, in a draft report, as a proposal to the OPT for consideration. Incorporate responses of the OPT in the final report.

C. Review and comment on deliverables, which include draft and final value engineering recommendation reports.

2.2 Start Up and Commissioning Program

A. Provide CM/GC's organizational structure for startup and commissioning. Identify the individuals from CM/GC, Subcontractors, and Suppliers actively involved in the process. Identify testing personnel required for startup, including independent testing agencies. Work with Owner's Advisor to develop a table of roles and responsibilities for CM/GC team and the OPT.

B. Develop a written start up and commissioning program consistent with the requirements of the Contract Documents. Write the plan in a way that will allow specific details to be added or information updated as equipment and materials are purchased and delivered.

C. Identify all systems to be included in the startup plan, each item of equipment involved with each system and the interface between each item of equipment and other operating equipment. Identify how each equipment component fits into operations of the completed facility.

D. Identify control systems associated with operating the system or facility, and how each is used to start-up, operate, and shut down its associated system. Identify prerequisite conditions for startup and testing for each system and facility. Identify conditions which would merit termination of startup or testing procedures.

E. Compile a list of all documents required for startup, including Contract Documents, Shop Drawings, operations and maintenance manuals, training requirements, verification of warranty information, lists of spare parts and their location, and contact information for manufacturer's representatives to be included in startup readiness testing /verification and performance testing.

F. Identify testing required for factory witness testing, startup readiness verification, equipment and performance testing, and functional and performance testing.

G. Provide a preliminary schedule for startup and commissioning plans which can be updated as more detailed information is available. Incorporate this schedule in the master schedule and construction schedule for the Project.

2.3 Surveys and Drawings

A. Provide field surveying required for the preparation of designs and drawings.

B. Provide Geographic Information System (GIS) mapping services or assistance with these services.

C. Prepare property, boundary, and right-of-way surveys; prepare easement and deed descriptions; conduct related title searches and examination of deed records.

2.4 Regulatory Agencies

A. Assist OPT in preparing applications and supporting documents for government grants, loans, or planning advances, and providing data for detailed applications.

B. Support the OPT in meeting and coordinating with the Utah Division of Environmental Quality, Salt Lake County Flood Control, Salt Lake City Public Utilities, City of Cottonwood Heights, and any other applicable governing or regulatory agencies.

2.5 Additional Inspections and Quality Management

A. Provide shop, mill, or laboratory inspections of materials and equipment, or field inspections of materials and equipment other than as required as Basic Services.

B. Unscheduled Post-Completion Inspections as required.

2.6 Studies, Reports, and Investigations

A. No geotechnical investigations, studies, or reports will be required as part of the CM/GC proposal. Any additional geotechnical investigations deemed necessary would be negotiated separately and issued as an amendment to this Agreement.

2.7 Additional Copies of Documents

A. Furnish additional sets of printed documents created by the CM/GC.

Article 3 – Basic Procurement Services

3.1 Project Management

A. Participate in Project Meetings

1. Participate in kick-off meeting for Procurement Services. Be prepared to discuss changes in CM/GC's team and organization structure for Procurement Services, assignments of responsibilities, and CM/GC's plan for implementation of Procurement Services.
2. Participate in periodic meetings with the OPT to review progress, coordinate efforts, and discuss planned activities related to procurement. It is anticipated that these progress

meetings will occur **weekly** at times when procurement activities for Work Packages are underway.

B. Provide administration of Agreement for CM/GC Procurement Services, including Applications for Payment, progress reporting, management of CM/GC staff, schedule for services, and deliverables.

3.2 Assembling Work Packages

A. Assemble appropriate bid documents for distribution to prospective bidders for Work Packages in accordance with the procurement strategies defined in the Construction Management Plan and Procurement Strategy Plan (see Basic Preconstruction Services).

3.3 Advertise for Bids

A. Publicly advertise each Work Package, soliciting bids from Subcontractors and Suppliers for each Work Package in accordance with the applicable provisions of Laws and Regulations.

B. Maintain a list of all entities that have requested bid documents for each Work Package (plan holders) until bids are received. Provide updates of the plan holders as required by the Owner’s Advisor.

C. Encourage multiple Subcontractors and Suppliers to submit bids on the Work Package so a minimum of three bids are received for each Work Package.

3.4 Pre-Bid Conferences

A. Conduct a pre-bid conference with prospective Subcontractor and Suppliers to familiarize them with:

1. Bid opportunities for Work Packages;
2. Special requirements of the Contract Documents;
3. Prevailing wage requirements, if any;
4. Equal employment opportunity requirements, if any; and
5. Diverse Business Enterprise requirements, if any.

B. Obtain responses from the OPT, in consultation with the Engineer, to all questions at pre-bid conferences requiring amendment to the Contract Documents. Prepare a record of the discussions at the pre-bid conference to assist the Owner’s Advisor and Engineer in preparing Addenda as appropriate. Review and comment on Addenda prepared by the Owner’s Advisor in consultation with the Engineer to incorporate responses to questions raised during or as a result of the pre-bid conference.

3.5 Addenda

A. Receive draft Addenda prepared by the Owner’s Advisor in consultation with the Engineer. Review the draft Addenda for clarity, consistency, and coordination, and provide comments to Owner’s Advisor and Engineer. By conducting such reviews and providing comments, CM/GC does not assume responsibility or liability, in whole or in part, for all or any part of the Project design or the content of the Contract Documents.

B. Distribute Addenda regarding any changes in the bid process or Contract Documents to all plan holders. Require verification from plan holders that Addenda have been received.

3.6 Opening Bids

A. Open bids submitted by Subcontractors and Suppliers for all Work Packages at the time and location so indicated in the advertisement for bid or as altered by addendum sent to all plan holders.

B. Where allowed by state Laws and Regulations, the CM/GC may be able to self-perform portions of the Work The CM/GC will be allowed to self-perform that Work for which the CM/GC's bid demonstrates that it will provide the best value in terms of cost, schedule, and quality of Work. Bids will be required from subcontractors and suppliers to provide best value in terms of cost, schedule, and quality of work in accordance with the provisions below.

C. Review all bids submitted in the presence of the Owner and the Owner's Advisor in a way that does not disclose the contents of the bid during the selection process to any entity other than the OPT and CM/GC.

D. Compare bids received to the line-item budget prepared for the Project prior to the opening of bids. Resolve discrepancies or overlaps in bid packages to eliminate duplications or the omission of elements of the Work that are not included in Construction Support Costs. Discuss each bid received with the OPT and recommend which bid received will provide best value for the Owner.

E. Evaluate any substitutions or alternate bids offered by bidders. Owner's Advisor, in consultation with the Engineer, will evaluate the substitutions or alternate bids to determine the technical merit and to determine that the modifications offered are consistent with the intent of the Contract Documents. The Owner, in consultation with the Owner's Advisor and Engineer, will determine if the substitution or alternate is acceptable.

F. The Owner will adjust the GMP if the Owner requires the CM/GC to contract with a Subcontractor or Supplier different from the entity submitting the bid on which the GMP is based. This adjustment will be made in the GMP or by Change Order if the GMP has already been established by a Work Authorization.

G. In the case of the need to replace a Subcontractor or Supplier under the provisions of the General Conditions Paragraph 7.10.O, Owner may direct the CM/GC to obtain competitive bids for this Work if the cost proposed by the CM/GC or substitute Subcontractor or Supplier for this Work differs from the line-item estimate by more than ten percent of the line-item amount. The CM/GC will not be required to advertise this Work as required in Paragraph 1.02.

H. Make all bids public after the award of contracts or not later than seven days after the date of the final selection of bids or proposals.

I. Owner will approve all bids, work packages and sub-work packages and will utilize best-value selection.

3.7 Assumptions

A. The CM/GC will be responsible for developing up to 7 GMPs – the actual number may be more or less.

Article 4 – Additional Procurement Services

4.1 Prequalification of Bidders

A. Prequalify bidders for the Project using the OPT's prequalification process. If the OPT does not have a prequalification process in place for this Project, CM/GC will assist the OPT in developing and implementing a prequalification process. Any prequalification of bidders must also be in accordance with applicable state Laws and Regulations.

4.2 Additional Work Packages

A. Providing additional effort to procure Work Packages in addition to the number of Work Packages set out in Paragraph 3.2.

EXHIBIT B – BASIS OF COMPENSATION

Table 1—Estimated Contract Price

Item	Item Title	Calculation	Comment
1	Compensation for CM/GC Services	= **Table 2**, **R 7**	Transfers amount for Total Cost for CM/GC Services from Table 2—Compensation for CM/GC Services.
2	Total Construction Support Costs	**[Enter Amount, if any]**	Part of cost of Work.
3	Estimated Cost of the Work	**[Enter Amount]**	Enter the Estimated Cost of the Work prepared by CM/GC. This number is used to determine an estimated Guaranteed Maximum Price (GMP) which is included in calculating an estimated Contract Price.
4	CM/GC Fee Percentage	**[Enter %]**	Enter the proposed or negotiated CM/GC Fee Percentage.
5	CM/GC Fee	**(3 x 4)**	Worksheet calculates the amount of the CM/GC Fee by multiplying the Estimated Cost of the Work times the CM/GC Fee Percentage. This is the amount of CM/GC Fee based on Estimated Cost of the Work. Fee is earned as a percentage of the actual cost on approved Work Authorizations.
6	Cost of the Work with CM/GC Fee	**(3 + 5)**	The Cost of the Work with CM/GC Fee by adding the Estimated Cost of the Work to the CM/GC Fee.
7	CM/GC Contingency Allowance	**[Enter Amount]**	CM/GC Contingency Allowance by multiplying the CM/GC Contingency Allowance Percentage times the Estimated Cost of the Work.
8	Estimated Guaranteed Maximum Price	**6+7**	Estimated GMP by summing the cost for Construction Support Costs, Cost of the Work with CM/GC Fee, and CM/GC and Other Contingency Allowances.
9	Owner's Contingency Allowance	**[Enter Amount]**	Enter the Owner's Contingency Allowance amount if the Owner's Contingency Allowance is to be include in the Contract Price.
10	Total Amount of Contract Award	**(1 + 8 + 9)**	The Total Amount of the Contract Award (amount for which Contract will be awarded) by summing the Cost for CM/GC Services, the Estimated Guaranteed Maximum Price (calculated using the selected compensation method) and the Owner's Contingency Allowance.
11	Substantial Completion Date	**[Enter Date]**	Enter the proposed or negotiated days to Substantial Completion in accordance with the applicable General Conditions or Supplementary Conditions provisions.
12	Final Completion Date	**[Enter Date]**	Enter the proposed or negotiated days to Final Completion in accordance with the applicable General Conditions or Supplementary Conditions provisions.

Table 2—Compensation for CM/GC Services

Item	Item Title	Calculation	Comment
1	Total Cost for CM/GC Basic Preconstruction Services	**[Enter Amount]**	
2	Total Cost for CM/GC Additional Preconstruction Services	**[Enter Amount, if any]**	
3	Total Cost for CM/GC Preconstruction Services	**(1 + 2)**	
4	Total Cost for CM/GC Basic Procurement Services	**[Enter Amount]**	
5	Total Cost for CM/GC Additional Procurement Services	**[Enter Amount, if any]**	
6	Total Cost for CM/GC Procurement Services	**(4 + 5)**	
7	Total Cost for CM/GC Services	**(3 + 6)**	This number is transferred to **Table 1 R 1** to be included in the calculation of the Contract Price. It is not part of the Guaranteed Maximum Price for Work

CM/GC shall reproduce Table 2 & 3 in the presented format as part of their proposal.

Table 3 - Table of Costs

A Table of Costs shall be submitted by the CM/GC and shall include at a minimum the following information:

Key Personnel	**Rate ($)**	**Hours**	**Total ($)**
Additional Staff	**Rate ($)**	**Hours**	**Total ($)**
Expenses			
Payroll Taxes			
Insurances (Labor Burden) Rate			
Rented and Leased Equipment Rates			
		Total	

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION MANAGER AT RISK CONTRACT

ARTICLE 1— DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

A. Wherever used in the Proposal Documents or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and Paragraphs, and the titles of other documents or forms.

1. Addenda—Written or graphic instruments issued prior to the receipt of Proposals by the Owner which clarify, correct, or change the Proposal Documents or the proposed Contract Documents.

2. Agreement—The written instrument, including its attached exhibits, executed by Owner and Construction Manager at Risk, that sets forth the Contract Price and Contract Times, identifies the Owner, Construction Manager at Risk, Owner's Advisor, and Engineer, and designates the specific items that are Contract Documents.

3. Application for Payment—The document prepared by Construction Manager at Risk, in a form acceptable to Owner's Advisor, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. Change Order—A document which is signed by Construction Manager at Risk and Owner after the Effective Date of a governing Work Authorization and authorizes an addition, deletion, or revision in the authorized Work, an adjustment in the applicable incremental Guaranteed Maximum Price or Contract Times, or other revision to such Work Authorization.

5. Change Proposal—A written request by Construction Manager at Risk, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Guaranteed Maximum Price or Contract Times; contesting a decision by Owner's Advisor, in consultation with Engineer, concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

6. Claim

    a. A demand or assertion by Owner directly to Construction Manager at Risk, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting a decision rendered by Owner's Advisor, in consultation with Engineer, concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents, or regarding a Change Proposal; or seeking other relief with respect to the terms of the Contract.

    b. A demand or assertion by Construction Manager at Risk directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Owner's Advisor's decision, made in consultation with Engineer, regarding a Change Proposal.

c. A demand or assertion by Owner or Construction Manager at Risk, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.3, concerning disputes arising after Owner's Advisor has issued a recommendation of final payment.

d. A demand for money or services by a third party is not a Claim.

7. CMAR Contingency Allowance—An allowance used to reimburse CMAR for costs due to unforeseen causes, unintentional errors, or events which cannot specifically be anticipated at the time Work Authorizations are issued, as set forth in the Agreement, Article 8.

8. CMAR Fee—The component of the Guaranteed Maximum Price that supplements the CMAR's compensation for the Cost of the Work, consisting of either a fixed fee (a stipulated price or lump sum amount) or a percentage of the Cost of the Work, as set forth in the Agreement.

9. CMAR Services—Those specific planning, organizational, and advisory services to be performed or furnished by CMAR, consisting collectively of Preconstruction Services, Procurement Services, and any other services authorized by Owner's Advisor and expressly identified in such authorization as CMAR Services. CMAR Services are not part of the Work.

10. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

11. Construction Manager at Risk (CMAR)—The entity that has entered into the Contract with Owner. Under the Contract the CMAR will provide CMAR Services and construct the Work set out in the Drawings and Specifications, as duly authorized, using the Construction Manager at Risk project delivery method.

12. Construction Period—The period from the commencement of Work on the first Work Authorization until Substantial Completion of the Work. This is the number of days for which Construction Support Costs will be compensated.

13. Construction Support Costs—See Agreement, Article 5.

14. Contract—The entire and integrated written agreement between Owner and Construction Manager at Risk concerning the CMAR Services and the Work.

15. Contract Amendment—A document signed by Owner and Construction Manager at Risk which modifies the terms and conditions of the Contract, including but not limited to modifications of the time or compensation provisions of the Agreement and the scope of CMAR Services. A Contract Amendment is not used to make changes in the Work or to a Work Authorization, such changes properly being made in a Change Order or supplemental Work Authorization.

16. Contract Documents—Those items so designated in the Agreement, and which together comprise the Contract.

17. Contract Price—The money that Owner has agreed to pay Construction Manager at Risk for performance and completion of the CMAR Services and the Work, in accordance with the Contract Documents. The Contract Price may be subdivided into component parts based on authorized CMAR Services and Work Authorizations. The Contract Price includes the CMAR's compensation for CMAR Services, Construction Support Costs,

Cost of the Work, the CMAR Fee, CMAR Contingency Allowances, and the Owner's Contingency Allowance.

18. Contract Times—The number of days or the dates by which Construction Manager at Risk shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work and all required services. The Contract Times may be subdivided into component parts based on Work Authorizations and authorized CMAR Services.

19. Contractor—The term "Contractor," if used in the Contract, means Construction Manager at Risk.

20. Cost of the Work—The sum of eligible costs incurred by CMAR for the performance of the Work, as allowed by the Cost of the Work provisions set forth in the Agreement. Cost of the Work as a defined term does not include Construction Support Costs.

21. Drawings—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Construction Manager at Risk.

22. Effective Date of the Contract—The date indicated in the Agreement, on which the Contract becomes effective.

23. Electronic Document—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.

24. Electronic Means—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

25. Engineer—The individual or entity that has primary responsibility for preparing or furnishing the Drawings and Specifications and is named as Engineer in the Agreement.

26. Estimated Cost of the Work—An estimate of the Cost of the Work prepared by the Owner for use (a) during the CMAR selection process in evaluating Proposals submitted in response to the Request for Proposals and (b) during the early stages of the Contract in calculating an Estimated Guaranteed Maximum Price until the design has progressed to the point where Owner and CMAR can mutually agree upon a Guaranteed Maximum Price.

27. Estimated Guaranteed Maximum Price—A preliminary Guaranteed Maximum Price calculated on the basis of the Estimated Cost of the Work. This is a non-binding price used on an interim basis for comparison or estimation of Owner's Construction Budget until the design has progressed to the point that a Guaranteed Maximum Price for the Work is established, or a Guaranteed Maximum Price for a portion of the Work is established by issuance of a Work Authorization by the Owner's Advisor.

28. Field Order—A written order issued by Owner's Advisor which requires minor changes in the Work but does not change the Guaranteed Maximum Price or the Contract Times.

29. Final Completion—The point at which the Work is complete in accordance with the Contract Documents, items and documents required by the Contract Documents have been accepted by the Owner, all required services have been completed, and the Contract is ready for final payment.

30. Guaranteed Maximum Price (GMP)—The maximum amount to be paid by Owner to CMAR for the sum of the Construction Support Costs, plus Cost of the Work, plus the CMAR Fee, all as set forth in the Agreement.
31. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
    a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
    b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
    c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
32. Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
33. Liens—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
34. Milestone—A principal event in the performance of the Work that the Contract requires Construction Manager at Risk to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
35. Notice of Award—The written notice by Owner stating that Owner will enter into the Construction Manager at Risk contract with the selected Construction Manager at Risk.
36. Owner—The entity with which Construction Manager at Risk has contracted regarding the CMAR Services and the Work, and which has agreed to pay Construction Manager at Risk for the performance of the CMAR Services and the Work, pursuant to the terms of the Contract.
37. Owner's Advisor (OA)—The individual or entity named as Owner's Advisor in the Agreement. The Owner's Advisor provides services to the Owner, as an advisor and representative.
38. Owner's Construction Budget (Budget)—The amount budgeted by the Owner to pay CMAR to perform and complete the Work in accordance with the Contract Documents. This amount includes compensation for Cost of the Work, the CMAR Fee, and Construction Support Costs, but does not include compensation for CMAR Services.
39. Owner's Project Team (OPT)—As used in this Contract, refers to Owner, Owner's Advisor and Engineer, collectively.
40. Preconstruction Services—Those planning, management, and support services to be performed or furnished by CMAR as set forth in the Scope of CMAR Preconstruction Services Exhibit to the Agreement. Preconstruction Services are separate and distinct from Procurement Services, and from the performance of the Work itself, and are a component of CMAR Services.
41. Preconstruction Services Price—The total amount to be paid to CMAR for the Preconstruction Services described in the Scope of CMAR Preconstruction Services Exhibit to the Agreement.
42. Procurement Services—Those services relating to assembling Work Packages and procurement of construction Subcontractors, Suppliers, and materials and equipment, to be performed or furnished by CMAR as set forth in the procurement-related provisions of

the Scope of CMAR Services Exhibit to the Agreement. Procurement Services are separate and distinct from Preconstruction Services, and from the performance of the Work itself, and are a component of CMAR Services.

43. Procurement Services Price—The total amount to be paid to CMAR for providing the Procurement Services described in the Scope of CMAR Procurement Services Exhibit to the Agreement.

44. Progress Schedule—A schedule, prepared and maintained by Construction Manager at Risk, describing the sequence and duration of the activities comprising Construction Manager at Risk's plan to accomplish the Work within the Contract Times.

45. Project—The total undertaking to be accomplished for Owner by construction managers, engineers, contractors, advisors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the CMAR Services and the Work to be performed under the Contract are a part.

46. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

47. Schedule of Submittals—A schedule, prepared and maintained by Construction Manager at Risk, of required Submittals and the time requirements for review of the Submittals.

48. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Construction Manager at Risk and submitted by Construction Manager at Risk to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

49. Site—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Construction Manager at Risk.

50. Specifications—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

51. Subcontractor—An individual or entity having a direct contract with Construction Manager at Risk or with any other Subcontractor for the performance of a part of the Work.

52. Submittal—A written or graphic document, prepared by or for Construction Manager at Risk, which the Contract Documents require Construction Manager at Risk to submit to Owner's Advisor, or that is indicated as a Submittal in the Schedule of Submittals accepted by Owner's Advisor. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether approved or accepted by Owner's Advisor or Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

53. Substantial Completion—The time at which the Work, or a specified part thereof, has progressed to the point where, the Work, or the specified part thereof, is sufficiently complete, in accordance with the Contract Documents, so that the Work, or the specified part thereof, can be utilized for the purposes for which it is intended. The terms

"substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

54. Supplementary Conditions—The part of the Contract that amends or supplements these General Conditions.

55. Supplier—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Construction Manager at Risk or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Construction Manager at Risk or a Subcontractor.

56. Technical Data

    a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures, except Underground Facilities, or (2) Hazardous Environmental Conditions at the Site.

    b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Construction Manager at Risk.

    c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated in the Drawings.

57. Underground Facilities—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

58. Unit Price Work—Work to be paid for based on unit prices.

59. Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

60. Work Authorization—A document issued by Owner's Advisor and signed by Owner and CMAR which identifies and defines new Work Packages and establishes the amount to be paid, times for completion, and any special or supplementary provisions applicable to the authorized Work.

61. Work Package–A specific portion of the Work developed by Engineer and Owner's Advisor in collaboration with the CMAR and subsequently authorized by a Work Authorization.

62. Work Change Directive—A written directive issued by Owner's Advisor to Construction Manager at Risk on or after the Effective Date of a governing Work Authorization, signed

by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Proposal Documents or Contract Documents, have the indicated meaning.

B. Intent of Certain Terms or Adjectives–The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Owner’s Advisor or Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Owner’s Advisor or Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents, unless there is a specific statement indicating otherwise. The use of any such term or adjective is not intended to and will not be effective to assign to Owner’s Advisor or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. Day–The word “day” means a period of 24 hours measured from midnight to the next midnight.

D. Defective–The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:

1. does not conform to the Contract Documents;

2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

3. has been damaged prior to Owner’s Advisor’s recommendation of final payment unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.04 or Paragraph 15.05.

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site, or some other specified location ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for their intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for their intended use.

4. If the Contract Documents establish an obligation of CMAR with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then CMAR shall furnish and install said services, materials, or equipment complete and ready for their intended use.

F. Contract Price or Contract Times–References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2— PRELIMINARY MATTERS

2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance

A. Performance and Payment Bonds–When CMAR delivers the signed counterparts of a Work Authorization to Owner, CMAR shall also deliver to Owner the performance bond and payment bond, if the Contract requires CMAR to furnish such bonds, or confirm that existing performance and payment bonds have been supplemented to account for the additional authorized Work.

B. Evidence of CMAR's Insurance–When CMAR delivers the signed counterparts of the Agreement to Owner, CMAR shall also deliver to Owner, with copies to each additional insured, as identified in the Contract, the certificates, endorsements, and other evidence of insurance required to be provided by CMAR in accordance with Article 6, except to the extent the Supplementary Conditions or Agreement expressly establish other dates for delivery of specific insurance policies.

C. Evidence of Owner's Insurance–After receipt of the signed counterparts of the Agreement and all required insurance documentation, Owner shall promptly deliver to CMAR, with copies to each additional insured, as identified in the Contract, the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 Copies of Documents

A. Owner shall furnish to CMAR four printed copies of the Contract, including one fully signed counterpart of the Agreement, and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to CMAR for review. Owner may delegate the responsibilities under this provision to Owner's Advisor.

2.03 Electronic Transmittals

A. Except as otherwise stated elsewhere in the Contract, the Owner, Owner's Advisor, Engineer, and CMAR may send, and shall accept, Electronic Documents transmitted by Electronic Means.

B. If the Contract does not establish protocols for Electronic Means, then Owner, Owner's Advisor, and CMAR shall jointly develop such protocols.

C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

2.04 Construction Management

A. In addition to providing CMAR Services, during the course of the Contract, and especially during the performance of the Work, CMAR will:

1. Organize and manage the resources required for construction of the Work, commissioning, and correction of defective Work after Substantial Completion of the Work.

2. Administer, coordinate, monitor, and report on construction progress and associated activities.

3. Assist the Owner's Advisor in collecting, disseminating, and storing documents and information.

4. Manage the Work to meet Contract goals and objectives.

5. Recommend action to the Owner related to the management of the Work.

B. Develop schedule and cost control systems to monitor and report on the progress of the overall Contract.

ARTICLE 3— CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project, or part thereof, to be constructed in accordance with the Contract Documents.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents, including any printed copies derived from such electronic versions, and the printed record version, the printed record version will govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Owner's Advisor, in consultation with Engineer, will issue clarifications and interpretations of the Contract Documents as provided herein.

F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and CMAR, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

G. Nothing in the Contract Documents creates:

1. any contractual relationship between Owner, Owner's Advisor, or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or

2. any obligation on the part of Owner, Owner's Advisor, or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws and Regulations

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of receipt of Proposals, except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, CMAR, Owner's Advisor, or Engineer from those set forth in the Contract Documents. No such provision or instruction will be effective to assign to Owner, Owner's

Advisor, or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

1. CMAR's Verification of Figures and Field Measurements–Before undertaking each part of the Work, CMAR shall carefully study the applicable Drawings and Specifications, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. CMAR shall promptly report in writing to Owner's Advisor any conflict, error, ambiguity, or discrepancy that CMAR discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Owner's Advisor, in consultation with Engineer, and, if appropriate, an amendment or supplement to the Contract is issued by Owner's Advisor pursuant to Paragraph 11.01.

2. CMAR's Review of Drawings and Specifications–If, while performing or providing CMAR Services, or during the performance of the Work, CMAR discovers any conflict, error, ambiguity, or discrepancy within the Drawings and Specifications, whether in draft or final form, or between such documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then CMAR shall promptly report it to Owner's Advisor in writing. CMAR shall not proceed with the Work affected thereby, except in an emergency as required by Paragraph 7.18, until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Owner's Advisor, in consultation with Engineer, and, if appropriate, an amendment or supplement to the Contract is issued by Owner's Advisor pursuant to Paragraph 11.01.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Drawings and Specifications take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Drawings and Specifications and:

   a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier, whether or not specifically incorporated by reference as a Contract Document; or

   b. the provisions of any Laws or Regulations applicable to the performance of the Work, unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation.

3.04 Interpretation of the Contract Documents

A. During the performance of the Work and until final payment, CMAR and Owner shall submit to the Owner's Advisor in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation) or relating to the performance or acceptability of the Work under the Contract Documents, as soon as possible after such matters arise.

B. Owner's Advisor will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, and if appropriate initiate a change to the Contract Documents. In determining its response, Owner's Advisor will consider CMAR's prior involvement and obligations with respect to reviewing and commenting on draft design documents during CMAR's provision of CMAR Services. Owner's Advisor's written clarification, interpretation, or decision (1) will be based, when applicable, on consultation with Engineer, and (2) will be final and binding on CMAR, unless CMAR appeals by submitting a Change Proposal, and on Owner, unless Owner appeals by filing a Claim.

3.05 Reuse of Documents

A. CMAR and its Subcontractors and Suppliers shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents, or copies of any thereof, prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes CMAR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4— COMMENCEMENT AND PROGRESS OF THE WORK

4.01 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the Effective Date of the Contract, or as specified in Work Authorizations.

4.02 Starting the Work

A. CMAR shall start to perform the Work promptly upon receipt of the first Work Authorization. No Work may be done at the Site prior to such authorization.

4.03 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction. CMAR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. CMAR shall report to Owner's Advisor whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and CMAR shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 Progress Schedule

A. CMAR shall adhere to the Progress Schedule established as part of Preconstruction Services, as it may be adjusted from time to time as provided below.

1. CMAR shall submit to Owner's Advisor for its information proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.

B. CMAR shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and CMAR may otherwise agree in writing.

4.05 Delays in CMAR's Progress

A. If Owner, Owner's Advisor, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then CMAR shall be entitled to an equitable adjustment in Guaranteed Maximum Price or Contract Times.

B. CMAR shall not be entitled to an adjustment in Guaranteed Maximum Price or Contract Times for delay, disruption, or interference caused by or within the control of CMAR. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier will be deemed to be within the control of CMAR.

C. If CMAR's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, CMAR, and those for which they are responsible, then CMAR shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be CMAR's sole and exclusive remedy for the delays, disruption, and interference described in this Paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this Paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;

2. Abnormal weather conditions;

3. Acts or failures to act of third-party utility owners or other third-party entities, other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8; and

4. Acts of war or terrorism.

D. CMAR's entitlement to an adjustment of Contract Times or Guaranteed Maximum Price is limited as follows:

1. CMAR's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.

2. CMAR shall not be entitled to an adjustment in Guaranteed Maximum Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of CMAR. Such a concurrent delay by CMAR shall not preclude an adjustment of Contract Times to which CMAR is otherwise entitled.

3. Adjustments of Contract Times or Guaranteed Maximum Price are subject to the provisions of Article 11.

E. Each CMAR request or Change Proposal seeking an increase in Contract Times or Guaranteed Maximum Price must be supplemented by supporting data that sets forth in detail the following:

1. The circumstances that form the basis for the requested adjustment;

2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;

3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;

4. The number of days' increase in Contract Times claimed because of each such cause of delay, disruption, or interference; and

5. The impact on Guaranteed Maximum Price, in accordance with the provisions of Paragraph 11.07.

CMAR shall also furnish such additional supporting documentation as Owner or Owner's Advisor may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.

G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5— SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify CMAR in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CMAR must comply in performing the Work.

B. Upon reasonable written request, Owner shall furnish CMAR with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CMAR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. CMAR shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that CMAR has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. CMAR shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for CMAR's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the CMAR or those for which CMAR is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the CMAR or those for which CMAR is responsible, CMAR shall (a) take immediate corrective or remedial action as required by Paragraph 7.18, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Owner's Advisor, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, CMAR's performance of the Work, or because of other actions or conduct of the CMAR or those for which CMAR is responsible.

B. Removal of Debris During Performance of the Work–During the progress of the Work the CMAR shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.

C. Cleaning—Prior to Substantial Completion of the Work CMAR shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work CMAR shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading of Structures—CMAR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CMAR subject any part of the Work or adjacent structures or land to stresses or pressures that could damage said structures or decrease their durability.

5.03 Subsurface and Physical Conditions

A. Reports and Drawings—The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;

2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site, except Underground Facilities, that contain Technical Data; and

3. Technical Data described in such reports and drawings.

B. Underground Facilities—Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

C. Reliance by CMAR on Technical Data—CMAR may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then CMAR may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.55.b.

D. Limitations of Other Data and Documents—Except for such reliance on Technical Data, CMAR may not rely upon or make any claim against Owner, Owner’s Advisor, or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for CMAR’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CMAR, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;

3. the contents of other Site-related documents made available to CMAR, such as record drawings from other projects at or adjacent to the Site, or Owner’s archival documents concerning the Site; or

4. any CMAR interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

E. Confirmation of Site Conditions—As a part of Preconstruction Services CMAR will inform Owner if CMAR concludes that additional examination, investigation, exploration, testing, or study (Supplemental Investigations) of subsurface or physical conditions at the Site prior to commencement of construction would be advantageous, practical, and cost-effective, specifically identifying the nature and scope of any such recommended Supplemental Investigations. If Owner authorizes CMAR to conduct such Supplemental Investigations, through CMAR's own personnel or through a qualified consultant, or if Owner conducts such Supplemental Investigations, through Owner's Advisor, the Engineer, or a consultant, then CMAR will be entitled to rely on the results of the Supplemental Investigations, together with the Technical Data cited above, in planning and pricing construction at the Site.

F. If Owner does not authorize any Supplemental Investigations of Site conditions, then CMAR will proceed with planning and pricing construction based on the Technical Data made available to it.

G. CMAR will be bound by any additional knowledge regarding Site conditions that CMAR gains while providing Preconstruction services.

5.04 Differing Subsurface or Physical Conditions

A. Notice by CMAR–If CMAR believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data or Supplemental Investigations results on which CMAR is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
2. is of such a nature as to require a change in the Drawings or Specifications;
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CMAR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith, except in an emergency as required by Paragraph 7.18, notify Owner's Advisor in writing about such condition. CMAR shall not further disturb such condition or perform any Work in connection therewith, except with respect to an emergency, until receipt of a written statement permitting CMAR to do so.

B. Owner's Advisor's Review–After receipt of written notice as required by the preceding paragraph, Owner's Advisor, in consultation with Engineer, will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from CMAR; prepare recommendations to Owner regarding the CMAR's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Owner's Advisor's findings, conclusions, and recommendations.

C. Owner's Statement to CMAR Regarding Site Condition–After receipt of Owner's response and instructions regarding Owner's Advisor's written findings, conclusions, and recommendations, Owner's Advisor will issue a written statement to CMAR regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and informing CMAR of Owner's Advisor's written findings, conclusions, and recommendations, as revised based on Owner's response and instructions.

D. Early Resumption of Work–If at any time Owner's Advisor, in consultation with Engineer, determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Owner's Advisor's review or Owner's Advisor's issuance of its statement to CMAR, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then Owner's Advisor may instruct CMAR to resume such Work.

E. Possible Price and Times Adjustments

1. CMAR shall be entitled to an equitable adjustment in Guaranteed Maximum Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in CMAR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;

b. With respect to Work that is paid for on a unit price basis, any adjustment in Guaranteed Maximum Price will be subject to the provisions of Paragraph 13.02; and

c. CMAR's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

2. CMAR shall not be entitled to any adjustment in the Guaranteed Maximum Price or Contract Times with respect to a subsurface or physical condition if:

a. CMAR knew of the existence of such condition at the time CMAR made a commitment to Owner with respect to Guaranteed Maximum Price and Contract Times through a Work Authorization;

b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Proposal Documents or Contract Documents to be conducted by or for CMAR prior to CMAR's making such commitment;

c. The existence of such condition reasonably could have been discovered or revealed as a result of practical and cost-effective Supplemental Investigations, as defined in Paragraph 5.03.E, but CMAR did not recommend any such Supplemental Investigations to Owner; or

d. CMAR failed to give the written notice required by Paragraph 5.04.A.

3. If Owner and CMAR agree regarding CMAR's entitlement to and the amount or extent of any adjustment in the Guaranteed Maximum Price or Contract Times, then any such adjustment will be set forth in a Change Order.

4. CMAR may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Guaranteed Maximum Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to CMAR regarding the subsurface or physical condition in question.

F. Underground Facilities; Hazardous Environmental Conditions–Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 Underground Facilities

A. CMAR's Responsibilities–Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all the following is included in the Guaranteed Maximum Price, and CMAR shall have full responsibility for:

1. collaborating with Engineer during the design phase, as part of Preconstruction Services, to improve the accuracy and completeness of information regarding Underground Facilities that Engineer gathers and depicts in the final Contract Documents;

2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities prior to construction;

4. coordination of the Work with the owners, including Owner, of such Underground Facilities, during construction; and

5. the safety and protection of all existing Underground Facilities at the Site and repairing any damage thereto resulting from the Work.

B. Notice by CMAR–If CMAR believes that an Underground Facility that is uncovered or revealed at the Site during construction was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then CMAR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith, except in an emergency as required by Paragraph 7.18, notify Owner and Owner's Advisor in writing regarding such Underground Facility.

C. Owner's Advisor's Review

1. Owner's Advisor will:

   a. promptly review the Underground Facility in consultation with Engineer, and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;

   b. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner, and if necessary, issue any preliminary instructions to CMAR regarding the CMAR's resumption of Work in connection with the Underground Facility in question;

   c. obtain any pertinent cost or schedule information from CMAR; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and

   d. advise Owner and Engineer in writing of Owner's Advisor's findings, conclusions, and recommendations.

During such time, CMAR shall be responsible for the safety and protection of such Underground Facility.

D. Owner's Advisor's Statement to CMAR Regarding Underground Facility–After receipt of Owner's response to and recommendations regarding Owner's Advisor's written findings, conclusions, and recommendations, Owner's Advisor will issue a written statement to CMAR regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and informing CMAR of Owner's Advisor's written findings, conclusions, and recommendations, as revised based on Owner's response and instructions.

E. Early Resumption of Work–If at any time Owner's Advisor, in consultation with Engineer, determines that Work in connection with the Underground Facility may resume prior to completion of Owner's Advisor's review or Owner's Advisor's issuance of its statement to CMAR, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then Owner's Advisor may instruct CMAR to resume such Work.

F. Possible Price and Times Adjustments

1. CMAR shall be entitled to an equitable adjustment in the Guaranteed Maximum Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in CMAR's cost of, or time required for, performance of the Work; subject, however, to the following:

   a. With respect to Work that is paid for on a unit price basis, any adjustment in Guaranteed Maximum Price will be subject to the provisions of Paragraph 13.02;

   b. CMAR's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and

   c. CMAR gave the notice required in Paragraph 5.05.B.

2. If Owner and CMAR agree regarding CMAR's entitlement to and the amount or extent of any adjustment in the Guaranteed Maximum Price or Contract Times, then any such adjustment will be set forth in a Change Order.

3. CMAR may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Guaranteed Maximum Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to CMAR regarding the Underground Facility in question.

4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE Manual 38, Standard Guideline for Investigating and Documenting Existing Utilities, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, CMAR's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 Hazardous Environmental Conditions at Site

A. Reports and Drawings–The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;

2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

3. Technical Data described in such reports and drawings.

B. Reliance by CMAR on Technical Data Authorized–CMAR may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then CMAR may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.55.b. Except for such reliance on Technical Data, CMAR may not rely upon or make any claim against Owner, Owner's Advisor, or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for CMAR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CMAR, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CMAR interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

C. CMAR shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. CMAR shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by CMAR, Subcontractors, Suppliers, or anyone else for whom CMAR is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If CMAR encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if CMAR or anyone for whom CMAR is responsible creates a Hazardous Environmental Condition, then CMAR shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby, except in an emergency as required by Paragraph 7.18; and (3) notify Owner, Owner's Advisor, and Engineer, and promptly thereafter confirm such notice in writing. Owner shall promptly consult with Owner's Advisor and Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Owner's Advisor and Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide CMAR with the written notice required by Paragraph 5.06.E. If CMAR or anyone for whom CMAR is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition and impose a set-off against payments to account for the associated costs.

F. CMAR shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to CMAR either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. If Owner and CMAR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Guaranteed Maximum Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by CMAR, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, CMAR may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.

H. If, after receipt of such written notice, CMAR does not agree to resume such Work based on a reasonable belief it is unsafe or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless CMAR, Subcontractors, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs, arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by CMAR or by anyone for whom CMAR is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

J. To the fullest extent permitted by Laws and Regulations, CMAR shall indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of construction managers engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by CMAR or by anyone for whom CMAR is responsible, or to a Hazardous Environmental Condition created by CMAR or by anyone for whom CMAR is responsible. Nothing in this Paragraph 5.06.J obligates CMAR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6— BONDS AND INSURANCE

6.01 Performance, Payment and Other Bonds

A. No later than the execution of the first Work Authorization the CMAR shall furnish a performance bond and a payment bond, each in an amount at least equal to the Guaranteed Maximum Price, as security for the faithful performance and payment of CMAR's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment on the Contract becomes due or until completion of the correction period for the Contract specified in Paragraph 15.09, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract. The premium costs of such bonds are:

1. included in Construction Support Cost if purchased for the Work based on the Estimated Guaranteed Maximum Price established with the Agreement; or

2. a reimbursable Cost of the Work if the bonds are purchased with the first Work Authorization and increased as subsequent Work Authorizations are approved.

B. CMAR shall also furnish such other bonds, if any, as are required by the Supplementary Conditions or other provisions of the Contract.

C. All bonds must be in the form included in the Contract Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570, as amended and supplemented by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

D. CMAR shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.

E. If the surety on a bond furnished by CMAR is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then CMAR shall promptly notify Owner and Owner's Advisor in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.

F. If CMAR has failed to obtain a required bond, Owner may exclude the CMAR from the Site and exercise Owner's termination rights under Article 16.

G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.

H. Upon request to CMAR from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, CMAR shall provide a copy of the payment bond to such person or entity.

I. Performance Bonds required of certain Subcontractors and Suppliers—see Paragraph 7.10.O.

6.02 Insurance—General Provisions

A. Owner and CMAR shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.

B. All insurance required by the Contract to be purchased and maintained by Owner or CMAR shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract must have an A.M. Best Financial Strength Rating of A- or better, and an A.M. Best Financial Size Category of VII or larger.

C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not adequate to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.

D. CMAR shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that CMAR has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, CMAR shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions, if allowed, and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, CMAR, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

E. Owner shall deliver to CMAR, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract, if any. Upon request by CMAR or any other insured, Owner shall also provide other evidence of such required insurance, if any, including but not limited to copies of policies, documentation of applicable self-insured retentions, if allowed, and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.

F. Failure of Owner or CMAR to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or CMAR to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain, and maintain such insurance.

G. In addition to the liability insurance required to be provided by CMAR, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by CMAR, and CMAR cannot rely upon Owner's liability policies for any of CMAR's obligations to the Owner, Owner's Advisor, Engineer, or third parties.

H. CMAR shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner, Owner's Advisor and Engineer, and any other individuals or entities identified in the Supplementary Conditions as additional insureds on CMAR's liability policies, on each Subcontractor's commercial general liability policy; and

2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.

I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any cancellation of the required coverage.

J. If CMAR has failed to obtain and maintain required insurance, CMAR's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs, including but not limited to the cost of purchasing necessary insurance coverage, and exercise Owner's termination rights under Article 16.

K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect, but is in no way obligated, to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect CMAR or CMAR's interests. CMAR is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that CMAR deems necessary.

M. The insurance and insurance limits required herein will not be deemed as a limitation on CMAR's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.

N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder must provide a copy of the notice to Owner's Advisor and each other insured.

6.03 CMAR's Insurance

A. Required Insurance–CMAR shall purchase and maintain worker's compensation, commercial general liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.

B. General Provisions–The policies of insurance required by this Paragraph 6.03 as supplemented must:

1. include at least the specific coverages required;

2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;

3. remain in effect at least until the Work is complete, as set forth in Paragraph 15.07.D, and longer if expressly required elsewhere in this Contract, and at all times thereafter when CMAR may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;

4. apply with respect to the performance of the Work, whether such performance is by CMAR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and

5. include all necessary endorsements to support the stated requirements.

C. Additional Insureds–The CMAR's commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:

1. include and list as additional insureds Owner, Owner's Advisor, and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;

2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;

3. afford primary coverage to these additional insureds for all claims covered thereby, including as applicable those arising from both ongoing and completed operations;

4. not seek contribution from insurance maintained by the additional insured; and

5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by CMAR's acts or omissions, or the acts and omissions of those working on CMAR's behalf, in the performance of CMAR's operations.

6.04 Builder's Risk and Other Property Insurance

A. Builder's Risk–Unless otherwise provided in the Supplementary Conditions, beginning at the commencement of construction CMAR shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost, subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations. The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.

For purposes of the builder's risk and other required property insurance, "commencement of construction" first occurs when materials are in the course of delivery to the Site or an off-site storage location required to be insured if transit coverage is required, or if transit coverage is not required, when materials are delivered to the Site, or an off-site storage location required to be insured.

B. Property Insurance for Facilities of Owner Where Work Will Occur–Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.07.D.

C. Property Insurance for Substantially Complete Facilities–Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.07.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.

D. Partial Occupancy or Use by Owner–If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.05, then Owner, directly, if it is the purchaser of the builder's risk policy, or through CMAR, will provide advance notice of such occupancy or use to the builder's risk insurer and obtain coverage or an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.

E. Insurance of Other Property; Additional Insurance–If the express insurance provisions of the Contract do not require or address the insurance of a property Item or interest, then the entity or individual owning such property Item will be responsible for insuring it. If CMAR elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, CMAR may do so at its expense.

6.05 Property Losses; Subrogation

A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04, or an installation floater policy if authorized by the Supplementary Conditions, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Owner's Advisor, Engineer, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and CMAR waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Owner's Advisor, Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.

2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or CMAR as trustee or fiduciary, or otherwise payable under any policy so issued.

B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.05, after Substantial Completion pursuant to Paragraph 15.04, or after final payment pursuant to Paragraph 15.07, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against CMAR, Subcontractors, Owner's Advisor, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.

C. Owner waives all rights against CMAR, Subcontractors, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.

D. CMAR shall assure that each subcontract contains provisions whereby the Subcontractor waives all rights against Owner, CMAR, Owner's Advisor, Engineer, all individuals or entities identified in the Supplementary Conditions as insureds, their consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 Receipt and Application of Property Insurance Proceeds

A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured will act as fiduciary for the other insureds and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 must maintain such proceeds in a segregated account and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

C. If no other special agreement is reached, CMAR shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7— CM/GC RESPONSIBILITIES

7.01 CM/GC's Means and Methods of Construction

A. CMAR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. If the Contract Documents note, or CMAR determines, that professional engineering or other design services are needed to carry out CMAR's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then CMAR shall cause such services to be provided by a properly licensed design professional, at CMAR's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner, Owner's Advisor, nor Engineer has any responsibility with respect to (1) CMAR's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by CMAR, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 Supervision and Superintendence

A. CMAR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

B. At all times during the progress of the Work, CMAR shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Owner's Advisor except under extraordinary circumstances.

7.03 CMAR Services—Key Personnel and Subconsultants

A. CMAR will provide the services of the key individuals identified in the Agreement for CMAR Services (Preconstruction Services and Procurement Services) for the duration of the time required to provide these services. CMAR may substitute other individuals for the key individuals identified in the Agreement or for individuals previously approved only upon good cause and with the written consent of the Owner. Subject to the foregoing, not providing the individuals proposed may be the grounds for termination of this Contract.

B. CMAR may provide CMAR Services through one or more subconsultants under contract to CMAR provided, however, that CMAR remains responsible to the Owner for all duties and obligations of the CMAR under this Contract, and in rendering services any such subconsultant must comply with all applicable terms and conditions of the Contract Documents. If the Agreement identifies a specific subconsultant, CMAR will provide the services of such subconsultant for the duration of the time required to complete the subcontracted tasks. CMAR may substitute other subconsultants for the subconsultants identified in the Agreement or previously approved only with the written consent of the Owner. Subject to the foregoing, not providing the subconsultants proposed may be the grounds for termination of this Contract.

7.04 Quality of CMAR Services

A. The Owner's Advisor, with the concurrence of Owner and Engineer, has the right to reject or disapprove any substandard portion of the CMAR Services. Owner's Advisor will provide written notice stating the reason for the rejection or disapproval. CMAR will revise the services in question to address the inadequacies identified by Owner's Advisor.

B. CMAR acknowledges that any review or approval of CMAR Services by the Owner or Owner's Advisor does not relieve CMAR of its responsibility to properly and timely perform such services.

7.05 Continuation or Termination of CMAR Services

A. Owner may terminate this Contract for Owner's convenience at the completion of Preconstruction Services if Owner determines that doing so is in Owner's best interest. Owner is not obligated to cite a reason for such a termination, but in making its determination Owner may wish to consider factors such as the quality of the CMAR Services, facts that indicate that the Project cannot be constructed for a cost within the Owner's budget, and changes in key personnel.

B. The Owner may terminate the Contract for Owner's convenience at the end of Procurement Services if Owner determines that doing so is in Owner's best interest. Owner is not obligated to cite a reason for such a termination, but in making its determination Owner may wish to consider factors such as whether CMAR is unable to offer a Guaranteed Maximum Price within the Owner's Construction Budget, or whether it will be advantageous to bid out the Work as a whole on a stipulated price basis.

7.06 Labor; Working Hours

A. CMAR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CMAR shall maintain good discipline and order at the Site.

B. CMAR shall provide or furnish:

1. Construction-related services as described in Division 00 and Division 01 of the Contract Documents;

2. Post-construction services as described in Division 00 and Division 01 of the Contract Documents; and

3. All other construction-related and post-construction services described in the Contract Documents.

C. CMAR shall be fully responsible to Owner, Owner's Advisor, and Engineer for all acts and omissions of CMAR's employees; of subconsultants, Suppliers, and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the CMAR Services or the Work, just as CMAR is responsible for CMAR's own acts and omissions.

D. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. CMAR will not perform Work on a Saturday, Sunday, or legal holiday. CMAR may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.07 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, CMAR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Owner's Advisor, the CMAR shall furnish satisfactory evidence, including reports of required tests, as to the source, kind, and quality of materials and equipment.

C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

D. CMAR will be fully responsible for the quality and effectiveness (1) of all services performed or provided by CMAR, including but not limited to CMAR Services and general services in support of construction, and (2) of the deliverables and documentation associated with all such services.

7.08 "Or Equals"

A. CMAR's Request; Governing Criteria–Whenever an Item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Guaranteed Maximum Price has been based upon CMAR furnishing such Item as specified. The specification or description of such an Item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" Item is permitted, CMAR may request that Owner's Advisor authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.

1. If Owner's Advisor, in consultation with Engineer, determines that an Item of equipment or material proposed by CMAR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Owner's Advisor will deem it an "or equal" item. For the purposes of this paragraph, a proposed Item of equipment or material will be considered functionally equal to an Item so named if:

a. in the exercise of reasonable judgment Owner's Advisor, in consultation with Engineer, determines that the proposed item:

1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;

3) has a proven record of performance and availability of responsive service; and

4) is not objectionable to Owner.

b. CMAR certifies that if the proposed Item is approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) the Item will conform substantially to the detailed requirements of the Item named in the Contract Documents.

B. CMAR's Expense–CMAR shall provide all data in support of any proposed "or equal" Item at CMAR's expense.

C. Owner's Advisor's Evaluation and Determination–Owner's Advisor, in consultation with Engineer, will be allowed a reasonable time to evaluate each "or-equal" request. Owner's Advisor may require CMAR to furnish additional data about the proposed "or-equal" item. Owner's Advisor, in consultation with Engineer, will be the sole judge of acceptability. No "or-equal" Item will be ordered, furnished, installed, or utilized until Owner's Advisor's review is complete and Owner's Advisor, in consultation with Engineer, has determined that the proposed Item is equal, which will be evidenced by an approved Shop Drawing or other written communication. Owner's Advisor will advise CMAR in writing of any negative determination.

D. Effect of Owner's Advisor's Determination–Neither approval nor denial of an "or-equal" request will result in any change in Guaranteed Maximum Price. The Owner's Advisor's denial of an "or-equal" request will be final and binding and may not be reversed through an appeal under any provision of the Contract.

E. Treatment as a Substitution Request–If Owner's Advisor determines that an Item of equipment or material proposed by CMAR does not qualify as an "or-equal" item, CMAR may request that Owner's Advisor consider the Item a proposed substitute pursuant to Paragraph 7.09.

7.09 Substitutes

A. CMAR's Request; Governing Criteria–Unless the specification or description of an Item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, CMAR may request that Owner's Advisor authorize the use of other items of equipment or material under the circumstances described below.

B. To the extent possible such requests must be made as part of Preconstruction Services, before the completion of the applicable portion of the design, the Procurement of Subcontractors, construction pricing, and execution of the governing Work Authorization (Preconstruction Substitute Requests). Preconstruction Substitute Requests are further addressed in Paragraph 7.09.E below; substitute requests made after the applicable Work Authorization are addressed in Paragraph 7.09.F.

C. The following provisions apply to all substitute requests:

1. CMAR shall submit adequate information as provided below to allow Owner's Advisor, in consultation with Engineer, to determine if the Item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Owner's Advisor will not accept requests for review of proposed substitute items of equipment or material from anyone other than CMAR.

2. The requirements for review by Owner's Advisor, in consultation with Engineer, will be as set forth in Paragraph 7.09.D, as supplemented by the Specifications, and as Owner's Advisor may decide is appropriate under the circumstances.

3. CMAR shall make written application to Owner's Advisor for review of a proposed substitute Item of equipment or material that CMAR seeks to furnish or use. The application:

   a. will certify that the proposed substitute Item will:

      1) adequately perform the functions and achieve the results called for by the general design;

      2) be similar in substance to the Item specified; and

      3) be suited to the same use as the Item specified.

   b. will state:

      1) the extent, if any, to which the use of the proposed substitute Item will necessitate a change in Contract Times;

      2) whether use of the proposed substitute Item in the Work will require a change in any of the Contract Documents, or in the provisions of any other direct contract with Owner for other work on the Project, to adapt the design to the proposed substitute item; and

      3) whether incorporation or use of the proposed substitute Item in connection with the Work is subject to payment of any license fee or royalty.

   c. will identify:

      1) all variations of the proposed substitute Item from the Item specified; and

      2) available engineering, sales, maintenance, repair, and replacement services.

   d. will contain, to the extent applicable, an itemized estimate of all costs, anticipated price impacts, or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Guaranteed Maximum Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

D. Owner's Advisor's Evaluation and Determination–Owner's Advisor, in consultation with Engineer, will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Owner's Advisor may require CMAR to furnish additional data about the proposed substitute item. Owner's Advisor, in consultation with Engineer, will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Owner's Advisor's review is complete and Owner's Advisor determines that the proposed Item is an acceptable substitute.

E. Preconstruction Substitute Requests—CMAR will research potential substitutes, furnish data, and prepare a Preconstruction Substitute Request as compensable Basic Preconstruction Services. CMAR will not be responsible for costs incurred by Owner, Owner's Advisor, or Engineer in response to a Preconstruction Substitute Request. If such a request is approved, CMAR will not be required to issue a special guarantee with respect to the substitute's inclusion in the final design.

F. For substitute requests made after a Work Authorization, or in an untimely manner such that the substitution cannot be made part of the final design on which binding construction pricing is based, the following apply:

   1. Owner's Advisor's determination will be evidenced by a Field Order, or a proposed Change Order issued by the Owner's Advisor accounting for the substitute itself and all related impacts, including changes in Guaranteed Maximum Price or Contract Times. Owner's Advisor will advise CMAR in writing of any negative determination.

   2. Special Guarantee –Owner's Advisor may require CMAR to furnish at CMAR's expense a special performance guarantee or other surety with respect to the substitute.

3. Reimbursement of Review Cost–Owner's Advisor and Engineer will record their costs in evaluating the substitute proposed or submitted by CMAR. Whether or not Owner's Advisor approves a substitute so proposed or submitted by CMAR, CMAR shall reimburse Owner for the reasonable charges of Owner's Advisor and Engineer for evaluating each such proposed substitute. CMAR shall also reimburse Owner for the reasonable charges of Owner's Advisor and Engineer for making changes in the Contract Documents, or in the provisions of any other direct contract with Owner resulting from the acceptance of each proposed substitute.

4. CMAR's Expense–CMAR shall provide all data in support of any proposed substitute at CMAR's expense.

5. Effect of Owner's Advisor's Determination–If Owner's Advisor approves the substitute request, CMAR shall execute a Change Order and proceed with the substitute. The Owner's Advisor's denial of a substitution request will be final and binding and may not be reversed through an appeal under any provision of the Contract. CMAR may challenge the scope of reimbursement costs imposed under Paragraph 7.09.F.3, by timely submittal of a Change Proposal.

7.10 Concerning Subcontractors and Suppliers

A. CMAR may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The CMAR's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve CMAR's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.

B. CMAR shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.

C. As a general matter, CMAR shall retain Subcontractors and Suppliers for Work Packages through the procurement process described in the Agreement, including but not limited to the Procurement Strategy Plan and Exhibit A Article 3 of the Agreement. If there is a conflict between such provisions of the Agreement and this paragraph, the provisions of the Agreement will govern.

D. Subsequent to the submittal of CMAR's Proposal or final negotiation of the terms of the Contract, Owner may not require CMAR to retain any Subcontractor or Supplier against which CMAR has reasonable objection to furnish or perform any of the Work.

E. Prior to entry into any binding subcontract or purchase order, CMAR shall submit to Owner the identity of the proposed Subcontractor or Supplier, unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the CMAR selection process, the Subcontractor and Supplier procurement process, or otherwise. Such proposed Subcontractor or Supplier will be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.

F. Owner may require the replacement of a Subcontractor or Supplier. Owner also may require CMAR to retain specific replacements; provided, however, that Owner may not require a replacement to which CMAR has a reasonable objection. If CMAR has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, through the Subcontractor and Supplier procurement process or otherwise, and Owner has accepted it, either in writing or by failing to make written objection thereto, then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. CMAR shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

G. If Owner requires the replacement of any Subcontractor or Supplier retained by CMAR to perform any part of the Work, then CMAR shall be entitled to an adjustment in Guaranteed Maximum Price or Contract Times, with respect to the replacement; and CMAR shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

H. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

I. On a monthly basis, CMAR shall submit to Owner's Advisor a complete list of all Subcontractors and Suppliers having a direct contract with CMAR, and of all other Subcontractors and Suppliers known to CMAR at the time of submittal.

J. CMAR shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.

K. The divisions and sections of the Specifications and the identifications of any Drawings do not control CMAR in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.

L. All Work performed for CMAR by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner, Owner's Advisor, and Engineer.

M. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to CMAR for Work performed for CMAR by the Subcontractor or Supplier.

N. CMAR shall restrict all Subcontractors and Suppliers from communicating with Owner's Advisor or Owner, except through CMAR or in case of an emergency, or as otherwise expressly allowed in this Contract.

O. CMAR will perform or undertake the responsibilities of any Subcontractor or Supplier that defaults, fails to perform, declares bankruptcy, or meets any of the other requirements for termination for cause listed as applying to the CMAR as described in Paragraph 16.02 of the General Conditions.

1. If, for a specific Subcontractor or Supplier, CMAR determines that CMAR would not reasonably be able to self-perform the Subcontractor's work or meet the Supplier's obligations in the event of the Subcontractor or Supplier default, then CMAR may require a subcontract/supplier performance bond, the costs of which will be reimbursed as a Cost of the Work under the Subcontract costs category (Paragraph 6.02, Agreement). Before requiring such a bond, CMAR will consult with Owner's Advisor and consider whether other protective measures are feasible and more cost-effective.

2. If Owner requires that CMAR enter into a subcontract with a Subcontractor to which the CMAR has reasonable objections, CMAR may require subcontract performance and payment bonds, the costs of which will be reimbursed as a Cost of the Work under the Subcontract costs category (Paragraph 6.02, Agreement).

7.11 Patent Fees and Royalties

A. CMAR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner, Owner's Advisor, or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, then the existence of such rights will be disclosed in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless CMAR, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs, arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, CMAR shall indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.12 Permits

A. Unless otherwise provided in the Contract Documents, CMAR shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist CMAR, when necessary, in obtaining such permits and licenses. CMAR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of CMAR's Proposal. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.13 Taxes

A. CMAR shall pay all sales, consumer, use, and other similar taxes required to be paid by CMAR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.14 Laws and Regulations

A. CMAR shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of CMAR Services or the Work. Neither Owner, Owner's Advisor, nor Engineer will be responsible for monitoring CMAR's compliance with Laws or Regulations.

B. If CMAR performs any CMAR Services or Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, CMAR shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to such CMAR Services, Work, or other action.

C. It is not CMAR's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve CMAR of its obligations under Paragraph 3.03.

D. Owner or CMAR may give written notice to the other party of any changes after the Effective Date of the Contract in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and CMAR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Guaranteed Maximum Price or Contract Times resulting from such changes, then within 30 days of such written notice CMAR may submit a Change Proposal, or Owner may initiate a Claim.

7.15 Record Documents

A. CMAR shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, Contract Amendments, Work Packages, Work Authorizations, written interpretations and clarifications, and approved Shop Drawings. CMAR shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Owner's Advisor and Engineer for reference. Upon completion of the Work, CMAR shall deliver these record documents to Owner's Advisor.

7.16 Safety and Protection

A. CMAR shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

B. CMAR shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

C. CMAR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

D. All damage, injury, or loss to any property referred to in Paragraph 7.16.C.2 or 7.16.C.3 caused, directly or indirectly, in whole or in part, by CMAR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, will be remedied by CMAR at its expense, except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner, Owner's Advisor, or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CMAR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them.

E. CMAR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

F. CMAR shall notify Owner's Advisor; Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities, if the identity of such owners is known to CMAR; and other contractors and utility owners performing work at or adjacent to the Site, in writing, when CMAR knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

G. CMAR shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.

H. CMAR shall inform Owner, Owner’s Advisor, and Engineer of the specific requirements of CMAR’s safety program with which Owner’s, Owner’s Advisor’s, and Engineer’s employees and representatives must comply while at the Site.

I. CMAR’s duties and responsibilities for safety and protection will continue until all the Work is completed, Owner’s Advisor has issued a written notice to Owner and CMAR in accordance with Paragraph 15.07.C that the Work is acceptable, and CMAR has left the Site, except as otherwise expressly provided in connection with Substantial Completion.

J. CMAR’s duties and responsibilities for safety and protection will resume whenever CMAR or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.17 Hazard Communication Programs

A. CMAR shall be responsible for coordinating any exchange of safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.18 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CMAR is obligated to act to prevent damage, injury, or loss. CMAR shall give Owner’s Advisor prompt written notice if CMAR believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency or are required as a result of CMAR’s response to an emergency. If Owner’s Advisor, in consultation with Engineer, determines that a change in the Contract Documents is required because of an emergency or CMAR’s response, a Work Change Directive or Change Order will be issued.

7.19 Submittals

A. Shop Drawing and Sample Requirements

1. Before submitting a Shop Drawing or Sample, CMAR shall:

    a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

    b. determine and verify:

        1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;

        2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

        3) all information relative to CMAR’s responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;

    c. confirm that the Submittal is complete with respect to all related data included in the Submittal.

2. Each Shop Drawing or Sample must bear a stamp or specific written certification that CMAR has satisfied CMAR’s obligations under the Contract Documents with respect to CMAR’s review of that Submittal, and that CMAR approves the Submittal.

3. With each Shop Drawing or Sample, CMAR shall give Owner’s Advisor specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the

Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. Submittal Procedures for Shop Drawings and Samples–CMAR shall label and submit Shop Drawings and Samples to Owner's Advisor for review by Engineer in accordance with the accepted Schedule of Submittals.

1. Shop Drawings

a. CMAR shall submit the number of copies required in the Specifications.

b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show the services, materials, and equipment CMAR proposes to provide, and to enable the information to be reviewed for the limited purposes required by Paragraph 7.19.D.

2. Samples

a. CMAR shall submit the number of Samples required in the Specifications.

b. CMAR shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Owner's Advisor may require to enable Engineer to review the Sample for the limited purposes required by Paragraph 7.19.D.

C. Proceeding without Engineer's Approval—Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, Owner will not pay for related Work, including equipment or materials, until Engineer approves the Shop Drawing or Sample. If CMAR proceeds without such approval, CMAR will bear the full risk of all resulting delays, costs, and losses, including but not limited to removal, corrective, purchase, and installation costs, if such approval is not granted.

D. Engineer's Review of Shop Drawings and Samples

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval, if any, will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.

3. Engineer's review and approval, if any, of a separate Item as such will not indicate approval of the assembly in which the Item functions.

4. Engineer's review and approval, if any, of a Shop Drawing or Sample will not relieve CMAR from responsibility for any variation from the requirements of the Contract Documents unless CMAR has complied with the requirements of Paragraph 7.19.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Owner's Advisor, in consultation with Engineer, will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval, if any, of a Shop Drawing or Sample will not relieve CMAR from responsibility for complying with the requirements of Paragraphs 7.19.A and B.

6. Engineer's review and approval, if any, of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Guaranteed Maximum Price, unless such changes are included in a Change Order.

7. Neither receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such Item becoming a Contract Document.

8. CMAR shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.19.D.4.

E. Resubmittal Procedures for Shop Drawings and Samples

1. CMAR shall make required corrections and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. CMAR shall direct specific attention in writing to revisions other than the corrections called for on previous Submittals.

2. CMAR shall furnish required Shop Drawing and Sample submittals with adequate information and accuracy to obtain required approval of an Item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and CMAR shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due CMAR to secure reimbursement for such charges.

3. If CMAR requests a change of a previously approved Shop Drawing or Sample, CMAR shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due CMAR to secure reimbursement for such charges, unless the need for such change is beyond the control of CMAR.

F. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:

a. CMAR shall submit all such Submittals to Owner's Advisor in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.

b. A timely review will be made of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.

c. Review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

d. If any such Submittal is not accepted, CMAR shall confer with Owner's Advisor regarding the reason for the non-acceptance and resubmit an acceptable document.

2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 4.04, 7.19, and 15.02.

G. Owner-delegated Designs–Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.22.

7.20 CMAR's General Warranty and Guarantee

A. CMAR warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Owner's Advisor and Engineer are entitled to rely on CMAR's warranty and guarantee.

B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.09. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.20 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.09:

1. Owner shall give CMAR written notice of any defective Work within 60 days of the discovery that such Work is defective; and

2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.

C. CMAR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, or improper modification, maintenance, or operation, by persons other than CMAR, Subcontractors, Suppliers, or any other individual or entity for whom CMAR is responsible; or

2. normal wear and tear under normal usage.

D. CMAR shall perform or provide CMAR Services in accordance with the Contract Documents and good construction management practice.

E. CMAR's obligation to perform and complete the CMAR Services and the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of CMAR Services or Work that is not in accordance with the Contract Documents, a release of CMAR's obligation to perform the CMAR Services or Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.20:

1. Observations by Owner's Advisor or Engineer;

2. Recommendation by Owner's Advisor or payment by Owner of any progress or final payment;

3. The acceptance of CMAR Services without objection;

4. The issuance of a certificate of Substantial Completion by Owner's Advisor or any payment related thereto by Owner;

5. Use or occupancy of the Work or any part thereof by Owner;

6. Any review and approval of a Shop Drawing or Sample submittal;

7. The issuance of a notice of acceptability by Owner's Advisor;

8. The end of the correction period established in Paragraph 15.09;

9. Any inspection, test, or approval by others; or

10. Any correction of defective Work by Owner.

F. If the Contract requires CMAR to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to CMAR's performance obligations to Owner for the Work described in the assigned contract.

7.21 Indemnification

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of CMAR under the Contract or otherwise, CMAR shall indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs, arising from third-party claims or actions relating to or resulting from the performance or furnishing of CMAR Services or the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property, other than the Work itself, including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of CMAR, any Subcontractor, any Supplier, subconsultant, or any individual or entity directly or indirectly employed by any of them to perform any of the CMAR Services or Work, or anyone for whose acts any of them may be liable.

B. In claims against Owner, Owner's Advisor, or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any CMAR employee, or the survivor or personal representative of such employee, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.21.A will not be limited by a limitation on the amount or type of damages, compensation, or benefits payable by or for CMAR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.22 Delegation of Professional Design Services

A. Owner may require CMAR to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that CMAR must furnish to Owner's Advisor with respect to the Owner-delegated design.

B. CMAR shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.

C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by CMAR, a Subcontractor, or others for submittal to Owner's Advisor, then such Shop Drawing or other Submittal must bear the written approval of CMAR's design professional when submitted by CMAR to Owner's Advisor.

D. Owner, Owner's Advisor, and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by CMAR under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

E. Pursuant to this Paragraph 7.22, Engineer's review, approval, and determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by CMAR pursuant to an Owner-delegated design will be only for the following limited purposes:

1. Checking for conformance with the requirements of this Paragraph 7.22;
2. Confirming that CMAR, through its design professionals, has used the performance and design criteria specified in the Contract Documents; and
3. Establishing that the design furnished by CMAR is consistent with the design concept expressed in the Contract Documents.

F. CMAR shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.

G. CMAR is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8— OTHER WORK AT THE SITE

8.01 Other Work

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give CMAR written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to CMAR.

C. CMAR shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.

D. CMAR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CMAR shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that CMAR may cut or alter others' work with the written consent of Owner's Advisor and the others whose work will be affected.

E. If the proper execution or results of any part of CMAR's Work depends upon work performed by others, CMAR shall inspect such other work and promptly report to Owner's Advisor in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CMAR's Work. CMAR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CMAR's Work except for latent defects and deficiencies in such other work.

F. The provisions of this Article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by CMAR is governed by the provisions of Paragraph 4.05.C.3.

8.02 Coordination

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to CMAR prior to the start of any such other work:

1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. An itemization of the specific matters to be covered by such authority and responsibility; and

3. The extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of CMAR or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then CMAR shall be entitled to an equitable adjustment in the Guaranteed Maximum Price or the Contract Times. CMAR must submit any Change Proposal seeking an equitable adjustment in the Guaranteed Maximum Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will consider information, if any regarding such other work that was provided to CMAR in the Contract Documents prior to the submittal of the Proposal or the final negotiation of the terms of the Contract, and any remedies available to CMAR under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Guaranteed Maximum Price will be conditioned on CMAR assigning to Owner all CMAR's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. CMAR's entitlement to an adjustment of the Contract Times or Guaranteed Maximum Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

B. CMAR shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

1. If CMAR fails to take such measures, and as a result, damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due CMAR, and assign to such other contractor or utility owner the Owner's contractual rights against CMAR with respect to the breach of the obligations set forth in this Paragraph 8.03.B.

2. When Owner is performing other work at or adjacent to the Site with Owner's employees, CMAR shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of CMAR's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due CMAR.

C. If CMAR damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through CMAR's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of CMAR's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against CMAR, Owner, Owner's Advisor, or Engineer, then CMAR shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner, Owner's Advisor, and Engineer, and their officers, directors, members, partners, employees, agents, consultants and subcontractors from and against any such claims, and against all costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9— OWNER'S RESPONSIBILITIES

9.01 Communications to CMAR

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to CMAR through Owner's Advisor.

9.02 Replacement of Owner's Advisor or Engineer

A. Owner may at its discretion appoint a replacement for Owner's Advisor, provided CMAR makes no reasonable objection to the replacement. The replacement's status under the Contract Documents will be that of the former Owner's Advisor.

B. Owner may at its discretion appoint an engineer to replace Engineer, provided CMAR makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay CMAR

A. Owner shall make payments to CMAR when they are due as provided in the Agreement.

9.05 Lands and Easements; Reports, Tests, and Drawings

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to CMAR copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 Insurance

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 Change Orders

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 Inspections, Tests, and Approvals

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 Owner's Tasks in Support of CMAR Services

A. Owner shall provide CMAR with all criteria and full information as to Owner's requirements for the Project including drafts of proposed Contract Documents, general schedules and completion requirements, reports, surveys, permits, record documents from related previous projects, and other information as required for CMAR to provide services. Owner shall be responsible for, and CMAR may rely upon, the accuracy and completeness of all such criteria and information, and of any other programs, instructions, data, and other information furnished by Owner to CMAR pursuant to this Agreement. CMAR may use such criteria and information in performing or furnishing CMAR Services.

B. Owner shall provide reasonable assistance to CMAR in securing the release of documents and information held by private entities and by public agencies as needed to provide services required by this Agreement.

C. Owner shall arrange for safe access to and make all provisions for CMAR to enter upon public and private property as required for CMAR to perform services.

D. Owner shall review documents presented by CMAR, make decisions, and carry out Owner's other responsibilities in a timely manner so as not to delay the CMAR's performance of its services.

E. Owner shall provide the services of attorneys, insurance consultants, financial advisors, and other professional advisors or consultants required for the Project, but not provided by the CMAR.

1. Advise CMAR of the identity and scope of services of any independent consultant, designer, contractor, or other construction manager employed by Owner to perform or

furnish services in regard to the Project, including cost estimating, project peer reviews, value engineering, and constructability reviews.

2. Define and set forth the duties, responsibilities, and limitations of authority of these other parties as they relate to the duties, responsibilities, and authority of CMAR.

F. Owner is not responsible for discovering deficiencies in the CMAR's Services. CMAR will correct any deficiencies without additional compensation, except to the extent this corrective action is directly attributable to deficiencies in Owner-furnished information.

9.10 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, CMAR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CMAR to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for CMAR's failure to perform the Work in accordance with the Contract Documents.

9.11 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.12 Evidence of Financial Arrangements

A. Upon request of CMAR, Owner shall furnish CMAR reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract, including obligations under proposed changes in the Work.

9.13 Safety Programs

A. While at the Site, Owner's employees and representatives will comply with the specific applicable requirements of CMAR's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to CMAR.

ARTICLE 10— STATUS OF OWNER'S ADVISOR AND ENGINEER DURING CONSTRUCTION

10.01 Owner's Advisor

A. Owner's Advisor will be Owner's representative during the construction period.

B. The general duties, responsibilities, and the limitations of authority of Owner's Advisor and Engineer during construction are set forth below.

10.02 Visits to Site

A. Owner's Advisor will either be based at the Site or make visits to the Site on a regular basis. Owner's Advisor will observe the Work; check the quality, quantity, and progress of the Work; implement Owner's quality assurance program; and administer the Contract as Owner's representative.

B. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of CMAR's executed Work. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer will report to Owner's Advisor regarding information obtained during such Site visits and observations.

C. Owner's Advisor's and Engineer's visits and observations are subject to all the limitations on Owner's Advisor's and Engineer's authority and responsibility set forth in Paragraph 10.05. Particularly, but without limitation, during or as a result of Owner's Advisor's and Engineer's visits or observations of CMAR's Work, neither Owner's Advisor nor Engineer will supervise, direct, control, or have authority over or be responsible for CMAR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CMAR to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Determinations for Unit Price Work

A. Owner's Advisor will determine the actual quantities and classifications of Unit Price Work performed or furnished by CMAR as set forth in Paragraph 13.02.

10.04 Decisions on Requirements of Contract Documents and Acceptability of Work; Exercise of Authority

A. Owner's Advisor will render decisions regarding the requirements of the Contract Documents, and judge the quality and acceptability of the Work, pursuant to the specific procedures set forth herein for interpretations, Change Proposals, Applications for Payment, and acceptance of the Work.

1. Before rendering such decisions or judgments, and before exercising its authority with respect to differing subsurface or physical conditions, Underground Facilities, "or equal" and substitute requests, emergencies, Field Orders, and similar matters, Owner's Advisor will consult with Engineer as to all matters in question involving (a) the design, as set forth in the Drawings, Specifications, or otherwise, (b) the quality or acceptability of the Work under the Contract Documents, or (c) other engineering matters.

2. With respect to such matters, Owner's Advisor's decisions and judgments as rendered will be in accord with Engineer's professional analysis, opinions, recommendations, and conclusions.

B. In rendering such decisions and judgments, exercising such authority, or providing professional analysis, opinions, recommendations, or conclusions underlying such decisions and judgments, neither Owner's Advisor nor Engineer will show partiality to Owner or CMAR, and neither Owner's Advisor nor Engineer will be liable to Owner, CMAR, or others in connection with any proceedings, interpretations, analysis, opinions, recommendations, conclusions, decisions, or judgments conducted or rendered in good faith.

C. Owner's Advisor may at any time request that CMAR furnish proposed changes to Guaranteed Maximum Price and Contract Times that would result from specified proposed changes to the Contract Documents.

10.05 Limitations on Owner's Advisor's and Engineer's Authority and Responsibilities

A. Neither Owner's Advisor's nor Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Owner's Advisor or Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Owner's Advisor or Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Owner's Advisor or Engineer to CMAR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Neither Owner's Advisor nor Engineer will supervise, direct, control, or have authority over or be responsible for CMAR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CMAR to comply with Laws and Regulations applicable to the performance of the Work. Neither Owner's Advisor nor Engineer will be responsible for CMAR's failure to perform the Work in accordance with the Contract Documents.

C. Neither Owner's Advisor nor Engineer will be responsible for the acts or omissions of CMAR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Owner's Advisor's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by CMAR under Paragraph 15.07.A, will only be to determine generally that their content complies with the requirements of the Contract Documents, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

10.06 Compliance with Safety Program

A. While at the Site, Owner's Advisor's and Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and CMAR's safety programs of which Owner's Advisor and Engineer have been informed.

ARTICLE 11— CHANGES TO THE CONTRACT

11.01 Amending and Supplementing the Contract

A. The Contract may be amended or supplemented by a Contract Amendment, Work Authorization, Change Order, Work Change Directive, or Field Order.

B. A Work Authorization, as more fully defined in Paragraph 1.01, is used to authorize specified Work, and establish related compensation. Change Orders, Work Change Directives, and Field Orders are used to modify a Work Authorization, including but not limited to modifications of the authorized Work and changes to the Guaranteed Maximum Price and Contract Times associated with the Work Authorization.

If a modification under a Work Authorization includes a change in the Guaranteed Maximum Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.

C. A Contract Amendment, as more fully defined in Paragraph 1.01, is used for general contract modification purposes.

D. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design, as set forth in the Drawings, Specifications, or otherwise, or (3) other engineering matters, must be supported by Engineer's recommendation. Owner and CMAR may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 Change Orders

A. With respect to a governing Work Authorization, Owner and CMAR shall execute appropriate Change Orders covering:

1. Changes in Guaranteed Maximum Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work performed in accordance with a Work Change Directive;

2. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design, as set forth in the Drawings, Specifications, or otherwise, or other engineering matters; and

3. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Paragraph 13.02.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

B. If Owner or CMAR refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

C. Owner and CMAR will enter into either a Change Order, if related to a specific Work Authorization, or a Contract Amendment with respect to the following:

1. Changes in Guaranteed Maximum Price resulting from an Owner set-off, unless CMAR has duly contested such set-off;

2. Changes that embody the substance of any final and binding results under Article 12, Claims; Paragraph 13.01, final adjustments resulting from allowances; and similar provisions.

11.03 Work Change Directives

A. A Work Change Directive will not change the Guaranteed Maximum Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Guaranteed Maximum Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Guaranteed Maximum Price.

B. If Owner has issued a Work Change Directive and:

1. CMAR believes that an adjustment in Contract Times or Guaranteed Maximum Price is necessary, then CMAR shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.

2. Owner believes that an adjustment in Contract Times or Guaranteed Maximum Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 Field Orders

A. Owner's Advisor, in consultation with Engineer, may authorize minor changes in the Work if the changes do not involve an adjustment in the Guaranteed Maximum Price or the Contract Times. Such changes will be accomplished by a Field Order and will be binding on Owner and on CMAR, which shall perform the Work involved promptly.

B. If CMAR believes that a Field Order justifies an adjustment in the Guaranteed Maximum Price or Contract Times, then before proceeding with the Work at issue, CMAR shall submit a Change Proposal as provided herein.

11.05 Owner-Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design, as set forth in the Drawings, Specifications, or otherwise, or other engineering matters will be supported by Engineer's recommendation.

B. Such changes in the Work may be accomplished by a Change Order, if Owner and CMAR have agreed as to the effect, if any, of the changes on Contract Times or Guaranteed Maximum Price; or by a Work Change Directive. Upon receipt of any such document, CMAR shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.

C. Nothing in this Paragraph 11.05 obligates CMAR to undertake work that CMAR reasonably concludes cannot be performed in a manner consistent with CMAR's safety obligations under the Contract Documents or Laws and Regulations.

11.06 Unauthorized Changes in the Work

A. CMAR shall not be entitled to an increase in the Guaranteed Maximum Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.18 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 Change of Contract Price

A. The Contract Price may be changed by a Work Authorization, Change Order, or Contract Amendment. Any Change Proposal for an adjustment in the Guaranteed Maximum Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.

B. An adjustment in the Guaranteed Maximum Price with respect to the Work will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved;

2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum; or

3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work determined in accordance with the Cost of the Work provisions in the Agreement, plus the CMAR Fee, applied proportionally, for overhead and profit determined in accordance with the terms in the Agreement.

11.08 Change of Contract Times

A. The Contract Times may be changed by a Work Authorization, Change Order, or Contract Amendment. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.

B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 Change Proposals

A. Purpose and Content—CMAR shall submit a Change Proposal to Owner's Advisor to request an adjustment in the Contract Times or Guaranteed Maximum Price; contest a decision by Owner's Advisor concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Guaranteed Maximum Price, or other proposed relief; identify any governing Work Authorization; indicate CMAR's recommendation for the correct means of amending the Contract (Work Authorization, Change Order, or Contract Amendment) if the proposed change is accepted; and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. Determination of Changes in Guaranteed Maximum Price for Work—If a Change Order under a Work Authorization entails a change in Guaranteed Maximum Price, then:

1. The change will include the applicable increase or decrease in Cost of the Work, pursuant to the provisions Article 6 of the Agreement.

2. The CMAR Fee for changes will be those agreed to Article 7 of the Agreement.

3. If there is a Guaranteed Maximum Price, it will increase or decrease in an amount equal to the increase or decrease in the Cost of the Work and CMAR Fee, as duly determined.

4. The amount of any increases or decreases in the CMAR Fee, or in Guaranteed Maximum Price, will be set forth in the applicable Change Order.

C. Change Proposal Procedures

1. Submittal—CMAR shall submit each Change Proposal to Owner's Advisor within 30 days after the start of the event giving rise thereto, or after such decision.

2. Supporting Data—The CMAR shall submit supporting data, including the proposed change in Guaranteed Maximum Price or Contract Time, if any, to the Owner's Advisor within 15 days after the submittal of the Change Proposal.

a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.

b. Change Proposals related to a change of Guaranteed Maximum Price based on Cost of the Work must include full and detailed account of eligible costs, such as materials incorporated into the Work, labor and equipment used for the subject Work, and Subcontract costs.

The supporting data must be accompanied by a written statement that the supporting data is accurate and complete, and that any requested time or price adjustment is the entire adjustment to which CMAR believes it is entitled as a result of said event.

3. Owner's Advisor's Initial Review—Owner's Advisor, in consultation with Engineer, will advise Owner regarding the Change Proposal and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Owner's Advisor concludes that additional supporting data is needed before conducting a full review and deciding regarding the Change Proposal, then Owner's Advisor may request that CMAR submit such additional supporting data by a date specified by Owner's Advisor, prior to Owner's Advisor beginning its full review of the Change Proposal.

4. Owner's Advisor's Full Review and Action on the Change Proposal—Upon receipt of CMAR's supporting data, including any additional data requested by Owner's Advisor, Owner's Advisor, in consultation with Engineer, will conduct a full review of each Change Proposal and, within 30 days after such receipt of the CMAR's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and CMAR. If Owner's Advisor does not act on the Change Proposal within 30 days, then either Owner or CMAR may at any time thereafter submit a letter to the other party indicating that as a result of Owner's Advisor's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. Binding Decision—Owner's Advisor's decision is final and binding upon Owner and CMAR, unless Owner or CMAR appeals the decision by filing a Claim under Article 12.

D. Post-Completion—CMAR shall not submit any Change Proposals after Owner's Advisor issues a written recommendation of final payment pursuant to Paragraph 15.07.B.

11.10 Notification to Surety

A. CMAR shall notify the performance and payment bond surety of the issuance of each Work Authorization and confirm that the bonds have been adjusted to reflect the changes in Guaranteed Maximum Price and Contract Times.

B. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents, including, but not limited to, Guaranteed Maximum Price or Contract Times, the giving of any such notice will be

CMAR's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12— CLAIMS

12.01 Claims

A. Claims Process—The following disputes between Owner and CMAR are subject to the Claims process set forth in this article:

1. Appeals by Owner or CMAR of Owner's Advisor's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and

3. Subject to the waiver provisions of Paragraph 15.08, any dispute arising after Owner's Advisor has issued a written recommendation of final payment pursuant to Paragraph 15.07.B.

B. Submittal of Claim—The party submitting a Claim shall deliver it directly to the other party to the Contract promptly, but in no event later than 30 days after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Owner's Advisor and Engineer, for their information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by CMAR seeking an increase in the Contract Times or Contract Price, CMAR shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of CMAR's knowledge and belief the amount of time or money requested accurately reflects the full amount to which CMAR is entitled.

C. Review and Resolution—The party receiving a Claim shall review it thoroughly and consider its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Owner's Advisor and Engineer.

D. Mediation

1. At any time after initiation of a Claim, Owner and CMAR may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.

2. If Owner and CMAR agree to mediation, then after 60 days from such agreement, either Owner or CMAR may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and CMAR shall each pay one-half of the mediator's fees and costs.

E. Partial Approval—If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. Denial of Claim—If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not act on the Claim within 90 days, then either Owner or CMAR may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

12.02 Final and Binding Results—If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13— ALLOWANCES; UNIT PRICE WORK

13.01 Allowances

A. The CMAR Contingency Allowance (Agreement, Article 8) and Owner's Contingency Allowance (Agreement, Article 12) are governed by the applicable provisions of the Agreement.

B. CMAR confirms that it has included the CMAR Contingency Allowance in the Guaranteed Maximum Price and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Owner's Advisor.

C. CMAR confirms that it has included the Owner's Contingency Allowance in the Contract Price and that use of Owner's Contingency Allowance is subject to the provisions of Article 12 in the Agreement.

D. Cash Allowances—CMAR agrees that:

1. the cash allowances include the cost to CMAR, less any applicable trade discounts, of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. CMAR's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Guaranteed Maximum Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.

E. Prior to final payment, an appropriate Change Order will be issued as recommended by Owner's Advisor to reflect actual amounts due CMAR for Work covered by allowances, and the Guaranteed Maximum Price will be correspondingly adjusted.

13.02 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Guaranteed Maximum Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified Item of Unit Price Work times the estimated quantity of each Item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Proposals and determining an Estimated Guaranteed Maximum Price. Payments to CMAR for Unit Price Work will be based on actual quantities.

C. Each unit price will be deemed to include an amount considered by CMAR to be adequate to cover CMAR's overhead and profit for each separately identified item.

D. Owner's Advisor will determine the actual quantities and classifications of Unit Price Work performed or furnished by CMAR. Owner's Advisor will review with CMAR the Owner's Advisor's preliminary determinations on such matters before rendering a written decision thereon, by recommendation of an Application for Payment or otherwise. Owner's Advisor's written decision thereon will be final and binding except as modified by Owner's Advisor to reflect changed factual conditions or more accurate data upon Owner and CMAR, and the final adjustment of Guaranteed Maximum Price will be set forth in a Change Order, subject to the provisions of the following Paragraph.

E. Adjustments in Unit Price

1. CMAR or Owner shall be entitled to an adjustment in the unit price with respect to an Item of Unit Price Work if:

   a. the quantity of the Item of Unit Price Work performed by CMAR differs materially and significantly from the estimated quantity of such Item indicated in the Agreement; and

   b. CMAR's unit costs to perform the Item of Unit Price Work have changed materially and significantly as a result of the quantity change.

2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in CMAR's costs to perform such other Work, such that the resulting overall change in Guaranteed Maximum Price is equitable to Owner and CMAR.

3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14— TESTS AND INSPECTAIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

A. Owner, Owner's Advisor, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. CMAR shall provide them with proper and safe conditions for such access and advise them of CMAR's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 Tests, Inspections, and Approvals

A. CMAR shall give Owner's Advisor timely notice of readiness of the Work, or specific parts thereof, for all required inspections and tests and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except those costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.

C. If Laws or Regulations of any public body having jurisdiction require any Work, or part thereof, specifically to be inspected, tested, or approved by an employee or other representative of such public body, CMAR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Owner's Advisor the required certificates of inspection or approval.

D. CMAR shall be responsible for arranging, obtaining, and paying for all inspections and tests required:

1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain acceptance of materials or equipment to be incorporated in the Work;

3. by manufacturers of equipment furnished under the Contract Documents;

4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and

5. for acceptance of materials, mix designs, or equipment submitted for approval prior to CMAR's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Owner's Advisor.

E. If the Contract Documents require the Work, or part thereof, to be accepted by Owner, Owner's Advisor, Engineer, or another designated individual or entity, then CMAR shall assume full responsibility for arranging and obtaining such approvals.

F. If any Work, or the work of others that is to be inspected, tested, or approved is covered by CMAR without written concurrence of Owner's Advisor, CMAR shall, if requested by Owner's Advisor, uncover such Work for observation. Such uncovering will be at CMAR's expense unless CMAR has given Owner's Advisor timely notice of CMAR's intention to cover the same and Owner's Advisor had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

A. CMAR's Obligation—It is CMAR's obligation to assure that the Work is not defective.

B. Owner's Advisor's Authority—Owner's Advisor has the authority to determine, in consultation with Engineer, whether Work is defective, and to reject defective Work.

C. Notice of Defects—Prompt written notice of all defective Work of which Owner, Owner's Advisor, or Engineer has actual knowledge will be given to CMAR.

D. Correction, or Removal and Replacement—Promptly after receipt of written notice of defective Work, CMAR shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Owner's Advisor has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. Preservation of Warranties—When correcting defective Work, CMAR shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. Costs and Damages—In addition to its correction, removal, and replacement obligations with respect to defective Work, CMAR shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and CMAR are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so. If such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles and will not endanger public safety. CMAR shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work; such costs to be approved by Owner's Advisor as to reasonableness, and for the diminished value of the Work to the extent not otherwise paid by CMAR. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Guaranteed Maximum Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, CMAR shall pay an appropriate amount to Owner.

14.05 Uncovering Work

A. Owner's Advisor has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

B. If any Work is covered contrary to the written request of Owner's Advisor, then CMAR shall, if requested by Owner's Advisor, uncover such Work for Owner's Advisor's or Engineer's observation, and then replace the covering, all at CMAR's expense.

C. If Engineer or Owner's Advisor considers it necessary or advisable that covered Work be observed by Owner's Advisor or Engineer, or inspected or tested by others, then Owner's Advisor will so advise CMAR, and CMAR shall uncover, expose, or otherwise make available for observation, inspection, or testing as Owner's Advisor may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, CMAR shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction, including but not limited to all costs of repair or replacement of work of others, and pending CMAR's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. If the uncovered Work is not found to be defective, CMAR shall be allowed an increase in the Guaranteed Maximum Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then CMAR may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

A. If the Work is defective, or CMAR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order CMAR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of CMAR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

A. If CMAR fails within a reasonable time after written notice from Owner's Advisor to correct defective Work, or to remove and replace defective Work as required by Owner's Advisor, then Owner may, after 7 days' written notice to CMAR, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude CMAR from all or part of the Site, take possession of all or part of the Work and suspend CMAR's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid CMAR but which are stored elsewhere. CMAR shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, Owner's Advisor, Engineer, and their consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against CMAR as set-offs against payments due under Article 15. Such claims, costs, losses, and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CMAR's defective Work.

D. CMAR shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15— PAYMENTS TO CMAR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Payment for CMAR Services

A. The basis and procedures for payment for CMAR Services are set forth in the Agreement, Article 3. The provisions of this Article 15 pertain to payment for performance and furnishing of the Work, unless noted otherwise.

15.02 Progress Payments

A. Basis for Progress Payments

1. CMAR will, at least 10 days prior to applying for Payment, prepare and submit for approval by Owner’s Advisor a schedule allocating portions of the Guaranteed Maximum Price to various portions of the Work, as determined by the applicable Work Authorizations.

2. The Schedule of Values will serve as the basis for progress payments and will be incorporated by Owner’s Advisor into an Application for Payment form. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.02. Progress payments for cost-based Work will be based on Cost of the Work completed by CMAR during the pay period.

B. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment, but not more often than once a month, CMAR shall submit to Owner’s Advisor for review an Application for Payment filled out and signed by CMAR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by CMAR for the materials and equipment; (b) at Owner’s request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner’s interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of CMAR stating that all previous progress payments received by CMAR have been applied to discharge CMAR’s legitimate obligations associated with prior Applications for Payment.

4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Owner’s Advisor will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to CMAR indicating in writing Owner’s Advisor’s reasons for refusing to recommend payment. In the latter case, CMAR may make the necessary corrections and resubmit the Application.

2. Owner’s Advisor’s recommendation of any payment requested in an Application for Payment will constitute a representation by Owner’s Advisor to Owner, based on Owner’s Advisor’s (a) observations of the executed Work, (b) consultations with Engineer, and (c) review of the Application for Payment and the accompanying data and schedules, that to the best of Owner’s Advisor’s knowledge, information, and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.02, and any other qualifications stated in the recommendation; and

c. the conditions precedent to CMAR's being entitled to such payment appear to have been fulfilled in so far as it is Owner's Advisor's responsibility to observe the Work.

3. By recommending any such payment Owner's Advisor will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Owner's Advisor in the Contract; or

b. there may not be other matters or issues between the parties that might entitle CMAR to be paid additionally by Owner or entitle Owner to withhold payment to CMAR.

4. Neither Owner's Advisor's review of CMAR's Work for the purposes of recommending payments nor Owner's Advisor's recommendation of any payment, including final payment, will impose responsibility on Owner's Advisor:

a. to supervise, direct, or control the Work;

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;

c. for CMAR's failure to comply with Laws and Regulations applicable to CMAR's performance of the Work;

d. to make any examination to ascertain how or for what purposes CMAR has used the money paid by Owner; or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Owner's Advisor may refuse to recommend the whole or any part of any payment if, in Owner's Advisor's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.02.C.2.

6. Owner's Advisor will recommend reductions in payment (set-offs) necessary in Owner's Advisor's opinion to protect Owner from loss because:

a. the Work is defective, requiring correction or replacement;

b. the Guaranteed Maximum Price has been reduced by Change Orders or other Contract modifications;

c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which CMAR is responsible; or

e. Owner's Advisor has actual knowledge of the occurrence of any of the events that would constitute a default by CMAR and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

1. Ten days after Owner's Advisor's presentation of the Application for Payment to Owner with Owner's Advisor's recommendation, the amount recommended, subject to any Owner set-offs, will become due, and when due will be paid by Owner to CMAR.

E. Reductions in Payment by Owner

1. In addition to any reductions in payment (set-offs) recommended by Owner's Advisor, Owner is entitled to impose a set-off against payment based on any of the following:

a. Claims have been made against Owner based on CMAR's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from CMAR's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

b. CMAR has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

c. CMAR has failed to provide and maintain required bonds or insurance;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which CMAR is responsible;

e. Owner has incurred extra charges for advisory services or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests, and inspections, or return visits to manufacturing or assembly facilities;

f. The Work is defective, requiring correction or replacement;

g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

h. The Guaranteed Maximum Price has been reduced by Change Orders or other Contract modifications;

i. An event has occurred that would constitute a default by CMAR and therefore justify a termination for cause;

j. Liquidated or other damages have accrued as a result of CMAR's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

k. Liens have been filed in connection with the Work, except where CMAR has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

l. Claims have been made or costs have been incurred arising from CMAR Services; or

m. Other items entitle Owner to a set-off against the amount recommended.

2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Owner's Advisor, Owner will give CMAR immediate written notice, with a copy to Owner's Advisor, stating the reasons for such action and the specific amount of the reduction, and promptly pay CMAR any amount remaining after deduction of the amount so withheld. Owner shall promptly pay CMAR the amount so withheld, or any adjustment thereto agreed to by Owner and CMAR, if CMAR remedies the reasons for such action. The reduction imposed will be binding on CMAR unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.02.D.1 and subject to interest as provided in the Agreement.

F. Where the Contract Price is based on the Cost of Work, if Owner determines that progress payments made to date substantially exceed the actual progress of the Work, as measured by reference to the Schedule of Values, or present a potential conflict with the Guaranteed Maximum Price, then Owner may require that CMAR prepare and submit a plan for the remaining anticipated Applications for Payment that will bring payments and progress into closer alignment and take into account the Guaranteed Maximum Price, if any, through reductions in billings, increases in retainage, or other equitable measures. Owner will review the plan, discuss any necessary modifications, and implement the plan as modified for all remaining Applications for Payment.

15.03 CMAR's Warranty of Title

A. CMAR warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.04 Substantial Completion

A. When CMAR considers the entire Work ready for its intended use CMAR shall notify Owner's Advisor in writing that the entire Work is substantially complete and request that Owner's Advisor issue a certificate of Substantial Completion. CMAR shall at the same time submit to Owner's Advisor CMAR's proposed punch list of items to be completed or corrected before final payment.

B. Promptly after CMAR's notification, Owner, CMAR, Owner's Advisor, and Engineer will inspect the Work to determine the status of completion. If the Work is not determined to be substantially complete, Owner's Advisor will notify CMAR in writing, giving the reasons for the determination.

C. If the Work is deemed substantially complete, Owner's Advisor will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Owner's Advisor will attach to the certificate the Owner's Advisor's proposed punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Owner's Advisor as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Owner's Advisor, in consultation with Engineer, concludes that the Work is not substantially complete, Owner's Advisor will, within 14 days after submission of the preliminary certificate to Owner, notify CMAR in writing that the Work is not substantially complete, stating the reasons for the conclusion. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Owner's Advisor, in consultation with Engineer, concludes that the Work is substantially complete, then Owner's Advisor will, within said 14 days, execute and deliver to Owner and CMAR a final certificate of Substantial Completion, with a revised punch list of items to be completed or corrected, reflecting such changes from the preliminary certificate as Owner's Advisor believes justified after consideration of any objections from Owner.

D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and CMAR will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and CMAR agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

E. After Substantial Completion the CMAR shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases CMAR may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude CMAR from the Site after the date of Substantial Completion subject to allowing CMAR reasonable access to remove its property and complete or correct items on the punch list.

15.05 Partial Use or Occupancy; Completion of Authorized Work

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Owner's Advisor, Engineer, and CMAR agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with CMAR's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that CMAR permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when CMAR agrees that such part of the Work is substantially complete, CMAR, Owner, Owner's Advisor and Engineer will follow the procedures of Paragraph 15.04.A through 15.04.E for that part of the Work.

2. At any time, CMAR may notify Owner and Owner's Advisor in writing that CMAR considers any such part of the Work substantially complete and request Owner's Advisor to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, CMAR, Owner's Advisor and Engineer will inspect that part of the Work to determine its status of completion. If Owner's Advisor, in consultation with Engineer, does not consider that part of the Work to be substantially complete, Owner's Advisor will notify Owner and CMAR in writing, giving the reasons for its determination. If Owner's Advisor, in consultation with the Engineer, considers that part of the Work to be substantially complete, then for that part of the Work the provisions of Paragraph 15.04 will apply with respect to certification of Substantial Completion, the Division of responsibility, and access.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

5. Neither the organization of the Work into Work Packages, nor the authorization of specified parts of the Work in a Work Authorization, establishes (a) that such packages or parts of the Work have been identified in the Contract Documents or otherwise as a part of the Work that Owner may use or occupy upon completion, or (b) that any such Work constitutes a separately functioning and usable part of the Work that upon completion can be used by Owner for its intended purpose without significant interference with CMAR's performance of the remainder of the Work. The determination of whether any part of the Work qualifies for partial use or occupancy under this Paragraph 15.05 will be made on the merits without reference to Work Packages or Work Authorizations.

B. Substantial Completion of Authorized Work

1. When CMAR considers the entire Work authorized under a specific Work Authorization is ready for its intended use, CMAR shall notify Owner's Advisor in writing that such authorized Work is substantially complete and request that Owner's Advisor issue a certificate of Substantial Completion applicable solely to such authorized Work. CMAR shall at the same time submit to Owner's Advisor the CMAR's proposed punch list of items to be completed or corrected before such authorized Work is deemed complete.

2. CMAR, Owner, Owner's Advisor, and Engineer will follow the procedures of Paragraphs 15.04.A, B, C, E, and F for such authorized Work. The terms of Paragraph 15.04.D are not applicable to the determination of Substantial Completion of the Work authorized under a Work Authorization.

3. Until Substantial Completion of the entire Work under this Contract under Paragraph 15.04, such authorized Work will not be eligible for Owner's use or occupancy, unless otherwise eligible for partial use or occupancy under Paragraph 15.05.A; the determination of a date of Substantial Completion for such authorized Work will not mark the commencement of the contractual correction period and applicable warranties required by the Contract for such authorized Work; and the authorized Work will remain the responsibility of CMAR.

15.06 Final Inspection

A. Upon written notice from CMAR that the entire Work or an agreed portion thereof is complete, Owner's Advisor will promptly make a final inspection with Owner, Engineer, and CMAR and will notify CMAR in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. CMAR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.07 Final Payment

A. Application for Final Payment

1. After Owner's Advisor, in consultation with Engineer, determines that CMAR has (a) satisfactorily completed all corrections identified during the final inspection, (b) has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents, as provided in Paragraph 7.15, and other documents, and (c) completed performance of all services required by the Contract, CMAR may make application for final payment.

2. The final Application for Payment must be accompanied, except as previously delivered by:

   a. all documentation called for in the Contract Documents;

   b. consent of the surety, if any, to final payment;

   c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects or will so pass upon final payment;

   d. a list of all duly pending Change Proposals and Claims; and

   e. complete and legally effective releases or waivers, satisfactory to Owner, of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 15.07.A.2 and as approved by Owner, CMAR may furnish receipts or releases in full and an affidavit of CMAR that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CMAR may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to CMAR and specified Subcontractors and Suppliers.

B. Owner's Advisor's Review of Final Application and Recommendation of Payment—If, on the basis of Owner's Advisor's observation of the Work during construction and final inspection, consultation with Engineer regarding completion, and review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Owner's Advisor is satisfied that CMAR has completed the Work and fulfilled CMAR's other obligations under the Contract, Owner's Advisor will, within 10 days after receipt of the final Application for Payment, indicate in writing Owner's Advisor's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Owner's Advisor's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Owner's Advisor will return the Application for Payment to CMAR, indicating in writing the reasons for refusing to recommend final payment, in which case CMAR shall make the necessary corrections and complete the Work and all remaining services, and resubmit the Application for Payment.

C. Notice of Acceptability of the Work—In support of its recommendation of payment of the final Application for Payment, Owner's Advisor, with Engineer's express approval, will also give written notice to Owner and CMAR that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.08.

D. Completion of Work—The Work is complete, subject to surviving obligations, when it is ready for final payment as established by the Owner's Advisor's written recommendation of final payment and issuance of Notice of Acceptability of the Work.

E. Final Payment Becomes Due—Upon receipt from Owner's Advisor of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Owner's Advisor for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to CMAR within 30 days of Owner's receipt of the final Application for Payment from Owner's Advisor.

15.08 Waiver of Claims

A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by CMAR, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

B. The acceptance of final payment by CMAR will constitute a waiver by CMAR of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim or appealed under the provisions of Article 17.

15.09 Correction Period

A. Scheduled Correction Period Inspection—Within one month before the end of the Contract's correction period, CMAR will participate in an inspection of the Work with the Owner, Owner's Advisor, and Engineer to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by CMAR.

B. If within one year after the date of Substantial Completion, or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents, Owner gives CMAR written notice that any Work has been found to be defective, whether as a result of the scheduled correction period inspection or otherwise, or that CMAR's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect CMAR shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. return to the Site with Owner, Owner's Advisor and Engineer to inspect any apparent or discovered defects in the Work, or unrepaired damage to the Site or adjacent areas;
2. consult with Owner's Advisor and Engineer regarding recommendations as to replacement or correction of such defective Work, or the repair of any damage;
3. correct the defective repairs to the Site or such adjacent areas;
4. correct such defective Work;

5. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and

6. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.

C. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.20.B.

D. If, after receipt of a notice of defect within 60 days and within the correction period, CMAR does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. CMAR shall pay all costs, losses, and damages, including but not limited to all fees and charges of construction managers, engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to such correction or repair or such removal and replacement, including but not limited to all costs of repair or replacement of work of others. CMAR's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.

E. In special circumstances where a particular Item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that Item may start to run from an earlier date if so provided in the Specifications.

F. Where defective Work, and damage to other Work resulting therefrom, has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

G. CMAR's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16— SUSPENSION AND TERMINATION

16.01 Owner May Suspend CMAR Services or Work

A. At any time and without cause, Owner may suspend the CMAR Services or the Work, or any portion thereof, for a period of not more than 90 consecutive days by written notice to CMAR and Owner's Advisor. Such notice will fix the date on which CMAR Services or Work will be resumed. CMAR shall resume the CMAR Services or Work on the date so fixed. CMAR shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. With respect to a suspension of the Work, any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will constitute a default by CMAR and justify termination for cause:

1. CMAR's persistent failure to perform the Work in accordance with the Contract Documents, including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule;

2. Failure of CMAR to perform or otherwise to comply with a material term of the Contract Documents;

3. CMAR's disregard of Laws or Regulations of any public body having jurisdiction; or

4. CMAR’s repeated disregard of the authority of Owner, Owner’s Advisor or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving CMAR and any surety 10 days’ written notice that Owner is considering a declaration that CMAR is in default and termination of the Contract, Owner may proceed to:

1. declare CMAR to be in default, and give CMAR, and any surety, written notice that the Contract is terminated; and

2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude CMAR from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid CMAR but which are stored elsewhere, and complete the Work as Owner may deem expedient.

D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if CMAR within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.B, CMAR shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages, including but not limited to all fees and charges of Owner’s Advisors, engineers, architects, attorneys, and other professionals, sustained by Owner, such excess will be paid to CMAR. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, CMAR shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Owner’s Advisor as to their reasonableness and, when so approved by Owner’s Advisor, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

F. Where CMAR’s services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against CMAR then existing or which may thereafter accrue, or any rights or remedies of Owner against CMAR or any surety under any payment bond or performance bond. Any retention or payment of money due CMAR by Owner will not release CMAR from liability.

G. If and to the extent that CMAR has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 Owner May Terminate for Convenience

A. Upon 7 days’ written notice to CMAR and Owner’s Advisor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, CMAR shall be paid for without duplication of any items:

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. CMAR shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 CMAR May Stop Work or Terminate

A. If, through no act or fault of CMAR, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Owner's Advisor fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay CMAR any sum finally determined to be due, then CMAR may, upon 7 days' written notice to Owner and Owner's Advisor, and provided Owner or Owner's Advisor do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Owner's Advisor has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay CMAR any sum finally determined to be due, CMAR may, 7 days after written notice to Owner and Owner's Advisor, stop the Work until payment is made of all such amounts due CMAR, including interest thereon. The provisions of this paragraph are not intended to preclude CMAR from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CMAR's stopping the Work as permitted by this paragraph.

ARTICLE 17— FINAL RESOULTION OF DISPUTES

17.01 Methods and Procedures

A. Disputes Subject to Final Resolution—The following disputed matters are subject to final resolution under the provisions of this article:

1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and

2. Disputes between Owner and CMAR concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.

B. Final Resolution of Disputes—For any dispute subject to resolution under this article, Owner or CMAR may:

1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;

2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18— MISCELLANEOUS

18.01 Giving Notice

A. Whenever any provision of the Contract requires the giving of written notice to Owner, Owner's Advisor, CMAR, or Engineer when required, it will be deemed to have been validly given only if delivered:

1. in person, by a commercial courier service or otherwise, to the recipient's place of business;

2. by registered or certified mail, postage prepaid, to the recipient's place of business; or

3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 Computation of Times

A. When any period is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

A. With respect to Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner, Owner's Advisor, nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to CMAR for any claims, costs, losses, or damages sustained by CMAR on or in connection with any other project or anticipated project.

18.05 No Waiver

A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of CMAR.

18.07 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 Assignment of Contract

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent, except to the extent that the effect of this restriction may be limited by law, and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 Successors and Assigns

A. Owner and CMAR each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 Headings

A. Article and Paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION MANAGER AT RISK CONTRACT

These Supplementary Conditions amend or supplement EJCDC® CMAR-700, Standard General Conditions of the Construction Manager at Risk Contract (2023). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added: for example, "Paragraph SC-4.05" references modifications to General Conditions Paragraph 4.05.

ARTICLE 1— DEFINITIONS AND TERMINOLOGY

SC – General Delete all references to Construction Manager at Risk and replace with Construction Manager / General Contractor.

SC – General Delete all references to CMAR and replace with CM/GC.

SC – 1.01 Add the following to the end of the last sentence of the definition of "Engineer": "The terms Engineer and Design Engineer are used interchangeably."

ARTICLE 2— PRELIMINARY MATTERS

SC-2.01 Delete Paragraph 2.01.C. in its entirety.

SC-2.02 Replace Paragraph 2.02.A. with the following:

"Owner shall furnish to CM/GC one electronic portable document format (PDF) of the conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract. Owner shall furnish one fully signed hard copy counterpart of the Agreement, and one copy in electronic PDF."

SC-2.03 Delete Paragraphs 2.03.B and 2.03.C in their entirety and insert the following in their place:

B. Electronic Documents Protocol—The parties shall conform to the following provisions in Paragraphs 2.03.B and 2.03.C, together referred to as the Electronic Documents Protocol (EDP or Protocol) for exchange of electronic transmittals.

1. Basic Requirements

   a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.

   b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.

c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.

d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with OA. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.

e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.

f. Nothing herein negates any obligation (1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; (2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or (3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

2. System Infrastructure for Electronic Document Exchange

a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.

1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is **20** MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.

2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.

b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.

c. Each party will operate and maintain industry-standard, industry-accepted, ISO standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, ransomware, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as

CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.

d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to CM/GC, not reasonably anticipated under the original EDP, CM/GC may seek an adjustment in price or time under the appropriate process in the Contract.

e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.

f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.

g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.

h. The Owner will operate a project information management system (also referred to in this EDP as "Project Website") for use of Owner, OA, Engineer, and CM/GC during the Project for exchange and storage of Project-related communications and information. Except as otherwise provided in this EDP or the General Conditions, use of the Project Website by the parties as described in this Paragraph will be mandatory for exchange of Project documents, communications, submittals, and other Project-related information. The following conditions and standards will govern use of the Project Website:

1) Describe the period of time during which the Project Website will be operated and be available for reliance by the parties;

2) Provide any minimum system infrastructure, software licensing and security standards for access to and use of the Project Website;

3) Describe the types and extent of services to be provided at the Project Website, such as large file transfer, email, communication, and document archives, etc.; and

4) Include any other Project Website attributes that may be pertinent to CM/GC's use of the facility and pricing of such use.

C. Software Requirements for Electronic Document Exchange; Limitations

1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents

received from the other party, and if relevant from third parties, using the software formats required in this section of the EDP.

a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.

2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including PDF, intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.

3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

D. Requests by CM/GC for Electronic Documents in Other Formats

1. Release of any Electronic Document versions of the Project design documents in formats other than those identified in the Electronic Documents Protocol, if any, or elsewhere in the Contract will be at the sole discretion of the Owner.

2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project design documents and other Project information requested by CM/GC (Request) in formats other than those identified in the Electronic Documents Protocol, if any, or elsewhere in the Contract will be subject to the provisions of the Owner's response to the Request, and to the following conditions to which CM/GC agrees:

a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer's purposes solely and is being provided to CM/GC on an "AS IS" basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, CM/GC is advised and acknowledges that the content may not be suitable for CM/GC's application or may require substantial modification and independent verification by CM/GC. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.

b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to CM/GC under the request are only for convenience of CM/GC. Any conclusion or information obtained or derived from such data will be at the CM/GC's sole risk and the CM/GC waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.

c. CM/GC shall indemnify and hold harmless Owner, OA, and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys' fees and defense costs arising out of or resulting from CM/GC's use, adaptation, or distribution of any Electronic Documents provided under the Request.

d. CM/GC agrees not to sell, copy, transfer, forward, give away, or otherwise distribute this information, in source or modified file format, to any third party without the direct written authorization of Engineer, unless such distribution is specifically identified in the Request and is limited to CM/GC's subcontractors. CM/GC warrants that subsequent use by CM/GC's Subcontractors complies with all terms of the Contract Documents and Owner's response to Request.

3. In the event that Owner elects to provide or directs the Engineer to provide to CM/GC any CM/GC-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to CM/GC, the Owner shall be reimbursed by CM/GC on an hourly basis at $**300** per hour for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3— CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

SC-3.01 Delete Paragraph 3.01.C in its entirety.

SC-3.03 Add the following new paragraph immediately after Paragraph 3.03.B.1.b:

2. Except as set out in Section 19.01 of the Supplementary Conditions the order of precedence of the Contract Documents is as follows:

    a. Change Orders

    b. Agreement

    c. Addenda

    d. Supplementary General Conditions

    e. General Conditions

    f. Technical Specifications

    g. Referenced Standard Specifications

    h. Drawings

    i. Contractor's Bid (Bid Form)

3. With reference to the Drawings the order of precedence is as follows:

    a. Figures govern over scaled dimensions

    b. Detail drawings govern over general drawings

    c. Addenda/change order drawings govern over general drawings

4. Contract Drawings govern over standard drawings.

ARTICLE 5— SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D and renumber subsequent sections:

E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which CM/GC may rely:

Report Title	Date of Report	Technical Data
Geotechnical / Geological Study MWDSLS Little Cottonwood Conduit Replacement (LCCR) – Phase 1 [Draft]	Mar 29, 2024	Geotechnical report including site conditions, seismic analysis, slope stability analysis, geotechnical design recommendations.
Basis of Design Memorandum Little Cottonwood Conduit Evaluation	May 2023	Engineering considerations for pipeline size, alignment, material, and intake structure modifications.
Basis of Design – LCWTP Raw Water Nexus Evaluation	July 2023	Data on existing LCWTP raw water facilities, proposed modifications to LCWTP raw water facilities, and recommended improvements.
RWLCC Replacement Project Technical Memorandum	Sept 18, 2025	Project engineering conclusions and recommendations for the RWLCC replacement, RWLCC meter and turnout vault, ASR piping, LCC intake structure modifications, and SLA wasteway improvements.
RWLCC Alignment Workshop Summary Technical Memorandum	Oct 17, 2024	Exploration and comparison of alternatives for RWLCC replacement constructability and methods of approach.
Basis of Design Evaluation Murray Power Bypass Project	July 2023	Murray Power Bypass Project considerations and data, and Murray power facility record drawings.

F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site, except Underground Facilities, that contain Technical Data, and specifically identifies the Technical Data upon which CM/GC may rely:

Drawings Title	Date of Drawings	Technical Data
LC063 Aquifer Storage and Recovery Pilot Testing – Phase 1 SIB and Infrastructure	June 2023	Aquifer storage and recovery project record drawings, including ASR piping tie-in location.

Drawings Title	Date of Drawings	Technical Data
Little Cottonwood Water Treatment Plant Electrical System Improvement Project	May 9, 1992	LCWTP electrical system diagrams.
MWDSLS Little Cottonwood Water Treatment Plant Seismic Retrofit Predesign 2002	November 2002	LCWTP Seismic retrofit predesign.
Little Cotton Wood Water Treatment Plant Seismic Predesign – Structural Calculations	May 2003	4.1 Inlet Diversion Structure 5.5 Aeration Basin & Distribution Channel
Seismic Wave Propagation Induced Pipe Strain – Little Cottonwood WTP Expansion Project	May 2004	Technical memorandum on seismic design for large diameter pipelines.
Master Plan System of Improvements Seismic Evaluation Study	June 1998	Seismic evaluation of LCWTP.
Final Report Geotechnical Study LCWTP Expansion Project South Side of LCWTP	November 2002	Geotechnical study along south side of the LCWTP.
Revised Final Report Geotechnical Study LCWTP Expansion Project South Side of LCWTP	August 2003	Geotechnical study along south side of the LCWTP.
Geologic Hazards Study LCWTP Site	July 2003	Geologic hazards study at LCWTP site.
Geotechnical Study LCWTP Site	April 2004	Geotechnical study for LCWTP site.
Geotechnical Study of Pipelines at LCWTP Site	February 2004	Geotechnical study of pipelines at LCWTP Expansion Project.
Gravity and Magnetic Surveys at Little Cottonwood Water Treatment Facility Interim Report	February 2003	Gravity and magnetic study at LCWTP.
SASW Testing at the Metropolitan Water District, Little Cottonwood Canyon Water Treatment Plant	April 2003	SASW testing at LCWTP.

Drawings Title	Date of Drawings	Technical Data
Geotechnical Investigation and Seismic Hazard Study LCWTP and Improvements	April 1999	Geotechnical investigation and seismic hazard study at LCWTP site.
LCWTP Expansion Project – Record Drawings	June 2006	Expansion of raw water facilities, addition of ozone, and other related improvements at the LCWTP.
Cottonwoods Connection, Volume 3 of 4	February 2024	Cottonwoods Connector pipeline alignment, connection, and proximity to the LCWTP.
Little Cottonwood WTP On-Site Improvements – Record Drawings	March 2008	LCWTP improvements, including yard piping and miscellaneous facilities throughout the site.

G. CM/GC may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Proposal Documents during regular business hours or may request copies from OA, at the cost of reproduction or via secure electronic transmission.

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data, if any, upon which CM/GC may rely:

Report Title	Date of Report	Technical Data
Geotechnical / Geological Study MWDSLS Little Cottonwood Conduit Replacement (LCCR) – Phase 1 [Draft]	March 29, 2024	Geotechnical report, including geologic hazards such as slope instability hazards, seismic hazards

ARTICLE 6— BONDS AND INSURANCE

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.C:

1. Required Performance Bond Form—The performance bond that CM/GC furnishes will be in the form of Exhibit B – 00610, Performance Bond (2020).
2. Required Payment Bond Form—The payment bond that CM/GC furnishes will be in the form of Exhibit B – 00620, Payment Bond (2020).

SC-6.02.B Modify Paragraph 6.02.B by deleting the last sentence and inserting the following in its place:

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, IX, and in the limits as listed in this document, unless approved in writing by the Owner.

SC-6.02.C Replace Paragraph 6.02.C in its entirety with the following:

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the Owner in writing. At the option of the Owner, either the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the Owner, its trustees, officers, and employees as additional insureds; or the CM/GC may be required to procure a bond or other instrument guaranteeing payment of losses and related investigations, claim distribution, and defense expenses of the Owner, its trustees, officers, and employees as additional insureds. The Owner does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or $50,000, whichever is less. The Owner does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or $20,000, whichever is less. With respect to any deductible or SIR, the CM/GC shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the Owner, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed.

SC-6.02.D Replace Paragraph 6.02.D in its entirety with the following:

CM/GC and all of CM/GC's subcontractors shall furnish Owner with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be provided on forms acceptable to the Owner before work commences. Owner reserves the right to require complete, certified copies of all required insurance policies, with all endorsements, at any time. CM/GC shall provide an insurance certificate and an endorsement evidencing compliance with this provision at least annually. From time-to-time Owner may increase the requirement for a liability limit by providing reasonable written notice to CM/GC of such a change.

SC-6.02.E Delete Paragraph 6.02.E in its entirety.

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

D. Minimum Limits of Insurance—Except as approved in writing by Owner in advance of the work to be performed, CM/GC and all of CM/GC's subcontractors shall maintain limits no less than:

a. **GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**

1) Combined Single Limit (Bodily Injury and Property Damage):

i) $5,000,000 Per Occurrence

2) Personal Injury (including completed operations and products liability):

i) $5,000,000 Each Occurrence

3) General Aggregate:

i) $5,000,000

4) Products - Comp/OP Aggregate:

i) $5,000,000

5) Limits to apply to this project individually.

b. **AUTOMOBILE LIABILITY**:

1) $5,000,000 Per Occurrence

2) "Any Auto" coverage required.

c. **WORKERS' COMPENSATION and EMPLOYERS LIABILITY:**

1) Workers' compensation statutory limits.

2) Employers Liability statutory limits.

d. **CM/GC's POLLUTION LIABILITY:**

1) $1,000,000 Per Claim

2) $2,000,000 Aggregate

3) Coverage applies to this project individually.

e. **PROFESSIONAL LIABILITY**

1) $2,000,000 Per Claim

2) $2,000,000 Aggregate

E. **Cyber Insurance**, with limits not less than $**2,000,000** per occurrence or claim, $**2,000,000** aggregate. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by CM/GC in this agreement and shall include, but not be limited to, claims involving security breach, system failure, data recover, business interruption, cyber extortion, social engineering, infringement of intellectual property, including but not limited to infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, and alteration of electronic information. The policy shall provide coverage for breach response costs, regulatory fines, and penalties as well as credit monitoring expenses.

F. Waiver of Worker's Compensation Subrogation—A waiver with respect to the Owner, its trustees, officers, and employees of Worker's Compensation subrogation shall be provided.

G. CM/GC shall see that each of its Subcontractors complies with these insurance requirements. CM/GC shall be strictly liable for any failure of such Subcontractors to meet these requirements.

H. All persons and entities performing any work on Owner lands or Owner's interest in lands will provide performance and payment bonds for the full sum of their contracts, naming Owner as obligee.

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provision:

F. This insurance shall be of the "all risk" type, shall be written in completed value form, and shall protect the CM/GC, the Owner, and the Engineer against damage to buildings, structures, materials, and equipment. The amount of this insurance shall not be less than the insurable value of the WORK at completion. Builder's risk insurance shall provide for losses to be payable to the CM/GC, the Owner, and the Engineer as their interests may appear. The policy shall contain a provision that in the event of payment for any loss under the coverage provided, the insurance company shall have no rights of recovery against the CM/GC, the Owner, or the Engineer. The Builder's Risk policy shall insure against all risks of direct physical loss or damage to property from any external cause including flood and earthquake.

G. Coverage for Completion Delays—The builder's risk policy will include, for the benefit of Owner, loss of revenue and soft cost coverage for losses arising from delays in completion that result from covered physical loss or damage to covered property. Such coverage will include, without limitation, fixed expenses, and debt service for a minimum of 12 months with a maximum deductible of 30 days, compensation for loss of net revenues, rental costs, and attorneys' fees and construction management, engineering, or other consultants' fees, if not otherwise covered.

ARTICLE 7—CM/GC RESPONSIBILITIES

SC-7.06 Add the following new subparagraphs immediately after Paragraph 7.06.D:

1. Regular working hours will be **Monday through Friday 7:00 a.m. to 5:30 p.m.**
2. Owner's legal holidays are: **New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Juneteenth Day, Independence Day, Pioneer Day, Labor Day, Veterans Day, Thanksgiving Day, Day After Thanksgiving, Christmas Eve, Christmas Day.**
3. CM/GC shall comply with all local and municipal ordinances.

SC-7.16 Add the following new paragraph immediately after Paragraph 7.16.J:

K. The LCWTP site utilizes chlorine gas for its disinfection process. The Owner maintains a Risk Management Program. CM/GC shall adhere and comply to the requirements of the Risk Management Program as described in Exhibit C – 00638 Chlorine Risk Management Requirements. As part of adherence and compliance, CM/GC shall acknowledge and sign Figure 00638-1 CM/GC Process Safety Management Briefing Form, included with Exhibit C.

SC-7.20 Add the following new paragraph immediately after Paragraph 7.20.F:

G. Unless specified elsewhere in the contract documents, a General Workmanship & Materials Warranty shall commence one year from date of substantial completion.

H. Warranty periods and requirements for equipment purchased as early works packages (during design) or equipment purchased during construction, shall be coordinated and approved in writing with the Owner and Engineer.

ARTICLE 17— FINAL RESOLUTION OF DISPUTES

SC-17.01 Add the following new paragraph immediately after Paragraph 17.01.

17.02 Attorneys' Fees

A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, considering the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 19— FEDERAL REQUIREMENTS

Add Article 19, consisting of the following paragraphs, immediately after Article 18.

19.01 Applicability

A. This Article applies if the Project utilizes, may utilize, is reimbursed with, or is otherwise subject to federal financial assistance, federal loans, federal grants, federally assisted construction requirements, or any other funding agreement, award, authorization, loan agreement, grant agreement, or similar arrangement with the United States or any agency, department, instrumentality, or pass-through entity thereof (collectively, Federal Funds).

B. Federal Requirements means all applicable federal statutes, regulations, executive orders, guidance, agency terms and conditions, award terms, funding agreement requirements, and contract clauses required because Federal Funds are used or may be used for the Project, including, as applicable, 2 CFR Part 200, Appendix II to 2 CFR Part 200, the requirements of any funding agency, and any applicable FAR Part 52 clauses incorporated by reference or required by the Federal Requirements.

C. To the extent any Federal Requirement conflicts with another provision of the Contract Documents, the Federal Requirement controls to the minimum extent necessary to comply with the Federal Requirement; otherwise, the Contract Documents remain in full force and effect.

D. CM/GC acknowledges that the RFP and Contract Documents disclose the possibility of Federal Funds and that compliance with the Federal Requirements identified or reasonably contemplated in this Article is included in CM/GC's compensation, the Contract Price, and the GMP. Any amendment, Work Authorization, Change Order, or other Contract Document that identifies the specific source of Federal Funds or incorporates funding-source-specific clauses consistent with this Article will be deemed a no-cost, time-neutral administrative change and will not entitle CM/GC to additional compensation, additional fee, markup, contingency, or an extension of Contract Times.

E. If, after the Effective Date of the Contract, a Federal Requirement is imposed that is not identified or reasonably contemplated in this Article and materially changes the scope, method, timing, or cost of the Work, CM/GC must promptly give written notice before incurring the affected cost, and the parties will address any allowable adjustment under the applicable change provisions of the Contract Documents and the governing Federal Requirements.

19.02 General Compliance

A. CM/GC shall perform the Work and all CM/GC Services in compliance with applicable Federal Requirements, including requirements communicated by Owner, any pass-through entity, or any federal awarding agency, and shall cooperate with Owner in demonstrating that Federal Funds are expended and administered in accordance with such requirements.

B. CM/GC shall promptly disclose to Owner in writing any potential conflict of interest, credible evidence of fraud, bribery, gratuity violations, civil False Claims Act violations, or other matter that must be disclosed under the Federal Requirements, and shall comply with applicable whistleblower protection requirements.

C. CM/GC shall not award or knowingly permit any Subcontract, Purchase Order, or lower-tier agreement to any person or entity that is debarred, suspended, proposed for debarment, otherwise excluded, or ineligible under the Federal Requirements, and shall verify and document eligibility as required by the Federal Requirements and the Contract Documents.

D. CM/GC shall not obligate or expend Federal Funds to procure, obtain, extend, or renew any covered telecommunications equipment, covered video surveillance equipment, or related services prohibited by 2 CFR 200.216 or by any applicable FAR Part 52 clause or funding-agency requirement.

19.03 Procurement, Competition, and Subcontracting

A. CM/GC shall conduct procurement of Subcontracts, Work Packages, materials, equipment, and services in accordance with documented procurement procedures that comply with applicable Federal Requirements and provide full and open competition.

B. CM/GC shall avoid unnecessary or duplicative procurements, unreasonable qualification requirements, unnecessary bonding, noncompetitive pricing practices, organizational conflicts of interest, brand-name-only specifications without an equal alternative where required, and any arbitrary action that would restrict competition.

C. If CM/GC bids on or self-performs any Work Package, CM/GC must submit its bid before receiving competing bids, must preserve a process that is open, fair, and documented, and may self-perform only if Owner determines in writing that CM/GC provides the best value and that the process satisfies the applicable Federal Requirements.

D. CM/GC shall maintain procurement records sufficient to detail the history of each procurement transaction, including the procurement method, solicitation, evaluation factors, bids or proposals received, selection or rejection rationale, contract type, subcontractor responsibility determination, basis for price, and any Owner or funding-agency approval.

E. For each procurement transaction and Contract modification subject to cost or price analysis under the Federal Requirements, CM/GC shall perform and document the required analysis before award or modification. CM/GC shall not use cost-plus-a-percentage-of-cost or percentage-of-construction-cost contracting methods.

F. When required by the Federal Requirements, CM/GC shall take the affirmative steps required for small businesses, minority businesses, women's business enterprises, veteran-owned businesses, and labor surplus area firms; provide applicable domestic preferences and Buy America preferences for goods, products, materials, iron, steel, manufactured products, and construction materials; and comply with recovered-materials and sustainable-procurement requirements.

19.04 Required Contract Clauses and Flow-Downs

A. CM/GC shall include in each applicable Subcontract, Purchase Order, and lower-tier agreement the Federal Requirements identified in Schedule 19.04 (Schedule of Federal Flow-Down Requirements) attached as Exhibit D, as such schedule may be supplemented by Owner to reflect the applicable funding agreement, federal agency requirements, or other Federal Requirements.

B. To the extent Schedule 19.04, any Federal Requirement, funding agreement, or federal agency requires use of FAR Part 52 clauses, such clauses are incorporated by reference as if set forth in full, with terms adapted as necessary so that "Government," "Contracting Officer," and similar references mean Owner, the applicable pass-through entity, or the applicable federal awarding agency, as the context requires.

C. CM/GC is responsible for reviewing Schedule 19.04 and determining, including, and enforcing all required flow-down clauses in its Subcontracts, Purchase Orders, and lower-tier agreements, and remains responsible for compliance by Subcontractors, Suppliers, and lower-tier parties.

19.05 Labor Standards

A. When required by Federal Requirements, CM/GC and its Subcontractors shall pay laborers and mechanics not less than the applicable prevailing wage and fringe benefits, include the applicable wage determinations in solicitations and agreements, post required notices and wage determinations, submit weekly certified payrolls, and maintain payroll and basic records.

B. CM/GC and its Subcontractors shall comply with applicable Contract Work Hours and Safety Standards Act requirements, including overtime compensation requirements for laborers and mechanics, and with the Copeland Anti-Kickback Act and implementing regulations.

C. Owner may withhold payment to the extent required or permitted by Federal Requirements for unpaid wages, liquidated damages, missing payroll records, or other labor-standards noncompliance, and any breach of federally required labor clauses may be grounds for termination and debarment as provided by the applicable Federal Requirements.

19.06 Cost Principles, GMP, and Payment

A. Costs included in the Cost of the Work, Construction Support Costs, CM/GC Fee, contingency expenditures, Change Orders, Work Authorization Modifications, or other amounts submitted for payment or federal reimbursement must be allowable, allocable, reasonable, consistently treated, adequately documented, and otherwise compliant with the applicable Federal Requirements.

B. CM/GC is not entitled to payment, reimbursement, CM/GC Fee, markup, contingency, or any other compensation for costs that are unallowable under the Federal Requirements, duplicated in another cost category, caused by CM/GC's noncompliance, or disallowed by Owner, a pass-through entity, or a federal awarding agency.

C. CM/GC shall provide all cost, pricing, payroll, subcontractor, supplier, procurement, and other documentation and certifications required to support Owner's payment review, federal reimbursement, financial reporting, and audit obligations.

19.07 Records, Audit, and Access

A. CM/GC shall establish and maintain records sufficient to identify the amount, source, and expenditure of Federal Funds; support all costs claimed; document compliance with Federal Requirements; and permit Owner, any pass-through entity, and any federal awarding agency to prepare required financial, performance, reimbursement, and audit reports.

B. Unless a longer period is required by the Contract Documents or Federal Requirements, CM/GC shall retain such records for at least three years after submission of the final financial report for the applicable Federal Funds, and longer if any litigation, claim, audit, monitoring review, dispute, or written retention-extension notice remains unresolved.

C. CM/GC shall provide Owner, any pass-through entity, the federal awarding agency, Inspectors General, the Comptroller General of the United States, the Government Accountability Office, the Department of Labor, and their authorized representatives timely and reasonable access to records, personnel, Site, Work, and supporting documentation for audits, examinations, monitoring, interviews, copying, transcription, and other official purposes.

19.08 Federal Agency Approvals, Withholding, and Remedies

A. CM/GC shall not proceed with any procurement, Subcontract, Work Package, Change Order, Work Authorization Modification, noncompetitive procurement, sole-source award, brand-name procurement, scope change, budget revision, or other action requiring Owner, pass-through entity, or federal awarding agency review or approval until the required approval has been obtained in writing.

B. Owner may withhold, disallow, offset, or recover amounts claimed by CM/GC to the extent the amount is unsupported, unallowable, noncompliant with Federal Requirements, subject to federal withholding, or later disallowed or recovered by a pass-through entity or federal awarding agency.

C. CM/GC shall promptly correct any noncompliance with Federal Requirements, reimburse Owner for amounts disallowed because of CM/GC's acts or omissions, and cooperate with Owner in responding to monitoring findings, audit findings, corrective action plans, management decisions, and closeout requirements.

19.09 Survival

A. The obligations in this Article, including record retention, audit access, repayment, reimbursement obligations, intellectual property and data rights required by Federal Requirements, and all required flow-down obligations, survive final payment, termination, expiration, and closeout to the extent required by the Contract Documents or Federal Requirements.

EXHIBIT A

SOFTWARE AND DATA FORMAT REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email	
2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)
3	CM/GCs Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to OA and OA's responses to CM/GC's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF	
4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from CM/GC to Owner or OA and for responses from OA to CM/GC regarding Submittals.	Email w/ Attachment or LFE	PDF	
5	Layouts and drawings to be submitted to Owner for future use and modification.	Email w/ Attachment or LFE	DWG	
6	Correspondence, reports, and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC	
7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	EXC	
8	Database files and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	DB	
Notes				
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.			
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.			

Key	
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)
PDF	Portable Document Format readable by Adobe® Acrobat Reader Version **2.0** or later
DWG	Autodesk® AutoCAD .dwg format Version **2018 or later**
DOC	Microsoft® Word .docx format Version **2024 or later**
EXC	Microsoft® Excel .xlsx or .xml format Version **2024 or later**
DB	Microsoft® Access .accdb format Version **2024 or later**

EXHIBIT B
PERFORMANCE & PAYMENT BOND FORMS

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS,

that __________________, as CM/GC, and __________________, as Surety, are held firmly bound unto the Metropolitan Water District of Salt Lake & Sandy hereinafter called "OWNER," in the sum of $__________________ for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, CM/GC has been awarded and is about to enter into the annexed Agreement with OWNER to perform all work required under the OWNER's Contract Documents entitled Little Cottonwood Water Treatment Plant Rebuild Project.

NOW THEREFORE, if CM/GC shall perform all the requirements of the Agreement required to be performed on his part, at the times and in the manner specified therein, then this obligation shall be null and void. Otherwise, it shall remain in full force and effect.

PROVIDED, that any alterations in the work to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of the Agreement, shall not in any way release CM/GC or Surety thereunder, nor shall any extensions of the time granted under the provisions of the Agreement release either the CM/GC or Surety, and notice of such alterations or extensions of the work, materials, or time to complete made under the Agreement is hereby waived by Surety. This Bond is furnished in compliance and in accordance with 14-1-18, et. seq., Utah Code Ann., as amended, and 63G-6a-1103 Utah Code Ann., as amended.

SIGNED AND SEALED, this ___ day of __________________, 20___.

(SEAL)	(SEAL)
______________________________	______________________________
(CM/GC)	(Surety)
By: ___________________________	By: ___________________________
(Signature)	(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGMENT OF SURETY)

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS,

that ___________________, as CM/GC, and ___________________, as Surety, are held firmly bound unto the Metropolitan Water District of Salt Lake & Sandy, hereinafter called "OWNER," in the sum of $___________________ for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, CM/GC has been awarded and is about to enter into the annexed Agreement with OWNER to perform all work required under the OWNER's Contract Documents entitled Little Cottonwood Water Treatment Plant Rebuild Project.

NOW THEREFORE, if said CM/GC, or subcontractor, fails to pay for any materials, equipment, or other supplies, or for rental of same, used in connection with the performance of work contracted to be done, or for amounts due under applicable State law for any work or labor thereon, said Surety will pay for the same in an amount not exceeding the sum specified above and, in the event suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of any persons, companies, or corporations entitled to file claims under applicable State law.

PROVIDED, that any alterations in the work to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of the Agreement, shall not in any way release CM/GC or Surety thereunder, nor shall any extensions of time granted under the provisions of said contract release either CM/GC or the Surety, and notice of such alterations or extensions of the work, materials, or time to complete made under the Agreement is hereby waived by Surety. This bond is furnished in compliance and in accordance with 14-1-18, et. seq., Utah Code Ann., as amended, and 63G-6a-1103 Utah Code Ann., as amended.

SIGNED AND SEALED, this ___ day of ___________________, 20___.

(SEAL)	(SEAL)
________________________________	________________________________
(CM/GC)	(Surety)
By: ____________________________	By: ____________________________
(Signature)	(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGMENT OF SURETY)

EXHIBIT C

CHLORINE RISK MANAGEMENT REQUIREMENTS AND FORM

CHLORINE RISK MANAGEMENT REQUIREMENTS

Introduction

The CM/GC shall be able to accomplish the WORK without compromising the safety and health of those at or near the facility. The CM/GC shall ensure that its employees and Subcontractors are trained to:

Perform work safely.

Be aware of provisions of the Owner's EPA Risk Management Program (RMP) / OSHA Process Safety Management (PSM) plan applicable to Owner’s chlorination facilities used for the chlorination system. All work done in and adjacent to chlorination systems area or portion of Owner’s facility used for the chlorination system must comply with the Owner’s safe work practices described in the Owner’s RMP Manual and Job Safety Analyses.

Be aware of potential hazards related to work in or near the Owner’s chlorination system or portion of Owner’s facility used for the chlorination system. The CM/GC is responsible for informing all of its employees, Subcontractors, and agents who work in or adjacent to the chlorination facilities used for the chlorination system of the requirements of the Owner’s Chlorine Risk Management Program Plan and any information communicated to the CM/GC by the Owner regarding chlorine hazards, emergency response plans, and other process safety information. All work performed in or adjacent to the chlorination facilities used for the chlorination system must be done in accordance with all requirements of 29 CFR 1910.119.

Applicability

The RMP/PSM program is applicable to all contractors who perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to the Owner’s chlorination facilities used for the chlorination system. Adjacent in this case is defined as working close enough to the process so that CM/GC’s work could reasonably be expected to affect process safety and potentially cause, either directly or indirectly, an accidental release of Chlorine. When in doubt, CM/GC shall contact the Owner and Engineer.

CM/GC Safety Program

Before allowing any employee, Subcontractor, or other personnel on site to work near, on, or adjacent to Owner’s chlorination facilities used for the chlorination system, CM/GC shall provide the Owner with a complete copy of CM/GC’s safety program for review. CM/GC’s safety program must contain the requirements listed below. The program need not contain all elements if an element is not applicable to the type of work being performed. For example, if CM/GC is not using cranes or hoists to perform the required work, CM/GC’s safety program does not need to address crane and hoist safety. If CM/GC has questions he should refer to OSHA *Safety and Health Regulations for Construction,* Part 1926, and *General Industry Standards,* Part 1910, to help determine if a safety program is applicable to the Work that will be performed.

CM/GC Safety Program Requirements

1. General Safety and Health Provisions
2. Occupational Health and Environmental Controls
3. Hazard Communication
4. Process Safety Management of Highly Hazardous Chemicals
5. Personal Protective and Life Saving Equipment
6. Fire Protection and Prevention
7. Signs, Signals, and Barricades
8. Materials Handling, Storage, Use, and Disposal

9. Tools: Hand and Power
10. Welding and Cutting
11. Electrical
12. Lockout and Tagging
13. Scaffolding
14. Cranes, Derricks, Hoists, Elevators, and Conveyors
15. Motor Vehicles and Mechanized Equipment
16. Excavation, Trenching, and Shoring
17. Stairways and Ladders
18. Confined Space Entry
19. Toxic and Hazardous Substances.

The Owner will review CM/GC's safety program elements only to determine if required safety program elements are present. Owner has no responsibility to determine if the contents of CM/GC's programs meet OSHA safety requirements. CM/GC is solely responsible for assuring that its safety programs meet all OSHA requirements. All work performed on or near the Owner's chlorine facility used for the chlorine system shall be in accordance with the CM/GC's safety program.

CM/GC Safety Training

Before allowing any employee, Subcontractor, or other personnel on site to work near, on, or adjacent to Owner's chlorination facilities used for the chlorination system, the CM/GC must submit records indicating that the CM/GC's employees, Subcontractors, and agents on site have received safety program training. The training records shall show the names and dates each of CM/GC's employees was trained, along with a listing of the safety program elements in which they were trained. Also, all CM/GC's employees and Subcontractors who worked on or near Owner's chlorine facilities used for the chlorine system shall be identified in writing. If CM/GC is working at the plant for more than 1 year, a copy of the CM/GC's safety training records shall be provided at least annually to the Owner.

CM/GC Safety Log

Before allowing any employee, Subcontractor, or other personnel on site to work near, on, or adjacent to Owner's chlorination facilities used for the chlorination system, the CM/GC shall also provide to the Owner a copy of CM/GC's OSHA Log and Summary of Injuries and Illnesses Form Number 200 for the five most recent calendar years and the names of at least two references that can attest to CM/GC's safety record and performance. During the construction period, the CM/GC is required to submit a copy of its OSHA Log and Summary of Injuries and Illnesses Form Number 200 any time an injury or illness on the project is reported as due to working in or adjacent to the chlorination system.

CM/GC Briefing

If CM/GC is to perform work in or adjacent to the Owner's chlorine facilities used for the chlorine system, a safety briefing will be conducted with CM/GC's Project Manager, Supervisor, and foremen before they begin work. The purpose of this briefing is to make the CM/GC aware of the Owner's RMP requirements. Upon arriving at the plant for the first time to perform work, the CM/GC's Project Manager, Supervisor, and foreman will be presented the attached Form 000638-1. The CM/GC must read and sign the form. The Owner's representative will then conduct a formal briefing session with the CM/GC that summarizes the following:

- The known hazards caused by an accidental release of chlorine.
- Safe work practices including procedures for handling chemicals, lockout/tagout, hot work permit procedure, and equipment and piping disassembly.
- Applicable provisions of the emergency response plan.

CM/GC and its Subcontractors should receive an Emergency Response Summary Sheet. CM/GC, its Subcontractors, and any other personnel on site to work near, on, or adjacent to Owner's chlorination facilities used for the chlorination system should also receive a copy of process safety information and the emergency response plan developed under the RMP/PSM regulations. In addition, the CM/GC should be shown where the RMP/PSM Plan is kept so that it can be used as a reference, if necessary. The briefing form is filed in the RMP/PSM files, which is maintained by the Owner's Safety & Security Administrator. The CM/GC has a responsibility to see that this information is received from Owner.

During the briefing, the following CM/GC access control procedures will be reviewed:

- CM/GC's employees, Subcontractors, employees of Subcontractors, Suppliers, employees of Suppliers, and others are restricted from entering all regulated process areas (chlorination system and portion of chemical building used for chlorination system) unless access is required to perform their work.
- CM/GC's employees, Subcontractors, employees of Subcontractors, Suppliers, employees of Suppliers, and others entering a regulated process area (chlorination system and portion of chemical building used for chlorination system) must inform the on-duty Senior Operator or supervisor, in person or by telephone, before entering.

In addition to the CM/GC briefing discussed above, CM/GC and its Subcontractors working in and around the Owner's chlorine facility should receive a walkthrough from Owner of the process that points out the chemical and equipment locations and the emergency response alarms and evacuation routes. The CM/GC has a responsibility to see that he has this information. After receiving this information, the CM/GC shall inform his employees and Subcontractors about this information.

Form 00638-1

CM/GC

Process Safety Management Briefing Form

In accordance with EPA 40 CFR Part 68 Chemical Accident Prevention Requirements: Risk Management Programs Under the Clean Air Act Section 112®(7) and OSHA 29 CFR 1910.119 Process Safety Management (PSM) of Highly Hazardous Materials, I have received a safety briefing from Owner personnel covering chlorine hazards, safe work practices including lockout/tagout, hot work, and emergency response procedures. In no way should this briefing be construed as replacing the required CM/GC employee safety training. I further understand that the Owner expects CM/GC, including their Subcontractors, Suppliers, agents, and employees of such, to perform construction activities under OSHA required regulations and the Owner procedures and that they have received all of the required associated training. It is understood that all information presented to me by the Owner staff shall be disseminated to all persons, Subcontractors, Suppliers, and agents employed either directly or indirectly by us. I agree to submit documentation as requested by the Owner to verify that our employees, Subcontractors, Suppliers, and any other parties working directly or indirectly for us are conveyed the information required and have received any required training. I agree to submit a written statement indicating whether our work presents any unique hazards and a description of those hazards.

Date	Signature	Print Name	Company
___________	______________________	______________________	______________________

[NOTE: The Owner is not responsible for training CM/GCs, nor does the Owner assume or undertake any duty to CM/GC or its employees, Subcontractors, or Suppliers by complying with Owner's chlorine RMP.]

EXHIBIT D
SCHEDULE 19.04 – SCHEDULE OF FEDERAL FLOW-DOWN REQUIREMENTS AND FAR PART 52 CLAUSES

SCHEDULE 19.04 – SCHEDULE OF FEDERAL FLOW-DOWN REQUIREMENTS AND FAR PART 52 CLAUSES

Project: Salt Lake City Little Cottonwood Water Treatment Plant (LCWTP) Rebuild Project
Contract Type: Construction Manager / General Contractor (CM/GC)
Owner: Metropolitan Water District of Salt Lake & Sandy
Federal Award No.: [TO BE INSERTED UPON AWARD]
Federal Awarding Agency: [TO BE INSERTED — e.g., EPA, Bureau of Reclamation, USDA-RD]

Authority and Applicability

This Schedule 19.04 is incorporated by reference into the CM/GC Contract pursuant to Article 19.04 of the Supplementary Conditions (00800). It identifies the federal requirements that CM/GC must include in each applicable Subcontract, Purchase Order, and lower-tier agreement as required by:

- 2 CFR Part 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards)
- Appendix II to 2 CFR Part 200 (Contract Provisions for Non-Federal Entity Contracts Under Federal Awards)
- FAR Part 52 (Solicitation Provisions and Contract Clauses), as applicable to federally assisted construction
- [FEDERAL AWARDING AGENCY] program-specific requirements, if any

Owner reserves the right to supplement this Schedule upon identification of additional federal requirements or changes in applicable law or regulation.

Part A – Far Clauses Incorporated by Reference

A.1 Clauses Incorporated by Reference (FAR 52.252-2)(FEB 1998)

NOTICE: The following contract clauses pertinent to this Schedule are hereby incorporated by reference, with the same force and effect as if they were given in full text. Upon request, Owner will make their full text available. The full text of a clause may be accessed electronically at:

https://www.acquisition.gov/browse/index/far

Where a clause below references the "Government," "Contracting Officer," or "Head of Contracting Activity," such terms shall be read to mean Owner, the pass-through entity, or the federal awarding agency, as context requires, per Article 19 of the Supplementary General Conditions.

Ethics, Integrity, and Anti-Corruption

FAR Clause	Title	Date
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-6	Restrictions on Subcontractor Sales to the Government	JUN 2020
52.203-7	Anti-Kickback Procedures	JUN 2020
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	MAY 2014
52.203-13	Contractor Code of Business Ethics and Conduct	NOV 2021
52.203-14	Display of Hotline Poster(s)	NOV 2021
52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights	JUN 2020
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017

Administrative and Data Requirements

FAR Clause	Title	Date
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUN 2020
52.204-13	System for Award Management Maintenance	OCT 2018
52.204-19	Incorporation by Reference of Representations and Certifications	DEC 2014
52.204-21	Basic Safeguarding of Covered Contractor Information Systems	NOV 2021
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities	NOV 2021
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment	NOV 2021
52.204-27	Prohibition on a ByteDance Covered Application	JUN 2023

Debarment, Suspension, and Responsibility

FAR Clause	Title	Date
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	NOV 2021
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	OCT 2018
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015

Audit, Records, and Pricing

FAR Clause	Title	Date
52.215-2	Audit and Records — Negotiation	JUN 2020
52.215-14	Integrity of Unit Prices	NOV 2021

Small Business

FAR Clause	Title	Date
52.219-8	Utilization of Small Business Concerns	OCT 2022
52.219-9	Small Business Subcontracting Plan	OCT 2022
52.219-16	Liquidated Damages — Subcontracting Plan	SEP 2021

Labor Standards (Davis-Bacon, CWHSSA, and Related)

FAR Clause	Title	Date
52.222-1	Notice to the Government of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards — Overtime Compensation	MAY 2018
52.222-6	Construction Wage Rate Requirements	AUG 2018
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	JUL 2021
52.222-9	Apprentices and Trainees	JUL 2005

52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014
52.222-12	Contract Termination — Debarment	MAY 2014
52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014

Equal Employment Opportunity and Nondiscrimination

FAR Clause	Title	Date
52.222-21	Prohibition of Segregated Facilities	APR 2015
52.222-26	Equal Opportunity	SEP 2016
52.222-29	Notification of Visa Denial	APR 2015
52.222-35	Equal Opportunity for Veterans	JUN 2020
52.222-36	Equal Opportunity for Workers with Disabilities	JUN 2020
52.222-37	Employment Reports on Veterans	JUN 2020
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	NOV 2021
52.222-54	Employment Eligibility Verification	MAY 2022
52.222-55	Minimum Wages Under Executive Order 14026	JAN 2022
52.222-62	Paid Sick Leave Under Executive Order 13706	JAN 2022

Environmental Protection

FAR Clause	Title	Date
52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts	SEP 2013
52.223-3	Hazardous Material Identification and Material Safety Data	FEB 2021

52.223-5	Pollution Prevention and Right-to-Know Information	MAY 2011
52.223-6	Drug-Free Workplace	MAY 2001
52.223-10	Waste Reduction Program	MAY 2011
52.223-11	Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons	JUN 2016
52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners	JUN 2016
52.223-17	Affirmative Procurement of EPA-designated Items in Service and Construction Contracts	AUG 2018
52.223-18	Encouraging Contractor Policies to Ban Text Messaging While Driving	JUN 2020
52.223-19	Compliance with Environmental Management Systems	MAY 2011

Buy American and Trade Agreements

FAR Clause	Title	Date
52.225-1	Buy American — Supplies	OCT 2022
52.225-9	Buy American — Construction Materials	OCT 2022
52.225-10	Notice of Buy American Requirement — Construction Materials	MAY 2014
52.225-11	Buy American — Construction Materials Under Trade Agreements	DEC 2022
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2021

Intellectual Property, Patents, and Data

FAR Clause	Title	Date
52.227-1	Authorization and Consent	JUN 2020
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	JUN 2020
52.227-3	Patent Indemnity	APR 1984
52.227-4	Patent Indemnity — Construction Contracts	DEC 2007
52.227-14	Rights in Data — General	MAY 2014

Bonds

FAR Clause	Title	Date
52.228-1	Bid Guarantee	SEP 1996
52.228-15	Performance and Payment Bonds — Construction	JUN 2020

Payments

FAR Clause	Title	Date
52.232-25	Prompt Payment	JAN 2017
52.232-27	Prompt Payment for Construction Contracts	JAN 2017

Subcontracting

FAR Clause	Title	Date
52.244-5	Competition in Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	JUN 2023

Part B – Far Clauses Incorporated In Full Text

The following FAR clauses are incorporated in full text because they contain operative language, require affirmative compliance actions, or implement Appendix II to 2 CFR Part 200 requirements for federally assisted construction contracts.

52.252-2 Clauses Incorporated by Reference (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address:

https://www.acquisition.gov/browse/index/far

(End of clause)

52.203-12 Limitation on Payments to Influence Certain Federal Transactions (JUN 2020)

(a) Definitions. As used in this clause —

"Agency" means an executive agency as defined in Federal Acquisition Regulation (FAR) 2.101.

"Covered Federal action" means any of the following actions: (1) The awarding of any Federal contract. (2) The making of any Federal grant. (3) The making of any Federal loan. (4) The entering into of any cooperative agreement. (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304) and include Alaskan Natives.

"Influencing or attempting to influence" means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government" means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency" includes the following individuals who are employed by an agency: (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment. (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code. (3) A special Government employee, as defined in section 202, Title 18, United States Code. (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person" means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Reasonable compensation" means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment" means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient" includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Regularly employed" means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State" means a State of the United States, the District of Columbia, an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition. 31 U.S.C. 1352 provides, in part, that no appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action. In accordance with 31 U.S.C. 1352, the Contractor shall not use appropriated funds to pay any person (including the Contractor or any of its officers, directors, or employees) for influencing or attempting to influence any covered Federal action.

(c) Disclosure. (1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB Standard Form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under paragraph (b) of this clause if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. An event that materially affects the accuracy of the information reported includes — (i) A cumulative increase of $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or (ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or (iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(d) Agreement. The Contractor agrees that — (1) It will not pay any person for influencing or attempting to influence in connection with this contract any covered Federal action using funds other than those described in paragraph (d)(2) of this clause; and (2) It will, to the extent it pays any person for influencing or attempting to influence in connection with this contract any covered Federal action using funds other than appropriated funds, pay only reasonable compensation to its employees for services rendered.

(e) Penalties. (1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (c) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable. (2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) Subcontracts. The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of this clause, from each person requesting or receiving a subcontract exceeding $150,000 under this contract. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(End of clause)

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (NOV 2021)

(a) Definitions. As used in this clause —

"Backhaul" means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network.

"Covered foreign country" means The People's Republic of China.

"Covered telecommunications equipment or services" means — (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities); (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

"Critical technology" means — (1) Defense articles or defense services included on the United States Munitions List; (2) Items included on the Commerce Control List that are controlled under specified Export Control Classification Numbers; (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology; (4) Nuclear facilities, equipment, and material; (5) Select agents and toxins; and (6) Emerging and foundational technologies.

"Interconnection arrangements" means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is destined.

"Reasonable inquiry" means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

"Roaming" means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

"Substantial or essential component" means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception applies or the covered telecommunications equipment or services are covered by a waiver.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception applies or a waiver is granted.

(c) Procedures. The Contractor shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities excluded from receiving federal awards for "ichovered telecommunications equipment or services."

(d) Reporting. (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information: (i) Within 1 business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended. (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i): any further available information about mitigation actions undertaken or recommended; and the entity name, description, and source (e.g., combating combating supply chain risks, or information gathered during contract performance).

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services.

(End of clause)

52.209-6 Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment (NOV 2021)

(a) Definition. As used in this clause — "Commercially available off-the-shelf (COTS) item" means any item of supply (including construction material) that is — (1) A commercial product (as defined in paragraph (1) of the definition of "commercial product" in FAR 2.101); (2) Sold in substantial quantities in the commercial marketplace; and (3) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace.

(b) The Government suspends or debars Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract, in excess of the threshold specified in FAR 9.405-2(b) on the date of subcontract award, with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so, and the Contracting Officer has provided written approval.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed the threshold specified in FAR 9.405-2(b) on the date of subcontract award, other than a subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment. The notice must include the following: (1) The name of the subcontractor. (2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM. (3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM. (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial products or commercial services, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified to identify the parties), in each subcontract that — (1) Exceeds the threshold specified in FAR 9.405-2(b) on the date of subcontract award; and (2) Is not a subcontract for a commercially available off-the-shelf item.

(End of clause)

52.222-4 Contract Work Hours and Safety Standards — Overtime Compensation (MAY 2018)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see FAR 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if the requirements of paragraph (a) are violated. In addition, the Contractor and subcontractor are liable for liquidated damages. Liquidated damages shall be computed for each individual employed in violation of paragraph (a) at the rate of $10 per affected employee for each calendar day on which the individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of overtime wages required by paragraph (a).

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer shall upon his or her own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in paragraph (b).

(d) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (d) of this clause and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (d).

(e) The requirements of this clause do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or to contracts for transportation or transmission of intelligence.

(End of clause)

52.222-6 Construction Wage Rate Requirements (AUG 2018)

(a) Definition. As used in this clause — "Site of the work" — (1) Means the physical place or places where the construction called for in the contract will remain when work on it is completed; and (2) Except as provided in paragraph (2) of this definition, includes any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project.

(b)(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor (see Wage Determination attached hereto or incorporated by reference, per [WAGE DETERMINATION NUMBER — TO BE INSERTED]), regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(c) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits only when all the following criteria have been met: (1) The work to be performed by the classification requested is not performed by a classification in the wage determination. (2) The classification is utilized in the area by the construction industry. (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (c) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(e) [Reserved — see FAR 52.222-6(e) for full fringe benefit compliance text]

(f) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The Contractor shall maintain and make available payroll records in accordance with FAR 52.222-8 (Payrolls and Basic Records).

(g) The Contractor shall insert in any subcontracts the clauses contained in FAR 52.222-6 through 52.222-10 and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(h) Wage Determination: [WAGE DETERMINATION TO BE ATTACHED — the applicable Davis-Bacon wage determination for Salt Lake County, Utah, building/heavy construction, as issued by the U.S. Department of Labor, shall be attached as Exhibit A to this Schedule upon confirmation of the federal funding source.]

(End of clause)

52.222-10 Compliance with Copeland Act Requirements (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-26 Equal Opportunity (SEP 2016)

(a) Definition. As used in this clause — "Compensation" means any payments made to, or on behalf of, an employee or offered to an applicant as remuneration for employment, including but not limited to salary, wages, overtime pay, shift differentials, bonuses, commissions, vacation and holiday pay, allowances, insurance and other benefits, stock options and awards, profit sharing, and retirement. "Compensation information" means the amount and type of compensation provided to employees or offered to applicants, including, but not limited to, the desire of the Contractor to attract and retain a particular employee for the value the employee is perceived to add to the Contractor's profit or the Contractor's ability to achieve its mission. "Gender identity" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found on their website. "Sexual orientation" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found on their website. "United States" means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of $10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. This shall include, but not be limited to — (i) Employment, upgrading, demotion, or transfer; (ii) Recruitment or recruitment advertising; (iii) Layoff or termination; (iv) Rates of pay or other forms of compensation; and (v) Selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(5) The Contractor shall not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant.

(6)-(11) [Additional compliance requirements per 41 CFR 60-1.4(a) are incorporated herein by reference.]

(c) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the applicable notice to be provided by the Contracting Officer or such other notice approved by the Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under this clause.

(d) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(e) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor.

(f) In the event of the Contractor's noncompliance with any clause of this contract or Executive Order 11246, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts, in accordance with the Executive Order and the applicable regulations.

(g) The Contractor shall include the terms and conditions of paragraphs (b)(1) through (b)(11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended.

(End of clause)

52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts (AUG 2018)

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired — (1) Competitively within a timeframe providing for compliance with the contract performance schedule; (2) Meeting contract performance requirements; or (3) At a reasonable price.

(b) Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

(c) The Contractor also shall comply with the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6962) and implementing regulations at 40 CFR Part 247.

(End of clause)

52.225-9 Buy American — Construction Materials (OCT 2022)

(a) Definitions. As used in this clause —

"Commercially available off-the-shelf (COTS) item" — (1) Means any item of supply (including construction material) that is — (i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" in FAR 2.101); (ii) Sold in substantial quantities in the commercial marketplace; and (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and (2) Does not include bulk cargo.

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work.

"Cost of components" means — for components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and for components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs.

"Critical component" means a component that is mined, produced, or manufactured in the United States and determined by the head of the agency to be critical to the operation of an article.

"Domestic construction material" means — (1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both — (i) An unmanufactured construction material mined or produced in the United States; or (ii) A construction material manufactured in the United States, if the cost of its U.S. components exceeds [55% / 60% / 65% / 75% — see current FAR thresholds] of the cost of all its components. (2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost of iron and steel not produced in the United States constitutes less than 5 percent of the cost of all the components used in such construction material.

"Foreign construction material" means a construction material other than a domestic construction material.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference. (1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial product, or to the construction materials or components listed by the Government as follows: [NONE / TO BE COMPLETED].

(3) The Contracting Officer may add other foreign construction materials to the list in paragraph (b)(2) if the Government determines that — (i) The cost of domestic construction material would be unreasonable (exceeding the cost of foreign construction material by more than the applicable percentage threshold); (ii) The application of the restriction of the Buy American statute would be impracticable or inconsistent with the public interest; or (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute. Any contractor request to use foreign construction material shall include adequate information for Government evaluation of the request, including a description of the foreign and domestic construction materials and applicable cost information.

(End of clause)

52.236-13 Accident Prevention — Alternate I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will — (1) Safeguard the public and Government personnel, property, materials, and equipment exposed to Contractor operations and activities; (2) Avoid interruptions of Government operations and delays in project completion dates; and (3) Control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall — (1) Provide appropriate safety barricades, signs, and signal lights; (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition, or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1), in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action.

(e) (Alternate I) Before commencing the work, the Contractor shall — (1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and (2) Meet with the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(f) The Contractor shall insert this clause, including this paragraph (f), with appropriate changes in the designation of the parties, in subcontracts.

(End of clause)

52.244-5 Competition in Subcontracting (DEC 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (section 831 of Public Law 101-510, as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges.

(End of clause)

[END OF SCHEDULE 19.04]

Attachment C – Non-disclosure Agreement

NON-DISCLOSURE

AND

CONFIDENTIALITY AGREEMENT

Agreement Purposes

The Metropolitan Water District of Salt Lake & Sandy (Owner) has contracted with ________________________, a _________ corporation (CM/GC) for pre-construction and construction services related to the Little Cottonwood Water Treatment Plant Rebuild Project (Project).

The Owner provides treated drinking water to the public utility departments of Salt Lake City and Sandy City, as well as others. Owner operations and facilities are critical to the health, safety, and welfare of the public. In connection with the Project, CM/GC will be given information and generate work product that must be kept secure and confidential in order to protect Owner operations and facilities and the health, safety, and welfare of the public.

Agreement Terms

Those signing below agree as follows:

1. Certain information that Owner must provide to the CM/GC to perform its work is confidential and security sensitive. This includes information disclosed physically, electronically, orally, visually, or the substantial equivalent thereof. That information is being provided solely for use in the Project. The work product generated as part of the Project, including but not limited to analysis, drafts, calculations, recommendations, and the final report, are also confidential and security sensitive. Together, the confidential and/or sensitive information provided by the Owner and the work product generated as part of the Project are referred to as the “Sensitive Information.” Sensitive Information does not include information that (a) was part of the public domain at the time of disclosure by the Owner or properly became part of the public domain, by publication or otherwise; or (b) CM/GC received from a third party without similar restrictions and without breach of this Agreement.

2. All those obtaining or having access to the Sensitive Information shall use deliberate and thoughtful care and caution to maintain in confidence, not disclose, and prevent unauthorized access to the Sensitive Information.

3. All persons and entities signing this Agreement agree not to reproduce or distribute by any means the Sensitive Information except as reasonable and necessary for the Project. The Sensitive Information shall not be disclosed or revealed to anyone, and shall be protected against unauthorized access by anyone, except: (a) trustworthy employees of the CM/GC, and trustworthy employees of any subcontractors or vendors of the CM/GC, who have a need to know the information for Project purposes; and (b) who have first read this Agreement and signed a copy of the attached Acknowledgement agreeing to be bound by all terms of this Agreement and returned such signed copy to Owner by email. The CM/GC shall be responsible to see that each and every employee and each and every employee of any subcontractor or vendor receiving the Sensitive Information has first read this Agreement and signed a copy of the attached Acknowledgement and returned it by email to the Owner. If CM/GC is required to disclose Sensitive Information to a governmental agency to further the objectives of the Project, CM/GC shall notify the Owner and consult with and assist the Owner in establishing protections for such disclosed Sensitive Information prior to the disclosure. If CM/GC is required by a court of competent jurisdiction to disclose Sensitive Information, CM/GC shall notify the Owner and consult with and assist the Owner in obtaining a protective order prior to such disclosure.

4. Upon notice from the Owner, all copies of the Sensitive Information shall be returned promptly to the Owner or destroyed as instructed by the Owner, at Owner's option and electronic files disclosing the same shall be deleted, including deletion of all backup copies. CM/GC may, however, retain (a) one copy of any Sensitive Information solely to the extent required to defend or maintain any litigation relating to this Agreement, or to comply with applicable laws and regulations, subject to the same confidentiality conditions described herein, and (b) copies of Sensitive Information contained in routine archived back-ups created as part of the CM/GC's information technology system back-up and disaster recovery protocols, where such back-ups are used only for such purposes and are not accessible in the ordinary course of business. Each person signing this Agreement shall certify full compliance in writing upon completion of destruction or return.

5. All persons and entities signing this Agreement or the attached Acknowledgement shall employ all reasonable efforts to maintain the Sensitive Information as highly confidential and security sensitive. Such efforts will be no less than the degree of care employed to preserve and safeguard such person or entity's own highly confidential and security sensitive information. Such efforts shall not be less than a reasonable degree of care. At a minimum, only one electronic copy of the Sensitive Information will be kept in a password protected file at all times, with access to the password restricted to a need-to-know basis and each hard copy of the Sensitive Information will be kept in a locked location with access restricted to a need-to-know basis. No archived back-ups may be kept unless created as part of the CM/GC's information technology system back-up and disaster recovery protocols, and such back-ups are used only for such purposes and are not accessible in the ordinary course of business.

6. This Agreement expresses the entire agreement and understanding of the parties with respect to the subject matter hereof and supersedes all prior oral or written agreements, commitments and understandings pertaining to the subject matter hereof. Any modifications of or changes to this Agreement shall be in writing and signed by both parties.

Dated this __ day of _______, 20__.

Metropolitan Water District of Salt Lake & Sandy

____

Annalee Munsey, General Manager

Dated this __ day of _______, 20__.

[CM/GC]

____

[Name, Title]

ACKNOWLEDGMENT

The undersigned hereby acknowledges that they have read the attached Non-disclosure and Confidentiality Agreement regarding the Little Cottonwood Water Treatment Plant Rebuild Project. The undersigned understands the terms of the Agreement and agrees to be bound by the terms of the Agreement.

Name: ________________________________

Position: ________________________________

Company: ________________________________

Email: ________________________________

Signature: ________________________________

Date: ________________________________

Attachment D – Pricing Information Form(s)

Phase I Services

Only those Proposers selected for the interview will provide pricing information as described in Section 7.3 and 7.4.

The scope and anticipated schedule of the CM/GC Services for which pricing is required is defined in Exhibit B of the Agreement (Attachment B of this RFP). Costs shall be broken down by task and input into **Table 1** – Compensation for CM/GC Services.

Proposers shall include rates, estimated hours, and total costs for Key Personnel and additional staff that will support Key Personnel during Phase **I** in **Table 2** – Table of Costs. Expenses, payroll taxes, insurance (labor burden) rates, and rented and leased equipment rates shall also be provided in **Table 2.**

Table 3 shall include a level of effort and fee for all CM/GC Services based on the scope of services included in Exhibit A of the Agreement.

The Owner will authorize portions of the CM/GC Services through Task Order. **Table 4** shall include level of effort and fee for only those CM/GC Services which shall be part of the 30% preliminary design.

Additional recommended scope and fee not part of the scope of services mentioned in Exhibit B of the Agreement may be included as a separate item within the pricing information submitted.

Proposers are encouraged to recreate the tables in Exhibit A of the Agreement for convenience and formatting.

Attachment E – Project Performance Evaluation Form

Instructions

The attached Project Performance Evaluation Form is to be provided to agencies or entities for which your core project team members or CM/GC have recently provided services relevant to those requested for this project. Provide the evaluation form to the owner, or the owner's representative directly responsible for oversight of the project, to complete and submit to the email listed below.

The first four references submitted will be accepted and utilized as part of the evaluation process.

The form is to be completed by the agency or entity and emailed to:

Gardner Olson
Senior Engineer
olson@mwdsls.gov
801-942-9667

Please have emails include LC070 PPE in the subject line.

Also attached is a sample performance evaluation cover letter that may be used when sending the reference check request.

Sample CM/GC Performance Evaluation Cover Letter

Sample Cover Letter

Contact Name

Address of Reference

(CM/GC) is responding to a Request for Proposals from the Metropolitan Water District of Salt Lake & Sandy. Metro Water is preparing to rebuild all or most of its 1960s era 150 MGD Little Cottonwood Water Treatment Plant.

As a part of the response submittal process, Metro Water is requesting performance evaluations from agencies either that our CM/GC has performed services for in the past or is currently receiving services.

I would appreciate your cooperation in completing the attached CM/GC Performance Evaluation Form and sending, by email, the completed form by end of business **September 17, 2026** to olson@mwdsls.gov. Please include “LC070 PPE” in the email subject line.

For questions, please contact Gardner Olson, P.E., Project Manager, at the email above or phone at 801.942.9667.

Failure to submit the CM/GC Performance Evaluation Form by the above date may have a negative impact on the qualification we submit for this service. Your cooperation in submitting this form by this date is appreciated.

If you have any questions regarding this request, please contact (your name) at (your telephone number).

Sincerely,

Little Cottonwood Water Treatment Plant Rebuild Project
CM/GC Selection

LC070 PPE

PROJECT PERFORMANCE EVALUATION FOR

____________________________ (CM/GC)

The Metropolitan Water District of Salt Lake & Sandy is seeking a Construction Manager / General Contractor (CM/GC) for its Little Cottonwood Water Treatment Plant Rebuild Project. The reference information requested will help guide Metro Water in its selection of the best possible CM/GC for this Project. CM/GC is also known as Construction Manager-at-Risk (CMAR).

Metro Water appreciates your time and assistance with this process. In the space below, provide the project title, contracted services provided by the CM/GC, and start and completion date of services. This form is to be completed by the project owner, or the owner's representative directly responsible for oversight of the project. The project services evaluated must be relevant to the services of this project. Every rating area must be scored.

Project Title:

Contracted Services Provided by CM/GC:

Start Date:

Completion Date:

Ratings: Summarize the CM/GC's performance and circle the number below that corresponds to the performance rating for each category. Please see the rating scale.

1 = Unsatisfactory; 2 = Poor; 3 = Good; 4 = Excellent

How would you rate the business relationship between the owner and CM/GC?	4 3 2 1	Comments:
How would you rate the CM/GC's ability to work through changes, risks, and other related matters?	4 3 2 1	Comments:
Was the CM/GC's team presented in the qualification the team that worked on the project to completion?	4 3 2 1	Comments:
Was the CM/GC proactive in solving problems that may have occurred on the project?	4 3 2 1	Comments:

Was the contracted scope of services completed on time and within budget?	4 3 2 1	Comments:
How would you rate the quality of the work performed by this CM/GC on your project?	4 3 2 1	Comments:
Did the CM/GC recommend efficiencies or provide creative or innovative ideas?	4 3 2 1	Comments:
Would you be willing to contract with this CM/GC again?	Yes No	Comments:
Other comments:		

Reference Evaluation provided by:

Name and Title: ______________________________

Agency/Organization: ______________________________

Telephone: ______________________________

Email: ______________________________

Can we contact you if we have further questions? Yes or No

Email completed form by end of business on September 17, 2026 to

olson@mwdsls.gov

Phone: 801.942.9667

Email subject line should include LC070 PPE