

HI-DESERT WATER DISTRICT



REQUEST FOR PROPOSALS

to Provide
Progressive Design-Build Services
for the

Phase II Wastewater Collection System Project

PROPOSAL SUBMITTAL DEADLINE:

1:00 P.M. Pacific Time, July 3, 2024

PROPOSAL SUBMITTAL LOCATION:

HI-DESERT WATER DISTRICT

55439 29 Palms Hwy

Yucca Valley, CA 92284

(760) 365-8333

info@hdwd.com

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

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- Attachment A – Definition of Terms
- Attachment B – Reference Documents
- Attachment C – Submission Forms
- Attachment D – Minimum Scope of Services
- Attachment E – Progressive Design-Build Services Contract (Draft)

Section 1 - Background

1.1 Introduction

The Hi-Desert Water District (District) will use the progressive design-build contracting method to deliver its Phase II Wastewater Collection System project (Project) and is employing a two-step procurement process for selecting the entity that will serve as the Progressive Design-Build Entity (PDBE) for the Project.

This Request for Proposals (RFP) represents the second step of the procurement process and establishes the process for soliciting and evaluating Proposals from those entities shortlisted as part of the Statement of Qualifications (SOQ) process, as identified in Section 1.3 below. The purpose of the Proposal is to demonstrate the qualifications, competence, and capacity of the Respondent to perform the work and provide the services described in this RFP, in conformity with the requirements of this RFP. The Proposal shall demonstrate the qualifications and experience of the Respondent and of the particular staff to be assigned to this Project. It should also specify a specific approach that will meet the RFP requirements. The Proposals will be reviewed and evaluated in accordance with this RFP.

The award of a contract will be subject to the terms and conditions of the RFP. This RFP is not a tender or an offer. The Successful Respondent will be expected to execute the Contract included in this RFP, or as modified by Addendum to this RFP.

Each Respondent must be thoroughly familiar with the scope of work and performance requirements discussed in this RFP. The District may disqualify any Respondent that fails to demonstrate such familiarity in its Proposal.

1.2 Purpose

This RFP details the Project description and includes function, program, design, performance, schedule, and cost criteria that will be the basis for design and construction services. These requirements include PDBE selection procedures and post-selection instructions to guide the Project delivery process through completion.

The RFP requirements specified herein are directed to all members of the Respondent including architects, engineers, other consulting design professionals, general construction contractors, and other contracts engaged to design and/or construct the new facilities. This RFP is not intended to inhibit or limit the creativity of architects, engineers, or design professionals engaged by the PDBE in any way. Rather, it is intended to facilitate the design and construction process by providing all members of Respondent with a clear understanding of the District's requirements and expectations.

1.3 Respondents

The District is soliciting proposals from the following entities ("Respondents"), listed in alphabetical order:

- Sukut Construction / West Coast Civil
- W.A. Rasic Construction / Willdan

Each Respondent is reminded that it was shortlisted based on the combined qualifications of the Progressive Design-Build Team (PDBT) submitted in its SOQ. Any Respondent submitting a Proposal with a PDBT from which members listed in the Respondent's SOQ have been removed, unless otherwise specified or allowed in the RFP, may be rejected.

1.4 Contracting Approach

The PDBE's scope of work for the Project will be performed in two stages, under a single Progressive Design-Build Services Contract (PDB Contract) between the District and PDBE. This RFP contains a draft of the PDB Contract and how the Respondents may provide comments on the draft. The two stages are generally described as follows:

- Stage I (Preconstruction Phase): Stage I services (or "Preconstruction services") will include: (a) performing design development; (b) performing other pre-construction services; (c) preparing, submitting, and negotiating a Guaranteed Maximum Price (GMP) for Stage II services; and (d) completing the entirety of the Project's design.
- Stage II (Construction Phase): Stage II services (or "Construction services") will include constructing the improvements, as well as performing post-construction tasks. Stage II services will only proceed if the GMP is accepted by the District, after which the PDBE and the District shall enter into an amendment to the Contract for PDBE's performance of Stage II Services. The District reserves the right to not accept the GMP at their sole discretion.

The PDBE's proposal shall include a schedule and approach to achieve the schedule. If the PDBE determines that multiple construction packages are necessary, the PDBE may need to provide separate design submittals for each construction package. All Stage I services shall be performed under the PDB Contract, regardless of the number of construction packages.

The District is seeking additional funding for the Project and may extend the scope of services presented in this RFP.

1.5 District's Objectives

The District's objectives for delivery of the Project are as follows:

- Sewer Connections: Maximize the amount of sewer connections and the amount of wastewater that will be collected by the new sewer facilities within the District's available funding budget.
- Quality: Provide appropriate quality control measures for both design and construction that will result in a reliable, low-maintenance sewer system.
- Cost: Obtain the most cost-effective design and construction that will optimize the amount of sewer connections and total cost of ownership (i.e., life-cycle cost) for the District.
- Schedule: Achieve the scheduled completion dates for design and construction of the Project.
- Operations and Maintenance: Optimize the design to minimize or eliminate the need for sewer pump stations and force mains. Minimize disruptions to existing water or sewer service.
- Easements: Minimize the number of pipelines that require utility easements on private property
- Package Treatment Plants: Eliminate existing package treatment plants.
- Public: Provide a safe and effective project that minimizes nuisance impacts to the public.
- Risk: Achieve an optimal balance of risk allocation between the District and the PDBE.
- Safety: Implement an effective safety program incorporating industry best practices.
- Accountability: PDBE to provide for a single point of accountability for performance of all services under the PDB Contract.

- Collaboration: Provide for coordinated design development, with the PDBE eliciting District input in a manner that preserves PDBE's sole responsibility for the achievement of Project performance objectives while meeting District objectives associated with cost, quality, operations, and maintenance.

1.6 Project Reference Documents

Attachment B (Project Reference Documents) is being provided for the purpose of giving Respondents background information about the Project and for obtaining Proposals for the Project. To the extent that any Project Reference Document includes design solutions or related information, such information does not necessarily represent the optimal or specific Project features that are included in the Minimum Scope of Services (Section 1.7 of this RFP) or that the PDBE will be required to develop in response to this RFP or under the PDB Contract.

1.7 Minimum Scope of Services

Attachment D (Minimum Scope of Services) is being provided to: (a) provide sufficient information to convey the intent, goals, criteria, and objectives of the Project; and (b) permit the Respondent to: (i) assess the scope of work; and (ii) submit a proposal. Proposals shall be based upon compliance with the requirements identified in the Minimum Scope of Services and the RFP. Notwithstanding the content of the design parameters and criteria in the Minimum Scope of Services, Respondents have the discretion, using their best technical judgment, to enhance the scope of services and submit innovative approaches that provide the optimal solution to the Project's objectives.

Respondents shall promptly report in writing to the District any conflict, ambiguity, or discrepancy that Respondent discovers in the Minimum Scope of Services. Neither the District, the District's Representative (NV5), nor any consultant working by or through District shall have any responsibility for errors or misrepresentations resulting from a Respondent's use of an incomplete set of the Minimum Scope of Services, or failure to comply with the Minimum Scope of Services as stated herein.

The District considers the data provided in the Minimum Scope of Services to be reliable data. Respondents should evaluate the data and make a determination as to whether or not it considers this data to be:

1. Sufficient for the purpose of developing the Project design under the PDB Contract; or
2. Must be amended or enhanced for the purpose of developing the Project design under the PDB Contract.

Respondents shall identify costs for additional services for the enhancement of the data, based on the Respondent's determination above.

1.8 Progressive Design-Build Services Contract

The Respondent understands that neither this RFP nor the Proposal shall constitute a contract with the District. No contract is binding or official until Proposals are reviewed and accepted by appointed District staff; approved through the appropriate level of authority within the District; and an official contract is duly executed by the parties.

Attachment E (Progressive Design-Build Services Contract [Draft]) is provided to Respondents with this RFP and contains what is anticipated to constitute the Progressive Design-Build Services Contract (PDB Contract). Each Respondent shall review this proposed document and provide comments/edits regarding

any aspect of such document about which it has any concern, including but not limited to terms that it considers ambiguous or which it believes should be modified. Such comments/edits shall be submitted to the District in accordance with Section 4.6 below. The District will review all comments/edits received and, if it deems appropriate, in its sole discretion, may modify such document through an Addendum by providing a revised draft PDB Contract. Respondents are on notice that the draft PDB Contract in place as of the Proposal Submittal Deadline is the form upon which each Proposal shall be based. Edits raised by the Respondents after the Proposal Submittal Deadline may only be made and accepted at the sole discretion of the District. Respondents are on notice that the District has no obligation to consider any proposed modifications after selection of the Successful Respondent, and the District's willingness to consider a modification will be premised upon the District determining, in its sole discretion, that it has received fair value in exchange for agreeing to any modification.

Technical Proposals and Cost Proposals should anticipate that the District and the Successful Respondent will contract for services under the terms in the draft PDB Contract, or as modified by Addendum.

1.9 Defined Terms

The capitalized terms in this RFP have the meanings as first used in the text of this RFP and as defined in Attachment A (Definition of Terms).

1.10 RFP Subject to Revision

This RFP is subject to revision after the date of issuance via written addenda (Addenda). Any such Addenda will be available through the District's Website at www.hdwd.com/232/Bid-Opportunities. Addenda issued by the District will also be emailed to each Respondent that has provided the District contact information. Each Respondent is solely responsible for obtaining all Addenda prior to submitting its Proposal. Respondents should check the District's Project Website frequently. The District assumes no responsibility or liability whatsoever for the distribution of Addenda to Respondents.

Section 2 - Project Overview

2.1 General

The Project includes the design and construction of an expansion of the District's existing wastewater collection (sewer) system as part of the effort to eliminate the use of septic systems in the town of Yucca Valley due to the state septic discharge prohibition in the Warren Basin.

The District's existing collection system was constructed as part of the Phase I project which included the construction of the District's Water Reclamation Facility (wastewater treatment plant), three sewer lift stations (Paxton, Kickapoo, and Barron), and approximately 78 miles of wastewater collection pipelines (sewer mains, trunk sewers, and force mains).

This **Phase II** project will construct a wastewater collection system that will connect to the existing collection system and will provide sewer service to a portion of the remaining Phase II and Phase III planning areas identified in Attachment B (Project Reference Documents). The PDBE, in collaboration with the District, will be responsible for delineating a new boundary for Phase II to provide a project that best meets the District's objectives and budget described in Section 1.5. The redefined Phase II boundary for this design-build project is expected to include higher density areas from both Phase II and Phase III planning areas and is not exclusive to the original Phase II planning boundary. As part of the respondent's Proposal, the PDBE shall provide a conceptual version of the redefined Phase II boundary and collection system, which shall be used as the basis for determining the scope and cost of Stage I design-build services in accordance with the requirements of this RFP.

The Project improvements are expected to include primarily gravity sewer infrastructure (sewer pipelines, manholes, laterals, and cleanouts) but some small lift stations (manhole-type) and force main pipelines may be required as described in Attachment B. Other major construction work items will include traffic control and pavement restoration.

2.2 Project Budget and Funding

The District's estimated budget for **Stage II services of the Phase II design-build project is currently \$73 million**. The District is in the process of securing funding for both Stage I and Stage II services of the design-build project through the State of California's Clean Water State Revolving Fund (CWSRF). Funding is intended to be secured by the third quarter of 2024 (approximately).

The PDBE will be required to comply with the CWSRF requirements listed in Section 7.14 and any additional requirements of the executed funding agreement between the DISTRICT and the State.

The Respondent will also be required to complete, comply with, and demonstrate Disadvantaged Business Enterprise (DBE) compliance with the Good Faith Efforts (GFE) to ensure that DBEs have the opportunity to compete for financial assistance dollars as listed in Section 7.14.

2.3 Project Schedule

It is anticipated that the PDB Contract will be executed in or about the third quarter of 2024. The design, permitting, construction, and restoration of the completed Project shall be completed no later than **December 31, 2025**. The PDBE shall determine if the project will need to be separated into multiple construction packages to meet the project schedule.

Section 3 - Progressive Design-Build Services

3.1 General

As noted in Section 1, the PDBE will provide services in two distinct stages.

Stage I services generally consists as follows:

- Develop the Project execution plan, including Project schedule.
- Perform comprehensive geotechnical investigation and produce a geotechnical analysis report.
- Survey, right-of-way mapping, utility mapping, and potholing.
- Develop design criteria and a hydraulic sewer model.
- Produce a Preliminary Design Report and cost estimate.
- Develop the engineering design (including preparing and submitting intermediate design review packages) and potentially participate in value-engineering activities in conjunction with District.
- Prepare a project cost model and provide detailed cost estimates as the design is advanced.
- Prepare procurement plan outlining the process of procuring and contracting with subcontractors and suppliers.
- Identify Project permitting requirements and initiate certain permitting activities, including any required environmental permits.
- Submit and negotiate a GMP to complete the Stage II services.
- Complete the final design.

Stage II services generally consists as follows:

- Procure materials, equipment, and subcontractors.
- Secure necessary permits.
- Construct the facilities and all appurtenances necessary to meet the Project requirements.
- Provide training to District staff, if applicable.
- Provide warranty coverage.
- Provide record drawings indicating as-built conditions.

3.2 Roles and Responsibilities

- **District:** The District will cooperate with the PDBE and will fulfill its responsibilities in a timely manner to facilitate the PDBE's timely and efficient performance of services. District responsibilities generally include the following, as ultimately defined in the PDB Contract between the District and PDBE:
 - Review submissions and provide comments to PDBE. The District has retained NV5 as the District's Representative, who will assist the District with design reviews and other matters related to the Project.
 - Furnish existing studies and provide pertinent data and information regarding the Project, including record drawings, preliminary studies, etc.
 - Provide adequate funding.

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- Provide access to the Project site and any necessary easements to lands belonging to the District.
- Obtain the governmental approvals and permits District is responsible for and assist PDBE in obtaining governmental approvals and permits for which it is responsible.
- Provide contract oversight, resident and special inspection, as well as liaison to the public.
- **PDBE:** The PDBE will cooperate with the District and the District's Representative (NV5) and will provide in a timely manner the Stage I (Preconstruction Phase) and Stage II (Construction Phase) services necessary to complete the Project scope. Stage II services will only proceed if the District and the PDBE reach an agreement on a GMP. PDBE responsibilities generally include the following, as ultimately defined in the PDB Contract between the District and PDBE:

Stage I Services:

- Prepare preliminary design documents.
- Prepare design and construction documents.
- Conduct survey
- Conduct geotechnical investigations.
- Conduct potholing
- Prepare easement documents
- Prepare cost estimates
- Prepare a Storm Water Pollution Prevention Plan (SWPPP), and other plans and pollution control measures as required by federal, state, and local requirements.
- Obtain certain governmental approvals and permits.
- Supervise PDBT personnel.

Stage II Services:

- Obtain all remaining governmental approvals and permits.
- Coordinate with utility providers and District for supply of power, telecommunications, and potable water to the site if necessary.
- Construct the Project.
- Maintain site security.
- Implement a Storm Water Pollution Prevention Plan (SWPPP), and other plans and pollution control measures as required by federal, state, and local requirements.
- Implement quality-management procedures.
- Implement Project health and safety practices.
- Implement practices and activities to address Mitigation Monitoring and Reporting Program requirements associated with the District's Mitigated Negative Declaration/Initial Study (MND). The MND and associated documents can be viewed online at <https://www.hdwd.com/324/Environmental-Review>.
- Supervise subcontractors and PDBT personnel.

Section 4 - Procurement Process

4.1 Communication and District Contact

The District’s sole point of contact (District’s Point of Contact or District Contact) for this RFP shall be **Mr. Ryan Hutchins, District Services Coordinator**, who shall administer the RFP process. All communications shall be submitted in writing by email and shall specifically reference this RFP (identify the e-mail in the subject line as: “Phase II Design-Build Project – RFP”). All questions or comments should be directed to the District Contact as follows:

Ryan Hutchins, District Services Coordinator
email: RyanH@hdwd.com

No oral communications from the District Contact or other individual are binding. All communications to the District Contact regarding the Project are subject to distribution to all Respondents. **No contact with District staff, District Board members or any public official concerning the Project during the procurement process is allowed. A violation of this provision may result in disqualification of Respondent.**

4.2 Procurement Schedule

The following table is a summary of the anticipated timeline for the events in the RFP process (all of which are subject to change at the District’s sole discretion):

RFP Process	Date	Due Time (all Pacific)
RFP Issued to Shortlisted Respondents	May 23, 2024	
End RFP Inquiry Period	June 5, 2024	5:00 p.m.
Proposal Submittal Deadline	July 3, 2024	1:00 p.m.
Selection of Successful Respondent	July 31, 2024	
Contract Negotiations	August 28, 2024	
Board Approval and Contract Award	September 4, 2024	
PDB Contract Effective Date	September 9, 2024	

4.3 Inquiry Period

The District will receive comments/edits on the RFP and the draft PDB Contract from the Respondents. The date for providing such comments is set forth in Section 4.2 of this RFP (i.e., End RFP Inquiry Period). Review comments shall be communicated to the District in accordance with Section 4.1 of this RFP. At the conclusion of the review comment/edit period for the RFP and the draft PDB Contract, the District will consider each review comment/edit and will post written Addenda in accordance with Section 1.9 of this RFP.

4.4 Withdrawal of Proposals

Respondents may withdraw a Proposal by providing a written request, duly executed by an authorized representative, and delivered to the District Contact at any time prior to the Proposal Submittal Deadline. Individuals making the withdrawal shall provide evidence of serving as an authorized representative of the Respondent. Proposals withdrawn by the Respondent prior to the Proposal Submittal Deadline can be claimed by the Respondent within ten (10) days following the Proposal Submittal Deadline. After that time, they will be destroyed. Submitted proposals shall not be withdrawn or modified except to the extent agreed to by the District during subsequent contract negotiations.

4.5 Validity of Proposal

The offer represented by each Proposal will remain in full force and effect for up to a maximum of one hundred and twenty (120) days after the Proposal Submittal Deadline. If the Contract Award has not been issued to PDDB by the District within one hundred and twenty (120) days after the Proposal Submittal Deadline, each Respondent that has not previously agreed to an extension of such deadline shall have the right to withdraw its Proposal. The District may, at its sole discretion, allow a Respondent to withdraw its Proposal prior to that date.

4.6 Addenda

If any revisions to this RFP become necessary (other than changes to the Proposal Submittal Deadline), the District will make Addenda available, in accordance with Section 1.10 of this RFP, at least seven (7) calendar days before the Proposal Submittal Deadline. The District may extend the Proposal Submittal Deadline via addendum at any time. **It is the responsibility of all Respondents to ascertain whether any addenda have been issued before the Proposal Submittal Deadline by checking the District's Website. If an Addendum is issued, Respondent must acknowledge receipt of Addendum in the appropriate location of the Affidavit of Authenticity Form, included in Attachment C (Submission Forms) of this RFP.**

All questions about the meaning, intent or any other aspect of the RFP shall be submitted in writing to the District Contact. Interpretations or clarifications considered necessary in response to such questions will be issued by Addendum to all Respondents. Questions received after the End RFP Inquiry Period date listed in Section 4.2 of this RFP may not be answered. Only answers issued by Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect.

4.7 Business Licensing Requirements

Each Respondent is responsible for determining and complying with all applicable business licensing requirements necessary to complete the Project's scope of work. The Successful Respondent shall be required to provide evidence to the District that it is authorized to do business in California prior to award of the PDB Contract.

4.8 Designer Licensing Requirements

Each Respondent is responsible for determining and complying with all applicable professional licensing requirements necessary to complete the Project's scope of work.

4.9 Contractor Registration Requirements

Effective March 1, 2015, Senate Bill 854 requires the District to use only contractors and subcontractors on public projects that have been registered with the State of California Department of Industrial Relations. Thus, the Successful Respondent and its known subcontractors shall be required to provide evidence to the District that it possesses required registrations. Respondent shall complete and submit in Appendix A of its Proposal the Public Works Contractor Registration Form included in Attachment C (Submission Forms) of this RFP.

The Successful Respondent shall be required to provide evidence to the District that it possesses a valid Class "A" Contractor's License issued by the Contractor's State License Board, prior to award of the PDB Contract. Each Respondent is responsible for determining and complying with all applicable contractor licensing and registration requirements necessary to complete the Project's scope of work.

Section 5 - Proposal Submission Requirements

5.1 Submittal Place and Deadline

The Respondent shall submit six (6) printed copies of its **Technical Proposal** and one (1) electronic version on a USB flash drive and shall upload (1) electronic version to a share file account. The electronic version shall be a searchable PDF file. The Respondent shall also submit one (1) paper document (one original) of its **Cost Proposal** submitted in a single, sealed envelope or package separate from its Technical Proposal, and without an electronic version included. Proposals must be submitted physically (via mail or in person) to District's Point of Contact at the following address:

Attn: Ryan Hutchins, District Services Coordinator
HI-DESERT WATER DISTRICT
55439 29 Palms Hwy
Yucca Valley, CA 92284

Telephone confirmation of timely receipt of the Proposal may be made by calling the District's Point of Contact at (760) 228-6279. Proposals must be received no later than **July 3, 2024, at 1:00 p.m.** Pacific Daylight Time.

Each Respondent assumes full responsibility for timely delivery of its Proposal at the required location. Any Proposal received after the submittal deadline will be deemed nonresponsive and returned. The delivered packaging containing the Proposal documents must note the Respondent's name, address, contact person(s), and phone number, as well as "**Proposals, RFP - Design-Build Services for Phase II Wastewater Collection System Project**" on its face.

Oral, telephone, facsimile, telegraph, or email Proposals are invalid and will not receive consideration. No Respondent may submit more than one Proposal. Multiple Proposals under different names will not be accepted from one firm or association; in this case, the second Proposal submitted will not be considered.

5.2 Submission Format

The Technical Proposal must not exceed **thirty (30)** total pages, excluding the transmittal letter, index or table of contents, front and back covers, title pages/separation tabs, mark-up of minimum scope of services, and appendices. Eleven-point font or larger must be used in Proposal Parts 1 through 3 except that font size associated with any graphics or exhibits included in Proposal may be less than eleven-point font.

5.3 Submission Content

The **Technical Proposal** must include the following information in the order listed:

1. Transmittal Letter
2. Part 1 – Qualifications and Experience Summary
3. Part 2 – Project Management
4. Part 3 - Project Understanding and Approach
5. Appendix A – Forms for Affirmation of Compliance
6. Appendix B – Conceptual Phase II Project Exhibit and Tables
7. Appendix C – Project Schedule

The content requirements set forth in this RFP represent the minimum content requirements for the Technical Proposal. It is the Respondent's responsibility to present all relevant information and other materials in its

Technical Proposal. The Technical Proposal, however, should not contain standard marketing or other general materials. It is the Respondent's responsibility to modify such materials so that only directly relevant information is included in the Technical Proposal.

The **Cost Proposal** must include the following information:

Part 4 – Cost Proposal

5.3.1 Transmittal Letter

Each Respondent must provide a Transmittal Letter following the cover that formally conveys the Proposal to the District. The letter must be signed by an authorized representative of the Respondent who is empowered to sign such material and to commit the Respondent to the obligations contained in the Proposal. If Respondent is a corporation or an LLC, an authorized officer shall sign his/her name and indicate his/her title beneath the full corporate name. If Respondent is a joint venture, an authorized representative for each member of the joint venture shall sign the letter, and specifically state that, if the joint venture is selected as the PDBE, each member will be jointly and severally liable to the District for the obligations arising out of the contract between the joint venture and the District.

The Transmittal Letter should be succinct and brief and must include: (a) the name of Respondent's authorized representative(s), address(es), phone number(s), and e-mail address(es); (b) the name of the PDBT Contractor and PDBT Designer, and (c) the identity of the individual(s) who will be the signatory(ies) to the contracts with the District, if awarded to Respondent, including title(s), address(es), phone number(s), and e-mail address(es), and the name of the Respondent's primary contact in which all future correspondence from the District should be directed including the individual's address, phone number and email address. The transmittal letter shall be limited to two (2) 8 ½ x 11-inch pages.

Respondent must include within the Transmittal letter confirmation that all information previously provided in Respondent's SOQ remains true and accurate by including the following statement in the Transmittal Letter:

"[Insert Name of Respondent] confirms that all information provided in our SOQ previously submitted to the District for the Phase II Wastewater Collection System Project in response to Sections 5.3.3 and 5.3.4 of the RFQ has not changed, and is valid, true and accurate; and confirms that all Key Personnel as represented in our SOQ and in our Technical Proposal will remain as part of the PDBT, in their represented roles, for the duration of the Project."

If the Respondent's PDBT has changed from its SOQ, or if any other information provided in the SOQ is no longer true or accurate, then the Respondent shall provide updated information that is true and accurate. Respondents are reminded that if any members of the PDBT listed in the Respondent's SOQ have been removed, unless otherwise specified or allowed in the RFP, Respondent's Proposal may be rejected.

The Transmittal Letter may include other information deemed relevant by the Respondent.

5.3.2 Part 1 - Qualifications and Experience Summary

In Part 1, the Respondent shall include a summary of the qualifications and experience of the PDBT, with emphasis on the Key Personnel. The qualifications and experience information shall focus on roles and past performance for projects of similar size, complexity, challenges, and functionality as the Project. The information provided by Respondent for this Part of its Technical Proposal is expected to be consistent with the information provided in the Respondent's SOQ. However, the Respondent may provide any additional information that it deems relevant to allow the District to evaluate its qualifications and experience. Respondent shall describe how the Key Personnel's qualifications and experience are applicable and beneficial to effectively supporting the delivery of the Project. Respondent shall describe its experience

with progressive design-build delivery, and open-book cost development and its experience and familiarity with the District and the local community.

5.3.3 Part 2 – Project Management

In Part 2, the Respondent shall provide a description of the approach for managing and performing its services during the Project. Specifically, Respondents shall provide a narrative for each item below that clearly describes its approach to managing the project activities, any examples from previous experiences, and how its approach is beneficial to meeting the District's objectives.

Project Delivery. Respondent shall provide, at a minimum, the following information:

1. Describe the anticipated roles and responsibilities of PDBT members, including subconsultants and subcontractors, during Stage I and Stage II of the Project. Include a discussion regarding the anticipated PDBT staff members that will be located onsite, as well as participate offsite, during construction. Discuss Contractor staff member involvement during Stage I, including the development of cost estimates.
2. Describe which PDBT member(s) are anticipated to self-perform work, and which work elements are anticipated to be self-performed. Describe the Respondent's capability to self-perform specific construction work elements (subject to District approval).

Procurement and Cost Development Approach. Respondent shall provide, at a minimum, the following information:

1. Describe the Respondent's approach to developing the cost model, including the reporting and trending capabilities the Respondent recommends.
2. Describe Respondent's philosophy on contingency, including the development and management of such contingency.
3. Define the process the Respondent intends to use for subcontractor/supplier engagement, including engagement of local resources.
4. Discuss and demonstrate the Respondent's approach to providing for materials, equipment, and subcontractor cost competitiveness. Discuss key cost control steps and/or measures in both the design and construction of the Project.
5. Discuss proposed means to demonstrate cost competitiveness for work that is proposed to be self-performed.

Schedule. Respondent shall provide, at a minimum, the following information:

1. Describe project sequencing and provide a proposed schedule for completion of Stage I and Stage II services.
2. General description(s) and sequencing graphic(s) should be included within Part 2 of the Proposal. Detailed Stage I and Stage II schedules should be included in Appendix C.

5.3.4 Part 3 – Project Understanding and Approach

In Part 3, Respondent shall demonstrate its knowledge of the Project requirements and needs, and how the Respondent will approach the challenges and the technical elements of the Project. Respondents shall provide a narrative for each item below that clearly describes its approach, any examples from previous experiences, and how its approach is beneficial to meeting the District's objectives.

Conceptual Phase II Project Boundary. Discuss the approach that was used to develop the Respondent's conceptual boundary for the redefined Phase II Project area, as described in Section 2.1, and summarize key elements. An exhibit of the conceptual boundary and corresponding tables shall be provided in Appendix B as described in Section 5.3.7.

Construction Packages. Discuss if multiple construction packages are anticipated to meet the project schedule so that design can be completed, and construction can start earlier for certain regions of the project and describe the approach for separating the project into separate construction packages.

Key Issues/Challenges. Define key issues and challenges in both design and construction of the Project. Describe how to mitigate potential negative impacts of each key issue and any unique approaches or strengths the Respondent may have relative to the issues and challenges.

Innovative/Alternative Ideas. Discuss any innovative or alternative ideas and approaches to completing the design and construction of the Project. Demonstrate the Respondent's ingenuity through design concepts, construction materials, and construction methods to achieve the most cost-efficient project meeting the District's objectives. Provide any examples of where suggested innovative or alternative approaches have been successfully implemented by the Respondent.

Operations and Maintenance Considerations. Discuss how operations and maintenance costs and access will be considered in development of the design.

Quality Assurance / Quality Control (QA/QC) Plan. Describe the QA/QC Plan and procedures that will be utilized for the Project.

Traffic Control / Access. Discuss approach to traffic control and maintaining access to residents or businesses.

5.3.5 Appendix A – Forms for Affirmation of Compliance

Complete and provide in Appendix A the Affidavit of Authenticity Form provided in Attachment C (Submission Forms).

5.3.6 Appendix B – Conceptual Phase II Project Exhibit and Tables

The Respondent shall provide an exhibit in Appendix B that shows the Respondent's conceptual boundary for the Phase II Project as described previously. The exhibit should clearly indicate which planning regions would likely be included in the Project. Refer to Attachment B for more information on planning regions. Appendix B shall also include corresponding tables that include estimated construction quantities for sewer pipelines, sewer connections, manholes, lift stations, force main pipelines, and any other relevant improvements based on the Respondent's conceptual boundary. The table shall also include the estimated length of easements that would be required for improvements on private property.

5.3.7 Appendix C – Project Schedule

In accordance with Section 5.3.3 of this RFP, Respondent shall provide in Appendix C detailed-level schedules for Stage I and Stage II of the Project.

5.3.8 Part 4 – Cost Proposals

The Cost Proposal shall be submitted, in a separate sealed envelope or package clearly marked "Cost Proposal," at the same time the Technical Proposal is submitted. Cost Proposals will not be scored.

The Respondent shall provide a cost proposal for all Stage I Design-Build Services. No cost information shall be included in the Technical Proposal (including within the cover letter and appendices). If any specific cost information is included in the Technical Proposal, the Respondent's Proposal may be rejected.

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The proposal shall include the Stage I Design-Build Services Fee Summary Form, which is included in Attachment C (Submission Forms) of this RFP, and a detailed cost breakdown of each sub-task, including the task description, labor hours and hourly rates for each labor category, sub-consultant/sub-contractor fees, reimbursable expenses, and total fee. The Stage I Design-Build Fee shall be the proposed contract amount as of the effective date of the PDB Contract, for which the PDBE is contractually obligated to perform the Stage I Design-Build services.

The Respondent shall also include a completed Stage I Design-Build Services Hourly Rate Form and a completed Stage II Design-Build Services Markup Fees Form as part of the cost proposal. These forms are included in Attachment C (Submission Forms) of the RFP.

The Respondent shall also submit an alternative project schedule as part of the Cost Proposal which would provide cost savings to the District by extending the project completion date. The alternative project schedule shall be based on the conceptual project boundary and tables developed by the Respondent for the Technical Proposal. The alternative project schedule shall be accompanied by a brief narrative which describes the estimated amount of cost savings and how the alternative schedule would provide cost savings. If the District can modify the project completion date, the District will consider using the estimated cost savings to increase the scope of the Project.

Section 6 - Proposal Evaluation

6.1 General

The Proposals will be reviewed and evaluated by the District's selection committee (with assistance provided by outside advisors if desired by District) according to the requirements and criteria outlined in this Section 6. The selection committee will review the Proposals in confidence.

During the Proposal evaluation process, written questions or requests for clarifications may be submitted to one or more Respondents regarding its Proposal or related matters. Failure to respond in a timely manner to any such questions or requests may be grounds for elimination of the Respondent from further consideration.

In general, the selection process will consist of the following:

- Step 1 – District will receive and open Technical Proposals. Cost Proposals will remain unopened.
- Step 2 – District will review each Technical Proposal to determine if Responsiveness Requirements are met.
- Step 3 – For those Technical Proposals that meet the Responsiveness Requirements, the evaluation criteria (Qualifications and Experience Summary, Project Management Approach, and Project Understanding and Approach will be reviewed by the selection committee members.
- Step 4 - The Technical Proposals will be scored by the selection committee, Respondents ranked based upon the evaluation criteria. The Respondents with the highest score and ranking will be selected as the Successful Respondent to enter into the PDB Contract with the District.
- Step 5 - The Cost Proposals will be opened and used for any necessary negotiations with the Successful Respondent.

6.2 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 as non-responsive. Each Response shall be reviewed for responsiveness in accordance with the following conditions.

1. Timely submission (refer to Section 5.1 of RFP for the Proposal Submittal Deadline).
2. Compliance with submittal requirements in accordance with Section 5 of RFP, including submission of all supporting documentation, and all information required in Section 5.

If a Respondent fails to satisfy these conditions, the Response may be deemed non-responsive by the District and not considered for further review.

6.3 Evaluation Criteria Scoring

The evaluation criteria are intended to allow the District to evaluate specific aspects of a Respondent’s Technical Proposal. Sub-factors for the evaluation criteria are listed in descending order of importance. The scoring of the evaluation criteria and each sub-factor (if applicable) will be based upon the rating set forth in the EVALUATION CRITERIA SCORING TABLE below. Cost Proposals will not be scored.

1. **Qualifications and Experience** – *Demonstration of experience that Respondent’s PDBT has the ability to successfully complete the design and construction of the Project.*

Respondents will be evaluated based on the qualifications, experience, and past performance of PDBT Designer and PDBT Contractor, with the evaluation considering in particular the experience of Key Personnel working in similar roles to those proposed on this Project based on projects of similar complexity, challenges, and functionality as this Project. Respondent shall also demonstrate their experience and familiarity with the District and the local community.

2. **Project Management** – *Demonstration that the Respondent's project management approach is appropriate for the efficient and effective completion of the Project.*

Respondents will be evaluated on the quality, value and effectiveness of the information submitted by Respondent pursuant to Section 5.3.3 of this RFP.

3. **Project Understanding and Approach** – *Demonstration that the Respondent's project understanding, and approach is appropriate for the efficient and effective completion of the Project.*

Respondents will be evaluated on the quality, value and effectiveness of the information submitted by Respondent pursuant to Section 5.3.4 of this RFP. Respondents will be evaluated on the Respondent’s: (a) approach to meeting/exceeding the scope of services and requirements as represented in this RFP, the Minimum Scope of Services, and the draft PDB Contract; (b) technical approach for meeting District’s goals and objectives; and (c) incorporation of innovative ideas and cost savings measures.

The District will evaluate and rank the responsive Proposals by scoring the evaluation criteria set forth. The total number of points that will be used in evaluating all of the factors is 100, allocated as shown in the following table.

EVALUATION CRITERIA SCORING TABLE	
Criterion	Maximum Possible Points
Qualifications and Experience	50
Project Management	25
Project Understanding and Approach	25
TOTAL	100

6.4 Selection of Successful Respondent

After the evaluation process is complete, the District will notify Respondents of the Successful Respondent.

Section 7 - Conditions for Respondents

7.1 District Authority

The District is a Special Water District in the State of California created under the Constitution of the State of California. The procurement process for this Project is authorized under the Hi-Desert Water District Code, Chapter 4.10 (Purchasing Policy).

7.2 Conflict of Interest

By submitting an Proposal, the Respondent represents and warrants that no Board member, officer or employee of the District is in any manner interested directly, or indirectly, in the proposal or in the PDB Contract which may be made under it or in any expected profits to arise therefrom, as set forth in Article 4, Division 4, Title I (commencing with Sec. 1090) of the Government Code of the State of California. The Respondent warrants and represents that it presently has no interest, and agrees that it will not acquire any interest, which would present a conflict of interest under California Government Code sections 1090 et seq. or sections 87100 et seq. during the performance RFQ step, the RFP step, or the performance of services under the PDB Contract. The Respondent further covenants that it will not knowingly employ any person having such an interest in the performance of the PDB Contract. Violation of this provision may result in the PDB Contract being deemed void and unenforceable. Additional Conflict of Interest requirements may apply during the term of any contract awarded.

7.3 No Assumption of Liability

Respondent understands that this RFP and the submission of a Proposal shall not constitute a contract with the District. No contract is binding or official until the Proposal from Successful Respondent is accepted by appointed District staff, approved by the District's Board, and an official contract is duly executed by the District and the PDDBE.

The District assumes no obligations, responsibilities, and liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred or alleged to have been incurred by parties considering a response to and/or responding to this RFP. All such costs shall be borne solely by each Respondent and its team members.

7.4 District's Reservation of Rights

The issuance of this RFP constitutes only an invitation for those Respondents pre-qualified to submit their Proposals. The District reserves the right to determine, in its sole discretion, whether any aspect of a Proposal satisfactorily meets the criteria established in the RFP and the right to seek clarification or additional information for any Respondent submitting a Proposal.

In connection with this procurement process, including the receipt and evaluation of Proposals, District 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, without incurring any obligations or liabilities.
- Modify any documents at any time prior to receiving Proposals and to reject any or all Proposals.
- To modify, amend, reissue or rewrite the RFP.
- Modify the procurement schedule.
- Waive deficiencies, informalities, and irregularities in a Proposal and accept and review a non-conforming Proposal.

- Suspend and terminate the procurement process or terminate evaluations of Proposals received.
- Permit corrections to data submitted with any Proposal.
- Hold meetings and conduct discussions and correspondence, with one or more of the Respondents 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 Respondent to fully understand information provided in the Proposal and to help evaluate and rank the Respondents.
- Reject any Proposal containing exceptions, additions, qualifications or conditions not called for in the RFQ or otherwise not acceptable to the District.
- Conduct an independent investigation of any information, including prior experience, identified in a Proposal by contacting project references, accessing public information, contacting independent parties, or any other means.
- Request additional information from a Respondent during the evaluation of its Proposal.
- To procure design and construction services for the Project by other means.
- In the event that the RFP is withdrawn by the District or if the District does not proceed for any reason, the District shall have no liability to any Respondent, contractor, architect or any other entity for any costs or expenses incurred in connection with the preparation and submittal of a Proposal.
- The District reserves the right to hold discussions and/or negotiations with any of the Respondents in furtherance of the District's evaluation of any Respondents Proposals and execution of a contract with a PDBE. The District will hold these discussions and/or negotiations in a fair and impartial manner and will not communicate any confidential information from any Respondent to another Respondent. In the event that any questions arise from such discussions and/or negotiations that require clarification to or modification of the design criteria or performance requirements, the District will issue an addendum to all of the Respondents.
- The District reserves the rights to incorporate any design ideas and/or construction approaches that are presented by the Respondents that are not selected for the Project.
- If the final negotiation of the PDB Contract, with the highest ranked Respondent is not successful, the District reserves the right to terminate the negotiations and begin negotiations with the next highest ranked Respondent. The right shall be continued until a satisfactory PDB Contract can be negotiated or until the District elects to reject all proposals.

7.5 Risk Transfer

The transfer, from the District to the selected Respondent, of some of the risks involved in undertaking the Project under the PDB Contract is inherent in the progressive design-build method of project delivery. The primary areas risk transfer include, but are not limited to:

- Full knowledge and understanding of the contract documents. The PDBE shall be fully responsible for the understanding and interpretation of the design, and as such cannot make a claim against the District in this regard.

- Responsibility for design errors and omissions. The PDDBE shall be fully responsible for the technical correctness and completeness of the design documents, and as such cannot make a claim against the District in this regard.
- Timely response, by all design disciplines, to questions and issues during construction. The PDDBE shall be fully responsible for the timely interface of all design disciplines, and as such cannot make a claim against the District in this regard.
- Permit processing and approvals. The PDDBE shall be fully responsible for obtaining approvals from all jurisdictions having authority over the Project, unless otherwise described in the PDB Contract.

7.6 Public Record

All responses to this RFP become property of the District and will be kept confidential until a recommendation for award of a contract has been announced. Thereafter, submittals are subject to public inspection and disclosure under the California Public Records Act (Cal. Govt. Code Sections 6250 et seq). Therefore, unless the information is exempt from disclosure by law, the content of any Proposal, request for explanation, or any other written communication between the District and any Respondent, between the District and any Respondent, between District employees or consultants, regarding the procurement, shall be available to the public.

If a Respondent believes any communication contains trade secrets or other proprietary information that the Respondent believes would cause substantial injury to the Respondent's competitive position if disclosed, the Respondent shall request that the District withhold from disclosure the proprietary information by marking each page containing such proprietary information as confidential. By submitting a Proposal with portions marked "**confidential**," a Respondent represents it has determined such portions qualify for exemption from disclosure under the California Public Records Act. A Respondent may not designate its entire Proposal as confidential. The District will not honor such designations and will disclose submittals so designated to the public.

If a Respondent requests that the District withhold from disclosure information identified as confidential, and the District complies with the Respondent's request, Respondent shall assume all responsibility for any challenges resulting from the non-disclosure, indemnify and hold harmless the District from and against all damages (including but not limited to attorneys' fees that may be awarded to the party requesting the Respondent information), and pay any and all costs and expenses related to the withholding of Respondent information. Respondent shall not make a claim, sue, or maintain any legal action against the District or their directors, officers, employees, or agents concerning the withholding from disclosure of Respondent information. If Respondent does not request that the District withhold from disclosure information identified as confidential, the District shall have no obligation to withhold the information from disclosure and may release the information sought without any liability to the District.

7.7 Obligation to Keep PDBT Intact

Respondents are advised that all PDBT members and Key Personnel identified in the SOQ and Proposal shall remain on the PDBT for the duration of the procurement process and during the execution of the Project. Names of Key Personnel shall be included within the PDB Contract. If extraordinary circumstances require a change, it must be submitted in writing to the District Contact who will forward to the District General Manager, who, at his or her sole discretion, will determine whether to authorize a change, recognizing that certain circumstances (such as termination of employment) may occur that are beyond the Respondent's control. Unauthorized changes to the PDBT at any time during the procurement process may result in elimination of the Respondent from further consideration. The District has no obligation to approve any requested change to the PDBT.

7.8 Equal Opportunity

The District hereby notifies all Respondents that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit Proposals in response to this invitation and will not be discriminated against on the grounds of race, creed, color, national origin, ancestry, sexual orientation, political affiliations or beliefs, sex, age, physical disability, medical condition, marital status or pregnancy, or any other legally protected class.

7.9 Appeal

7.9.1 General

The District will entertain appeals regarding this RFP process only as set forth in this Section.

The District will not entertain appeals regarding, or reconsider, substantive scores or determinations made in the evaluation process.

The District Contact will respond to an appeal in writing within seven (7) calendar days of receipt, and the District General Manager's determination shall be final.

The District will review and evaluate the basis of the appeal provided and that the appeal is filed in strict conformity with the foregoing. The District shall provide the Respondent submitting the appeal with a written statement concurring or denying the protest. As noted above, action by the District relative to the appeal will be final and not subject to appeal or reconsideration. The procedure and time limits set forth in this section are mandatory and are the Respondent's sole and exclusive remedy in the event of an appeal. Failure to comply with these procedures will constitute a waiver of any right to further pursue the appeal, including filing a Government Code claim or legal proceedings.

If the District determines the appeal to be frivolous, the Respondent originating the appeal may be determined to be irresponsible and may be ineligible for future purchase orders/contracts.

7.9.2 RFP Content Appeal

Appeals may be based upon restrictive requirements or alleged improprieties in the RFP that are apparent or reasonably should have been discovered prior to the District's receipt of Proposals. Such appeals shall be written, and hand delivered or sent via certified mail to be received by the District Contact at least fourteen (14) calendar days prior to the District's receipt of Proposals. The appeal must clearly specify in writing the grounds and evidence on which the appeal is based.

7.9.3 Other Appeals

Appeals may also be based upon alleged improprieties that are not apparent in the RFP or that could not reasonably have been discovered prior to the District's receipt of the Proposals. Such appeals are limited to: 1) the District's failure to follow its own appeal procedures set forth in this Section; and 2) other procedural errors in the RFP process. The appeal must clearly specify in writing the grounds and evidence on which the appeal is based. Such appeals shall be written, and hand delivered or sent via certified mail to be received by the District Contact within five (5) days from receipt of the notice from the District advising of the Successful Respondent.

In order to prevail on an appeal based on alleged improprieties not apparent in the RFP as described herein, a Respondent must demonstrate that an error was prejudicial to the Respondent's effort to become selected for this Project. In other words, in order to prevail, the Respondent must demonstrate that but for the District's error, the Respondent would have been deemed selected.

7.10 Use of Information

Regardless of whether the District awards a contract, all Proposals submitted in response to this RFP, including the data, information, concepts and ideas contained therein, will become the property of the District and the District shall have the right to use such Proposals in any manner or combination it so elects, without notice or the consent of the Respondent(s).

7.11 Laws Governing Contract

The laws of the State of California shall govern the interpretation and enforcement of the any contract entered into between the PDBE and the District. Legal action may be instituted only in the Superior Court of the County of San Bernardino, State of California or in the Federal District Court in the Central District of California.

7.12 Adherence to All Local, State, and Federal Laws and Requirements

The PDBE shall adhere to all applicable health and safety laws and regulations including, but not limited to, those promulgated by CAL-OSHA, FED-OSHA, EPA, State Dept. of Health Services, and County Environmental Health Department.

7.13 Insurance Requirements

The PDBE shall carry and maintain, at the successful Responder’s expense, at all times during the term of the PDB Contract not less than the coverage and limits of insurance set forth in the PDB Contract, which shall be maintained with insurers and under forms and polices satisfactory to the District.

7.14 CWSRF Requirements

The PDBE and its subcontractors will be required to comply with all State of California Clean Water State Revolving Fund (CWSRF) requirements including, but not limited to, the requirements of this Section. These requirements and any additional requirements of the executed funding agreement between the District and the State shall be included in the PDB Contract and any subcontracts.

The Respondent is also required to comply with Section 7.14.1 for this Proposal.

7.14.1 Disadvantaged Business Enterprise (DBE) Compliance

The Respondent and the PDBE shall comply with the Disadvantaged Business Enterprise (DBE) requirements, shall complete Good Faith Efforts (GFE), and shall submit all required DBE compliance documents in accordance with the Code of Federal Regulations (CFR) Title 40, Section 33.301 and the Guidelines for Meeting the California State Revolving Fund (CASRF) Programs (Clean Water and Drinking Water SRF) Disadvantaged Business Enterprise Requirements that can be found at:

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/policy0513/dbe_compliance_guidelines_instructions.pdf

The Respondent must provide evidence of DBE compliance with its Proposal for Stage I services, including a copy of the Respondent’s advertisement published no less than 30 calendar days prior to the Proposal due date. State Water Resources Control Board (SWRCB) Forms No. 4500-2, No. 4500-3, and No. 4500-4 must also be completed and be submitted with the Proposal.

The PDBE shall also provide evidence of DBE compliance for applicable Stage II services prior to performance of said services, including a copy of the PDBE’s advertisement published no less than 30 calendar days prior. State Water Resources Control Board (SWRCB) Forms No. 4500-2, No. 4500-3, and No. 4500-4 must also be completed and be submitted to the DISTRICT.

7.14.2 Prevailing Wage

Certain labor categories under this Project may be subject to prevailing wages as identified in the State of California Labor Code commencing at sections 1720 et seq. and 1770 et seq. If applicable, employees working in these categories at the site must be paid not less than the basic hourly rates of pay and fringe benefits established by the California Department of Industrial Relations (“DIR”). Copies of the State of California wage schedules are available for review at www.dir.ca.gov/dlstr/. The PDBE shall pay its employees the general prevailing wage rates as determined by the DIR pursuant to provisions of Section 1770, et seq., of the Labor Code of the State of California or Davis-Bacon Act wage rates, whichever is greater. In addition, the PDBE shall be responsible for compliance with the requirements of Section 1777.5 of the California Labor Code relating to apprentice public works contracts. It shall be mandatory upon the PDBE to whom the PDB Contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage rates to all workers employed by them in the execution of the PDB Contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors. The PDBE shall be responsible for compliance with all DIR regulations and requirements, including reporting requirements. Additional information can be found at: <http://www.dir.ca.gov/lcp.asp>

7.14.3 Davis-Bacon Act Requirements

The PDBE shall comply with the Davis-Bacon Requirements for CWSRF Projects that can be found at:

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/2023/davis-bacon-2023-cwsrf-non-governmental-entities-private.pdf

Davis-Bacon Wage Rates can be found at:

<https://sam.gov/content/wage-determinations>

7.14.4 American Iron and Steel (AIS) Requirement

All of the iron and steel products used in construction of the Project shall be produced in the United States (AIS Requirement), unless the PDBE has obtained a waiver from the United States Environmental Protection Agency on file with the State Water Resources Control Board. For purposes of this section, the term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. “Steel” means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Guidance for compliance with the AIS requirement can be found at:

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/ais_compliance.pdf

7.14.5 Certificate of Insurance

The PDBE shall issue a certificate of insurance showing the State Water Resources Control Board, its officers, agents, employees, and servants as additional insured; and must provide the DISTRICT with a copy of all such certificates prior to the commencement of construction of the Project.

7.14.6 Performance and Payment Bonds

Prior to construction (Stage II Services), the PDBE shall furnish a performance bond and a payment bond (labor and materials) in favor of the DISTRICT in the following amounts: faithful performance (100%) of contract value; labor and materials (100%) of contract value.

7.14.7 Records Retention

The PDBE shall maintain separate books, records and other material relative to the Project. The PDBE must also retain such books, records, and other material for itself and for each subcontractor who performed or performs work on this project for a minimum of thirty-six (36) years after Completion of Construction. The PDBE must require that such books, records, and other material are subject at all reasonable times (at a minimum during normal business hours) to inspection, copying, and audit by the State Water Board, the California State Auditor, the Bureau of State Audits, the United States Environmental Protection Agency (USEPA), the Office of Inspector General, the Internal Revenue Service, the Governor, or any authorized representatives of the aforementioned. The PDBE must allow and must require its subcontractors to allow interviews during normal business hours of any employees who might reasonably have information related to such records. The PDBE agrees to include a similar duty regarding audit, interviews, and records retention in any contract or subcontract related to the performance of the Project.

7.14.8 Scientific Integrity Policy

The PDBE shall comply with, and require all subcontractors to comply with, EPA's Scientific Integrity Policy, available at <https://www.epa.gov/scientific-integrity/epas-scientific-integrity-policy>, when conducting, supervising, and communicating science and when using or applying the results of science. For purposes of this condition scientific activities include, but are not limited to, computer modelling, economic analysis, field sampling, laboratory experimentation, demonstrating new technology, statistical analysis, and writing a review article on a scientific issue.

7.14.9 Discrimination

The PDBE shall comply with Government Code section 11135 and the implementing regulations (Cal. Code Regs, tit. 2, § 11140 et seq.), including, but not limited to, ensuring that no person is unlawfully denied full and equal access to the benefits of, or unlawfully subjected to discrimination in the operation of, the Project or System on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation as such terms are defined under California law.

The PDBE must comply with the federal American with Disabilities Act of 1990 and implementing regulations as required by Government Code section 11135(b).

During the performance of the work, the PDBE and its subcontractors must not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, sexual orientation, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, denial of family care leave, or genetic information, gender, gender identity, gender expression, or military and veteran status.

The PDBE and its subcontractors must ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.

The PDBE and its subcontractors must comply with the provisions of the Fair Employment and Housing Act and the applicable regulations promulgated thereunder. (Gov. Code, §12990, subs. (a)-(f) et seq.; Cal. Code Regs., tit. 2, § 7285 et seq.)

The PDBE and its subcontractors must give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

7.14.10 Executive Order No. 11246

The PDDBE shall include in its contracts and subcontracts related to the Project the following provisions:

"During the performance of this contract, the contractor agrees as follows:

(a) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(b) The contractor will, 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, creed, color, or national origin.

(c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

ATTACHMENT A
DEFINITION OF TERMS

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

The definitions of some of the capitalized terms used in this RFP are presented below:

Addendum or Addenda – Documentation provided by the District to Respondents to modify, add to, or clarify the RFP.

District – The Hi-Desert Water District.

Joint Venture - An association of two or more persons or businesses carrying out a single business enterprise for which purpose they combine their capital, efforts, skills, knowledge and/or property. Joint ventures must be established by written agreement.

Key Personnel – For the purposes of this RFP, the following individuals identified in the Respondent's SOQ and Proposal: Project Executive, Project Manager, Design Manager, Construction Manager, Superintendent, and any other individual specifically identified in the SOQ and Proposal as Key Personnel.

Minimum Scope of Services – A contract document that will be provided as part of the RFP that shall serve, in part, as the basis of the Shortlisted Respondents' proposals.

Progressive Design-Build - The Design-Build method of delivering capital projects whereby the owner has direct involvement in both the project concept and initial design by the PDBE prior to the establishment of either a lump sum or a guaranteed maximum price.

Progressive Design-Build Services Contract (PDB Contract) – The contract, including all of its attachments, for Design-Build services. A draft contract is provided within the RFP.

Progressive Design-Build Entity (PDBE) – The entity that will enter into a contract with the District and that will be the single point of accountability to the District for delivery of the services and the Project.

Progressive Design-Build Team (PDBT) – The PDBT Contractor, the PDBT Designer (with the understanding that one or more of these entities will be the PDBE); Key Personnel; and any additional subconsultants included in the SOQ and Proposal.

PDBT Contractor – The member of the PDBT having primary responsibility for construction services for the Project.

PDBT Designer – The member of the PDBT having primary responsibility for design services for the Project and is the Engineer of Record.

Project – The Phase II Wastewater Collection System project, and all work obligations within the PDB Contract, inclusive of design, construction, and obtaining governmental approvals.

Proposal – Shortlisted Respondents' response to the RFP issued by District, which shall consist of a technical proposal and cost proposal.

Respondent – The entity shortlisted as a result of submitting a SOQ and responding to this RFP by submitting a Proposal, and the entity that, if selected by the District, will enter into the PDB Contract with the District for delivery of the Design-Build services and the Project.

Responsiveness Requirements – The requirements set forth in Subsection 6.2 of this Solicitation that, at a minimum, must be satisfied (or waived by the District) in order for the Proposal to be evaluated and ranked according to the comparative evaluation criteria.

Shortlist – A limited list of Respondents selected by the District to compete in the RFP process.

Shortlisted Respondent (also, Respondent) – Those entities who submitted an SOQ in response to the RFQ and were invited to submit Proposals in response to this RFP. The RFP is the second step in the District's two-step procurement process employed to procure a PDBE for the Project.

Successful Respondent – The Respondent with the highest total Proposal score that will be offered the opportunity to serve as the PDBE and enter into the PDB Contract for the Project.

ATTACHMENT B
REFERENCE DOCUMENTS

1. **Wastewater Collection System Phase II & III – Planning Study Report (Atkins, Sept 2018)**
2. **Wastewater Collection System Phase I - Preliminary Design Report (Atkins, April 2013)**

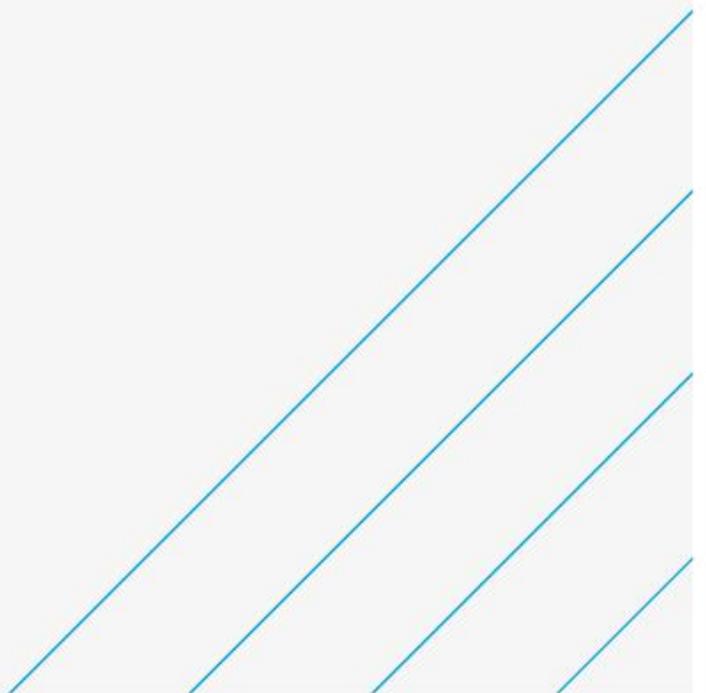


Wastewater Collection System

Planning Study Report - Phase II and III

Hi Desert Water District

September 4 2018



Notice

This document and its contents have been prepared and are intended solely as information for Hi Desert Water District and use in relation to planning for the wastewater collection system

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This document has 23 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Initial Submittal	CMR	AJF	MC	RJW	9/04/18

Client signoff

Client	Hi Desert Water District
Project	Wastewater Collection System Phase II and III
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Abbreviations and Definitions

B	Barron Basin
CEQA	California Environmental Quality Act
Deferred	A parcel that will not connect to the initial collection system
District	Hi Desert Water District
FM	Force main
FT	Feet
IS/EIR	Initial Study / Environmental Impact Report
K	Kickapoo Basin
LAFCO	Local Agency Formation Commission
LF	Linear Feet
MND	Mitigated Negative Declaration
MWH	Montgomery Watson Harza
NEPA	National Environmental Protection Agency
Non-assessed	A parcel that was not assessed and never planned to connect to the sewer system
P	Paxton Basin
Planned Parcels	All parcels not listed as deferred or non-assessed
PS	Pump Station
RD	Recommend to Defer
S	Sunnyslope Basin
Town	Town of Yucca Valley
USGS	United States Geological Survey
WWTP	Wastewater Treatment Plant

Executive Summary

In 2007, the California State Water Resources Control Board adopted a resolution identifying the Town of Yucca Valley as a top priority for eliminating the use of septic systems. In 2011, the Colorado River Basin Regional Water Quality Control Board (Board) amended their Basin Plan to prohibit discharge from septic systems in Yucca Valley. Because of these measures, Hi Desert Water District (District) is implementing the Wastewater Reclamation Project and will become the local sewer agency. The Wastewater Reclamation Project is a program to design, construct, and operate a wastewater collection and treatment system.

The District will own and operate the proposed wastewater collection and treatment system. The District contracted Montgomery Watson Harza (MWH) to prepare a wastewater master plan (Master Plan) for the Town of Yucca Valley, which was adopted in 2009. The design and construction of the system is separated into three phases. Phase I, designed by Atkins, is currently under construction and is scheduled for completion during the first quarter of 2021. The District has also contracted Atkins to perform initial design services for Phases II and III, which are scheduled to complete construction in 2022 and 2025 respectively.

The purpose of this Planning Study is to formalize proposed sewer alignments that will provide service to all parcels within the Phase II and III boundaries. Select parcels identified as *deferred* or *non-assessed* in the Assessment District Engineer’s Report, compiled by Albert A. Webb Associates, will not receive service as part of the three phases, at present, and are not considered for this study. Deferred parcels are properties within the phase boundaries that are either vacant or in a low development area that will not meet the design flow metrics and will be hooked into the system at a later date. Non-assessed parcels are parcels that are dedicated for open space, habitat conservation, public rights-of-way, utility easements, parking lots or other uses that will not involve development of the parcel. Parcels within the phase boundaries that are not listed as deferred or non-assessed will be called *planned parcels*.

Backbone trunk sewer and force main alignments as well as the three major pump stations are included in the Phase I system. Sewer mains within the Phase II and III systems will ultimately flow into the Phase I alignments then to the Wastewater Treatment Plant (WWTP). For the initial Phase II and III design, Atkins utilized aerial imagery and topographical data gathered for the Phase I system, supplemented by new survey data gathered by Psomas. The Phase II and III wastewater collection system consists of gravity flow sewer mains and short force main alignments.

The collection system proposed in this study is an extension of the Phase I system to ensure every planned parcel is serviced. The collection system is optimized to minimize pipe lengths and system depth while ensuring sufficient gravity flow. Cost and ease of construction are improved by reducing the need for private easements and reducing the number of sewer lines crossing Caltrans right-of-way (SR 247 and SR 62). This Planning Study is a preliminary assessment of proposed alignments and is subject to further refinement based on final design and easement acquisitions.

The Phase II and III system is divided into the same four basins identified in Phase I. Each basin is defined by topographical constraints and comprised of several sub-basins which are defined by a network of sewer mains that feed into a branch of the backbone collection system.

The proposed system to service every planned parcel within the Phase II and III boundaries is summarized below:

- 334,900 feet of gravity sewer collection line
- 3,585 feet of force main
- 3,780 total lots serviced
 - 2,984 developed lots serviced
 - 796 vacant lots serviced

Construction of the Phase II and III system is projected to range from a low-end cost of \$83,337,270 to a high-end cost of \$88,337,506. This cost does not include associated soft costs, or any professional services.

1. Introduction

The Hi Desert Water District (District) has provided drinking water service for the Town of Yucca Valley (Town) and portions of the unincorporated area of San Bernardino County since 1962. The Town is located at the intersection of State Route 62 and State Route 247 between Morongo Valley and Twentynine Palms, California.



Figure 1 - Vicinity Map

Septic systems are currently used within the District’s entire service area to dispose of wastewater. The District’s primary water source is groundwater from the Warren sub-basin of the Morongo Groundwater Basin. The District collaborates with the United States Geological Survey (USGS) in a cooperative water resources monitoring program to monitor the water quality and groundwater surface elevations in the groundwater basin.

In 2007, the California Regional Water Quality Control Board (Regional Board) adopted a resolution identifying the Town as a top priority for eliminating the use of septic systems. The goal of eliminating septic systems was to improve the water quality in the groundwater basin, which has tested high for nitrates. On February 17, 2010, the Local Agency Formation Commission (LAFCO) granted the Hi Desert Water District the authority to construct, operate, and maintain a wastewater collection and treatment system. Additionally, in 2011, Colorado River Basin Regional Water Quality Control Board amended their Basin Plan to prohibit discharge from new and existing septic systems within the Town. In response to the Regional Board’s resolution, the District is implementing the Wastewater Reclamation Project, and will become the local sewer agency.

The project is separated into three phases, as shown in Figure 1 of Appendix A. All referenced Figures are in Appendix A unless otherwise stated. The design and construction of the collection and treatment system for the central portion of Yucca Valley (Phase I), is currently under construction and scheduled to be complete in the first quarter of 2021. The Phase I area septic system discharge prohibition begins June 30, 2021, while the Phase II and III prohibition begins December 31, 2025. The District has now begun to look at the expansion of the system to incorporate the Phase II and III areas. The additional facilities necessary to efficiently incorporate the Phase II and III areas is the focus of this planning study.

The District contracted MWH to prepare a Sewer Master Plan which was adopted by the Board in January of 2009. The Master Plan defined planning criteria to calculate flow projections, created a hydraulic model based on the projections, and determined initial estimates for the Phase I collection system pipe sizes. Atkins updated the hydraulic model in 2013 and used it to set the final pipe diameter sizes for the Phase I system.

To satisfy the Federal requirements of the National Environmental Policy Act (NEPA) and the State requirements of the California Environmental Quality Act (CEQA), the environmental consulting firm Tom Dodson and Associates was selected by the District to prepare an Initial Study/ Environmental Assessment Report (IS/EAR). Based on the IS/EAR, a Mitigated Negative Declaration (MND) for the Project was finalized on October 7, 2009.

In March 2016, the Regional Board adopted a Basin Plan Amendment, to revise the prohibition dates and phase boundaries governing the wastewater collection system in Yucca Valley. This Basin Plan removed areas from the initial plan that would produce little benefit to the system (low flow), extended the prohibition dates for all three phases, and allowed for the simultaneous design and construction of Phases II and III. The prohibition dates reflected in this planning study match the revised dates from the Basin Plan amendment, and not the original dates set in 2007.

As a product of the 2016 Basin Plan Amendment, Atkins was provided with a list of all Assessor's Parcel Numbers (APN) within the complete phase boundaries, and a corresponding parcel status. The parcel status identified several parcels as either deferred or non-assessed. Deferred parcels are exempt from the requirement to connect into the Phase I, II and III systems, and will be connected at a future date, once specific flow and/or development metrics are met. Deferred parcels still carry a small assessment fee, which is much lower than the typical fee for non-deferred parcels. Non-assessed parcels carry no assessment fee and are planned to never connect to the collection system. These non-assessed parcels are comprised of properties that will never need a sewer connection, such as parcels dedicated for open space, habitat conservation, public rights-of-way, utility easements, parking lots, or other uses that will not involve development of the parcel. As both deferred parcels and non-assessed parcels are not planned to connect into this phase of the collection system, they were not included in the layout of the system.

1.1. Purpose

One of the first tasks associated with the design of the sewer collection system for the Phase II and III areas was to perform a horizontal alignment study. The purpose of the Alignment Study was to provide initial sewer alignments to service all parcels that are not listed as deferred or non-assessed and fall within the Phase II and III boundaries. The alignment study was completed in June of 2018, and it laid out recommendations for changes to the overall Phase II and III areas that could improve the overall efficiency of the system.

The purpose of this planning study is to formalize final alignments for the Phase II and III areas and identify system components that will be a part of the system for final design. This planning study will use these final alignments and expand upon their provided information to include final lengths and number of manholes. The alignments will also be used to identify the anticipated number of easements needed, identify areas needing environmental study, and outline the anticipated costs associated with the design and construction of the Phase II and III system. In addition, alignments to service deferred parcels were laid out, and an associated deferred cost is presented in Section 3.2. The deferred cost will be used for future planning purposes upon build out of the deferred areas.

1.2. Methodology

The design team utilized the aerial imagery and topographical data collected for the Phase I system supplemented by new data for the Phase II and III areas gathered by Psomas, to develop a wastewater collection system consisting of gravity flow sewers and short force main alignments connecting into the existing Phase I system. The collection system proposed in this study builds upon the existing Phase I system to ensure every planned parcel within the Phase II and III boundaries is serviced. The collection system is designed to minimize pipe length and depth while ensuring gravity flow, reduce the need for

private easements, and reduce the number of sewer lines crossing sensitive right-of-way such as Caltrans (SR 247 and Highway 62) and San Bernardino County Flood Control District.

The collection system expansion into the Phase II and III areas will also conform to all criteria set forth in the Phase I Preliminary Design Report, including minimum pipe diameter, minimum pipe slopes, minimum depth, and minimum velocity requirements. This Planning Study Report is a preliminary assessment of proposed alignments, depths and costs; it is subject to further refinement due to vertical alignment continuity, easement acquisitions, and alignment revisions as the project progresses through the final design stage.

2. Collection System Analysis

2.1. Sewer Basins

The Phase I system was divided into four major basins, Barron, Sunnyslope, Paxton, and Kickapoo, which are shown in Figure 2 of Appendix A. Each basin is defined by topographical characteristics, has one terminating low point, and is comprised of sub-basins. A sub-basin is defined by a network of sewer mains that feed a branch of the trunk sewer.

For the Phase II and III areas, these basins will be extended by adding additional area to the existing sub-basins, as shown in Appendix A. The new areas added to each sub-basin will be split into regions. Each region corresponds to a single connection point into the Phase I or Phase II system. To maintain continuity with the labelling scheme and basin designations of the Phase I system, the new regions for the Phase II and III areas will adopt a similar naming convention.

Regions in the Phase II and III areas will be named in the following format: PD2A, PD2B, PD3A, etc. The first two-letter designation represents the Phase I sub-basin that the new region will connect into. Therefore, the PD2A region will connect into the PD sub-basin in the Phase I system. Second, the number indicates the phase; for example, the “2” in the PD2A region indicates that this region is part of the Phase II area. Similarly, a “3” designation in a region, such as PD3A, indicates that the region is part of the Phase III area. Finally, the last letter in the region designation accounts for the position of the region within the overall basin and project area. For example, the PD2A region is the first region in the Phase II area that will connect into the PD sub-basin from Phase I. PD2B will be the second region in the Phase II area that will connect into the PD sub-basin from Phase I, and so on. These position indicators are assigned moving from east to west, so the earlier the letter, the further east the region is located.

There are certain regions within the Phase II and III area that include serviced parcels, but no new sewer pipe. In this instance, the listed parcels are serviced by pipe that is part of a different region or Phase. Such parcels shall be called dependent parcels. Where a new region is comprised of only dependent parcels, it shall be called a dependent region.

In addition to construction of sewer mains in the Phase II and III areas, the scope of the Phase II and III construction will include the addition of a new sewer within the Phase I boundary. The new sewer within the Phase I limits will be in the Paxton basin south down Kickapoo Trail, from Santa Fe to Mountain View Trail. This pipe is needed to allow for connections from the Phase III areas. Construction of this line will allow several parcels along the east side of Kickapoo Trail, which were previously deferred under Phase I, to connect into the system.

Overall, the total length of gravity pipe including all four basins under the condition of providing service to every planned parcel within the Phase II boundary is 160,225 feet and within the Phase III boundary is 174,675 feet. The total length of force main to service every planned parcel within the Phase II boundary is 700 feet and within the Phase III boundary is 2,885 feet. This length of pipe is used to service 1,969 lots within Phase II and 1,811 lots within Phase III. Within Phase II, 1,656 of those lots, or 84%, are developed, and within Phase III, 1,328 of those lots, or 73% are developed.

2.2. Barron Basin

The Barron Basin is located within the eastern portion of Yucca Valley, north and south of Highway 62. The Barron Basin contains both Phase I and Phase III areas, as shown in Figure 3 of Appendix A. Within the Barron Basin, there is only one sub-basin, BA, while the Phase III area of the Barron Basin is comprised of only one planned region, as shown in Figure 4 of Appendix A.

Sewer mains within the Barron Basin flow via gravity to the Barron Pump Station, located at the northwest corner of Barron Drive and Yucca Mesa Road, as shown in Appendix B. Flow is then conveyed south via the Barron Force Main, to the Barron Trunk, and finally to the Sunnyslope Trunk. The Sunnyslope Trunk ultimately flows via gravity to the proposed Wastewater Treatment Plant (WWTP), shown in Appendix B. Within the Phase III area of the Barron Basin, the total length of pipe is 8,830 feet, which is used to service 80 lots, of which 47, or 59%, are developed. Summarized in Table 1 below is the proposed region information.

Table 1 - Barron Basin Regions

Region	Phase	Length (ft)	Parcels Serviced	No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
BA3A	3	8,830	80	28	3
Total		8,830	80	28	3

2.3. Sunnyslope Basin

The Sunnyslope Basin is located within the eastern portion of Yucca Valley, south of the proposed WWTP. The Sunnyslope Basin contains both Phase I, II, and III areas, as shown in Figure 5 of Appendix A. Within the Sunnyslope Basin, there are two sub-basins, SA and SB, as shown in Figure 6 of Appendix A. Finally, the Phase II and III areas of the Sunnyslope Basin are broken up into three regions, as shown in Figure 7 of Appendix A.

Sewer mains within the Sunnyslope Basin flow via gravity to the Sunnyslope Trunk sewer, ultimately discharging to the proposed WWTP. Within the Phase II and III areas of the Sunnyslope Basin, the total length of gravity pipe is 107,155 feet, which is used to service 1,145 lots, of which 943, or 82%, are developed. Summarized in Table 2 below is the proposed region information.

Table 2 - Sunnyslope Basin Regions

Region	Phase	Length (ft)	Parcels Serviced	No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
SB2A	2	34,580	438	103	11
SB3A	3	35,935	268	121	13
SB3B	3	36,640	439	117	13
Total		107,155	1,145	341	37

2.4. Paxton Basin

Paxton Basin is the largest of the four basins encompassing the central portion of Yucca Valley on both sides of Highway 62. The basin is mostly east of Kickapoo Trail and west of Avalon Avenue. The Paxton Basin contains both Phase I, II, and III areas, as shown in Figure 8 of Appendix A. Within the Paxton Basin, there are 25 sub-basins, PA through PZ, excluding PY, as shown in Figure 9 of Appendix A. Finally, the Phase II and III areas of the Paxton Basin are broken up into thirty regions, as shown in Figure 10 of Appendix A.

Sewer mains within the Paxton Basin flow via gravity to the Paxton Trunk then to the Paxton Pump Station, located at the southwest corner of Paxton Road and Balsa Avenue, shown in Appendix B. Flow is then conveyed south then east via the Paxton Force Main to the Sunnyslope Trunk. As previously stated, the Sunnyslope Trunk sewer ultimately flows via gravity to the proposed WWTP. All the sub-basins except for PB and PE were represented in Phase I. Phase II contains 18 regions and Phase III contains 12 regions of the Paxton Basin. Within the Phase II and III areas of the Paxton Basin, the total

length of gravity pipe is 180,055 feet which is used to service 2,076 lots of which 1,636, or 79%, are developed. Summarized in Table 3 below is the proposed alignment information.

Table 3 - Paxton Basin Regions

Region	Phase	Length (ft)	Parcels Serviced	No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
PD2D	2	0	2 ¹	0	0
PD2E	2	1,890	11	8	0
PD2F	2	5,975	41	21	0
PD2G	2	1,025	14	4	0
PD2H	2	2,920	44	10	0
PD2I	2	2,890	34	8	0
PD2J	2	11,970	132	34	4
PI2A	2	19,865	250	70	8
PI2B	2	17,610	253	49	5
PK2A	2	5,875	132	24	0
PK2B	2	15,120	153	49	6
PO2A	2	1,375	12	7	0
PQ2A	2	1,355	13	4	0
PR2A	2	1,355	12	4	0
PS2A	2	1,740	15	9	0
PT2A	2	1,945	17	6	0
PU2A	2	3,445	38	12	0
PW2A	2	1,990	15	6	0
PB3A	3	2,400	10	8	0
PC3A	3	5,395	53	26	3
PC3B	3	5,420	70	25	3
PD3A	3	16,210	235	62	7
PD3B	3	5,730	89	23	3
PE3A	3	10,555	74	33	4
PE3B	3	25,570	250	112	13
PH3A	3	715	5	3	0
PI3A	3	4,555	78	22	0
PJ3A	3	2,650	20	8	0
PJ3B	3	0	1 ¹	0	0
PX3A	3	2,510	3	9	0
Total		180,055	2,076	656	56

¹ Parcels in regions with zero length are serviced by pipe in other regions or phases. These are named *dependent parcels*.

2.5. Kickapoo Basin

The Kickapoo Basin is located within the western portion of Yucca Valley, on both sides of Highway 62. The Kickapoo Basin contains both Phase I, II, and III areas, as shown in Figure 11 of Appendix A. Within the Kickapoo Basin, there are two sub-basins, KA and KB, as shown in Figure 12 of Appendix A. Finally, the Phase II and III areas of the Kickapoo Basin are broken up into six regions, as shown in Figure 13 of Appendix A.

Sewer mains in the Kickapoo Basin flow via gravity to the Kickapoo Pump Station, located on the south side of Benicia Trail, east of Kickapoo Trail, as shown in Appendix B. Flow is then pumped south to the Paxton Trunk and directed east to the Paxton Pump Station, where it is pumped to the Sunnyslope Trunk, and ultimately into the WWTP via gravity. Within the Phase II and III areas of the Kickapoo Basin, the total length of gravity pipe is 38,860 feet which is used to service 479 lots of which 358 or 79% are developed. Summarized in Table 4 below are the Phase II and III alignments.

Table 4 - Kickapoo Basin Alignments

Region	Phase	Length (ft)	Parcels Serviced	No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
KA2A	2	27,300	343	103	11
KA3B ¹	3	0	1 ¹	0	0
KA3C	3	3,170	46	11	0
KA3D ¹	3	0	3 ¹	0	0
KA3E	3	7,035	79	25	3
KB3E	3	1,355	7	5	0
Total		38,860	479	144	14

¹ Parcels in regions with zero length are serviced by pipe in other regions or phases. These are named *dependent parcels*.

2.6. Force Mains

Due to grades and site constraints, three separate regions within the Paxton and Sunnyslope basins require force mains. The force mains will allow for construction to take place within maintained roads, avoiding construction through easements and parcels thick with Joshua trees, dense rocks, and other obstructions impacting construction. Pumps for the force mains will be located in a sump manhole. Summarized in Table 5 below is the proposed force main alignment information.

Table 5 - Force Main Alignments

Region	Phase	Length (ft)	Proposed Diameter (in)	Parcels Benefitted
PK2B	2	700	6	34
PC3A	3	2,535	6	53
SB3A	3	350	6	56
Total		3,585	-	143

2.7. Deferred Regions

As discussed in the Alignment Study, alignments were laid out to service every planned parcel. This was necessary to accurately design and plan the expansion of the collection system into the Phase II and III areas. These alignments were then optimized to eliminate service to areas that did not meet the metrics presented in the Alignment Study. Service was deferred to areas that would only serve vacant parcels, areas where the District does not provide water service, and areas that contain low flow parcels. The deferred parcels will require service once the areas meet one of the three metrics, and

their construction could take place on a rolling timeline. For the purposes of this report, deferred regions are quantified collectively. The total length of deferred sewer line is 105,184 feet, or 19.9 miles.

2.8. Environmental

The MND approved for the project on October 7, 2009 was based on the sewer alignments proposed in the Sewer Master Plan. This Planning Study proposes new alignment locations to study compared to the alignments presented in the Master Plan such that an amendment to the MND will be required. Shown in Appendix C are proposed alignments and deferred alignments that both were and were not included in the Master Plan. Summarized in Table 6 below is the proposed alignment information for each Phase.

Table 6 - Summary of Alignments Not a Part of Sewer Master Plan

Phase	Alignment Length Previously Studied (ft)	Alignment Length for Future Study (ft)
Phase II Planned	133,926	29,045
Phase II Deferred	7,270	24,350
Phase III Planned	140,020	35,220
Phase III Deferred	22,740	50,830
Phase II & III Planned	273,946	64,265
Phase II & III Deferred	30,010	75,180
Total Phase II & III	303,956	139,445

2.9. Easements

Many areas within the Phase I boundary are not dedicated right of way and required easements to construct the sewer. This situation is also present in Phase II and III. In areas that do not have dedicated right of way, the District will need to obtain easements in order to construct and operate the new sewer system. Parcels that will require new easements are shown in Appendix D. Table 7 below summarizes the parcels that will require easements.

Table 7 - Proposed Sewer Requiring Easements

Phase	Number of Parcels
Phase II Planned	90
Phase II Deferred	54
Phase III Planned	111
Phase III Deferred	152
Total Phase II & III Planned	201
Total Phase II & III Deferred	206
Total Phase II & III	407

2.10. Hydraulic Analysis

In order to appropriately size the new sewer mains planned for the Phase II and III areas, Atkins updated and expanded the existing Phase I hydraulic model of the collection system. The hydraulic model uses the estimated pipe slopes, materials, and projected flows, to simulate the volume of wastewater in the system at any given time of day. This volume is used to size the pipe diameter to conform with the design criteria depth to diameter (d/D) ratio, as well as to produce a velocity as close to the desired velocity of 2 feet per second, which is generally considered to be a “self-cleaning” velocity.

To generate projected wastewater flows, Atkins used the same process followed for the Phase I system design. This process included obtaining water meter flow data for each property in the Phase II and III areas, which was then tied back to a specific parcel through the APN. A return to sewer (RTS) rate of 90% was used, meaning that 90% of the water meter flow was modeled to return to the sewer system as wastewater.

Pairing this flow data with the system layout in this study yielded potential flow rates in each pipe segment of the Phase II and III areas. Each pipe was initially set to a minimum diameter of 8-inches, and the model was used to highlight pipes that were over capacity and needed to increase in diameter. Shown in Table 8 below are the pipes in the Phase II and III system that are projected to be larger than 8-inches in diameter.

Table 8 - Pipes Larger Than 8 Inches

Region	Initial Pipe size	Required Pipe Size	Length (ft)
PD2F	8"	10"	5,770
SB2A	8"	10"	9,530
Total Phase II and III	--	--	15,300

3. Estimated Costs

3.1. Construction Costs

To generate projected construction costs for the Phase II and III systems two methods were applied. The first method used as bid prices for the sewer infrastructure in Phase I as a baseline. Those prices were then combined with the anticipated system metrics of the Phase II and III areas to generate a probable cost of construction.

The system metrics used from the Phase II and III areas include the length of pipe by diameter, number of manholes by diameter, anticipated paving areas, and other like items from Phase I. For lump sum bid items, percentages of each value from the corresponding Phase I package were generated and applied to the Phase II and III estimate.

The second method applied to generate construction costs used a general approach of taking the average cost per mile of construction. The average price per mile of construction was derived from the three Phase I bid packages and multiplied by the anticipated length of the Phase II and III system.

The price determined using as bid prices from Phase I is \$83,337,270. A line item breakdown of this method is available in Appendix E. The price determined using the average cost per mile is \$75,068,612. A line item breakdown of the cost per mile method is available in Appendix F.

For the purposes of this report, the price using method one will be used carried forward as the low-end estimate. To accommodate potential increases in construction materials and general construction pricing, a high-end price will be developed by escalating the prices 6% from the low-end price. Together, the low and high-end prices will create the anticipated range for construction costs.

3.2. Construction Costs – Deferred Regions

For planning purposes, it is important to look not only at the recommend lines presented in this Planning Study, but also at the deferred lines. The deferred lines will be a critical cost component as the District builds out the completion of the system over time. An estimated cost for the construction of these lines can be made using the average construction cost per mile developed in Appendix F. Using this method, the anticipated cost to construct the deferred portions of the Phase II and III system is \$23,366,527.

3.3. Anticipated Soft Costs

In addition to the estimated construction cost, the overall cost of the system will include several soft costs including design, construction management, survey, environmental monitoring, testing, and District staff labor hours. Each of these items will add to the total overall price of the project and should be included in the total budget. Recommendations for each of the soft cost is outlined below and are based on a percentage of the construction cost.

Item	Cost (Low-End)	Cost (High-End)
Construction Cost:	\$83,337,270	\$88,337,506
Engineering Design and Construction Support: 7%	\$5,833,608	\$6,183,625
Construction Management: 9%	\$7,500,354	\$7,950,375
Environmental Monitoring: 0.8%	\$666,698	\$706,700
Surveying and Testing: 1%	\$833,372	\$883,375
Geotechnical: 0.2%	\$166,675	\$176,675
Assessment District Engineer: 0.5%	\$416,686	\$441,687
District Labor: 3%	\$2,500,118	\$2,650,125
Easement Acquisition 0.5%	\$416,686	\$441,687
Enhanced Septic (\$25,000 each)	\$500,000	\$525,000
Total	\$102,171,467	\$108,296,755

4. Recommendation

The purpose of the Planning Study is to formalize proposed sewer alignments that will provide service to all planned parcels within the Phase II and III boundaries. The proposed alignments take into consideration the existing topography, right-of-way corridors, existing utilities, and preferred connection points into the Phase I sewer system. Based on this study, an estimate of the length of pipe, number of parcels serviced, and potential easement requirements were quantified.

The collection system is designed to minimize pipe lengths and system depth while ensuring gravity flow, reduce the need for private easements, and reduce sewer lines crossing Caltrans right-of-way (SR 247 and Highway 62). The collection system expansion into the Phase II and III areas will also conform to all criteria set forth in the Phase I Preliminary Design Report, including minimum pipe diameter, slopes, depth, and velocity requirements.

The proposed Phase II and III system is divided into four major basins matching the Phase I system. Table 9 below summarizes the proposed system for each major basin servicing every planned parcel within the Phase II and III boundaries. Table 10 below summarizes the proposed system by Phase.

Table 9 - Phase II and III System Summary Table - By Basin

Basin	Pipe Length (ft)	Parcels Serviced		No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
		Total	Developed		
Barron	8,830	80	47	28	3
Sunnyslope ¹	107,505	1,145	943	341	37
Paxton ¹	183,290	2,076	1,636	656	56
Kickapoo	38,860	479	358	144	14
Total	338,485	3,780	2,984	1,169	110

¹ This basin includes both gravity and force main lengths.

Table 10 - Phase II and III System Summary Table - By Phase

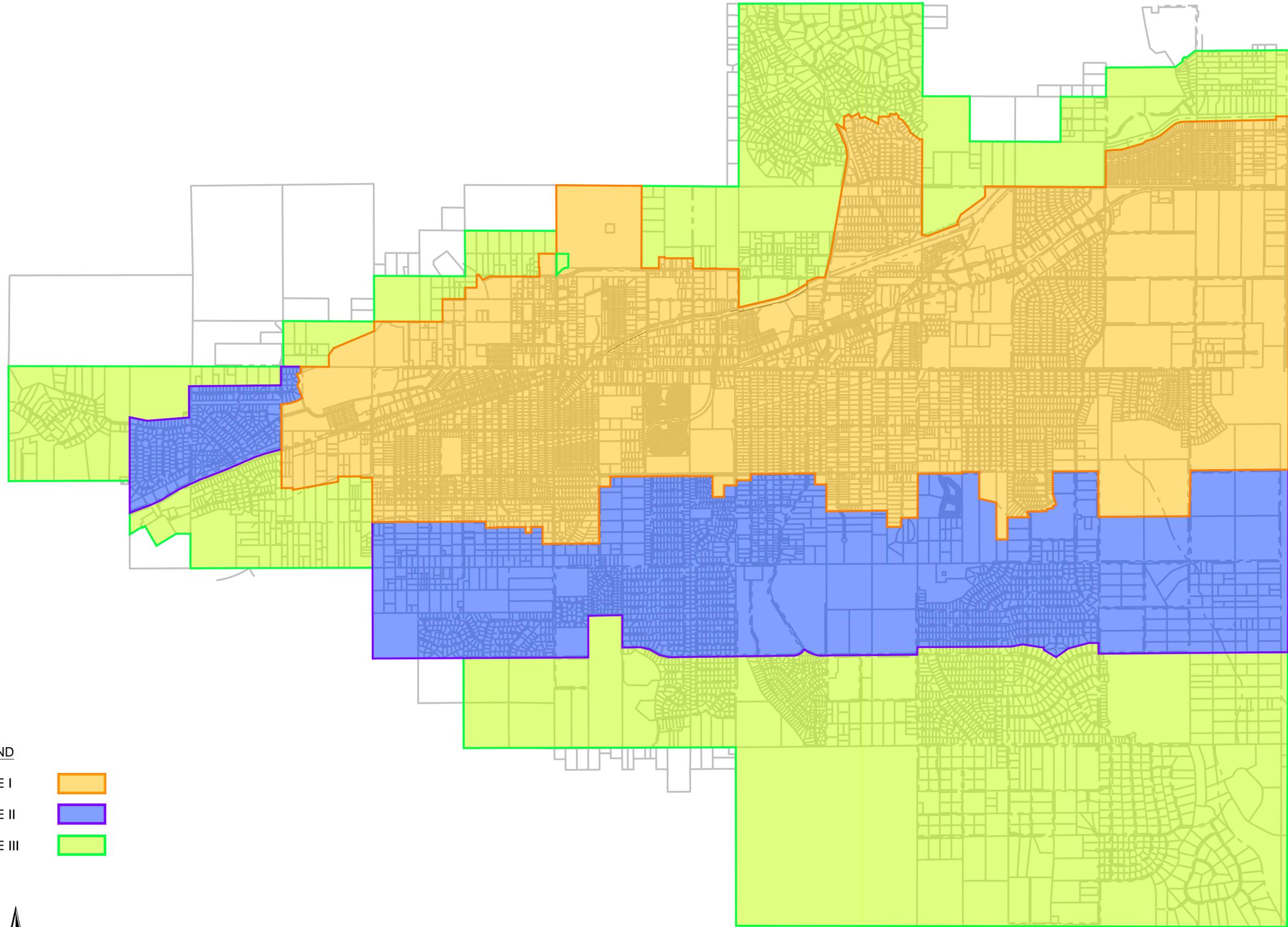
Phase	Pipe Length (ft)	Parcels Serviced		No. Manholes (4' Diameter)	No. Manholes (5' Diameter)
		Total	Developed		
Phase II ¹	160,925	1,969	1,656	531	45
Phase III ¹	177,560	1,811	1,328	638	65
Phase II & III	338,485	3,780	2,984	1,169	110

¹ This Phase includes both gravity and force main lengths.

Appendices



Appendix A. Figures



LEGEND

- PHASE I
- PHASE II
- PHASE III

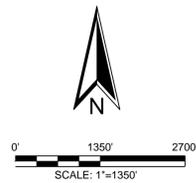
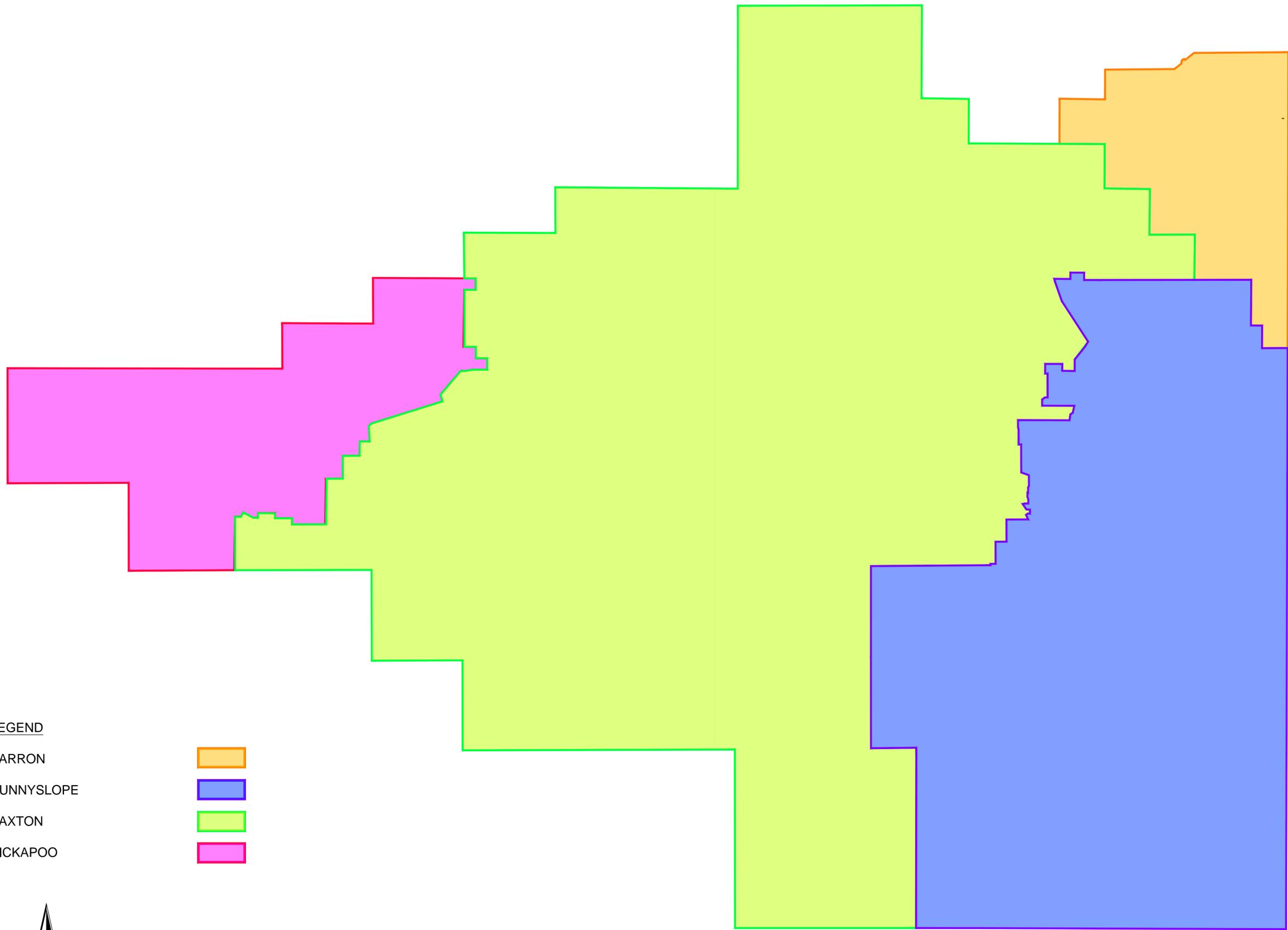


FIGURE 1 - PHASE MAP



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LEGEND

- BARRON
- SUNNYSLOPE
- PAXTON
- KICKAPOO

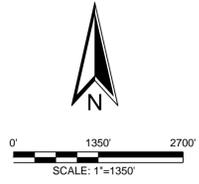
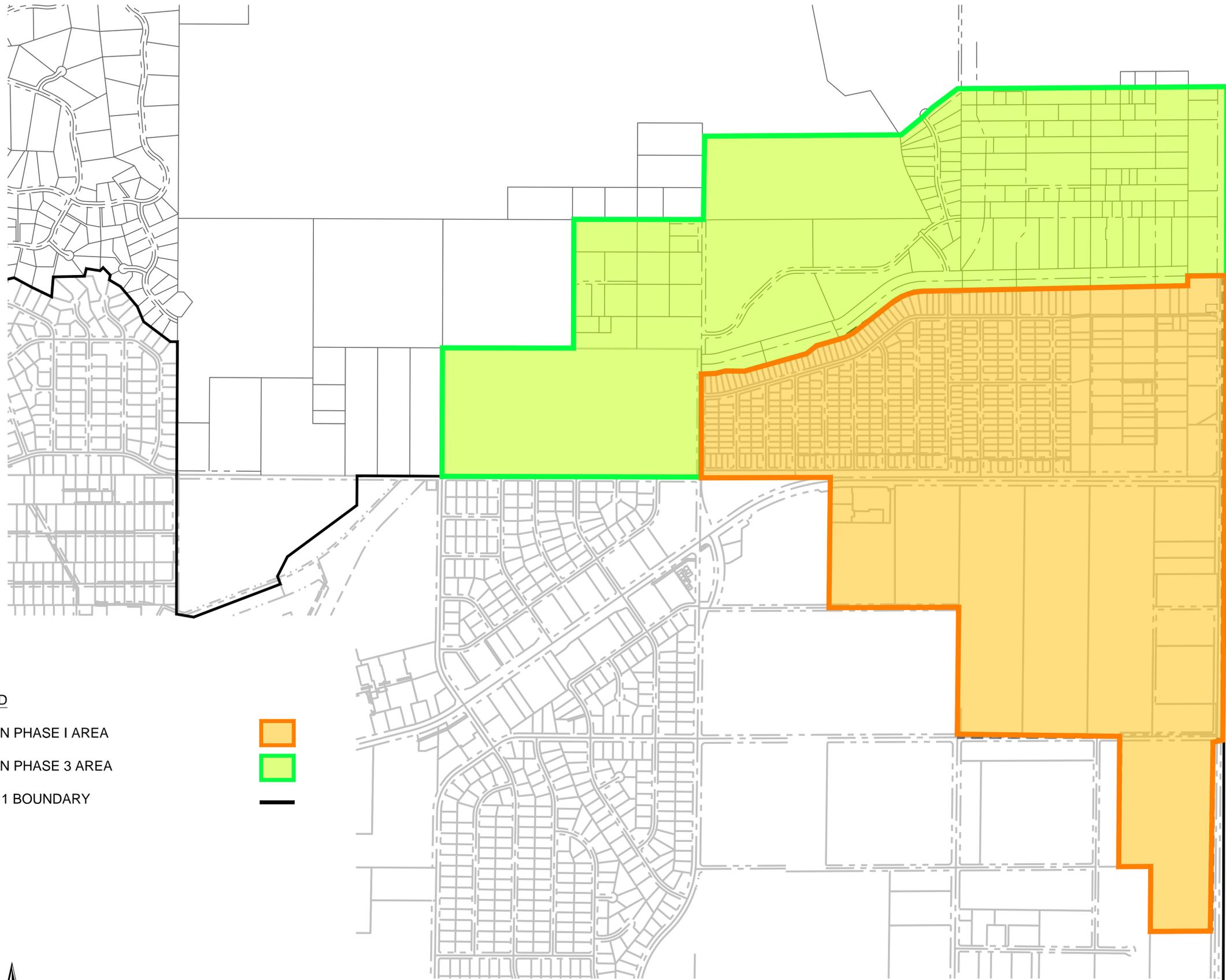


FIGURE 2 - BASIN MAP



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LEGEND

BARRON PHASE I AREA

BARRON PHASE 3 AREA

PHASE 1 BOUNDARY



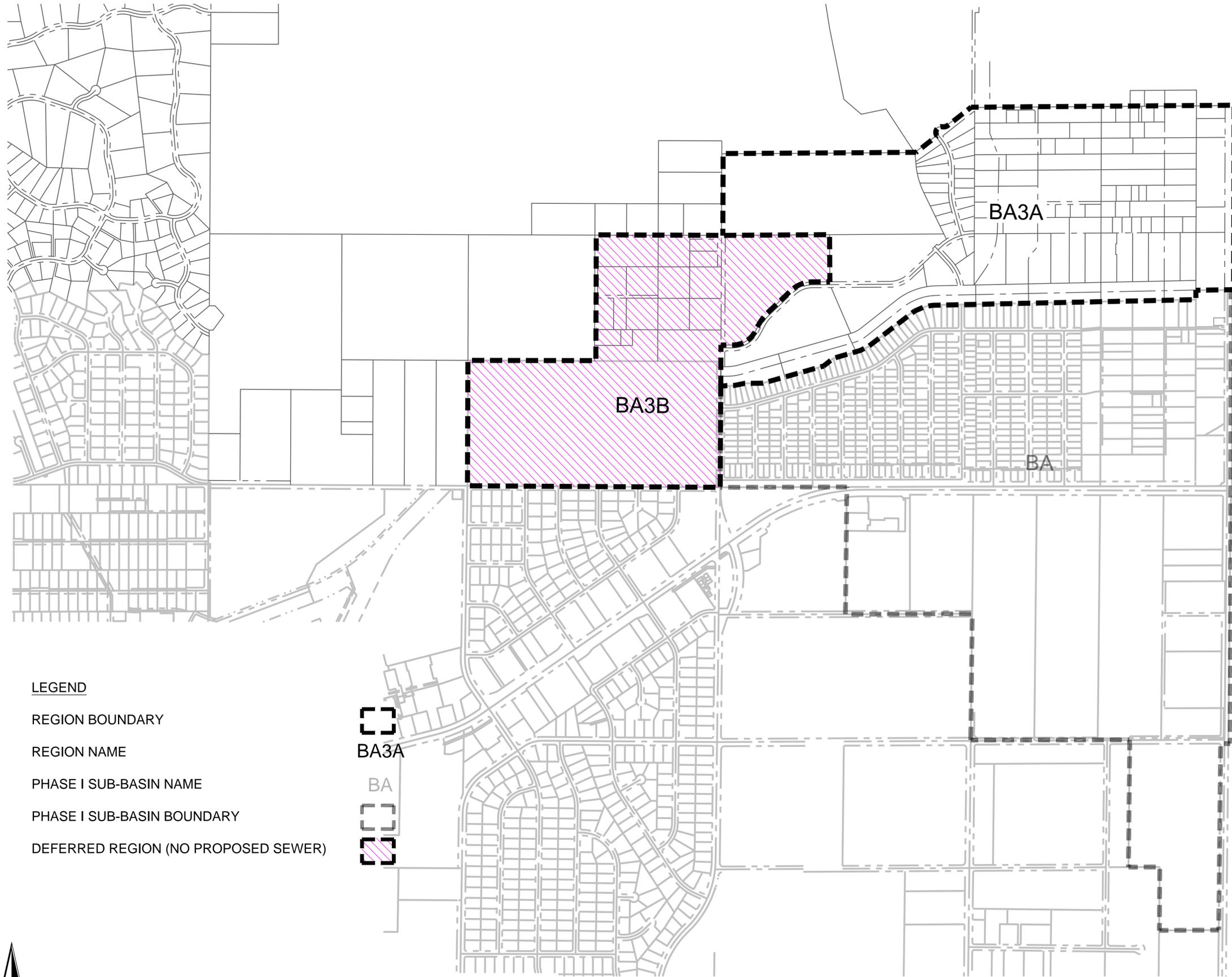
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FIGURE 3 - BARRON PHASES

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LEGEND

REGION BOUNDARY

REGION NAME

PHASE I SUB-BASIN NAME

PHASE I SUB-BASIN BOUNDARY

DEFERRED REGION (NO PROPOSED SEWER)



BA3A

BA

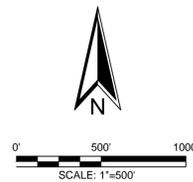
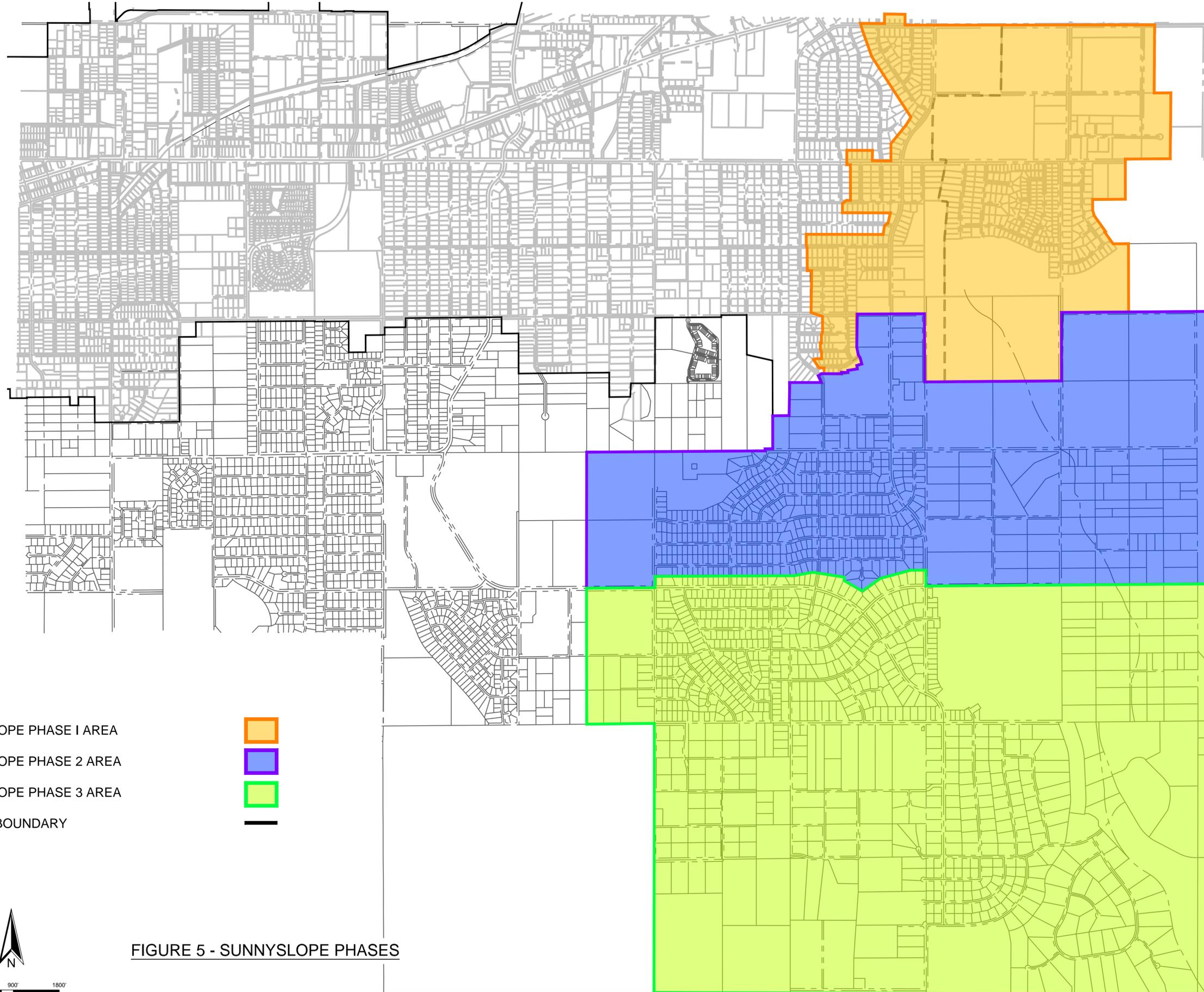


FIGURE 4 - BARRON SUB-BASINS/REGIONS



LEGEND

SUNNYSLOPE PHASE 1 AREA

SUNNYSLOPE PHASE 2 AREA

SUNNYSLOPE PHASE 3 AREA

PHASE 1 BOUNDARY

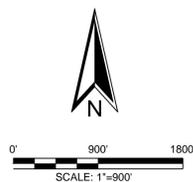
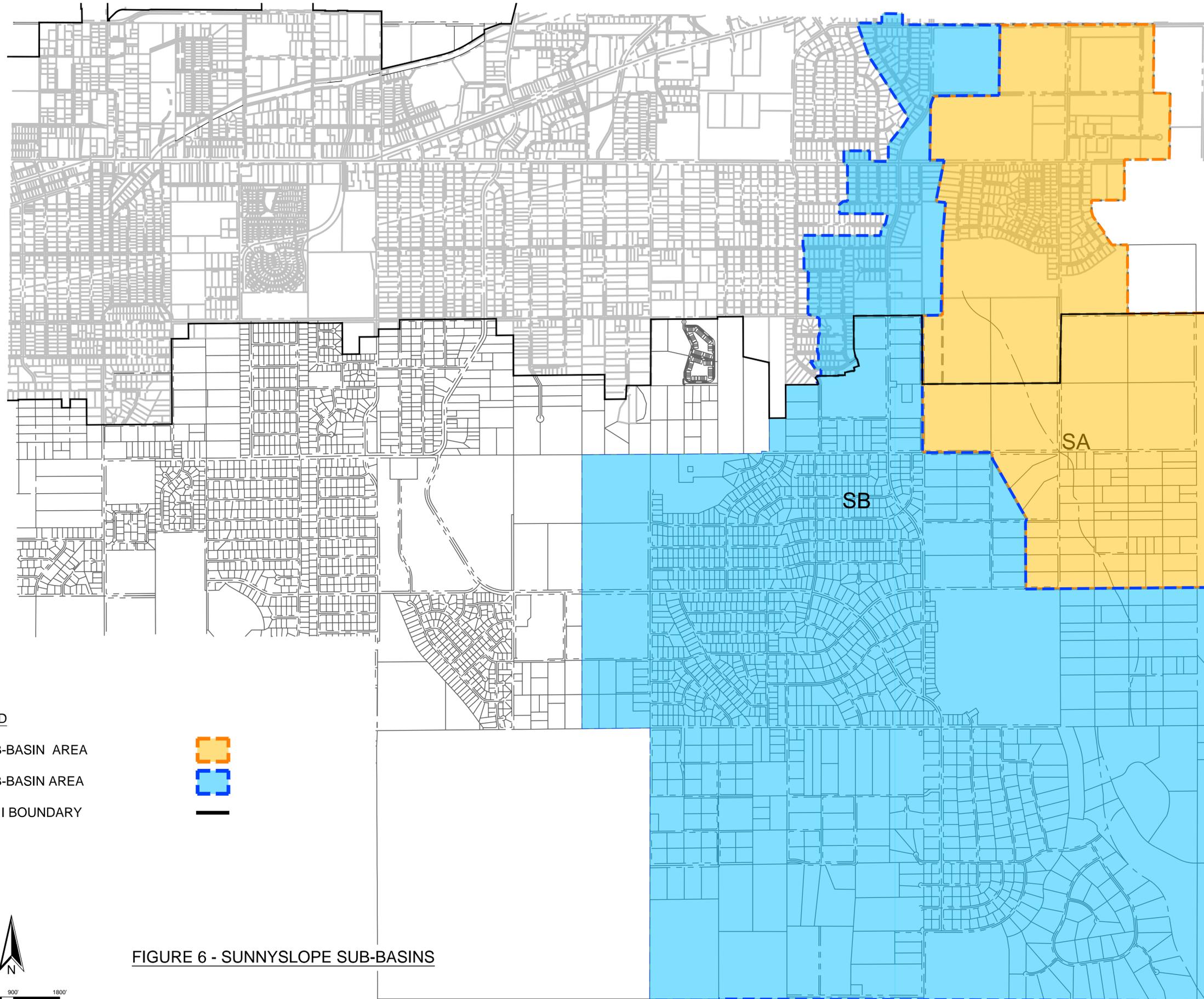


FIGURE 5 - SUNNYSLOPE PHASES

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LEGEND

SA SUB-BASIN AREA



SB SUB-BASIN AREA



PHASE I BOUNDARY

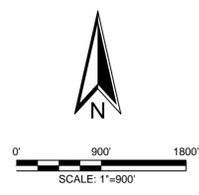
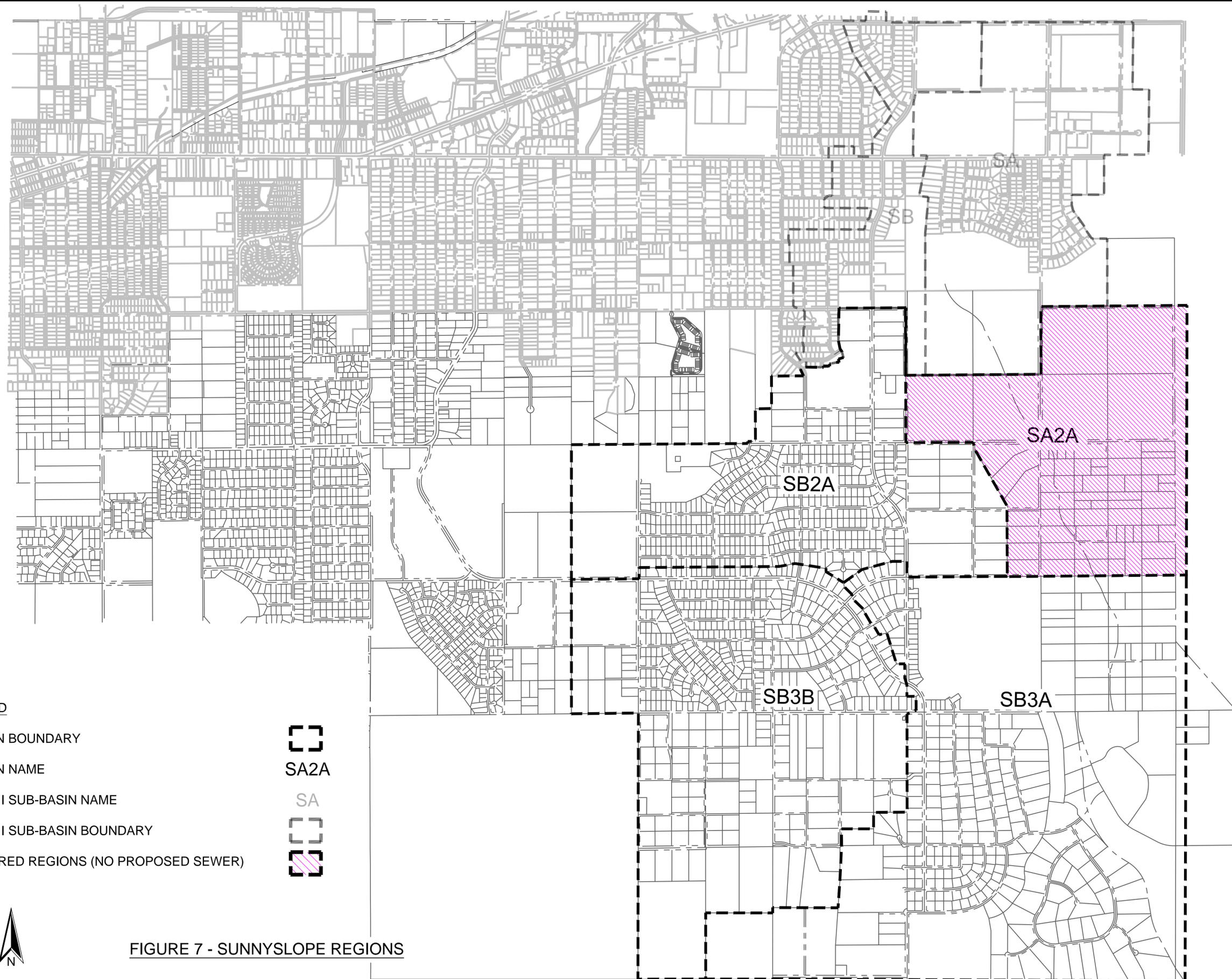


FIGURE 6 - SUNNYSLOPE SUB-BASINS



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LEGEND

REGION BOUNDARY



REGION NAME

SA2A

PHASE I SUB-BASIN NAME

SA

PHASE I SUB-BASIN BOUNDARY



DEFERRED REGIONS (NO PROPOSED SEWER)

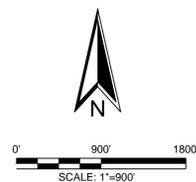
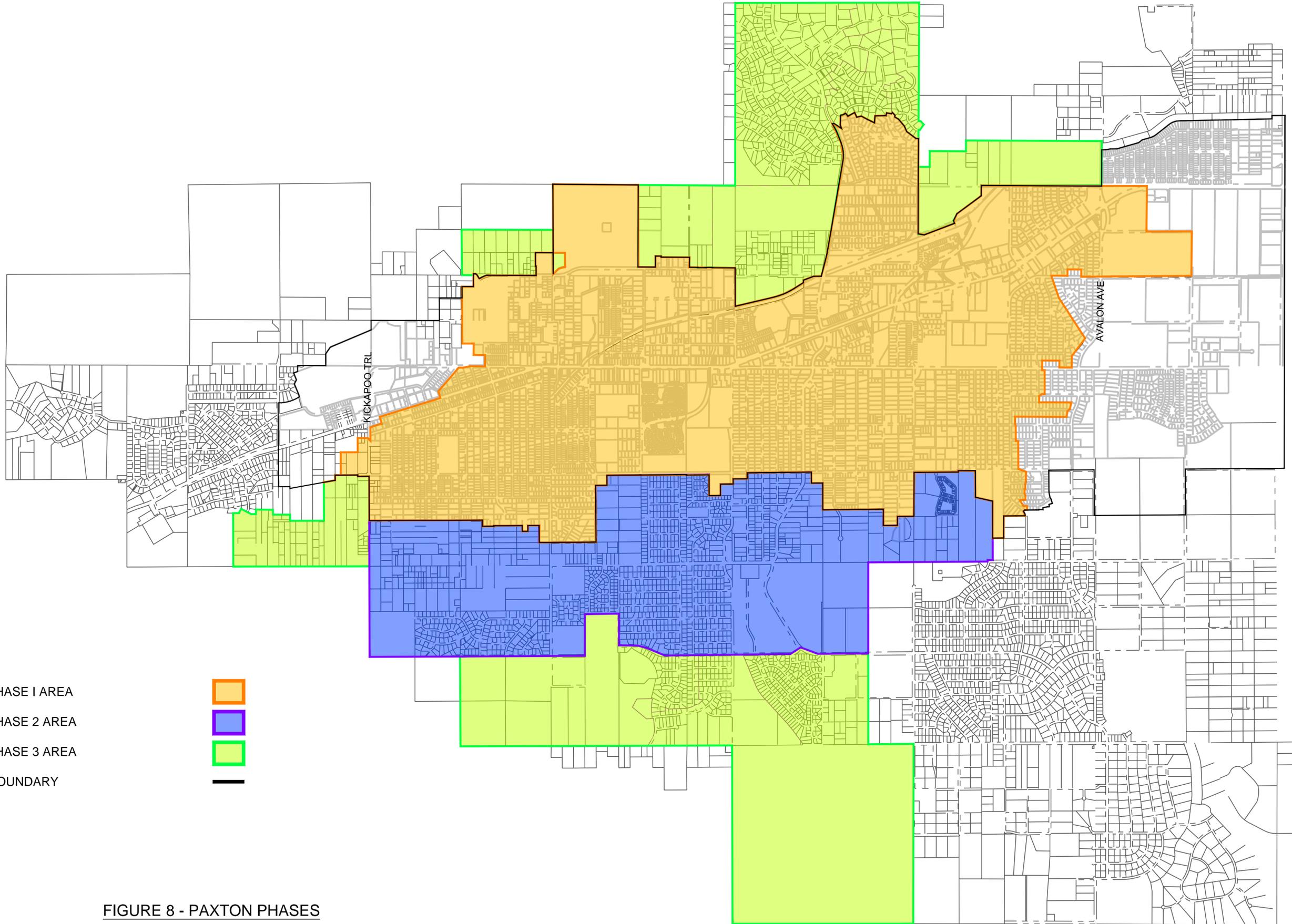


FIGURE 7 - SUNNYSLOPE REGIONS



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LEGEND

PAXTON PHASE 1 AREA

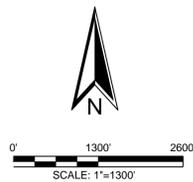
PAXTON PHASE 2 AREA

PAXTON PHASE 3 AREA

PHASE 1 BOUNDARY



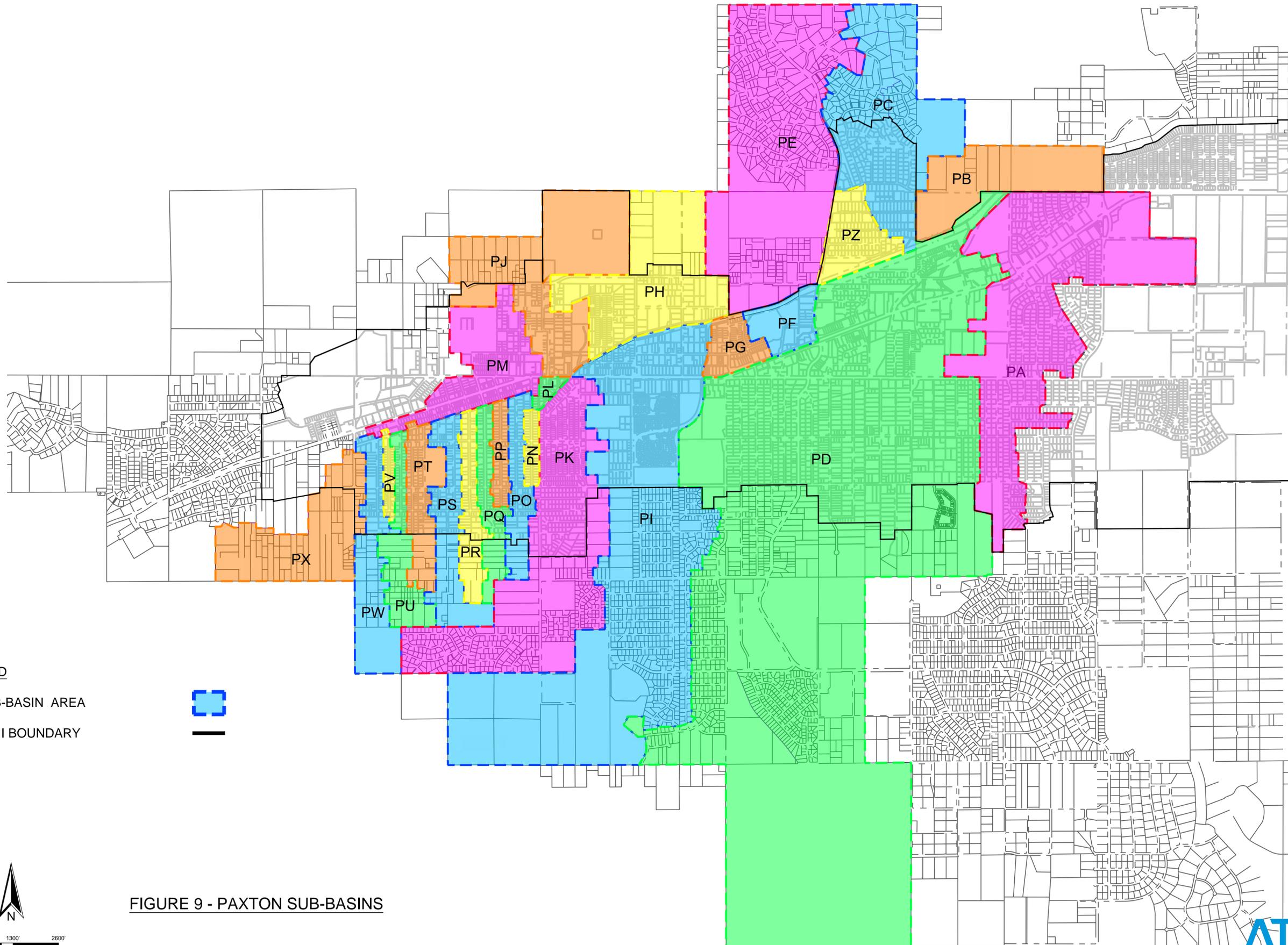
FIGURE 8 - PAXTON PHASES



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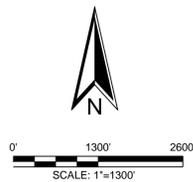
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PA SUB-BASIN AREA

PHASE I BOUNDARY



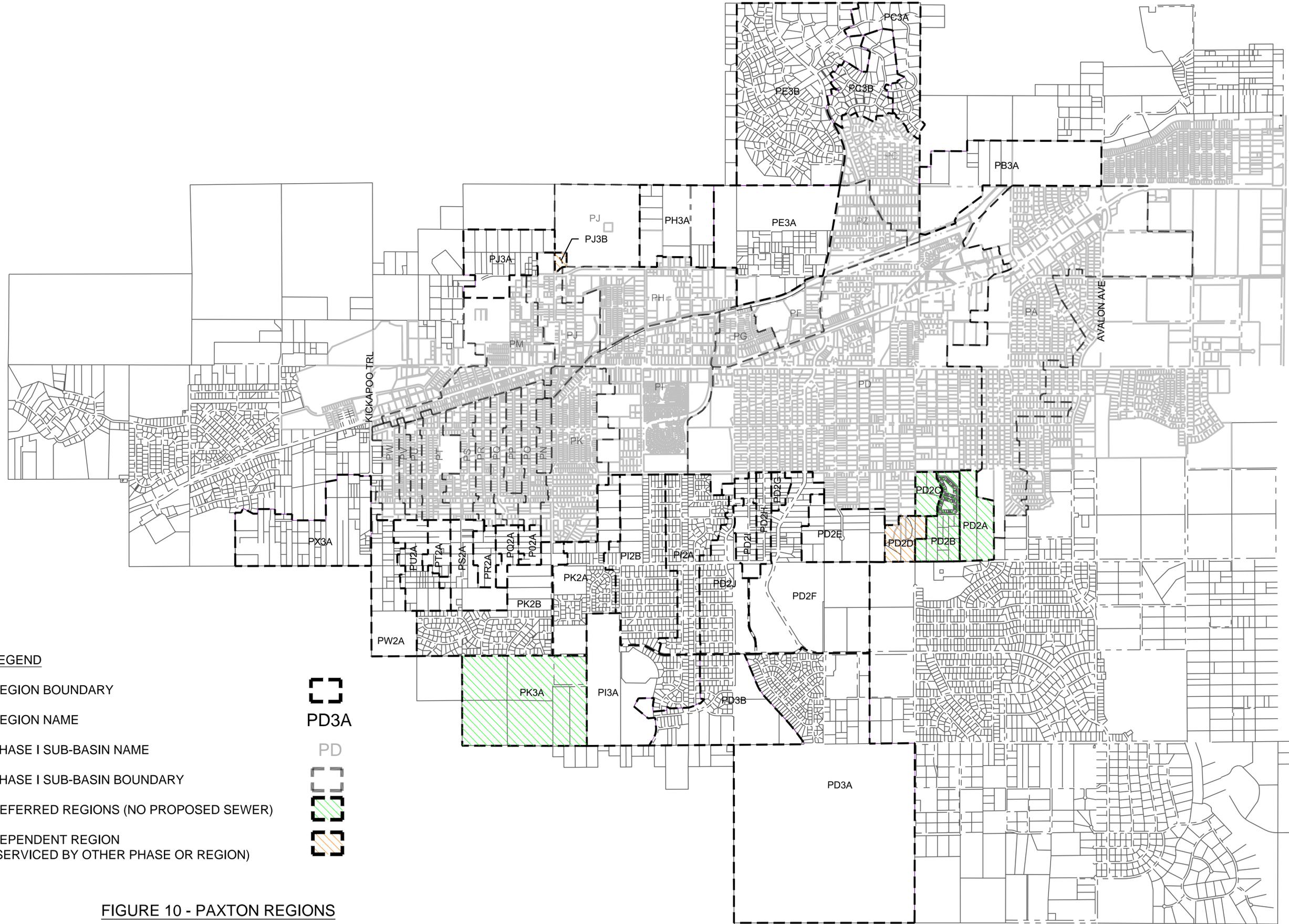
FIGURE 9 - PAXTON SUB-BASINS



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LEGEND

REGION BOUNDARY

REGION NAME

PHASE I SUB-BASIN NAME

PHASE I SUB-BASIN BOUNDARY

DEFERRED REGIONS (NO PROPOSED SEWER)

DEPENDENT REGION
(SERVICED BY OTHER PHASE OR REGION)



PD3A

PD



FIGURE 10 - PAXTON REGIONS



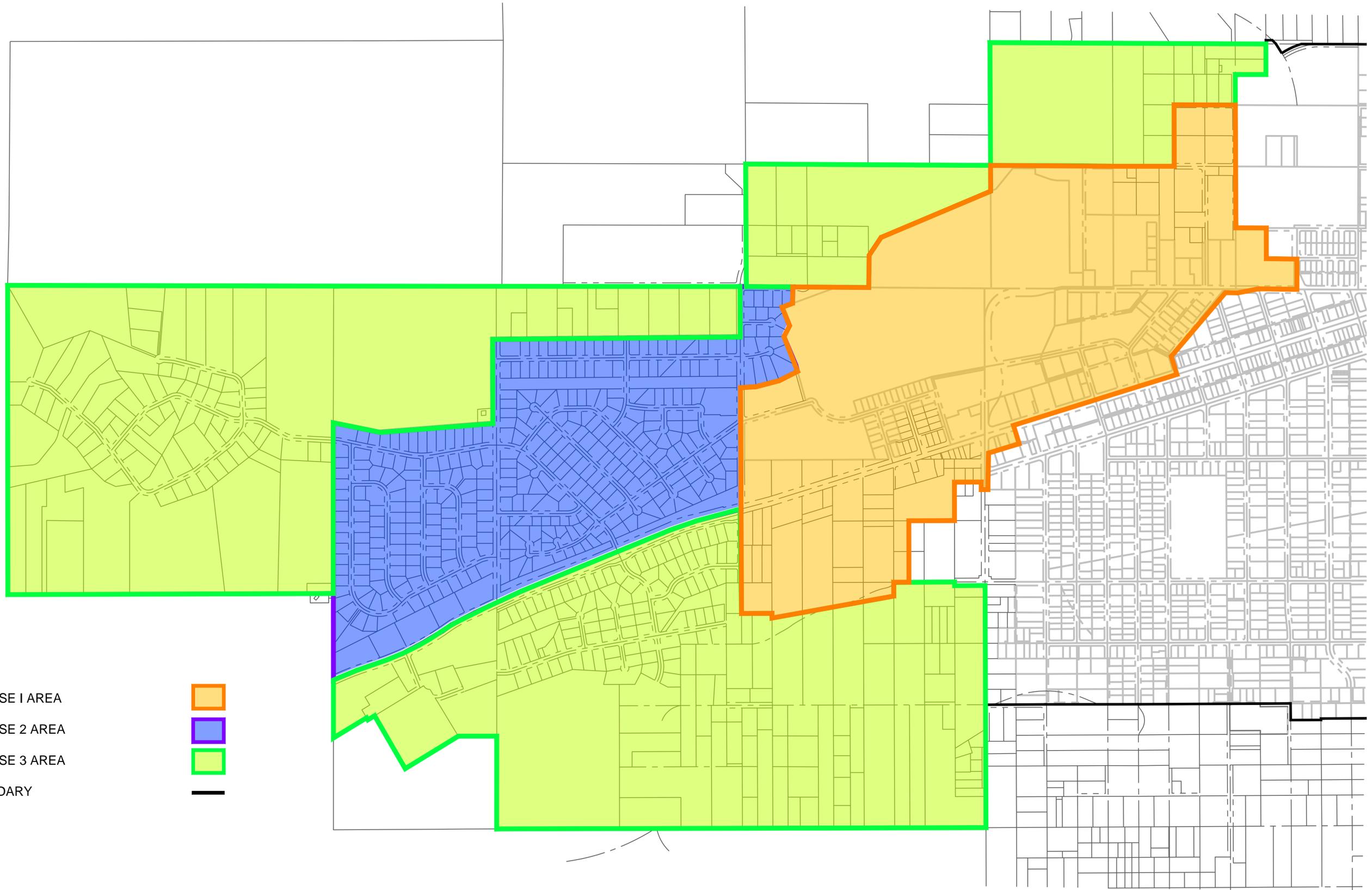
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LEGEND

KICKAPOO PHASE I AREA

KICKAPOO PHASE 2 AREA

KICKAPOO PHASE 3 AREA

PHASE 1 BOUNDARY



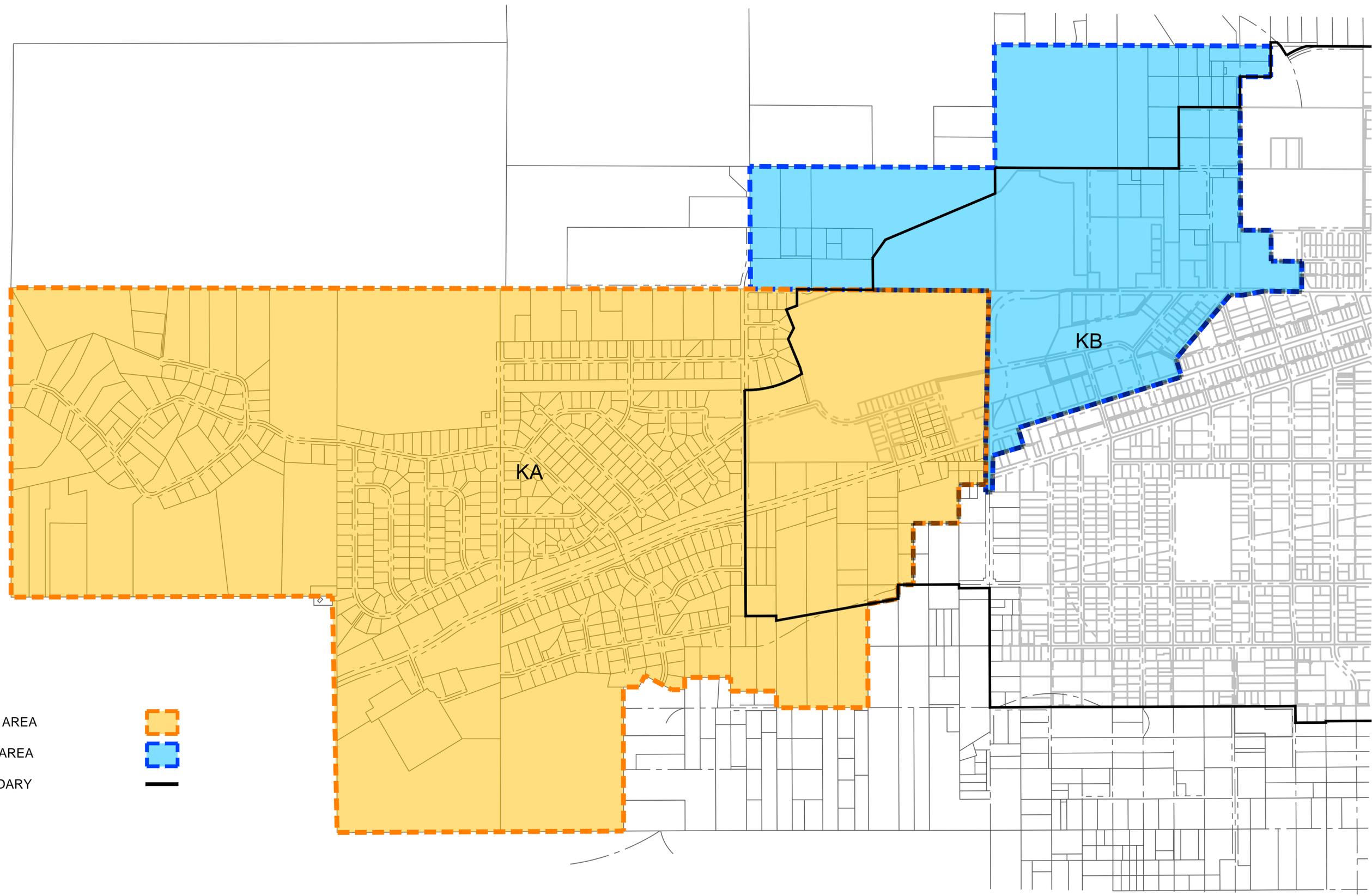
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FIGURE 11 - KICKAPOO PHASES

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LEGEND

KA SUB-BASIN AREA

KB SUB-BASIN AREA

PHASE I BOUNDARY



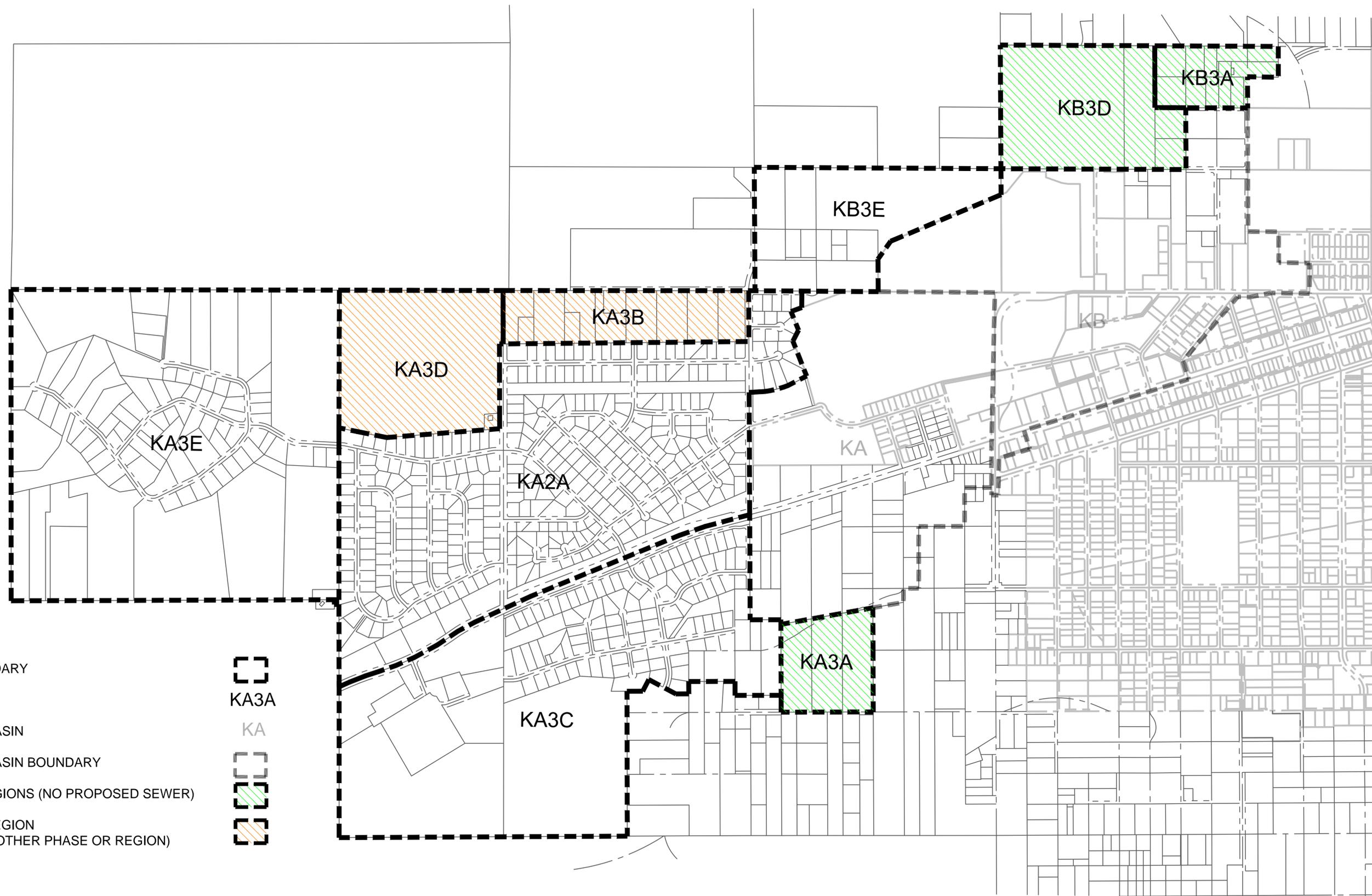
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FIGURE 12 - KICKAPOO SUB-BASINS



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LEGEND

REGION BOUNDARY

REGION NAME

PHASE I SUB BASIN

PHASE I SUB BASIN BOUNDARY

DEFERRED REGIONS (NO PROPOSED SEWER)

DEPENDENT REGION
(SERVICED BY OTHER PHASE OR REGION)



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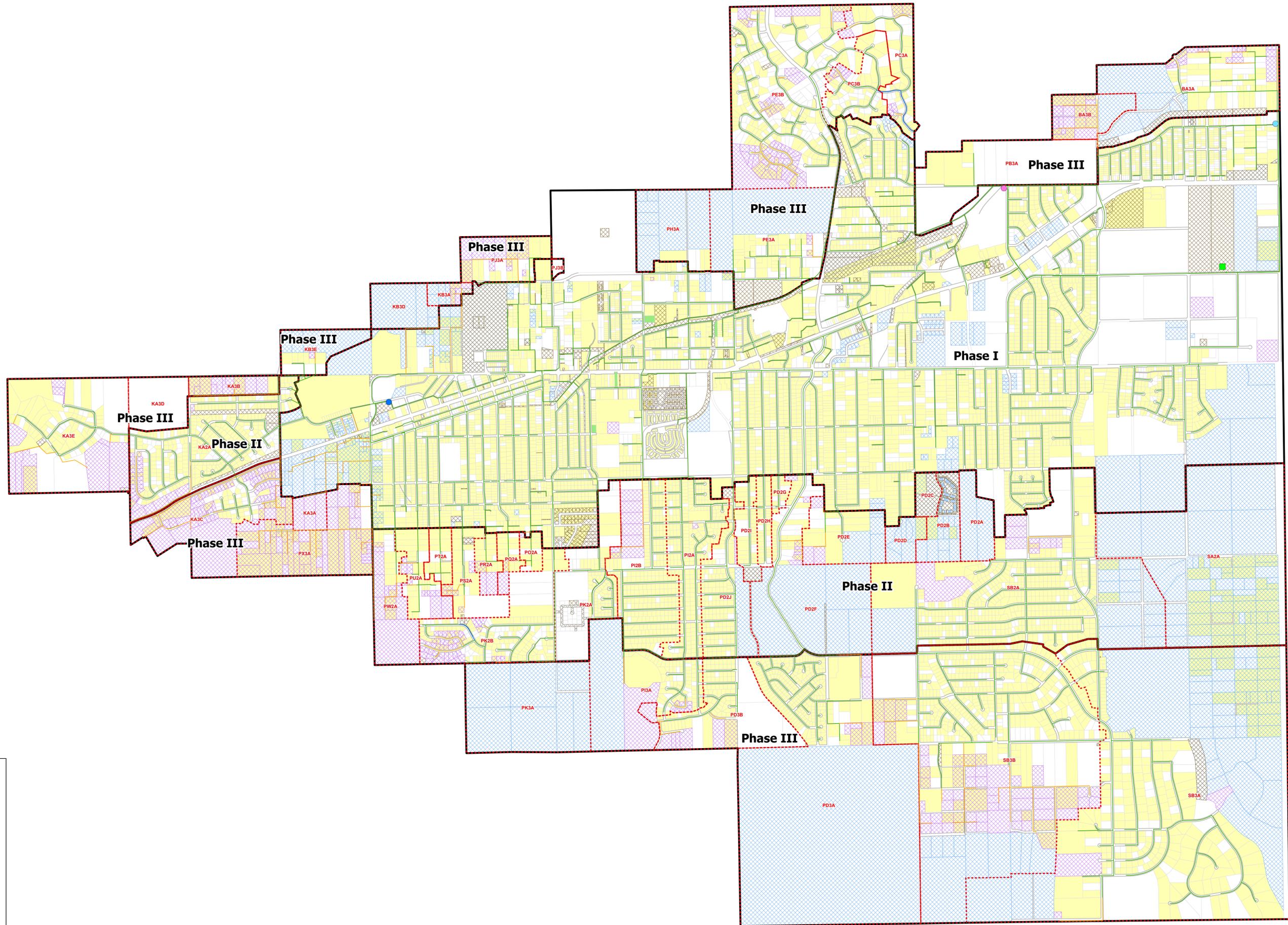
FIGURE 13 - KICKAPOO REGIONS

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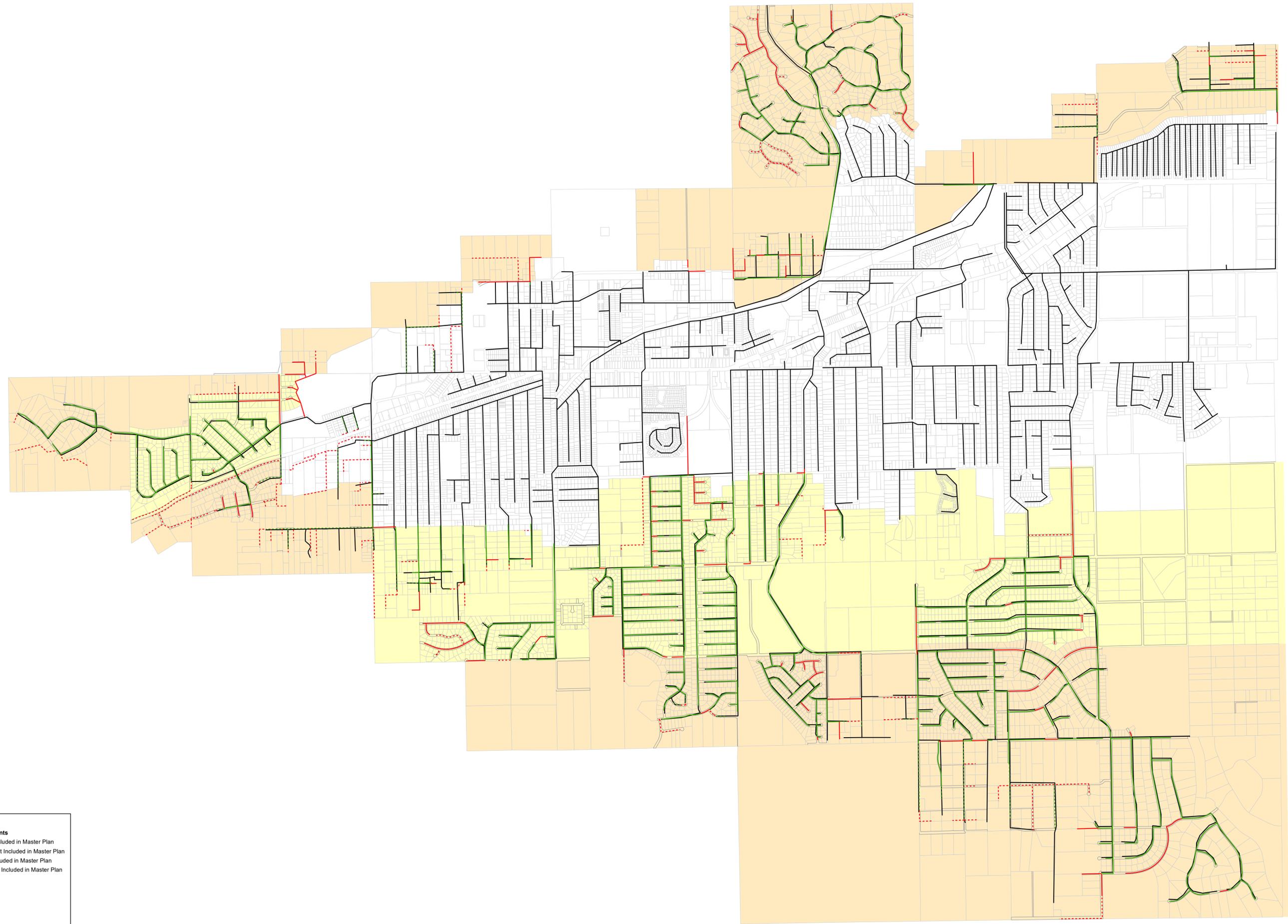
Appendix B. Phase II and III System Layout



■ Wastewater Treatment Plant
Pump Station
● Barron
● Kickapoo
● Paxton
Sewer Alignments
— Proposed Gravity Main
— Proposed Force Main
- - - Deferred Gravity Main
- - - Regions
 Phases
 ROW
 Atkins Non-Assessed Parcels
 Atkins Deferred Parcels
 Non-Assessed Parcels
 Deferred Parcels
 Developed Parcels
 Undeveloped Parcels



Appendix C. Alignments Not a Part of Environmental Study



— Master Plan Alignments
Current Phase II & III Alignments
 — Proposed Alignments Included in Master Plan
 — Proposed Alignments Not Included in Master Plan
 - - - Deferred Alignments Included in Master Plan
 - - - Deferred Alignments Not Included in Master Plan
 — ROW
 □ Parcels
Phase
 II
 III



Appendix D. Alignments Requiring Easements

Appendix E. Estimate of Probable Construction Costs Using as Bid Prices

HDWD Sewer Conversion Project - Phase 2/3 - Engineers Opinion of Probable Construction Costs

<i>Item No.</i>	<i>Item Description</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Item Total</i>
1	MOBILIZATION & DEMOBILIZATION	1	LS	\$ 4,500,000.00	\$ 4,500,000
2	VIDEO RECORDING OF PRE-EXISTING SURFACE CONDITIONS	1	LS	\$ 15,000.00	\$ 15,000
3	TRAFFIC CONTROL	1	LS	\$ 1,500,000.00	\$ 1,500,000
4	SHEETING/SHORING AND BRACING	1	LS	\$ 2,400,000.00	\$ 2,400,000
5	MILLING OF EXISTING ROADWAY	11,827,200	SF	\$ 0.20	\$ 2,365,440
6	8-INCH SEWER MAIN	319,600	LF	\$ 55.00	\$ 17,578,000
7	10-INCH PVC SEWER MAIN	15,300	LF	\$ 65.00	\$ 994,500
8	6-INCH PVC FORCE MAIN	3,585	LF	\$ 65.00	\$ 233,025
9	4' DIAMETER POLYMER MANHOLES	1,169	EA	\$ 10,500.00	\$ 12,274,500
10	5' DIAMETER POLYMER MANHOLES	110	EA	\$ 18,500.00	\$ 2,035,000
11	SEWER LATERAL PIPING AND CLEANOUT - 4-INCH	3,754	EA	\$ 215.00	\$ 807,110
12	SEWER LATERAL PIPING AND CLEANOUT - 6-INCH	26	EA	\$ 260.00	\$ 6,760
13	VIDEO INSPECTION OF PIPELINES FOR ACCEPTANCE	338,485	LF	\$ 1.00	\$ 338,485
14	REPAVE EXISTING PAVED ROADWAY SURFACE 4" over native	1,314,133	SY	\$ 1.50	\$ 1,971,200
15	REPLACE BERMS	475,200	LF	\$ 5.00	\$ 2,376,000
16	WATER POLLUTION CONTROL PROGRAM DEVELOPMENT	1	LS	\$ 10,000.00	\$ 10,000
17	WATER POLLUTION CONTROL PROGRAM IMPLEMENTATION	1	LS	\$ 200,000.00	\$ 200,000
18	PERMITTING Caltrans Encroachment Inspections	1	LS	\$ 2,500.00	\$ 2,500
19	JACK AND BORE 8-INCH PVC IN 20-INCH CASING	1	EA	\$ 450,000.00	\$ 450,000
20	MITIGATION AND MONITORING	1	LS	\$ 600,000.00	\$ 600,000
21	NATIVE PLANT RELOCATION	1	LS	\$ 33,000.00	\$ 33,000
22	ASPHALT MATERIAL	258,720	TON	\$ 72.50	\$ 18,757,200
SUB-TOTAL					\$ 69,447,720
Contingency 20.0%					\$ 13,889,544
TOTAL =					\$ 83,337,264

TOTAL ENGINEER'S ESTIMATED PROBABLE CONSTRUCTION COST	\$ 83,337,270
--	----------------------

Appendix F. Estimate of Probable Construction Costs Using Average Cost Per Mile

Appendix F

Hi-Desert Water District Collection System Phase II/III Design
Hi-Desert Water District

Phase I Data (For Reference)	A	C	D	
Length of Phase I (miles)	24.74	24.1	28.9	77.74
Design cost				\$ 4,736,730
Construction cost (at bid)	\$ 30,285,998	\$ 28,739,867	\$ 32,159,039	\$ 91,184,904
Design as percent of construction				5.19%
Construction cost per mile				\$ 1,172,947.06
Construction cost per foot				\$ 222
Cost per mile for design				\$ 60,930.41
Cost per foot for design				\$ 11.54
<hr/>				
Phase II/III Data				
Length of Phase II/III (miles)				64
Anticipated construction value				\$75,068,612
General design fee (5.19%)				\$3,896,061
Cost per mile for design				\$ 60,875.95
Cost per foot for design				\$ 11.53

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Hi-Desert Water District

Wastewater Collection System Program

Preliminary Design Report

April 30, 2013

Prepared for:



Hi-Desert Water District
55439 29 Palms Highway
Yucca Valley, California 92284

Prepared by:



3570 Carmel Mountain Road, Suite 300
San Diego, California 92130
Atkins Project No.: 100030882

Carmen C. Kasner, P.E.
Project Manager

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Acronyms

ADF	Average Day Sewage Flow
ALT	Alternate
d/D	Depth-to-Diameter Ratio
DTM	Digital Terrain Module
EPCC	Estimate of Probable Construction Costs
fps	Feet Per Second
ft msl	Feet Mean Sea Level
GIS	Geographical Information System
gpcd	Gallons per Capita per Day
gpd	Gallons per Day
GPR	Ground Penetrating Radar
HDWD	Hi-Desert Water District
I&I	Inflow and Infiltration
LS	Lift Station
MDAQMD	Mohave Desert Air Quality Management District
PDR	Preliminary Design Report
PDWF	Peak Dry Weather Flow
PLC	Programmable Logic Controller
PWWF	Peak Wet Weather Flow
RBF	RBF Consulting Engineers
RSM	RS Means Online 1 st Quarter 2013 data
SAS	Sewer Alignment Study
SBCFCD	San Bernardino County Flood Control District
SCE	Southern California Edison
SMP	Sewer Master Plan
SWPPP	Storm Water Pollution Prevention Plan
Town	Town of Yucca Valley
WQMP	Water Quality Management Plan
WWRF	Wastewater Reclamation Facility

Section 1

Introduction

This Preliminary Design Report (PDR) for Phase 1 of the Hi-Desert Water District (HDWD) wastewater collection system documents the basis of design for the project and presents preliminary drawings and specifications developed to at least the 30 percent completion level. Additional studies conducted in support of the design are also documented through this PDR. These studies include a scour analysis for wash and drainage crossings, a pavement depth analysis, and a hydraulic modeling analysis of the proposed Phase 1 sewer system.

1.1 Background

The HDWD provides water service to approximately 25,000 residents and businesses in the Town of Yucca Valley (Town) via groundwater wells that draw from the Warren Valley Groundwater Basin. At ultimate development, the HDWD service area is estimated to have a population of 80,000. Years of discharges from septic systems has had a negative impact on the water quality of the basin. In response to rising concerns over the quality of the groundwater in and around the Town of Yucca Valley, a comprehensive Sewer Master Plan (SMP) was prepared for HDWD in January 2009. On May 19, 2011, the California Regional Water Quality Control Board, Colorado River Basin Region, adopted Resolution R7-2011-0004 amending the Water Quality Control Plan for the Colorado River Basin Region to prohibit septic tank discharges in the Town of Yucca Valley. The Resolution enacted a prohibition on future discharges of wastewater from septic systems in three phases as defined in the HDWD Sewer Master Plan according to the following schedule:

- Phase 1 by May 19, 2016
- Phase 2 by May 19, 2019
- Phase 3 by May 19, 2022

On September 24, 2012, the HDWD contracted with Atkins to provide the design for the Phase 1 wastewater collection system.

1.2 Project Description

Atkins is currently under contract with HDWD to provide design for 77 miles of pipelines (sewer mains, trunk sewers, and force mains) and three lift stations. Design of the Phase 1 sewer system builds upon the previous engineering work provided by MWH in the SMP.

Section 2

Base Mapping Development

This section provides a summary of the Phase 1 area, base map development and existing utilities.

2.1 Project Boundaries

During the preparation of the SMP for the HDWD, MWH evaluated several phasing alternatives. HDWD adopted a three-phase boundary, which is identified in the final report dated January 2009. As presented in the SMP, the Phase 1 area is bounded by Nelson Avenue to the north, Onaga Trail to the south, La Contenta Road to the east, and Rockaway Avenue to the west. HDWD has since identified two additional areas to be included in the Phase 1 sewer collection system. The first additional area is bounded by SR 62 to the north, Mountain View Trail to the south, Camino Del Cielo to the east, and Rockaway Avenue to the west. The second additional area is bounded by Sunnyslope Drive and Warren Vista Avenue to the north, Little League Drive to the south, SR 247 to the east, and Scarvan Road to the west.

The Phase 1 boundary was generally established to remove septic tanks that are closest to HDWD wells and thus the Phase 1 shape is generally linear along the valley bottom. The intention is to focus on areas that will reduce the influence of nitrates from septic tanks that are impairing the water quality of HDWD wells. Additional refinements and optimization of the Phase 1 boundary are discussed in Section 6.2, Preliminary Horizontal Alignment and Section 7, Cost Estimate.

2.2 Survey Data

The base design file for this project is a compilation of several individual files layered together to create the underlying base map which was then utilized to develop the horizontal alignments for the proposed collection system. Individual file layers consist of the following:

- Aerial photography
- Topography at 1-foot contour intervals
- Planimetrics
- Digital Terrain Module (DTM)
- Right of way, property boundaries and parcel information
- Existing utilities including water, gas, electrical, telephone, and cable television
- Septic tanks locations

The files listed above were developed by RBF Consulting Engineers (RBF) who was under contract with HDWD to provide aerial survey in preparation for the Hi-Desert Wastewater Collection system program. RBF began the aerial mapping for the Yucca Valley area in 2011. Horizontal control was set relative to the North American Datum of 1983. Vertical control utilizes the North American Vertical Datum established in 1988. Coordinates utilized throughout the project conform to the California Coordinate System of 1983, Epoch 2009.00, Zone 5.

The DTM files provided by RBF were used to create the existing ground surface for design profiles. Whenever possible, Atkins designed the proposed collection system within existing public right of ways. Where a right of way does not exist or the alignment deviates from a dedicated right of way, Atkins reviewed record of survey maps to locate the existing easements that could possibly be used for the proposed sewer alignments. Any existing easements identified were manually added to the existing right-of-way file provided by RBF. Street names were taken from the HDWD geographical information system (GIS) map, verified with Google Maps, and manually added to the sheets.

A minor contour issue with the DTM was noted in November, 2012 resolution was not received in time to be incorporated into the plan submittal. Replicating the contour data produced from the DTM has been inconsistent. This inconsistency was only noted along the channel and some boundaries between map edges and does not result in major elevation differences. Atkins received revised mapping that corrected the inconsistency on February 28, 2013. Future submittals will reflect this correction, which should have no significant impact on the alignment or cost estimate.

Right-of-way information provided by RBF is based on Tract Maps, Parcel Maps, County Surveyors Maps and Records of Survey that were obtained from the San Bernardino County Surveyor's Office. Field survey crews were mobilized to locate and measure controlling monuments throughout the project limits and upon completion and analysis of substantiating records and field data, the base map was compiled and verified with the County's GIS parcel data acquired on October 24, 2011. Alignments were evaluated for existing right-of-way easements provided in the RBF data. Atkins identified some additional easements that were noted on individual plan sheets. Other easements may exist that are for utilities, such as water lines. Those easements will be reviewed and noted through the next phase of the project and through obtaining title reports for individual properties. The easement acquisition cost estimate is based on a conservative quantity of easements necessary, as there may be existing easements for some alignments that were not provided by RBF, but will be identified prior to any new easement acquisition.

2.3 Existing Utilities

RBF prepared a utility information request letter and project limits exhibit for initial contact with the utility purveyors to request record drawings on August 17, 2011. The following lists the contact information for each of the utilities:

- Southern California Gas Transmission: Kevin Kuennen (951) 845-0709
- Time Warner Cable: Randy Burkholder (760) 674-5472
- Southern California Gas Company: Carlos Flores (909) 335-7851
- Verizon: Larry Moore (760) 788-3603
- Southern California Edison: Kim Gurule (714) 796-9932

Record drawings were received and catalogued for use in preparation of the base map. The locations of more than fourteen thousand (14,000) above ground utility features were obtained by field survey and the record drawings obtained from the utility companies were compiled together for the base map in accordance with ASCE Standard 38-02 Quality Level C.

Atkins reviewed the existing utility files provided by RBF against available utility maps and as-built drawings provided by HDWD and the utility companies. Discrepancies were revised to

reflect as-built information. Overhead electrical lines were added along the proposed sewer alignments.

During a field reconnaissance for the trunk sewer alignment, Atkins identified a 16-inch high-pressure gas main that is owned and operated by Southern California Gas Company, a Sempra Utility. Atkins obtained schematic drawings for the 16-inch high-pressure gas main and then field verified the alignment. The location of the main is identified in the field with paddle markers and mounted signs set at various intervals. The proposed trunk sewer alignment was adjusted to minimize any potential conflicts with the existing 16-inch gas main. All proposed crossings of the trunk sewer and the 16-inch gas main will be potholed to identify potential conflicts.

Further review of the existing utilities revealed that there might be recent water line replacements that were not contained within the RBF files. Additional as-built research and field review will be conducted after the PDR. Any recent water line replacement projects should not result in additional costs to the project. It may result in realigning a proposed sewer main from one side of the street to the opposite side of the street where a water line was originally. If a water main was in a prior location, there would have been an easement and so the only potential cost difference would be for removal of the water line if the new sewer is in the exact same alignment.

2.4 Septic Tank Locations

The majority of existing septic tanks were field located by District Staff. Atkins supplemented District provided information with as-built records made available from Morongo Unified School District, San Bernardino County, and the Town of Yucca Valley. Remaining unknown septic tank locations will be identified in the design phase associated with on-site lateral design. At this time, it was assumed that these septic tanks are located at the farthest point on the lot from the proposed sewer main. All sewer mains were designed to accommodate proposed laterals at a two percent (2%) slope from the septic tank to the sewer main. Lateral invert elevation at the septic tank was assumed to be 1.5 feet below the existing grade.

2.5 Field Reconnaissance

Following HDWD approval of the preliminary sewer collection system alignments, Atkins will conduct field reconnaissance to verify utility locations where possible, other field constraints and adjust the project drawings accordingly. New development that has occurred subsequent to the aerial mapping will be noted on the project drawings and a service lateral will be provided. Atkins will investigate the properties where no data exists for the location of the septic tanks and will add the locations to the project drawings. Potholing will be conducted during the 60 percent design phase.

Section 3

Geotechnical Investigation

A geotechnical study will be conducted by Converse Consultants to provide information on subsurface conditions in the Phase 1 project area and to develop geotechnical recommendations for design and construction of the proposed collection system and its appurtenances. Due to the uncertainty of the alignments and lift station locations prior to the PDR submittal, the geotechnical study was scheduled to commence after the review of the PDR in late May 2013 and be completed by early August 2013. The study will include site reconnaissance, subsurface exploration and soil sampling, and field and laboratory testing.

3.1 Scope of Study

The subsurface exploration will consist of approximately 86 borings to depths ranging from 15 to 50 feet. Two borings will be taken from each of the three lift station sites with the remainder taken along the collection system alignment at approximately 2,000-foot intervals. This new geotechnical information will be combined with geotechnical investigations performed for other projects in the Town. Soils from each boring will be classified, boring logs prepared, and soil samples collected for laboratory analysis. The following laboratory tests will be conducted to determine physical and engineering properties: 1) sieve analyses, 2) in-situ moisture and density, 3) dry density and optimum moisture content, 4) expansion index, 5) consolidation/collapse potentials, 6) sand equivalent, 7) R-value, 8) direct shear and 9) corrosivity.

The mitigated negative declaration for the project had the following information to note for the geological conditions that would be encountered. This information is from *“Initial Study / Environmental Assessment: Hi-Desert Water District Water Reclamation Facility, Wastewater Reclamation Facility and Sewer Collection System Project.”*

Geologically, the project area and surrounding vicinity are at the boundary of the Transverse Ranges and the Mojave Desert Geomorphic Provinces. The hills and mountains trend in an east/west direction, with the Pinto and Eagle Mountains to the east and the Santa Monica and Santa Ynez Mountains to the west. The immediate valley in the Town of Yucca Valley is bounded by the Little San Bernardino Mountains on the south and the Sawtooth Mountains to the north. The valley floor contains Quaternary alluvial deposits and older superficial sediments, including sand and gravel eroded from the adjacent highlands. Alluvial soils consist of unconsolidated sand and gravel with minor amounts of clay and silt, estimated to be 100 feet or less in thickness. Older alluvium consists of coarse-grained sediments, including cobbles, pebbles and coarse sand. This alluvium extended to greater than 500-foot depth, particularly in the north and east (General Plan EIR 1995).

The existing fault that represents the greatest local threat in the project area is the Pinto Mountain Fault, with an estimated maximum Richter magnitude earthquake event of 7.4 and peak ground acceleration of 0.60 (g), with an estimated duration of strong ground shaking of 31 seconds. The proposed WRF project is not located within a mapped fault rupture zone or Alquist-Priolo Special Studies Zone (Seismic Safety Element of the General Plan, Exhibit V-1, 1995). The sewer pipeline alignments will cross the Pinto Mountain Fault, which is located north of SR 62 and other inferred faults.

Regional seismicity appears to be dominated by the San Andreas Fault (west of the Morongo Basin) and the Johnson Valley Fault (the Landers Fault System approximately 3 miles north of Yucca Valley). Both of these faults run north/south, or northwest/southeast, and pose no direct ground rupture hazards within the project area. However, the 1992 Landers earthquake on the Johnson Valley Fault caused “sympathetic ground ruptures” along the Pinto Mountain Fault (Leighton and Associates, Inc. 1993). This earthquake damaged 40 percent of the District’s subsurface water distribution lines and over \$100 million of other property damage, according to the Seismic Safety Element of the General Plan (1995).

Liquefaction can occur when loose, unconsolidated and saturated sandy soils are subjected to ground shaking during a seismic event. This causes the soils to “liquefy.” This is not seen as a general hazard in the in the Yucca Valley area, due to the depth of 200 feet or more to the groundwater table. In addition, soils within the project area are coarse alluvial soils, i.e., sandy. Expansive soils are not considered a concern in the Yucca Valley, as these would contain significant amounts of clay. The project area is also located in a “low” susceptibility zone for rockfalls and landslides (General Plan 1995).

3.2 Study Findings, Conclusions and Recommendations

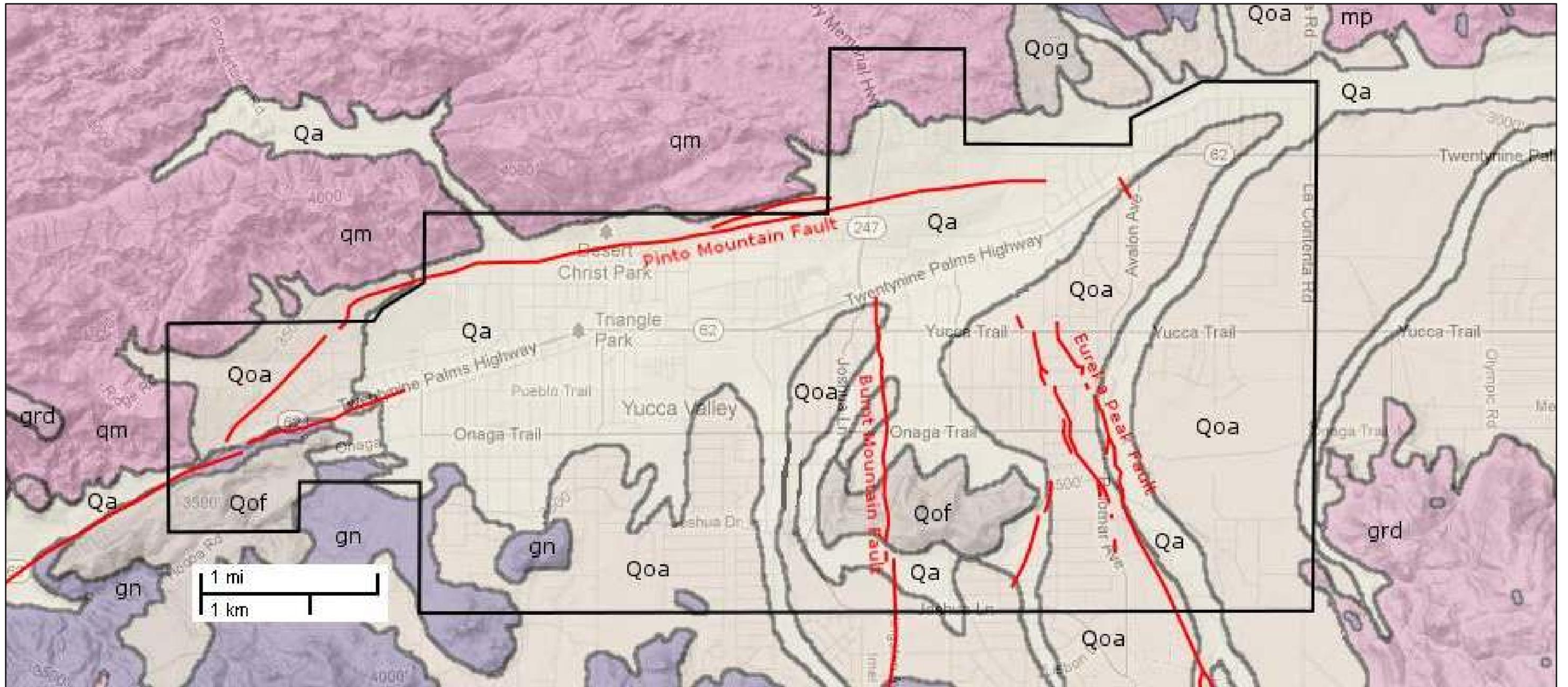
Converse Consultants has completed an initial review of available documents and noted that the majority of the Phase 1 area would generally be easy to excavate due to the Quaternary alluvial deposits. For our cost estimate, we have assumed standard excavation procedures with required shoring for alluvial materials through the majority of the project area.

Converse noted that there is granitic rock underlying the alluvium in the area north and south of SR 62 at the west end of the proposed system. The rock may be shallow enough to be encountered in the trenches in some of the pipe trenching locations. Based on field visits, it was noted that the sewer drainage basin that feeds into the Kickapoo pump station could possibly contain rock. In particular, granite rock should be anticipated along Rockaway Avenue, possibly at Shafter, the west end of Pinion Drive, and the west end of Benecia Trail.

There is granitic rock mapped at the surface level south of SR 62. Granitic rock should be anticipated in 29 Palms OH South, Onaga Trail, Chaparral Drive, Arrowhead Drive north of Navajo Trail, and Pinion Drive north of Navajo Trail. Rock may also be encountered south of Navajo Trail, but is expected to be at a deeper location than the rock to the north of Navajo Trail.

The presence of rock material in these areas will require more costly construction methods than the majority of the project and thus, these areas are included in alternate construction area 1 (ALT 1) as further discussed in Section 7, Cost Estimate.

As seen in Figure 3-1, there are several faults crossing the valley that will warrant additional protective measures which may include the use of fusible (no joints) pipe, additional restraints or flexible couplings, depending on the proposed orientation of the proposed pipelines with respect to the faults. These additional precautions should not significantly affect the pipeline cost and will be detailed in our 60 percent and 90 percent submittal after the project specific geotechnical study is complete.



Alluvial Units

- Qa Unconsolidated sand and gravel alluvium
- Qoa Unconsolidated sand, gravel, and cobble alluvial deposits
- Qog Unconsolidated sand, gravel, and cobble deposits
- Qof Weakly consolidated sand, cobble, and boulder fanglomerate

Bedrock Units

- Qm Quartz monzonite
- Grd Granodiorite to quartz monzonite
- Mp Monzonite porphyry
- Gn Gneissic quartz monzonite to quartzdiorite

Sources

California Geological Survey, State of California Special Studies Zones, Yucca Valley North and South Quadrangles, scale 1:24,000, dated July 1, 1993.
 Dibblee, Thomas W., Geologic Map of the Joshua Tree and Twentynine Palms 15 Minute Quadrangles, Riverside and San Bernardino Counties, California, Dibblee Geology Center Map #DF-390, scale 1:62,500, dated June, 2008.

Map data ©2013 Google

Note:Geologic contacts and fault locations depicted should be considered approximate until field verified.



PRELIMINARY GEOLOGICAL MAP
Figure 3-1

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Section 4

Scour Analysis

4.1 Scope of Study

Storm water runoff in the Town of Yucca Valley is conveyed via washes and channels to the ephemeral Yucca Creek which generally flows in an easterly direction. Yucca Creek and many of its tributary water courses are under the jurisdiction of the San Bernardino County Flood Control District (SBCFCD). During the monsoonal season, flows in the Yucca Creek can be considerable. The proposed gravity sewer system essentially mimics storm water flow paths and all distribution mains will eventually discharge into the proposed trunk sewer which generally follows Yucca Creek to the proposed Wastewater Reclamation Facility location. For the most part, the proposed trunk sewer is located on the north side of the creek however; due to area constraints there are instances where the trunk sewer must cross the creek. Additionally, distribution sewer mains that connect to the trunk sewer may also need to cross the creek. The majority of Yucca Creek is unlined and thus susceptible to scour from large storm water flows. To protect the proposed sewer system from damage, all sewer pipes should be constructed outside of the potential scour zone. To identify the scour zone, Atkins conducted an analysis for the portion of Yucca Creek where the proposed sewer system will be located.

4.2 Preliminary Analysis

Appendix A includes the full preliminary scour analysis completed for Yucca Creek, which includes both hydrology and hydraulic calculations. As the project proceeds through final design and permitting with SBCFCD, further refinement will be completed. The preliminary analysis was only for Yucca Creek as it was identified to be the largest flooding source along the alignment. Other minor wash crossings will be analyzed during subsequent design phases.

During the preliminary horizontal alignment for the trunk sewer, efforts were made to choose an alignment that was constructible, maintainable, and minimized disturbance to existing infrastructure. Once the horizontal alignment was determined, work on the vertical alignment commenced. Factors affecting the vertical alignment include the topography along the alignment, existing utility crossing, connecting sewer main elevations, and channel scour depths at all of the 11 proposed crossings. Once the existing utilities were determined, the vertical alignment of the trunk sewer was initially designed to satisfy the minimum depth requirements. Refinements were made for utility conflicts. The proposed alignment was then checked against the scour depths provided in the scour analysis and adjustments were made as necessary. As design of the collection system progressed, further refinements of the trunk sewer were necessary to accommodate proposed connection points. The calculated scour depths were just one of the many factors to consider in the vertical alignment of the trunk sewer. As these depths were accounted for in the design process, the effect on the overall alignment was minimal and did not require modifications to the horizontal alignment. As the system design progresses, each channel crossing location will be further analyzed to determine the appropriate measures to incorporate to protect the system against potential scour.

The preliminary analysis did not include lateral scour analysis. A visual inspection of the channel via aerial photographs did not show any recent areas of lateral erosion within the

collection systems alignments. The channel appears to be graded and in good condition throughout the various alignments, and is occasionally stabilized with riprap, concrete, and/or earthen berms. Additionally, development in and adjacent to the wash will serve to laterally stabilize some portions of the wash.

Unless lateral scour is shown to be significant and large quantities of bank stabilization are required, these further refinements and analysis should not significantly affect the project estimate. A length of approximately 2,000 feet of bank protection is included in the budget at this design stage to account for areas where stabilization might be needed. Since the alignment is being proposed below the elevation of the bottom of the channel, the risk for lateral scour to affect the pipeline is minimized. A field meeting with SBCFCD in the 60 percent design phase will discuss areas where significant lateral channel movement has been noted by SBCFCD staff. Calculations will be refined in subsequent design phases.

Section 5

Hydraulic Analysis

5.1 Objective

The objective of the hydraulic analysis is to determine sewer pipeline sizing within the proposed service area under current and future conditions and to size the proposed lift stations and Wastewater Reclamation Facility (WWRF) to meet the phased implementation plan. Three phases of development at build-out conditions were evaluated to assist HDWD in reasonably sizing the new infrastructure.

Figure 5-1 shows the three (3) phase boundaries identified in the 2009 HDWD SMP prepared by MWH. Each phase is described as follows:

- **Phase 1** – Phase 1 targets the commercial corridor along SR 62 and high-density residential customers. The area is bounded by Nelson Avenue to the north, Onaga Trail to the south, La Contenta Road to the east, and Rockaway Avenue to the west. The State will prohibit septic discharge in this area after 2016.
- **Phase 2** – Phase 2 targets high-density residential customers located south of Yucca Wash and are bounded by Onaga Trail to the north, Golden Bee Drive to the south, La Contenta Road to the east, and Kickapoo Trail to the west. The State will prohibit septic discharge in this area after 2019.
- **Phase 3** – Phase 3 captures flows north of Yucca Wash up to Cobalt Road and is scheduled to connect the remaining residential customers at the west end of HDWD's service area by 2022.
- Alternative areas identified as ALT on Figure 5-1 are discussed in Section 6.2.2.

5.2 Design Criteria

The design criteria utilized to size the proposed sewer mains are discussed in Section 6.1, Design Criteria, and defined in the "Wastewater Collection System Design Criteria and Consideration" memo presented to the HDWD Board of Directors on December 10, 2012 (meeting minutes are included in Appendix B, and Section 1 of the design criteria is included in Appendix C). The key refinements to the design criteria from the SMP are summarized in Table 5-1.

The criteria comparison analysis was completed using the base sewer model developed by MWH with the pipe layout and slopes identified in the SMP. Sizing criteria for new pipelines was determined based on a depth-to-diameter (d/D) ratio of 0.80 for all flow conditions. As the design progresses, all pipe layouts and slopes will be adjusted and the recommended criteria applied to the final pipe layout and slopes to determine the final pipe sizing.

Table 5-1 Summary of Design Criteria Refinements

Design Criteria	Sewer Master Plan	Atkins	Staff Recommendation
Wastewater Generation	80 gpcd	80 gpcd	80 gpcd
Depth to Diameter (d/D)	<18" = 50% full >18" = 66% full	All pipe diameters = 80% full	All pipe diameters = 80% full
Planning Horizon	General Plan complete build-out scenario	50 year build-out or 60% of master plan build-out	50 year build-out or 60% of master plan build-out
Peaking Factor for collection system sizing	2.5, complete build-out	1.8, 60% build-out flows	1.8, 60% build-out flows

gpcd = gallons per capita per day

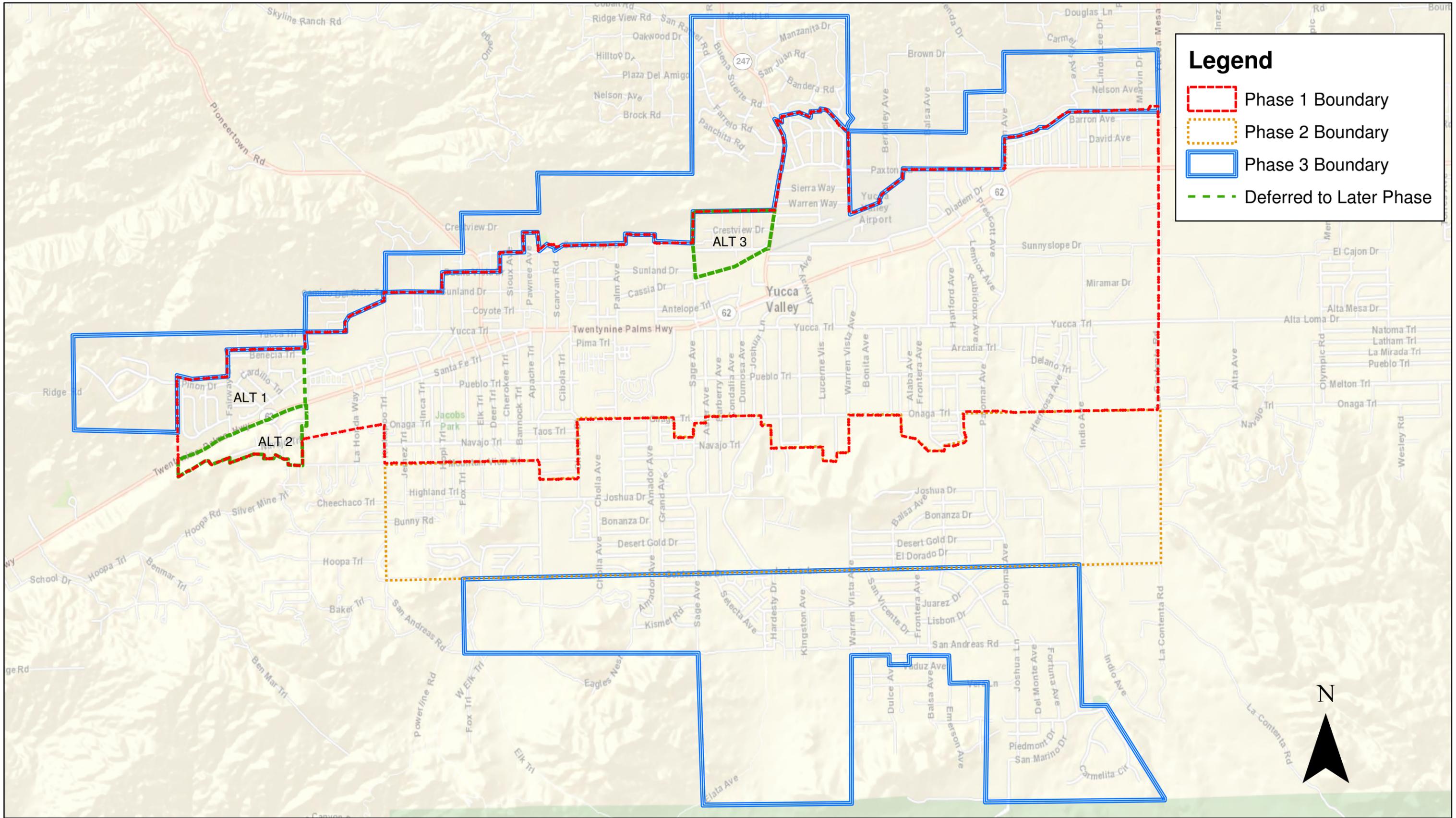
5.3 Review of Sewer Master Plan Model

Atkins reviewed and analyzed the hydraulic model prepared by MWH as part of the January 2009 SMP to verify independently the conclusions presented relative to capacity and facility sizing. The analysis included a review of flow projections and diurnal patterns and peaking factors.

5.3.1 Flow Projections

For new sewer collection systems, where water service is currently provided, flow projections are typically estimated based on average water use and an estimated return-to-sewer rate. The HDWD SMP used 80 gallons per capita per day (gpcd) for single-family residential flow projections. Atkins obtained 2011 water use data from HDWD which revealed that average Phase 1 and 2 single family residential water use was 78 gpcd based on an average household size of 2.55 people. The average Phase 3 area single-family residential water use was 88 gpcd. Some water usage is not returned as wastewater, which for a desert community is commonly 10 to 20 percent of the total water usage, meaning that wastewater generation rates could be as low as 62.4 to 70.4 gpcd and as high as 70.2 and 79.2 gpcd for different areas of the system. However, as the system ages, there is a potential for inflow and infiltration (I&I) from storm events.

Based on data compiled by the American Society of Civil Engineers (Manual No. 37, 1979) the average inflow and infiltration rate for municipal sanitary sewer systems is approximately 500 gpd per inch diameter per mile. Based on this rate the expected I&I into the District's collection system would range from 10 to 15 percent of the average dry weather flow rate. As such, the conservative number of 80 gpcd is recommended to provide a contingency for potential future I&I that may increase projected flows from initial flows. Overestimating wastewater generation factors can result in pipelines that are too large for actual system flows possibly resulting in lower velocities, more solids deposition, and ultimately odor problems and more required maintenance.



PHASED DEVELOPMENT BOUNDARIES

Figure 5-1

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The SMP sized the collection system based on population projections for complete build out of the Town of Yucca Valley. In order to size the collection system to accommodate future growth in the area while still presenting an efficient system to operate and maintain during the initial phases of service, Atkins reviewed the build-out projections and recommends a 50-year horizon as a reasonable target – this growth represents approximately 60 percent of flows from the SMP build-out model.

- **Phase 1** – Phase 1 populations and flows were not adjusted from the SMP analysis.
- **Build-out** – The SMP build-out model was revised to reflect a reasonable build-out projection, which equates to approximately 60 percent of the SMP flows.

As the design progresses, the hydraulic model will be revised to reflect existing populations and growth through the 50-year planning horizon. Flow projections will be revised based on populations, land use, and the revised unit generation rates.

5.3.2 Diurnal Patterns and Peaking Factors

Wastewater system capacity analyses typically utilize peaking factors and diurnal curves to route flows through the model and assist with facility sizing. Peaking factors are used to represent peak flow periods during a typical day and to represent wet weather flow increases during storm events. The SMP reviewed peaking factors from similar southern California agencies, which showed flows typically peaked at 1.6 times the average daily flow. The SMP build-out model used a peaking factor of 2.5 to account for wet weather flows, which is conservative for a sewer system of this size and the infrequent rain events in the high desert. The collection system will be designed to incorporate watertight manhole lids in areas subject to storm water inflow to minimize the potential for inflow, and with a completely new collection system, the potential for ground water infiltration is low.

Diurnal curves model flow variations occurring during the average daily flow – most residential flows experience lower than average flows at night and higher than average flows in the morning and early evening. The SMP build-out model used a diurnal flow pattern to represent routing flows double the average flow through the system as a conservative method for facility sizing during peak flows, although typical volume-based diurnal curves average a factor of 1.0.

As part of the 30 percent design effort, Atkins normalized the diurnal pattern to average daily flows to a factor of 1.0. The modeled peaking factor of 2.5 was lowered to 1.8, which is similar to other southern California agencies while also allowing for I&I during a storm event.

The revised diurnal patterns route sewer flow through the system and allow the wet well storage and lift stations to be more appropriately sized for the volume of wastewater collected, stored, pumped and conveyed through the system.

5.4 Capacity Analysis

The hydraulic model, pipeline and manhole attributes, and estimated build-out population projections were updated as discussed above. As shown in Table 5-2, as a result of the refined criteria and modeling iterations, some of the pipe diameters, especially for the trunk sewers, were reduced in size from those listed in the SMP. The model was run under build-out and Phase 1 flow conditions to evaluate pipe conveyance capacity and lift station pump capacities. Pipeline alignments and slopes were unchanged from the SMP model.

Table 5-2 Pipe Summary Comparison (All Phases)*

Diameter (in)	Length (ft)	
	Master Plan	Recommended
8	389,120	389,090
10	35,530	38,690
12	27,130	45,830
15	17,770	9,820
18	6,690	4,970
21	0	0
24	7,200	7,200
27	0	0
30	7,330	0
36	4,180	0
Total (ft)	494,950	494,950
Total (mi)	93.7	93.7

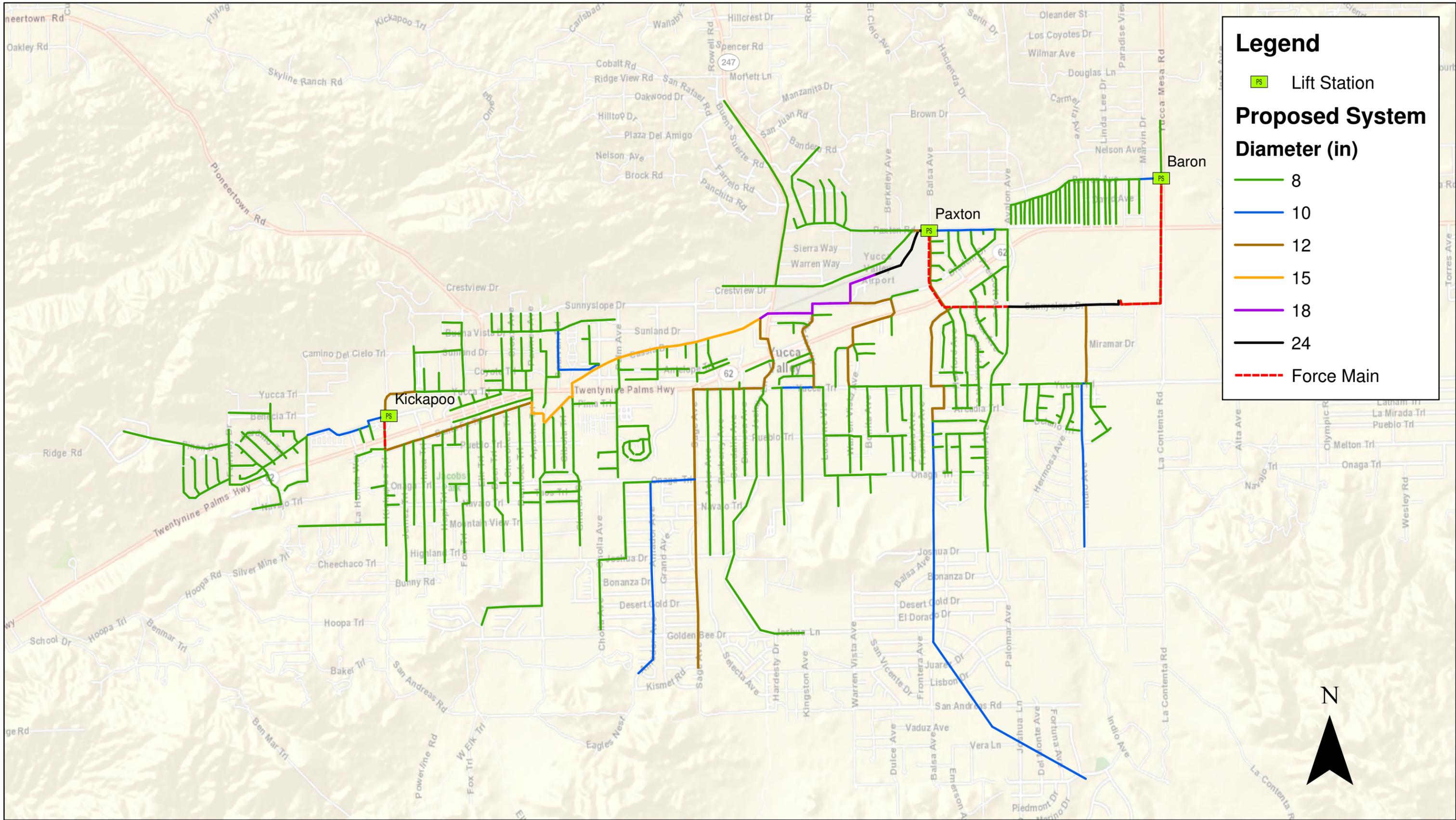
* Base on MWH's Master Plan Alignment

Proposed infrastructure was initially sized for build-out flow conditions utilizing revised peaking factors and population projections. The modeled diameters were adjusted based on the revised d/D criteria of 80 percent full and the system was analyzed to identify any additional capacity constraints.

The proposed build-out collection system diameters were also evaluated under Phase 1 flow conditions to evaluate appropriate cleansing velocities and d/D pipe capacities. Figure 5-2 displays the proposed sewer system diameters for the service area. Proposed sewer mains are symbolized by diameter.

5.4.1 Phase 1

Atkins reviewed the proposed collection system under Phase 1 flow conditions. Lift stations can be phased to accommodate Phase 1 flows, but the pipe diameters are sized for build-out flows. Under Phase 1 peak flow conditions, the modeled trunk sewers flow approximately half full, which will provide adequate cleansing velocities and minimize operational concerns.



Legend

- Lift Station

Proposed System Diameter (in)

- 8
- 10
- 12
- 15
- 18
- 24
- Force Main

Note: Analysis based on MWH Master Plan pipeline alignments and slopes. Hydraulic model to be updated and verified against Atkins proposed alignments to confirm pipe diameters.



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PROPOSED SEWER SYSTEM DIAMETERS

Figure 5-2

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5.4.2 Build-out

In order to size the collection system to accommodate future growth in the area while still presenting an efficient system during the initial phases of service, Atkins used the 50-year horizon population as a reasonable target – this growth represents approximately 60 percent of flows from the SMP’s build-out model. The proposed buildout population is based on 0.9 percent growth in Yucca Valley, which was presented as the average annual growth rate in the Mid-Town Master Land Use Vision and Mobility Plan Market Potential Analysis, prepared by Stanley R Hoffman August 20, 2012 and the 2010 Census population of 20,700 people. Designing the sewer system for a 50-year buildout period is an approach that allows the system to be designed for a conservative amount of growth while refraining from over-designing the facilities during their design lifetime.

As a result, pipes and lift stations are sized using a peaking factor of 1.8, with pipe capacity evaluated using a d/D factor of 80 percent. With this revision, flows in the system have been reduced such that the largest proposed pipe diameter is 24-inch, which is adequate to convey peak flows for 50 years into the future.

At the end of the 50-year planning horizon, it is likely significant modifications or replacement of the lift stations, pipe networks and the reclamation facility will be required due to age deterioration. Additional capacity needs can be reevaluated at that time. Additionally, developers impacting the system beyond the current design constraints should make financial contributions toward the future sewer infrastructure to meet the development needs.

Atkins also evaluated whether there would be a benefit to installing smaller dual parallel lines for some of the trunk sewers during the initial construction phase to account for ultimate build-out flows. While smaller dual lines can be sized to handle the capacity, having pipes sit empty in the ground ready for future potential flows does not guarantee longevity of the pipeline. Whether a pipe has flows in them or they are sitting empty, there is still a risk of pipeline failure over time. Since water conservation and associated technologies are constantly evolving and population growth patterns change over time, installing pipes that may not be used is not cost effective for this project. However, force mains from lift stations are a different situation. It may be cost effective to install dual force mains and utilize one pipe to accommodate near-term flows while the second pipe would serve as a backup in the near-term while providing the necessary capacity for the future flows. This subject is further discussed in Section 6.

5.5 Conclusion

In summary, the revised hydraulic analyses have resulted in significant reductions in pipe sizes, and were based on the MHW pipeline alignments and slopes. The hydraulic model will be updated and verified against Atkins proposed alignments for additional confirmation.

By not sizing the pipes with multiple factors of conservatism in flow projections, the pipelines appear optimally sized for a reasonable horizon and will be significantly easier to maintain with less risk of odor issues and solids settling that can result from oversized facilities.

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Section 6

Preliminary Design

6.1 Design Criteria

Draft design criteria and standard specifications were provided by HDWD, but these criteria were not reviewed by others, nor adopted by the HDWD Board. Working with Carollo Engineers, Inc., and consulting with other agencies in the region who recently completed similar septic conversion projects, Atkins has reviewed and modified the first two sections of the HDWD design criteria.

Appendix C includes the hydraulic design criteria as discussed in Section 5, Hydraulic Analysis, as well as alignment requirements. Appendix D is focused more on the materials to be used in the design. Other design criteria and standards specifications will be developed later in the design phase as geotechnical information is obtained and further details regarding the lift stations and force mains are developed. Table 6-1 summarizes key design criteria.

Table 6-1 Summary of Design Criteria for Gravity Flow Collection Systems

Criteria	Value
Flow Depth (d/D)	
Peak Flow	0.8
Minimum Velocity	2 fps (feet per second)
Maximum Velocity	10 fps
Minimum Slope	
4 inch (laterals only)	2%
6 inch (laterals & dead end mains)	1.11%
8 inch	0.4%
10 inch	0.32%
12 inch	0.24%
15 inch	0.15%
18 inch	0.12%
>18 inch	0.10%
Pipe Material	PVC-SDR 35
Pipe Size	
Minimum	6 inch
Pipe Curvature (minimum radius), feet	330 x Pipe OD, feet
Depth - Minimum Depth of Cover	6 feet
Manholes	
Size	48 inch for manholes <20 feet deep or pipes <18 inch 60 inch for manholes ≥20 feet deep or pipe ≥18 inch
Maximum Spacing	400 feet + / - (Based on alignment conditions)

6.2 Preliminary Horizontal Alignment

An initial horizontal alignment was developed in accordance with established project design criteria using AutoCAD Civil 3D software. A preliminary centerline profile was prepared for each pipe to evaluate problem areas and make necessary iterations to address adverse grades, reduce excessive manhole depths, minimize wash crossings, and reduce impact to existing infrastructure. A draft Sewer Alignment Study (SAS), dated November 16, 2012, established sub-basins and the horizontal connectivity for the project. The SAS included alignments that would provide service to every parcel whether developed or undeveloped, resulting in more than 94 miles of pipeline. After the SAS submittal, the team met with HDWD to discuss eliminating some alignments that did not serve developed lots or alignments that required extensive lengths of pipe serving one or two properties.

Draft vertical alignments were then developed for pipelines that resulted in adjusting the horizontal alignment to minimize pipe depths. Further analysis was completed to identify alignments that could be modified to serve larger developed lots more effectively. For example, the lots adjacent to Home Depot to the east are undeveloped. In the SAS, we assumed a long pipeline that paralleled SR 62. With the focus on serving developed lots as a priority, it was determined that Home Depot could be served more efficiently by adding an additional crossing of SR 62 and connecting that developed lot to the lines in the Barron Basin.

Drawings ID01 and ID02 included in the 30 percent drawing package, details the refined sub-basins. A wall map, included in Appendix F, shows all of the current alignments including many refinements made since the SAS. Some initial segments were eliminated from the proposed system after the SAS was submitted. Additional refinements have occurred to shorten segments that were initially extended to serve vacant lots. The alignments will be designed with a vertical profile such that future extension to serve those lots is easily accomplished, while providing a logical breaking point at manholes or cleanouts.

Plan and profile sheets included under separate cover present a preliminary horizontal and vertical alignment that improves the design technically and cost effectiveness from the SAS. Further verification of the endpoints and alignments will be completed as the cleanouts and proposed lateral alignments are reviewed.

6.2.1 Sub-basins

As illustrated in Drawing ID01, there are four major basins designated as “S” for Sunnyslope, “B” for Barron, “P” for Paxton, and “K” for Kickapoo. Each of these basins drains to a lift station with the exception of Sunnyslope, which drains directly to the reclamation facility. When selecting sub-basin boundaries, consideration was also given to minimizing wash and drainage crossings, minimizing sewer and manhole depths, and minimizing crossing of SR 62. Appendix F shows the overall Phase 1 system map with alignments, septic tanks, existing satellite treatment facilities, and alignments considered for deferment.

6.2.2 Alternate Sewer Service Areas

In an effort to provide the District with the most cost efficient project, three areas were identified as being candidates for deferment to future phases. Based on the information provided in this report, the District will evaluate whether or not to include these areas in the Phase 1 project.

As illustrated in Figure 5.1, the area identified as ALT 1 is located north of SR 62 at the westerly edge of the project. This area would drain to the Kickapoo lift station. Although the area has a high density of homes and would not require extensive piping to serve them, the area would require a significant number of privately owned and maintained grinder lift stations. These grinder lift stations are required for situations where the houses are located below the sewer main. The typical solution is to lower the sewer main however, the presence of underlying rock in this area makes this costly. Further analysis to determine the feasibility of servicing this area will be required but, based on the information available at this time, servicing this area will result in high capital costs with relatively low benefits to water quality and thus, it is recommended that this area to be deferred to a future phase of the project.

The second area, identified as ALT 2, is located south of SR 62 at the westerly boundary of the project. This area has a very low density of homes requiring a lengthy sewer system to service the few properties which are located relatively far away from any District water wells. Additionally, this area will likely require rock excavation for construction of the sewer system. These factors will result in high capital costs with relatively low benefits to water quality and thus, it is recommended that this area to be deferred to a future phase of the project.

The third area, identified as ALT 3, is located west of SR 247 and north of Yucca Creek and was recently added to Phase 1 by the District. However, this area has a medium density of homes and will require a large number of easements for construction of the sewer system which result in high capital costs and relatively low benefits to water quality due to the number of homes served and thus, it is recommended that this area to be deferred to a future phase of the project.

6.2.3 Easement Requirements

The design criteria established minimum easement widths of 20 feet for up to 12-inch sewer mains and 25 feet for 15 to 24-inch trunk sewers. As noted in Section 2.2, Survey Data, Atkins was provided right-of-way information from RBF. Additional research has found many other utility and potential rights-of-way easements that cover properties. Large sections of Yucca Valley have developed roadways with no apparent right-of-way dedication. Additionally, the alignments necessary to service many lots also require crossing individual residential and commercial properties, as is the case along SR 62 which is controlled by the California Department of Transportation (Caltrans). Caltrans does not generally allow utilities to parallel their facilities in their right of way. To date, no title reports have been obtained so other easements may cover some alignments. In addition, some easements identified may be limited to water, or other specific utilities, or may be too narrow thus requiring another easement.

Estimates for the cost to obtain easements were broken into different categories: easements across vacant properties, residential properties, commercial properties, industrial properties, Other Retail/Service properties, and schools. The total square footage of easements anticipated on the project for each category is as follows:

Land Use	Number of Lots	Total Area (SF)
Residential	128	320,595
Vacant	123	754,746
Comm / Ind / Ret / Serv*	55	274,186
School	1	237
Totals	307	1,349,764

* Commercial / Industrial / Other Retail / Service

This estimate is conservative because some of the identified parcels may already have utility easements that could be utilized for the proposed sewers if available and adequately sized.

A preliminary alignment assessment indicates that 12 easements will be required across SBCFCD properties. Appendix I Easements details specific assessor parcel numbers with draft easement needs.

6.2.4 Wash and Drainage Crossings

Yucca Creek is the major drainage channel for the Town of Yucca Valley and the obvious choice of alignment for the proposed gravity trunk sewer which parallels the channel from Apache Trail to Paxton Road. For the most part, the trunk sewer is located on the north side of the channel however, in an effort to reduce the number of channel crossings for the connecting sewer mains, avoid confluencing drainage channels and a 16-inch high pressure gas line, the trunk sewer crosses from the north side of the channel to the south side and back again a total of four times. Three of these crossings occur within the paved rights-of-way of existing streets as do most of the crossings for connecting sewer mains. However, there are four channel crossings, one for the trunk and three for the connecting mains that occur outside paved roads. These crossings are more prone to channel scour during a heavy storm event. On January 24, 2013, HDWD and Atkins met with SBCFCD to discuss the proposed alignments. On February 19, 2013, the draft scour report was submitted to SBCFCD for review and concurrence with the proposed methodology (see Section 4). At the time of this report, SBCFCD had not yet provided any feedback on the scour analysis. Although SBCFCD was receptive to the proposed alignments, further coordination with SBCFCD is anticipated through the final design phases. Additional SBCFCD permitting requirements are discussed in the next section.

6.2.5 Permits

Construction of the proposed sewer system within jurisdictional agency boundaries typically requires a permit from the agency. The following paragraphs provide information on the different agencies with jurisdictional boundaries within the proposed sewer system area and associated permit requirements and processes anticipated for each agency.

Regulatory Permits

As stated in the *“Initial Study / Environmental Assessment: Hi-Desert Water District Water Reclamation Facility, Wastewater Reclamation Facility and Sewer Collection System Project,”* the proposed sewer lines will occasionally cross an ephemeral stream channel along its alignment. In most cases these crossing will occur within existing paved and graded road rights-of-way. Based on the field survey of the sewer line alignment, no wetlands or riparian habitats are located within the proposed project area or along the pipeline alignments. Because these stream channels are isolated and ephemeral, the preliminary finding is that they are not subject to U.S.

Army Corps of Engineers Clean Water Act Section 404 jurisdiction, i.e., they are not waters of the U.S.

However, the channels appear to be waters of the state and are within the jurisdiction of the California Department of Fish and Wildlife (formerly Fish and Game) and a CDFW 1602 Streambed Alteration Agreement will need to be obtained for any disturbances of the ephemeral stream channels within the project area. This process is expected to take approximately nine months and should be started during the 60 percent design phase. Application and review fees will likely range from \$4,000 to \$8,000.

The California Regional Water Quality Control Board will require conformance with the statewide construction permit (Order No. 2009-000-DWQ) regulation for construction activities and post construction water quality. A Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) will be prepared to address these concerns. Preparation of these documents can commence in the 90 percent design phase. The construction contractor is responsible for complying with the requirements of the SWPPP during construction. The District must file a Notice of Intent and Notice of Termination with the Regional Board and pay the annual fee which is based on acreage.

Local Permits

San Bernardo County Flood Control District. The SBCFCD maintains the major flood control channels and washes in Yucca Valley. The major channel, Yucca Creek, and its tributaries are within land either owned by SBCFCD or easements granted to SBCFCD for flood control purposes. The proposed sewer system alignments parallel or cross many SBCFCD properties and easements. Encroachment permits and easements are required when the sewers are within SBCFCD properties. A joint use agreement with SBCFCD and permission from the property owners is required when the sewers are located within flood control easements. Negotiations with SBCFCD have already begun and are expected to continue throughout the project design phase. Costs at this time are unknown; however, easement acquisition costs have been included in the estimate.

Caltrans, District 8. Caltrans maintains State Highway 62, Twenty-nine Palms Highway, and State Highway 247, Old Woman Road. An encroachment permit is required for the 11 proposed sewer crossings of Highway 62 and the one crossing at Highway 247. All of the proposed crossings are transverse crossings and all crossings are anticipated to be included under one permit. Caltrans requires that traffic control drawings be prepared and submitted with the permit application so design will need to be substantially complete prior to applying for the permit. This entire process typically takes a few months to obtain the permit. Caltrans waives the permit fee for public agencies; however, the Contractor is required to pay the associated permit inspection fees.

Town of Yucca Valley. An encroachment permit will be required by the Town for all work within public rights-of-way. The Contractor typically obtains this permit prior to the start of construction. Discussions with the Town will commence after the 30 percent submittal to detail any specific requirements to assure the plans and specifications include anticipated requirements and that the contractor has a solid basis for costs. Additional permits from the Town may be required for the disturbance of Joshua Trees.

Mojave Desert Air Quality Management District. The purchase of generators for the pump stations require the acquisition of Mohave Desert Air Quality Management District (MDAQMD)

Permits. These permits are tied directly to the exact model installed and therefore cannot be finalized until into construction in coordination with the supplier of the generator. Atkins will work with the MDAQMD to confirm that the specified models are in conformance with the current standards and then once the specific model is determined the final permit application will be completed.

Yucca Valley Airport District. Approximately 3,500 feet of the proposed trunk sewer alignment parallels the airport runway within the runway safety area. Construction of the sewer within the runway safety area will require closure of the airport during construction. Coordination with the Yucca Valley Airport District and the airport operator will be necessary to determine any permitting requirements and ensure minimal disturbance to airport operations.

6.2.6 Pavement

Atkins subconsultant, LaBelle Marvin, prepared a preliminary pavement analysis for all of the paved streets in the Phase 1 collection system and is included in Appendix E. Ground penetrating radar (GPR) was used to take measurements of pavement depth every four inches in the roadway. The aerial photograph below is an example of the resulting data from the analysis as the information can be overlaid onto Google Earth. Every depth has a GPS coordinate associated with the data and thus the path of the testing vehicle can be reviewed.



HDWD has noted that in recent years all of the water pipeline replacement projects used 3-inch thick asphalt in the trench repairs. Locations where the testing vehicle obtained measurements of recently replaced trenches may skew the results. The actual path of the vehicles will be reviewed during final design. Additionally, this pavement depth analysis is not an evaluation of the quality of the existing pavement, but rather a determination of depth of material. If a roadway has had multiple layers of oil impregnated surfacing, the GPR will note that material as being

thick when it may not be quality material. The initial pavement evaluation will be verified when potholing and geotechnical borings are completed prior to the 60 percent submittal.

While many roadways have pavement depths less than two inches, there are a large number of roadways that have a thickness in the standard 3-foot to 4-foot range. However, the quality of the pavement may be such that when saw cutting the pavement for trenches significant edge failure may occur due to deteriorated conditions. Once the pavement thicknesses have been verified against the pothole and geotechnical information, additional information will be collected for pavement condition as well. The cost estimate section includes a specific evaluation of pavement restoration and associated costs with two basic options. One option is to saw cut each trench including laterals and the sewer mains and trunk sewers and then do trench repairs on only the trenches dug. The other option is to mill the entire pavement width and then fully restore the pavement. See Section 7, Cost Estimate, for more information.

6.3 Pump Station Design

One of the goals in the design of the lift stations is to include as many similarities as possible. This includes pumping schemes, same pump manufacturer, and emergency storage configurations to provide for ease in operation and maintenance. Presented in this section are the design flows, hydraulics, site layout, instrumentation, and electrical design. The lift station locations and force mains are shown in Figure 5-2. Appendix J contains manufacturer's literature on the lift stations components.

6.3.1 Design Flows

The average daily sewage flow (ADF) generated within each lift station basin was determined through the sewer model and is presented in Table 6-2. The 1.8 peaking factor identified earlier in Chapter 5 was also used to determine the peak dry weather flow (PDWF). The lift stations are designed for the peak wet weather flow (PWWF) with an allowance for I&I into the sewer system. The design flows shown in Table 6-2 include the Alternate Phase 1 areas discussed in this Section.

Table 6-2 Lift Station Design Flows

Lift Station	Phase 1			Build Out		
	ADF	PDWF	PWWF	ADF	PDWF	PWWF
Kickapoo	88	158	205	100	180	234
Paxton	575	1,035	1,242	1,888	3,399	4,079
Barron	50	90	117	56	101	130

All flows in gallons per minute (gpm).

6.3.2 Hydraulics

Table 6-3 summarizes the lift station information used for the hydraulic analysis.

Table 6-3 Summary of Lift Station (LS) Information

Description	Kickapoo LS	Paxton LS	Barron LS
Lift Station Elevation (ft msl)	3,314±	3,196	3,096±
Force Main Length	1,365± feet	4,930± feet	5,735± feet
Invert Elevation into Wet Well (ft msl)	3,298±	3,181±	3,086±
Invert Elevation at Downstream MH (ft msl)	3,350±	3241±	3,241±

ft msl = feet mean sea level

The Paxton LS will be designed to accommodate the Phase 1 PWWF with room for expansion to accommodate the build-out PWWF. The Kickapoo LS and Barron LS will be designed for the PWWF at the build-out condition due to the small difference in flow between the Phase 1 and build-out condition. The lift station hydraulic analyses for the Kickapoo LS and Barron LS are summarized in Table 6-4. The hydraulic analyses for the Paxton LS for Phase 1 and build-out condition are presented in Table 6-5.

Table 6-4 Summary of Hydraulic Analyses for Kickapoo LS and Barron LS

Description	Kickapoo LS	Barron LS
Design Point	250 gpm @72 ft TDH	350 gpm @ 190 ft TDH
Static Lift	58± feet	161± feet
Pump Station Piping Size	4 inches	4 inches
Force Main Size	6 inches	8 inches
Force Main Velocity	2.84 fps	2.33 fps
Number of Pumps	1 duty, 1 standby	1 duty, 1 standby
Manhole Diameter	5 feet	6 feet
Wet Well Depth	23.5± feet	17.5± feet

fps = feet per second
gpm = gallons per minute

Table 6-5 Summary of Hydraulic Analyses for Paxton LS

Description	Phase 1	Build Out
Design Point	1,242 gpm @ 91 ft TDH	4,079 gpm @ 94 ft TDH
Static Lift	66± feet	66± feet
Pump Station Piping Size	10 inches	12 inches
Force Main Size Phase 1	12 inches	14 inches (to be constructed in Phase 1)
Force Main Velocity	3.97 fps	4.92 fps
Number of Pumps	1 duty, 1 standby	2 duty*, 2 standby*
Wet Well Depth	23 ± feet	23 ± feet

fps = feet per second

*Additional equipment required for the build-out condition (Includes Phase 1 equipment).

The intent in sizing the force main was to keep the velocity above 2 feet per second (fps), with 3 fps or greater being preferable. The small flow from the Kickapoo LS and the Barron LS and the high heads made sizing the pumps difficult. An iterative approach was used to determine the optimal lift station flow based on force main and pump station sizing.

Note that in the Paxton LS build-out condition, two force mains will be used to transmit flow. In Phase 1, the 12-inch force main will be used to convey flow. At build-out, both force mains will be used to convey flow. In addition to the connection points at the lift station and at the WWRF, the 12-inch and 14-inch force mains will be interconnected at selected locations to allow for maintenance on either force main while allowing uninterrupted operation of the lift station.

6.3.3 Design and Appurtenances

Pumps and Motors

Based on the information in the previous section, the pump and motor design characteristics are provided in Table 6-6.

Table 6-6 Pump and Motor Characteristics

Description	Kickapoo LS	Paxton LS	Barron LS
Type	Submersible	Submersible	Submersible
Fairbanks Morse Pump	2"5432M&W	4"5433MV Phase 1 6"5436LM Build out	4"5435MV
Pump Efficiency	61%	73% and 81%	51%
Minimum Motor Horsepower	10 hp @ 460V with 1.15 SF	50 hp and 100 hp Both @ 460V with 1.15 SF	60 hp @ 460V with 1.15 SF
Maximum Speed	1800 rpm	1800 rpm	1800 rpm
NPSHR	21.3 feet	26 feet	11.5 feet

hp = horsepower
rpm = revolutions per minute

The pumps identified above represent only one possible pump selection. Other pumps may be available. In addition, the pump configuration (number of pumps) at the Paxton LS can be modified.

All pumps will be submersible, non-clog centrifugal pump with a submersible close-coupled motor designed to pump raw sewage. The pump will automatically connect to the discharge connection, guided by no less than two guide bars extending from the top of the lift station to the discharge connection. Lifting the pump from their discharge connection of the wet well will not require the removal of any bolts, nuts, or other fastenings, nor the need for personnel to enter the wet well.

The motors will be housed in air-filled watertight casing, and will have Class H insulated windings that will be moisture resistant. Motors will be NEMA Design B with a 1.0 service factor. The motor will be rated at 155°C or better while operating in an ambient temperature of 50°C (122°F). The motor will be NEMA Code Letter F, G, or H, or better. Motor will be non-overloading and capable of 10 starts per hour.

Grinders

Many agencies have experienced increased solids in the sewage, including personal hygiene wipes, which do not dissolve and clogs pumps. Although the submersible pumps have a 1.5-inch diameter clear passage through the volute, an in-line grinder is recommended upstream of the pump wet well. The grinder, using hardened steel cutters will reduce the size of any incoming solids, thereby protecting the pump.

For Kickapoo LS and Barron LS a Muffin-Monster Manhole, or approved equal, is recommended. The Monster Manhole is a prefabricated unit with fiberglass manhole and grinder unit in a complete package.

For the Paxton LS a Muffin In-Line Channel Monster, or approved equal, is recommended. The In-Line Channel Monster will be installed in a precast concrete vault with a by-pass.

Wet Well

The Kickapoo LS and the Barron LS will utilize concrete manholes for wet wells. The diameters of the wet well are five feet and six feet for the Kickapoo LS and the Barron LS, respectively.

The Paxton LS will utilize a rectangular cast-in-place concrete wet well. The anticipated size of the wet well is 32 feet by 12 feet.

All wet wells will be lined with resin coating as manufactured by PPC Coatings, or approved equal, or an epoxy coating such as Sauereisen, or approved equal, to prevent hydrogen sulfide corrosion of the concrete.

Wet well access for Paxton LS will be through spring assisted hatches located above each pump. Hatches will be aluminum covers rated for H-20 loading.

Valve Vaults

Pre-cast valve vaults will be located next to the wet well and will house the swing check valve and isolation plug valve. The vaults will have H-20 rated spring assisted aluminum hatches.

Flow Meter Vault

A pre-cast flow meter vault will be located downstream of the valve vaults to monitor total lift station flows. The vaults will have H-20 rated spring assisted aluminum hatches.

Yard Piping

All yard piping will be ductile iron pipe. Pipe shall meet the requirements of AWWA/ANSI C151/A21.51. Fittings shall meet the requirements of AWWA/ANSI C110/A21.10. Pipe and fittings 12 inches and smaller will be Class 350, and those greater than 12 inches will be Class 250.

Flanged pipe shall meet the requirements of AWWA/ANSI C115/A21.15.

All ductile iron pipe and fittings will be lined with a ceramic epoxy which is an amine-cured novolac epoxy containing at least 20 percent by volume of ceramic quartz pigment. The material will be Protecto 401™ Ceramic Epoxy, or approved equal.

All above-grade and wet well piping shall be epoxy coating per AWWA/ANSI C116/A21.16.

All below grade ductile iron pipe and fittings shall be coated per the requirements of AWWA/ANSI C151/A21.51 and polyethylene encased in accordance with AWWA/ANSI C105/A21.5; however, two wraps of film will be utilized instead of one. The polyethylene film will have a minimum thickness of 8 millimeters. The two wraps of film will provide a minimum total thickness of 16 millimeters.

Force Main Piping

All force main piping downstream of the lift station meter vaults will be PVC conforming to the requirements of AWWA C900 or C905. Force main piping shall have a dimension ratio of 18 (DR18) rated for 235 psi maximum working pressure.

All fittings will be ductile iron fittings meeting the requirements of AWWA C110, C115 and C111. Fittings shall be lined, coated and wrapped as described for yard piping.

Fusible PVC™ pipe shall be considered for force main piping as an alternative to conventional gasketed joint PVC pipe. Use of fusible PVC™ pipe may reduce the need for restrained joints and provide an additional factor of safety due to the proximity of Yucca Valley to a number of earthquake faults.

Emergency Storage

Emergency storage is provided as a precaution in the event of a power failure. A minimum of 4 hours of PWWF will be provided at Kickapoo LS and Barron LS in below-grade concrete structures. Paxton LS will have an on-site emergency generator and will be provided with one hour of PWWF storage. Presented in Table 6-7 is the preliminary sizing of the storage.

Table 6-7 Preliminary Sizing of Emergency Storage

Site	Dimensions	Required Storage Volume	
Kickapoo LS	14 ft x 9 ft x 23 ft deep	51,840 gal	6,930 cubic feet
Paxton LS	60 ft x 32 ft x 22 ft deep	244,815 gal	32,730 cubic feet
Barron LS	24 ft x 12 ft x 18 ft deep	29,030 gal	3,881 cubic feet

The useable storage depth is limited by the highest invert of the upstream manhole and the depth of the storage basin. In this concept the overflow from the wet well automatically enters the emergency storage basin, thereby preventing sewage spills in upstream reaches. The emergency storage basin and the wet well will be connected through a pipe with plug valve or through a sluice gate. Draining the emergency storage will require opening the connecting valve.

Odor Control

In the initial phases of the project, it is anticipated that odor control may be necessary due to the low flows and longer wet well retention times. Odor control will be provided through passive carbon adsorption canisters located at each wet well and force main discharge manholes. Should additional odor control be required, the design will incorporate chemical feed type additions to the wet well (such as Bioxide).

Electrical Building

Due to the sensitivity of electrical and controls equipment to heat and cold, each lift station is anticipated to have a 10-foot by 12-foot pre-fabricated electrical building. The final building size will depend on the size of the electrical cabinets determined during final design. All buildings will be equipped with a heater and air conditioner, fluorescent lighting, a set of 3-foot-wide double doors, and convenience receptacles for 120VAC power.

HDWD and the Town of Yucca Valley will be involved in the selection of the lift station architectural features available from the prefabricated building manufacturers.

6.3.4 Lift Station Site Plans

Layouts

The Kickapoo LS will be on Benicia Trail as shown in Figure 6-1. Although the property is owned by the Town of Yucca Valley, it is anticipated that HDWD will acquire the property. This site was selected because it is the farthest from the residences located along the western edge of the property. The fenced area for the lift station is 55 feet by 65 feet or about 0.07 acres.

The Barron LS is anticipated to be located on the property owned by HDWD at the northwest corner of Yucca Mesa Road and Barron Drive as shown in Figure 6-2. HDWD owns two properties in the vicinity with a combined boundary of 300 feet by 450 feet. The fenced area for the lift station is 65 feet by 61 feet or about 0.09 acres.

The Paxton LS is anticipated to be located on property owned by HDWD on the southwest corner of the Paxton Drive and Balsa Road intersection as shown in Figure 6-3. The property is 100 feet by 100 feet (approximately 0.23 acre). The entire site will be fenced. The site currently has an inactive groundwater well located at the southeast corner. The well will be abandoned according to California Department of Water Resources requirements prior to construction of the lift station.

Within the fenced area of each lift station will be the wet well, emergency storage, valve vault, meter vault, grinder manhole, electrical building and paved parking area. Gravel will cover the remaining portions of the sites.

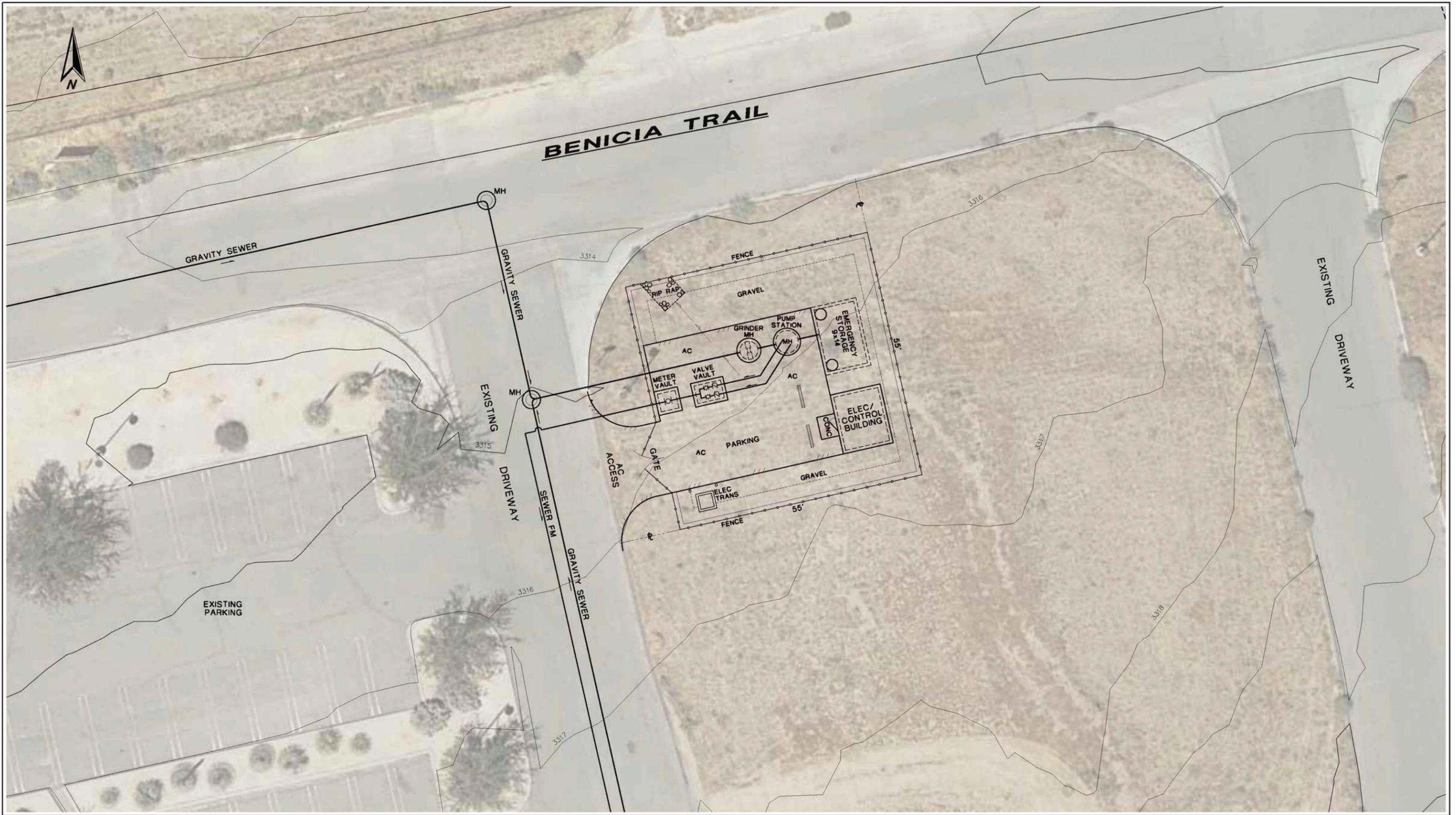
Site Grading

The existing ground slope across each potential lift station site is minimal. In general, the gradient across each site is approximately 2 percent and will not require retaining walls.

Fencing and Site Access

HDWD will provide input into the type of security fencing that will surround each lift station. It is anticipated that the fencing will be a minimum of 6-feet high and be either chain-link or steel bars. The 16-foot-wide driveways will either have a roller gate or swing gate. Both gate types can either be motor operated or manually operated utilizing a padlock for security.

Each site is accessible by a paved road. The access driveway from the road will have asphaltic concrete pavement as shown on the individual site layouts.



PLAN
1"=10'

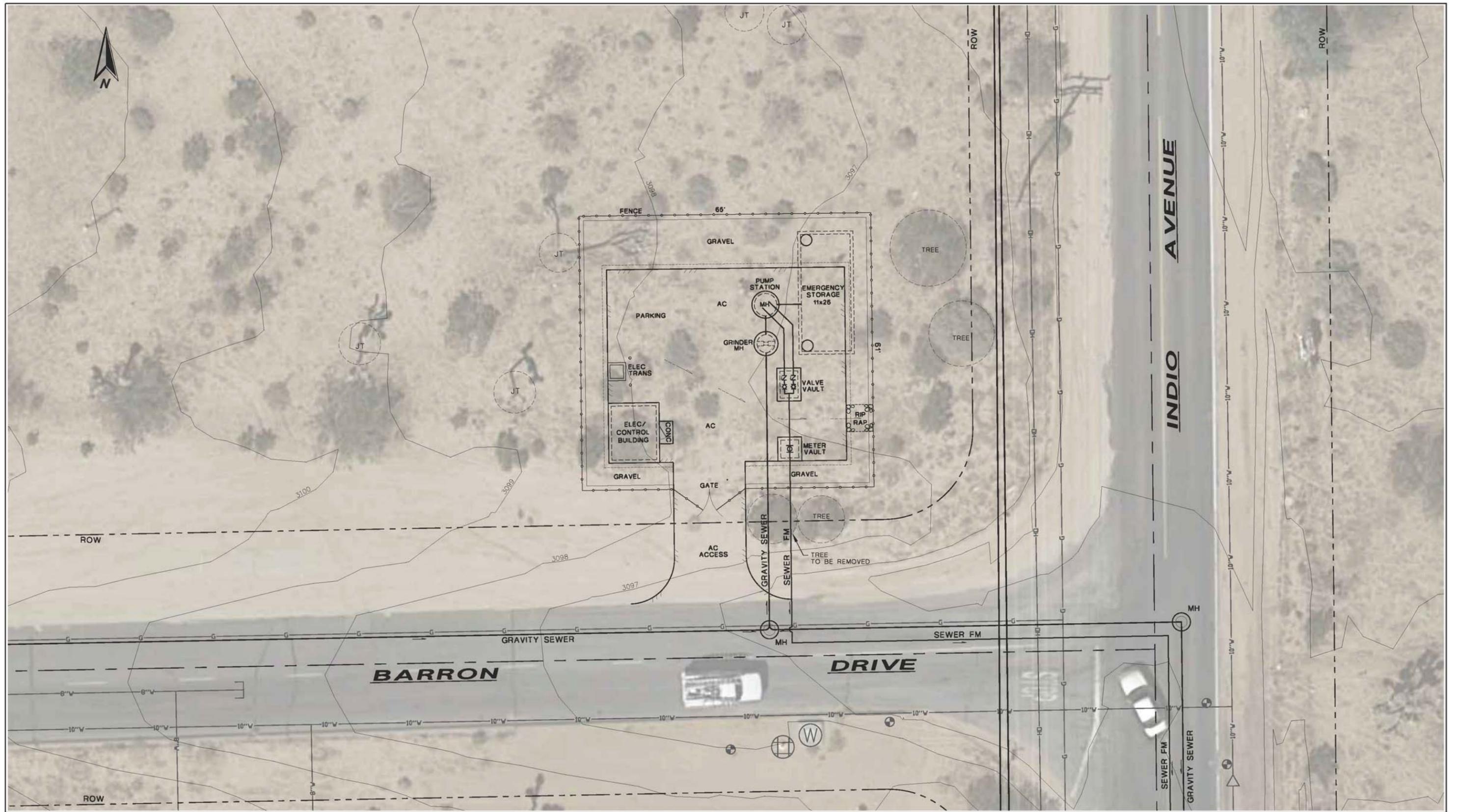
**KICKAPOO LIFT STATION
PLAN**

Figure 6-1



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PLAN
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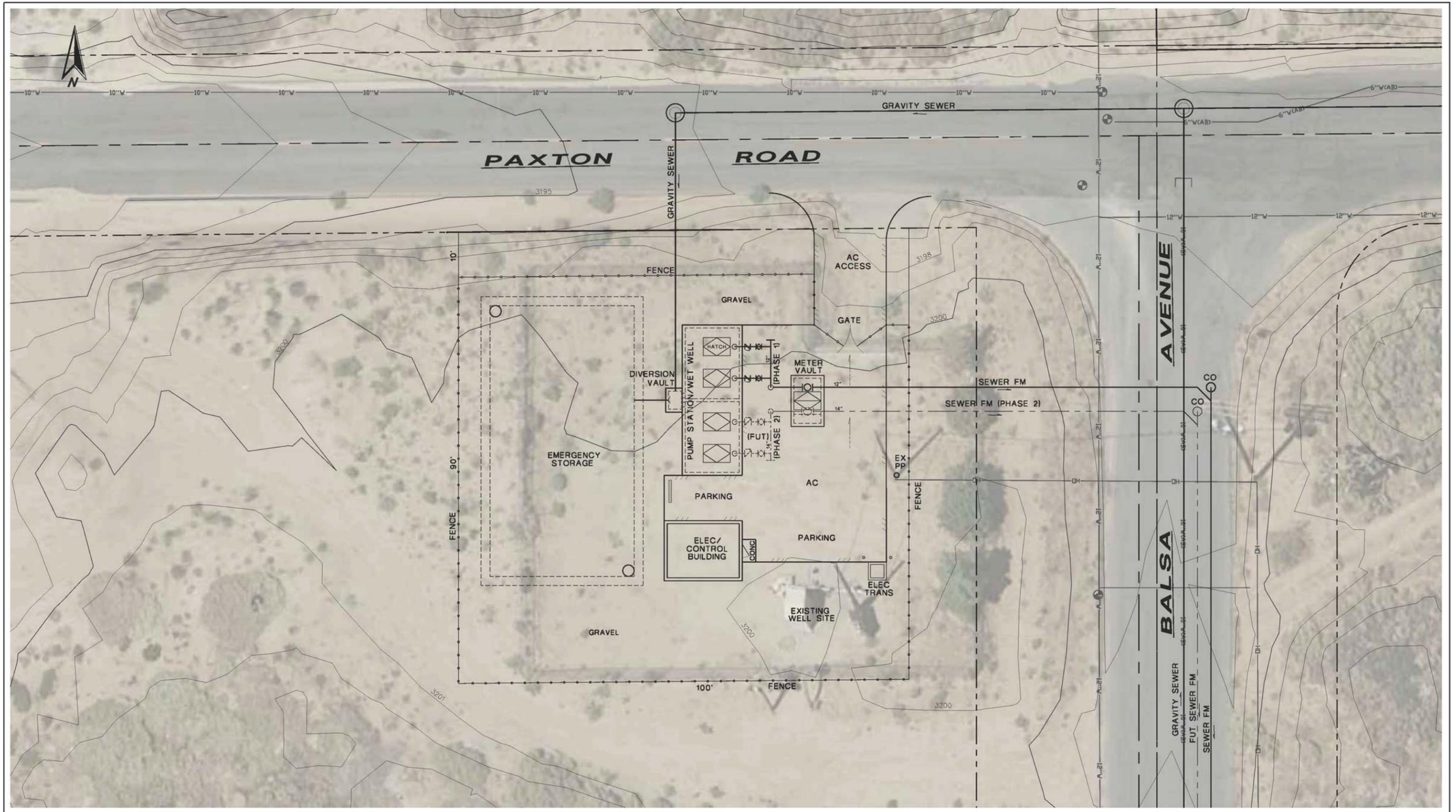
**BARRON LIFT STATION
PLAN**

Figure 6-2



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PLAN
1"=10'

**PAXTON LIFT STATION
PLAN**

Figure 6-3



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6.3.5 Electrical Design

Electrical Service

The required electrical system for each site consists of the following sub-systems: electrical distribution, standby power generation (Paxton LS only), lighting, convenience power, and grounding.

The electrical distribution system and service for each lift station site has yet to be determined. However, it is anticipated that SCE will be able to provide electrical service through a pad-mounted transformer located at each site.

The service entrance will include an underground utility corridor, utility company metering section, a molded case main circuit breaker, feeder breakers, and surge arrestors, all enclosed in a NEMA 1 indoor rated enclosure, designed to meet the SCE standards and electrical code requirements. The utility meter will be remotely mounted to the exterior of the electrical building to allow meter reading without entry into the building.

Standby Power

The Paxton LS will have an emergency generator sized for the construction of Phases 1, 2, and 3 and infill for 20 years. The build-out condition is not expected to occur for at least 20 years which is also the expected life of the emergency generator. As the life expectancy of the generator is reached, an evaluation will be made whether to upsize the generator to build-out capacity.

The emergency generator will have an automatic transfer switch that will automatically start the generator upon detection of utility power loss, switching power between the utility and the generator. The transfer switch can also be manually operated for periodic exercising of the generator. The transfer switch shall be manufactured by Appleton for conformance with existing HDWD equipment.

The emergency generator will be furnished in an outdoor, weatherproof, sound-attenuated enclosure rated 72 dbA at 23 feet from the center of the generator. The generator will run on either natural gas or diesel fuel. If diesel fuel is used, the generator base will also serve as the fuel tank capable of providing enough fuel for 24 to 48 hours of continuous operation at the build-out condition capacity. Further discussions with HDWD are needed to confirm consistency with emergency planning procedures and the length of time HDWD plans to be self-sufficient after a major event.

The lower design flows at Kickapoo LS and the Barron LS will not require on-site standby emergency generators. A manual transfer switch will be installed for connection to a portable generator in the event of a power outage.

The Kickapoo and Barron LS have four-hours of PWWF emergency storage. It is anticipated that HDWD can install a portable generator within a four-hour span. Further analysis will be performed to ensure that both lift stations are not on the same power grid and it is unlikely that both stations would lose power simultaneously. It may be recommended to have two portable generators purchased as part of the project.

Site Lighting

Site lighting will consist of photocell-controlled high-pressure sodium fixtures. Site lighting will be limited to the building perimeter.

Grounding

Grounding will be provided for each lift station.

6.3.6 Instrumentation and Controls

The instrumentation and controls system for each lift station will be monitored and controlled by a primary system programmable logic controller (PLC). This PLC will communicate with the master station via a radio link thus enabling remote monitoring and control capabilities.

Programmable Logic Controller System and SCADA System

The PLC type and programming will be determined with input from HDWD. The control system for the lift stations and the SCADA telemetry system utilize the same PLC.

The remote telemetry units at each lift station will communicate with HDWD's master station via radio link. The master station will be located at the WWRF.

The PLC and SCADA system must be integrated with the WWRF for an effective design and will require coordination between the lift station and the WWRF design teams.

General Control Description

Each submersible pump will have a hand-off-auto switch. When the selector switch is in the 'Hand' position, operation of the corresponding pump will be controlled by 'START & STOP' pushbuttons located at its associated starter. In the 'Off' position, the pump will not operate. While in the 'Auto' position, the pump will be controlled by the PLC, either via its associated Operator Interface Terminal or by lift station sequencing logic programmed into the PLC. The pump sequencing logic will start and stop pumps based on the sewage level in the wet well.

Instrumentation

Level Control. Wet wells will be equipped with ultrasonic level sensors to monitor the fluid levels for pump start/stop operation. As a backup to the ultrasonic level sensors, mercury float switches mounted on a float tree in a stilling well will also monitor the level in the wet wells.

Motor High Temperature. A temperature overload sensing device will be integral to each motor winding and will trip at 125°C. The temperature overload device will stop the motor when tripped and will be self-resetting.

Motor Moisture Detection. A float leak sensor will detect moisture in the stator chamber. When tripped, the sensor will stop the motors.

High Pressure Discharge. A pressure switch will be installed on the discharge header. When high pressure is detected, the motor will stop.

Flow Meter. A lift station flow meter will be installed in a vault. The ultrasonic flow meter will have digital readout at the electrical building

Security. Intrusion detection devices will be installed on each hatch, electrical building access, and the security fencing. An alarm will be transmitted to the WWRF for unauthorized access.

SCADA. All instrumentation and security devices shall be connected to the central SCADA system for real-time monitoring by HDWD personnel.

6.4 Preliminary Vertical Alignment

A preliminary vertical alignment or profile has been established for each sewer main and trunk sewer in accordance with project design criteria. Profiles were initially established to assist in confirming the horizontal alignment, and then refined to address technical and cost-related issues. Factors considered in developing preliminary profiles are discussed below.

6.4.1 Pipe Hydraulics

All sewer mains are initially designated as 8-inch diameter and set at a slope of 0.4 percent or greater. Hydraulic modeling has not yet been completed on these new alignments and the refined design criteria. After the 30 percent submittal, all sewer mains will be evaluated with their actual design slopes to confirm their sizes. An updated hydraulic model will be developed that links tributary flows to the sewer mains and trunk sewers. The 30 percent submittal did have an evaluation of the trunk sewers completed based on slopes. Any changes in pipe sizes will likely be minimal and should not affect the project costs in that all pipes are less than 24 inches and thus trench widths are based on shoring boxes which dictate minimum trenching costs. The difference in pipe material costs are minimal compared to trenching and paving costs.

6.4.2 Sewer Main and Manhole Depth

The minimum depth of cover to sewer invert, per project design criteria, is 6 feet. The actual depth will likely be deeper, due to physical conditions such as topography, relationship of house elevation to street, crossing of washes or existing utilities, etc. This depth was chosen as a minimum because from a practical standpoint, a minimum cover of 4 to 5 feet is typically necessary to enable connection of laterals from lots at the required slope. Upon review of the depth to laterals at the cleanouts, careful analysis will be performed to confirm adequate depth is available for the laterals to enter the sewer mains near the top of the sewer main and have appropriate 2 percent minimum fall from the farthest point of the house or property depending on whether septic tank information is available.

As mentioned, additional cover is necessary at certain wash and drainage crossings per the scour analysis described in detail in Section 4, Scour Analysis, and Appendix A. As the vertical alignment is refined additional scour analysis will be completed on the minor washes and lateral scour will be considered which may result in deepening some sections that parallel washes and others that may require minor bank stabilization to minimize lateral scour. These decisions will be determined in consultation with SBCFCD.

Every effort has been made to choose horizontal alignments and preliminary profiles that minimize manhole depth. A depth of 20 feet is considered deep and was generally the maximum, when possible. As currently configured, eight manholes are more than 20 feet deep. The maximum depth is 26.2 feet. The average depth of all manholes is 8.5 feet. This initial profile effort will be refined as potholing of utilities is completed and private property lateral

analysis is completed. This may result in some sewer mains and trunk sewers being deeper than initially shown; however, the cost estimate has included an allowance for pipe depth variability. Therefore, all sewer main, trunk sewer, and manhole depths are assumed to be 10 percent deeper than the initial estimate for cost estimating purposes.

6.4.3 Drop Manholes

Sewer systems often include drop manholes to minimize the depth of pipe. Our experience in other hot desert communities show that drop manholes often are a source of hydrogen sulfide generation which causes odors and can damage facilities due to the chemical attack of this acid. Additionally, providing a design that results in an easy to maintain system is often costly due to the number of fittings necessary to facilitate cleaning the pipeline that is making the drop. Therefore, at the 30 percent design phase no drop manholes are included in the alignment.

6.4.4 Cleanouts

The established design criteria allows oversized cleanouts to be installed on the end of mains where the distance between the last manhole and the end of the main is less than 175 feet or the number of lots served is eight or less. During the development of the initial design, many lines were adjusted to avoid constructing a sewer system to vacant lots. Some of the manholes associated with these sewers may meet the requirements for a cleanout. Verification of cleanout requirements will be made during the final design phase where manholes shown on the plans may be replaced by cleanouts resulting in minor cost savings.

6.5 Construction Packaging

Due to the magnitude of the Phase 1 area sewer collection, transmission, and treatment system, it is necessary to break the system down into smaller units that can be constructed in a logical order and a timely manner. There are many elements to consider in determining how best to accomplish this task however, these elements can be grouped into three main categories: 1) construction package size, 2) impacts to the community, and 3) adequate effluent volume for startup of the lift stations and WWTF.

6.5.1 Construction Package Size

This category analyzes the subdivision of the Phase 1 area into manageable sections. Each subarea will essentially be a stand-alone construction project. To encourage local contractors to participate in obtaining some, or all, of the work included in each subarea, the subareas must be sized accordingly. If the subareas are too large, the overall contract price could require bonding requirements that are above the capabilities of most small to medium scale construction contractors. Packages between \$10M and \$30M will likely attract more contractors. If the subareas are too small, additional costs and delays will be incurred due to the requirements for advertising, awarding, and construction management for each subarea project.

The types of work included in each subarea are also important to consider. Contractors that specialize in pipeline construction generally will not bid for a large lift station project such as the Paxton LS, but would bid for the associated piping if packaged as a separate project. If the lift station and piping were packaged together, it is likely that large construction companies that are able to perform all of the work with their own forces would bid for the project. Smaller lift stations

are not as complex and could be packaged with the associated piping without eliminating smaller construction contractors from bidding for the work.

HDWD wants to provide local contractors the opportunity to compete for the available work provided by this project, either as the prime contractor or as subcontractors to the prime contractor. This requires creating construction packages that provide specific function subcontracting opportunities such as on-site lateral connections, landscaping, trucking, material supply, etc.

6.5.2 Impacts to the Community

Construction of this project will have a significant impact on the community and community input will be solicited through scheduled community meetings as the project design progresses. Constraints will be placed in the construction documents to minimize impacts and require the contractor to limit disruptions to specific time periods. Contractors shall be required to implement all financially feasible constraints to minimize impacts to local residences and businesses. Proper construction scheduling can minimize disruption to critical facilities such as schools. Construction phasing will be implemented to require completion of one area prior to starting on the next. This will minimize community disruptions and facilitate effluent flow. It is important however, not to constrain every detail of the contractors' work, which can increase costs, but to include enough requirements as necessary to minimize community disruptions.

6.5.3 Wastewater Reclamation Facility and Lift Stations Startup

Although design for the reclamation facility has not yet begun, based on the flow projections it is anticipated that the initial capacity will be approximately 1.0 MGD. Assuming that the facility will be built with multiple treatment trains for ease of operation and maintenance, having startup flows in the 0.125 MGD range would allow for relatively simple initial facility startup. Lower flows will impact the ability for the facility to adequately treat and dispose of the effluent. That amount of flow does not need to be present in the first day, but for the best development of the biological portion of the facility, it would be most effective to have these flows within a short window of one to two weeks.

Startup of the lift stations require sufficient flows to be able to adequately test the pumps and motors and that there are not long retention times that can lead to odor issues or problems with treatment. Lift stations can have what is called "makeup water" at the start of operation to ensure that pumps cycle and that there is sufficient flow. "Makeup water" is generally potable water, so due to the cost of water, it is not desirable to utilize it for long-term operation of a lift station but it can assist in short-term start up situations.

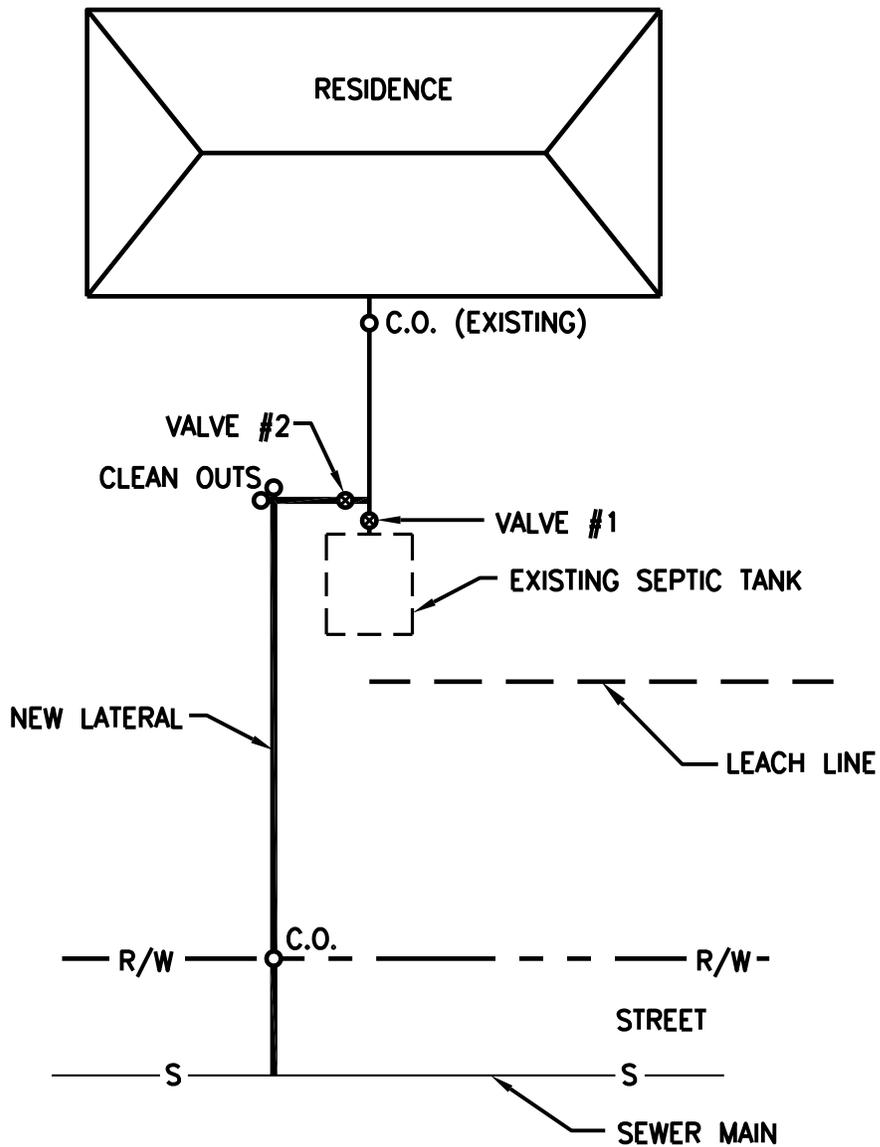
Atkins approach to construction packaging was to first identify what properties, if connected at one time, could provide roughly 0.125 MGD of initial flow. The proposed service area shown in Appendix G meets the criteria. The Kickapoo LS and Paxton LS could be separate construction bid packages, or they could be part of the initial package. The Paxton LS and Kickapoo LS as well as the trunk main and force mains between the lift stations and the treatment plant would then essentially be constructed at the same time. The initial properties are primarily commercial or multi-family and have one or two septic tanks or private treatment systems serving multiple residents (mobile homes or condominiums or recent developments

A new lateral from the sewer main would tee connect to the existing lateral upstream of the existing septic tank. At this connection point, two valves would be installed; one on the septic

side of the tee and the other on the sewer side of the tee. Prior to completion of the new sewer system, the sewer side valve would remain closed and the septic valve would remain open allowing the septic system to remain fully operational. Once the sewer system is operational, the septic side valves would be closed and the sewer valves would be opened, diverting effluent from the septic system to the new sewer system. This would provide for a way to divert flows from these properties at essentially the same time (within a few days or a week). These properties would then have their septic tanks abandoned. The identified properties would be impacted twice; once for installation of the lateral and diversion valves, and later for the abandonment of the septic tank or on-site treatment facility. However, this phasing plan would provide the required target flow necessary for facility startup while minimizing the number of properties that would need to be affected twice for the conversion process. Figure 6-4 shows a schematic of the interim lateral connection.

Subsequent construction phases would have the contractor install a section of sewer main with the laterals and abandon the septic tanks on the properties as one operation to reduce the need to come back at a later time to abandon the septic tanks and restore the properties. This will minimize the disruption to the community and property owners and reduce the risk of damaging the roadways after repaving for the sewer mains has been completed.

It is anticipated that there would probably be three or four subsequent phases of construction. Four phases would roughly divide the City into quadrants. The Barron LS would need to be constructed prior to connection of the Barron sub-basin. During early operations, the lift station will serve a small area and, until a sufficient number of properties are connected, it may be necessary to use additional methods to control odor including the use of "makeup water."



PHASE 1: INSTALL LATERAL, TEE, AND VALVES

PHASE 2: REMOVE TEE, VALVES, AND SEPTIC

SEPTIC OPERATION

VALVE NO. 1 - OPEN

VALVE NO. 2 - CLOSED

SEWER OPERATION

VALVE NO. 1 - CLOSED

VALVE NO. 2 - OPEN

NO SCALE

INTERIM SERVICE CONNECTION FOR STARTUP

Figure 6-4

6.6 Preliminary Design Drawings

Full and half-size preliminary plan and profile drawings are provided as a separately bound component of this submittal. These drawings have been advanced well beyond the required 30 percent completion level, showing both horizontal and vertical alignments. Several items that are fully addressed on the drawings include:

- **Pipeline Diameter** – All sewer mains are currently shown as 8-inch and 12-inch diameters, with the exception of the trunk line and force mains. The hydraulic analysis with associated design criteria presented in Section 5, Hydraulic Analysis, of this report will be completed for each pipe segment to confirm the final sizing. These pipe sizes will be updated on the design drawings in subsequent submittals.
- **Septic Tanks** – Septic tank locations are shown on the plans as identified by District staff. There are still about 10 percent of the developed properties that require septic tanks to be located. Additional work including town plan research, county research, and direct contact with property owners, will be done to research septic tank locations to provide a more complete and accurate depiction of these facilities for the next submittal. Where no information can be found to locate a particular septic tank, the tank will be shown at an assumed location on the lot furthest from the sewer main.
- **Manhole Labels** – In the profile view, manhole numbers will be annotated to indicate whether they are shallow (S), extra deep (X), require coating (C), and/or a drop manhole (D). These designations will be added in the next submittal if applicable.
- **Laterals** – Proposed alignments of private laterals are not currently shown on the plans.
- **Wash and Drainage Crossings** – The sewer main and trunk sewer profiles at these crossings have been located at a depth consistent with the preliminary scour analysis, as discussed in Section 4, Scour Analysis. These locations will be refined as final scour calculations are performed.
- **Details** – Standard details typically included with sewer main design plans are provided with this set. Additional modifications to the details may be identified in the course of design. These will be discussed with HDWD prior to making any changes for subsequent submittals.
- **Utilities** – The preliminary drawings show existing utility locations in the plan and profile views. These are positioned based on the information available from RBF, as described in Section 2.2, Survey Data, pending further refinement through a potholing program. Potholing is planned for all water mains and gas mains, unless the proposed sewer alignment is 8-feet below grade or greater. All fiber optic and electric lines will be potholed, and representative telephone and cable television lines will be potholed. The 16-inch gas line will be potholed at all crossings regardless of anticipated sewer main or trunk sewer depth.
- **Field Verification** – While some field verification has been completed, additional field walks will be completed as part of the final detailed plans and specifications.

Section 7

Cost Estimate

7.1 General

As part of the 30 percent submittal, Atkins has completed a 30 percent cost estimate. Appendix H provides a detailed estimate. The opinion of probable cost is the approximation summary of the cost of the overall defined scope of work. This should not be construed to represent a low bid. The cost estimate is the product of the cost estimating process. The probable cost has a single total value and has identifiable construction component values. Atkins would classify this HDWD Opinion of Probable Costs using industry standard guidelines a Class 3 estimate. Generally, Class 3 estimates involve more deterministic estimating methods and typically have engineering design from 10 percent to 40 percent complete. A contingency of 15 percent has been included to provide for undefined scope costs which are indicated as likely to occur by experience, but is not complete at this time. Based on this information used in the opinion of probable cost, Atkins would proffer that our accuracy range at 30 percent design level would be -15 percent on the low side to +20 percent on the high side.

The Estimate of Probable Construction Costs (EPCC) was prepared using the following standard practices. The reliability of project cost estimates at every stage in the project development process is necessary for responsible fiscal management. Project cost estimating is not an exact science; however, estimators are expected to prepare reasonable project cost estimates that represent the cost to complete the project. These costs include those required not only for the contractor to construct the project but, also includes the costs for the purchase of right of access, permitting, fees, and other costs that are anticipated to be incurred to complete the project.

EPCC estimates are dynamic and have to be reviewed continually from conceptual to final construction documents to keep them current. The estimate is expressed in year-of-expenditure dollars to allow for anticipated escalation of costs for Material, Labor and Equipment. This EPCC includes escalation each year of the anticipated 5-year contract duration for Materials at 4.5 percent, Prevailing Wage Labor increases of 3.4 percent and Equipment / Fuel at 5 percent.

Categories of Estimating Levels

High Level Estimate. Generally, these estimates are performed before any design work is performed – Generally called programming or planning level estimates.

Mid Level Estimate. These estimates are generally performed during various design level completions with some form of contingencies for undefined scope. Use known quantities with estimator developed unit prices and adjust for items unknown at the time the estimate is done.

Low Level Estimate. These estimates are generally performed at the 100 percent P, S, & E level and prior to the construction bidding process.

The categorized takeoff and quantities were provided by the in-house design team for the cost estimating process. A quantity takeoff was performed for all the individual work items that involve labor and materials. The estimate determined the work-hour production rate for each of the work activities that must be performed using RS Means Online 1st Quarter 2013 (RSM) data

for San Bernardino, California location. To this information, these project labor rates were determined using the current prevailing wage rates for the appropriate class of worker and location worked including all fringes and overtime wages. Many major material cost items were solicited from potential vendors and suppliers as budgetary values with normal expectancy that they may be conservatively figured by 5 to 10 percent above contracted rates. Equipment rates for construction were either used from RSM and/or Equipment Watch "Bluebook Rates" for contractor owned including ownership costs or open market rental rates. Effective estimates typically utilize past cost experiences to insure the estimated costs are reasonably consistent when compared with available historical costs for same or similar work scopes. Estimated overhead costs including home office overhead, job overhead, bonding and profit consisted of the following for this estimate: OHD and Bond costs figured at 10 percent of direct costs. Profit figured at 5 percent of direct costs plus overhead costs. Easement land acquisition or soft cost was specifically excluded from the cost estimate and separately allocated to the project total costs. The EPCC is in a form that can be understood, checked, and validated.

EPCC pricing for Hi-Desert Water District project reflects probable construction costs obtainable in the locality on the date of cost estimate of probable costs. This estimate is a determination of fair market value for the construction of the project and it is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work, with a minimum of four general contractor bids. Experience indicates that a fewer number of bidders may result in higher bids; conversely an increased number of bidders may result in more competitive bids. This cost estimate includes items and scope that will typically be in the general contractor's bid.

The existing project roadway data provided was used to establish the scope needed to reconstruct the entire roadways to existing conditions as an alternative to standard trench repair, which would be used in the case of trenching for the underground facilities. A project alternative to typical standard remove and patch roadways and its cost components have been included for cost benefit decisions.

7.2 Summary of Opinion of Probable Construction Cost

Package	Public	On Lot	Total
Package 1	\$25,660,751	\$618,177	\$26,278,928
Subsequent Packages	\$58,871,873	\$11,797,781	\$70,669,654
Easements	\$3,200,000	\$--	\$3,200,000
<i>Base Subtotal</i>	<i>\$87,732,624</i>	<i>\$12,415,958</i>	<i>\$100,148,582</i>
Alternate 1	\$11,605,138	\$1,412,111	\$13,017,249
Alternate 2	\$1,614,105	\$131,941	\$1,746,046
Alternate 3	\$2,839,938	\$130,170	\$2,970,108
<i>Alt Subtotal</i>	<i>\$16,059,181</i>	<i>\$1,674,222</i>	<i>\$17,733,403</i>
Project Total	\$103,791,805	\$14,090,180	\$117,881,985

Additional summary to be developed through discussions with HDWD.

ATTACHMENT C SUBMISSION FORMS

Technical Proposal Forms:

- 1. Affidavit of Authenticity Form**
- 2. Iran Contracting Act Certification Form**
- 3. Workers' Compensation Certification Form**
- 4. Non-Collusion Declaration Form**
- 5. Public Works Contractor Registration Certification Form**
- 6. Anti-Lobbying Certification Form**
- 7. Debarment and Suspension Certification Form**
- 8. Executive Order N-6-22 Certification Form**
- 9. American Iron and Steel Certification Form**
- 10. DBE Compliance Forms – Bidder's List**
- 11. DBE Compliance Forms - Good Faith Efforts Verification**
- 12. DBE Compliance Forms – Form 4500-3**
- 13. DBE Compliance Forms – Form 4500-4**

Cost Proposal Forms:

- 14. Stage I Design-Build Services Fee Summary Form**
- 15. Stage I Design-Build Services Hourly Rate Schedule Form**
- 16. Stage II Design-Build Services Markup Fees Form**

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

1. AFFIDAVIT OF AUTHENTICITY FORM

The following affidavit shall be executed, notarized, and submitted for each legal entity that is a member of the Respondent as identified in the Proposals.

State of California

County of [San Bernardino]

Before me, the undersigned authority, personally appeared _____, who, having been by me duly sworn, made the following statement:

"I am authorized to make this affidavit on behalf of _____, a participating legal entity in the attached Proposal dated _____, 2024, and submitted in response to Request for Proposals (RFP) issued by the Hi-Desert Water District for the Phase II Wastewater Collection System Project Design-Build. All information pertaining to _____ and provided in the attached Proposal is to the best of my knowledge, true and correct and if called upon to testify, I could testify competently thereto.

I acknowledge receipt of the Addenda to this RFP by identifying the following Addenda numbers and dates of receipt (if any): _____

(Signature)

(Printed Name)

(Date)

(Design-Build Member)

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

2. IRAN CONTRACTING ACT CERTIFICATION FORM

(Public Contract Code sections 2208-2208)

Prior to bidding on, submitting a proposal, or executing a contract or renewal for a public entity contract for goods or services of \$1,000,000 or more, a vendor must either: a) certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (“DGS”) pursuant to Public Contract Code section 2203(b) and is not a financial institution extending \$20,000,000 or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d).

To comply with this requirement, please insert your vendor or financial institution name and Federal ID number (if available) and complete **one** of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made, contract termination, and three-year ineligibility to bid on contracts. (Pub. Cont. Code section 2205)

OPTION #1 – CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below is not on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct

Vendor Name/Financial Institution

Federal ID Number (or n/a)

By (Authorizing Signature)

Printed Name and Title of Person Signing

Date Executed

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

2. IRAN CONTRACTING ACT CERTIFICATION FORM (Continued)

OPTION #2 – EXEMPTION

Pursuant to Public Contract Code sections 2203 (c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

Vendor Name/Financial Institution

Federal ID Number (or n/a)

By (Authorizing Signature)

Printed Name and Title of Person Signing

Date Executed

3. WORKERS' COMPENSATION CERTIFICATION FORM

Labor Code Section 3700 provides in relevant part:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Department of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

I am aware of the provisions of Section 3700 of the Labor Code which require every employee to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Design Builder Entity:

By: _____

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

4. NON-COLLUSION DECLARATION FORM

TO BE EXECUTED BY DESIGN-BUILDER AND SUBMITTED WITH PROPOSAL

The undersigned declares:

I am the _____ of _____, the party making the foregoing proposal.

The proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The proposal is genuine and not collusive or sham. The respondent has not directly or indirectly induced or solicited any other respondent to put in a false or sham proposal. The respondent has not directly or indirectly colluded, conspired, connived, or agreed with any respondent or anyone else to put in a sham proposal, or to refrain from responding. The respondent has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price, or of that of any other respondent. All statements contained in the proposal are true. The respondent had not, directly or indirectly, submitted his or her proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, proposal depository, or to any member or agent thereof to effectuate a collusive or sham proposal and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a respondent that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she as full power to execute, and does execute, this declaration on behalf of the respondent.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signed _____

Print Name _____

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

5. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION FORM

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html>" <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid/proposal will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.

Name of Bidder: _____

DIR Registration Number: _____

Bidder further acknowledges:

- (1) Bidder shall maintain a current DIR registration for the duration of the project.
- (2) Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered prior to execution of the contract and maintain registration status for the duration of the project.

Name of Bidder: _____

Signature _____

Name and title: _____

Dated: _____

6. ANTI-LOBBYING CERTIFICATION FORM

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee 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 the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

7. DEBARMENT AND SUSPENSION CERTIFICATION FORM

Contractors, Subcontractors, Debarment and Suspension, Executive Order 12549; 2 CFR Part 180; 2 CFR Part 1532

PDBE certifies that it and its principals, and shall obtain certifications from its subcontractors that they and their principals:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency;
- b) Have not within a three (3) year period preceding this procurement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- d) Have not within a three (3) year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.
- e) Suspension and debarment information can be accessed at <http://www.sam.gov>. Contractor represents and warrants that it has or will include a term or conditions requiring compliance with this provision in all of its contracts and subcontracts under this Agreement.
- f) PDBE acknowledges that failing to disclose the information as required at 2 CFR 180.335 may result in the termination, delay or negation of any Contract entered into pursuant to this procurement, or pursuance of legal remedies, including suspension and debarment.

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

DUNS Number: _____

8. EXECUTIVE ORDER N-6-22 CERTIFICATION FORM

Executive Order N-6-22 issued by Governor Gavin Newsom on March 4, 2022, directs all agencies and departments that are subject to the Governor’s authority to (a) terminate any contracts with any individuals or entities that are determined to be a target of economic sanctions against Russia and Russian entities and individuals; and (b) refrain from entering into any new contracts with such individuals or entities while the aforementioned sanctions are in effect.

Executive Order N-6-22 also requires that any contractor that: (1) currently has a contract with the DISTRICT funded through grant funds provided by the State of California; and/or (2) submits a bid or proposal or otherwise proposes to or enter into or renew a contract with the DISTRICT funded by State of California grant funds, certify that the person is not the target of any economic sanctions against Russia and Russian entities and individuals.

The PDBE hereby certifies, SUBJECT TO PENALTY FOR PERJURY, that a) the respondent is not a target of any economic sanctions against Russian and Russian entities and individuals as discussed in Executive Order N-6-22 and b) the person signing below is duly authorized to legally bind the PDBE. This certification is made under the laws of the State of California.

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

9. AMERICAN IRON AND STEEL CERTIFICATION FORM

1. Identification of American-made Iron and Steel Products: PDBE certifies that this proposal reflects the PDBE's best, good faith effort to identify domestic sources of iron and steel products for every component contained in the proposal solicitation where such American-made components are required. The term “iron and steel products” means the following products made primarily of iron or steel - lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.
2. Verification of U.S. Production: If this Proposal is accepted, PDBE agrees that it will provide, to the District, reasonable, sufficient, and timely verification of the U.S. production of each Iron and Steel Product incorporated into the Project.
3. Documentation Regarding Non-American-made Iron and Steel: PDBE certifies that for any Iron or Steel Product that is not American-made but was incorporated in the development of this bid, is allowed by waiver of the U.S. Environmental Protection Agency and such waiver is attached to this certification.

Warranty of Bidder: PDBE hereby represents and warrants to and for the benefit of District that (a) PDBE has reviewed and understands the American Iron and Steel Requirement, and (b) if the Proposal is selected, all of the iron and steel products used in the project will be produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is attached to this certification.

Signature: _____

Name (Printed): _____

and Title (Printed): _____ of Signer (Please Print)

Dated: _____

Q & A's, Waiver request instructions, and a list of approved waivers can be found at http://water.epa.gov/grants_funding/aisrequirement.cfm

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

10. DBE COMPLIANCE FORMS – BIDDER’S LIST

PDBE is required to provide the following information for all DBE and non-DBE subcontractors, who provided a proposal, bid, quote, or were contacted by PDBE. This information must be submitted with the Proposal.

Firm Name: _____	Phone: _____
Business Address: _____	Fax: _____
Email: _____	
License No. and Classification: _____	Years in Business: _____
Contact Person: _____	
Is the firm currently certified as a DBE? <input type="checkbox"/> No <input type="checkbox"/> Yes Cert. Number: _____	
Type of work/ services/ materials proposed by bidder: _____ _____	
Amount of Bid/Quote: _____	
Date of Bid/Quote: _____	

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

11. DBE COMPLIANCE FORMS – GOOD FAITH EFFORTS VERIFICATION

Project: _____

Proposal Opening Date _____

PDBE Name: _____

PDBE Phone Number: _____

PDBE Address: _____

DISTRICT, in accordance with 40 CFR part 33, requires PDBs to provide information pertaining to the use of minority businesses, women's business enterprises, and labor surplus area firms (referred to herein as “DBEs”).

Please provide the following information, using additional sheets of paper if necessary, and submit this form with your bid. PDBE should also submit mail logs, phone logs, electronic searches and communication, newspaper clippings or similar records documenting efforts to meet the Good Faith Effort requirements.

1. Solicitation Lists/Publications. The names and dates of each publication in which a request for DBE participation for this project was placed by the PDB (please attach copies of advertisements or proofs of publication), or information related to solicitation lists on which DBEs were included:

Publications/Solicitation Lists	Dates of Advertisement

2. Soliciting DBEs as Potential Sources. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

Name of DBEs Solicited	Date of Initial Solicitation	Follow Up Methods and Dates

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

11. DBE COMPLIANCE FORMS – GOOD FAITH EFFORTS VERIFICATION (Continued)

3. Division of Requirements. The items of work which the PDBE made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the PDBE's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs Item? (Yes/No)	Breakdown of Items	Amount (\$)	Percentage of Total Bid (%)

4. Delivery Schedules. Efforts made to establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises:

5. Services of Other Agencies. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms, such as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

Name of Agency/Organization	Method/Date of Contact	Results

Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

6. PDBs must also complete forms 4500-3 and Form 4500-4 (following pages) and submit with your bid. Form 4500-3 must be submitted for each identified DBE subcontractor. **Failure to include completed forms 4500-3 and Form 4500-4 for each identified DBE subcontractor with a Proposal will render the Proposal nonresponsive.**

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

12. DBE COMPLIANCE FORMS – FORM 4500-3



**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form**

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. A Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name		Project Name	
Bid / Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity	

Contract Item Number	Description of Work Submitted from the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: <input type="checkbox"/> DOT <input type="checkbox"/> SBA Other: _____		Meets/exceeds EPA certification standards? YES NO Unknown

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.2015 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.
² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an award of financial assistance.

FORM 4500-3 (DBE Subcontractor Performance Form)

Revised 12/2016

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

12. DBE COMPLIANCE FORMS – FORM 4500-3 (Continued)

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

Subcontractor Signature	Print Name
Title	Date

The public reporting and record keeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Do not send the completed form to this address.

FORM 4500-3 (DBE Subcontractor Performance Form)

Revised 12/2016

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

13. DBE COMPLIANCE FORMS – FORM 4500-4



**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form**

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE¹ subcontractor's² and the estimated dollar amount of each subcontract. A Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid / Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity			

I have identified potential DBE certified subcontractors. YES NO			
If yes, please complete the table below. If no, please explain:			
Subcontractor Name/ Company Name	Company Address / Phone / Email	Estimated Dollar Amount	Currently DBE Certified?

--Continue on back if needed--

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.2015 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.
² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an award of financial assistance.

FORM 4500-4 (DBE Subcontractor Utilization Form)

Revised 12/2016

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

13. DBE COMPLIANCE FORMS – FORM 4500-4 (Continued)

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

The public reporting and record keeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Do not send the completed form to this address.

FORM 4500-4 (DBE Subcontractor Utilization Form)

Revised 12/2016

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

14. STAGE I DESIGN-BUILD SERVICES FEE SUMMARY FORM

<u>Task</u>	<u>Labor Costs (\$)</u>	<u>Sub- consultant Costs (\$)</u>	<u>Reimbursable Expenses (\$)</u>	<u>Total Cost (\$)</u>
Task 1: District Management Support				\$
Task 2: Investigative Support Services				\$
Task 3: Design Criteria Technical Memorandum (TM)				\$
Task 4: Hydraulic Modeling and GIS Services				\$
Task 5: Preliminary Design Report (PDR)				\$
Task 6: 50% Design				\$
Task 7: GMP Proposal				\$
Task 8: 90% Design				\$
Task 9: 100% Design				\$
Task 10: Permitting and Coordination				\$
TOTAL FEE (NOT TO EXCEED)				\$

1. Respondent may submit its own version of this form, if necessary, but the recreated form shall consist of identical contents.
2. Respondent shall provide a separate cost breakdown of each sub-task for completing the Scope of Stage I Design-Build Services (see Attachment D, Minimum Scope of Services). The breakdown shall include the task description, labor hours and hourly rates for each labor category, sub-consultant/sub-contractor fees, reimbursable expenses, and total fee.
3. Respondent shall complete the attached Hourly Rate Schedule Form for all PDBT personnel anticipated to participate in the Project during Stage I.

HI-DESERT WATER DISTRICT (YUCCA VALLEY, CA)

15. STAGE I DESIGN-BUILD SERVICES HOURLY RATE SCHEDULE FORM

<u>PDBT Personnel</u>	<u>Hourly Rate</u>
Project Executive	\$
Project Manager	\$
Design Manager	\$
Project Engineer	\$
Traffic Control Engineer	\$
Design QA/QC Manager	\$
Construction Manager	\$
Superintendent	\$
Cost Estimator	\$
Procurement Lead	\$
(INSERT AS NEEDED)	\$

1. PDBT personnel shall include all PDBT Designer and PDBT Contractor personnel that will be involved in completing the Scope of Stage I Design-Build Services (see Attachment D, Minimum Scope of Services). The Respondent may adjust PDBT Personnel titles/categories.
2. Hourly rate equals the rate that PDBT will be allowed to bill the Owner and shall include the raw labor rate and all overhead and profit multipliers.
3. Respondent may submit its own version of this form, if necessary, but the recreated form shall consist of identical contents.

16. STAGE II DESIGN-BUILD SERVICES MARKUP FEES FORM

The Respondent shall list the following markup fees that will be applied for Stage II Design-Build Services costs. The District reserves the right to negotiate these fees which will be included as part of the Progressive Design-Build Services Contract. The selected PDBE will not be permitted to apply any of these markup fees to the PDBE's General Conditions or District Contingency as described in the Contract.

1. PDBE's Fees for Overhead and Profit:

_____ percent (_____%) of the Construction Cost self-performed by the PDBE

_____ percent (_____%) of the Construction Cost subcontracted by the PDBE

Note: These fees shall be used to compensate the PDBE for all office overhead, profit, and other costs and expenses not specifically included in the Construction Cost.

2. PDBE's Fee for Performance and Payment Bonds:

_____ percent (_____%) of the Construction Cost.

3. PDBE's Fee for Insurance Costs:

_____ percent (_____%) of the Construction Cost.

ATTACHMENT D
MINIMUM SCOPE OF SERVICES

ATTACHMENT D – MINIMUM SCOPE OF SERVICES

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SECTION 1 - GENERAL

- A. This document provides the minimum expected scope of services for the Progressive Design Build Team (PDBT) to perform Stage I design-build services in accordance with the Request for Proposals (RFP) for the Phase II Wastewater Collection System Project (Project). This scope is provided for the PDBT to develop a fee proposal for the DISTRICT's Consideration.
- B. Multiple construction packages may be necessary to meet the project schedule. If the PDBT determines that multiple construction packages are necessary, the PDBT may need to provide separate design submittals at designated design levels for each construction package. The PDBT shall include all necessary costs associated with multiple construction packages in the PDBT's fee proposal for Stage I services. All Stage I services will be performed under the Progressive Design-Build Services Contract (PDB Contract) at no additional cost to the DISTRICT regardless of the number of construction packages.
- C. All deliverables shall be an electronic file in PDF format unless noted otherwise.
- D. This minimum scope of services shall be included as part of the PDBT's Proposal with a mark-up of any proposed changes.

SECTION 2 - DISTRICT MANAGEMENT SUPPORT

- A. The PDBT shall provide management and technical support to the DISTRICT in the execution of the design of the Project. The PDBT shall make available its Executive, Project Manager, Design Manager, Construction Manager, and technical design leads for regular coordination with the DISTRICT during the design. The PDBT shall prepare a Project Execution Plan that is specific to the Project. The Project Execution Plan must follow industry best practices and must include a detailed Quality Assurance/Quality Control (QA/QC) plan. It is the District's expectation that the PDBT will lead and manage the predesign activities, design process, permitting, and required coordination for prompt execution of the Stage 1 scope of services.
- B. The PDBT must attend meetings as requested by the DISTRICT and coordinate the preparation of supporting materials as required. Coordination meetings and deliverables are identified in the subsequent subtasks and elsewhere throughout this scope of services. Some of the support and coordination required include, but is not limited to:
 - 1. Value engineering support
 - 2. Preparation of request for clarifications and deviations
 - 3. Review of Deviation/Inconsistency Reports
 - 4. Public information support
 - 5. Operations and maintenance review
 - 6. Preparation of construction scheduling and cost trending
 - 7. Constructability reviews
 - 8. Construction cost reporting
 - 9. Permits and right-of-way's,
 - 10. Operations and Maintenance manual
 - 11. Coordinate with related projects
 - 12. Long lead time equipment and materials, and
 - 13. Environmental issues and constraints.

2.1 PROGRESS MEETINGS AND REPORT

- A. PDBT shall lead, prepare the meeting agenda, attend meetings, and prepare meeting minutes for project progress meetings with DISTRICT personnel. Progress meetings shall be held bi-weekly and shall alternate between in-person meetings at the DISTRICT's office and videoconference meetings online. Prepare and submit five (5) days in advance of the meeting, technical memorandum on key issues (and monthly status report) to be addressed at the meetings. Provide technical representation at the meetings to respond to DISTRICT questions on the key issues. Provide meeting minutes to the DISTRICT within five (5) working days of the meeting. All meetings must be attended by the PDBT's Project Manager.
- B. Progress meeting topics will include as a minimum:
- Review previous meeting minutes
 - Progress, Budget, Schedule, and Cost monitoring
 - Deliverable status
 - Submitted and Scheduled deliverables
 - Project issues and recommended resolutions
 - Deviation request status
 - Coordination with related Projects

PDBT shall include other discussion items as required to address key issues and permitting requirements, coordinate with District or other stakeholders, and adhere to funding requirements, to maintain the project on schedule.

2.2 PROJECT STATUS REPORTS

- A. PDBT shall prepare and submit a monthly Project Status Report, per the Project schedule, that will list all deliverables, identify key issues and define current progress and scheduled completion dates. The Report will include itemized information at the task level within each project phase, as an Appendix to the Project Status Report. Each monthly Project Status Report includes:
1. Services Performed During the Invoice Period
 2. Services to be Performed Next Period
 3. Out of Scope Work Requested
 4. Schedule Milestone Summary
 5. Schedule Issues
 6. Financial Summary
 7. Budget Issues
 8. Action Items
 9. Decisions Log Updates
 10. Risk Register Updates

2.2.1 DECISIONS LOG UPDATES

- A. PDBT shall develop and maintain a detailed log of key decisions made by the PDBT and the DISTRICT throughout the duration of the Project. The decisions log shall be updated and included with each Project Status Report and each designated design submittal.

2.2.2 RISK REGISTER UPDATES

- A. PDBT shall provide monthly Risk Register Updates to the DISTRICT's Project Manager at progress meetings. PDBT shall identify and convey new risks to the Project Manager during progress meetings and shall submit risk updates via the Risk Register.

DELIVERABLES

1. Meeting Agendas (10 hard copies each and an electronic file in pdf format)
2. Project Status Reports (10 hard copies each and an electronic file in pdf format)
3. Decisions Log Updates (10 hard copies each and an electronic file in MS Excel format)
4. Risk Register Updates (10 hard copies each and an electronic file in MS Excel format)
5. Final Meeting Minutes

2.3 KICKOFF MEETING

- A. The PDBT shall conduct a project kickoff meeting and shall commit the following personnel to attend:
 1. An Officer of the PDBT's firm
 2. The Project Manager of the PDBT's firm
 3. The Major Task Leaders, and
 4. A Representative from each Major Sub
- B. The kickoff meeting shall cover topics including, but not limited to:
 1. Project scope, schedule, roles and responsibilities, document management system, submittal formats, submittal review protocol, funding requirements, invoicing, permitting, public outreach, and environmental compliance.

DELIVERABLES

1. Kickoff Meeting Agenda (10 hard copies each and an electronic file in pdf format)
2. Draft Meeting Minutes submitted to Project Manager within five (5) days of meeting
3. Final Meeting Minutes within five (5) days of receiving DISTRICT comments

2.4 SCHEDULING/ENGINEERING AND COST MONITORING

- A. PDBT shall prepare and maintain a project specific schedule as a tool in managing and monitoring project progress. The schedule shall include project tasks, task interrelationships, milestones, and intermediate and final project deliverables. The PDBT shall coordinate the development of the schedule with the DISTRICT to have the schedule be compatible with the DISTRICT and other projects. The schedule shall be updated monthly and be provided as an appendix to the monthly progress report.

DELIVERABLES

1. Schedule as a pdf export and native electronic format compatible with MS Project.

2.5 RECORDS MANAGEMENT

- A. The PDBT shall utilize the Document Control System selected by the DISTRICT. ***PDBT shall make all documents available for DISTRICT review/reference in digital format with native files. The PDBT is required to store ALL deliverables electronically on the DISTRICT's Document Control System.***

2.6 COORDINATION WITH OTHER DISTRICT PROJECTS

- A. This project may require coordination and design interface with other DISTRICT projects that interface with the Project's pipeline alignments. Required coordination with other District projects shall be identified in the Preliminary Design Report.

2.7 COORDINATION WITH OTHER AGENCIES

- A. The DISTRICT has developed a list of potential permits in Section 12 of this document. PDBT is responsible for determining the level of effort to coordinate with other agencies and procure all necessary permits to complete the Project. Required coordination with other agencies shall be further identified in the Preliminary Design Report.

2.8 DISTRICT REVIEW AND DESIGN REVIEW MEETING

- A. Design products of the Deliverable shall be submitted to the DISTRICT for review. The DISTRICT will collect review comments, will resolve conflicts, and will provide review comments within 30 calendar days of receipt of PDBT submittal. Corrections noted that are within scope of services shall be made by the PDBT at no additional cost to the DISTRICT. PDBT and DISTRICT will resolve review comments via a Design Review Meeting and the PDBT shall incorporate into design all accepted review comments. A final table of review comments, PDBT responses, and resolutions shall be prepared by the PDBT and submitted to the DISTRICT within ten (10) days of Design Review Meeting.
- B. Design Review Meetings between the DISTRICT and the PDBT shall be conducted for the following submittals: Design Criteria Technical Memorandum (TM), Preliminary Design Report (PDR), 50% Design, and 90% Design to review the comments and confirm design development. Design Review Meetings shall be held in the DISTRICT'S office and shall be scheduled on the same day as progress meetings.

DELIVERABLES

- 1. Respond to DISTRICT review comments in the DISTRICT provided tabular format prior to Design Review Meeting (an electronic file in MS Excel format).

2.9 RISK MANAGEMENT

- A. PDBT shall attend three (3) Risk Management Workshops at Kickoff, PDR, and 50% Design. Workshops shall be held in the DISTRICT'S office and shall be scheduled on the same day as progress meetings.
- B. PDBT'S Project Manager is required to participate in the Risk Management Workshop. PDBT will work with DISTRICT to identify other PDBT staff that should attend the workshop. PDBT is responsible for leading the workshop, creating the agenda, and taking meeting minutes.

2.10 STAGE II COST ESTIMATES

- A. The PDBT shall progressively develop and provide construction cost estimates for Stage II design-build services in conjunction with the design, allowing the DISTRICT to modify scope, priorities, and requirements, if necessary, based on the overall budget. The PDBT shall develop its estimates in a transparent and open-book manner concurrent with design development to create an acceptable cost (including contingency) to which the PDBT's proposed fees and other fixed allocations or allowances will be added to ultimately establish a mutually agreed-upon Guaranteed Maximum

Price (GMP) for Stage II services after the 50% Design Submittal, as described in Section 9. At a minimum, cost estimates shall be provided with the following submittals:

1. Preliminary Design Report (PDR)
 2. 50% Design
- B. Each cost estimate shall include a Cost Breakdown Structure (CBS) Register with detailed backup data. At a minimum, the CBS Register (table) shall include the following data for each item of work (CBS position code): Item Description, Quantity, Unit of Measure, Unit Cost, and Total Cost. The backup data for each CBS position code shall include detailed estimates for labor, materials, profit, overhead, fees, and any other costs. Written quotes for major cost items shall also be included.
- C. Each estimate shall be accompanied with a narrative that provides a summary and describes the basis for the cost estimate.
- D. PDBT shall identify any variance in costs along with associated documentation to justify the incorporated changes from previous cost estimates.

DELIVERABLES

1. Cost Estimates (electronic files in pdf and MS Excel formats)

SECTION 3 - ENVIRONMENTAL SERVICES

- A. The DISTRICT adopted a Mitigated Negative Declaration/Initial Study (MND) in June 2020 for this Project. The MND and associated documents can be viewed online at <https://www.hdwd.com/324/Environmental-Review>.
- B. The MND includes a Mitigation Monitoring and Reporting Program (MMRP) that shall be adhered to by the PDBT. The PDBT shall incorporate all required mitigation measures into the design documents and will be responsible for implementing all mitigation measures including, but not limited to, additional biological surveys, construction monitoring (biological, archeological, paleontological, cultural), hazardous materials management, traffic control, wildfire prevention, and development of specific plans and reports. Cost for incorporating environmental requirements into the design shall be included in the design tasks. Costs for implementation of the mitigation measures during Stage II of the Project shall be included in the GMP, described in Section 9. All environmental work during construction shall be performed by a qualified environmental firm(s) selected by the PDBT and approved by the District.

SECTION 4 - INVESTIGATIVE SUPPORT SERVICES

- A. The task shall include Investigative Support Services in support of the design of the Project. Investigative Support Services shall include, at a minimum:
1. Geotechnical Investigation
 2. Survey
 3. Utility Data Collection, Research, and Mapping
 4. Utility Potholing
 5. Easement Assistance

- B. PDBT is responsible for the completion of all activities outlined below prior to completion of the 50% Design. PDBT shall determine the appropriate schedule of the Investigate Support Services but shall receive authorization from the DISTRICT prior to commencement with work. All work shall be in accordance with the Project’s Mitigated Negative Declaration/Initial Study (MND).

4.1 GEOTECHNICAL INVESTIGATION

- A. Perform geotechnical and environmental investigations and prepare reports for the Project. Geotechnical services shall include soil borings necessary to observe, test, classify soils, presence of rock, and monitor groundwater. The number, spacing, and depth of the soil borings shall be determined by the PDBT’s qualified geotechnical engineer or engineering geologist, and shall consider the various construction methods that may be utilized (open cut, horizontal directional drill, micro- tunnel, auger bore, tunnel boring machine (TBM) etc.). For work within Caltrans right-of-way (ROW) the minimum requirements as stated in Caltrans guidelines shall apply.
- B. Prior to any soil boring or ground disturbance, appropriate environmental clearance shall be obtained by the PDBT. PDBT shall determine if borings will be within environmentally sensitive areas and the PDBT shall take appropriate measures. Avoid placement of borings within environmentally sensitive areas if feasible.
- C. Prior to any soil boring or ground disturbance, all necessary permits shall be obtained by the PDBT. At a minimum, PDBT shall submit for and receive an encroachment permit for work within Town of Yucca Valley right-of-way (See Section 12) with traffic control plans approved by the Town. PDBT shall also submit for and receive boring permits from the appropriate regulatory agencies.
- D. The PDBT shall notify DigAlert / Underground Service Alert (USA) and request utility mark-outs prior to advancing borings. The PDBT will perform borings in the public ROW or other DISTRICT owned land.
- E. PDBT shall dispose of non-hazardous soil and water samples in accordance with existing regulations including those of the Regional Water Quality Control Board and the County Department of Environmental Health Services, and the DISTRICT should the Contractor need to discharge dewatering into the DISTRICT’s wastewater collection system. Groundwater and soil testing may be required to properly analyze for potential contaminants/constituents. PDBT shall determine the type and extent of sampling required for the Project.
- F. The PDBT shall prepare a Geotechnical Baseline Report for any tunneled or trenchless pipeline reaches in accordance with American Society Civil Engineers guidelines (“Geotechnical Baseline Reports for Construction”, ASCE, 2007).
- G. A geological/geotechnical map shall be prepared. It shall include all borings and geologic conditions in accordance with the Guidelines. The PDBT shall provide geologic maps of the selected alignments, showing current investigation findings as well as information from past investigations. A geologic cross section should also be provided along the alignment. The DISTRICT will provide past geotechnical investigations prior to PDBT’s investigation.

DELIVERABLES

1. Draft Geotechnical Investigation Report
2. Final Geotechnical Investigation Report
3. Draft and Final Geotechnical Baseline Report

4.2 SURVEY

- A. PDBT shall conduct aerial photogrammetric topographic survey and supplemental field (ground) survey for the entire Project Area. Survey shall include, but not be limited to: property lines, right of way, spot elevations, monuments, grade breaks, roadways, curb, gutter, above/at grade utilities, underground utilities (manhole dips and potholes), utility mark-out, fences, and trees. The basis of control shall be the California State Plane Coordinate system of NAD 83. Elevations shall be based on NAVD 88 vertical datum. The survey shall be delivered at 40 scale showing one-foot contours and prominent surface features over the proposed area to U.S. mapping standards. Digital high-resolution color orthoimage(s) shall be provided for the entire Project Area. At a minimum, scribed (mapped) topography shall cover the right-of-way and the entirety of each property along the proposed pipeline alignments.
- B. PDBT shall research and obtain record mapping information and shall prepare right-of-way mapping for the entire Project Area. Research and perform field work to locate and document all existing survey monuments for mapping. Identify monuments that may be affected by construction activities.
- C. Prepare AutoCAD base maps showing topographic survey and right-of-way information. The base mapping shall be done at 40 scale.

DELIVERABLES

- 1. Existing Topographic Survey Base Map (AutoCAD dwg format)
- 2. Existing Right-of-Way Base Map (AutoCAD dwg format)
- 3. Field Survey Points (AutoCAD dwg and CSV formats)

4.3 UTILITY DATA COLLECTION, RESEARCH, AND MAPPING

- A. PDBT shall collect, catalog, and review existing utility information relevant to the Project including, but not limited to, DISTRICT and Town of Yucca Valley record drawings, the DISTRICT's GIS data, and record drawings or maps from other utility owners. PDBT shall obtain record drawings or maps for all existing utilities in the Project area and shall field verify (survey) their locations from visible above ground features or by potholing.
- B. PDBT shall utilize DigAlert's utility lookup services to determine which utilities/agencies have facilities located within the Project area. The owners of facilities determined to be within the project area shall be contacted by the PDBT to obtain utility record drawings or maps. PDBT shall prepare exhibit map(s) detailing the requested Project area to be sent to utility owners.
- C. All existing utilities in the Project Area shall be mapped in an AutoCAD base map that shall be updated based on survey and potholing information. The base mapping shall be done at 40 scale.
- D. The PDBT is responsible for coordinating all utility relocations. PDBT shall include costs for relocated utilities in their cost estimates and the GMP for Stage II services.

DELIVERABLES

- 1. Existing Utilities Base Map (AutoCAD dwg format)

4.4 UTILITY POTHOLING

- A. Upon review, analysis, and mapping of existing utilities, PDBT shall develop a list and maps of existing utilities that need to be potholed for the design. It shall be the responsibility of the PDBT to determine which utilities need to be potholed and the schedule for potholing work.
- B. PDBT shall prepare a potholing plan with maps showing the pothole ID, owner, material, size, and location of utilities to be potholed. PDBT shall show the horizontal locations, of overhead and buried utilities, of all known public and private utilities.
- C. Prior to any potholing or ground disturbance, appropriate environmental clearance shall be obtained by the PDBT. PDBT shall determine if potholes will be within environmentally sensitive areas and the PDBT shall take appropriate measures.
- D. Prior to any potholing or ground disturbance, all necessary permits shall be obtained by the PDBT. At a minimum, PDBT shall submit for and receive an encroachment permit for work within Town of Yucca Valley right-of-way (See Section 12) with traffic control plans approved by the Town.
- E. The PDBT shall perform potholes (borings) in the public ROW or other DISTRICT owned land. The PDBT shall notify DigAlert / Underground Service Alert (USA) and request utility mark-outs prior to any excavation.
- F. Utilities located by potholing shall be surveyed by the PDBT and the survey data shall be used to update the existing utilities base map described in Section 4.3.
- G. Pothole results shall be submitted to the DISTRICT as a list and maps and at a minimum identify: pothole ID, utility type, owner, size, depth, material, location, and condition.

DELIVERABLES

- 1. Potholing Plan
- 2. Potholing Results

4.5 EASEMENT ASSISTANCE

- A. As part of the 50% design submittal, the PDBT shall determine if any utility easements on private property will be required for the Project and shall provide the DISTRICT with a map showing the location of proposed easements and the assessor's parcel number (APN) of each property where easements will be required. The DISTRICT will be responsible for easement procurement and negotiations with property owners.
- B. Upon direction from the DISTRICT, the PDBT shall prepare easement documents (plats and legal descriptions) for any utility easements required for the Project. PDBT shall obtain and utilize title reports from a title company for properties where easements will be required. Easement documents shall be prepared by a California licensed surveyor. The PDBT shall estimate and list the number of easement documents that will be required based on the PDBT's conceptual version of the redefined Phase II boundary and collection system include in the PDBT's proposal.

DELIVERABLES

- 1. Map showing the location of proposed easements
- 2. Plats and Legal Descriptions

SECTION 5 - DESIGN CRITERIA TECHNICAL MEMORANDUM (TM)

- A. The task shall include development of a Technical Memorandum (TM) for all Design Criteria and Design Standards that will be used for the Project. At a minimum, the TM shall:
 - 1. Review the design criteria and design standards that were used for the design of the existing (Phase I) wastewater collection system. Identify any recommended changes for the Project.
 - 2. Review the design criteria, data, and approach that was used for hydraulic modeling of the existing (Phase I) system. Identify any recommended modeling changes for the Project.
 - 3. Discuss any other design criteria to be used for the Project.
- B. PDBT shall submit a Draft TM for DISTRICT review. A meeting between the PDBT and DISTRICT shall occur to review comments on the Draft TM. PDBT shall submit a final TM with DISTRICT comments addressed. The final TM shall be included as an appendix in the PDR described in Section 7.

DELIVERABLES

- 1. Draft Design Criteria TM
- 2. Final Design Criteria TM
- 3. Review Comment Log with Responses to Comments on the Draft TM (an electronic file in MS Excel format)

SECTION 6 - HYDRAULIC MODELING AND GIS SERVICES

- A. PDBT shall develop and maintain a hydraulic sewer model of the existing wastewater collection system and the proposed wastewater collection system for the Project. The sewer modeling software used to create and operate the model shall be either Autodesk InfoWorks ICM or Bentley OpenFlows SewerGEMS. The PDBT's proposal shall list which modeling software will be used. A hydraulic model of the existing wastewater collection system is not available.
- B. The model shall include all existing and proposed gravity sewer mains, manholes, lift stations, and force mains. Sewer laterals do not need to be included in the model. The model shall be prepared with the DISTRICT's latest GIS data and record drawings for the existing (Phase I) wastewater collection system. The PDBT shall verify that the GIS data and record drawings are consistent and shall rectify any discrepancies. Appropriate naming conventions used for Phase I facilities shall be followed for Phase II facilities.
- C. The model shall be developed based on the design criteria, data, and approach included in the Design Criteria TM, described in Section 5.
- D. The PDBT shall calibrate the model based on available flow meter data from the DISTRICT, from the DISTRICT's Water Reclamation Facility (wastewater treatment plant) and sewer lift stations (Paxton, Kickapoo, and Barron).
- E. The PDBT shall update the model as the design progresses to verify design criteria is met for the proposed pipelines. Following construction of the Project, the PDBT shall update the model based on record drawings. Updates shall include, but not be limited to the location, size, and elevations for pipelines and manholes.

- F. Following construction of the Project, the PDBT shall update the DISTRICT's GIS shapefiles (gravity sewer mains, manholes, lift stations, force mains, laterals, cleanouts, and service points) to include the Phase II Project collection system based on record drawings. All existing GIS attributes (fields) used for Phase I facilities shall be populated for Phase II facilities. Appropriate naming conventions used for Phase I facilities shall be followed for Phase II facilities.

DELIVERABLES

1. Hydraulic Model (Updated based on Record Drawings)
2. GIS shapefiles (Updated based on Record Drawings)

SECTION 7 - PRELIMINARY DESIGN REPORT (PDR)

- A. The task shall include development of a comprehensive Preliminary Design Report (PDR) for the Project. The PDR content shall include, at a minimum:
1. Project Background
 2. Proposed Phase II (Project) Service Area
 - a. Phase II Boundary Development
 - b. Phase II Sewer Basins / Sub-basins
 - c. Phase II Sewer Connections (parcel data, equivalent residential connections, deferred parcels)
 - d. Land Use
 - e. Existing Population and Population Growth
 - f. Water Consumption
 - g. Future System Phasing (Phase III)
 3. Hydraulic Analysis
 - a. Background
 - b. Methodology
 - c. Peaking Factors / Diurnal Curves
 - d. Wastewater Flow Projections
 - e. Hydraulic Design Criteria
 - f. Hydraulic Model
 4. Gravity Sewer Pipeline Design
 - a. Design Criteria and Standards
 - b. Evaluation of Alignments
 - c. Alternative Alignments
 - d. Proposed Construction Methods
 - e. Pavement Restoration Requirements
 - f. Appurtenances (manholes, laterals, cleanouts, etc.)
 - g. Easement Requirements
 - h. Wash and Drainage Crossings
 - i. Scour Analysis (if required)
 - j. Private Laterals
 5. Sewer Lift Station Design (if required)
 - a. Design Criteria and Standards
 - b. Locations
 - c. Design Flows

- d. Preliminary Layouts
 - e. Equipment
 - f. Electrical Requirements
 - g. Instrumentation and Controls Requirements
 - h. Property Acquisition / Easement requirements
6. Force Main Pipeline Design (if required)
 - a. Similar Content to Item 4 (Gravity Sewer Pipeline Design)
 - b. Appurtenances (Valves, Air Release/Vacuum Valves, Blowoffs)
 - c. Surge Protection
 - d. Thrust Restraint
 7. Existing Utilities
 8. Geotechnical Considerations
 9. Environmental
 - a. Impacts
 - b. Documentation
 - c. Mitigation Measures
 - d. Comprehensive Response to Climate Change (per State guidelines)
 10. Agency Coordination and Permits
 11. State Funding – Special Design and Construction Requirements
 12. Construction Packaging and Sequencing
 13. Project Cost
 14. Project Schedule
 15. Risk Analysis
 16. Preliminary Design Drawings
- B. The PDBT, in collaboration with the District, will be responsible for delineating a new boundary for Phase II to provide a project that best meets the District's objectives and budget as described in the RFP. The PDBT shall progress the PDBT's conceptual version of the redefined Phase II boundary and collection system, included in the PDBT's proposal, for the PDR.
- C. PDBT shall develop a cost estimate for Stage II services for the PDR that shall be in conformance with Section 2.10 of this document.
- D. PDBT shall submit a Draft PDR for DISTRICT review. A meeting between the PDBT and DISTRICT shall occur to review comments on the Draft PDR. PDBT shall submit a Final PDR with DISTRICT comments addressed. PDBT shall receive authorization from DISTRICT prior to proceeding to 50% Design.

DELIVERABLES

1. Draft PDR
2. Final PDR
3. Review Comment Log with Responses to Comments on the Draft PDR (an electronic file in MS Excel format)
4. Cost Estimate for Stage II Design-Build Services
5. Updated Decision Log

SECTION 8 - FIFTY PERCENT (50%) DESIGN

- A. The task shall include advancement of the preliminary design presented in the Preliminary Design Report (PDR) for the Project. Included in the 50% Design shall be an update to any design issues or omissions from the PDR. The PDBT shall use the PDR to the fullest extent possible in preparation of the 50% Design. It is recognized that clarifications, substitution requests and/or other issues may be raised by the PDBT while developing the 50% Design. In this event, the PDBT shall submit to the DISTRICT for approval with proper justification. Resolution of issues raised and their incorporation in the 50% Design will be done at no additional cost to the DISTRICT. All key design decisions shall be documented in the Decisions Log, described in Section 2.2.1.
- B. Project drawings shall be developed on 22" x 34" sheets using the District's standard title block. Pipeline plan and profile sheets shall have a 1" = 40' horizontal scale and a 1" = 8' vertical scale.
- C. At a minimum, 50% Design Drawings shall include the following sheets for the Project:
 - 1. Title Sheet
 - 2. Sheet Index
 - 3. General Notes
 - 4. Legend and Abbreviations
 - 5. Key Maps of Sheets
 - 6. Pipeline Plan and Profile Sheets
 - 7. Pipeline Detail Sheets (Trench, Manholes, Laterals, Cleanouts)
 - 8. Pavement Plan Sheets
 - 9. Pavement Detail Sheets
 - 10. Lift Station Civil, Mechanical, Structural, Electrical, and Instrumentation Sheets (If required)
- D. At a minimum, 50% pipeline plan and profile sheets shall include the following:
 - 1. Plan with existing base maps (topographic survey, right-of-way, existing utilities), a color orthophoto, labels for streets and properties (address and APN), north arrow, scale bar, proposed pipeline alignment with stationing, proposed manholes with labels (ID and station), and proposed utility easements.
 - 2. Profile of pipeline, pipeline labels (size, material, slope, and length), manhole labels (ID, station, rim elevation, and invert elevations), vertical deflection/fitting labels for force mains, existing ground surface profile, existing utility crossings with labels (size and service), and minimum utility clearances.
 - 3. All pipeline appurtenances
 - 4. Line information (coordinates, curve data)
 - 5. Construction callouts and notes
 - 6. Match lines
 - 7. Key dimensions
- E. The 50% design submittal shall include both 50% drawings and technical specifications.
- F. PDBT shall develop a cost estimate for Stage II services for the 50% Design that shall be in conformance with Section 2.10 of this document.
- G. **50% Design Narrative.** PDBT shall prepare and submit a narrative detailing all significant changes, deviations, and impacts to Project costs and schedule from the PDR.
- H. QA/QC Documentation. For all design deliverables, the PDBT shall submit documentation showing compliance with the PDBT's QA/QC Plan. At a minimum, provide a review/check stamp with the initials of the PDBT's reviewer(s) and date(s) on the front page of each design deliverable.

- I. The DISTRICT will provide the PDBT with one (1) set of consolidated review comments on the 50% Design submittal. PDBT shall provide comment responses to the DISTRICT's comments prior to the comment resolution meeting. A Comment Resolution Meeting between the DISTRICT and the PDBT shall be conducted to review the comments and confirm design development, in conformance with Section 2.8.
- J. The DISTRICT must provide written authorization to the PDBT before the PDBT can proceed with 90% Design. For the DISTRICT to consider a design submittal complete, the submittal must meet all the requirements outlined in this scope of services. In the essence of time, PDBT can request approval from the DISTRICT to proceed with the next submittal while the DISTRICT reviews the current submittal, at their own risk.
- K. Deliverables for each design level (50%, 90%, and 100%) shall be submitted concurrently as a complete submittal package.

DELIVERABLES

- 1. 50% Design Narrative
- 2. 50% Design Drawings
- 3. 50% Specifications
- 4. Cost Estimate for Stage II Design-Build Services
- 5. Map showing the location of all proposed easements per Section 4.5
- 6. QA/QC Documentation
- 7. Updated Decision Log

SECTION 9 - GUARANTEED MAXIMUM PRICE (GMP) PROPOSAL

- A. Upon direction from the DISTRICT and following the comment resolution meeting between the District and the PDBT for the 50% Design submittal, the PDBT shall submit a Guaranteed Maximum Price (GMP) proposal for Stage II services. The GMP shall be developed in a transparent and open-book manner to create an acceptable cost (including contingency) to which the PDBT's proposed fees and other fixed allocations or allowances will be added to establish a mutually agreed-upon price. The GMP shall build upon the previously developed cost estimates described in Section 2.10.
- B. The GMP proposal shall include a Cost Breakdown Structure (CBS) Register with detailed backup data. At a minimum, the CBS Register (table) shall include the following data for each item of work (CBS position code): Item Description, Quantity, Unit of Measure, Unit Cost, and Total Cost. The backup data for each CBS position code shall include detailed estimates for labor, materials, profit, overhead, fees, and any other costs. Written quotes for major cost items shall also be included.
- C. The DISTRICT will review the GMP proposal. Following the DISTRICT's review, a meeting will be held in the DISTRICT's office with the DISTRICT and the PDBT to negotiate the Stage II scope of services and GMP. The DISTRICT reserves the right to not enter into a contract amendment for Stage II services at the DISTRICT's sole discretion. If the DISTRICT chooses to exercise said right, the DISTRICT will implement a contractual "off-ramp" approach, which may release the PDBT from further engagement or, at the DISTRICT'S option, may require the PDBT to complete the design under Stage I services of the PDB Contract. In the event the DISTRICT initiates the contractual "off-ramp" approach, the DISTRICT will reserve the right to cancel or re-

procure the Project using a similar project delivery method or procurement methodologies, at its sole discretion.

- D. The PDBT shall comply with the Disadvantaged Business Enterprise (DBE) requirements, shall complete Good Faith Efforts (GFE), and shall provide evidence of DBE compliance for applicable Stage II services prior to performance of said services as required by the PDB Contract. As part of Stage I Services, the PDBT shall develop and submit a plan documenting how the PDBT intends to comply with DBE requirements.

DELIVERABLES

- 1. GMP Proposal (electronic files in pdf and MS Excel formats)
- 2. DBE Compliance Plan

SECTION 10 - NINETY PERCENT (90%) DESIGN DEVELOPMENT

- A. Upon direction from the DISTRICT, the PDBT shall advance the 50% submittal to 90% level. PDBT shall incorporate agreed upon DISTRICT comments from the 50% submittal.
- B. The 90% level of final design shall be a complete set of construction drawings and specifications prepared by the PDBT, including traffic control plans (per Town of Yucca Valley requirements).
- C. **90% Design Narrative.** PDBT shall prepare and submit a narrative detailing all significant changes, deviations, and impacts to Project costs and schedule from the 50% design.
- D. The DISTRICT will provide the PDBT with one (1) set of consolidated review comments on the 90% Design submittal. PDBT shall provide comment responses to the DISTRICT's comments prior to the comment resolution meeting. A Comment Resolution Meeting between the DISTRICT and the PDBT shall be conducted to review the comments and confirm final design development, in conformance with Section 2.8.

DELIVERABLES

- 1. 90% Design Narrative
- 2. 90% Design Drawings
- 3. 90% Specifications
- 4. Review Comment Log with Responses to Comments on the 50% design submittal (an electronic file in MS Excel format)
- 5. QA/QC Documentation
- 6. Updated Decision Log

SECTION 11 - ONE HUNDRED PERCENT (100%) DESIGN

- A. Perform the design to advance the 90% submittal to 100% (final) completion by incorporating agreed upon DISTRICT review comments on the 90% submittal. All drawings and reports shall be stamped and signed by a Professional Engineer licensed in the State of California.
- B. Compile final project calculations and computations into a design package. All calculations shall be stamped and signed by the appropriate, responsible, licensed engineer. Calculation sheets shall indicate person responsible for the independent calculation/plan check. Only computations relating to final designed facilities are to be included in the design package.

DELIVERABLES

1. Final Design Drawings (electronic files in pdf and AutoCAD formats)
2. Final Specifications (electronic files in pdf and MS Word formats)
3. Final Design Package
4. Review Comment Log with Responses to Comments on the 90% design submittal (an electronic file in MS Excel format)
5. QA/QC Documentation.
6. Updated Decision Log

SECTION 12 - PERMITTING

- A. Subject to the permits listed herein and specified clarifications, the PDBT shall prepare the necessary regulatory agency permit applications (except as noted below), plans, reports and notifications in support of the design, construction and operation of the proposed project.

12.1 PERMIT WORK PLAN AND SCHEDULE

- A. The PDBT shall identify all existing regulatory approvals by preparing a detailed work plan and a permit work schedule. The work plan and schedule shall be submitted to the DISTRICT within 60 days of Notice to Proceed (NTP) for review and input. The DISTRICT anticipates that the agencies listed below have permitting or approval authority. The PDBT is responsible for validating and identifying any additional responsible agencies with permitting or approval authority. PDBT shall identify any additional permits and bring to the attention of the DISTRICT. PDBT shall instruct DISTRICT of any permits that require DISTRICT submittal to responsible agencies.
1. United States Army Corps of Engineer 404 Permit (Federal Clean Water Act)
 2. United States Fish and Wildlife Take Permit (Section 10 of Endangered Species Act)
 3. State of California Fish and Wildlife Take Permit (Western Joshua Tree)
 4. State Water Resources Control Board, Division of Drinking Water (Design Review)
 5. State Water Resources Control Board, 401 Permit (Federal Clean Water Act)
 6. State Water Resources Control Board, 2009-0009-DWQ Construction General Permit
 7. AB-52 Coordination
 8. Storm Water Quality Management Plan
 9. Regional Water Quality Control Board NPDES Permit
 10. Town of Yucca Valley Encroachment Permit
 11. Caltrans

DELIVERABLES

1. Permit Work Plan and Schedule

12.2 PERMIT APPLICATIONS AND TECHNICAL DOCUMENTS

- A. As specified above, prepare permit applications, as deemed complete by the regulatory agency, and identified in the PDBT's permit work plan. Prepare necessary information required by the regulatory agencies for the applications. PDBT shall submit permits and pay associated permitting fees (to be reimbursed by the DISTRICT).
- B. Provide a Stormwater Pollution Prevention Plan for each construction package.

- C. Improvements in Caltrans right-of-way shall be avoided if possible. If improvements in Caltrans right-of-way are included in the design, the PDBT shall be responsible for preparing a Caltrans permit application and construction documents in accordance with Caltrans requirements.

DELIVERABLES

- 1. Permit applications
- 2. Engineering and technical reports
- 3. Stormwater Pollution Prevention Plan (1 hard copy and one electronic file in pdf format)

12.3 COORDINATION AND AGENCY INTERACTION

- A. The PDBT shall participate with the DISTRICT, as the lead agency, in interactions with various regulatory agencies and departments as identified in the PDBT's work plan by providing the necessary technical support and information to conduct discussions or meetings with the regulatory agency.

DELIVERABLES

- 1. Meeting Agenda (10 hard copies each and an electronic file in pdf format)
- 2. Engineering or Technical Support Information (10 hard copies each and an electronic file in pdf format)
- 3. Meeting Minutes

12.4 TRAFFIC CONTROL

- A. PDBT shall secure an encroachment permit and receive authorization from the Town of Yucca Valley prior to any construction activities.

12.4.1 PRE-CONSTRUCTION ACTIVITIES

- A. Prior to any construction activities associated with Section 4: Investigative Services, the PDBT shall submit for and receive an encroachment permit with the Town of Yucca Valley. The PDBT shall have approved traffic control plans on record with the Town of Yucca Valley for each pre-construction activity within the roadway.

12.4.2 CONSTRUCTION ACTIVITIES

- A. Prior to any construction activities, the PDBT shall submit for and receive an encroachment permit with the Town of Yucca Valley. The PDBT shall have approved traffic control plans on record with the Town of Yucca Valley for each construction activity within the roadway.

ATTACHMENT E
PROGRESSIVE DESIGN-BUILD SERVICES CONTRACT (Draft)

HI-DESERT WATER DISTRICT



DRAFT

PROGRESSIVE DESIGN/BUILD CONTRACT FOR PHASE II WASTEWATER COLLECTION SYSTEM PROJECT

**HI-DESERT WATER DISTRICT
55439 29 Palms Hwy
Yucca Valley, CA 92284
(760) 365-8333
info@hdwd.com**

**PROGRESSIVE DESIGN-BUILD CONTRACT BETWEEN
HI-DESERT WATER DISTRICT AND
[***INSERT PDBE NAME***]
FOR THE PHASE II WASTEWATER COLLECTION SYSTEM PROJECT**

This Progressive Design-Build Contract (“Contract”) is made and entered into this [] day of [], 2024 (“Effective Date”) by and between the Hi-Desert Water District (hereinafter referred to as “Agency”) and [***INSERT PDBE NAME***] (hereinafter collectively referred to as “Progressive Design-Build Entity” or “PDBE”). Agency and PDBE are sometimes individually referred to as “Party” and collectively as “Parties.”

RECITALS

- A. Agency is a public agency of the State of California and is in need of turnkey design and construction for the Phase II Wastewater Collection System Project (“Project”), which will include two phases: (1) preconstruction phase services (“Preconstruction Phase” or “Preconstruction Services” or “Stage 1”); and (2) construction phase services (“Construction Phase” or “Construction Services” or “Stage 2”), each of which are more fully described in the Contract Documents (collectively, “Services” or “Work”).
- B. Agency seeks to have PDBE perform the Services and PDBE warrants and represents that it is able and qualified to perform the Services for the Project.
- C. PDBE shall first perform Preconstruction Services consistent with the requirements of the Contract Documents, during or after which PDBE shall prepare and propose to Agency a Guaranteed Maximum Price (as defined in this Contract) to construct the Project and, if accepted by Agency, the Parties shall enter into an amendment to the Contract for PDBE’s performance of Construction Services.
- D. PDBE represents that is duly licensed in the State of California and has the necessary qualifications to perform the Services.
- E. The Parties desire to enter into this Contract for the purpose of setting forth the terms and conditions upon which PDBE shall render Services to Agency.

TERMS

1. Incorporation of Contract Documents.

The above referenced recitals are true and correct and are incorporated into this Contract by this reference. This Contract includes and hereby incorporates in full by reference the following Contract Documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto [***INSERT ADDITIONAL DOCUMENTS OR REMOVE DOCUMENTS LISTED IF NOT APPLICABLE TO THIS CONTRACT; THEN REMOVE THIS***]:

- Progressive Design-Build Contract
- Attachment 1 to this Contract – Scope of Services
- Attachment 1-1 to this Contract – Proposal
- Attachment 2 to this Contract - General Conditions

- Attachment 3 to this Contract – Special Conditions
- Attachment 4 to this Contract – Performance Bond
- Attachment 5 to this Contract – Payment Bond
- Attachment 6 to this Contract – Rate Schedule
- Attachment 7 to this Contract – Workers’ Compensation Certification
- Attachment 8 to this Contract – Funding Requirements
- Request for Proposals (“RFP”) and all addenda, attachments and appendices
- Request for Qualifications (“RFQ”) and all addenda, attachments and appendices
- Agency approved Change Orders
- Completed and approved Construction Documents in accordance with the General Conditions

2. PDBE’s Services, Responsibilities and Progression of the Services.

2.1 Pre-Construction and Construction Phases. As described in greater detail herein, the Services provided by PDBE for the Project shall consist of those performed at the Pre-Construction Phase and Construction Phase (each a “Phase” or collectively the “Phases”). PDBE shall neither proceed with any work or any Phase, nor shall the PDBE be entitled to any compensation for any such work unless and until Agency issues a written Notice to Proceed for that Phase. In entering into this Contract, the Parties expressly agree that Agency is under no obligation to issue a Notice to Proceed for any specific Phase, and may or may not issue a Notice to Proceed for a specific Phase, in Agency’s sole discretion.

2.2 Performance of the Services. PDBE promises and agrees, at its own cost and expense, to furnish to Agency all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately perform the Services and complete the Project consistent with the requirements of the Contract Documents. The Services are more particularly in the Contract Documents, including, without limitation, **Attachment 1**.

2.3 Standard of Care. PDBE’s performance shall be consistent with the standards set forth in the Contract and the General Conditions. PDBE warrants to Agency that all Services shall be performed in accordance with the highest professional standards and degree of care applicable to those design professionals who specialize in designing and providing services for projects of the type, scope, quality and complexity of the Project utilizing the progressive design-build contracting mode. PDBE warrants to Agency that all labor, materials, equipment and furnishings used in, or incorporated into, the Work will be of good quality, new (unless otherwise required or permitted by the Contract Documents), and all work will be free of liens, claims and security interests of third parties; that the work will be of the highest quality and free from defects and that all work will conform with the requirements of the Contract Documents. PDBE shall supervise, inspect, and direct the Project competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Project in accordance with the Contract Documents. PDBE shall be solely responsible for the means, methods, techniques, sequences, and procedures of design and construction of the Project. PDBE shall perform, at its own cost and expense and without reimbursement from Agency, any services necessary to correct errors or omissions which are caused by the PDBE’s failure to comply with the standard of care provided for herein.

3.2 Construction Phase Compensation.

(a) Construction Phase Compensation. PDDBE expressly agrees and acknowledges that, as of the Effective Date, PDDBE is not entitled to any compensation for Construction Services, and shall only be entitled to such compensation if: (1) Agency accepts the PDDBE's GMP Proposal (as defined herein and further described in the Scope of Services in **Attachment 1**); (2) the Parties execute, and Agency's governing body approves, the GMP Amendment (as defined herein and further described in the Scope of Services in **Attachment 1**); and (3) Agency issues a Notice to Proceed for the Construction Phase.

(b) GMP for Construction Phase. PDDBE's compensation for Construction Services shall be a not-to-exceed guaranteed maximum price as further described, and subject to, the limitations set forth below and as indicated in the Contract Documents ("Guaranteed Maximum Price" or "GMP"). As of the Effective Date, the GMP has not been agreed to by the Parties. If, during or after the completion of Preconstruction Services and PDDBE's presentation of the GMP Proposal to Agency, Agency agrees to PDDBE's GMP in the GMP Proposal, the Parties shall amend this Contract and replace this Section with a not-to-exceed GMP for all PDDBE's Construction Services for the Project, which shall be consistent with the structure, and subject to the limitations, set forth below.

3.3 Definitions of Guaranteed Maximum Price Components.

(a) "Agency Contingency" means an amount set by Agency that is part of the GMP and which Agency may use to pay for Change Orders for Construction Services, in Agency's sole and absolute discretion. Agency Contingency shall be for the sole and exclusive use and benefit of Agency.

(b) "PDDBE's General Conditions" means the costs for activities, facilities, and services required to support the Construction Phase for the Project and manage the Project site, without mark-up, which shall not exceed the amount included in the GMP Amendment.

(c) "Construction Cost" means all actual and direct costs necessarily and properly incurred by the PDDBE and Subcontractors to construct, test, and commission the Project, which is defined as all costs reasonably and properly incurred in performing the Work at competitive rates, including: wages paid for direct labor; contributions applicable to the PDDBE's and Subcontractor's payroll; fringe benefits; payroll taxes; contributions for unemployment; social security, disability, and similar payments and assessments; travel and subsistence; materials, supplies, and equipment incorporated or consumed in the Work; hand tools consumed in the Work; reasonable equipment rental charges whether the equipment is owned by or rented to PDDBE or Subcontractor; power, utility, and telephone charges; permits, licenses and inspections for which the PDDBE or Subcontractor is required by the Contract Documents to pay, other than those permits for which Agency pays directly; sales and use taxes incurred about the Work; fees of testing laboratories for tests required by the Contract Documents, except those related to nonconforming Work; demolition, clean-up and removal costs; professional fees of consultants, engineers, designers or schedulers that the PDDBE or Subcontractor is required by the Contract Documents to employ during the Project; and all other costs properly and reasonably incurred in the performance of the Work.

(d) "Construction Cost" does not include: compensation for PDDBE's General Conditions; PDDBE's and Subcontractor's personnel stationed at the PDDBE's and Subcontractor's principal or branch offices; overhead and general expenses except those provided for in

Construction Cost; the cost of the PDBE's and Subcontractor's capital used in the performance of the Work; costs that would cause the GMP to be exceeded; discounts and rebates and the salvage value of tools and equipment consumed in the Work; costs incurred in performing call-back, repair and warranty work; discounts and rebates and the salvage value of tools and equipment consumed in the Work; costs due to the negligence, error, or omission of the PDBE or Subcontractor or to the failure of the PDBE or Subcontractor to fulfill a specific responsibility to Agency set forth in this Contract Document; costs incurred as a result of a delay which does not constitute compensable delay under the General Conditions; costs incurred in the performance of the Pre-Construction Phase; any cost not specifically and expressly described as a reimbursable cost; and costs PDBE or Subcontractor is required to bear as a result of PDBE's or Subcontractor's failure to perform in accordance with the Contract Documents.

3.4 Components of Guaranteed Maximum Price. The GMP includes the following costs for Construction Services:

(a) PDBE's General Conditions. PDBE's General Conditions for the Construction Services, consistent with the detailed general conditions presented with the GMP Proposal.

(b) Construction Cost. The Construction Cost for Construction Services performed by PDBE.

(c) Mark-Ups.

(i) Fee for Overhead and Profit. PDBE's fee for overhead and profit (the "PDBE's Fee") shall be [redacted] percent ([redacted]%) of the Construction Cost self-performed by the PDBE and [redacted] percent ([redacted]%) of the Construction Cost subcontracted by the PDBE. PDBE's Fee shall compensate the PDBE for all field and home office overhead, profit, and other costs and expenses not specifically included in the Construction Cost.

(ii) Bonds. PDBE's charge for Performance Bond and Payment Bond costs shall be [redacted] percent ([redacted]%) of the Construction Cost.

(iii) Insurance. PDBE's charge for insurance costs shall be [redacted] percent ([redacted]%) of the Construction Cost.

(iv) Mark-Up Inapplicable. PDBE shall not apply any of the above-mark-ups to PDBE's General Conditions or Agency Contingency.

(d) Agency Contingency.

(i) Agency Contingency Calculation. Agency Contingency shall be **ten percent (10%)** of the Construction Cost incurred by the PDBE. PDBE shall **NOT** be entitled to the above stated mark-up on the Construction Cost for Construction Services paid for out of Agency Contingency. Agency Contingency shall be for the sole use of Agency in its absolute discretion and is included in the GMP. Agency Contingency may be used for any changes directed by Agency, including but not limited to, Change Orders, or for use any other use proposed by Agency, which may be accepted or denied in Agency's sole and absolute discretion.

(e) No Allowances. PDBE shall not include any allowances in the GMP, unless expressly authorized in writing by Agency. If Agency approves the use of allowances, Agency shall be entitled to set the conditions for allowance use in its sole and absolute discretion.

3.5 Conditions Applicable to Guaranteed Maximum Price.

(a) PDBE guarantees that the final cost to construct the Project shall not exceed the GMP, subject to any additions or deductions as provided in the Contract Documents. Except as otherwise provided in this Contract, PDBE shall assume the risk of all costs in excess of the GMP in performing the Construction Services and provide a fully completed and successfully operational Project, complete in every detail according to the provisions of the Contract Documents and shall not be entitled to additional payments because of such excess costs. Should PDBE believe that it is entitled to additional compensation, whether money or time, it must request such compensation pursuant to the Contract Documents.

(b) The GMP includes and assumes that from time to time, PDBE will encounter delays and difficult site conditions arising from limited access to work areas, other interference, or conditions at the Project site. PDBE assumes full responsibility for its examination, investigation and understanding of the difficulties which may be encountered, and has included in its GMP the cost of any Work associated with such difficulties.

3.6 Adjustments to Guaranteed Maximum Price.

(a) The GMP reflected in the GMP Amendment shall not be modified except in the event of the following circumstances: (a) Agency directs and authorizes a change which is related solely to Agency discretionary changes (the foregoing excludes changes authorized by Agency resulting from errors, omissions or other deficiencies in the Construction Documents or changes resulting from the acts, omissions or other conduct of the PDBE); (b) unanticipated field conditions which could not be reasonably foreseeable by the PDBE are encountered which requires changes; (c) changes are directed by a governmental agency with jurisdiction over the Project or portions thereof, which could not be reasonably foreseen or anticipated by the PDBE at the conclusion of the Pre-Construction Phase; (d) changes are necessitated by amendment(s) or enactment(s) of laws, rules, ordinances or regulations applicable to the Project or portions thereof which could not be reasonably anticipated or foreseen by the PDBE at the conclusion of the Pre-Construction Phase; or (e) changes resulting from emergencies not caused, in whole or in part, by the acts, omissions or other conduct of the PDBE or its employees, agents or representatives. Adjustments to the GMP shall be reflected in a Change Order duly executed by Agency and the PDBE.

(b) Adjustments to the GMP on account of changes in the Work shall be determined as set forth in the Contract Documents, including, without limitation, the General Conditions in **Attachment 2**. In calculating adjustments to the GMP, the allowed costs shall mean the Construction Cost and the allowed mark-up shall mean PDBE's Fee.

3.7 PDBE Responsibility for Construction Costs Exceeding GMP. If the final GMP exceeds the GMP, including all adjustments to the GMP in accordance with the Contract Documents, PDBE shall be solely responsible for all costs exceeding such amount.

3.8 Final Project Cost Accounting.

(a) During Project close-out of the Construction Services as set forth in the General Conditions, but before Agency records a Notice of Completion, PDBE shall provide Agency a detailed Project accounting setting forth all additive Change Orders approved by Agency, and, if applicable, all savings generated by PDBE during the Project.

(b) Agency shall, within a reasonable amount of time after receipt, review the Project accounting to determine its accuracy and reconcile the any potential savings and approved and unapproved Change Orders to determine the final cost to complete the Construction Services. If Agency determines that there are savings due to either Party, or if Agency determines that the GMP needs to be adjusted upward because of unapproved Change Orders, Agency may issue a unilateral additive or deductive Change Order (as applicable).

(c) PDBE's compliance with this Section is a material term of the Contract necessary to deem the Project complete, and PDBE acknowledges that Agency shall not be obligated to record a Notice of Completion or release retention until PDBE complies with this Section.

(d) Any disputes or claims arising out of this process shall be resolved pursuant to the dispute resolution procedures set forth in the General Conditions.

3.9 Payment Terms.

(a) Payment of Compensation for Pre-Construction Services.

(i) PDBE shall submit a monthly itemized statement of Preconstruction Services charges and expenses to Agency on the fifth (5th) day of each month. The itemized statement shall reflect the hours spent, or scopes of work performed, by PDBE in performing its Preconstruction Services, and, if applicable, the statements shall reflect expenses and materials, and the hourly charges shall not exceed the rates set forth in **Attachment 6**. The itemized statement shall show the days and hours worked each workday PDBE performs Preconstruction Services for the previous month.

(ii) Payment for the Preconstruction Services shall be made for all undisputed amounts in monthly installment payments within thirty (30) Days after PDBE submits an itemized statement to Agency for Preconstruction Services actually completed and after Agency's written approval of the Preconstruction Services, or the portion of the Preconstruction Services for which payment is to be made. Payment shall not constitute acceptance of any Pre-Construction Services completed by PDBE.

3.10 Payment of Compensation for Construction Services.

(a) PDBE Monthly Payment Requests.

(i) Pursuant to the General Conditions in **Attachment 2**, PDBE shall submit to Agency on forms approved by Agency a written request for payment of the GMP, together with such supporting data as Agency may request covering the amount of the Project work then completed. Unless specified otherwise, such request and supporting data shall be submitted by PDBE so that it is received by Agency no later than the last day of the month preceding the month in which payment will be made.

(ii) PDBE acknowledges that the GMP is to be administered on an open book arrangement relative to the costs of the Work. The payment request shall specify the percentage of completion (as of the end of the preceding month) of the work and compensation due PDBE. The payment request shall be supported by such data substantiating the PDBE's right to payment as Agency may require including but not limited to payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, Subcontractor payment requests submitted to PDBE, documentation supporting the Subcontractor's payment requests, and any other evidence required by Agency.

(iii) Upon Agency's approval, Agency will make a progress payment of the GMP to the PDBE in the amount of ninety-five percent (95%) of the estimated value of the Project work performed through the date of the payment request. PDBE shall then make payment to Subcontractors as required pursuant to the Subcontractor contracts and applicable law. Without limitation to any and all remedies available to Agency under law, equity and contract, Agency may withhold disputed retained amounts as provided for under law and the General Conditions.

(iv) Each Application for Payment shall be based on the most recent schedule of values submitted by PDBE in accordance with the Contract Documents. The schedule of values shall allocate the entire GMP among the various portions of the Work, except that PDBE's Fee shall be shown as a single separate item. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as Agency may require. This schedule, unless objected to by Agency, shall be used as a basis for reviewing PDBE's Applications for Payment. Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the percentage of that portion of the Work which PDBE has actually been completed.

(b) Agency Payments of GMP. Agency shall make payment to PDBE within thirty (30) days of receipt of an undisputed payment request or the resolution of any billing dispute. Agency may withhold a portion of an Application for Payment because of defective work not remedied or unsatisfactory prosecution of the work by the PDBE. Agency will release any withheld funds upon PDBE satisfactorily remedying the issue that resulted in the withholding. Agency will not pay late fees to the PDBE on the compensation due PDBE under the terms of this Contract. Payment shall not constitute acceptance of any work completed by PDBE. The making of final payment shall not constitute a waiver of any claims by Agency for any reason whatsoever. The foregoing shall be in accordance with the General Conditions.

(c) Payments to Subcontractors. PDBE shall develop and implement procedures for submittal of applications for progress payments to PDBE by Subcontractors in accordance with the General Conditions and the review, processing and disbursement of progress payments to Subcontractors, along with associated forms and reporting systems. PDBE shall disburse progress payments due each Subcontractor within ten (10) Days of PDBE's receipt of payment from Agency, except to the extent that PDBE's payment of such amount or any portion thereof is subject to withholdings for a Stop Payment Notice, Prevailing Wage Rate violations or other withholdings of payment(s) due the Subcontractors under the terms of the subcontracts or by operation of law. PDBE shall indemnify Agency against any and all claims arising from or related to the failure of the PDBE to comply with the prompt payment requirements under the Public Contract Code.

4. Commencement and Time to Complete Services; Liquidated Damages.

4.1 **Time to Complete Preconstruction Services.** PDDB shall commence the performance of Pre-Construction Services upon Agency's issuance of a Notice to Proceed and shall complete the Pre-Construction Services within *****INSERT CALENDAR DAYS***** Days of Agency's issuance of the Notice to Proceed.

4.2 **Time to Complete Construction Services.**

*****THIS MAY BE UPDATED AS NEEDED FOR EACH PROJECT*****

(a) Guaranteed Completion Date. PDDB shall complete Construction Services within the Guaranteed Completion Date (as defined in the Scope of Services in **Attachment 1**). The Guaranteed Completion Date is **December 31, 2025**.

(b) Commencement of Construction. PDDB shall not commence the Construction Services until Agency executes the GMP Amendment and issues a Notice to Proceed with Construction. PDDB may request a Notice to Proceed with Construction prior to completion of the 100% Construction Documents, and Agency may issue same, provided that PDDB shall not construct any portion of the Project until the design of such portion has been approved by Agency. The Guaranteed Completion Date shall run from the Notice to Proceed with Construction even if issued prior to completion of the 100% Construction Documents.

(c) Liquidated Damages. Time is of the essence. PDDB agrees that it shall be liable to Agency for liquidated damages for each and every calendar day beyond the Guaranteed Completion Date that completion of the Project has not been achieved at the Project Site. **The liquidated damages amount will be determined as part of the GMP Proposal.** If not completed by the Guaranteed Completion Date, it is understood that Agency will suffer damage, and that it is and will be difficult and/or impossible to ascertain and determine the actual damage which Agency will sustain in the event of and by reason of PDDB's failure to complete the work, and therefore PDDB shall pay to Agency the stipulated sum as fixed and liquidated damages and not as a penalty. Any money due or to become due PDDB may be retained to cover liquidated damages.

(d) Adjustments to Guaranteed Completion Date. The Guaranteed Completion Date shall be subject to amendment only if: (a) the GMP is modified in accordance with this Contract and the modified GMP directly affects the time for completion of the Project; (b) Agency directs or authorizes the suspension of construction of the Project as a whole or in part and such directive or authorization actually delays the final completion of the Project; (c) Agency directs or authorizes delays to construction of the Project as a whole or in part and such directive or authorization actually delays final completion of the Project; or (d) completion of construction of the Project is delayed by the acts or omissions of Agency or its employees, agents or representatives. Adjustments to the Guaranteed Completion Date on account of a circumstance described above shall be reflected in Change Orders duly executed by Agency and PDDB. PDDB acknowledges and agrees that the adjustment of contract time which does not have an effect on the final completion of the Project shall not be a basis for adjustment of the Guaranteed Completion Date.

5. PDDB Notices of Adjustment.

An express condition precedent to any obligation of Agency to consider or to adjust the

GMP or the Guaranteed Completion Date is the PDDBE's delivery of written notice to Agency no more than five (5) Days following the initial occurrence of a circumstance which the PDDBE believes is justification for adjustment of the GMP and/or Guaranteed Completion Date. The failure of PDDBE to deliver written notice to Agency of the occurrence of circumstances PDDBE believes is justification for modification of the GMP or the Guaranteed Completion Date shall be deemed PDDBE's waiver of any right to modification of the GMP or the Guaranteed Completion Date for such circumstances. If PDDBE provides such written notice, Agency shall thereafter promptly consider the request and equitably adjust the GMP or the Guaranteed Completion Date, as applicable. If the source or nature of a basis for adjustment of the GMP or the Guaranteed Completion Date is on-going, PDDBE's delivery of written notice within the time set forth above after the initial occurrence of such event shall be deemed sufficient notice.

6. Audit.

PDDBE shall establish and maintain books, records, and systems of account, in accordance with generally accepted accounting principles, reflecting all business operations of PDDBE transacted under this Contract. PDDBE shall retain these books, records, and systems of account during the term of this Contract and for five (5) years thereafter. PDDBE shall permit Agency, its agent, other representatives, or an independent auditor to audit, examine, and make excerpts, copies, and transcripts from all books and records, and to make audit(s) of all billing statements, invoices, records, and other data related to the Services covered by this Contract. Audit(s) may be performed at any time, provided that Agency shall give reasonable prior notice to PDDBE and shall conduct audit(s) during PDDBE's normal business hours, unless PDDBE otherwise consents.

7. Insurance; indemnification; Bonds.

For all phases of the Project, PDDBE shall purchase and maintain insurance, and bonds as set forth below, in the Contract Documents, or as required by law.

7.1 PDDBE Insurance. [***UPDATE INSURANCE REQUIREMENTS ON EACH PROJECT***] PDDBE shall procure and maintain, at PDDBE's expense, all insurance specified in General Conditions.

7.2 Indemnity. PDDBE shall indemnify Agency as specified in General Conditions.

7.3 Bonds. Upon execution of the GMP Amendment, PDDBE shall provide performance and payment bonds on forms attached hereto. The penal sum of the payment and performance bonds shall be equal to the GMP. If construction is phased or staged with different GMPs established at different times, the penal sum of the bonds shall be increased at the start of each stage or phase based on the cumulative total value of all GMPs in effect.

8. Project Representatives.

8.1 Agency's Representative. Agency hereby designates [***INSERT NAME***] or his or her designee, as the person to act as its representative for the performance of this Contract ("Agency's Representative"). Agency's Representative shall be authorized to act as liaison between Agency and PDDBE in the administration of this Contract and all work on the Project. Agency's Representative shall have the power to act on behalf of Agency for all purposes under this Contract, including for the purpose of approving the design. Agency may designate new and/or different individuals to act as Agency's Representative from time to time upon written notice to the PDDBE.

8.2 PDBE's Representative. PDBE hereby designates *****INSERT NAME*****, or his or her designee, to act as its representative for the performance of this Contract ("PDBE's Representative"). PDBE's Representative shall have full authority to represent and act on behalf of the PDBE for all purposes under this Contract. PDBE's Representative shall supervise and direct all work on the Project, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the work pursuant to this Contract.

9. PDBE's Contractor's License and Registration.

PDBE shall have only appropriately licensed contractors performing work on the Project as required by the Business and Professions Code. The PDBE (**License No. CA#** **_____**) shall act as the licensed contractor for the Project. PDBE shall perform all services required under the Contract Documents in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals qualified to perform such services in the same discipline in the State of California, and the PDBE shall be fully responsible to Agency for any damages and/or delays to the Project as specified in the Contract. The licensed contractor shall be registered with the Department of Industrial Relations to perform public work (**DIR Registration No.** **_____**).

10. PDBE's Design Professional.

PDBE shall name a specific person to act as the Design Professional as described in the General Conditions, subject to the approval of Agency. PDBE hereby designates *****INSERT NAME***** (**License No.: CA#** **_____**) to act as the Design Professional for the Project. PDBE's Design Professional shall perform all services required under the Contract Documents in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals qualified to perform such services in the same discipline in the State of California, and PDBE shall be fully responsible to Agency for any damages and/or delays to the Project as specified in the indemnification provisions of the Contract. Any change in the Design Professional shall be subject to Agency's prior written approval, which approval shall not be unreasonably withheld. The new Design Professional shall be of at least equal competence as the prior Design Professional. In the event that Agency and PDBE cannot agree as to the substitution of a new Design Professional, Agency shall be entitled to terminate this Contract as described in the General Conditions.

11. State and Federal Funding Requirements.

This Project will be funded in whole or in part by state and/or federal funds, including the Clean Water State Revolving Fund ("SRF"). PDBE shall fully and adequately comply with the provisions included in Attachment 8 (Funding Requirements) attached hereto and incorporated herein by reference ("Funding Requirements"). With respect to any conflict between such Funding Requirements and the terms of this Contract and/or the provisions of state law, the more stringent requirement shall control.

12. Notices.

Any notice to be given by any Party hereunder must be given in writing and delivered in person, or by reputable nationwide overnight courier (e.g., Federal Express), or forwarded by certified or registered mail, postage prepaid, return receipt requested, at the address indicated below, unless the Party giving such notice has been notified, in writing, of a change of address:

AGENCY:

Hi-Desert Water District
55439 29 Palms Hwy
Yucca Valley, CA 92284
Attention: General Manager

PDBE:

[**INSERT**]

Any such notice is effective on the date on which such notice is delivered, if notice is given by personal delivery or overnight courier, or if notice is sent through the United States mail, on the date of actual delivery as shown by the addressee's receipt or upon the expiration of three (3) days following the date of mailing, whichever first occurs.

13. Authority of Signatories.

The persons executing this Contract on behalf of their respective Parties represent and warrant that they have the authority to do so under law and from their respective Parties.

[SIGNATURES ON NEXT PAGE]

SIGNATURE PAGE TO PROGRESSIVE DESIGN BUILD CONTRACT BETWEEN THE HI-DESERT WATER DISTRICT AND [*INSERT PDBE NAME***]**

IN WITNESS WHEREOF, the Parties hereby execute this Progressive Design-Build Contract as of the Effective Date.

HI-DESERT WATER DISTRICT

[*INSERT NAME OF PDBE***]**

By: _____

[INSERT NAME]

[INSERT TITLE]

[IF CORPORATION, TWO SIGNATURES, PRESIDENT OR VICE PRESIDENT AND SECRETARY OR TREASURER REQUIRED]

By: _____

Its: _____

ATTEST:

Printed Name: _____

By: _____

[INSERT NAME]

[DELETE THE FOLLOWING SIGNATURE LINE IF NOT REQUIRED]

By: _____

Its: _____

APPROVED AS TO FORM:

Printed Name: _____

By: _____

[INSERT NAME]

Contractor's License Number _____

DIR Registration Number _____

**ATTACHMENT 1
SCOPE OF SERVICES**

[ATTACH BEHIND THIS FORM]

**ATTACHMENT 1-1
PROPOSAL**

**ATTACHMENT 2
GENERAL CONDITIONS**

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.1 Defined Terms.

- A. Wherever used in the Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined below, 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. Act of God -- Act of God is an earthquake of magnitude 3.5 or higher on the Richter Scale or a tidal wave.
 2. Additional Work -- New or unforeseen work will be classified as "Additional Work" when Agency's Representative determines that it is not covered by the Contract Documents.
 3. Applicable Laws -- The laws, statutes, ordinances, rules, codes, regulations, permits, and licenses of any kind, issued by local, state or federal governmental authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Work.
 4. Application for Payment -- The form acceptable to Agency's Representative which is to be used by Progressive Design-Build Entity during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 5. Architect of Record or Engineer of Record ("A/E") -- The individual, partnership, corporation, joint venture, or other legal entity named as the Design Professional in the Contract or any succeeding entity designated by Agency.
 6. Background Documents -- Key documents provided to Design-Build Entity prior to the commencement of Stage 1 to further understand the requirements of the Project.
 7. Certificate for Payment -- The form signed by Agency's Representative attesting to Progressive Design-Build Entity's right to receive payment for certain completed portions of the Work on the Project in accordance with Article 12.
 8. Change Order ("CO") -- A document that authorizes an addition, deletion, or revision in the Work or an adjustment in the GMP or the Guaranteed Completion Date, issued on or after the Effective Date of the Contract, in accordance with the Contract Documents and in the form contained in the Contract Documents.
 9. Change Order Request ("COR") -- A request made by Progressive Design-Build Entity for an adjustment in the GMP and/or Guaranteed Completion Date as the result of a Progressive Design-Build Entity-claimed change to the Work.

10. Claim -- A demand or assertion by Agency or Progressive Design-Build Entity seeking an adjustment of the GMP or Guaranteed Completion Date, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
11. Construction Documents -- The plans and Technical Specifications prepared by Progressive Design-Build Entity for the Project and approved by Agency. The Construction Documents shall set forth in detail all items necessary to complete the construction (other than such details customarily provided by others during construction) of the Project in accordance with the Contract Documents. Following commencement of the Construction Phase, Construction Documents become part of the Contract Documents upon their completion and approval by Agency. All amendments and modifications to the Construction Documents must be approved by Agency in writing.
12. Construction Work -- That portion of the Work on the Project consisting of the provision of labor, materials, furnishings, equipment and services in connection with the construction of the Project as set forth in the Contract Documents.
13. Contract -- The entire integrated written agreement between Agency and Progressive Design-Build Entity concerning the Work. "Contract" may be used interchangeably with "Agreement" in the Contract Documents. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral, and includes all Contract Documents.
14. Contract Time -- The number of days or the dates stated in the Contract Documents and Project Schedule to achieve defined Milestones, if any, and to complete the Work by the Guaranteed Completion Date.
15. Critical Supply Shortage -- An unusual shortage in materials that is (a) supported by documented proof that Progressive Design-Build Entity made every effort to obtain such materials from all available sources; (b) such shortage is due to the fact that such materials are not physically available from single or multiple sources or could have been obtained only at exorbitant prices entirely inconsistent with current and standard rates taking into account the quantities involved and the usual industry practices in obtaining such quantities; and (c) such shortages and the difficulties in obtaining alternate sources of materials could not have been known or anticipated by Progressive Design-Build Entity at the time it submitted its bid or entered the Contract. Market fluctuations in prices of materials, whether or not resulting from a Force Majeure Event, does not constitute a Critical Supply Shortage.
16. Day -- A calendar day of 24 hours measured from midnight to the next midnight.
17. Defective Work -- Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referenced in the Contract Documents.

18. Demobilization – The complete dismantling and removal by Progressive Design-Build Entity of all of Progressive Design-Build Entity’s temporary facilities, equipment, and personnel at the Site.
19. Design Materials -- Any and all documents, shop drawings, electronic information, including computer programs and computer generated materials, data, plans, drawings, sketches, illustrations, specifications, descriptions, models and other information developed, prepared, furnished, delivered or required to be delivered by, or for, Progressive Design-Build Entity: (1) to Agency under the Contract Documents or; (2) developed or prepared by or for Progressive Design-Build Entity specifically to discharge its duties under the Contract Documents.
20. Design Professional -- The individuals or entities who will provide Progressive Design-Build Entity with the required architectural, engineering, and other professional services required for the coordinated design of the Project and the administration of construction.
21. Design Work -- The portion of the Work on the Project consisting of the Design services and design deliverables required to be provided in connection with the Design of the Project as set forth in the Contract Documents.
22. Drawings -- The graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work to be done on the Project, generally including plans, elevations, sections, details, schedules, and diagrams prepared as part of the Design Materials. The Drawings are listed in the List of Drawings.
23. Effective Date of the Contract – The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the two parties to sign and deliver.
24. Equipment Manufacturer -- Any Separate Contractor that fabricates and/or supplies any of Agency’s provided equipment which is installed in the Project by Progressive Design-Build Entity.
25. Force Majeure Event -- An event that materially affects a party’s performance and is one or more of the following: (1) Acts of God or other natural disasters occurring at the Site; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the Work); (4) pandemics, epidemics or quarantine restrictions; (5) strikes and other organized labor action occurring at the Site and the effects thereof on the Work, only to the extent such strikes and other organized labor action are beyond the control of Progressive Design-Build Entity and its Subcontractors, of every Tier, and to the extent the effects thereof cannot be avoided by use of replacement workers; and (6) a Critical Supply Shortage. For purposes of this section, “orders of governmental authorities,” includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of Agency in its capacity as a municipal authority.

26. Governmental Approvals -- Those governmental actions required to be obtained by Agency and necessary for the completion of the Project.

27. Hazardous Materials – Any substance: the presence of which requires investigation or remediation under any federal, state or local law, statute, regulation, ordinance, order, action, policy, or common law; which is or becomes defined as a "hazardous waste," "hazardous substance," pollutant, or contaminant under any federal, state or local law, statute, regulation, rule or ordinance, or amendments thereto, including, without limitations, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq. ("CERCLA"), as amended, or the Resource, Conservation and Recovery Act, as amended, 42 U.S.C. Section 6901 et seq. ("RCRA"); which is petroleum, including crude oil or any fraction thereof not otherwise designated as a "hazardous substance" under CERCLA including, without limitation, gasoline, diesel fuel, or other petroleum hydrocarbons; which is toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic, or otherwise hazardous and is or becomes regulated by any regulatory agency or instrumentality or the United States; the presence of which on the Site causes or threatens to cause a nuisance upon the Site or to the adjacent properties or poses or threatens to pose a hazard to the health or safety of persons on or about the Site; the presence of which on adjacent properties could constitute a trespass by Progressive Design-Build Entity or Agency; or as defined in the California Health and Safety Code. For the purposes of this Contract, "Hazardous Materials" shall also include, but are not limited to, "Underground Storage Tanks." "Underground Storage Tank" shall have the definition assigned to that term by Section 9001 of RCRA, 42 U.S.C. Section 6991, and also shall include: any tank of one thousand one hundred (1,100) gallons or less capacity used for storing motor fuel; any tank used for storing heating oil for consumption on the premises where stored; any septic tank; and any pipes connected to the above items.

28. Holidays -- Holidays occur on:

New Year's Day - January 1
Martin Luther King Jr. Day – Third Monday of January
President's Day – Third Monday of February
Memorial Day - Last Monday in May
Independence Day - July 4
Labor Day - First Monday in September
Veteran's Day - November 11
Thanksgiving Day - Fourth Thursday in November
Friday after Thanksgiving
Christmas Day - December 25
New Years' Eve December 31

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both Holidays.

29. Liens – Charges, security interests, or encumbrances upon Project funds, or personal property, including without limitation Stop Payment Notices.

30. Milestones – A principal event specified in the Contract Documents associated with a required completion date or time prior to Completion of all the Work. Failure to achieve Milestones may result in Liquidated Damages as described in the Contract Documents.
31. Notice of Award – The written notice by Agency to Progressive Design-Build Entity stating that upon timely compliance by Progressive Design-Build Entity with the conditions precedent listed therein, Agency will sign and deliver the Contract.
32. Notice of Completion – The form which may be executed by Agency and recorded by the county where the Project is located constituting final acceptance of the Project.
33. Notice to Proceed -- A written notice given by Agency to Progressive Design-Build Entity fixing the date on which Progressive Design-Build Entity may proceed with any Phase of the Work.
34. Partial Utilization – Use by Agency of a substantially completed part of the Work prior to Completion of all the Work.
35. Progressive Design-Build Entity -- The individual or entity with which Agency has contracted for performance of the Work.
36. Progressive Design-Build Entity Representative -- The person or firm identified as the primary contact person and representative of Progressive Design-Build Entity as designated in the Contract and who shall not be changed without prior written consent of Agency.
37. Project -- The total design and construction of which the Work performed under the Contract Documents may be the whole, or a part, and which may include separate design or construction work performed by Agency or by Separate Contractors for the Project.
38. Project Schedule -- The graphical representation of a practical plan to complete the Work on the Project within the Guaranteed Completion Date and other Contract Times. The detailed requirements for the Project Schedule are stated in Article 6.
39. Proposal -- The proposal submitted by Progressive Design-Build Entity in response to the RFP for this Project.
40. Request for Proposals (“RFP”) -- The request for proposals issued by Agency for the Project and includes all documents, exhibits, attachments, and addenda thereto.
41. Request for Qualifications (“RFQ”) -- The request for qualifications issued by Agency for the Project and includes all documents, exhibits, attachments, and addenda thereto.
42. Samples -- Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

43. Separate Contractor -- A person, or firm, under separate contract with Agency performing other work at the Project site which may affect the Work.
44. Shop Drawings -- All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Progressive Design-Build Entity and submitted by Progressive Design-Build Entity to illustrate some portion of the Work.
45. Site -- Lands or areas indicated in the Contract Documents as being furnished by Agency upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Agency which are designated for the use of Progressive Design-Build Entity.
46. Stop Payment Notice -- A written notice as defined in Civil Code section 8044.
47. Subcontractor -- An individual or entity that has a contract with Progressive Design-Build Entity or with a Subcontractor of Progressive Design-Build Entity to perform a portion of the Work on the Project. Unless otherwise specifically provided, the term Subcontractor includes Subcontractors of all tiers.
48. Submittal - Written or graphic information and physical samples prepared and supplied by Progressive Design-Build Entity demonstrating various portions of the Work.
49. Supplier -- A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Progressive Design-Build Entity or with any Subcontractor to furnish materials or equipment used in the performance of the Work or to be incorporated in the Work.
50. Technical Specifications -- All documents developed by Progressive Design-Build Entity and which are ready for the Construction Phase.
51. Tier -- The contractual level of a Subcontractor or supplier or consultant with respect to Progressive Design-Build Entity. For example, a first tier Subcontractor is under subcontract with Progressive Design-Build Entity, a second tier Subcontractor is under subcontract with a first tier Subcontractor, and so forth.
52. Warranty -- A written guarantee provided to Agency by Progressive Design-Build Entity that the Work remain free of defects and suitable for its intended use for the period required by the Contract Documents or the longest period permitted by the law of this State, whichever is longer.
53. Work -- The entire design and 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 design and construction, and furnishing, installing, and incorporating all materials and equipment into such design and construction, all as required by the Contract Documents.

1.2 Terminology.

- A. The words and terms below are not defined but, when used in the Contract Documents, have the indicated meaning.
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Project 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, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. Regardless of whether “furnish,” “install,” “perform,” or “provide” is used in connection with services, materials, or equipment, an obligation of Progressive Design-Build Entity is implied.
- B. 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

2.1 Delivery of Contract Documents.

- A. Within fifteen (15) Days after receipt of the Notice of Award and before Agency will execute the Contract, Progressive Design-Build Entity shall furnish and file with Agency a signed Contract in duplicate and the necessary Performance Bond, Payment Bond, Certificates of Insurance and Endorsements, Escrow Agreement (if used) and Tax Identification Number, as well as any other documents specified in the Contract Documents. Notwithstanding the foregoing, if the GMP has yet to be established at Notice of Award, then the Performance Bond and Payment Bond may be provided after establishing the GMP and prior to the Construction Phase.

2.2 Bonds.

- A. Within fifteen (15) Days after receipt of the Notice of Award for the Construction Phase Progressive Design-Build Entity shall submit the bonds on the forms provided with the Contract Documents, duly executed by a responsible corporate surety admitted to transact surety business in the State of California, as defined in Code of Civil Procedure section 995.120, and listed in the United States Department of the Treasury circular entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," authorized to do business in the State of California and acceptable to Agency conditioned upon the faithful performance by Progressive Design-Build Entity of all requirements of the

Contract Documents. Each of the bonds shall be in a sum no less than one hundred percent (100%) of the GMP.

2.3 Evidence of Insurance.

- A. Progressive Design-Build Entity shall obtain, at its sole cost and expense, all insurance required by Article 5. Certificates of such insurance and copies of the insurance policies and endorsements shall be delivered to Agency within fifteen (15) Days after receipt of the Notice of Award and before Agency will execute the Contract.

2.4 Execution of Contract.

- A. Upon receipt of the required Contract Documents, Agency will execute the Contract, establishing the Effective Date of the Contract.

2.5 Commencement of Contract Time; Notice to Proceed with Construction.

- A. Agency will not issue a Notice to Proceed until after the Effective Date of the Contract. Construction Work shall commence within fifteen (15) Days of the date stated in Agency's Notice to Proceed with Construction. No Construction Work shall be done at the Site prior to the date on which the Contract Time commence to run. Nothing herein shall affect the Guaranteed Completion Date.

2.6 Copies of Documents.

- A. Agency will furnish to Progressive Design-Build Entity one (1) copy of the Background Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.7 Preconstruction Conference; Designation of Authorized Representatives.

- A. Before any Work at the Project site is started, a conference attended by Agency, Progressive Design-Build Entity, Agency's Representative, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to herein, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.8 Initial Acceptance of Schedules.

- A. At least ten (10) Days before submission of the first Application for Payment, a conference attended by Progressive Design-Build Entity, Agency's Representative, and others as appropriate will be held to review for acceptability to Agency's Representative the schedules submitted, as required by the Contract Documents. Progressive Design-Build Entity shall have an additional ten (10) Days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Progressive Design-Build Entity until acceptable schedules are submitted to Agency's Representative. Acceptance of the schedules by Agency's Representative will not impose on responsibility for accuracy, for sequencing, scheduling, or progress of the Work, or compliance with the Contract

Documents. Acceptance will not interfere with or relieve Progressive Design-Build Entity from Progressive Design-Build Entity's full responsibility therefor.

ARTICLE 3 -CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Intent.

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be designed and constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Agency. Clarifications and interpretations of the Contract Documents shall be issued by Agency's Representative as provided in these General Conditions.
- B. If utilities to equipment/fixtures are not shown but are necessary to operate the equipment/fixtures, the utilities service installation is considered to be part of the Work. The implied Work will conform to the appropriate sections of the Contract Documents.
- C. Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control Progressive Design-Build Entity in dividing Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

3.2 Reference Standards.

- A. Standards, Specifications, Codes, Laws, and Regulations.
 - 1. Reference to federal specifications, federal standards, other standards, specifications, manuals, or codes of any technical society, organization, or association, or to Applicable Laws, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Applicable Laws in effect at the time of opening of proposals (or on the Effective Date of the Contract if there were no proposals), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard, specification, manual, or code, or any instruction of a supplier, shall be effective to change the duties or responsibilities of Agency, Progressive Design-Build Entity, or Agency's Representative, or any of their Subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Agency or Agency's Representative, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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.

3.3 Order of Precedence.

- A. The intent of the Contract Documents is to include all necessary criteria to establish the scope and quality for completion of the Work on the Project by Progressive Design-Build Entity. The Contract Documents are complementary and what is required by one shall be as binding as if required by all. Performance by Progressive Design-Build Entity shall be required to the extent consistent with, and reasonably inferable from, the Contract Documents.
- B. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or the provisions of any Applicable Laws (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Applicable Law).
- C. In resolving conflicts among any of the Contract Documents, the order of precedence shall be as follows:
 - 1. Permits from other agencies as may be required by law;
 - 2. Change Orders or Pending Change Orders, most recent first;
 - 3. Design-Build Contract;
 - 4. Special Conditions;
 - 5. General Conditions;
 - 6. RFP and all addenda, attachments and appendices;
 - 7. RFQ and all addenda, attachments and appendices;
 - 8. Construction Documents prepared by Progressive Design-Build Entity;
 - 9. Drawings prepared by Progressive Design-Build Entity; and
 - 10. Progressive Design-Build Entity Proposals in response to RFP and/or RFQ.
- D. With reference to the Drawings the order of precedence shall be as follows:
 - 1. Figures govern over scaled dimensions;
 - 2. Detail drawings govern over general drawings;
 - 3. Change Order drawings govern over Drawings;
 - 4. Drawings govern over standard drawings.
- E. Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality and most expensive shall always apply.

3.4 Amending and Supplementing Contract Documents.

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof only by a Change Order.

3.5 Interpretation and Use of Contract Documents.

- A. Agency and Progressive Design-Build Entity acknowledge that the Contract Documents may differ in some respect(s) from the other documents included in the RFQ and/or RFP upon which Progressive Design-Build Entity based its Proposal. Prior to the commencement of design and construction on the Project, the parties shall confirm, in writing, the final form of the Contract Documents that are to be utilized. Specifically, once approved by Agency, the Construction Documents become a part of the Contract Documents and define the entire scope of work, so long as such documents incorporate all minimum requirements of the Background Documents. Progressive Design-Build Entity shall certify that the Construction Documents are in full compliance with the Contract Documents, except as noted.
- B. Organization of the Construction Documents into various subdivisions and the arrangement of the Drawings shall not control Progressive Design-Build Entity in dividing portions of the Work necessary for the Project among Subcontractors or in establishing the extent of Work to be performed by any trade.
- C. Unless otherwise stated in the Contract Documents, technical words and abbreviations contained in the Contract Documents are used in accordance with commonly understood design professional and construction industry meanings; nontechnical words and abbreviations are used in accordance with their commonly understood meanings.
- D. The Contract Documents may omit modifying words such as “all” and “any,” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement. The use of the word “including,” when following any general statement, shall not be construed to limit such statement to specific items or matters set forth immediately following such word or to similar items or matters, whether or not non limiting language (such as “without limitation,” “but not limited to,” or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such general statement.
- E. Whenever the context so requires, the use of the singular number shall be deemed to include the plural and vice versa. Each gender shall be deemed to include any other gender, and each shall include a corporation, partnership, trust, or other legal entity, whenever the context so requires. The captions and headings of the various subdivisions of the Contract Documents are intended only for reference and convenience and in no way define, limit, or prescribe the scope or intent of the Contract Documents or any subdivision thereof.
- F. Each and every provision of law required by law to be inserted in the Contract Documents shall be deemed to be inserted herein, and the Contract Documents shall

be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the Contract shall be amended in writing to make such insertion or correction.

- G. Before commencing any Work on the Project, Progressive Design-Build Entity shall check and review the Contract Documents, including the Construction Documents, for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract. In the event Progressive Design-Build Entity observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with any such restrictions or special requirements of the Contract, Progressive Design-Build Entity shall immediately notify Agency's Representative in writing of the same and shall cause to be corrected any such violation or inconsistency in the manner provided hereunder. Progressive Design-Build Entity shall be solely liable for any such violation, inconsistency or special requirement, if Progressive Design-Build Entity fails to conduct such review or notification to Agency.
- H. Before commencing any Work on the Project, Progressive Design-Build Entity shall carefully examine the Contract, the Contract Documents, the Background Documents and other information given to Progressive Design-Build Entity as to Project requirements. Progressive Design-Build Entity shall immediately notify Agency's Representative of any perceived or alleged error, inconsistency, ambiguity, or lack of detail or explanation in such documents in writing. Neither Progressive Design-Build Entity nor any Subcontractor shall take advantage of any apparent error or omission which may be found in the Contract, the Contract Documents, the Background Documents or other information given to Progressive Design-Build Entity. If Progressive Design-Build Entity or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Progressive Design-Build Entity shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the GMP or the Guaranteed Completion Date. In no case shall any Subcontractor proceed with Work if uncertain without Progressive Design-Build Entity's written direction and/or approval.

3.6 Reuse of Documents.

- A. Progressive Design-Build Entity and any Subcontractor shall not have or acquire any title to or ownership rights in any of the Construction Documents or other documents (or copies of any thereof) prepared by or bearing the seal of the A/E or its consultants, including electronic media editions; or reuse of any such Construction Documents, other documents, or copies thereof on extensions of the Project or any other project without written consent of Agency. The prohibitions of this Article will survive final payment, or termination of the Contract. Nothing herein shall preclude Progressive

Design-Build Entity from retaining copies of the Contract Documents for record purposes.

3.7 Electronic Data.

- A. The data furnished by Agency or Agency's Representative to Progressive Design-Build Entity, or by Progressive Design-Build Entity to Agency or Agency's Representative, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) Days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-Day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

3.8 Ownership and Use of Construction Documents.

- A. The Construction Documents, and all copies thereof, furnished to, or provided by, Progressive Design-Build Entity are the property of Agency. Agency and Progressive Design-Build Entity explicitly agree that all materials and documents developed in the performance of this Contract are the property of Agency, including any and all rights, title, and interest in said materials and documents. Agency shall have unlimited rights, for the benefit of Agency, in all drawings, designs, technical specifications, notes and any other documentation and other Work developed in the performance of this Contract for the Project, including the right to re-use details of the Design on any other Agency work at no additional cost to Agency. Progressive Design-Build Entity agrees to, and hereby does, grant to Agency a royalty free license to all such data that Progressive Design-Build Entity may cover by copyright and to all designs as to which Progressive Design-Build Entity may assert any right or establish any claim to under the patent or copyright laws. Progressive Design-Build Entity, for a period up to five (5) years from the date of Completion of the Project, agrees to furnish and to provide access to the originals or copies of all such materials immediately upon the written request of Agency. Any use or reuse by Agency of the Construction Documents on any project other than this Project without employing the services of Progressive Design-Build Entity shall be at Agency's own risk with respect to third parties. If Agency uses or re-uses the Construction Documents on any project other than this Project, it shall remove the A/E's seal from the Construction Documents and hold harmless Progressive Design-Build Entity, A/E, and their officers, directors, agents and employees from claims arising out of the use or re-use of the Construction Documents

on such other project. Progressive Design-Build Entity shall not be responsible or liable for any revisions to the Construction Documents made by any party other than Progressive Design-Build Entity, a party for which Progressive Design-Build Entity is legally responsible or liable, or anyone approved by Progressive Design-Build Entity.

3.9 Administration of the Contract by Agency's Representative.

- A. During the term of this Contract, Agency's Representative shall have the right to review Progressive Design-Build Entity's Work at such intervals as deemed appropriate by Agency's Representative. However, no actions taken during such review or site visit by Agency's Representative shall relieve Progressive Design-Build Entity of any of its obligations of single point responsibility for the design and construction of this Project nor form the basis for a Claim if such actions extend beyond the Guaranteed Completion Date.
- B. Agency's Representative will not have control over, will not be in charge of, and will not be responsible for design or construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work on the Project, since these are solely Progressive Design-Build Entity's responsibility.
- C. Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, Agency and Progressive Design-Build Entity shall communicate through Agency's Representative. Communications by Progressive Design-Build Entity with Agency's consultants and Agency's Representative's consultants shall be through Agency's Representative. Communications by Agency and Agency's Representative with Subcontractors will be through Progressive Design-Build Entity. Communications by Progressive Design-Build Entity and Subcontractors with Separate Contractors shall be through Agency's Representative. Progressive Design-Build Entity shall not rely on oral or other non-written communications.
- D. Based on Agency's Representative's Project site visits, review of the Work, and evaluations of Progressive Design-Build Entity's Applications for Payment, Agency's Representative will recommend amounts, if any, due Progressive Design-Build Entity and will issue a Certificate for Payment in such amounts.
- E. Agency's Representative will have the authority to reject Work on the Project, or any portion thereof, which does not conform to the Contract Documents. Agency's Representative will have the authority to stop Work on the Project, or any portion thereof. Whenever Agency's Representative considers it necessary, or advisable, for implementation of the intent of the Contract Documents, Agency's Representative will have the authority to require additional inspection or testing of the Work on the Project in accordance with the Contract Documents, whether or not such Work is fabricated, installed, or completed. However, no authority of Agency's Representative conferred by the Contract Documents nor any decision made in good faith either to exercise, or to not exercise such authority, will give rise to a duty or responsibility of Agency or Agency's Representative to Progressive Design-Build Entity, or any person or entity claiming under, or through, Progressive Design-Build Entity.

- F. Agency's Representative will have the authority to conduct inspections in connection with beneficial occupancy and to determine the dates of Project completion; will receive for review and approval any records, written warranties, and related documents required by the Contract Documents and assembled by Progressive Design-Build Entity; and will issue a final Certificate for Payment upon Progressive Design-Build Entity's compliance with the requirements of the Contract Documents.
- G. Agency's Representative will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of performance thereunder by Progressive Design-Build Entity. Should Progressive Design-Build Entity discover any conflicts, omissions, or errors in the Construction Documents or the Contract Documents; have any questions about the interpretation or clarification of the Contract Documents; question whether Work is within the scope of the Contract Documents; then, before proceeding with the Work affected, Progressive Design-Build Entity shall notify Agency's Representative in writing and request interpretation, or clarification. Agency's Representative's response to questions and requests for interpretations, clarifications, instructions, or decisions will be made with reasonable promptness. Should Progressive Design-Build Entity proceed with the Work affected before receipt of a response from Agency's Representative, any portion of the Work on the Project which is not done in accordance with Agency's Representative's interpretations, clarifications, instructions, or decisions shall be removed or replaced and Progressive Design-Build Entity shall be responsible for all resultant losses.
- H. Agency may at any time and from time to time, without prior notice to or approval of Progressive Design-Build Entity, replace Agency's Representative with a new Agency Representative. Upon receipt of notice from Agency informing Progressive Design-Build Entity of such replacement and identifying the new Agency's Representative, Progressive Design-Build Entity shall recognize such person or firm as Agency's Representative for all purposes under the Contract Documents.

ARTICLE 4 -AVAILABILITY AND OWNERSHIP OF LANDS AND MATERIALS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.1 Availability of Lands.

- A. Agency shall furnish the Project site. Agency shall notify Progressive Design-Build Entity of any encumbrances or restrictions not of general application but specifically related to use of the Project site with which Progressive Design-Build Entity must comply in performing the Work. Agency will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. Progressive Design-Build Entity shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment at no additional cost to Agency.

4.2 Ownership of Site Materials Found.

- A. The title to water, soil, rock, gravel, sand, minerals, timber and any other materials developed or obtained in the excavation or other operations of Progressive Design-Build Entity or any of its Subcontractors in the performance of the Contract, and the right to use said items in carrying out the Contract, or to dispose of same, is hereby

expressly reserved by Agency. Neither Progressive Design-Build Entity nor any of its Subcontractors nor any of their representatives or employees shall have any right, title, or interest in said materials, nor shall they assert or make any claim thereto. Progressive Design-Build Entity will, as determined by Agency's Representative, be permitted to use in the Work without charge, any such materials which meet the requirements of the Contract Documents, provided Agency shall have the right to use or consume these materials without payment to a third party.

4.3 Hazardous Material at Site.

- A. Progressive Design-Build Entity shall have responsibility for detection, containment, abatement, remediation, treatment, storage, removal, transport and disposal of any Hazardous Material, including Hazardous Materials introduced onto the Project Site by Progressive Design-Build Entity, its employees, subcontractors, agents, or other parties acting on behalf of Progressive Design-Build Entity, and perform all other aspects of Hazardous Materials management in accordance with Applicable Laws and the Contract Documents. In the event Progressive Design-Build Entity becomes aware of the presence of, or exposure of persons to, any Hazardous Material at the Project Site, Progressive Design-Build Entity shall inform Agency by notice immediately.
- B. Progressive Design-Build Entity hereby specifically agrees to indemnify, defend and hold Agency, its present and future directors, officers, employees, agents, representatives, successors and assigns harmless from and against any and all losses, liabilities, claims, demands, damages, causes of action, fines, penalties, costs and expenses (including, but not limited to, all reasonable consulting, engineering, attorneys' or other professional fees), that they may incur or suffer by reason of: (a) the release by Agency or Progressive Design-Build Entity of, a Hazardous Material introduced onto the Project Site by Progressive Design-Build Entity, its employees, subcontractors, agents, or other parties acting on behalf of Progressive Design-Build Entity; (b) any enforcement or compliance proceeding commenced by or in the name of any governmental authority because of the presence on the Project Site of Hazardous Materials introduced onto the Project Site by Progressive Design-Build Entity, its employees, subcontractors, agents, or other parties acting on behalf of Progressive Design-Build Entity; and (c) any action reasonably necessary to abate, remediate or prevent a violation or threatened violation of any Hazardous Material laws by Progressive Design-Build Entity.

4.4 Protection and Restoration of Existing Improvements and Reference Points.

- A. Progressive Design-Build Entity 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 Agency. Progressive Design-Build Entity shall report to Agency's Representative whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

ARTICLE 5 - BONDS AND INSURANCE [*THE FOLLOWING INSURANCE REQUIREMENTS AND LIMITS SHOULD BE REVIEWED BY THE AGENCY'S RISK MANAGER***]**

5.1 Time for Compliance. Progressive Design-Build Entity shall not commence Work under this Contract until it has provided evidence to Agency that it has secured all insurance required under this Article. Progressive Design-Build Entity shall require and verify that all subconsultants and subcontractors maintain insurance meeting all the requirements stated herein. Progressive Design-Build Entity shall not allow any subconsultant or subcontractor to commence work on any subcontract until it has provided evidence to Agency that the subconsultant or subcontractor has secured all insurance required under this Article.

5.2 Minimum Requirements. Progressive Design-Build Entity shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise out of or result from the performance of the Work and Progressive Design-Build Entity's other obligations under the Contract Documents whether by Progressive Design-Build Entity, its agents, representatives, employees or subcontractors. Progressive Design-Build Entity shall also require all of its subconsultants and subcontractors to procure and maintain the same insurance for the duration of the Contract and verify the subconsultants' and subcontractors' compliance. Progressive Design-Build Entity's and subconsultants' and subcontractors' insurance shall meet at least the minimum levels of coverage set forth in this Article:

A. Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) General Liability: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); (2) Automobile Liability: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto) or if Progressive Design-Build Entity has no owned autos, non-owned, leased or hired autos Code 8 (hired) and Code 9 (non-owned); (3) Workers' Compensation and Employer's Liability: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance; (4) Installation Floater/Builder's Risk: "All Risk All Perils" form; and (5) Professional Liability/Errors and Omissions. The policies shall not contain any exclusion contrary to the Contract, including but not limited to endorsements or provisions limiting coverage for (1) contractual liability or (2) cross liability for claims or suits by one insured against another.

B. Minimum Limits of Insurance. Progressive Design-Build Entity shall maintain limits no less than:

1. For Commercial General Liability, Progressive Design-Build Entity shall have limits of at least the amount that corresponds to the GMP in the following table:

<u>GMP</u>	<u>Amount of Liability Insurance</u> (per occurrence)
Up to \$2 million	\$2 million
\$2 million - \$5 million	\$3 million
\$5 million - \$10 million	\$5 million
\$10 million- \$20 million	\$10 million

Over \$20 million	\$15 million
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If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 25 03, either the general aggregate limit shall apply separately to the Project or the general aggregate limit shall be twice the required occurrence limit. Should any of the Work involve aircraft (fixed wing or helicopter) owned or operated by Progressive Design-Build Entity, liability insurance with limits of not less than \$5,000,000 per occurrence for bodily injury and property damage is required. Should any of the Work involve watercraft owned or operated by Progressive Design-Build Entity, liability insurance with limits of not less than \$5,000,000 per occurrence for bodily injury and property damage is required.

2. Automobile Liability: \$1 million per accident for bodily injury and property damage.
 3. Workers' Compensation and Employer's Liability:
 - a. Workers' Compensation: statutory limits.
 - b. Employer's Liability limits of \$1 million per accident for bodily injury or disease.
 - c. Should any of the Work be upon or contiguous to navigable bodies of water, Progressive Design-Build Entity shall carry insurance covering its employees for benefits available under the Federal Longshoremen's and Harbor Worker's Act to the extent required by law;
 4. Excess/Umbrella Liability Policy may be provided to insure the total limits required for Commercial General Liability and Automobile Liability and must apply to all primary coverage afforded, including but not limited to general liability, owned and non-owned automobiles, leased and hired cars.
 5. Professional Liability/Errors and Omissions: \$2,000,000 per claim.
- C. Notices; Cancellation or Reduction of Coverage. At least fifteen (15) Days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with Agency. If such coverage is cancelled or materially reduced, Progressive Design-Build Entity shall, within ten (10) Days after receipt of written notice of such cancellation or reduction of coverage, file with Agency evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Contract does not comply with these specifications or is canceled and not replaced, Agency has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Agency will be promptly reimbursed by Progressive Design-Build Entity or Agency may withhold amounts sufficient to pay premium from Progressive Design-Build Entity payments. In the alternative, Agency may suspend or terminate this Contract.

5.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Progressive Design-Build Entity shall provide endorsements on forms approved by Agency to add the following provisions to the insurance policies:

- A. General Liability. The general liability policy shall include or be endorsed (amended) to state that: (1) using ISO CG forms 20 10 and 20 37 (including completed operations), or endorsements providing the exact same coverage, Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions shall be covered as additional insureds with respect to the Work or ongoing and completed operations performed by or on behalf of Progressive Design-Build Entity, including materials, parts or equipment furnished in connection with such work; and (2) using ISO form 20 01, or endorsements providing the exact same coverage, the insurance coverage shall be primary insurance as respects Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions, or if excess, shall stand in an unbroken chain of coverage excess of Progressive Design-Build Entity's scheduled underlying coverage. Any excess insurance shall contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of Agency, before Agency's own primary insurance or self-insurance shall be called upon to protect it as a named insured. Any insurance or self-insurance maintained by Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions shall be excess of Progressive Design-Build Entity's insurance and shall not be called upon to contribute with it in any way.
- B. Automobile Liability. The automobile liability policy shall include or be endorsed (amended) to state that: (1) Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Progressive Design-Build Entity or for which Progressive Design-Build Entity is responsible; and (2) the insurance coverage shall be primary insurance as respects Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions, or if excess, shall stand in an unbroken chain of coverage excess of Progressive Design-Build Entity's scheduled underlying coverage. Any insurance or self-insurance maintained by Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions shall be excess of Progressive Design-Build Entity's insurance and shall not be called upon to contribute with it in any way.
- C. Workers' Compensation and Employer's Liability Coverage. The insurer shall agree, using WC 00 03 13 or the exact equivalent, to waive all rights of subrogation against Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions for losses paid under the terms of the insurance policy.
- D. Professional Liability/Errors and Omissions. Professional Liability Insurance insuring the A/E, its officers, directors, stockholders, employees, agents, or partner, and all other persons for whose acts the A/E may be liable, against any and all liabilities arising out of or in connection with the negligent acts, errors or omissions of any of the foregoing in connection with the carrying out of their professional responsibilities described in this Contract. Professional Liability Insurance shall remain in full force and effect, and shall be so certified to Agency by the insurer, for a period of five (5) years after the completion of all of Progressive Design-Build Entity's services

hereunder and Agency's acceptance of the Project. All subconsultants shall have professional liability insurance with the same limits (additional requirements for Professional Liability/Errors and Omissions Insurance written on a "claims made" basis are set forth below).

- E. All Coverages. Each insurance policy required by this Agreement shall be endorsed to include the following provisions:
1. coverage shall not be suspended, voided, reduced or canceled except after thirty (30) Days (10 Days for nonpayment of premium) prior written notice by mail has been given to Agency and all additional insureds.
 2. any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to Agency and any other additional insureds.
 3. standard separation of insureds provisions.
 4. no special limitations on the scope of protection afforded to Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions.
 5. waiver of any right of subrogation of the insurer against Agency, its officials, officers, employees, agents, and volunteers, or any other additional insureds, or shall specifically allow Progressive Design-Build Entity or others providing insurance in compliance with these specifications to waive their right of recovery prior to a loss. By signing this agreement, Progressive Design-Build Entity hereby waives its own right of recovery against Agency or any other additional insureds, and shall require similar written express waivers and insurance clauses from each of its subconsultants and subcontractors.

5.4 Builder's Risk ["All Risk"]

- A. It is Progressive Design-Build Entity's responsibility to maintain or cause to be maintained Builder's Risk ["All Risk"] extended coverage insurance on all work, material, equipment, appliances, tools, and structures that are or will become part of the Work and subject to loss or damage by fire, and vandalism and malicious mischief, in an amount to cover 100% of the replacement cost. Agency accepts no responsibility for the Work until the Work is formally accepted by Agency. Progressive Design-Build Entity shall provide a certificate evidencing this coverage before commencing performance of the Work.
- B. The named insureds shall be Progressive Design-Build Entity, all Subcontractors of any tier (excluding those solely responsible for design work), suppliers, and Agency, its elected officials, officers, employees, agents and authorized volunteers, as their interests may appear. Progressive Design-Build Entity shall not be required to maintain property insurance for any portion of the Work following acceptance by Agency.
- C. Policy shall be provided for replacement value on an "all risk" basis. There shall be no coinsurance penalty provision in any such policy. Policy must include: (1) coverage

for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) transit coverage, including ocean marine coverage (unless insured by the supplier), with sub-limits sufficient to insure the full replacement value of any key equipment item; and (5) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site. Such insurance shall be on a form acceptable to Agency to ensure adequacy and sublimit.

D. In addition, the policy shall meet the following requirements:

1. Insurance policies shall be so conditioned as to cover the performance of any extra work performed under the Contract.
2. Coverage shall include all materials stored on site and in transit.
3. Coverage shall include Progressive Design-Build Entity's tools and equipment.
4. Insurance shall include boiler, machinery and material hoist coverage.
5. Agency shall be named loss payee.

5.5 Pollution Liability Insurance. Pollution Liability Insurance is required should any of the Project involve pollutants. Liability coverage shall include coverage for the environmental risk associated with the project and expenses related to such, including bodily injury, property damage, on and off site clean-up, transporting, carrying, or storing pollutants, coverage for non-owned disposal site in an amount not less than that set forth in the Special Conditions. Pollutants include, but are not limited to, asbestos, mold, microbial matter, solid, liquid, gaseous or thermal irritants or contaminants, including smoke, vapor, soot, fumes, acids, alkalis, chemicals, and waste. Waste includes materials to be recycled, reconditioned, or reclaimed.

5.6 Receipt and Application of Insurance Proceeds. Any insured loss under the policies of insurance required herein will be adjusted with Agency and made payable to Agency as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of the provisions herein. Agency shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Project and the cost thereof covered by an appropriate Change Order. Agency as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing to Agency's exercise of this power within fifteen (15) Days after the occurrence of loss. If such objection be made, Agency as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Agency as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Agency as fiduciary shall give bond for the proper performance of such duties.

- 5.7 Partial Utilization, Acknowledgement of Property Insurer. If Agency finds it necessary to occupy or use a portion or portions of the Project prior to Completion of all the Work, no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.
- 5.8 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by Agency. Progressive Design-Build Entity shall guarantee that, at the option of Agency, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects Agency, its officials, officers, employees, agents, and volunteers and any other additional insureds named in the Special Conditions; or (2) Progressive Design-Build Entity shall procure a bond guaranteeing payment of losses and related investigation costs, claims, and administrative and defense expenses.
- 5.9 Claims Made Policies. Claims made policies are not acceptable other than for Professional Liability. In addition to the requirements above, for any claims made policy: The Retroactive Date must be shown and must be before the date of the Contract or the beginning of contract work; Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after Agency's acceptance of the Work; and If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Progressive Design-Build Entity must purchase "extended reporting" coverage for a minimum of five (5) years after Agency's acceptance of the Work.
- 5.10 Subcontractor Insurance Requirements. Progressive Design-Build Entity shall not allow any Subcontractors to commence work on any subcontract relating to the Work until Progressive Design-Build Entity has verified that all Subcontractors maintain insurance meeting all requirements under this Section and has provided evidence to Agency of such insurance. For Commercial General Liability coverage Subcontractors shall provide coverage naming Agency, its officials, officers, employees, agents, and volunteers with a format at least as broad as CG 20 38 04 13. If requested by Progressive Design-Build Entity, Agency may approve different scopes or minimum limits of insurance for particular Subcontractors. Progressive Design-Build Entity shall confirm that Agency shall be named as additional insureds on all Subcontractors' policies of Commercial General Liability Insurance and Commercial Automobile Insurance.
- 5.12 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to Agency.
- 5.13 Verification of Coverage. Progressive Design-Build Entity shall furnish Agency with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to Agency. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by Agency before work commences. Agency reserves the right to require complete, certified copies of all required insurance policies, at any time.

5.14 Reservation of Rights. Agency reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

5.15 Performance Bond and Payment Bond.

- A. Progressive Design-Build Entity shall submit performance and payment bonds on the forms provided with the Contract Documents, duly executed by a responsible corporate surety admitted to transact surety business in the State of California, as defined in Code of Civil Procedure Section 995.120, and listed in the United States Department of the Treasury circular entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," authorized to do business in the State of California and acceptable to Agency conditioned upon the faithful performance by Progressive Design-Build Entity of all requirements of the Contract Documents. Each of the bonds shall be in a sum no less than one hundred percent (100%) of the GMP. Progressive Design-Build Entity shall furnish bonds covering the faithful performance of the Contract (Performance Bond) and payment of obligations arising thereunder (Payment Bond) on the forms contained in the Contract. The obligations of the performance bond surety shall continue so long as any obligation of Progressive Design-Build Entity remains. Nothing herein shall limit Agency's rights or Progressive Design-Build Entity's or surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.
- B. The Payment Bond and Performance Bond shall be in effect on the date the Contract is signed by Agency. Progressive Design-Build Entity shall promptly furnish such additional security as may be required by Agency to protect its interests and those interests of persons or firms supplying labor or materials to the Project. The premiums for the Payment Bond and Performance Bond shall be paid by Progressive Design-Build Entity. Progressive Design-Build Entity maintains and agrees that it has executed Payment and Performance Bonds in the amounts and manner required by the Contract Documents. No payment will be made to Progressive Design-Build Entity until Progressive Design-Build Entity's Payment Bond and Performance Bond have been approved by Agency.
- C. Should, in Agency's sole opinion, any bond become insufficient or surety found to be unsatisfactory, Progressive Design-Build Entity shall renew or replace the effected bond within 10 Days of receiving notice from Agency. In the event the surety or Progressive Design-Build Entity intends to reduce or cancel any required bonds, at least thirty (30) Days prior written notice shall be given to Agency, and Progressive Design-Build Entity shall post acceptable replacement bonds at least ten (10) Days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this Article are accepted by Agency.
- D. To the extent, if any, that the GMP is increased in accordance with the Contract, Progressive Design-Build Entity shall, upon request of Agency, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to Agency. The bonds shall further provide that no change or alteration of the Contract (including, without limitation, an increase in the GMP, as

referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to Progressive Design-Build Entity will release the surety. If Progressive Design-Build Entity fails to furnish any required bond, Agency may terminate the Contract for cause.

ARTICLE 6 -PROGRESSIVE DESIGN-BUILD ENTITY'S RESPONSIBILITIES

6.1 Progressive Design-Build Entity Responsibility; Independent Contractor.

A. Progressive Design-Build Entity shall be responsible to Agency for acts and omissions of Progressive Design-Build Entity, their employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of Work on the Project under direct or indirect contract with Progressive Design-Build Entity or any of its Subcontractors. Agency retains Progressive Design-Build Entity on an independent contractor basis. Progressive Design-Build Entity retains the right to perform similar or different services for others during the term of this Contract. Progressive Design-Build Entity is not an employee, agent or representative of Agency. Progressive Design-Build Entity represents that it is fully experienced and properly qualified to perform the class of Work provided for in this Contract and that it is properly licensed, equipped, organized, and financed to perform Work on the Project. Neither Agency, nor any of its officials, officers, directors, employees or agents shall have control over the conduct of Progressive Design-Build Entity or any of Progressive Design-Build Entity's officers, employees, or agents, except as set forth in this Contract. Progressive Design-Build Entity shall maintain complete control over its employees and its Subcontractors and shall pay all wages, salaries and other amounts due such personnel in connection with their performance as required by law. Progressive Design-Build Entity shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, and workers' compensation insurance.

6.2 Review of Contract Documents and Field Conditions by Progressive Design-Build Entity; Single Point Responsibility of Progressive Design-Build Entity.

- A. In addition to the examination and reviews performed, and obligations assumed, incident to making the representations set forth in the Contract, Progressive Design-Build Entity shall carefully study and compare each of the Contract Documents provided by Agency with the others and with information furnished by Agency, and shall promptly report in writing to Agency's Representative any errors, inconsistencies, or omissions in the Contract Documents provided by Agency or inconsistencies with Applicable Law observed by Progressive Design-Build Entity. Progressive Design-Build Entity shall be solely responsible for any errors, inconsistencies or omissions in the Contract Documents if Progressive Design-Build Entity fails to perform such review and examination or fails to report such errors, inconsistencies or omissions to Agency in writing.
- B. Progressive Design-Build Entity is responsible for the design and construction of the Project and shall use the highest design and engineering standards of care applicable to projects, buildings or work of similar size, complexity, quality and scope in performing Work on the Project. Progressive Design-Build Entity shall be solely

responsible for any and all design errors including, but without limitation, errors, inconsistencies or omissions in the Construction Documents. Progressive Design-Build Entity shall take field measurements, verify field conditions, and carefully compare with the Contract Documents such field measurements, conditions, and other information known to Progressive Design-Build Entity before commencing Work on the Project. Errors, inconsistencies, or omissions discovered at any time shall be promptly reported in writing to Agency's Representative.

- C. If Progressive Design-Build Entity performs any design and/or construction activity which it knows, or should know, involves an error, inconsistency, or omission referred to in this Article, without notifying and obtaining the written consent of Agency's Representative, Progressive Design-Build Entity shall be responsible for the resultant losses, including, without limitation, the costs of correcting Defective Work.
- D. Agency does not assume any obligation to employ Progressive Design-Build Entity's services or pay Progressive Design-Build Entity royalties of any type as to future programs that may result from Work performed under this Contract.
- E. Progressive Design-Build Entity shall be responsible for all plotting, printing, copying and distribution costs of any and all documents required in connection with Work on the Project.
- F. Progressive Design-Build Entity agrees that it has single point responsibility for the design and construction of this Project, and agrees to utilize the highest standard of excellent design, engineering and construction practices. Progressive Design-Build Entity has the duty to act in Agency's best interests at all times throughout the course and performance of this Contract.

6.3 Design, Supervision and Construction Procedures.

- A. Progressive Design-Build Entity shall supervise, coordinate, and direct all Work on the Project using Progressive Design-Build Entity's best skill and attention and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Progressive Design-Build Entity shall be solely responsible for, and have control over, the entire design effort, construction means, methods, techniques, sequences, procedures, and the coordination of all portions of Work on the Project, including, but without limitation, landscape and site work, utilities, and building systems.
- B. Progressive Design-Build Entity shall be responsible to Agency for acts and omissions of Progressive Design-Build Entity, its agents, employees, and Subcontractors, and their respective agents and employees.
- C. Progressive Design-Build Entity shall not be relieved of its obligation to perform all Work on the Project in accordance with the Contract Documents either by acts or omissions of Agency or Agency's Representative in the administration of the Contract, or by tests, inspections, or approvals required, or performed, by persons or firms other than Progressive Design-Build Entity.

- D. Progressive Design-Build Entity shall be responsible for inspection of all portions of Work on the Project to determine that such portions conform to the requirements of the Contract Documents and are ready to receive subsequent Work.
- E. To facilitate communications and the management of the design process, Progressive Design-Build Entity shall maintain an office in Agency's County for the duration of the design process.
- F. Unless otherwise provided in the Contract Documents, Progressive Design-Build Entity shall provide and pay for all professional design/engineering services, services, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work on the Project, whether temporary or permanent and whether or not incorporated or to be incorporated in Work on the Project. Progressive Design-Build Entity shall furnish architectural and engineering services for the preparation of Construction Documents necessary to complete the Project in accordance with the requirements of the Contract Documents. Progressive Design-Build Entity shall furnish all labor, materials, equipment, services, and transportation necessary to complete construction of the Project, including site work, structures and utilities.
- G. Progressive Design-Build Entity is required to deliver to Agency, if requested, any and all Design Materials including, but not limited to, calculations, preliminary drawings, construction drawings, shop drawings, electronic media data, tenant improvement documents, sketches, illustrations, specifications, descriptions, models, mock ups, and other information developed, prepared, furnished, or delivered in the prosecution of the Design Work.
- H. Progressive Design-Build Entity is responsible for preparation of the Construction Documents for the entire Project. Progressive Design-Build Entity is responsible for construction of the entire Project as required by the Contract Documents.

6.4 Labor; Working Hours.

- A. Progressive Design-Build Entity shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Progressive Design-Build Entity shall at all times maintain good discipline and order at the Site. Progressive Design-Build Entity will provide all labor needed to complete the Work within the Contract Times.
- B. 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 shall be performed during regular working hours, which are defined as hours between 7:00 a.m. and 3:30 p.m. any day Monday through Friday of any week except on Holidays and/or during Schedule Constraints defined in the Contract Documents. Progressive Design-Build Entity will not permit the performance of Work on a Saturday, Sunday, any Holiday or during identified Schedule Constraints without Agency's written consent given after prior written notice to Agency's Representative. Progressive Design-Build Entity shall be responsible for,

and shall reimburse Agency for, all inspection costs outside regular working hours, including overtime.

6.5 Progress Meetings.

- A. Progressive Design-Build Entity shall schedule and hold regular on-Site progress meetings at least weekly and at other times as requested by Agency or as required by progress of the Work. Progressive Design-Build Entity, Agency's Representative, and all Subcontractors active on the Site shall attend each meeting. Progressive Design-Build Entity may at its discretion request attendance by representatives of its Suppliers, manufacturers, and other Subcontractors. Agency's Representative will preside at the progress meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings is to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, Progressive Design-Build Entity shall present any issues which may impact its progress with a view to resolve these issues expeditiously.

6.6 Cost-Loaded CPM Progress Schedule and Recovery Schedule.

- A. Progressive Design-Build Entity shall adhere to the Project Schedule, which shall be a cost-loaded CPM progress schedule established in accordance with the Contract Documents as it may be adjusted from time to time as provided below:
1. Progressive Design-Build Entity shall submit to Agency's Representative for acceptance proposed adjustments in the Project Schedule that will not result in changing the Guaranteed Completion Date. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 2. Proposed adjustments in the Project Schedule that will change the Guaranteed Completion Date shall be submitted in accordance with the requirements of the Contract Documents. Adjustments in the Guaranteed Completion Date may only be made by a Change Order.
 3. Should any of the following conditions exist, Agency may require Progressive Design-Build Entity to prepare, at no extra cost to Agency, a plan of action and a recovery schedule for completing the Work and achieving all contractual milestones within the Guaranteed Completion Date:
 - a. Progressive Design-Build Entity's monthly progress report indicates delays that are, in the opinion of Agency, of sufficient magnitude that Agency questions Progressive Design-Build Entity's ability to complete the Work;
 - b. The Project Schedule shows Progressive Design-Build Entity to be thirty (30) or more Days behind the critical path at any time during construction;
 - c. Progressive Design-Build Entity desires to make changes in the logic or the planned duration of future activities of the Project Schedule which, in the opinion of Agency, are major in nature.

- d. The recovery schedule shall include proposed revisions to the Project Schedule, demonstrating how Progressive Design-Build Entity intends to achieve all contractual milestones including contract completion within the Guaranteed Completion Date. The submittal shall include a narrative describing the actions planned by Progressive Design-Build Entity to recover the schedule.
 - e. Progressive Design-Build Entity shall submit the recovery schedule within seven (7) Days of Agency's request:
 - (i) If Progressive Design-Build Entity asserts that Agency is responsible for the delay, failure to submit the recovery schedule within seven (7) Days of Agency's request will be considered a concurrent delay event attributable to Progressive Design-Build Entity, and Progressive Design-Build Entity shall only be entitled to non-compensable adjustments to the Guaranteed Completion Date.
 - (ii) If Progressive Design-Build Entity is responsible for the delay, this provision will not limit or affect Progressive Design-Build Entity's liability and failure to submit the recovery schedule with seven (7) Days of Agency's request may result in Agency withholding progress payments or other amounts due under the Contract Documents.
 - f. Progressive Design-Build Entity is responsible for all costs associated with the preparation and execution of the recovery schedule, including any necessary recovery actions, which may include, but are not limited to, assignment of additional labor, and/or equipment, shift or overtime work, expediting of submittals or deliveries, overlapping of activities or sequencing changes to increase activity concurrence.
 - g. Regardless of whether Agency directs Progressive Design-Build Entity to prepare a recovery schedule pursuant to this Article, Progressive Design-Build Entity shall promptly undertake appropriate action at no additional cost to Agency to recover the schedule whenever the current Project Schedule shows that Progressive Design-Build Entity will not achieve a milestone and/or complete the Work within the Guaranteed Completion Date.
- B. Unless otherwise specified in the Contract Documents, Progressive Design-Build Entity 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 within the Guaranteed Completion Date.
- C. Failure of Agency's Representative to discover errors or omissions in schedules that it has reviewed, or to inform Progressive Design-Build Entity that Progressive Design-Build Entity, Subcontractors, or others are behind schedule, or to direct or enforce procedures for complying with the Project Schedule shall not relieve Progressive Design-Build Entity from its sole responsibility to perform and complete all Work on

the Project within the Guaranteed Completion Date and shall not be a cause for an adjustment of the Guaranteed Completion Date or the GMP.

- D. Progressive Design-Build Entity shall perform all Work on the Project in accordance with the current accepted Project Schedule.

6.7 Materials.

- A. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All materials furnished by Progressive Design-Build Entity shall be of the most suitable grade for the purpose intended considering strength, ductility, durability, and best industry practice.
- B. All special warranties and guarantees required by the Contract Documents shall expressly run to the benefit of Agency. If required by Agency's Representative, Progressive Design-Build Entity 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 shall 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. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract Documents. Progressive Design-Build Entity shall be entirely responsible for damage or loss by weather or other causes to materials or Work until Agency has accepted the Work. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of Agency or any independent contractor.
- E. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Progressive Design-Build Entity warrants good title to all material, supplies, and equipment installed or incorporated in the work and agrees upon completion to deliver the Work to Agency free from any claims, liens, or encumbrances.
- F. Inspection of Materials.
 - 1. Materials furnished by Progressive Design-Build Entity which will become a part of the Project shall be subject to inspection at any one or more of the following locations, as determined by Agency's Representative: at the place of production or manufacture, at the shipping point, or at the site of the Work. To allow sufficient time to provide for inspection, Progressive Design-Build Entity shall submit to Agency's Representative, at the time of issuance, copies of purchase orders or other written instrument confirming procurement of the materials, including drawings and other pertinent information, covering materials on which inspection will be made.

2. No later than fourteen (14) Days prior to manufacture of material, Progressive Design-Build Entity shall inform Agency's Representative, in writing, the date the material is to be manufactured.
3. The inspection of materials at any of the locations specified above or the waiving of the inspection thereof shall not impact whether the materials and equipment conform to the Contract Documents. Progressive Design-Build Entity will not be relieved from furnishing materials meeting the requirements of the Contract Documents due to Agency's inspection or lack of inspection of the equipment or materials. Acceptance of any materials will be made only after materials are installed in the Project.

6.8 Submittals.

A. Industry Standard Submittals.

1. Progressive Design-Build Entity will identify in the Construction Documents all industry standard submittals for all materials, systems, and equipment incorporated into the Work.

B. Schedule of Submittals.

1. Progressive Design-Build Entity will prepare and deliver a Schedule of Submittals to Agency's Representative that has been fully integrated with the cost-loaded CPM Progress Schedule and identifies each Submittal required by the Construction Documents as well as the date on which Progressive Design-Build Entity will deliver each Submittal to Agency's Representative. Each Submittal must be delivered to Agency's Representative at least thirty (30) Days prior to the date the material or equipment is scheduled to be incorporated into the Work. Progressive Design-Build Entity is responsible for any schedule delays resulting from the Submittal process.
2. Progressive Design-Build Entity must submit all submittals required by the Construction Documents in accordance with the Schedule of Submittals. If Progressive Design-Build Entity fails to submit the submittals in accordance with the Schedule of Submittals, Progressive Design-Build Entity will be solely liable for any delays or impacts caused by the delayed submittal, whether direct or indirect. Progressive Design-Build Entity will be liable for the time calculated from the date the submittal is due until the date a compliant submittal is made. A compliant submittal will be one that is complete and satisfies the requirements of the Contract Documents.
3. Where a Submittal, Shop Drawing or Sample is required by the Construction Documents, any related Work performed prior to Agency's Representative's review and approval of the pertinent Submittal will be at the sole expense and responsibility of Progressive Design-Build Entity.

C. Submittal Procedures.

1. Progressive Design-Build Entity will follow the following procedures for each Submittal, Shop Drawing and Sample required by the Contract Documents:

- a. Transmit three (3) copies of each with a Submittal Transmittal.
- b. Transmittals will be sequentially numbered. Progressive Design-Build Entity to mark revised Submittals with original number and sequential alphabetic suffix.
- c. Each Submittal will identify the Project, Progressive Design-Build Entity, Subcontractor and supplier, pertinent Construction Document and detail number, and specification section number appropriate to the Submittal.
- d. Progressive Design-Build Entity must sign each Submittal, certifying that it has reviewed and approved the Submittal, verified products required, field dimensions, adjacent construction work, and that coordination of information is according to requirements of the Project and Contract Documents.
- e. Identify variations in Contract Documents and product or system limitations that may differ and/or be detrimental to successful performance of completed Work.
- f. When a Submittal is revised for resubmission, Progressive Design-Build Entity shall promptly address Agency comments and resubmit. Progressive Design-Build Entity shall identify changes made since previous submission.
- g. Agency's review of Submittals shall not relieve Progressive Design-Build Entity from responsibility for deviations from the Contract Documents unless Progressive Design-Build Entity has, in writing, called Agency's attention to such deviations at time of submission and Agency's has taken no exception to the deviation. Agency's review of Submittals shall not relieve Progressive Design-Build Entity from responsibility for errors in the Submittals.
- h. Submittals not required by the Construction Documents or requested by Agency's Representative will not be acknowledged or processed.
- i. Incomplete Submittals will not be reviewed by Agency's Representative. Delays resulting from incomplete submittals are not the responsibility of Agency's Representative.
- j. Progressive Design-Build Entity shall not be entitled to any extension of the Guaranteed Completion Date as a result of the Submittal process.

6.9 Shop Drawing and Sample Submittal Procedures.

- A. Before submitting each Shop Drawing or Sample, Progressive Design-Build Entity shall have:
 1. Reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

2. Determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 3. Determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 4. Determined and verified all information relative to Progressive Design-Build Entity's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- B. With each Submittal, Progressive Design-Build Entity shall give Agency's Representative specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal and, in addition, a specific notation made on each Shop Drawing or Sample submitted to Agency's Representative for review and approval of each such variation.
- C. Shop Drawings.
1. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Agency's Representative the services, materials, and equipment Progressive Design-Build Entity proposes to provide and to enable Agency's Representative to review the information Representative for assessing conformance with information given and design concept expressed in Contract Documents. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional engineer responsible for designing components shown on Shop Drawings. Shop Drawings must include signed and sealed calculations to support design in a form suitable for submission to and approval by authorities having jurisdiction. Progressive Design-Build Entity shall make revisions and provide additional information when required by authorities having jurisdiction.
- D. Samples.
1. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as required to enable Agency's Representative to review the submittal for assessing conformance with information given and design concept expressed in Contract Documents. Samples should be of appropriate size and detail to assess functional, aesthetic, color, texture, patterns and finish selection.
- E. Agency's Representative's Review.
1. Agency's Representative will review Shop Drawings and Samples in accordance with the Schedule of Submittals. Agency's Representative's review and acceptance will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Project, conform to the information

given in 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. Agency's Representative's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of design or construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 3. Agency's Representative's review and acceptance shall not relieve Progressive Design-Build Entity from responsibility for any variation from the requirements of the Contract Documents unless Agency's Representative has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Submittal.
- F. Progressive Design-Build Entity shall make corrections required by Agency's Representative and shall return three (3) corrected copies of Shop Drawings and Product Data, and submit, as required, new Samples for review and approval. Progressive Design-Build Entity shall direct specific attention in writing to revisions other than the corrections called for by Agency's Representative on previous Submittals. Agency will review the first resubmittal of Shop Drawings at its cost. Agency reserves the right to reduce the GMP by Change Order for its cost for any subsequent reviews of Shop Drawing resubmittals.

6.10 Construction Documents.

A. Construction Documents.

1. The A/E shall design the Project and prepare the Construction Documents. The Construction Documents shall provide information customarily necessary in documents for projects of similar size, complexity, and quality. The Construction Documents shall include all information required by the building trades to complete the construction of the Project, other than such details customarily developed by others during construction. Agency's review of the Construction Documents shall be conducted in accordance with the approved Project Schedule with procedures set forth in this Article. Such review shall not relieve Progressive Design-Build Entity from its responsibilities under the Contract. Such review shall not be deemed an approval or waiver by Agency of any deviation from, or of Progressive Design-Build Entity's failure to comply with, any provision or requirement of the Contract Documents, unless such deviation or failure has been identified as such in writing in the Document submitted by Progressive Design-Build Entity and approved by Agency.
2. However, it is acknowledged by the parties hereto that inherent in a design-build concept, bridging or otherwise, the production and review of Construction Documents may be a continuing process with portions thereof completed at different times. Progressive Design-Build Entity will submit the Construction

Document packages to Agency for review and approval in accordance with the agreed upon schedule, unless otherwise approved in writing by Agency. The Project Schedule shall indicate the times for Agency to review the completion of each such portion of the Construction Documents and a reasonable time for review of same.

3. Progressive Design-Build Entity shall submit completed packages of the Construction Documents for review by Agency at the times indicated on the Project Schedule and as defined in the Scheduling Specification. Meetings between Progressive Design-Build Entity and Agency to review the Construction Document packages, shall be scheduled at least every two weeks, or as otherwise agreed to by the parties, and held so as not to delay Work on the Project. Progressive Design-Build Entity will conduct these design meetings with Agency in accordance with the schedule approved by Agency. Progressive Design-Build Entity will be responsible for preparing and circulating for the parties review, design meeting minutes from all such meetings.

B. Field Engineering.

1. Progressive Design-Build Entity shall retain and pay expenses of a civil engineer or land surveyor to establish on the Project site the required reference points and benchmarks, establish building lines and elevations, check for building framing, plumbness, and establish on building frame the required basic grid lines. The engineer or land surveyor shall be properly licensed in the State of California.
2. Progressive Design-Build Entity shall locate and protect control points prior to starting Work on the Project site and preserve permanent reference points during construction, and shall require the engineer or surveyor to replace control points which become lost or destroyed.

C. Geotechnical and Survey.

1. Agency may provide a geotechnical report to Progressive Design-Build Entity that shall not be considered a part of the Contract Documents and shall be informational only and may not be relied upon by Progressive Design-Build Entity to form its basis of design. Progressive Design-Build Entity shall be responsible for obtaining its own geotechnical report which includes supporting data, findings and recommendations; and also with a legal description and a project survey, as necessary, which shall become a part of the Contract Documents. The Design Work shall be consistent with both the findings and recommendations of Progressive Design-Build Entity's geotechnical report and legal description and Project survey, or such other geotechnical recommendations obtained by Progressive Design-Build Entity at its sole cost and expense.
2. Progressive Design-Build Entity shall verify the location and depth (elevation) of all existing utilities and services before performing any excavation work.
3. Any additional tests, borings, etc. necessary to support the Construction Documents shall be the responsibility of Progressive Design-Build Entity.

6.11 Dust Control.

- A. Progressive Design-Build Entity, at its expense, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas free from dust. Industry accepted methods of dust control suitable for the area involved, such as sprinkling, chemical treatment, light bituminous treatment or similar methods, will be permitted.

6.12 Air Pollution.

- A. To the extent applicable, Progressive Design-Build Entity must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management Agency (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Progressive Design-Build Entity shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Progressive Design-Build Entity shall indemnify Agency against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Progressive Design-Build Entity, its sub-consultants, or others for whom Progressive Design-Build Entity is responsible under its indemnity obligations provided for in this Agreement.
- B. Progressive Design-Build Entity shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements. Progressive Design-Build Entity shall not discharge into the atmosphere from any source whatever smoke, dust, or other air contaminants in violation of the laws, rules, and regulations of the governmental entities having jurisdiction.

6.13 Patent Fees and Royalties.

- A. Progressive Design-Build Entity 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 a particular 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 Agency or Agency's Representative, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Agency in the Contract Documents.
- B. To the fullest extent permitted by Applicable Laws, Progressive Design-Build Entity shall indemnify, defend, and hold harmless Agency and Agency's Representative, 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 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 or specified in the Contract Documents and identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

6.14 Permits and Licenses.

- A. Progressive Design-Build Entity shall obtain and pay for all other permits and licenses required for the Work, including excavation permit and permits for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than Agency.
- B. Progressive Design-Build Entity shall arrange and pay for all off-site inspection of the Work related to permits and licenses, including certification, required by the Contract Documents or by governing authorities, except for such off-site inspections identified as Agency's responsibility in the Contract Documents.
- C. Before acceptance of the Work, Progressive Design-Build Entity shall submit all licenses, permits, certificates of inspection and required approvals to Agency.

6.15 Applicable Laws.

- A. Progressive Design-Build Entity shall give all notices required by and shall comply with all Applicable Laws applicable to the performance of the Work. Except where otherwise expressly required by Applicable Laws, neither Agency nor Agency's Representative shall be responsible for monitoring Progressive Design-Build Entity's compliance with any Applicable Laws. If Progressive Design-Build Entity performs any Work knowing or having reason to know that it is contrary to Applicable Laws, Progressive Design-Build Entity shall bear all claims, 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 such Work.

6.16 Labor Laws and Progressive Design-Build Entity's Obligations.

A. Hours of Work.

- 1. Progressive Design-Build Entity and Subcontractors shall furnish sufficient forces to ensure the prosecution of the Work on the Project in accordance with the Construction Schedule and in such a manner to allow for the full and adequate completion of the Project within the Guaranteed Completion Date.
- 2. Work on the Project shall be performed during regular working hours, except that in the event of an emergency or when required to complete the Work on the Project in accordance with job progress, Work may be performed outside of regular working hours with advance written notice to Agency. Permissible working hours shall be between 7:00 a.m. to 3:30 p.m. and shall not be changed except with consent of Agency.

3. Eight (8) hours of work shall constitute a legal day's work. Progressive Design-Build Entity and each Subcontractor shall forfeit, as penalty to Agency, twenty-five dollars (\$25) for each worker employed in the execution of Work on the Project by Progressive Design-Build Entity or any Subcontractor for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any week in violation of the provisions of the Labor Code, and in particular, Section 1810 to Section 1815, except as provided in Labor Code Section 1815.
4. If the work done after hours is required by the Contract to be done outside Progressive Design-Build Entity's regular working hours, the costs of any inspections, if required to be done outside normal working hours, shall be borne by Agency. If Agency allows Progressive Design-Build Entity to do Work outside regular working hours for Progressive Design-Build Entity's own convenience, the costs of any inspections required outside regular working hours shall be invoiced to Progressive Design-Build Entity by Agency and deducted from the next progress payment. If Progressive Design-Build Entity elects to perform Work outside the Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to Progressive Design-Build Entity by Agency and deducted from the next progress payment.
5. No Work on the Project or other activities by or on behalf of Progressive Design-Build Entity which presents a hazard or unreasonable disruption to Agency staff shall be allowed during normal working hours. The determination as to whether Work on the Project or some other activity presents a hazard or constitutes an unreasonable disruption to Agency staff shall be made by and pursuant to the sole discretion of a representative of Agency. All Work on the Project or other activities which could present a hazard or unreasonable disruption to Agency staff shall be performed before or after normal working hours, on weekends, or on an Agency recognized holiday. Neither Progressive Design-Build Entity nor its Subcontractors or anyone working on behalf of Progressive Design-Build Entity or Subcontractors shall be entitled to additional compensation or an extension of the Guaranteed Completion Date for having to arrange their Work schedule so as not to violate the provisions of this Article 6.17A. Progressive Design-Build Entity, Subcontractors and persons working on behalf of Progressive Design-Build Entity shall be expected to arrange such Work and other activities in advance so as to avoid creating monetary or time impacts.

B. Wage Rates, Travel, and Subsistence.

1. Progressive Design-Build Entity is aware of the requirements of Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since the Work on the Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Progressive Design-Build Entity agrees to fully comply with such Prevailing Wage Laws. Agency has obtained the prevailing wage rates from the Director of the Department of Industrial Relations, State of California. Copies of the prevailing wage rates are

on file at Agency's office and shall be made available to any interested party on request. Progressive Design-Build Entity shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform the Project available to interested parties upon request, and shall post copies at Progressive Design-Build Entity's principal place of business and at the Project site. Progressive Design-Build Entity shall defend, indemnify and hold Agency, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

2. Pursuant to Labor Code Section 1775, Progressive Design-Build Entity is hereby advised that in the event that Progressive Design-Build Entity fails to pay prevailing wages, Progressive Design-Build Entity will be held liable for penalties and for shortfalls in wages and such amounts may be withheld from progress payments. Progressive Design-Build Entity and each Subcontractor shall forfeit as a penalty to Agency not more than two hundred dollars (\$200) for each Day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each Day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by Progressive Design-Build Entity.
3. Progressive Design-Build Entity shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

C. Labor Compliance/Payroll Records.

1. Pursuant to Labor Code Section 1776, Progressive Design-Build Entity and each Subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the Project. Progressive Design-Build Entity shall certify under penalty of perjury that records maintained and submitted by Progressive Design-Build Entity are true and accurate. Progressive Design-Build Entity shall also require Subcontractor(s) to certify weekly payroll records under penalty of perjury.
2. In accordance with Labor Code section 1771.4, Progressive Design-Build Entity and each Subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on a weekly basis and in the format prescribed by the DIR. This may include electronic submission. Progressive Design-Build Entity shall ensure full compliance with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement and all other applicable labor law.
3. Any stop orders issued by the DIR against Progressive Design-Build Entity or any Subcontractor that affect Progressive Design-Build Entity's performance of Work, including any delay, shall be Progressive Design-Build Entity's sole responsibility.

Any delay arising out of or resulting from such stop orders shall be considered Progressive Design-Build Entity caused delay subject to any applicable liquidated damages and shall not be compensable by Agency. Progressive Design-Build Entity shall defend, indemnify and hold Agency, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the DIR against Progressive Design-Build Entity or any Subcontractor.

4. The payroll records described herein shall be certified and submitted by Progressive Design-Build Entity at a time designated by Agency. Progressive Design-Build Entity shall also provide the following:
 - a. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - b. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the DIR.
5. Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.
6. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, Agency, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of Progressive Design-Build Entity awarded the Contract or performing the contract shall not be marked or obliterated.
7. In the event of noncompliance with the requirements of this Article 6.17C, Progressive Design-Build Entity shall have ten (10) Days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this Article 6.17C. Should noncompliance still be evident after such ten (10) day period, Progressive Design-Build Entity shall, as a penalty to Agency, forfeit One Hundred Dollars (\$100.00) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of DIR, such penalties shall be withheld from contract payments.
8. In submitting the Proposal on this Project, it shall be Progressive Design-Build Entity's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this Contract and Applicable Law in its Proposal.
9. Progressive Design-Build Entity shall include provisions of this Article 6.17C in all Subcontracts and require Subcontractors to comply with these provisions at no additional cost to Agency.

D. Apprentices.

1. Progressive Design-Build Entity's attention is directed to the provisions of Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning employment of apprentices by Progressive Design-Build Entity or any Subcontractor. Progressive Design-Build Entity shall obtain a certificate of apprenticeship before employing any apprentice pursuant to Sections 1777.5, 1777.6, and 1777.7 of the Labor Code. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from DIR, the Administrator of Apprenticeships, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars (\$100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7.

E. Nondiscrimination.

1. Pursuant to Labor Code section 1735 and other applicable provisions of law, Progressive Design-Build Entity and its Subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap on this Work. Progressive Design-Build Entity will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

F. Workers' Compensation.

1. Pursuant to Labor Code section 1860, Progressive Design-Build Entity shall secure the payment of workers' compensation to its employees in accordance with the provisions of Labor Code section 3700. By its signature hereunder, Progressive Design-Build Entity certifies that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work.

G. Public Works Registration.

1. Pursuant to Labor Code sections 1725.5 and 1771.1, Progressive Design-Build Entity and its Subcontractors must be registered with the Department of Industrial Relations prior to the execution of a contract to perform public works. By entering into this Contract, Progressive Design-Build Entity represents that it is aware of the registration requirement and is currently registered with the DIR. Progressive Design-Build Entity shall maintain a current registration for the duration of the Project. Progressive Design-Build Entity shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any Subcontract and ensure that all Subcontractors are registered at the time this Contract is entered into and maintain registration for the duration of the Project.

6.17 Debarment

- A. Contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor

Code section 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid, or may have been paid to a debarred subcontractor by a contractor on the project shall be returned to Agency. Progressive Design-Build Entity shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

6.18 Taxes.

- A. Progressive Design-Build Entity shall pay all sales, consumer, use, and other similar taxes required to be paid in accordance with the Applicable Law of the place of the Project which are applicable during the performance of the Project. In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Progressive Design-Build Entity will be responsible.

6.19 Use of Site and Other Areas.

- A. Limitation on Use of Site and Other Areas. Progressive Design-Build Entity shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Applicable Laws, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Progressive Design-Build Entity shall assume full responsibility for any damage to any such land or area, or to Agency or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work. Should any claim be made by any such Agency or occupant because of the performance of the Work, Progressive Design-Build Entity shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- B. Removal of Debris. During the progress of the Work Progressive Design-Build Entity shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to Applicable Laws.
- C. Cleaning. Prior to Completion of the Work, Progressive Design-Build Entity shall clean the Site and the Work and make it ready for utilization by Agency. At the completion of the Work Progressive Design-Build Entity shall remove from the Site 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 Structures. Progressive Design-Build Entity shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Progressive Design-Build Entity subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.20 Protection of Work and Property.

- A. Progressive Design-Build Entity shall digitally record video and take photographs of the Project site and adjacent improvements in a manner and quality that clearly depicts the existing condition of the Project Site and adjacent improvements immediately prior to the start of Work (minimum 1080p video and 4MP photo). All videos and photographs shall be date and time stamped. Progressive Design-Build Entity shall submit the video and photos in digital format on a memory stick before the commencement of Work, along with a map outlining the route and locations of the videos and/or photographs. Progressive Design-Build Entity shall be responsible for all damages to persons or property that occur as a result of the Work. Progressive Design-Build Entity shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the Agency. All Work shall be solely at the Progressive Design-Build Entity's risk.
- B. Progressive Design-Build Entity shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Progressive Design-Build Entity shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Progressive Design-Build Entity shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction. Progressive Design-Build Entity shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- C. Progressive Design-Build Entity shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Progressive Design-Build Entity shall repair any damage thereto caused by the Work operations. Progressive Design-Build Entity shall:
1. Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.
 2. Provide substantial barricades around any shrubs or trees indicated to be preserved.
 3. Deliver materials to the Site over a route designated by Agency.
 4. Confine Progressive Design-Build Entity's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Agency. Progressive Design-Build Entity shall not unreasonably encumber the Site with its materials.
 5. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a civil engineer or land surveyor acceptable to Agency, at no cost to Agency.

6. Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to Agency.
 7. Preserve and protect from injury all buildings, pole lines and all directional, warning and mileage signs that have been placed within the right-of-way.
 8. At the completion of work each day, leave the Work and the Site in a clean, safe condition.
 9. Comply with any stage construction and/or traffic handling plans. Access to residences and businesses shall be maintained at all times, except with the Agency's written approval. Any request for approval to reduce or restrict access to residences and business must be submitted to Agency at least seven (7) Days in advance, and Agency may issue or withhold approval in its sole discretion.
- D. These precautionary measures will apply continuously and not be limited to normal working hours. Should damage to persons or property occur as a result of the Work, Progressive Design-Build Entity shall promptly notify Agency, in writing. Progressive Design-Build Entity shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. Agency shall be entitled to inspect and copy any such documentation, video, or photographs. Progressive Design-Build Entity shall maintain all investigation documentation including video and/or photographs for a minimum of four (4) years following completion of the Project.

6.21 Utility Usage.

- A. All temporary utilities, including but not limited to electricity, water, gas, and telephone, used on the Work shall be furnished and paid for by Progressive Design-Build Entity. Progressive Design-Build Entity shall provide necessary temporary distribution systems, including meters, if necessary, from distribution points to points on the Work where the utility is needed. Upon completion of the Work, Progressive Design-Build Entity shall remove all temporary distribution systems. All permanent meters installed shall be listed in Progressive Design-Build Entity's name until the Work is accepted. If Work is to be performed in existing Agency's facilities, Progressive Design-Build Entity may, to the extent authorized by Agency in writing, use Agency's existing utilities. If Progressive Design-Build Entity uses Agency utilities, it shall compensate Agency for utilities used.

6.22 Record Drawings.

- A. Progressive Design-Build Entity shall maintain in a safe place at the Site one record copy of the Contract Documents and written interpretations and clarifications in good order and annotated to show changes made during construction. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the original Contract Documents, including buried or concealed construction and utility features which are revealed during the course of construction. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the

Work as actually constructed. These master record drawings of the as-built conditions, including all revisions made necessary by Addenda and Change Orders shall be maintained up-to-date during the progress of the Project. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date.

- B. Record drawings shall be accessible to Agency's Representative at all times during the construction period. Upon Completion of the Project and as a condition of final acceptance, Progressive Design-Build Entity shall finalize and deliver a complete set of record drawings to Agency's Representative. The information submitted by Progressive Design-Build Entity will be assumed to be correct, and Progressive Design-Build Entity shall be responsible for, and liable to Agency, for the accuracy of such information, and for any errors or omissions which may or may not appear on the record drawings.

6.23 Safety and Protection.

- A. Progressive Design-Build Entity shall be solely responsible for 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. Progressive Design-Build Entity 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, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Progressive Design-Build Entity shall comply with all Applicable Laws 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. Progressive Design-Build Entity shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. Progressive Design-Build Entity shall comply with the applicable requirements of Agency's safety programs, if any. Progressive Design-Build Entity shall inform Agency and Agency's Representative of the specific requirements of Progressive Design-Build Entity's safety program with which Agency's and Agency's Representative's employees and representatives must comply while at the Site.
- C. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Progressive Design-Build Entity, 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, shall be remedied by Progressive Design-Build Entity.

6.24 Safety Representative.

- A. Progressive Design-Build Entity shall designate an OSHA-certified and experienced safety representative at the Project site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. Progressive Design-Build Entity shall provide Agency's Representative the name and contract information of the safety representative in writing. Progressive Design-Build Entity shall provide Agency's Representative the name and contact information of the safety representative in writing.

6.25 Hazard Communication Programs.

- A. Progressive Design-Build Entity shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Project site in accordance with Applicable Laws.

6.26 Emergencies.

- A. In an emergency affecting safety of life or of Work or of adjoining property, Progressive Design-Build Entity, without special instruction or authorization from Agency, shall act to prevent such threatened loss or injury; and Progressive Design-Build Entity shall so act, without appeal, if directed or instructed by Agency. Any compensation claimed by Progressive Design-Build Entity on account of emergency work shall be determined in accordance with the Contract Documents.

6.27 Guarantee.

- A. Progressive Design-Build Entity unconditionally guarantees all Work on the Project will be completed in accordance with the requirements of the Contract Documents, and will remain free of defects in workmanship and materials for a period of one (1) year from the date of Project Completion, unless a longer guarantee period is specifically called for in the Contract Documents. Progressive Design-Build Entity shall repair or replace any and all Work, together with any adjacent work that may have been damaged or displaced, which was not in accordance with the requirements of the Contract Documents, or that may be defective in its workmanship or material within the guarantee period specified in the Contract Documents, without any expense whatsoever to Agency; ordinary wear and tear and abuse excepted.
- B. Progressive Design-Build Entity further agrees, within fourteen (14) Days, or as such shorter period as may be designated for emergency repairs, after being notified in writing by Agency, of any Work not in accordance with the requirements of the Contract Documents or any defects in the Work on the Project, that Progressive Design-Build Entity shall commence and execute, with due diligence, all Work necessary to fulfill the terms of the guarantee. If Agency finds that Progressive Design-Build Entity fails to perform any of the Work under the guarantee, Agency may elect to have the Work completed at Progressive Design-Build Entity's expense and Progressive Design-Build Entity will pay costs of the Work upon demand. Agency will be entitled to all costs, including reasonable attorneys' fees and consultants' expenses necessarily incurred upon Progressive Design-Build Entity's refusal to pay the above costs.

- C. Where Defective Work (or damage to other Work resulting therefrom) has been corrected or removed and replaced, the Warranty period hereunder with respect to such Work shall be extended for an additional period of one (1) year after such correction or removal and replacement has been satisfactorily completed.
- D. Progressive Design-Build Entity's obligations under this Article are in addition to any other obligation or warranty and do not limit Agency's rights and remedies pursuant to California Code of Civil Procedure sections 337.10 and 337.15. or any other Applicable Law.
- E. Notwithstanding the foregoing provisions, in the event of an emergency constituting an immediate hazard to health or safety of Agency employees, property, or licensees, Agency may undertake, at Progressive Design-Build Entity's expense and without prior notice, all Work necessary to correct such condition(s) when it is caused by Work of Progressive Design-Build Entity not being in accordance with the requirements of the Contract Documents.

6.28 Warranty.

- A. Progressive Design-Build Entity warrants to Agency that any and all materials, equipment and furnishings incorporated in the Project will be of good quality and new unless otherwise required or permitted by the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The foregoing warranty excludes improper operation, or normal wear and tear under normal usage under the control of Agency. Such warranty shall exclude warranties relating to design, warranty of fitness, and any other express or implied warranties other than as set forth herein or in the Contract Documents; provided, however, that the foregoing shall not impair the rights of Agency to maintain an action for breach of contract against Progressive Design-Build Entity. Nothing contained in these Contract Documents pertaining to warranty or guarantee shall be construed as limiting any other rights Agency may have at law, including rights for latent defects under Code of Civil Procedure Section 337.15.

6.29 Indemnification.

- A. To the fullest extent allowed by law (including without limitation Civil Code Sections 2782 and 2782.8), Progressive Design-Build Entity shall defend (with counsel of Agency's choosing), indemnify and hold Agency, its officials, officers, agents, employees, and representatives free and harmless from and against any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or in equity, to property or persons, including wrongful death, regardless of whether the allegations are false, fraudulent, or groundless, arising out of, related to, or in connection with any acts, omissions or willful misconduct of Progressive Design-Build Entity, its officials, officers, employees, agents, consultants, contractors, and Subcontractors arising out of or in connection with the performance of the Work or this Contract, including claims made by Subcontractors for nonpayment, and including without limitation the payment of all attorney's fees and other related costs and expenses except to the extent caused by the sole or active negligence or willful misconduct of Agency. Progressive Design-Build Entity shall defend, at Progressive Design-Build Entity's own cost, expense and risk, with counsel of Agency's choosing,

any and all such suits, actions or other legal proceedings of every kind that may be brought or instituted against Agency, its officials, officers, agents, employees and representatives. Progressive Design-Build Entity shall pay and satisfy any judgment, award or decree that may be rendered against Agency, its officials, officers, agents, employees and representatives, in any such suit, action or other legal proceeding. Progressive Design-Build Entity shall reimburse Agency, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Progressive Design-Build Entity agrees to pay, or reimburse Agency and Agency's Representative, for regulatory agency or court imposed fees, fines, or penalties imposed on Agency and Agency's Representative arising from Progressive Design-Build Entity's failure to complete the Project in a timely manner and/or in accordance with the Contract Documents and any applicable permits or Applicable Laws. Progressive Design-Build Entity's responsibility and obligation to pay, or reimburse Agency and Agency's Representative, for these fees, fines, or penalties shall be in addition to the assessment of liquidated damages for late completion of the Project. This indemnity provision shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable. Insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by Progressive Design-Build Entity.

- B. If Progressive Design-Build Entity's obligation to defend, indemnify, and/or hold harmless arises out of Progressive Design-Build Entity's performance as a "design professional" (as that term is defined under Civil Code Section 2782.8), then, and only to the extent required under Civil Code Section 2782.8, which is fully incorporated herein, Progressive Design-Build Entity's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Progressive Design-Build Entity, and, upon Progressive Design-Build Entity obtaining a final adjudication by a court of competent jurisdiction, Progressive Design-Build Entity's liability for such claim, including the cost to defend, shall not exceed Progressive Design-Build Entity's proportionate percentage of fault.
- C. In claims against any person or entity indemnified under this Article that are made by an employee of Progressive Design-Build Entity or any Subcontractor, a person indirectly employed by Progressive Design-Build Entity or any Subcontractor, or anyone for whose acts Progressive Design-Build Entity or any Subcontractor may be liable, the indemnification obligation under this Article shall not be limited by any limitation on amount or type of damages, compensation, or benefits payable by or for Progressive Design-Build Entity or any Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts or any other insurance limitations.
- D. In the event Progressive Design-Build Entity and one or more than one other party is connected with an accident or occurrence covered by this indemnification, then all such parties shall be jointly and severally responsible to each of the Indemnitees for indemnification, and the ultimate responsibility among such indemnifying parties for the loss and expense of any such indemnification shall be resolved without jeopardy to any indemnitee listed in this Article.

- E. The provisions of this Article shall survive the termination of this Contract howsoever caused, and no payment, partial payment, or acceptance of occupancy in whole or part of the Work shall waive or release any of the provisions of this Article.

6.30 Superintendent.

- A. Progressive Design-Build Entity shall employ a competent Superintendent satisfactory to Agency who shall be in attendance at the Project site at all times during the performance of the Construction Work. Superintendent shall represent Progressive Design-Build Entity and communications given to, and received from, Superintendent shall be binding on Progressive Design-Build Entity. Superintendent must be able to proficiently speak, read and write in English. Failure to maintain a Superintendent on the Project site at all times Work on the Project is in progress shall be considered a material breach of this Contract, entitling Agency to terminate the Contract or, alternatively, issue a Suspension Order until the Superintendent is on the Project site. If, by virtue of issuance of said Suspension Order, Progressive Design-Build Entity fails to complete the Contract by the Guaranteed Completion Date, Progressive Design-Build Entity will be assessed Liquidated Damages in accordance with the Contract.
- B. Any changes to the assignment of the Superintendent shall receive prior written approval from Agency. The Superintendent may not perform the work of any trade, pick up materials, or perform any work not directly related to the supervision and coordination of the Construction Work at the Project site when work is in progress. In addition, Progressive Design-Build Entity will provide all key personnel identified in the Contract for the time periods stipulated.

6.31 Project Staffing.

- A. Progressive Design-Build Entity and each Subcontractor shall: furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work on the Project; organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and keep an adequate force of skilled and fit workers on the job to complete all Work on the Project in accordance with all requirements of the Contract.
- B. Agency shall have the right, but not the obligation, to require the removal from the Project of Progressive Design-Build Entity's Representative, or any other superintendent, staff member, agent, or employee of any contractor, Subcontractor, material or equipment supplier, or any other entity working on the Project. Removal may be required for any reason designated by Agency, including but not limited to, failure or refusal to perform Work on the Project in a manner acceptable to Agency, uncooperative or incompetent performance on the Project, threatening the adequate or timely completion of the Project, or threatening the safety of persons or property.

6.32 Compliance With State Storm Water Permit for Construction.

- A. Storm, surface, ground, nuisance, or other waters may be encountered at various times during the Work. Progressive Design-Build Entity hereby acknowledges that it

has investigated the risk arising from such waters, has prepared its Proposal accordingly, and assumes any and all risks and liabilities arising therefrom.

- B. Progressive Design-Build Entity shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of Agency's ordinances regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.); the California Porter-Cologne Water Quality Control Act (Water Code § 13000 et seq.); and any and all regulations, policies, or permits issued pursuant to any such authority. These include, but are not limited to California Regional Water Quality Control Boards (Santa Ana and San Diego Regions) Order No. R8-2009-0030 (NPDES Permit No. CAS 618030), Order No. R9-2009-0002, Order No. R8-2009-0045, Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100, and State Water Resources Control Board Order No. 2010-0014-DWQ, Order No. 2009-0009-DWQ, and Order No. 2012-0006-DWQ, and any amendment or renewal thereof.

- C. Progressive Design-Build Entity shall be required to comply with all conditions of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity ("Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Progressive Design-Build Entity shall be responsible for filing the Notice of Intent and for obtaining the Permit. If applicable, Progressive Design-Build Entity shall be solely responsible for preparing and implementing a Stormwater Pollution Prevention Plan ("SWPPP") prior to initiating work on the Project. It shall be Progressive Design-Build Entity's responsibility to evaluate the cost of procuring the Permit and preparing the SWPPP as well as complying with the SWPPP and any necessary revision to the SWPPP to address storm water impacts. Progressive Design-Build Entity shall comply with all requirements of the State Water Resources Control Board. Progressive Design-Build Entity shall include all costs of compliance with specified requirements in the Price. For those Sites where construction activity results in the disturbance of less than one acre of total land area and/or do not need coverage under the Permit, Progressive Design-Build Entity shall be responsible for preparing and implementing an Erosion and Sediment Control Plan in accordance with California Regional Water Quality Control Board Order No. R8-2009-0030, Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100 and any amendment or renewal thereof.

- D. Progressive Design-Build Entity shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, monitoring and reporting requirements as required by the Permit. Progressive Design-Build Entity shall provide copies of all reports and monitoring information to Agency's Representative. Progressive Design-Build Entity shall comply with the lawful requirements of any applicable municipality, the County, drainage authority, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

E. Failure to comply with laws, regulations, and ordinances listed in this Article is a violation of federal and state law. Notwithstanding any other indemnity contained in this Contract, Progressive Design-Build Entity agrees to indemnify and hold harmless Agency, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which Agency, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the laws, regulations, and ordinances listed above, arising out of or in connection with the Project, except for liability resulting from the sole established negligence, willful misconduct or active negligence of Agency, its officials, officers, agents, employees or authorized volunteers. Agency reserves the right to defend any enforcement action or civil action brought against Agency for Progressive Design-Build Entity's failure to comply with any applicable water quality law, regulation, or policy. Progressive Design-Build Entity hereby agrees to be bound by, and to reimburse Agency for the costs associated with, any enforcement action and/or settlement reached between Agency and any relevant enforcement entity.

6.33 Monthly Report.

A. Progressive Design-Build Entity shall prepare and submit to Agency, during both the Pre-Construction Phase and the Construction Phase, monthly reports on the Work accomplished during the prior monthly period. Such reports shall be prepared in a manner and in a format approved by Agency. Reports shall be furnished at the time of submission of each monthly application for payment. The monthly report shall also set forth Progressive Design-Build Entity's projected progress for the forthcoming month.

6.34 Other Reports.

A. Progressive Design-Build Entity will cooperate with Agency in preparing, or causing to be prepared, all or part of, periodic project reports required by state or federal agencies.

6.35 Notice of Labor Dispute.

A. If Progressive Design-Build Entity has knowledge that any actual or potential labor dispute is delaying, or threatens to delay, the timely performance of Work on the Project, Progressive Design-Build Entity shall immediately give written notice including all relevant information to Agency.

B. Progressive Design-Build Entity agrees to insert the substance of this Article in any subcontract to which a labor dispute may delay the timely performance of Work on the Project, except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor shall immediately notify the next higher tier Subcontractor or Progressive Design-Build Entity, as the case may be, of all relevant information concerning the dispute.

6.36 Documents and Samples At Project Site.

A. Progressive Design-Build Entity shall maintain the following at the Project site:

1. One current copy of the Contract Documents (including Construction Documents), in good order and marked to record current changes and selections made during construction.
2. One copy of the prevailing wage rates applicable to the Project.
3. The current accepted Project Schedule.
4. Shop Drawings, Product Data, and Samples.
5. All other required submittals.

6.37 Cutting, Fitting, and Patching.

- A. Progressive Design-Build Entity shall do all cutting, fitting, or patching work required to make all parts of the Project come together properly and to allow the Project to receive or be received by the work of Separate Contractors shown upon, or reasonably implied by, the Contract Documents. Progressive Design-Build Entity shall not endanger the Project, or adjacent property by cutting, digging, or otherwise. Progressive Design-Build Entity shall not cut or alter the work of any Separate Contractor without the prior written consent of Agency's Representative.

6.38 Access to Work.

- A. Agency, Agency's Representative, their consultants, and other persons authorized by Agency will at all times have access to the Work on the Project wherever it is in preparation or progress. Progressive Design-Build Entity shall provide safe and proper facilities for such access and for inspection.

6.39 Concealed Or Unknown Conditions.

- A. Except and only to the extent provided otherwise in Articles 9 and 10, by signing the Contract, Progressive Design-Build Entity agrees:
 1. To bear the risk of concealed or unknown conditions, if any, which may be encountered in performing the Contract, as described in the Contract Documents, and/or can reasonably be inferred by Progressive Design-Build Entity based on its experience and expertise; and
 2. That Progressive Design-Build Entity's GMP for the Contract was made with full knowledge of this risk.
- B. In agreeing to bear the risk of concealed or unknown conditions, Progressive Design-Build Entity understands that, except and only to the extent provided otherwise in Articles 9 and 10, concealed and/or unknown conditions shall not excuse Progressive Design-Build Entity from its obligation to achieve full completion of the Project within the Guaranteed Completion Date, and shall not entitle Progressive Design-Build Entity to an adjustment of the GMP.
- C. Progressive Design-Build Entity knowingly, unconditionally, irrevocably and specifically waives any and all rights to the protections and benefits of Public Contract

Code section 7104. Progressive Design-Build Entity acknowledges and agrees that this waiver and risk allocations in this Contract are material considerations for Agency to enter into this Contract with Progressive Design-Build Entity.

6.40 Liability for and Repair of Damaged Work.

- A. Progressive Design-Build Entity shall be liable for any and all damages and losses to the Project (whether by fire, theft, vandalism, earthquake, flood or otherwise) prior to Agency's acceptance of the Project as fully completed.

6.41 Environmental Quality Protection

A. Landscape and Vegetation Preservation

- 1. Progressive Design-Build Entity shall exercise care to preserve the natural landscape and vegetation, and shall conduct operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work. Movement of crews and equipment within the rights-of-way and over routes provided for access to the Work shall be performed in a manner to prevent damage to property. When no longer required, construction roads shall be restored to original contours. Upon completion of the Work, and following removal of construction facilities and required cleanup, land used for construction purposes and not required for the completed installation shall be scarified and regraded, as required, so that all surfaces are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.

B. Protected Species

- 1. If, in the performance of the Work, evidence of the possible occurrence of any Federally listed threatened or endangered plant or animal is discovered, Progressive Design-Build Entity shall notify Agency Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to Agency within two (2) Days. Progressive Design-Build Entity shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the endangered plant or animal. If directed by Agency Representative, Progressive Design-Build Entity will refrain from working in the immediate area, suspend the Work in its entirety, or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Any Agency directed changes to the Work as a result of a siting will be pursuant to the Contract Documents. Any costs or delays incurred by Agency or Progressive Design-Build Entity due to unreasonable or false notification of an endangered plant or animal will be borne by Progressive Design-Build Entity.

C. Preservation of Historical and Archeological Resources

- 1. If, in the performance of the Work, Progressive Design-Build Entity should unearth cultural resources (for example, human remains, animal bones, stone tools, artifacts and/or midden deposits) through excavation, grading, watering

or other means, Progressive Design-Build Entity notify Agency Representative immediately, giving the location and nature of the findings. Progressive Design-Build Entity shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the cultural resource. If directed by Agency Representative, Progressive Design-Build Entity will refrain from working in the immediate area, suspend the Work in its entirety, or re-sequence and/or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Progressive Design-Build Entity shall provide such cooperation and assistance as may be necessary to preserve the cultural resources for removal or other disposition. Any Agency directed changes to the Work as a result of the cultural resource will be pursuant to the Contract Documents. Should Progressive Design-Build Entity, without permission, injure, destroy, excavate, appropriate, or remove any cultural resource on or adjacent to the Site, it will be subject to disciplinary action, arrest and penalty under applicable law. Progressive Design-Build Entity shall be principally responsible for all costs of mitigation and/or restoration of cultural resources related to the unauthorized actions identified above. Progressive Design-Build Entity shall be required to pay for unauthorized damage and mitigation costs to cultural resources (historical and archeological resources) as a result of unauthorized activities that damage cultural resources and shall indemnify Agency pursuant to the Contract Documents.

6.42 Technical Manuals: Spare Parts.

- A. Progressive Design-Build Entity shall submit technical operation and maintenance information for each item of mechanical, electrical and instrumentation equipment in an organized manner in a technical manual. It shall be written so that it can be used and understood by Agency's operation and maintenance staff. Progressive Design-Build Entity shall furnish to Agency six (6) identical technical manuals. Each set shall consist of one or more volumes, each of which shall be bound in a standard binder.
- B. Progressive Design-Build Entity shall furnish to Agency six (6) identical sets of spare parts information for all mechanical, electrical, and instrumentation equipment. The spare parts list shall include the current list price of each spare part. The spare parts list shall include those spare parts which each manufacturer recommends be maintained by Agency in inventory. Each manufacturer or supplier shall indicate the name, address, and telephone number of its nearest outlet of spare parts to assist Agency in ordering. Progressive Design-Build Entity shall cross-reference all spare parts lists to the equipment numbers designated in the Contract Documents. The spare parts lists shall be bound in standard size, 3-ring binder.

6.43 CARB Compliance.

- A. Progressive Design-Build Entity shall comply, and shall ensure all subcontractors comply, with all applicable requirements of the most current version of the regulations imposed by California Air Resources Board ("CARB") including, without limitation, all applicable terms of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments ("CARB Regulation").

- B. Throughout the Project, and for three (3) years thereafter, Progressive Design-Build Entity shall make available for inspection and copying any and all documents or information associated with Progressive Design-Build Entity's and its Subcontractors' fleets including, without limitation, the Certificates of Reported Compliance ("CRCs"), fuel/refueling records, maintenance records, emissions records, and any other information Progressive Design-Build Entity is required to produce, keep or maintain pursuant to the Regulation upon two (2) calendar days' notice from Agency.
- C. Progressive Design-Build Entity shall be solely liable for any and all costs associated with compliance with the CARB Regulation as well as for any and all penalties, fines, damages, or costs associated with any and all violations, or failures to comply with the Regulation. Progressive Design-Build Entity shall defend, indemnify and hold harmless Agency, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the CARB Regulation.

ARTICLE 7 -OTHER WORK AT THE PROJECT SITE

7.1 Related Work At Project Site.

- A. Nothing contained in the Contract Documents shall be interpreted as granting to Progressive Design-Build Entity exclusive occupancy at the Project site. Agency reserves the right to award separate contracts for, or to perform with its own forces, construction or operations related to the Work or other construction or operations at or affecting the Project site, including portions of Work on the Project which have been deleted by Change Order. Progressive Design-Build Entity shall cooperate with Agency's employees or through other direct contracts, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then written notice thereof will be given to Progressive Design-Build Entity prior to starting any such other work. Progressive Design-Build Entity shall participate with Agency and Separate Contractors in joint review of construction schedules and Project requirements when directed to do so. Progressive Design-Build Entity shall make necessary revisions to the Project Schedule after such joint review.
- B. Progressive Design-Build Entity shall be solely responsible for all costs associated with coordinating its Work with Separate Contractors. Progressive Design-Build Entity shall not be entitled to additional compensation from Agency for damages resulting from such simultaneous, collateral, and essential Work. If necessary to avoid or minimize such damage or delay, Progressive Design-Build Entity shall redeploy its work forces to other parts of the Work, or adjust its Work schedule including reasonable acceleration of the Work. If a portion of the Work on the Project is dependent upon the proper execution or results of other construction or operations by Agency or Separate Contractors, Progressive Design-Build Entity shall inspect such other design or construction or operations before proceeding with that portion of the Work on the Project. Progressive Design-Build Entity shall promptly report to Agency's Representative apparent discrepancies or defects which render the other design, construction or operations unsuitable to receive the Work on the Project. Unless otherwise directed by Agency's Representative, Progressive Design-Build Entity shall not proceed with the portion of the Work on the Project affected until apparent discrepancies or defects have been corrected. Failure of Progressive Design-Build

Entity to so report within a reasonable time after discovering such discrepancies or defects shall constitute an acknowledgment that the other construction or operations by Agency or Separate Contractors is suitable to receive the Work on the Project, except as to defects not then reasonably discoverable.

- C. Progressive Design-Build Entity shall afford each Separate Contractor proper and safe access to the Project site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Progressive Design-Build Entity 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. Progressive Design-Build Entity shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Progressive Design-Build Entity may cut or alter others' work with the written consent of Agency's Representative and the others whose work will be affected.
- D. If the proper execution or results of any part of Progressive Design-Build Entity's Work depends upon work performed by Separate Contractors, Progressive Design-Build Entity shall inspect such other work and promptly report to Agency's Representative in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Progressive Design-Build Entity's Work. Progressive Design-Build Entity's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Progressive Design-Build Entity's Work except for latent defects and deficiencies in such other work.
- E. If any claims are made by Separate Contractors arising out of Progressive Design-Build Entity's performance of the Work, Progressive Design-Build Entity shall be responsible to immediately resolve the dispute and indemnify Agency pursuant to the Contract Documents.
- F. Agency's Representative shall arrange meetings with Separate Contractors performing work to plan coordination of construction activities but will not be responsible to direct coordination efforts. Any difference or conflict arising between Progressive Design-Build Entity and any Separate Contractor shall be submitted to Agency's Representative for a decision in the matter. Progressive Design-Build Entity shall comply with direction from Agency's Representative whose decision on coordination matters will be final.

7.2 For Delays by Others.

- A. By entering into this Contract, Progressive Design-Build Entity acknowledges that there may be Separate Contractors on the Project site whose work will be coordinated with that of Progressive Design-Build Entity. Progressive Design-Build Entity expressly warrants and agrees that Progressive Design-Build Entity will cooperate with Separate Contractors and will do nothing to delay, hinder, or interfere with the work of Separate Contractors, Agency, or Agency's Representative. Progressive Design-Build Entity also expressly agrees that, in the event its Work is hindered, delayed, interfered with, or otherwise affected by a Separate Contractor, its sole remedy will be a direct action against the Separate Contractor. Progressive Design-Build Entity will have no

remedy, and hereby expressly waives any remedy, against Agency or Agency's Representative on account of delay, hindrance, interference, or other event caused by Separate Contractor.

7.3 Progressive Design-Build Entity's Delay Or Damage.

- A. Progressive Design-Build Entity shall be liable to Agency and any Separate Contractor for the direct delay and disruption costs or damages incurred by such Separate Contractor as a result of Progressive Design-Build Entity's wrongful action or inactions.

ARTICLE 8 -SUBCONTRACTORS

8.1 Award of Subcontracts and Other Contracts for Portions of The Work.

- A. All Subcontractors shall be retained in accordance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 *et seq.*). Progressive Design-Build Entity shall not, without the consent of Agency: substitute any person or entity as a Subcontractor in place of the Subcontractor designated in the Proposal; or permit any such Subcontractor to be assigned or transferred, or allow it to be performed by any person or entity other than the original Subcontractor listed in the Proposal. Any assignment or substitution made without the prior written consent of the awarding authority or not in compliance with the Subletting and Subcontracting Fair Practices Act shall be void, and the assignees shall acquire no rights in the Contract. Any consent, if given, shall not relieve Progressive Design-Build Entity or its Subcontractors from their obligations under the terms of the Contract. All requests by Progressive Design-Build Entity for substitution will be handled through Agency's Representative.
- B. Progressive Design-Build Entity shall submit to Agency's Representative after selecting Subcontractors pursuant to an open and competitive process, an updated expanded list of Subcontractors, along with their respective addresses, telephone numbers, e-mail addresses and contractor's license numbers. The expanded list of Subcontractors shall be provided and/or updated no later than ten (10) Days after the date which Progressive Design-Build Entity awards a contract for any portion of the Work to a Subcontractor not originally listed in Progressive Design-Build Entity's Proposal.
- C. Agency has the right to request all documentation that supports Progressive Design-Build Entity's selection of a Subcontractor. Agency shall have the right of final approval as to the qualifications of a Subcontractor to perform its designated scope of Work. Within Agency's discretion, any Subcontractor may be deemed not qualified to perform Work on the Project if Agency or Agency's Representative determines that the Subcontractor fails to meet the requirements of the Contract Documents, or for any other reason.
- D. Any increase in the cost of the Work on the Project resulting from the replacement or substitution of a Subcontractor pursuant to this Article or as required by Agency or Agency's Representative pursuant to this Article, shall be borne solely by Progressive Design-Build Entity. Progressive Design-Build Entity shall not be entitled to any increase in GMP or an extension of Guaranteed Completion Date due to such replacement or substitution.

- E. Any part of the Work on the Project performed for Progressive Design-Build Entity by a Subcontractor shall be pursuant to a written subcontract. Each such subcontract shall require the Subcontractor, to the extent of the work to be performed by the Subcontractor, to be bound to Progressive Design-Build Entity by the terms of the Contract Documents, to assume toward Progressive Design-Build Entity all the obligations and responsibilities which Progressive Design-Build Entity assumes towards Agency by the Contract Documents, and to perform such portion of the work on the Project in accordance with the Contract Documents. Each such subcontract shall preserve and protect the rights of Agency under the Contract Documents, with respect to the work to be performed by Subcontractor, so that subcontracting thereof will not prejudice such rights. Progressive Design-Build Entity is responsible for reviewing and coordinating the Work of and among his Subcontractors and Design Professionals. This review and coordination includes, but is not limited to, resolution of any inconsistencies, errors or omissions.

8.2 Contingent Assignment of Subcontracts.

- A. Progressive Design-Build Entity hereby assigns to Agency all its interest in first tier subcontracts now or hereafter entered into by Progressive Design-Build Entity for performance of any part of the Work on the Project. The assignment will be effective upon acceptance by Agency in writing and only as to those subcontracts which Agency designates in writing. Agency may accept said assignment at any time during the course of the Work on the Project and prior to Final Completion in the event of a suspension or termination of Progressive Design-Build Entity's rights under the Contract Documents. Such assignment is part of the consideration to Agency for entering into the Contract with Progressive Design-Build Entity and may not be withdrawn prior to Final Completion.

ARTICLE 9 -CHANGE IN CONTRACT PRICE; CHANGE IN CONTRACT TIMES

9.1 Contract Change Orders.

- A. Agency, without invalidating the Contract, may order changes in the work consisting of additions, deletions or other revisions, and the GMP and/or Contract Time shall be adjusted accordingly. All such changes in the Work shall be authorized by written Change Order and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by Progressive Design-Build Entity indicates Progressive Design-Build Entity's agreement therewith, including any adjustment in the GMP and/or Contract Time, and the full and final settlement of all costs (direct, indirect and overhead) related to the work authorized by the Change Order. No changes in the Work covered by this Contract shall exonerate any surety or any bond given in connection with this Contract. No dispute, disagreement or failure of the Parties to reach agreement on the terms of a Change Order shall relieve Progressive Design-Build Entity from the obligation to proceed with performance of the changed work promptly and expeditiously. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract Documents, and shall be subject to all terms, conditions and provisions of the original Contract Documents.

- B. Progressive Design-Build Entity shall promptly execute changes in the Work as directed in writing by Agency even when the parties have not reached agreement on whether the change increases the scope of Work or affects the GMP or Contract Time, if any. All claims for additional compensation to Progressive Design-Build Entity shall be presented in writing. No claim will be considered after the work in question has been done unless a written Change Order has been issued or a timely written notice of claim has been made by Progressive Design-Build Entity. Progressive Design-Build Entity shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done.

9.2 Contract Change Order Procedures.

A. Agency Directive

1. Agency may direct changes in the Work, including deletion of Work, by delivering a written work directive. To the extent the work directive results in a change to the GMP and/or Guaranteed Completion Date, Progressive Design-Build Entity must timely submit a Change Order Request and comply with all Change Order procedures in accordance with this Article. Notwithstanding issuance of a work directive, Progressive Design-Build Entity's failure to timely submit a Change Order Request shall constitute a waiver by Progressive Design-Build Entity of any adjustment to the GMP and/or Guaranteed Completion Date for work performed under the directive. Agency shall not be liable to Progressive Design-Build Entity for work performed or omitted by Progressive Design-Build Entity in reliance on verbal orders.
2. Agency shall have the right to order changes in the Work by a unilateral Change Order setting forth Agency's determination of the reasonable additions or savings in the GMP and/or Guaranteed Completion Date.

B. Progressive Design-Build Entity Change Order Request.

1. Progressive Design-Build Entity agrees that one of the purposes of the Contract is to minimize the risk for Change Orders and reduce the likelihood of Change Orders. Change Order Requests shall be kept to a minimum.
2. Progressive Design-Build Entity may request changes to the GMP and/or Guaranteed Completion Date for Agency directed changes in the Work or for Additional Work caused by the acts, errors, or omissions of Agency, or caused by unforeseen conditions if, and only if, Progressive Design-Build Entity follows the procedures specified in this Article. Work that should or could have been included as part of the Construction Documents or work resulting from ambiguities in the Construction Documents shall not be considered Additional Work and Agency will not issue a Change Order for said work.
3. If Progressive Design-Build Entity intends to initiate a Change Order Request, then Progressive Design-Build Entity shall provide Agency with written notice of the underlying facts and circumstances that give rise to the proposed change. Progressive Design-Build Entity shall submit the notice of change/delay prior to performance of the work and no later than five (5) Days

after Agency's work directive or Progressive Design-Build Entity discovers the circumstances causing the need for the Change Order. To be considered valid and complete, the notice of change/delay shall include a general statement of the circumstances giving rise to the notice of change/delay and a reasonable order of magnitude estimate of the additional costs and/or time. If the circumstances give rise to both a cost adjustment and time extension, Progressive Design-Build Entity shall submit the notice of change and notice of delay concurrently.

4. A Change Order Request will only be deemed timely submitted if it is submitted prior to incurring any expense and within fourteen (14) Days from Progressive Design-Build Entity's notice of change/delay.
5. A Change Order Request must state that it is a Change Order Request, state and justify the reason for the request, and specify the amount of any requested adjustment to the GMP and/or Guaranteed Completion Date, if any. The Change Order Request shall include all of the following information (unless inapplicable to the change): A detailed description of the circumstances giving rise to the request; A complete itemized cost proposal, including itemized pricing for costs; Supporting documentation for all costs; A time impact analysis showing the impact of the delay to the critical path to completion; If any added costs or information cannot be determined at the time of the Change Order Request, the reason the costs or information cannot be determined at the time; and Certification to the accuracy of the Change Order Request under penalty of perjury. The time impact analysis shall be in the critical path method format and shall show the sequencing of all critical and non-critical new activities and/or activity revisions affected by the delay, with logic ties to all affected existing activities noted on the schedule. Agency may demand, and Progressive Design-Build Entity shall provide, any additional information supporting the Change Order Request, including but not limited to native electronic format version of schedules and time impact analyses. Progressive Design-Build Entity shall provide the requested additional information within five (5) Days of the request.
6. If Agency denies the Change Order Request or disagrees with the proposal submitted by Progressive Design-Build Entity, it will notify Progressive Design-Build Entity, and Agency will provide its opinion of the appropriate change to the GMP and/or Contract Time. If no agreement can be reached, Agency shall have the right to order the work by a unilateral Change Order setting forth Agency's determination of the reasonable additions or savings in the GMP and/or Contract Time, if any. Agency's determination shall become final and binding if Progressive Design-Build Entity fails to submit a Claim in writing to Agency within fourteen (14) Days of the issuance of the unilateral Change Order, disputing the terms of the unilateral Change Order and providing such supporting documentation for its position as Agency may reasonably require.

C. Change Order Format

1. A Change Order signed by Progressive Design-Build Entity indicates Progressive Design-Build Entity's agreement therewith, including any

adjustment in compensation or extension of time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.

2. Agency may designate the forms to be used for notices, Change Order Requests, and Change Orders. If so designated, Progressive Design-Build Entity may only use such forms. Progressive Design-Build Entity shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the Change Order. No Claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. Progressive Design-Build Entity may not change or modify Agency's Change Order form in an attempt to reserve additional rights.

9.3 Determining Adjustments to Compensation.

- A. Limitation on Costs. Progressive Design-Build Entity shall not be entitled to any compensation for Work subject to a Change Order except as expressly set forth in this Article. The mark-up added in instances of Additional Work shall constitute the entire amount of profit, any mark-ups, any field or home office overhead costs, including personnel, equipment or office space, any materials, or any costs of equipment idle time for such Work.
- B. Lump Sum Change Orders. Whenever possible, any changes affecting compensation shall be in a lump sum mutually agreed by Progressive Design-Build Entity and Agency.
- C. Time and Materials Change Orders. Agency may direct Progressive Design-Build Entity to proceed with the Additional Work with payment to be made on the basis of actual cost of the labor and materials required to complete the Additional Work. If the Project is federally funded, a time and materials Change Order shall only be issued after a determination that no other Change Order is suitable and the Change Order shall include a ceiling price that Progressive Design-Build Entity exceeds at its own risk.
- D. Federally Funded Projects. For any change in price to the Contract, general and administrative expenses shall be negotiated and must conform to the cost principles set forth under at 2 C.F.R. Part 200, subpart E, and profit shall be negotiated as a separate element of the cost. To establish a fair and reasonable profit, consideration must be given to the complexity of the Additional Work to be performed, the risk borne by Progressive Design-Build Entity, Progressive Design-Build Entity's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- E. Allowed Costs. Estimates for lump sum quotations and accounting for time-and-material work shall be limited to direct expenditures necessitated specifically by the change and shall be segregated as follows

1. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the Additional Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the Additional Work cost will not be permitted unless Progressive Design-Build Entity establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
2. Materials. The cost of materials reported shall be at the lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials costs shall be based upon supplier or manufacturer's invoice.
3. Tool and Equipment Use. Regardless of ownership, the rates to be used in determining equipment use shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed. Progressive Design-Build Entity shall furnish cost data supporting the establishment of the rental rate. The rental rate to be applied for use of each items of equipment shall be the rate resulting in the least total cost to Agency for the total period of use. Agency shall the make the final determination as to an equitable rental rate for the equipment. No payment will be made for the use of small tools, which have a replacement value of \$1,000 or less.
 - a. The rental time to be paid for equipment shall be the time the equipment is in productive operation on the Additional Work being performed. Rental time will not be allowed while equipment is inoperative due to breakdowns.
 - b. All equipment shall, in the opinion of Agency, be in good working condition and suitable for the purpose for which the equipment is to be used. Equipment with no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
 - c. Before construction equipment is used on any Additional Work, Progressive Design-Build Entity shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to Agency, in duplicate, a description of the equipment and its identifying number.
 - d. When hourly rates are listed, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour greater than 30 minutes will be considered one hour of operation. When daily rates are listed, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation.
4. Allowed Mark-up. The allowed mark-up for any and all overhead (including supervision and home and field office costs) and profit on work added to the Contract shall be determined in accordance with the following provisions:

- a. "Net Cost" is defined as the actual costs of labor, materials and tools and equipment only, excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to Progressive Design-Build Entity and Subcontractors at cost only, without mark-up. Progressive Design-Build Entity shall provide Agency with documentation of the costs, including but not limited to payroll records, invoices, and such other information as Agency may reasonably request.
 - b. For Work performed by Progressive Design-Build Entity's forces the allowed mark-up shall not exceed fifteen (15%) percent of labor costs, ten percent (10%) of material costs, and ten percent (10%) of the cost of tools and equipment use.
 - c. For Work performed by a Subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Subcontractor's Net Cost of the Work to which Progressive Design-Build Entity may add up to five percent (5%) of the Subcontractor's Net Cost.
 - d. For Work performed by a sub-subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the sub-subcontractor's Net Cost for Work to which the Subcontractor and Progressive Design-Build Entity may each add up to an additional five percent (5%) of the Net Cost of the lower tier subcontractor.
 - e. No additional mark-up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by Agency exceed twenty-five percent (25%) of the Net Cost as defined herein, of the party that performs the Work.
 - f. Calculation of the mark-up will be subject to the limitations above and to calculation as further detailed in (b)(B)(5) above.
5. Documentation of Time-and-Material Costs.
- a. T&M Daily Sheets. Progressive Design-Build Entity must submit timesheets, materials invoices, records of equipment hours, and records of rental equipment hours to Agency's for an approval signature each day that Work is performed on a time-and-material basis. The Engineer's signature on time sheets only serves as verification that the Work was performed and is not indicative of Agency's agreement to Progressive Design-Build Entity's entitlement to the cost.
 - b. T&M Summary Sheet. Progressive Design-Build Entity shall submit a T&M Summary Sheet, which shall include total actual costs, within five (5) Days following completion of Additional Work on a time-and-material basis. Progressive Design-Build Entity's total actual cost shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and any other costs, along with documentation supporting the costs. Progressive Design-Build Entity's failure to submit the T&M Summary Sheet within five (5) Days of completion of the Additional Work will result in

Progressive Design-Build Entity's waiver for any reimbursement of any costs associated with the Additional Work.

- c. Excluded Costs. The following costs or any other home or field office overhead costs, all of which are to be considered administrative costs covered by Progressive Design-Build Entity's mark-up, shall not be allowed costs and shall not be included in any lump sum proposals or time-and-materials invoices:
- d. Overhead Cost. Payroll costs and other compensation of Progressive Design-Build Entity's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks, and other personnel employed by Progressive Design-Build Entity whether at the Site or in Progressive Design-Build Entity's principal office or any branch office, material yard, or shop for general administration of the Work;
- e. Office Expenses. Expenses of Progressive Design-Build Entity's principal and branch offices;
- f. Capital Expenses. Any part of Progressive Design-Build Entity's capital expenses, including interest on Progressive Design-Build Entity's capital employed for the Additional Work and charges against Progressive Design-Build Entity for delinquent payments;
- g. Negligence. Costs due to the negligence of Progressive Design-Build Entity or any Subcontractor or Supplier, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;
- h. Small Tools. Cost of small tools valued at less than \$1,000 and that remain the property of Progressive Design-Build Entity;
- i. Administrative Costs. Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates, or the preparation or filing of Claims;
- j. Anticipated Lost Profits. Expenses of Progressive Design-Build Entity associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings, or unpaid retention;
- k. Home Office Overhead. Costs derived from the computation of a "home office overhead" rate by application of the Eichleay, Allegheny, burden fluctuation, or other similar methods;
- l. Special Consultants and Attorneys. Costs of special consultants or attorneys, whether or not in the direct employ of Progressive Design-Build Entity, employed for services specifically related to the resolution of a Claim, dispute, or other matter arising out of or relating to the performance of the Additional Work.

- m. Other. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in the Contract Documents; including but not limited to: submittals, drawings, field drawings, shop drawings, including submissions of drawings; field inspection; general superintendence; computer services; reproduction services; salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; janitorial services; small tools, incidentals and consumables; temporary on-site facilities (offices, telephones, high speed internet access, plumbing, electrical power, lighting; platforms, fencing, water); surveying; estimating; protection of work; handling and disposal fees; final cleanup; other incidental work; related warranties; insurance and bond premiums.
- n. Compliance with Federal Cost Principles. If the Project is federally funded, any costs that are not allowable, reasonable and allocable to the Project, under generally accepted accounting principles and the applicable federal requirements.

9.4 Progressive Design-Build Entity's Wavier of Further Relief.

- A. **PROGRESSIVE DESIGN-BUILD ENTITY'S FAILURE TO PROVIDE A COMPLETE AND TIMELY NOTICE OF A CHANGE ORDER REQUEST OR TO COMPLY WITH ANY OTHER REQUIREMENT OF THIS ARTICLE, SHALL CONSTITUTE A WAIVER BY PROGRESSIVE DESIGN-BUILD ENTITY OF THE RIGHT TO AN ADJUSTMENT OF THE CONTRACT PRICE AND/OR PROJECT COMPLETION DATE ON ACCOUNT OF SUCH CIRCUMSTANCES AND A WAIVER OF ANY RIGHT TO FURTHER RECOURSE OR RECOVERY BY REASON OF OR RELATED TO SUCH CHANGE BY MEANS OF THE CLAIMS DISPUTE RESOLUTION PROCESS OR BY ANY OTHER LEGAL PROCESS OTHERWISE PROVIDED FOR UNDER APPLICABLE LAWS.**
- B. Progressive Design-Build Entity recognizes and acknowledges that timely submission of a formal written notice of change/delay and Change Order Request, whether or not the circumstances of the change may be known to Agency or available to Agency through other means, is not a mere formality but is of crucial importance to the ability of Agency to promptly identify, prioritize, evaluate and mitigate the potential effects of changes. Any form of informal notice, whether verbal or written (including, without limitation, statements in requests for information, statements in Submittals, statements at any job meeting or entries on monthly reports, daily logs or job meeting minutes), that does not strictly comply with the formal requirements of this Article, shall accordingly be insufficient.

9.5 Agency Reservation of Rights.

- A. By signing the Contract, the parties agree that Agency has the right to do any or all of the following, which are reasonable and within the contemplation of the parties:
 - 1. To order changes in the Work, including without limitation: Changes to correct errors or omissions caused by Agency, if any, in the Contract Documents; Changes resulting from Agency's decision to change the Work subsequent to execution of the Contract; and Changes due to unforeseen conditions.

2. To suspend Work on the Project or any part thereof.
3. To delay Work on the Project, including without limitation, delays resulting from the failure of Agency or Agency's Representative to timely perform any Contract obligation and delays for Agency's convenience.

ARTICLE 10 -TIME FOR COMPLETION; LIQUIDATED DAMAGES

10.1 Progress and Completion.

- A. Progressive Design-Build Entity shall proceed expeditiously with adequate forces and shall achieve full completion of the Work by the Guaranteed Completion Date. If Agency's Representative determines and notifies Progressive Design-Build Entity that Progressive Design-Build Entity's progress is such that Progressive Design-Build Entity will not achieve full completion of the Work by the Guaranteed Completion Date, Progressive Design-Build Entity shall immediately and at no additional cost to Agency, take all measures necessary, including working such overtime, additional shifts, Sundays, or holidays as may be required to ensure that the entire Project is completed within the Guaranteed Completion Date. Upon receipt of such notice from Agency's representative, Progressive Design-Build Entity shall immediately notify Agency's Representative of all measures to be taken to ensure full completion of the Work within the Guaranteed Completion Date. Progressive Design-Build Entity shall reimburse Agency for any extra costs or expenses (including the reasonable value of any services provided by Agency's employees) incurred by Agency as the result of such measures.

10.2 Time for Completion.

- A. The time for completion set forth in Contract shall commence: (1) on the date stated in the Notice to Proceed, or (2) if the Notice to Proceed does not specify a commencement date, then on the date of the Notice to Proceed and shall be completed by Progressive Design-Build Entity in the time specified in the Contract Documents. Agency is under no obligation to consider early completion of the Project; and the Guaranteed Completion Date shall not be amended by Agency's receipt or acceptance of Progressive Design-Build Entity's proposed earlier completion date. Any difference in time between Progressive Design-Build Entity's early completion and the Guaranteed Completion Date shall be considered a part of the Project float. Progressive Design-Build Entity shall not be entitled to compensation, and Agency will not compensate Progressive Design-Build Entity, for delays which impact early completion. Progressive Design-Build Entity shall not, under any circumstances, receive additional compensation from Agency (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by Progressive Design-Build Entity and the Guaranteed Completion Date.

10.3 Liquidated Damages.

- A. If the Work is not completed as stated in the Contract Documents, it is understood that Agency will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Progressive Design-Build Entity shall pay to Agency as fixed and liquidated

damages, and not as a penalty, the sum stipulated in the Contract for each calendar day of delay until the Work is fully completed. Progressive Design-Build Entity and its surety shall be liable for any liquidated damages. Any money due or to become due Progressive Design-Build Entity may be retained to cover liquidated damages.

10.4 Inclement Weather.

- A. Progressive Design-Build Entity shall abide by Agency's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.

10.5 Extension of Time.

- A. Progressive Design-Build Entity's entitlement to an extension of the Contract Time is limited to an Agency-caused extension of the critical path, reduced by Progressive Design-Build Entity's concurrent delays, and established by a proper time impact analysis. Agency shall ascertain the facts and extent of delay and grant extension of time for completing the Work when, in its judgment, the facts justify such an extension. Progressive Design-Build Entity shall not be entitled to an adjustment in the Contract Times for delays within the control of Progressive Design-Build Entity. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Progressive Design-Build Entity.

10.6 Force Majeure.

- A. If a delay to the critical path results from a Force Majeure Event, Progressive Design-Build Entity will be entitled to a time extension but will not receive an adjustment to the GMP or any other compensation. Such a non-compensable adjustment shall be Progressive Design-Build Entity's sole and exclusive remedy for such delays.

10.7 No Damages for Reasonable Delay.

- A. Agency's liability to Progressive Design-Build Entity for delays for which Agency is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall Agency be liable for any costs which are borne by Progressive Design-Build Entity in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable Agency delay shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

10.8 Procedure for Time Extensions and Delay Damages.

- A. Progressive Design-Build Entity shall not be entitled to any extension of time unless Progressive Design-Build Entity properly notices the delay and adjustment to compensation and requests a Change Order in accordance with the Contract Documents. Progressive Design-Build Entity's failure to timely and fully comply with the Change Order procedures in the Contract Documents shall constitute a waiver of Progressive Design-Build Entity's right to a time extension.

ARTICLE 11 -TEST AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK; NOTICE OF DEFECTS

11.1 Notice of Defective Work.

- A. Prompt written notice of all Defective Work of which Agency or Agency's Representative has actual knowledge will be given to Progressive Design-Build Entity. Defective Work may be rejected, corrected, or accepted as provided in the Contract Documents.

11.2 Access to Work.

- A. Agency, Agency's Representative, their consultants and other representatives and personnel, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Project site and the Work at reasonable times for their observation, inspection, and testing. Progressive Design-Build Entity shall provide them proper and safe conditions for such access and advise them of Progressive Design-Build Entity's safety procedures and programs.

11.3 Tests and Inspections.

- A. Progressive Design-Build Entity shall give Agency's Representative timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Except as provided by the Contract Documents, Agency shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents.
- C. If Applicable Laws 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, Progressive Design-Build Entity shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Agency's Representative the required certificates of inspection or approval.
- D. Progressive Design-Build Entity shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Agency and Agency's Representative's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Progressive Design-Build Entity's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Agency.
- E. Agency will provide inspection during normal working hours from 7:00 a.m. to 3:30 p.m. Monday through Friday. Inspection before or after this time will be charged to the contractor as reimbursable inspection time. Inspections on weekends requires two days' notice for review and approval. Upon written request and approval the 8.5 hour working day may be changed to other limits subject to Agency ordinance.

11.4 Uncovering Work.

- A. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Progressive Design-Build Entity without written concurrence of Agency's Representative, Progressive Design-Build Entity shall, if requested by Agency's Representative, uncover such Work for observation.
- B. Uncovering Work shall be at Progressive Design-Build Entity's expense unless Progressive Design-Build Entity has given Agency's Representative timely notice of Progressive Design-Build Entity's intention to cover the same and Agency's Representative has not acted with reasonable promptness in response to such notice.
- C. If Progressive Design-Build Entity has given Agency's Representative timely notice of Progressive Design-Build Entity's intention to cover the work and Agency's Representative has not acted with reasonable promptness in response to such notice, and Agency's Representative later considers it necessary or advisable that covered Work be observed by Agency's Representative or inspected or tested by others, Progressive Design-Build Entity, at Agency's Representative's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Agency's Representative may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Progressive Design-Build Entity shall pay all claims, 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 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 Agency shall be entitled to an appropriate decrease in the GMP.
 - 2. If the uncovered Work is not found to be defective, Progressive Design-Build Entity shall be allowed an increase in the GMP and/or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction.

11.5 Agency May Stop The Work.

- A. If the Work is defective, Agency may in its sole discretion order Progressive Design-Build Entity to stop the Work, or any portion thereof, until the cause for such order has been eliminated. All delays associated with the stop Work order will be the responsibility of Progressive Design-Build Entity.

11.6 Correction of Defective Work.

- A. Promptly after receipt of written notice, Progressive Design-Build Entity shall (1) correct Defective Work that becomes apparent during the progress of the Work on the Project and (2) replace, repair, or restore to Agency's satisfaction any other parts of the Work on the Project and any other real or personal property which is damaged or destroyed as a result of Defective Work or the correction of Defective Work. Progressive Design-Build Entity shall promptly commence such correction,

replacement, repair, or restoration upon notice from Agency's Representative or Agency, but in no case later than fourteen (14) Days after receipt of such notice; and Progressive Design-Build Entity shall diligently and continuously prosecute such correction to completion. Progressive Design-Build Entity shall bear all costs of such correction, replacement, repair, or restoration, and all losses resulting from such Defective Work, including additional testing, inspection, and compensation for Agency's Representative's services and expenses. Progressive Design-Build Entity shall perform corrective Work on the Project at such times that are acceptable to Agency and in such a manner as to avoid, to the extent practicable, disruption to Agency's activities. When correcting Defective, Progressive Design-Build Entity shall take no action that would void or otherwise impair Agency's special warranty and guarantee, if any, on said Work.

- B. If immediate correction of Defective Work is required for life safety or the protection of property and is performed by Agency or Separate Contractors, Progressive Design-Build Entity shall pay to Agency all reasonable costs of correcting such Defective Work. Progressive Design-Build Entity shall replace, repair, or restore to Agency's satisfaction any other parts of the Construction Work and any other real or personal property which is damaged or destroyed as a result of such Defective Work or the correction of such Defective Work.
- C. Progressive Design-Build Entity shall remove from the Project site portions of the Construction Work and materials which are not in accordance with the Contract Documents and which are neither corrected by Progressive Design-Build Entity nor accepted by Agency.
- D. Enforcement of Progressive Design-Build Entity's express warranties and guarantees to repair contained in the Contract Documents shall be in addition to and not in limitation of any other rights or remedies Agency may have under the Contract Documents or at law or in equity for Defective Work. Nothing contained in this Article shall be construed to establish a period of limitation with respect to other obligations of Progressive Design-Build Entity under the Contract Documents.

11.7 Acceptance of Defective Work.

- A. If, instead of requiring correction or removal and replacement of Defective Work, Agency prefers to accept it, Agency may do so. Progressive Design-Build Entity shall pay all claims, 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) attributable to Agency's evaluation of and determination to accept such Defective Work and for the diminished value of the Work.
- B. If any acceptance of Defective Work occurs prior to release of the Project retention, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Agency shall be entitled to an appropriate decrease in the GMP, reflecting the diminished value of Work and all costs incurred by Agency.

- C. If the Project retention is held in an escrow account as permitted by the Contract Documents, Progressive Design-Build Entity will promptly alert the escrow holder, in writing, of the amount of retention to be paid to Agency.
- D. If the acceptance of defective Work occurs after release of the Project retention, an appropriate amount will be paid by Progressive Design-Build Entity to Agency.

11.8 Agency May Correct Defective Work.

- A. If Progressive Design-Build Entity fails within a reasonable time after written notice from Agency's Representative to correct Defective Work, or to remove and replace rejected Work as required by Agency, or if Progressive Design-Build Entity fails to perform the Work in accordance with the Contract Documents, or if Progressive Design-Build Entity fails to comply with any other provision of the Contract Documents, Agency may, after seven (7) Days written notice to Progressive Design-Build Entity, correct, or remedy any such deficiency.
- B. In connection with such corrective or remedial action, Agency may exclude Progressive Design-Build Entity from all or part of the Site, take possession of all or part of the Work and suspend Progressive Design-Build Entity's services related thereto, take possession of Progressive Design-Build Entity's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Agency has paid Progressive Design-Build Entity but which are stored elsewhere. Progressive Design-Build Entity shall allow Agency and Agency's Representative, and the agents, employees, other contractors, and consultants of each of them, access to the Site to enable Agency to exercise the rights and remedies to correct the defective work.
- C. All claims, 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) incurred or sustained by Agency correcting the defective work will be charged against Progressive Design-Build Entity, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Agency shall be entitled to an appropriate decrease in the GMP. 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 Defective Work.
- D. If the Change Order is executed after all payments under the Contract have been paid by Agency and the Project Retention is held in an escrow account as permitted by the Contract Documents, Progressive Design-Build Entity will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to Agency.
- E. If the Change Order is executed after release of the Project Retention, an appropriate amount will be paid by Progressive Design-Build Entity to Agency.
- F. Progressive Design-Build Entity shall not be allowed an extension of the Guaranteed Completion Date because of any delay in the performance of the Work attributable to Agency correcting defective work.

ARTICLE 12 -PAYMENTS TO PROGRESSIVE DESIGN-BUILD ENTITY AND COMPLETION

12.1 Schedule of Values.

- A. Progressive Design-Build Entity shall submit a schedule of values to Agency before the first Application for Payment, allocating the entire GMP to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by Agency. This schedule, unless objected to by Agency, shall be used as a basis for reviewing Progressive Design-Build Entity's Applications for Payment. Any changes to the schedule of values shall be submitted to Agency and supported by such data to substantiate its accuracy as Agency may require, and unless objected to by Agency, shall be used as a basis for reviewing Progressive Design-Build Entity's subsequent Applications for Payment.

12.2 Applications for Payments.

- A. By the fifth (5th) day of each month Progressive Design-Build Entity shall submit to Agency's Representative for review an Application for Payment filled out and signed by Progressive Design-Build Entity covering the Work completed for the previous month and accompanied by such supporting documentation as is required by the Contract Documents. 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 shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Agency has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Agency's interest therein, all of which must be satisfactory to Agency.
- B. Beginning with the second Application for Payment, each Application shall include an affidavit executed by Progressive Design-Build Entity stating that it has paid all amounts due on account of the Work paid by Agency in the prior Applications for Payment.

12.3 Review of Applications.

- A. Agency's Representative will either indicate in writing a recommendation of payment to Agency or return the Application for Payment to Progressive Design-Build Entity indicating in writing Agency's Representative's reasons for refusing to recommend payment. In the latter case, Progressive Design-Build Entity may make the necessary corrections and resubmit the Application for Payment.
- B. In taking action on Progressive Design-Build Entity's Applications for Payment, Agency shall be entitled to rely on the accuracy and completeness of the information furnished by Progressive Design-Build Entity and shall not be deemed to represent that Agency has made a detailed examination, audit or arithmetic verification of the documentation submitted in support of the Application for Payment or other supporting data; that Agency has made exhaustive or continuous on-site inspections; or that Agency has made examinations to ascertain how or for what purposes Progressive Design-Build Entity has used amounts previously paid on account of the Contract. Such examinations, audits and verifications, if required by Agency, will be performed by Agency's auditors acting in the sole interest of Agency.

- C. By recommending any such payment Agency's Representative will not thereby be deemed to have represented that:
1. 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 Agency's Representative in the Contract Documents; or
 2. there may not be other matters or issues between the parties that might entitle Progressive Design-Build Entity to be paid additionally by Agency or entitle Agency to withhold payment to Progressive Design-Build Entity.
- D. Neither Agency's Representative's review of Progressive Design-Build Entity's Work for the purposes of recommending payments nor Agency's Representative's recommendation of any payment, including final payment, will impose responsibility on Agency's Representative:
1. to supervise, direct, or control the Work;
 2. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 3. for Progressive Design-Build Entity's failure to comply with Applicable Laws applicable to Progressive Design-Build Entity's performance of the Work;
 4. to make any examination to ascertain how or for what purposes Progressive Design-Build Entity has used the moneys paid on account of the GMP; or
 5. to determine that title to any of the Work, materials, or equipment has passed to Agency free and clear of any Liens.
- E. Agency's Representative may refuse to recommend the whole or any part of any payment due to subsequently discovered evidence or the results of subsequent inspections or tests. Agency retains the right to revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Agency's opinion to protect Agency from loss.

12.4 Payment Becomes Due.

- A. Thirty (30) Days after presentation of an undisputed and properly submitted Application for Payment to Agency's Representative, and subject to Agency's Representative's recommendation, subject to the modifications above, the amount recommended will become due, and when due will be paid by Agency to Progressive Design-Build Entity.

12.5 Retention and Securities in Lieu of Retention.

- A. Unless Project has been deemed substantially complex as noted in the Contract Documents, Agency will retain five percent (5%) of the amount invoiced in accordance with Applicable Laws.

- B. Pursuant to Public Contract Code section 22300, Progressive Design-Build Entity may substitute securities for any moneys withheld as a retention by Agency to ensure performance under the Contract. At the request and expense of Progressive Design-Build Entity, securities equivalent to the amount withheld shall be deposited with Agency, or with a state or federally chartered bank in this state as the escrow agent, who shall then pay those moneys to Progressive Design-Build Entity. Upon satisfactory completion of the Contract, the securities shall be returned to Progressive Design-Build Entity.
1. Alternatively, Progressive Design-Build Entity may request, and Agency shall make payment of retentions earned directly to the escrow agent selected by Progressive Design-Build Entity. At the expense of Progressive Design-Build Entity, Progressive Design-Build Entity may direct the investment of the payments into securities and Progressive Design-Build Entity shall receive the interest earned on the investments upon the same terms provided for in Public Contract Code section 22300 for securities deposited by Progressive Design-Build Entity. Upon satisfactory completion of the Contract, Progressive Design-Build Entity shall receive from the escrow agent all securities, interest, and payments received by the escrow agent when Agency authorizes the escrow agent to release these funds to Progressive Design-Build Entity, pursuant to the terms of Public Contract Code section 22300.
- C. Securities eligible for investment shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Progressive Design-Build Entity and Agency.
- D. Progressive Design-Build Entity shall be the beneficial Agency of any securities substituted for moneys withheld and shall receive any interest thereon.
- E. The escrow agreement shall be in the form of the Escrow Agreement provided as part of the Contract Documents.

12.6 Agency's Reduction in Recommended Payment.

- A. In addition to reductions recommended by Agency's Representative, Agency may refuse to make payment of the full amount recommended by Agency's Representative because:
1. Claims have been made against Agency on account of Progressive Design-Build Entity's performance or furnishing of the Work.
 2. Stop Payment Notices or Liens have been filed in connection with the Work.
 3. Defective Work not remedied.
 4. Failure of Progressive Design-Build Entity to make proper payments to its subcontractors or suppliers.
 5. Completion of the Contract if there exists a reasonable doubt that the Work can be completed for the unpaid Contract balance.

6. Damage to another contractor or third party.
 7. Amounts which may be due Agency for claims against Progressive Design-Build Entity.
 8. Failure of Progressive Design-Build Entity to keep the record ('as-built') drawings up to date.
 9. Failure to provide updates on the construction schedule.
 10. Site cleanup.
 11. Failure of Progressive Design-Build Entity to comply with requirements of the Contract Documents.
 12. Liquidated Damages.
- B. Upon completion of the Contract, Agency may reduce the final GMP to reflect costs charged to Progressive Design-Build Entity, back charges or payments withheld pursuant to the Contract Documents.

12.7 Progressive Design-Build Entity's Warranty of Title.

- A. Progressive Design-Build Entity warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Agency no later than the time of payment free and clear of all Liens.

12.8 Partial Utilization.

- A. Agency reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute acceptance of any part of Work covered by this Contract. This use shall not relieve Progressive Design-Build Entity of its responsibilities under the Contract.

12.9 Final Inspection.

- A. Upon written notice from Progressive Design-Build Entity that the entire Work is complete, Agency's Representative will promptly make a final inspection with Agency and Progressive Design-Build Entity and will notify Progressive Design-Build Entity in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Progressive Design-Build Entity shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

12.10 Final Acceptance.

- A. After Progressive Design-Build Entity has, in the opinion of Agency's Representative, satisfactorily completed all corrections identified during the final inspection and 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, marked-up record documents, and other

documents required by the Contract Documents, Agency shall execute and file with the County in which the Project is located a Notice of Completion, constituting final acceptance and completion of the Project, except as may be expressly noted.

12.11 Final Payment.

A. Application for Payment.

1. Upon execution of the Notice of Completion, Progressive Design-Build Entity may submit a final accounting for the cost of the Work and a final Application for Payment. Final payment, constituting the entire unpaid balance of the GMP.
2. Prior to Final Payment, Agency may conduct an audit of the Work or notify Progressive Design-Build Entity that it will not conduct an audit and issue a final Certificate for Payment. If Agency conducts an audit of the Work, Agency will either issue to Progressive Design-Build Entity a final Certificate for Payment, or notify Progressive Design-Build Entity in writing of Agency's reasons for withholding a certificate. If Agency's auditors report the cost of the Work as substantiated by Progressive Design-Build Entity's final accounting to be less than claimed by Progressive Design-Build Entity, Progressive Design-Build Entity shall be entitled to make a claim. Pending a final resolution of the disputed amount, Agency shall pay Progressive Design-Build Entity the amount certified in Agency's final Certificate for Payment.
3. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance;
 - b. consent of the surety to final payment;
 - c. a fully completed Conditional Waiver and Release on Final Payment by Progressive Design-Build Entity and all Subcontractors.

B. Agency's Representative's Review of Application and Acceptance.

1. If, on the basis of Agency's Representative's observation of the Work during construction and final inspection, and Agency's Representative's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Agency's Representative is satisfied that the Work has been completed and Progressive Design-Build Entity has satisfied all other requirements for final payment, Agency's Representative will indicate in writing Agency's Representative's recommendation of payment and present the Application for Payment to Agency for payment. Otherwise, Agency's Representative will return the Application for Payment to Progressive Design-Build Entity, indicating in writing the reasons for refusing to recommend final payment, in which case Progressive Design-Build Entity shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due.

1. Within sixty (60) Days after the presentation to Agency's Representative of the proper and complete final Application for Payment and accompanying documentation, the amount recommended by Agency's Representative, less any sum Agency is entitled to set off pursuant to the Contract Documents, will become due and will be paid by Agency to Progressive Design-Build Entity.

12.12 Waiver of Claims.

- A. The making and acceptance of final payment will constitute a waiver of all Claims by Progressive Design-Build Entity against Agency other than those previously made in accordance with the requirements herein and expressly acknowledged by Agency in writing as still unsettled.

ARTICLE 13 -SUSPENSION OF WORK AND COMPLETION

13.1 Agency May Suspend Work.

- A. Agency may, at its sole option, decide to suspend at any time the performance of all or any portion of the Work by notice in writing to Progressive Design-Build Entity. Such notice of suspension of Work will designate the amount and type of plant, labor, and equipment to be committed to the Project during the period of suspension. Progressive Design-Build Entity shall use its best efforts to utilize its plant, labor, and equipment in such a manner as to minimize costs associated with suspension.
- B. Upon receipt of any such notice, Progressive Design-Build Entity shall, unless the notice requires otherwise:
 1. Immediately discontinue Work on the date and to the extent specified in the notice;
 2. Place no further orders or subcontracts for material, services, or facilities with respect to suspended Work other than to the extent required in the notice;
 3. Promptly make every reasonable effort to obtain suspension upon terms satisfactory to Agency's Representative of all orders, subcontracts, and rental agreements to the extent they relate to performance of Work suspended; and
 4. Continue to protect and maintain the Work including those portions on which Work has been suspended.
- C. Except as provided by this article, as full and complete compensation for such suspension, Progressive Design-Build Entity shall be granted an adjustment in the GMP based on a negotiated daily rate that reflects Progressive Design-Build Entity's actual costs associated with the demobilized condition of the Site (and as a result will be less than the Daily Rate) and an extension of the Guaranteed Completion Date equal to the number of days performance of Work is suspended; provided, however, that no adjustment of GMP or extension of the Guaranteed Completion Date shall be granted if the suspension results from Progressive Design-Build Entity's non-compliance with the requirements of the Contract. Agency shall not be liable for any additional costs, damages or anticipated profits incurred by PDBE or its Subcontractors

13.2 Agency May Terminate for Cause.

- A. In the sole estimation of Agency, Agency may, without prejudice to any other right or remedy, serve written notice upon Progressive Design-Build Entity of its intention to terminate this Contract in whole or in part if Progressive Design-Build Entity: (i) refuses or fails to prosecute the Work or any part thereof with such diligence as will ensure its completion within the Guaranteed Completion Date; (ii) fails to complete the Work within the required time; (iii) files a bankruptcy petition or is adjudged a bankruptcy; (iv) makes a general assignment for the benefit of its creditors; (v) has a receiver appointed; (vi) refuses or fails to supply enough properly skilled workers or proper materials to complete the Work; (vii) fails to make prompt payment to subcontractors or for material or labor; (viii) disregards Applicable Laws, other requirements or instructions of Agency; or (ix) violates any of the provisions of the Contract Documents.
- B. This notice of intent to terminate shall contain the reasons for such intention to terminate this Contract, and a statement to the effect that Progressive Design-Build Entity's right to perform this Contract shall cease and terminate upon the expiration of ten (10) Days unless such violations have ceased and arrangements satisfactory to Agency have been made for correction of said violations.
- C. After expiration of the ten (10) Day period, Agency may terminate this Contract. In such case, Progressive Design-Build Entity shall not be entitled to receive any further payment until the Work has been finished. Agency may take over and complete the Work by any method it may deem appropriate, including enforcement of the Project Performance Bond. Progressive Design-Build Entity and its surety shall be liable to Agency for any excess costs or other damages incurred by Agency to complete the Work. If Agency takes over the Work, Agency may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plant, and other property belonging to Progressive Design-Build Entity as may be on the Site.

13.3 Agency May Terminate for Convenience.

- A. In addition to its right to terminate this Contract for default, Agency may terminate the Contract, in whole or in part, at any time upon seven (7) Days written notice to Progressive Design-Build Entity. The Notice of Termination shall specify that the termination is for the convenience of Agency, the extent of termination, and the effective date of such termination ("Effective Date of Termination").
- B. After receipt of Notice of Termination, and except as directed by Agency, Progressive Design-Build Entity shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:
 - 1. Stop Work as specified in the Notice.
 - 2. Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.

3. Leave the Site and any other property upon which Progressive Design-Build Entity was working in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
 4. Terminate all subcontracts and purchase orders to the extent that they relate to the portions of the Work terminated.
 5. Place no further subcontracts or orders, except as necessary to complete the remaining portion of the Work.
 6. Submit to Agency, within fifteen (15) Days from the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by Progressive Design-Build Entity for labor, materials and equipment through the Notice of Termination. Any documentation substantiating costs incurred by Progressive Design-Build Entity solely as a result of Agency's exercise of its right to terminate this Contract pursuant to this clause, which costs Progressive Design-Build Entity is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by Agency no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by Agency's Termination for Convenience."
- C. Agency's total liability to Progressive Design-Build Entity by reason of the termination shall be limited to the total (without duplication of any items) of:
1. The reasonable cost to Progressive Design-Build Entity for all Work performed prior to the Effective Date of Termination, including the Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the progress schedule and the schedule of values. Deductions shall be made for cost of materials to be retained by Progressive Design-Build Entity, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits or offsets against cost of Work as allowed by the Contract Documents.
 2. When, in Agency's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of the Contract Documents and excessive actual cost shall be disallowed.
 3. Any Work required by the Termination for Convenience that is not included in Contract Documents will be negotiated pursuant to the Contract Change Order provisions.
 4. Reasonable costs to Progressive Design-Build Entity of handling material returned to vendors, delivered to Agency or otherwise disposed of as directed by Agency.
 5. A reasonable allowance for Progressive Design-Build Entity's internal administrative costs in preparing termination claim.

6. Reasonable demobilization costs, and reasonable payments made to Subcontractors or suppliers on account of termination.
- D. In no event shall Agency be liable for unreasonable costs incurred by Progressive Design-Build Entity or Subcontractors after receipt of a Notice of Termination. Such non-recoverable costs include, but are not limited to, the cost of or anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, unreasonable post-termination administrative expenses, post-termination overhead or unabsorbed overhead, surety costs of any type, costs of preparing and submitting Progressive Design-Build Entity's termination claim, attorney fees of any type, and all other costs relating to prosecution of a claim or lawsuit.
- E. Agency shall have no obligation to pay Progressive Design-Build Entity under this Article unless and until Progressive Design-Build Entity provides Agency with updated and acceptable as-builts and Record Documents for Work completed prior to termination as required by the Contract Documents.
- F. In arriving at the amount due Progressive Design-Build Entity under this clause there shall be deducted in whole, or in the appropriate part(s) if the termination is partial:
1. All unliquidated advances or other payments on account previously made to Progressive Design-Build Entity, including without limitation all payments which are applicable to the terminated portion of the Contract Documents,
 2. Any claim Agency may have against Progressive Design-Build Entity in connection with the Work or any amounts that may be withheld in accordance with the Contract Documents, and
 3. The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Progressive Design-Build Entity and not otherwise recovered by or credited to Agency.
- G. Progressive Design-Build Entity shall not be paid on account of loss of anticipated profits or revenue or other economic loss or consequential damages arising out of or resulting from such termination.
- H. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, Agency may immediately order Progressive Design-Build Entity to cease Work until such safety or liability issues are addressed to the satisfaction of Agency or the Contract is terminated.
- I. If Agency terminates Progressive Design-Build Entity for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Progressive Design-Build Entity shall be entitled to receive only the amounts payable under this section, and Progressive Design-Build Entity specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.

ARTICLE 14 -CLAIMS, DISPUTE AVOIDANCE AND RESOLUTION

14.1 Procedure for Resolving Claims

- A. Progressive Design-Build Entity shall timely comply with any and all requirement of the Contract Documents pertaining to notices and requests for changes to the GMP and/or the Guaranteed Completion Date, including but not limited to all requirements of Article 9 and Article 14.1, as a prerequisite to filing any Claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely submit a Chang Order Request, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the Claim under the Contract or at law.
- B. Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with all applicable law, including but not limited to these statutes.
- C. Claims. For purposes of this Article, "Claim" means a separate demand by Progressive Design-Build Entity for (1) a time extension, including without limitation relief from damages or penalties for delay assessed by Agency, (2) payment of money or damages arising from Work done by or on behalf of Progressive Design-Build Entity and payment of which is not otherwise expressly provided for or Progressive Design-Build Entity is not otherwise entitled, or (3) payment of an amount which is disputed by Agency. A "Claim" does not include any demand for payment for which Progressive Design-Build Entity has failed to provide notice, submit a Change Order Request, or otherwise failed to follow any procedures contained in the Contract Documents.
- D. Filing Claims. Claims governed by this Article may not be filed unless and until Progressive Design-Build Entity completes any and all requirements of the Contract Documents pertaining to notices and requests for changes to the GMP and/or the Guaranteed Completion Date, and Progressive Design-Build Entity's request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than thirty (30) Days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to Agency and shall include on its first page the following words in 16 point capital font: "THIS IS A CLAIM." The Claim shall include the all information and documents necessary to substantiate the Claim, including but not limited to those identified below. Nothing in this Article is intended to extend the time limit or supersede notice requirements otherwise provided by Contract Documents. Failure to follow such contractual requirements shall bar any Claims or subsequent proceedings for compensation or payment thereon.
- E. Documentation. Progressive Design-Build Entity will submit the claim justification in the following format:

1. Summary description of Claim including basis of entitlement, merit and amount of time or money requested, with specific reference to the Contract Document provisions pursuant to which the Claim is made
 2. List of documents relating to the Claim
 - a. Specifications
 - b. Drawings
 - c. Clarifications (Requests for Information)
 - d. Schedules
 - e. Other
 3. Chronology of events and correspondence
 4. Narrative analysis of Claim merit
 5. Analysis of Claim cost, including calculations and supporting documents
 6. Time impact analysis in the form required by the Contract Documents or, if the Contract Documents do not require a particular format, CPM format, if an adjustment of the Contract Time is requested
 7. Cover letter and certification of validity of the Claim
- F. Agency Response to Claim. Upon receipt of a Claim pursuant to this Article, Agency shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days of receipt of the Claim, or as extended by mutual agreement, shall provide a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the Claim will be processed and made within 60 days after Agency issues its written response.
1. If Agency needs approval from its governing body to provide Progressive Design-Build Entity a written statement as set forth above, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, Agency shall have up to three (3) days following the next publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide Progressive Design-Build Entity a written statement identifying the disputed portion and the undisputed portion of the Claim.
 2. Agency may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the Claim or relating to defenses or Claims Agency may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of Agency and Progressive Design-Build Entity. Agency's written response shall be submitted 30 days (15 days if the Claim is less than \$50,000) after receiving the additional documentation, or

within the same period of time taken by Progressive Design-Build Entity to produce the additional information, whichever is greater.

- G. Meet and Confer Conference. If Progressive Design-Build Entity disputes Agency's response, or if Agency fails to respond within the statutory time period(s), Progressive Design-Build Entity may so notify Agency, in writing, within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement of those portions of the Claim that remain in dispute. Upon such demand, Agency shall schedule a meet and confer conference within 30 Days.
- H. Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, Agency shall provide Progressive Design-Build Entity a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 Days after Agency issues its written statement. Any disputed portion of the Claim, as identified by Progressive Design-Build Entity in writing, shall be submitted to nonbinding mediation, with Agency and Progressive Design-Build Entity sharing the associated costs equally. The public entity and Progressive Design-Build Entity shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing, unless the parties agree to select a mediator at a later time.
1. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.
 2. For purposes of this Article, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Article.
 3. Unless otherwise agreed to by Agency and Progressive Design-Build Entity in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
 4. The mediation shall be held no earlier than the date Progressive Design-Build Entity completes the Work or the date that Progressive Design-Build Entity last performs Work, whichever is earlier. All unresolved Claims shall be considered jointly in a single mediation, unless a new unrelated Claim arises after mediation is completed.
- I. Procedures After Mediation. If following the mediation, the Claim or any portion remains in dispute, Progressive Design-Build Entity must file a Claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating

litigation. For purposes of those provisions, the running of the period of time within which a Claim must be filed shall be tolled from the time Progressive Design-Build Entity submits his or her written Claim pursuant to subdivision (a) until the time the Claim is denied, including any period of time utilized by the meet and confer conference.

J. Civil Actions. The following procedures are established for all civil actions filed to resolve Claims of \$375,000 or less:

1. Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.
2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

K. Government Code Claim Procedures.

1. This Article does not apply to tort claims and nothing in this Article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.5 of Title 1 of the Government Code.
2. In addition to any and all requirements of the Contract Documents pertaining to notices of and requests for adjustment to the Contract Time, GMP, or compensation or payment for Additional Work, disputed Work, construction claims and/or changed conditions, Progressive Design-Build Entity must comply with the claim procedures set forth in Government Code Section 900, et seq. prior to filing any lawsuit against Agency.
3. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to adjustment of the Contract Time

or GMP for Additional Work, disputed Work, construction claims, and/or changed conditions have been followed by Progressive Design-Build Entity. If Progressive Design-Build Entity does not comply with the Government Code claim procedure or the prerequisite contractual requirements, Progressive Design-Build Entity may not file any action against Agency.

4. **A Government Code claim must be filed no earlier than the date the Work is completed or the date Progressive Design-Build Entity last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved Claims known to Progressive Design-Build Entity or that should reasonably be known to Progressive Design-Build Entity excepting only new unrelated Claims that arise after the Government Code claim is submitted.**

L. Non-Waiver. Agency's failure to respond to a Claim from Progressive Design-Build Entity within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the Claim being deemed rejected in its entirety, and shall not constitute a waiver of any rights under this Article.

14.2 Litigation.

A. Any claims, disputes, or controversies between the parties arising out of or related to the Contract, which have not been resolved in accordance with the procedures set forth herein shall be resolved in a court of competent jurisdiction.

14.3 Duty to Continue Performance.

A. Unless provided to the contrary in the Contract Documents, Progressive Design-Build Entity shall continue to perform the Work and Agency shall continue to satisfy its payment obligations to Progressive Design-Build Entity, pending the final resolution of any dispute or disagreement between Progressive Design-Build Entity and Agency.

ARTICLE 15 -MISCELLANEOUS PROVISIONS

15.1 Limitations On Agency's Responsibilities.

A. Agency shall not supervise, direct, or have control or authority over, nor be responsible for, Progressive Design-Build Entity's means, methods, techniques, sequences, or procedures of design or construction, or the safety precautions and programs incident thereto, or for any failure of Progressive Design-Build Entity to comply with Applicable Laws applicable to the performance of the Work. Agency will not be responsible for Progressive Design-Build Entity's failure to perform the Project in accordance with the Contract Documents.

15.2 Successors

A. The parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract. Progressive Design-Build Entity may not either voluntarily or by action of law, assign any obligation assumed by Progressive Design-Build Entity hereunder without the prior written consent of Agency.

15.3 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 Applicable Laws, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Article 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.

15.4 Survival of Obligations.

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Project or termination or completion of the Contract or termination of the services of Progressive Design-Build Entity.

15.5 Controlling Law.

A. Notwithstanding any subcontract or other contract with any Subcontractor, Supplier, or other person or organization performing any part of the Project, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

15.6 Jurisdiction; Venue.

A. Progressive Design-Build Entity and any Subcontractor, supplier, or other person or organization performing any part of the Project agree that any action or suits at law or in equity arising out of or related to the proposal process, award, or performance of the Project shall be maintained in the Superior Court of San Bernardino County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

15.7 Headings.

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

15.8 Agency's Right to Audit.

A. Progressive Design-Build Entity shall make available to Agency for auditing, all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to Agency. If Progressive Design-Build Entity submits a Change Order Request or a Claim to Agency, Agency shall have the right to audit Progressive Design-Build Entity's books, records, documents, and other evidence to the extent they are relevant.

- B. The right to audit shall include the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to discover and verify all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which the claim has been submitted, including but not limited to job cost reports, estimates, proposals, bids, proposal papers, documents of other work administered by Progressive Design-Build Entity's home office, and any and all other documentation relied upon by Progressive Design-Build Entity to obtain this Contract. Agency shall have the right to make and take copies of any records examined.
- C. The right to audit shall include the right to inspect Progressive Design-Build Entity's plans, or such parts thereof, as may be or have been engaged in the performance of the Project. Progressive Design-Build Entity further agrees that the right to audit encompasses all subcontracts and is binding upon Subcontractors. The right to audit provided herein shall be exercisable through such representatives as Agency deems desirable during Progressive Design-Build Entity's normal business hours at Progressive Design-Build Entity's office.
- D. In accordance with Government Code Section 8546.7, records of both Agency and Progressive Design-Build Entity shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment. Progressive Design-Build Entity shall make available to Agency any of Progressive Design-Build Entity's other documents related to the Project immediately upon request of Agency. In addition to the State Auditor's rights described above, Agency shall have the right to examine and audit all books, estimates, records, contracts, documents, Proposals, subcontracts, and other data of Progressive Design-Build Entity (including electronic records, computations and projections) related to negotiating, pricing, or performing the Project in order to evaluate the accuracy and completeness of the cost or pricing data, for a period of four (4) years after final payment.

15.9 Assignment.

- A. Progressive Design-Build Entity shall not assign, transfer, convey, sublet, or otherwise dispose of this Contract or any part thereof including any claims, without prior written consent of Agency. Any assignment without the written consent of Agency shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.
- B. As set forth in Public Contract Code section 7103.5, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be

made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

15.10 All Legal Provisions Included.

- A. Progressive Design-Build Entity shall give all notices and comply with all federal, state and local laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified by their terms. References to specific laws, rules or regulations in this Contract are for reference purposes only, and shall not limit or affect the applicability of provisions not specifically mentioned. If Progressive Design-Build Entity observes that drawings and specifications are at variance therewith, he shall promptly notify Agency in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in Work. If Progressive Design-Build Entity performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to Agency, he shall bear all costs arising therefrom.
- B. Progressive Design-Build Entity shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA laws, rules and regulations. Progressive Design-Build Entity shall comply with the Historic Building Code, including, but not limited to, as it relates to the ADA, whenever applicable..
- C. Progressive Design-Build Entity acknowledges and understands that, pursuant to Public Contract Code section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code section 2717(b) in order to supply mined material for this Contract.
- D. No Agency official or representative who is authorized in such capacity and on behalf of Agency to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Work, shall be or become directly or indirectly interested financially in the Contract.
- E. All provisions of law required to be inserted in the Contract or Contract Documents pursuant to any Applicable Laws shall be and are inserted herein. If through mistake, neglect, oversight, or otherwise, any such provision is not herein inserted or inserted in improper form, upon the application of either party, the Contract or Contract Documents shall be changed by Agency, at no increase in the GMP or Contract Time, so as to strictly comply with the Applicable Laws and without prejudice to the rights of either party hereunder.

15.11 State License Board Notice.

- A. Contractors are required by law to be licensed and regulated by Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation.

Any questions concerning a contractor may be referred to the Registrar, the Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

15.12 Noise.

- A. Progressive Design-Build Entity shall use only such equipment on the Project and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
- B. Progressive Design-Build Entity shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements. No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, Progressive Design-Build Entity shall promptly remove the equipment and shall not return that equipment to the Project site until the device is repaired or replaced. Noise and vibration level requirements shall apply to all equipment on the jobsite or related to the Project, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by Progressive Design-Build Entity.

15.13 Change In Name Or Nature of Progressive Design-Build Entity's Legal Entity.

- A. Should a change be contemplated in the name or nature of Progressive Design-Build Entity's legal entity, Progressive Design-Build Entity shall first notify Agency in order that proper steps may be taken to have the change reflected in the Contract Documents and all related documents. No change of Progressive Design-Build Entity's name or nature will affect Agency's rights under the Contract Documents, including but not limited to the bonds and insurance.

15.14 Complete Contract.

- A. The Contract Documents constitute the full and complete understanding of the parties and supersede any previous agreements or understandings, oral or written, with respect to the subject matter hereof. The Contract may be modified only by a written instrument signed by both parties or as otherwise provided in the Contract Documents.

15.15 Notice of Third Party Claims.

- A. Pursuant to Public Contract Code section 9201, Agency shall provide Progressive Design-Build Entity with timely notification of the receipt of any third-party claim relating to the Contract.

15.16 Severability of Provisions.

- A. If any one or more of the provisions contained in the Contract Documents should be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

15.17 Correction of Errors and Omissions.

- A. Progressive Design-Build Entity agrees to correct any error or omission in the Construction Documents or Contract Documents at no additional cost to Agency.

15.18 Interpretation.

- A. The Contract Documents shall not be construed in favor of or against any party, but shall be construed as if all parties prepared the Contract Documents.

END OF GENERAL CONDITIONS

**ATTACHMENT 3
SPECIAL CONDITIONS**

ARTICLE 1 -MODIFICATIONS TO THE GENERAL CONDITIONS

[*ADJUSTMENTS CAN BE MADE TO THE GENERAL CONDITIONS FOR MANY PROJECT SPECIFIC REQUIREMENTS, EXAMPLES INCLUDING BRAND NAMES OR MATERIALS, PRODUCTS, THINGS, OR SERVICES REQUIRED, MODIFYING WORK AND/OR HOLIDAY HOURS, CHANGING THE RETENTION AMOUNT, DAYS FOR SUBSTITUTION OF MATERIALS, MODIFYING NOISE RESTRICTIONS, ETC.***]**

[*THE FOLLOWING ARE EXAMPLES OF WAYS IN WHICH TO MAKE THE FOLLOWING ADJUSTMENTS TO THE GENERAL CONDITIONS***]**

1.1 Section 6.8 Submittals.

Section 6.8 of the General Conditions shall be deleted in its entirety and replaced with the following:

“6.8 Submittals.

_____”

1.2 Section 6.8 Submittals.

The first sentence in Section 6.8 of the General Conditions shall be deleted in its entirety and replaced with the following:

“_____”

**ATTACHMENT 4
PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, Hi-Desert Water District (“Agency”) has awarded to _____, (“PDBE”) an agreement for _____ (hereinafter referred to as the “Project”).

WHEREAS, the work to be performed by the PDBE is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as “Contract Documents”), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the PDBE is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned PDBE and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto Agency in the sum of _____ dollars, (\$ _____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the PDBE, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless Agency, its officers and agents, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney’s fees, incurred by Agency in enforcing such obligation.

The obligations of Surety hereunder shall continue so long as any obligation of PDBE remains. Nothing herein shall limit Agency’s rights or the PDBE or Surety’s obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

Whenever PDBE shall be, and is declared by Agency to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at Agency's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a Bid or Bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible Bidder, arrange for a Contract between such Bidder, the Surety and Agency, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the Contract price, including other costs and damages for which Surety may be liable. The term "balance of the Contract price" as used in this paragraph shall mean the total amount payable to PDBE by Agency under the Contract and any modification thereto, less any amount previously paid by Agency to the PDBE and any other set offs pursuant to the Contract Documents.
- (3) Permit Agency to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the Contract price, including other costs and damages for which Surety may be liable. The term "balance of the Contract price" as used in this paragraph shall mean the total amount payable to PDBE by Agency under the Contract and any modification thereto, less any amount previously paid by Agency to the PDBE and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that Agency may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the PDBE.

Surety shall not utilize PDBE in completing the Project nor shall Surety accept a Bid from PDBE for completion of the Project if Agency, when declaring the PDBE in default, notifies Surety of Agency's objection to PDBE's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

Progressive Design-Build Entity

By: _____
President

Surety

By: _____
Attorney-in-Fact

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____

(Name and Address of Agent or Representative for service of process _____ in _____ California, _____ if _____ different from above) _____ general

(Telephone number of Surety and Agent or Representative for service of process in California) _____

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

**ATTACHMENT 5
PAYMENT BOND (LABOR AND MATERIALS)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, Hi-Desert Water District (“Agency”), has awarded to _____, hereinafter designated as the “Principal,” a contract (“Contract”) for the work described as follows: _____ (“Project”); and

WHEREAS, said Principal is required to furnish a bond in connection with said Contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto Agency in the penal sum of _____ dollars (\$_____) lawful money of the United States of America, 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.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the Work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the PDBE and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such Work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by Agency in such suit, including reasonable attorneys’ fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such Contract or agreement or under the bond,

nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of Contract between the owner or Agency and original PDBE or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the ____ day of _____ 20____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

(Corporate Seal of Principal, if corporation)

Progressive Design-Build Entity

By: _____
President

(Seal of Surety)

Surety

By: _____
Attorney-in-Fact

(Attached Attorney-In-Fact Certificate and Required Acknowledgements)

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

**ATTACHMENT 6
HOURLY RATE SCHEDULE FOR EXTRA WORK**

*****ATTACH RATE SCHEDULE*****

**ATTACHMENT 7
WORKERS' COMPENSATION CERTIFICATION**

Labor Code section 3700 in relevant part provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- a. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state.
- b. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of this Contract.

Date: _____

Name of Progressive Design-Build Entity: _____

Signature: _____

Print Name: _____

Title: _____

(In accordance with Article 5 - commencing at section 1860, chapter 1, part 7, division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any Work under this Contract.)

ATTACHMENT 8 FUNDING REQUIREMENTS

This Project will be funded in whole or in part by state and/or federal funds, including the Clean Water State Revolving Fund ("SRF"). Agency's funding agreements for this Project are incorporated into this Contract by reference. PDBE shall comply, and assist Agency in complying, with all requirements in and arising out of the funding agreements.

PDBE shall also comply with all applicable state and/or federal funding requirements including, but not limited to, the following, all of which are expressly incorporated herein by reference:

- SRF Funding Requirements attached hereto as Exhibit "A"
- Federal Funding Requirements attached hereto as Exhibit "B"
- Davis-Bacon Provisions attached hereto as Exhibit "C"
- Davis-Bacon Rates attached hereto as Exhibit "D"
- Disadvantaged Business Enterprise Requirements attached hereto as Exhibit "E"

EXHIBIT "A"
SRF FUNDING REQUIREMENTS

1. ACCESS, INSPECTION, AND PUBLIC RECORDS. PDDBE shall ensure that the State Water Board, the Governor of the State, the United States Environmental Protection Agency, the Office of Inspector General, any member of Congress, the President of the United States, or any authorized representative of the foregoing, will have safe and suitable access to the Project site at all reasonable times during Project construction and thereafter for the term of the Contract. PDDBE acknowledges that, except for a subset of information regarding archaeological records, the Project records and locations are public records.

2. ACCOUNTING AND AUDITING STANDARDS; FINANCIAL MANAGEMENT SYSTEMS, RECORDS RETENTION.

(a) PDDBE and its subcontractors must maintain project accounts according to GAAP as issued by the Governmental Accounting Standards Board (GASB) or its successor. PDDBE and its subcontractors must maintain GAAP-compliant project accounts, including GAAP requirements relating to the reporting of infrastructure assets.

(b) PDDBE and its subcontractors must comply with federal standards for financial management systems. PDDBE agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit preparation of reports required by the federal government and tracking of Project funds to a level of expenditure adequate to establish that such funds have not been used in violation of federal or state law or the terms of this Contract. To the extent applicable, the PDDBE is bound by, and must comply with, the provisions and requirements of the federal Single Audit Act of 1984 and 2 CFR Part 200, subpart F, and updates or revisions, thereto.

(c) Without limitation of the requirement to maintain Project accounts in accordance with GAAP, the PDDBE and its subcontractors must:

- (i) Establish an official file for the Project which adequately documents all significant actions relative to the Project;
- (ii) Establish separate accounts which will adequately and accurately depict all amounts received and expended on the Project, including all assistance funds received under this Contract;
- (iii) Establish separate accounts which will adequately depict all income received which is attributable to the Project;
- (iv) Establish an accounting system which will accurately depict final total costs of the Project, including both direct and Indirect Costs;
- (v) Establish such accounts and maintain such records as may be necessary for Agency to fulfill federal reporting requirements, including any and all reporting requirements under federal tax statutes or regulations; and
- (vi) If force account is used by the PDDBE for any phase of the Project, accounts will be established which reasonable document all employee hours charged to the Project and the associated tasks performed by each employee.

(d) "GAAP" means generally accepted accounting principles, the uniform accounting and reporting procedures set forth in publications of the American Institute of Certified Public Accountants or its successor, or by any other generally accepted authority on such procedures, and includes, as applicable, the standards set forth by the Governmental Accounting Standards Board or its successor, or the Uniform System of Accounts, as adopted by the California Public Utilities Commission for water utilities.

3. AUDIT. Agency may call for an audit of financial information relative to the Project if Agency determines that an audit is desirable. If an audit is called for, the audit must be performed by a certified public accountant independent of the PDBE and at the cost of the PDBE. The audit must be in the form required by Agency. Audit disallowances must be returned to the State Water Board.

4. COMPLIANCE WITH LAWS, REGULATIONS, ETC. PDBE shall, at all times, comply with and require its subcontractors to comply with all applicable federal and state laws, rules, guidelines, regulations, and requirements. Without limitation of the foregoing, to the extent applicable, PDBE shall:

- (i) Comply with the provisions of the adopted environmental mitigation plan, if any, for the term of the Contract;
- (ii) Comply with the State Water Board's "Policy for Implementing the Clean Water State Revolving Fund," as amended from time to time, including the Intended Use Plan in effect as of the execution date of this Contract.
- (iii) Comply with and require compliance with the state and federal requirements set forth elsewhere in this Contract.

PDBE may not begin project activities that require environmental or other regulatory compliance approval prior to receipt of written notice from the Agency that all such clearances have been obtained.

5. COMPUTER SOFTWARE. PDBE certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Contract for the acquisition, operation or maintenance of computer software in violation of copyright laws.

6. CONFLICT OF INTEREST. PDBE certifies that it, its owners, officers, directors, agents, representatives, and employees are in compliance with applicable State and federal conflict of interest laws and will remain in compliance for the useful life of the Project. PDBE must not have any role or relationship with the Agency, that, in effect, substantially limits Agency's ability to exercise its rights, including cancellation rights, under the Contract, based on all the facts and circumstances.

7. DATA MANAGEMENT. PDBE will undertake data management activities so that the Project data can be incorporated into statewide data systems.

8. DEBARRED, DISQUALIFIED, OR EXCLUDED CONTRACTORS. PDBE must not contract or allow subcontracting with excluded parties. PDBE must not contract with any party who is debarred or suspended or otherwise excluded from or ineligible for participation in any work overseen, directed, funded, or administered by the State Water Board program for which this funding is authorized. For any work related to this Contract, PDBE must not contract with any

individual or organization on the State Water Board's List of Disqualified Businesses and Persons that is identified as debarred or suspended or otherwise excluded from or ineligible for participation in any work overseen, directed, funded, or administered by the State Water Board program for which funding under this Contract is authorized. The State Water Board's List of Disqualified Businesses and Persons is located at http://www.waterboards.ca.gov/water_issues/programs/enforcement/fwa/dbp.sht_ml

9. DRUG-FREE WORKPLACE. PDDBE certifies that it will provide a drug-free workplace in compliance with the Drug-Free Workplace Act (Gov. Code. §§ 8350-8357). PDDBE shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the PDDBE's workplace and specifying the actions to be taken against employees for violations of the prohibition. PDDBE shall follow Agency's drug-free awareness program to inform employees about the dangers of drug abuse in the workplace, Agency's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs, and penalties that may be imposed upon employees for drug abuse violations. PDDBE shall provide that every employee who works on the Project receives a copy of the Agency's drug-free workplace policy statement and agrees to abide by the terms of the statement as a condition of employment on the Project.

10. FRAUD AND MISUSE OF PUBLIC FUNDS. All requests for disbursement must be accurate and signed by the PDDBE under penalty of perjury. All costs submitted pursuant to this Contract must only be for the work or tasks set forth in this Contract. Any costs for which the PDDBE is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing for time, services, or any other cost is improper and will not be compensated. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements and, notwithstanding any other section in this Contract, the termination of this Contract requiring the immediate repayment of all funds disbursed hereunder. Additionally, the Deputy Director of the Division may request an audit and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability.

11. INDEMNIFICATION. Any contractual provision in which the PDDBE or any subcontractor indemnifies, defends, or holds harmless Agency shall include or shall be read to include indemnifying, defending, and holding harmless the State Water Board and any trustee, and their officers, employees, and agents for the bonds financing the Project, if any, to the same extent as is provided Agency.

12. INSPECTION. Throughout the useful life of the Project, the State Water Board shall have the right to inspect the Project area to ascertain compliance with this Contract.

13. LIENS. PDDBE must not make any pledge of or place any lien on the Project or Project assets except upon consent of the Agency.

14. NON-DISCRIMINATION PROVISIONS.

(a) PDDBE and its subcontractors must comply with Government Code section 11135 and the implementing regulations (Cal. Code Regs, tit. 2, § 11140 et seq.), including, but not limited to, ensuring that no person is unlawfully denied full and equal access to the benefits of, or unlawfully subjected to discrimination in the operation of, the Project or System on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental

disability, physical disability, medical condition, genetic information, marital status, or sexual orientation as such terms are defined under California law, for as long as the PDBE and its subcontractors for the duration of the Project.

(b) PDBE and its subcontractors must comply with the federal American with Disabilities Act of 1990 and implementing regulations as required by Government Code section 11135(b).

(c) PDBE's obligations under this section shall survive the term of this Contract.

(d) During the performance of this Contract, PDBE and its subcontractors must not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, sexual orientation, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, denial of family care leave, or genetic information, gender, gender identity, gender expression, or military and veteran status.

(e) PDBE and its subcontractors must ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.

(f) PDBE and its subcontractors must comply with the provisions of the Fair Employment and Housing Act and the applicable regulations promulgated thereunder. (Gov. Code, §12990, subds. (a)-(f) et seq.; Cal. Code Regs., tit. 2, § 7285 et seq.) Such regulations are incorporated into this Contract by reference and made a part hereof as if set forth in full.

(g) PDBE and its subcontractors must comply with all applicable federal civil rights regulations, including statutory and national policy requirements. (2 CFR § 200.300). This includes, to the greatest extent practicable and to the extent permitted by law, the requirement to respect and protect the freedom of persons and organizations to engage in political and religious speech. (Executive Order 13798).

(h) PDBE and its subcontractors must give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

(i) PDBE must include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Contract.

15. RECORDS, INSPECTION, AUDITS, AND INTERVIEWS; RECORDS RETENTION.

PDBE and its subcontractors shall maintain separate books, records and other material relative to Project. PDBE and its subcontractors shall provide copies of all books, records and other materials to the Agency prior completing their work on the Project. PDBE shall maintain such records for a minimum of thirty-six (36) years after Project Completion. PDBE and its subcontractors shall make such books, records, and other material available at all reasonable times (at a minimum during normal business hours) to inspection, copying, and audit by the State Water Board, the Bureau of State Audits, the United States Environmental Protection Agency (USEPA), the Office of Inspector General, the Internal Revenue Service, the Governor, or any authorized representatives of the aforementioned. PDBE shall allow and shall require its subcontractors to allow interviews during normal business hours of any employees who might reasonably have information related to such records. PDBE agrees to include a similar duty regarding audit, interviews, and records retention in any contract or subcontract related to the

performance of the Contract. The provisions of this section shall survive the expiration or termination of the Contract.

16. STATE WATER BOARD RIGHTS IN DATA. PDBE agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of the Contract are subject to the rights of the State as set forth in this section. The State shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so. As to any work which is copyrighted by Agency, the State reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so. PDBE may disclose, disseminate and use in whole or in part, any final form data and information received, collected, and developed under this Contract, subject to appropriate acknowledgement of credit to the State Water Board for financial support. PDBE shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so.

17. UNION ACTIVITIES. PDBE hereby acknowledges the applicability of Government Code sections 16645 through 16649 to this Contract. PDBE certifies that none of the Project funds will be used to assist, promote, or deter union organizing. If PDBE incurs costs or makes expenditures to assist, promote, or deter union organizing, the Recipient will maintain records sufficient to show that no reimbursement from Project funds has been sought for these costs and PDBE shall provide those records to the Attorney General upon request.

18. EXECUTIVE ORDER N-6-22. Executive Order N-6-22 issued by Governor Gavin Newsom on March 4, 2022, directs all agencies and departments that are subject to the Governor's authority to (a) terminate any contracts with any individuals or entities that are determined to be a target of economic sanctions against Russia and Russian entities and individuals; and (b) refrain from entering into any new contracts with such individuals or entities while the aforementioned sanctions are in effect. Executive Order N-6-22 also requires that any contractor that: (1) currently has a contract with the Agency funded through grant funds provided by the State of California; and/or (2) submits a bid or proposal or otherwise proposes to or enter into or renew a contract with the Agency funded by State of California grant funds, certify that the person is not the target of any economic sanctions against Russia and Russian entities and individuals. PDBE certifies that the PDBE is not a target of any economic sanctions against Russian and Russian entities and individuals as discussed in Executive Order N-6-22.

EXHIBIT "B"
FEDERAL FUNDING REQUIREMENTS

1. RESERVED

(a) Appendix II to Part 200 (A) - Remedies: The parties shall comply with the administrative, contractual, or legal remedies in the Contract for when PDBE violates or breaches the Contract terms and shall comply with the applicable sanctions and penalties as appropriate in the Contract.

(b) Appendix II to Part 200 (B) - Termination for Cause/Convenience. The parties shall comply with the termination for cause provision and the termination for convenience provision in the Contract.

(c) Appendix II to Part 200 (C) – Equal Employment Opportunity: Since the Contract meets the definition of a "federal assisted construction contract" in 41 CFR § 60-1.3, PDBE agrees as follows during the performance of the Contract:

(i) PDBE will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The PDBE will 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. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. PDBE agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(ii) PDBE will, in all solicitations or advertisements for employees placed by or on behalf of the PDBE, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(iii) PDBE will 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. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the PDBE's legal duty to furnish information.

(iv) PDBE will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of PDBE's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(v) PDBE will comply with all provisions of Executive Order 11246 of

September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(vi) PDBE will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(vii) In the event of PDBE's noncompliance with the nondiscrimination clauses of Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and PDBE may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(viii) PDBE will include the portion of the sentence immediately preceding paragraph (i) and the provisions of paragraphs (i) through (vii) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. PDBE will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

(d) Provided, however, that in the event the PDBE becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the PDBE may request the United States to enter into such litigation to protect the interests of the United States.

(e) Agency further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the Agency so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the Construction Contract.

(f) Agency agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of the PDBE and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

(g) Agency further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Agency agrees that if it fails or refuses to comply with

these undertakings, the administering agency may take any or all of the following actions: cancel, terminate, or suspend in whole or in part the grant (contract, loan, insurance, guarantee) for this project; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(h) Appendix II to Part 200 (D), (E) – Davis-Bacon Act; Contract Work Hours and Safety Standards Act: PDBE shall comply with 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (labor standards originally enacted as the Davis- Bacon Act, the Contract Work Hours and Safety Standards Act, the Copeland Anti-Kickback Act), which are included in this Contract.

(i) Appendix II to Part 200 (F) – Rights to Inventions Made Under a Contract or Agreement: This provision is not applicable to the Contract..

(j) Appendix II to Part 200 (G) – Clean Air Act and Federal Water Pollution Control Act: PDBE shall comply with the following:

(i) Pursuant to the Clean Air Act, (1) PDBE agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq., (2) PDBE agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection District Regional Office, and (3) PDBE agrees to include these requirements in each subcontract exceeding \$150,000.

(ii) Pursuant to the Federal Water Pollution Control Act, (1) PDBE agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., (2) PDBE agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection Agency Regional Office, and (3) PDBE agrees to include these requirements in each subcontract exceeding \$150,000.

(k) Appendix II to Part 200 (H) – Debarment and Suspension:

(i) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such PDBE is required to verify that none of the PDBE's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(ii) PDBE must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(iii) This certification is a material representation of fact relied upon by Agency. If it is later determined that PDBE did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Agency, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(iv) PDBE agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart

C and 2 C.F.R. pt. 3000, subpart C throughout the Contract. PDDB further agrees to include a provision requiring such compliance in its subcontracts.

(v) PDDB warrants that it is not debarred, suspended, or otherwise excluded from or ineligible for participation in any federal programs. PDDB also agrees to verify that all subcontractors performing work under this Contract are not debarred, disqualified, or otherwise prohibited from participation in accordance with the requirements above. PDDB further agrees to notify the Agency in writing immediately if PDDB or its subcontractors are not in compliance during the term of this Contract.

(l) Appendix II to Part 200 (I) – Byrd Anti-Lobbying Act:

(i) Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

(m) Appendix II to Part 200 (J) – §200.323 Procurement of Recovered Materials:

(i) PDDB shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement.

(ii) In the performance of this Contract, the PDDB shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired: competitively within a timeframe providing for compliance with the contract performance schedule; meeting contract performance requirements; or at a reasonable price.

(iii) Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

(iv) PDDB also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

(n) Appendix II to Part 200 (K) – §200.216 Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment:

(i) PDDB shall not contract (or extend or renew a contract) to procure or obtain equipment, services, or systems 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

funded under this Contract. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(1) 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).

(2) Telecommunications or video surveillance services provided by such entities or using such equipment.

(3) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the 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.

(ii) See Public Law 115-232, section 889 for additional information.

(o) Appendix II to Part 200 (L) – §200.322 Domestic Preferences for Procurement:

(i) PDDBE shall, to the greatest extent practicable, purchase, acquire, or use goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subcontracts.

(ii) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

EXHIBIT "C"
DAVIS-BACON PROVISIONS

(a) Davis-Bacon Provisions. PDDBE shall comply with 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (labor standards originally enacted as the Davis- Bacon Act, the Contract Work Hours and Safety Standards Act, the Copeland Anti-Kickback Act), which are incorporated into the Contract by this reference. This includes, but is not limited to, the following provisions:

(i) Minimum wages.

(1) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), 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 which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the PDDBE and such laborers and mechanics. 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 (d)(i)(4) of this section; 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 weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in section (d)(iv). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (d)(i)(2) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the PDDBE and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2)

a. 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 therefore only when the following criteria have been met:

i. The work to be performed by the classification requested is not performed by a classification in the wage determination; and

ii. The classification is utilized in the area by the construction industry; and

iii. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

b. If the PDBE and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

c. In the event the PDBE, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (d)(i)(2) (b) or (c) of this section, 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.

(3) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the PDBE shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(4) If the PDBE does not make payments to a trustee or other third person, the PDBE may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the PDBE, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the PDBE to set aside in a separate account assets for the meeting of obligations under the plan or program.

(ii) Withholding. The Agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the PDBE under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the PDBE or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or

part of the wages required by the Contract, the Agency may, after written notice to the PDBE, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(iii) Payrolls and basic records.

(1) Payrolls and basic records relating thereto shall be maintained by the PDBE during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the PDBE shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(2)

a. The PDBE shall submit weekly for each week in which any Contract work is performed a copy of all payrolls to the Bureau of Reclamation if the agency is a party to the contract, but if the agency is not such a party, the PDBE will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Bureau of Reclamation. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The PDBE is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the Contract, but if the agency is not such a party, the PDBE will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the PDBE, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

b. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the PDBE or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

i. That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

ii. That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

iii. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

c. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

d. The falsification of any of the above certifications may subject the PDBE or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(3) The PDBE or subcontractor shall make the records required under paragraph (c)(iii)(1) of this section available for inspection, copying, or transcription by authorized representatives of the Agency or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the PDBE or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the PDBE, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(iv) Apprentices and trainees -

(1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft

classification shall not be greater than the ratio permitted to the PDBE as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a PDBE is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the PDBE's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the PDBE will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the PDBE will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(3) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(v) Compliance with Copeland Act requirements. The PDBE shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this Contract.

(vi) Subcontracts. The PDBE or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The PDBE shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(vii) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(viii) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this Contract.

(ix) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the PDBE (or any of its subcontractors) and the Agency, the U.S. Department of Labor, or the employees or their representatives.

(x) Certification of eligibility.

(1) By entering into this Contract, the PDBE certifies that neither it (nor he or she) nor any person or firm who has an interest in the PDBE's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(2) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act

(i) Overtime Requirements. No contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(ii) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (i) of this Section the PDBE and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under

contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (i) of this Section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (i) of this Section.

(iii) Withholding for unpaid wages and liquidated damages. The Agency shall upon its 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 PDBE or subcontractor under any such contract or any other Federal contract with the PDBE, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the PDBE, such sums as may be determined to be necessary to satisfy any liabilities of PDBE or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (ii) of this section.

(iv) Subcontracts. PDBE or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (ii) through (iv) of this Section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The PDBE shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (i) through (iv) of this Section.

EXHIBIT "D"
DAVIS-BACON RATES

[INSERT APPLICABLE FEDERAL PREVAILING WAGE RATES FOR THE PROJECT, THE ENTIRE PACKAGE OF RATES MUST BE PHYSICALLY INSERTED PRIOR TO EXECUTION BY THE DISTRICT AND CONTRACTOR**]**

EXHIBIT "E" DBE REQUIREMENTS



California State Water Resources Control Board
Division of Financial Assistance
1001 I Street • Sacramento, California 95814 • (916) 341-5700 FAX (916) 341-5707
Mailing Address: P. O. Box 944212 • Sacramento, California • 94244-2120
Internet Address: <http://www.waterboards.ca.gov>

Guidelines for Meeting the California State Revolving Fund (CASRF) Programs (Clean Water and Drinking Water SRF) Disadvantaged Business Enterprise Requirements

The Disadvantaged Business Enterprise (DBE) Program is an outreach, education, and objectives program designed to increase the participation of DBEs in the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Programs.

How to Achieve the Purpose of the Program

Recipients of CWSRF/DWSRF financing that are subject to the DBE requirements (recipients) are required to seek, and are encouraged to use, DBEs for their procurement needs. Recipients should award a "fair share" of sub-agreements to DBEs. This applies to all sub-agreements for equipment, supplies, construction, and services.

The key functional components of the DBE Program are as follows:

- Fair Share Objectives
- DBE Certification
- Six Good Faith Efforts
- Contract Administration Requirements
- DBE Reporting

Disadvantaged Business Enterprises are:

- Entities owned and/or controlled by socially and economically disadvantaged individuals as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d) (8% statute), respectively;
- Minority Business Enterprise (MBE) - entities that are at least 51% owned and/or controlled by a socially and economically disadvantaged individual as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note), and Public Law 102-389 (42 U.S.C. 4370d), respectively;
- Women Business Enterprise (WBE) - entities that are at least 51% owned and/or controlled by women;
- Small Business Enterprise (SBE);
- Small Business in a Rural Area (SBRA);
- Labor Surplus Area Firm (LSAF); or
- Historically Underutilized Business (HUB) Zone Small Business Concern or a concern under a successor program.

Certifying DBE Firms:

Under the DBE Program, entities can no longer self-certify and contractors and sub-contractors must be certified at bid opening. Contractors and sub-contractors must provide to the CASRF recipient proof of DBE certification. Certifications will be accepted from the following:

- The U.S. Environmental Protection Agency (USEPA)
- The Small Business Administration (SBA)
- The Department of Transportation's State implemented DBE Certification Program (with U.S. citizenship)
- Tribal, State and Local governments
- Independent private organization certifications

If an entity holds one of these certifications, it is considered acceptable for establishing status under the DBE Program.

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Six Good Faith Efforts (GFE)

All CWSRF/DWSRF financing recipients are required to complete and ensure that the prime contractor complies with the GFE below to ensure that DBEs have the opportunity to compete for financial assistance dollars.

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practical through outreach and recruitment activities. For Tribal, State and Local Government Recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs. Posting solicitations for bids or proposals for a minimum of 30 calendar days in a local newspaper, before the bid opening date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs.
4. Encourage contracting with a group of DBEs when a contract is too large for one firm to handle individually.
5. Use the services of the SBA **and/or** Minority Business Development Agency (MBDA) of the US Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.

The forms listed in the table below and attached to these guidelines; must be completed and submitted with the GFE:

FORM NUMBER	FORM NAME	REQUIREMENT	PROVIDED BY	COMPLETED BY	SUBMITTED TO
SWRCB Form 4500-2 or EPA Form	DBE Sub-Contractor Participation Form	As Needed to Report Issues	Recipient	Sub-contractor	EPA DBE Coordinator
SWRCB Form 4500-3 or EPA Form	DBE Sub-Contractor Performance Form	Include with Bid or Proposal Package	Prime Contractor	Sub-Contractor	SWRCB by Recipient
SWRCB Form 4500-4 or EPA Form	DBE Sub-Contractor Utilization Form	Include with Bid or Proposal Package	Recipient	Prime Contractor	SWRCB by Recipient

The completed forms must be submitted with each Bid or Proposal. The recipient shall review the bidder's documents closely to determine that the GFE was performed **prior** to bid or proposal opening date. Failure to complete the GFE and to substantiate completion of the GFE before the bid opening date could jeopardize CWSRF/DWSRF financing for the project. The following situations and circumstances require action as indicated:

1. If the apparent successful low bidder was rejected, a complete explanation must be provided.
2. Failure of the apparent low bidder to **perform** the GFE **prior** to bid opening constitutes a non-responsive bid. The construction contract may then be awarded to the next low, responsive, and responsible bidder that meets the requirements or the Recipient may re-advertise the project.
3. If there is a bid dispute, all disputes shall be settled **prior** to submission of the Final Budget Approval Form.

Administration Requirements

- A recipient of CWSRF/DWSRF financing must require entities receiving funds to create and maintain a Bidders List if the recipient of the financing agreement is subject to, or chooses to follow, competitive bidding requirements.
- The Bidders list must include all firms that bid or quote on prime contracts, or bid or quote on subcontracts, including both DBEs and non-DBEs.

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- Information retained on the Bidder's List must include the following:
 1. Entity's name with point of contact;
 2. Entity's mailing address and telephone number;
 3. The project description on which the entity bid or quoted and when;
 4. Amount of bid/quote; and
 5. Entity's status as a DBE or non-DBE.
- The Bidders List must be kept until the recipient is no longer receiving funding under the agreement.
- The recipient shall include Bidders List as part of the Final Budget Approval Form.
- A recipient must require its prime contractor to pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the Recipient.
- A recipient must be notified in writing by its prime contractor prior to any termination of a DBE subcontractor by the prime contractor.
- If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the six GFEs if soliciting a replacement subcontractor.
- A recipient must require its prime contractor to employ the six GFEs even if the prime contractor has achieved its fair share objectives.

Reporting Requirements

For the duration of the construction contract(s), the recipient is required to submit to the State Water Resources Control Board DBE reports annually by October 10 of each fiscal year on the attached Utilization Report form (UR-334). Failure to provide this information as stipulated in the financial agreement language may cause for withholding disbursements.

CONTACT FOR MORE INFORMATION

SWRCB, CASRF – Barbara August (916) 341-6952 barbara.august@waterboards.ca.gov

US EPA, Region 9 – Joe Ochab (415) 972-3761 ochab.joe@epa.gov

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