



BOARD OF SUPERVISORS AGENDA ITEM REPORT AWARDS / CONTRACTS / GRANTS

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: 07/15/25

* = Mandatory, information must be provided

or Procurement Director Award: ☐

***Contractor/Vendor Name/Grantor (DBA):**

Kiewit Infrastructure West Co. (Headquarters: Omaha, NE)

***Project Title/Description:**

Design-Build Services – Pima County Tres Rios Wastewater Reclamation Facility Digester

***Purpose:**

Award: Contract No. PO2500016871 This award is recommended to the highest qualified Design-Build Team in the amount of \$2,881,117.11 for a contract term from 07/15/25 to 12/31/28 for Design and Pre-Construction Services for the Tres Rios Wastewater Reclamation Facility Digester. County intends to negotiate with Design-Builder regarding scope, schedule, general conditions, construction fees and other elements of the Guaranteed Maximum Price (GMP) for construction services and incorporate into this Contract by amendment. Administering Department: Project Design and Construction.

This project is expected to have multiple GMP's for construction services. The Design-Builder's construction budget is set not-to-exceed \$20,000,000.00. Board of Supervisors to authorize the Procurement Director to execute all modifications, including one or more GMP packages, provided that the cumulative total of all GMPs and pre-construction services does not exceed \$22,881,117.11 and the contract expiration date does not exceed 12/31/28, which allows for all contract close-out activities and final submittals.

***Procurement Method:**

Request for Qualifications No. RFQu-2400009444 was conducted in accordance with A.R.S. § 34-603 and Pima County Board of Supervisors Policy D29.1. 3 responsive statements of qualifications were received and evaluated by a 7 member committee using qualifications and experience-based selection criteria. Based upon the evaluation of the respondents' written representations of their qualifications and necessary due diligence, a short list of 3 respondents were invited to interviews. As a result of the combined scoring of the written statements of qualifications and interviews, the highest qualified contractor is recommended for award.

Attachments: Notice of Recommendation for Award and Contract.

***Program Goals/Predicted Outcomes:**

The new digester will facilitate the repair and rehabilitation of existing digesters, as well as accommodate the increased biogas production and future plant capacity.

***Public Benefit:**

The additional digester will prolong the safe, reliable operation of the Tres Rios Facility allowing for necessary updates and increase the overall future plant capacity.

***Metrics Available to Measure Performance:**

The performance will be measured using the contractor evaluation process as outlined in BOS Policy D29.1 (E).

***Retroactive:**

No.

THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (*) fields

Contract / Award Information

Document Type: PO

Department Code: PDC

Contract Number (i.e., 15-123): PO2500016871

Commencement Date: 07/15/25

Termination Date: 12/31/28

Prior Contract Number (Synergen/CMS): _____

☒ Expense Amount \$ 2,881,117.11 *

☐ Revenue Amount: \$ _____

***Funding Source(s) required: Regional Wastewater Reclamation Department Obligations**

Funding from General Fund? ☐ Yes ☒ No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No

If Yes, is the Contract to a vendor or subrecipient? _____

Were insurance or indemnity clauses modified? ☐ Yes ☒ No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? ☐ Yes ☒ No

If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____

Amendment No.: _____ AMS Version No.: _____

Commencement Date: _____ New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

☐ Expense ☐ Revenue ☐ Increase ☐ Decrease

Amount This Amendment: \$ _____

Is there revenue included? ☐ Yes ☐ No If Yes \$ _____

***Funding Source(s) required: _____**

Funding from General Fund? ☐ Yes ☐ No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards)

☐ Award ☐ Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____

Commencement Date: _____ Termination Date: _____ Amendment Number: _____

☐ Match Amount: \$ _____ ☐ Revenue Amount: \$ _____

***All Funding Source(s) required: _____**

*Match funding from General Fund? ☐ Yes ☐ No If Yes \$ _____ % _____

*Match funding from other sources? ☐ Yes ☐ No If Yes \$ _____ % _____

*Funding Source: _____

*If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)? _____

Contact: Procurement Officer: **Dawn Dargan**
Digitally signed by Dawn Dargan
Date: 2025.06.09 09:20:28 -07'00'

Division Manager: **Scott Loomis**
Digitally signed by Scott Loomis
Date: 2025.06.06 16:37:44 -07'00'

Department: Procurement Director: **Bruce D Collins**
Digitally signed by Bruce D Collins
Date: 2025.06.10 09:00:35 -07'00'

Telephone: **520-724-9071**

Department Director Signature: _____

Date: **6/13/2025**

Deputy County Administrator Signature: _____

Date: **6/13/2025**

County Administrator Signature: _____

Date: **6/14/2025**



NOTICE OF RECOMMENDATION FOR AWARD

Date of Issue: June 6, 2024

The Pima County Procurement Department hereby issues formal notice to respondents to **Solicitation No. RFQu-2400009444 for Design Build Services for Pima County Tres Rios Wastewater Reclamation Facility Digester** that the following listed respondent will be recommended for award as indicated below. The award action is scheduled to be performed by the Board of Supervisors, on or after, July 15, 2025.

Award is recommended to the Most Qualified Respondent.

AWARDEE NAME

Kiewit Infrastructure West Co.

OTHER RESPONDENT'S NAMES

MWH Constructors, Inc.

Sundt Construction, Inc.

NOTE: Pursuant to A.R.S. §34-603(H), only the names of the firms on the final list may be disclosed.

Issued by: /s/ Dawn Dargan

Telephone Number: (520) 724-9071

This notice is in compliance with Pima County Procurement Code §11.20.010(C).

Copy to: Pima County SBE via e-mail at SBE@pima.gov

PIMA COUNTY PROJECT DESIGN & CONSTRUCTION DEPARTMENT

PROJECT:	Design-Build Services – Pima County Tres Rios Wastewater Reclamation Facility Digester
CONTRACTOR:	Kiewit Infrastructure West Co. 3888 E. Broadway Rd. Phoenix, AZ 85040
CONTRACT NO.:	PO2500016871
AMOUNT:	\$2,881,117.11
FUNDING:	Regional Wastewater Reclamation Department Obligations

DESIGN-BUILD CONTRACT

1. Parties, Background and Purpose.

- 1.1. Parties. This Contract is between Pima County, a body politic and corporate of the State of Arizona (“County”), and Kiewit Infrastructure West Co. (“Design-Builder”). County and Design-Builder may also be individually referred to as a “Party” or collectively as the “Parties.”
- 1.2. History. County previously issued Solicitation for Qualifications (RFQu) No. RFQu-2400009444 (hereinafter referred to as the “Solicitation”) seeking a Design-Build services provider, the documents, amendments, requirements and specifications of which are all incorporated into this Contract by reference.
- 1.3. Design-Builder Selection. Design-Builder was selected by County through the evaluation process described in the Solicitation.
- 1.4. Purpose. The Parties desire to enter into this Contract to effect the completion of the Project on a Guaranteed Maximum Price (“GMP”) basis.

2. Effective Date, Term, and Schedule.

- 2.1. The effective date of this Contract is the date last signed below.
- 2.2. Unless otherwise terminated or extended, in writing, pursuant to other provisions of this Contract, the term of this Contract shall commence on July 15, 2025, and terminate on December 31, 2028 (the “Term”).
- 2.3. Design-Builder provided County with a preliminary schedule covering the planning, design, and construction of the Project which is attached as Appendix A - Project Scope of Work (51 pages).

3. Scope of Services.

- 3.1. This is a Design-Build Contract for architectural, engineering, and construction services (collectively, the “Services”) for Project, as more fully set forth in the following documents attached this Contract: Appendix A – Project Scope of Work; Appendix B – Supplemental Provisions – Construction Costing (5 pages); Appendix C – Design-Builder General Conditions (48 pages); and Appendix D – Design and Preconstruction Services Fee Proposal (42 pages).

- 3.2. Design-Builder will proceed with the Work in two phases: Phase 1 - Design and Preconstruction Services; and Phase 2 – Construction Services. This Contract covers only Phase 1 as that is defined in the Scope. Prior to any Design-Builder work on Phase 2, Design-Builder must deliver to County a proposed GMP, or multiple GMPs, if construction is divided into multiple phases.
- 3.3. With respect to Phase 2 – Construction Services, the parties acknowledge that the Construction Documents may be incomplete at the time Design-Builder delivers the GMP proposal to County, and that Design-Builder may not complete the Construction Documents until after Design-Builder begins work on Phase 2. Nevertheless, Design-Builder's GMP proposal shall include all anticipated costs for the Work required for Phase 2. If County accepts Design-Builder's GMP proposal, Design-Builder will not be entitled to any increase in the GMP unless the Work required by the completed Construction Documents: (i) is required by this Contract for Design-Build Construction; (ii) is reasonably inferable from the incomplete construction documents submitted with the proposed GMP; (iii) is consistent with County's programmatic goals and objectives; (iv) is consistent with County's Design and Construction Standards and the general industry standards for completion of the Work; (v) is not a substantial enlargement of the scope of Work; or (vi) substantially conforms to the nature, type, kind, or quality of Work depicted in the incomplete construction documents submitted with the GMP proposal.
- 3.4. If a GMP proposal is unacceptable to County, County will promptly notify Design-Builder in writing. Within 14 calendar days of notification, County and Design-Builder will meet to discuss and resolve any differences, inconsistencies, or misunderstandings and to negotiate recommended adjustments to the Work and/or to the proposed GMP.
- 3.5. County may, at its sole discretion and based upon its sole judgment: (i) accept a GMP proposal; (ii) reject a GMP proposal; (iii) terminate the Project; or (iv) proceed to construct the Project using a party or parties other than Design-Builder.
- 3.6. If County rejects a GMP proposal, neither party shall have any further obligation pursuant to this Contract.
- 3.7. If County accepts a GMP proposal, the parties will complete and execute an amendment to this Contract, and County will issue a written Notice to Proceed to Design-Builder establishing the date that Design-Builder will commence Phase 2 (the "Phase Commencement Date"). Design-Builder shall not expend any monies for the new phase prior to receipt of the Notice to Proceed.

4. **Key Personnel.** Design-Builder will employ suitably trained and skilled professional personnel to perform all services under this Contract. Prior to changing any key personnel, especially those key personnel County identified in Design-Builder's Statement of Qualifications relied upon in making this Contract, Design-Builder will obtain the approval of County.

5. **Compensation and Payment.**

- 5.1. County will pay Design-Builder at the rates in Appendix D. County's total payments to Design-Builder for Phase 1 Work, including sales taxes (if applicable), is \$2,881,117.11 (the "Not-to-Exceed Amount" or "NTE amount"). The payment amounts or rates in Appendix D do not include sales taxes. Design-Builder may invoice County for the sales taxes Design-Builder is required to pay on goods supplied to County under this Contract.
- 5.2. Design-Builder will invoice County on a monthly basis unless a different billing period is included in Appendix A. County must receive invoices no more than 30 calendar days after the end of the billing period in which Design-Builder delivered the invoiced products or services to County. County may refuse to pay for any product or service for which Design-Builder does not timely invoice County and, pursuant to A.R.S. § 11-622(C), will not pay for any product or service invoiced more than six months late. Design-Builder will cite the Contract number on all invoices. Design-Builder shall show sales taxes as a separate line item on invoices. Any pre-printed terms and conditions on a purchase order form do not apply to Work performed under this Contract, which is to be governed solely by the terms of this Contract, including all attached and referenced documents.

- 5.3. County may, at any time during the Term and during the retention period set forth in Section 31 below, question any payment under this Contract. If County raises a question about the propriety of a past payment, Design-Builder will cooperate with County in reviewing the payment. County may set-off any overpayment against amounts due to Design-Builder under this or any other contract between County and Design-Builder. Design-Builder will promptly pay County any overpayment that County cannot recover by set-off.
- 5.4. Design-Builder will not perform work in excess of the GMP without prior authorization by a written Change Order executed by County's Board of Supervisors or Procurement Director pursuant to the Pima County Procurement Code. Work performed in excess of the GMP without a written and properly approved Change Order is done at Design-Builder's own risk.
- 5.5. Price Guarantees. Upon acceptance by County of a GMP under Section 3.7:
 - 5.5.1. Design-Builder guarantees that the sum of: (i) the actual cost of the work; (ii) Design-Builder's contingency; (iii) Design-Builder's staffing costs; (iv) the general conditions cost; and (v) Design-Builder's overhead and profit, will not exceed the amount in the accepted GMP. Design-Builder is responsible for all costs or expenses that would cause the sum of the items above to exceed the GMP unless County has adjusted the GMP by an approved change order.
 - 5.5.2. Design-Builder certifies that: all unit costs supporting the GMP proposal are accurate, complete, and current at the time of negotiations; and that any other factual unit costs that Design-Builder may provide to County in the future to support any additional amounts that County may authorize will also be accurate and complete. County may reduce payments to Design-Builder if County determines that any amounts Design-Builder included are materially inaccurate, incomplete, or non-current factual unit costs.

6. Insurance. The Insurance Requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. County in no way warrants that the minimum limits contained herein are sufficient to protect Design-Builder from liabilities that arise out of the performance of the work under this Contract. Design-Builder is free to purchase additional insurance.

Design-Builder's insurance will be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers will have an "A.M. Best" rating of not less than A- VII. County in no way warrants that the above- required minimum insurer rating is sufficient to protect Design-Builder from potential insurer insolvency.

6.1. Minimum Scope and Limits of Insurance.

Design-Builder will procure and maintain, until all of their obligations have been discharged, coverage with limits of liability not less than those stated below.

- 6.1.1. Commercial General Liability (CGL) – Occurrence Form with limits of \$2,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form Contractual liability coverage, and products – completed operations.
- 6.1.2. Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
- 6.1.3. Workers' Compensation (WC) and Employers' Liability - Statutory requirements and benefits. In Arizona, WC coverage is compulsory for employers of one or more employees. Employer's Liability coverage- \$1,000,000 each accident and each person – disease.

Note: The Workers' Compensation requirement will not apply to a Design-Builder that is exempt under A.R.S. § 23-901, and when such Design-Builder executes the appropriate County Sole Proprietor or Independent Design-Builder waiver form.

- 6.1.4. Builder's Risk Insurance does apply to this contract. Design-Builder shall be required to maintain throughout the course of construction, Builder's Risk Insurance in a dollar amount equal to the full insurable value of the work under contract, which shall include "All Risk" coverage. Pima County shall be named as a "Loss Payee". Design-Builder shall be responsible for equipment, materials, and supplies until completion of the project and acceptance by Pima County.
- 6.1.5. Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this contract.

In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, Design-Builder warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of 2 years beginning at the time work under this Contract is completed.

6.2. Additional Insurance Requirements

The policies shall include, or be endorsed to include, as required by this written agreement, the following provisions:

- 6.2.1. Additional Insured Endorsement: The General Liability and Business Automobile Liability Policies will each be endorsed to include County, its departments, districts, boards, commissions, officers, officials, agents, and employees as additional insureds with respect to liability arising out of the activities performed by or on behalf of Design-Builder.
- 6.2.2. Subrogation Endorsement: The General Liability, Business Automobile Liability and Workers' Compensation Policies will each contain a waiver of subrogation endorsement in favor of County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of Design-Builder.
- 6.2.3. Primary Insurance Endorsement: Design-Builder's policies will stipulate that the insurance afforded Design-Builder will be primary and that any insurance carried by the Department, its agents, officials, employees or County will be excess and not contributory insurance, as provided by A.R.S. § 41-621 (E).
- 6.2.4. Insurance provided by Design-Builder will not limit Design-Builder's liability assumed under the indemnification provisions of this Contract.

6.3. Notice of Cancellation.

For each insurance policy required by the insurance provisions of this Contract, Design-Builder must provide to County, within two business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to Pima County Procurement, 150 West Congress Street, 5th Floor, Tucson, Arizona 85701-1317 or via fax to (520) 724-3646.

6.4. Verification of Coverage.

Design-Builder will furnish County with certificates of insurance (valid ACORD form or equivalent approved by County) as required by this Contract. An authorized representative of the insurer will sign the certificates.

6.4.1. All certificates and endorsements, as required by this written agreement, are to be received and approved by County before work commences. Each insurance policy required by this Contract must be in effect at, or prior to, commencement of work under this Contract. Failure to maintain the insurance coverages or policies as required by this Contract, or to provide evidence of renewal, is a material breach of Contract.

6.4.2. All certificates required by this Contract will be sent directly to the Department. County Project or Contract number and Project description will be noted on the certificate of insurance. County reserves the right to require complete copies of all insurance policies required by this Contract at any time.

6.5. Approval and Modifications.

Pima County Risk Management reserves the right to review or make modifications to the insurance limits, required coverages, or endorsements throughout the life of this Contract, as deemed necessary. Such action will not require a formal Contract amendment but may be made by administrative action.

7. Payment and Performance Bonds.

As required by A.R.S. §§ 34-610 and 34-611 and, as a condition precedent to receiving a Notice to Proceed for any new construction phase of the Work, Design-Builder will deliver to County the Performance Bond and the Payment Bond, each in an amount equal to the portion of the GMP attributable to that phase of the construction work, as financial security for the faithful performance and payment of its Design- Build Period obligations hereunder. The Design-Builder will provide for an increase in the Performance Bond and the Payment Bond to reflect any GMP adjustments, as a condition of its entitlement to the GMP adjustment.

7.1. The Performance Bond and the Payment Bond must be substantially in the form set forth in Attachment 1 hereto and must be issued by a surety company: (1) verified by County having a rating of "A-" in the latest revision of the A.M. Best Company's Insurance Report; (2) be listed in the United States Treasury Department's Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsurance Companies"; and (3) holding a certificate of authority to transact surety business in the State of Arizona, issued by the Director of the Department of Insurance.

7.2. The Performance Bond and the Payment Bond shall be released only upon the achievement of Final Completion by Design-Builder. In no event shall the Performance Bond or the Payment Bond serve as a limitation on the liability of Design-Builder under this Contract.

7.3. Design-Builder's failure to maintain the Performance Bond and Payment Bond in the required amounts throughout the construction phases of this Contract will constitute material breach of this Contract.

8. Design-Builder's Performance. Design-Builder is responsible for the professional quality, technical accuracy, timely completion, and coordination of all its efforts and other services under this Contract. Without additional compensation from County, Design-Builder will correct or revise any errors, omissions, or other deficiencies in all products of its efforts and other services provided. This will include resolving any deficiencies arising out of the willful or negligent acts or omissions of Design-Builder found during or after the course of the services performed by or for Design-Builder under this Contract, to the extent that such willful or negligent errors, omissions, and acts fall below the standard of care and skill that a professional Design-Builder in Arizona would exercise under similar conditions. Design-Builder is responsible for these

corrections or revisions regardless of County having knowledge of or condoning/accepting the efforts or services.

9. Excusable Delays. Neither Party shall be liable to the other nor deemed in default under this Contract if and to the extent that such Party's performance is prevented or delayed by reason of an Uncontrollable Circumstance. For purposes of this Contract, Uncontrollable Circumstance means any act, event, or condition that: (1) is beyond the reasonable control of the party relying on it as a justification for not performing an obligation or complying with any condition required of such party under this Contract; and (2) materially expands the scope of, interferes with, delays, or increases the cost of performing the party's obligations under this Contract, to the extent that such act, event, or condition is not the result of the intentional or negligent act, error, or omission, failure to exercise reasonable diligence, or breach of this Contract on the part of the party claiming the occurrence of an uncontrollable circumstance. Excusable Delays shall not include late performance by a subcontractor unless the delay arises out of an Uncontrollable Circumstance. A party shall extend the time of completion by a Change Order for a period of time equal to the time the Uncontrollable Circumstance prevented the delayed Party from performing in accordance with this Contract.

10. Liquidated Damages. Design-Builder agrees to achieve substantial completion by the end date as determined by mutual agreement of the Parties at time of GMP. Design-Builder's failure to reach Substantial Completion within the Term will substantially harm County. Because damages resulting from such a failure cannot be calculated with any degree of certainty, the Parties agree that if Contractor does not achieve Substantial Completion within the Term (as may be amended through written Change Orders), Design-Builder will pay to County as liquidated damages, and not a penalty, a dollar amount not-to-exceed limits set forth in Pima Association of Governments (PAG) Standards and Specifications, Section 108-9, for each calendar day between the deadline for Substantial Completion and the date Design-Builder actually achieves Substantial Completion. Dollar amount to be determined by mutual agreement of the Parties at time of GMP. The Parties further agree that the daily liquidated damages amount is fair, reasonable, and not subject to later challenge.

11. Unilateral Change Directive. County may issue a unilateral change directive to Design-Builder at any time during the term of the Contract. Upon receipt of a unilateral change directive, Design-Builder will promptly proceed with the performance of any change in the Work as instructed and will promptly advise County in writing of Design-Builder's agreement (or disagreement) with any price, performance, or schedule, if any, as may be proposed by County in the unilateral change directive. No unilateral change directive will be binding on either Party unless it has been approved by the Pima County Board of Supervisors or, if authorized, County's Procurement Director. A unilateral change directive that is signed by Design-Builder and approved by the Pima County Board of Supervisors or Procurement Director reflecting the Scope of Work and any price, schedule, or performance relief, if any, will be deemed a Change Order.

12. Suspension/Termination for Convenience

12.1. Suspension by County for Convenience. County may, without cause, order Design-Builder, in writing, to suspend or interrupt the Work in whole or in part for such period of time as County may determine necessary; but, in any case, not to exceed sixty (60) calendar days whenever such suspension or interruption would be in the best interest of County. If County suspends the Work for convenience, an adjustment shall be made for substantiated increases in the cost of performance of the Contract, if any, including profit on the increased cost of performance, caused by suspension or interruption. No adjustment shall be made to the extent:

12.1.1. performance is, was, or would have been so suspended or interrupted by another cause for which Design-Builder is responsible; or

12.1.2. an equitable adjustment is made or denied by County.

12.2. Termination by County for Convenience.

- 12.2.1. The performance of the Work under this Contract may be terminated by County, in whole or in part, in accordance with this clause whenever County reasonably determines that such termination is in the best interest of County. Any such termination will be affected by delivery to Design-Builder of a written Notice of Termination specifying the extent to which performance of the Work is terminated, and the date upon which such termination becomes effective.
- 12.2.2. If the Contract is terminated by County as provided herein, County will compensate Design-Builder for any Work performed, and accepted, prior to the termination, together with profit in proportion to the Work performed and accepted. The compensation shall include payment for contractual obligations reasonably incurred prior to termination. No amount will be allowed for: anticipated profit on unperformed Work; or consequential damages to Design-Builder resulting from the termination.
- 12.2.3. Termination of the Contract or any portion thereof by County for convenience will not relieve Design-Builder of its contractual responsibilities for Work completed.

13. Termination for Cause.

- 13.1. Events of Default. This Contract may be terminated for cause upon the occurrence of one or more of the following Events of Default:

- 13.1.1. If Design-Builder fails or neglects to carry out the Work in accordance with the provisions of the Contract Documents, and fails, after 10 calendar days written notice from County, to correct such failure or neglect and thereafter diligently pursue the Project to completion;
- 13.1.2. If Design-Builder materially breaches this Contract and fails, after 10 days written notice from County, to correct such breach and thereafter diligently pursue the Project to completion; or
- 13.1.3. If a custodian, trustee or receiver is appointed for Design-Builder, or if Design-Builder becomes insolvent or bankrupt, or makes an assignment for the benefit of creditors, or Design-Builder causes or suffers an order for relief to be entered with respect to it under applicable Federal bankruptcy law or applies for or consents to the appointment of a custodian, trustee or receiver for Design-Builder, or bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of debtors, are instituted by or against Design-Builder, and in any of the foregoing cases such action is not discharged or terminated within 60 days of its institution.

13.2. Remedies of County Upon an Event of Default.

- 13.1.1. Upon an Event of Default, County has the right to terminate this Contract upon an additional seven days' written notice to Design-Builder provided Design-Builder has not commenced a cure within the seven-day period.
- 13.1.2. Without prejudice to any of County's other rights or remedies, County may:
 - 13.1.2.1. Take possession of all data, reports, and work in progress in possession of Design-Builder or to which Design-Builder otherwise has rights;
 - 13.1.2.2. Accept assignment of Subcontracts; and
 - 13.1.2.3. Finish the Work by whatever reasonable method County may deem expedient.

- 13.1.3. If County terminates the Contract under this Section 14.2, Design-Builder is not entitled to receive further payment until the Work is finished. If the unpaid balance exceeds costs incurred in finishing the Work, such excess may be paid to Design-Builder, up to the amount due Design-Builder to the date of the termination. If such costs exceed the unpaid balance of the Contract, Design-Builder will pay the difference to County.

14. Dispute Resolution.

- 14.1. In the event of any dispute between County and Design-Builder regarding any part of this Contract or the Contract Documents, or the Parties' obligations or performance hereunder, either Party may institute these dispute resolution procedures. The Parties shall continue performance of their respective obligations notwithstanding the existence of a dispute.
 - 14.1.1. The Parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, Design-Builder and County each commit to resolving such disputes or disagreements in an amicable, professional, and expeditious manner to avoid unnecessary losses, delays, and disruptions to the Work, Design-Builder and County will first attempt to resolve disputes or disagreements at the field level through discussions between Design-Builder's Representative and County's Representative.
 - 14.1.2. Either Party may, from time to time, call a special meeting for the resolution of disputes that would have a material impact on the cost or progress of the Project. This meeting will be held at County's offices within three working days of a written request for a meeting that specifies in reasonable detail the nature of the dispute. County's Project Manager and Design-Builder's Project Manager will attend the meeting. These Representatives shall attempt in good faith to resolve the dispute. If unable to resolve the dispute, the Parties may agree to escalation of discussions to a higher level before proceeding to mediation, as described below.
 - 14.1.3. If the Parties are unable to resolve the dispute through the special meeting or escalation, then either Party may request non-binding mediation. The non-requesting Party may decline the request in its reasonable discretion. If there is concurrence that any matter will be mediated, a mediator, mutually acceptable to the Parties and experienced in design and construction matters as well as in the Design-Build procurement method will be appointed. The Parties will share the cost of the mediator. The mediator will be given any written statements of the Parties and may review Project and any relevant documents. The mediator will call a meeting of the Parties within 10 working days after his/her appointment, which meeting will be attended by County's Project Manager and Design-Builder's Project Manager. Such Authorized Representatives shall attempt in good faith to resolve the dispute. During such 10-day period, the mediator may meet with the Parties separately.
 - 14.1.4. No minutes will be kept with respect to any mediation proceedings and the comments and/or findings of the mediator, together with any written statements prepared by the Parties, will be non-binding, confidential, and without prejudice to the rights and remedies of any Party. The entire mediation process must be completed within 20 working days of the date upon which the initial special meeting is held, unless the Parties agree otherwise in writing. If the dispute is settled through the mediation process, the decision will be implemented by written agreement signed by the Parties.
 - 14.1.5. Nothing in this Section limits, interferes with, or delays the right of either Party to this Contract to commence judicial legal proceedings upon a breach of this Contract by the other Party, whether in lieu of, concurrently with, or at the conclusion on any non-binding mediation.

- 15. No Consequential or Punitive Damages.** In no event will either Party be liable to the other or obligated in any manner to pay to the other any special, incidental, consequential, punitive, or similar damages based upon claims arising out of or in connection with the performance or non-performance of its obligations or otherwise under this Contract, or the material falseness or inaccuracy of any representation made in this Contract, whether such claims are based upon contract, tort, negligence, warranty, or other legal theory; provided, however, that the waiver of the foregoing damages under this Section is intended to apply only to disputes and claims as between County and Design-Builder. Nothing in this Section shall limit the obligation of Design-Builder to indemnify, defend and hold harmless County Indemnitees for any special, incidental, consequential, punitive, or similar damages payable to third parties resulting from any act or circumstance for which Design-Builder is obligated to indemnify County Indemnitees hereunder. In addition, the Parties acknowledge and agree that nothing in this Section will serve as a limitation or defense with respect to any obligation of a party to pay liquidated damages specifically provided for under this Contract.
- 16. Laws and Regulations.**
- 16.1. Compliance with Laws. Design-Builder will comply with all federal, state, and local laws, rules, regulations, standards, and Executive Orders.
 - 16.2. Licensing. Design-Builder warrants that it (directly or through its subcontractors) is appropriately licensed to provide all services required under this Contract and that its subcontractors will be appropriately licensed.
 - 16.3. Choice of Law; Venue. The laws and regulations of the State of Arizona govern the rights and obligations of the parties under this Contract. Any action relating to this Contract must be filed and maintained in the appropriate court of the State of Arizona in Pima County.
- 17. Independent Contractor.** Design-Builder is an independent contractor. Neither Design-Builder, nor any of Design-Builder's officers, agents, or employees will be considered an employee of Pima County for any purpose or be entitled to receive any employment-related benefits, or assert any protections, under the Pima County Merit System. Design-Builder is responsible for paying all federal, state, and local taxes on the compensation received by Design-Builder under this Contract and will indemnify, defend, and hold County harmless from any and all liability that County may incur because of Design-Builder's failure to pay such taxes.
- 18. Subcontractors.** Design-Builder is fully responsible for all acts and omissions of its subcontractors, and of persons directly or indirectly employed by Design-Builder's subcontractors, and of persons for whose acts any of them may be liable, to the same extent that Design-Builder is responsible for the acts and omissions of its own employees. Nothing in this Contract creates any obligation on the part of County to pay or see to the payment of any money due any subcontractor, except as may be required by law.
- 19. Assignment.** Design-Builder may not assign its rights or obligations under this Contract, in whole or in part, without County's prior written approval. County may withhold approval at its sole discretion.
- 20. Non-Discrimination.** Design-Builder will comply with all provisions and requirements of Arizona Executive Order 2009-09, which is hereby incorporated into this contract, including flow-down of all provisions and requirements to any subcontractors. During the performance of this Contract, Design-Builder will not discriminate against any employee, client, or any other individual in any way because of that person's age, race, creed, color, religion, sex, disability, or national origin.
- 21. Americans with Disabilities Act.** Design-Builder will comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36.
- 22. Authority to Contract.** Design-Builder warrants its right and power to enter into this Contract. If any court or administrative agency determines that County does not have authority to enter into this Contract, County will not be liable to Design-Builder or any third party by reason of such determination or by reason of this Contract.

23. **Full and Complete Performance.** The failure of either Party to insist, in one or more instances, upon the other Party's full and complete performance under this Contract, or to take any action based on the other Party's failure to fully and completely perform, is not a waiver or relinquishment of the right to insist upon full and complete performance of the same, or any other covenant or condition, either in the past or in the future. The acceptance by either Party of sums less than may be due and owing it at any time is not an accord and satisfaction.
24. **Cancellation for Conflict of Interest.** This Contract is subject to cancellation for conflict of interest pursuant to A.R.S. § 38-511, the pertinent provisions of which are incorporated into this Contract by reference.
25. **Notice.** Any notice required or permitted to be given under this Contract must be in writing and be served by personal delivery, email or by certified mail upon the other Party as follows:
- | | |
|--|-------------------------------------|
| County: | Design-Builder: |
| Rod Lane, Director | Darron Rolle, Senior Vice President |
| Project Design & Construction | Kiewit Infrastructure West Co. |
| 150 W. Congress, 3 rd Floor | 3888 E. Broadway Rd. |
| Tucson, AZ 85701 | Phoenix, AZ 85040 |
| Tel:(520) 724-3085 | Tel (602) 437-7878 |
26. **Non-Exclusive Contract.** Design-Builder understands that this Contract is nonexclusive and is for the sole convenience of County. County reserves the right to obtain like services from other sources for any reason.
27. **Remedies.** Either Party may pursue any remedies provided by law for the breach of this Contract. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.
28. **Encumbrances.** Design-Builder will not directly or indirectly create or permit to be created or to remain and shall promptly discharge or bond any encumbrance or lien arising in relation to the Project or the Design-Build Work. Design-Builder's Subcontracts with all materialmen, suppliers, and Subcontractors shall provide that the sole recourse for such materialmen, suppliers, and Subcontractors for non-payment shall be against the Payment Bond.
29. **Severability.** Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law will be ineffective to the extent of such prohibition without invalidating the remainder of this Contract.
30. **Books and Records.** Design-Builder will keep and maintain proper and complete books, records and accounts, which will be open at all reasonable times for inspection and audit by duly authorized representatives of County. In addition, Design-Builder will retain all records relating to this Contract for at least five (5) years after its expiration or termination or, if later, until any related pending proceeding or litigation has concluded.
31. **Public Records.**
- 31.1. Disclosure. Pursuant to A.R.S. § 39-121 et seq., and A.R.S. § 34-603(H) in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all documents submitted in response to the solicitation resulting in award of this Contract, including, but not limited to, pricing schedules, product specifications, work plans, and any supporting documents, are public records. As such, those documents are subject to release and/or review by the general public upon request, including competitors.
- 31.2. Records Marked Confidential; Notice and Protective Order. If Design-Builder reasonably believes that some of those records contain proprietary, trade-secret, or otherwise-confidential information, Design-Builder must prominently mark those records "CONFIDENTIAL." In the event a public-records request is submitted to County for records marked CONFIDENTIAL, County will notify Design-Builder of the request as soon as reasonably possible. County will release the records 10

business days after the date of that notice, unless Design-Builder, within that period, secured an appropriate order from a court of competent jurisdiction, enjoining the release of the records. County will not, under any circumstances, be responsible for securing such an order, nor will County be in any way financially responsible for any costs associated with securing such an order.

32. Legal Arizona Workers Act Compliance.

- 32.1. Compliance with Immigration Laws. Design-Builder hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to its employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). Con Design-Builder further ensure that each subcontractor who performs any work for Design-Builder under this Contract likewise complies with the State and Federal Immigration Laws.
- 32.2. Books & Records. County has the right at any time to inspect the books and records of Design-Builder and any subcontractor in order to verify such party's compliance with the State and Federal Immigration Laws.
- 32.3. Remedies for Breach of Warranty. Any breach of Design-Builder's or any subcontractor's warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, is a material breach of this Contract subjecting Design-Builder to penalties up to and including suspension or termination of this Contract. If the breach is by a subcontractor, and the subcontract is suspended or terminated as a result, Design-Builder will be required to take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement subcontractor, as soon as possible so as not to delay project completion. Any additional costs attributable directly or indirectly to such remedial action are the responsibility of Design-Builder.
- 32.4. Subcontractors. Design-Builder will advise each subcontractor of County's rights and the subcontractor's obligations under this Section by including a provision in each subcontract substantially in the following form:

"Subcontractor hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to Subcontractor's employees, and with the requirements of A.R.S. § 23-214 (A). Subcontractor further agrees that County may inspect the Subcontractor's books and records to insure that Subcontractor is in compliance with these requirements. Any breach of this Section by Subcontractor is a material breach of this Contract subjecting Subcontractor to penalties up to and including suspension or termination of this Contract."

- 33. Israel Boycott Certification.** Design-Builder hereby certifies that it is not currently engaged in and will not for the duration of this Contract engage in, a boycott of Israel as defined by A.R.S. § 35-393.01. Violation of this certification by Design-Builder may result in action by County up to and including termination of this Contract.
- 34. Forced Labor of Ethnic Uyghurs.** Pursuant to A.R.S. § 35-394, if Contractor engages in for-profit activity and has 10 or more employees, Contractor certifies it is not currently using, and agrees for the duration of this Contract to not use (1) the forced labor of ethnic Uyghurs in the People's Republic of China; (2) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; and (3) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China. If Contractor becomes aware during the term of the Contract that the Company is not in compliance with A.R.S. § 35-394, Contractor must notify the County within five business days and provide a written certification to County regarding compliance within one hundred eighty days.

- 35. Heat Injury and Illness Prevention and Safety Plan.** Pursuant to Pima County Procurement Code 11.40.030, Contractor hereby warrants that if Contractor's employees perform work in an outdoor environment under this Contract, Contractor will keep on file a written Heat Injury and Illness Prevention and Safety Plan. At County's request, Contractor will provide a copy of this plan and documentation of heat safety and mitigation efforts implemented by Contractor to prevent heat-related illnesses and injuries in the workplace. Contractor will post a copy of the Heat Injury and Illness Prevention and Safety Plan where it is accessible to employees. Contractor will further ensure that each subcontractor who performs any work for Contractor under this Contract complies with this provision.
- 36. No Third-Party Beneficiaries.** Unless explicitly stated otherwise elsewhere in this Contract, no person other than the Parties themselves has any rights or remedies under this Contract.
- 37. Order of Precedence.** In the event of any conflict between the terms and provisions of this Agreement and those of any Schedule, Exhibit or Statement of Work, the following order of precedence shall govern: (a) first, any Amendments or Change Orders; (b) second, this Contract, exclusive of any Schedules, Change Orders, and the General Conditions; (c) third, the Scope of Services; (d) fourth, Construction Costing in Appendix B; (e) fifth, the General Conditions in Appendix C; and (f) sixth, Design and Preconstruction Services Fee Proposal in Appendix D any Appendices to this Agreement.
- 38. Entire Agreement.** This document constitutes the entire agreement between the Parties pertaining to the subject matter it addresses, and this Contract supersedes all prior or contemporaneous agreements and understandings, whether oral or written.

PIMA COUNTY

Chair, Board of Supervisors

ATTEST

Clerk of the Board

Date

DESIGN-BUILDER



Authorized Officer Signature

Darron A. Rolle, Senior Vice President

Printed Name and Title

June 11, 2025

Date

This contract template has been approved as to form by the Pima County Attorney's Office.

APPENDIX A – PROJECT SCOPE OF WORK (51 pages)



PIMA COUNTY PROJECT DESIGN & CONSTRUCTION

SCOPE OF SERVICES REQUIRED

DATE (Version): January 29, 2025

PROJECT NAME: DESIGN-BUILD SERVICES FOR –
PIMA COUNTY TRES RIOS WASTEWATER RECLAMATION FACILITY
DIGESTER

SCOPE OF SERVICES FOR TRES RIOS DIGESTER

Tres Rios Wastewater Reclamation Facility (WRF), the flagship facility in Pima County, currently has six digesters. Four of the digesters have been in continuous operation since the plant's construction over forty years ago. The remaining two digesters were constructed in 2012 as part of the Regional Optimization Master Plan (ROMP) program to upgrade and expand the treatment capacity of the Tres Rios WRF facility. To rehabilitate the four oldest digesters, they must be taken out of service. The capacity then must be transferred to other digesters. Currently, the Tres Rios WRF digester capacity is not sufficient to both transfer capacity and continue to provide a level of safe redundancy needed to complete the rehabilitation.

The new Digester Complex (known as Building 60) was constructed with the infrastructure necessary to support and operate two additional digesters as part of future facility expansion.

One new digester will be constructed to facilitate the repair and rehabilitation effort needed with minimal risk to the treatment process. The new digester will be designed to accommodate future biogas production. The mechanical, electrical, and necessary tie-ins are anticipated to be similar to the existing digesters 5 and 6, within the basement of Building 60. Rehabilitation of the main Motor Control Center (MCC) building is anticipated to accommodate electrical equipment for the new Digester 7. The project also includes the replacement of existing compressors with Variable Frequency Drive (VFD) controlled centrifugal blowers, which will service the existing 2 Digesters (#5 and #6) as well as the new #7 Digester.

The Scope of Services includes all services required to design and construct a fully functional, and easily maintainable Digester at the Tres Rios WRF.

Design-Builder shall provide the services to design and construct the new Digester. To fulfill this obligation, Design-Builder shall hire and coordinate all professional consultants, and subcontractors.

Yard Piping and Valves

The design-build team shall utilize existing yard piping wherever possible and supplement with new piping and valves as required.

System Design Requirements

The Digester design will be completed and detailed to provide an operational and fully functional Digester after construction. At a minimum, design submittals will be made at the 30 percent, 60 percent, 90 percent and 100 percent of design. The design requirements and design submission requirements are described in the project General Scope of Work requirements (**Appendix A**).

The design-build team will have bi-weekly progress meetings with RWRD to review project status and discuss upcoming activities. A project report shall be prepared and submitted each month describing project activities and actions undertaken and completed, and activities and actions to be undertaken and completed within the next month. The project schedule will be reviewed during each monthly meeting.

Should the Design-Builder and Pima County fail to negotiate a Guaranteed Maximum Price; the Design- Builder will be required to complete the design to the 100% level for competitive bidding.

Construction Requirements

A Contractor, appropriately licensed by the State of Arizona will perform all the work necessary to provide a complete and operational Digester. All work will be in locations approved by RWRD and in compliance with all current local, state and federal codes. All permits for construction will be the responsibility of the Design-Builder. All onsite equipment, materials and supplies will be kept in areas designated by RWRD for that purpose. All personnel will enter the site through approved access points only after following the plant security processes and procedures.

The Contractor will be responsible for preparing the baseline project schedule and conducting weekly progress meetings to provide updates from project initiation through construction completion, startup, commissioning and performance testing.

The Contractor will prepare construction cost estimates for inclusion in the 30 percent, 60 percent, 90 percent and 100 percent of design submittals. When requested by RWRD, the Contractor will prepare a Guaranteed Maximum Price (GMP) for the construction, O&M Manual preparation, commissioning, startup, training and performance testing. The GMP will be based on an "open book" bidding process from qualified subcontractors. Self-performed services will be subject to review and approval by RWRD. Unapproved services shall be procured through open-book bidding.

A draft Operations and Maintenance (O&M) Manual will be submitted to RWRD for comment 180 days in advance of startup and training. A final complete O&M Manual in conformance with the existing plant-wide O&M Manual will be submitted for approval by RWRD 60 days prior to startup and training on the Digester. Training material shall also be presented along with the O&M. Training should consist of a recorded session with optimal audio quality for training staff unable to attend.

Record drawings for the Project will be prepared and approved by RWRD before retainage release and final payment is approved.

Project Schedule Requirements

The Design-Builder shall submit a proposed baseline project schedule within 45 calendar days after the contract date for review and comment by the County. The schedule will be updated at least monthly throughout the project. The schedule shall include a defined work calendar designating which days of the week will be planned workdays and dates of all scheduled non-workdays. The schedule shall encompass the entire Design-Build Period and shall consist of, but not be limited to, the following:

- All design and permitting activities and milestones to be achieved in the design-build period
- All construction activities and milestones to be achieved in the design-build Period
- Sequence of design-build work and the time of commencement and completion of each part
- All design deliverables and the sequence for their review by the County
- All permitting deliverables and the sequence for their review by the County and approval agencies
- Sitework
- Temporary relocations
- Excavation
- Shutdowns and tie-ins

- Concrete placement (pour and cure time)
- Backfill and compacting
- Raceway and duct bank installations
- Process piping and ductwork installations
- HVAC installations
- Plumbing
- Electrical equipment installations
- Power and control wiring and termination
- Treatment system installations
- Major equipment installations
- Order and delivery dates for all County furnished equipment
- Painting and coatings
- Preliminary and final O&M Manual delivery
- All testing
- All training
- Turnover of spare parts
- Pre-startup substantial completion inspections
- Equipment system and subsystem startups
- Record drawings, warranties, occupancy permits
- Final inspections and final punch list
- Commissioning
- Acceptance testing
- Performance testing

Each activity shall show the number of person-days of efforts, by month, over the duration of the design-build period. Further, the Design-Builder shall show each type of critical construction equipment used, number of pieces of each type of equipment used, and where such equipment will be used. In developing the schedule, the Design-Builder shall be responsible for assuring that Subcontractor work at all tiers, as well as its own work, is included in the schedule.

The schedule shall show the sequence and interdependence of activities required for complete performance of the design-build work. The Design-Builder shall be responsible for assuring that all design-build work sequences are logical, activity durations are reasonable based on their scope and the resources allocated for them and that the schedule reflects a coordinated plan of the design-build work.

Failure by the Design-Builder to include any element of design-build work required for proper performance of the Design-Builder's obligations under the contract shall not excuse the Design-Builder from completing all design-build work within the design-build period.

The Design-Builder shall meet with the County within 14 calendar days after the County's receipt of the Design-Builder's proposed baseline schedule for a joint review to identify any corrections or adjustments to the proposed schedule. Within 14 days of such joint review meeting, the Design-Builder shall submit a final schedule incorporating the County's comments into the proposed schedule. The finalization of the schedule shall be a precondition to the establishment of the Construction Date.

The final schedule shall be updated, at a minimum, on a monthly basis to show progress until final completion has been achieved. The final schedule shall be used for the evaluation of any design-build period extension request(s) made by the Design-Builder once the final schedule has been established.

In the event the Design-Builder fails to define any element of design-build work, activity or logic, such omission or error, when discovered by the Design-Builder or County, shall be corrected by the Design-Builder in the next progress schedule and the Design-Builder shall provide notice to the County of the proposed amendment(s) with the submission of the monthly progress report. The schedule shall be utilized in the preparation of and submitted with progress payments and monthly meetings.

System Performance Testing

After substantial completion of construction, the Design-Builder will provide RWRD plant staff with operator training, including O&M training on all the equipment and systems provided in preparation of a 60 continuous calendar days performance test. The performance test will be operated by the County in association with the Design-Builder. The County will perform all sample testing in the County's certified laboratory facility, with the following method:

Should the system fail to meet the performance requirements, or operation of any part of the system stops, because of mechanical or system failure anytime during the 60 days, the performance test period will restart at day one.

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DESIGN-BUILDER GENERAL SCOPE OF WORK

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PROJECT DESCRIPTION

This scope of work describes the general services to be provided by the Design-Builder for the design and construction of the Tres Rios Digester #7. A separate document, entitled "Technical Specifications," describes the key components of the Work as well as County technical requirements for the Work. The Technical Specifications define what will be done and the General Scope of Work defines how it will be done.

It is envisioned that the Work will be accomplished in two phases: Phase 1 - Design and Pre-Construction Services; and Phase 2 – Construction Services. Each phase will have a specific list of work products and deliverables. Also, each phase will include design review workshops with County's and Design-Builder's personnel at critical design milestones.

This Project does not include at this time, the following additional work elements:

- Excavations or other mitigation measures required to preserve or relocate historic resources.

DESIGN PHASES SCOPE OF WORK

The following key assumptions were made in the development of the Scope of Work for design and in estimating level of effort:

- With the exception of the final review, the project team will continue the design effort during formal reviews of deliverables by Pima County and regulatory agencies.
- County will provide one round of compiled review comments to the Design-Builder for each deliverable submitted for review.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the Project.
- County's design standards will be used. County will provide electronic copies of these documents in MS Word format to the Design-Builder.
- The drawings will follow the Design-Builder's CAE/ CAD standards. AutoCAD will be used to develop the drawings. At the conclusion of design, County will be given a 22"x 34" sized set of original signature drawings and an electronic set of drawings in pdf format. In addition, the County will be given a copy of the Design Documents in AutoCAD and PDF formats.

The design will be carried out using a five-phased design delivery approach:

1. Preliminary Design Report (10%)
2. Schematic Design (30%)
3. Design Development (60%)
4. Construction Document Development (95%)
5. Construction Document Completion (100%)

PHASE 1 – PRELIMINARY DESIGN SERVICES

Task 1 Project Management

The purpose of this task is to manage, coordinate, and lead the Design-Builder's activities and perform administration of Project design services. The Design-Builder will perform the following subtasks described below as part of Task 1.

Task 1.1 - Project Execution Plan

Within 60 days of the Notice to Proceed, a Project Execution Plan will be prepared to guide the direction of the Design-Builder team. It will include descriptions of the roles and responsibilities of team members, communication plan, cost and schedule control procedures, document control, change management, and other Project

management requirements. Also, the plan will define the CAD/CAE software standards, graphic standards, file naming conventions and standards, and other graphic standards. Design-Builder will utilize standards developed by the County as a basis for this element of the Plan. In addition, the Plan will include a Quality Management Plan and a Project Health and Safety Plan applicable to the Design-Builder Team. The Project Execution Plan will be distributed to the County and design team members.

Task 1.2 - Project Kick-off and Chartering Meeting

Task 1.2.1 - Project Kickoff Meeting

Within 60 days of the Notice to Proceed, the Design-Builder will conduct a project kick-off meeting to be held with the County. The purpose of the meeting is to discuss the roles, relationships, and responsibilities of all parties. The draft baseline design schedule will be presented and discussed. The Design-Builder will prepare a meeting summary and will distribute to the attendees.

Task 1.2.2 - Chartering Meeting

The Design-Builder will attend a project chartering meeting to be held between the County and the Design-Builder. The purpose of the meeting is to discuss the roles, relationships, and responsibilities of the parties. The draft baseline Project Schedule will be presented and discussed.

Task 1.3 - Contract Administration

This task includes activities associated with administration of the Contract and coordination with the County. It will include communications with the County and others as required. In addition, preparation of invoices, oversight of Project staff, administration of contracts with sub-consultants, maintenance of a decision log, and record keeping are included in this task.

Task 1.4 - Project Schedule and Controls

Within 60 days of the Notice to Proceed, the Design-Builder will submit a draft baseline Project Schedule using MS Project, which will be updated on a monthly basis. The initial draft Project Schedule will be cost-loaded for Phase 1 tasks. Upon completion of Phase 1 and approval to proceed with Phase 2, a new cost-loaded Project Schedule will be developed for the remainder of the Project. This task also includes the preparation of monthly reports showing the comparison of actual costs and percent complete with planned cost and percent complete. The Design-Builder will also report Project status including the following information:

- Key accomplishments
- Key issues
- Required actions
- Upcoming work and challenges
- Key milestone schedule updates
- Scheduled progress verses actual progress
- Cost summary
- Cost (budget, accrued. Projection, variance)

Task 1.5 - Project Coordination and Progress Meetings

On a bi-weekly basis, the Design-Builder will conduct Project design progress meetings between the County and Design-Builder's project team members to discuss design elements of the Project. Meeting agendas will be prepared and distributed 2 days prior to the meeting and a meeting minute summary will be prepared and distributed by the Design-Builder within 3 business days following the design Project Coordination and Progress Meeting. In addition, the Design-Builder will conduct monthly progress report and invoice presentation meetings attended by the County to confirm the Design-Builder is meeting the requirements of the County. A summary of meetings will be prepared

and distributed by the Design-Builder within 5 business days of the monthly progress report meeting. This task also allocates time for internal Project coordination meetings.

Task 1.6 - Not Applicable

Task 1.7 - Quality Assurance/Quality Control Management

The Design-Builder will provide management of the quality assurance/quality control (QA/QC) aspects of the Project. An internal Project Quality Manager (PQM) will be identified by the Design-Builder and will provide oversight of the QA/QC staff, scheduling of technical reviews, and documenting and adjudicating of review comments from both internal sources and the County. The Quality Management Plan will be prepared as part of the Project Execution Plan.

Task 1.8 - Public Information Assistance

The County is responsible for managing the Public Information Program for the Project. The Design-Builder will assist the County by preparing informational material and attending meetings, if requested. The Design-Builder is not authorized to issue statements or press releases on County's behalf, nor is it authorized to issue statement or press releases concerning the Project unless prior approval is given by the County.

Task 1.9 - Construction Cost Estimating/Guaranteed Maximum Price Reviews

The Design-Builder will prepare Opinions of Probable Construction Costs at the conclusion of the 30%, 60%, 95%, and 100% design phases. The Association for the Advancement of Cost Estimating (AACE) recommended practices will be used to develop the cost estimates.

Task 1.10 - Project Closeout

At the completion of design, appropriate Project records will be archived according to County's existing methods and standards.

Task 1.11 - Deliverables

1. Project Execution Plan
2. Project Kickoff/Chartering Meeting Summary
3. Invoices
4. Draft Project Baseline Schedule
5. Monthly Progress Reports
6. Bi-weekly Progress Meeting Summary
7. Monthly Progress Report
8. 30% Cost Estimate
9. 60% Cost Estimate
10. 90% Cost Estimate
11. 100% Cost Estimate

Task 2 - Permitting Assistance

The purpose of this task is to develop a Permitting Workplan for obtaining the various permits, identifying the permits required for construction and operation of the project, preparing the permit applications for the various regulatory agencies, and submitting the permit applications to County for review and approval. County will then submit the completed applications to the various regulatory agencies and pay all the permit fees. For permit activities related to this Project, the Design-Builder will provide five copies of draft and final permit applications and accompanying material. An electronic file in .pdf format will be provided for draft and final submittals. The Design-Builder will develop a Permitting Workplan. The plan will list those permits that are necessary, the appropriate contacts for the

permits, the time constraints associated with the permits, and a schedule for application of the permits. In addition to the Permitting Plan, permit applications will be developed, as appropriate, for each agency. County will take the lead in submittal of the permit applications. As requested by County, the Design-Builder will assist in the negotiation of these permits.

Task 2.1 - Permitting Workplan

The Design-Builder will prepare a permitting workplan for submittal and approval by County. The workplan will include the following elements:

- List of anticipated permits required
- Agency contacts
- Time constraints associated with each permit
- Schedule for submittal of permit applications

Task 2.2 - Deliverables

1. Permitting Workplan
2. Stormwater Construction Permit Application
3. Draft and Final Stormwater MSGP Application
4. AZPDES SWPPP Draft and Final
5. Draft and Final Regulatory Applicability Analysis TM
6. Draft and Final Air Permit Application

Task 3 - Preliminary Design

The purpose of this task is to develop design criteria for use in the subsequent design phases of Project. The Design-Builder will perform the following subtasks as part of this Task:

Task 3.1 - Data and Information Collection

Information and data needed to formulate design criteria will be collected and reviewed by the Design-Builder.

Task 3.2 - Survey and Mapping

The Design-Builder will provide mapping and related services as described below for Project, suitable for final design activities. The Design-Builder will employ a Registered Land Surveyor (RLS), registered in Arizona, to survey and map the improvements to be designed, and/or constructed. The surveying and mapping will be sufficient to establish needed horizontal and vertical control monuments. Existing aerial and ground survey information will be reviewed to determine any additional survey activities needed. Specific activities will include the following:

- Establish Control Network: The Design-Builder will perform research, field surveys, and office work necessary to establish the Horizontal and Vertical Project Control Network meeting County standards. The Design-Builder will establish a survey control network which will encompass the Project area. The Project Control Network will also provide the basis of control for the construction phase of the Project. Survey control monuments will be located in areas that will not be disturbed during construction. Survey control monuments set by the RLS will be tagged or stamped.
- Survey monuments (property pins, section corners, witness comers, and benchmarks) will be collected during the field survey with a description of the monuments (steel pin, O.I.P., L.C.P., and brass monument in concrete).
- A ground aerial survey will be performed and used to develop a site digital terrain model and existing facilities model, including all existing above grade structures and site features.

- Horizontal Control: Control traverses will be geometrically closed and the error of angular and horizontal closure for the unadjusted traverse will be shown in the field notes and on the required maps. Horizontal closures will be made using unadjusted angles and distances and will have a precision ratio of 1:20,000 or better. Set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations.
- Vertical Control: A control listing of the benchmarks used for the survey control network will be provided to the Design-Builder. The datum which the elevations are to be referenced will be included in the field research data. Set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations.
- Arizona State Plane Coordinates: The coordinate system for establishing the Project Control Network will be the North American Datum of 1983 (NAD-83) (1992) adjustment, Arizona State Plane Coordinate System in International feet reported in both grid and ground coordinates. The vertical datum will be North American Vertical Datum of 1988 (NAVD88).

The survey and mapping activities associated with the treatment facilities are defined as follows:

- Aerial Targets: Design-Builder will set up to 20 aerial targets for photo-control at locations determined by the aerial mapping firm within the defined Project limits.
- Aerial Photography: Design-Builder will acquire new color vertical aerial photography, +/-1:2400 scale for design mapping at these facilities.
- DTM and 1-foot contours - Design Mapping: Using the acquired 1:2400 scale aerial photography, Design-Builder will generate a DTM for a 1"=20'scale, 1.0-foot contour interval contour mapping of the affected treatment plant site. The total area for 1.0-foot interval contour mapping will be for the portion of the facility affected by this design and construction project.
- Other surveys (other than control surveys), will comply with FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C), and Facility Management with accuracy tolerances of +/-0.10- foot for the horizontal and +/-0.03-foot for the vertical (if applicable) on other hard surfaces and +/-0.10-foot for the vertical on soft or natural ground surfaces (if applicable).
- Planimetric Mapping: Using the acquired 1:2400 scale aerial photography, Design-Builder will generate a 1" =20'scale planimetric mapping of the entire project site. Above ground features (structures, roads, curbs, sidewalks, piping, walls or fencing, ditches, grade breaks, site lighting, and major vegetation) will be collected during the survey.
- Digital Orthophoto Images: Using the acquired 1:2400 scale photography, Design-Builder will generate digital orthophoto images at 0.2 ground distance pixel resolution covering the entire project site.
- Locate Utilities: The Design-Builder will locate at grade utilities and other physical obstructions within the Project site. The Design-Builder will also identify locations and elevations of inverts of sanitary sewers, storm sewers, other buried utilities, drainage structures, and other similar underground structures.
- Surveying services will be performed under the supervision of a qualified, Arizona registered, professional land surveyor.
- The units of measurement for this Project will be in International Feet.
- The Design-Builder will take reasonable precautions to prevent damage to public and private property and will restore the site to the condition existing prior to the surveyor's entry.

Task 3.3 - As-Built Validation/Development

The Design-Builder will obtain as-built information for the Project area and will utilize this information, and information obtained in Subtask 3.2, to develop a set of as-built drawings as required for design and construction of the new facilities. Specific activities will include the following:

- Determine document needs associated with the Project and obtain available information including as-built drawings for roads, sanitary sewers, utilities, storm water drainage structures, rights-of-way, easements, and property lines, and significant topographical features.
- Utilize information obtained in Subtask 3.2 to validate as-built information as required for the design and construction.
- Develop and prepare as-built drawings for Project. At this stage, focus will be on obtaining and documenting "above ground" information associated with the Project site. Below grade as-built information for site utilities is described separately in Task 4.3, Sub-surface Utility Engineering.

Assumptions:

- The County will provide the Design-Builder with electronic or hard copies of existing as-built drawings for existing County facilities within the Project area.

Task 3.4 - Visual Inspection and Photography

The Design-Builder will perform a visual inspection of the proposed construction site and will determine if there are any concerns affecting the design or construction process. A written narrative documenting the results of this task will be provided to the County.

The Design-Builder will also take interior and exterior photographs (as appropriate) of existing above ground facilities. The photographs will be taken with a digital format camera with a minimum 8 mega pixel rating. The photographs should be of sufficient size to clearly identify vegetation, and objects which may come into question during the design and construction of the Project. As an alternate, digital motion pictures with still print capability may be used. The Design-Builder will provide County with licensed software and hands-on instruction, if needed, to view and print the pictures. The digital images (JPEG or MPEG) will be stored on USB drives (2 copies will be supplied to County). Hard copy will be printed only when needed.

Task 3.5 - Not Applicable

Task 3.6 - Design Criteria Development/Confirmation

The Design-Builder will work with the County to develop updated design criteria for the Project. Design criteria development and confirmation will include:

- Review of all available data, including as-built information and County requirements.
- Develop design criteria, sizing, and general layouts.

This design criteria development information will be summarized in a series of technical memoranda described in the following subtasks.

Assumptions:

- This task includes two meetings with appropriate County staff to review design criteria that is developed for the Project.

Task 3.6.1 - LEED Strategies (If Applicable)

In concert with the goals established by the County, the Design-Builder will lead a one-day LEED workshop with the County to validate the compliance or certification goals established for the Project. Based on the County's goals and the opportunities for incorporating LEED strategies into the Project components, conceptual approaches will be presented, and a LEED strategy will be developed for the Project. A preliminary LEED Scorecard will be prepared with a preliminary list of proposed LEED credits for the Project.

This LEED Scorecard will be used to establish the LEED goals as the Project is designed. Actual final LEED certification level is based on a number of items, the LEED design elements that County chooses to incorporate into

the Project and the County's decision on whether to include LEED certification activities into the design and construction phases, such as LEED template development, LEED modeling and verification, and commissioning.

The scope of this task is currently limited to developing LEED strategies for the Project, presenting this information in a workshop and documenting proposed LEED credits in the LEED scorecard. A design memorandum (DM) will be developed summarizing the LEED strategies.

Task 3.6.2 - Project Design Standards

Project design standards will comply with County standards. When such standards do not exist, Design-Builder and County will confer as necessary to establish County-approvable standards. These design standards will include standards to be used for drawings and specifications for the Project as well as standards for each discipline, which include County preferences for materials and components.

Task 3.6.3 - Design Submittals

Task 3.6.3.1 - Submittal

The Design-Builder will submit to County, with such promptness as to cause no delay in the Design Work, all submittals and drawings required by the Contract or as necessary to illustrate details of the Design Work.

Task 3.6.3.2 - Submittal Requirements

Each submittal and drawing must be accompanied by a transmittal letter containing a list of the submitted documents and/or of the titles and numbers of the drawings, as appropriate. Each series will be numbered consecutively for ready reference and each submittal and drawing will be marked with the following information:

- Date of submission
- Name of Project
- Location of Project
- Branch of Design Work (specification section)
- Project number
- Name of submitting Design-Builder
- Name of Subcontractors
- Revision number

Task 3.6.3.3 - Consistency with Technical Specifications

All Subcontractor submittals and drawings will be reviewed by Design-Builder prior to being submitted to County and will bear a written statement by the Design-Builder that the submittals and drawings are consistent with the Technical Specifications or, if not totally consistent, will bear a written statement indicating all deviations from the Technical Specifications. By approving, verifying, and submitting drawings, product data, and similar submittals, the Design-Builder represents that the Design-Builder has determined and verified the information contained within such submittals complies with the requirements of the Technical Specifications. Any submittals or drawings submitted without the statement will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted, and any delay caused thereby will be the Design-Builder's sole responsibility. This review by Design-Builder of Subcontractor submittals and drawings will not be construed as Design-Builder approval of the design therein except that it will be a representation that the letter accompanying the submittal or drawings does indicate all deviations from the Construction Documents as required by Task 3.6.3.4,

Task 3.6.3.4 - Identification of Deviations

Design-Builder will include with submittals and drawings, a written statement indicating all deviations from the Technical Specifications. Failure to so notify County of such deviations may be grounds for subsequent rejection of the Design Work. If, in the opinion of County, the deviations are not acceptable, the Design-Builder must furnish the

item as specified in accordance with the Technical Specifications. Design-Builder will not be relieved of responsibility for deviations from requirements of the Technical Specifications by County's approval of Drawings, Product Data, or similar submittals unless Design-Builder has specifically informed County in writing of such deviation at the time of submittal and County has given written approval to the specific deviation. The Design-Builder will not be relieved of responsibility for errors or omissions in Drawings, Product Data, or similar submittals by approval thereof.

Task 3.6.3.5 - Verification of Submittal

By reviewing or submitting submittals and/or drawings, the Design-Builder represents that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each submittal and/or drawing with the requirements of the Technical Specifications. If any specified material item or part is not available, the Design-Builder will so indicate to County.

Task 3.6.3.6 - County Review

The County will review and approve submittals and drawings and return them to Design-Builder within ten (10) days of receipt unless otherwise previously agreed in writing. For scheduling purposes, Design-Builder must assume a ten (10) day review period for each submittal or set of drawings. For complex submittals, Design-Builder must assume two ten (10) day review cycles. If review and approval are delayed beyond ten (10) days, County will notify Design-Builder in writing stating the reason for the delay. Approval will not relieve the Design-Builder from responsibility for deviations from the Technical Specifications, unless it has been called to County's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to affect an improvement in the Work and does not increase the GMP or Contract Time(s). Any such modification is subject to all other provisions of the Technical Specifications and Contract and is without prejudice to any and all rights of County under any surety bonds.

Task 3.6.3.7 - Response to County Review

If the County returns a submittal or shop drawing to Design-Builder with the notation "rejected", "revise and resubmit", or "approved as noted", Design-Builder, so as not to delay the Work, will promptly submit a submittal or drawing conforming to the requirements of the Technical Specifications and Contract and indicating in writing on the submittal or drawing and on the transmittal what portions of the resubmittal have been altered in order to meet with the approval of the County. Any other differences between the resubmittal and the prior submittal will be indicated on the drawing and on the resubmittal as a special note.

Task 3.6.3.8 - No Time Extension

No extension of time will be granted to Design-Builder because of its failure to submit submittals or drawings in ample time to allow for review, possible resubmittal, and approval. The Design-Builder will furnish prints of its approved submittals and drawings to all Subcontractors whose work is in any way related to the Work covered by the submittal or drawings.

Task 3.6.4 - Design Memoranda

Based on information provided in the RFP/RFQ and further development of facilities criteria, sizing, and layouts, a series of design memoranda (DM) will be prepared to document and build consensus of the criteria to be used for the basis of design.

Task 3.6.4.1. - Site Layout

A proposed site plan is provided as part of the SFQ documents. This DM will include reviewing the proposed site layout, along with locations of existing utilities and roadways and proposed sizing of new and future facilities, including auxiliary facilities, and developing an updated proposed site layout for the Project. The site layout will include as appropriate, new and existing facilities, roadways, and space allowances for utility corridors and future facilities.

Task 3.6.4.2. - Site Utility Requirements

This DM will, if applicable, summarize site utility requirements, including requirements for fire protection, potable water, non-potable water, power, communications infrastructure, and any additional requirements. The capacity of the existing systems for these utilities will also be summarized, with proposed modifications to provide the required utility capacities.

Task 3.6.4.3 - Power/Electrical System

This DM will, if applicable, include the electrical power supply sizing criteria for the Project, summarize the current electrical power system (if applicable) and provide a plan for electrical system feed modifications to power the new facilities. This task will develop a comprehensive plan for power supply and distribution to the new facilities including evaluating power supplies from the power supplier and any electrical power supply system and capacity currently available.

Task 3.6.4.4 - Instrumentation and Control Systems (SCADA)

This DM will, if applicable, include a description of the proposed instrumentation, control, and SCADA systems to be incorporated into the Project. This will be coordinated with County's existing SCADA system. A system block diagram will be developed showing how the Project ties into the existing control system. Process and instrumentation diagrams (P&IDs) will be developed for each unit process. Process control narratives will be developed to describe the control approach for each unit process. During this phase of the Project the P&IDs and process control narratives will be preliminary and will be developed in more detail during subsequent design phases.

Task 3.6.4.5 - Construction Packaging, Sequencing, and Duration

This DM will provide a summary of the recommended construction packaging and scheduling to achieve the County's goals and regulatory requirements for the project. These recommendations for construction packaging, sequencing, and duration will be coordinated with the County. This task will include attending workshops with County to coordinate these requirements and to develop a DM with recommendations and schedule milestones.

Assumptions:

- This task includes attending two 4-hour workshops with the County.

Task 3.6.4.6 - Maintenance of Existing Operations During Construction

This DM will provide a summary of construction sequencing and tie-ins to maintain any existing operations while the new facilities are being constructed and started up. The required MOPOs will be identified and documented for the purposes of updating as the design progresses. These recommendations will be coordinated with County staff.

Assumptions:

- This task includes attending two workshops with all appropriate County personnel.

Task 3.6.4.7 - Security

This DM will, if applicable, describe how the security will be maintained at the Project and, if the Project is a modification to an existing facility, how it will be incorporated into the existing security system. The site security provisions for the new facilities will be coordinated with the County's security plan. In addition, this DM will describe the overall site work to be done to provide security that meets the County's Security System Master Plan requirements. These security requirements may include closed circuit TV, fencing, gates with controllers, building access controls, and the site security monitoring system.

Assumptions:

- This task includes one meeting with County security personnel to review site security design criteria.

Task 3.6.4.8 - Not Applicable

Task 3.6.4.9 - Discipline Engineering Design Criteria

DM's will be developed to include the general design criteria for the technical disciplines, including HVAC, plumbing, electrical, structural, mechanical, architectural, instrumentation, and civil. In addition to the design criteria to be used for the Project, the applicable codes and standards will be listed that apply to the Project.

Task 3.6.4.10 - Pre-purchased Equipment and Materials

This DM will include recommendations for any pre-purchased equipment and materials recommended for advancing the Project schedule. The DM will identify vendor-imposed lead times for the recommended purchases and show Project Schedule impacts as well as critical purchase deadlines. The list of equipment and materials recommended for pre-purchase will be coordinated with the County to ensure that the equipment and materials meet County standards and any County preferences for type or manufacturer. Following County approval, Design-Builder will work with County to facilitate timely purchase of the recommended equipment and materials.

Task 3.7 - Preliminary Design Report

The Design-Builder will compile the DMs developed under this task into a comprehensive Preliminary Design Report. A Final Design Report will be completed under other tasks.

Task 3.8 - Deliverables

1. Draft Preliminary Design Report – Digester #7
2. Final Preliminary Design Report – Digester #7
3. Workshop Summary
4. Draft preparation of required permits and accompanying documentation
5. Draft Pilot Test Plan
6. Final Pilot Test Plan
7. Pilot Test Report
8. 30% Schematic Design Report (Draft and Final)
9. Presentation workshop materials and summary
10. 30% Construction Cost Estimate
11. 60% Design Development Documents
12. 60% Construction Cost Estimate
13. Final preparation of required permits and accompanying documentation
14. Outline of startup and operator training plan
15. Constructability Review Workshop Materials and Summary
16. Presentation workshop materials
17. 95% Construction Cost Estimate
18. 95% Contract Documents
19. 100% Contract Documents
20. Preliminary Design
21. Planimetric mapping, DTM, and 1.0-foot contour interval contour mapping at 1"=20' scale containing utilities located by field survey methods for the project site.

22. Digital orthophoto imagery at 1"=20' scale with 0.2-foot ground distance pixel resolution for the project site.
23. A copy of field notes and electronically collected notes of horizontal and vertical traverses as well as closure information on these traverses.
24. A coordinate printout of surveyed information with X, Y, and Z coordinates listed to the nearest 0.01 foot. The collected field information shall contain the station ID, the horizontal and vertical coordinate information, and feature codes. Information shall be tied to the Arizona State Plane Coordinate System. A Project adjustment factor shall be provided, and the final coordinate system shall be converted to ground.
25. ASCII file containing topographic points and survey control points
26. Hard copy plots of the surveyed Project area showing the derived data with the 1.0-foot contours
27. As-built drawings
28. Calibrated GPSX Process Model Results
29. Design memoranda and preliminary drawings
30. Draft and Final Preliminary Design Report

Task 4 - Field Investigations

Task 4.1 - Geotechnical

Based upon available information, the scope of work for geotechnical investigations is assumed to consist of the following:

Task 4.1.1 - Site Reconnaissance and Field Exploration

- Using the facility site layout validated in Task 3, the location of soil borings will be determined, identified by their coordinates, and staked on the site.
- Clearance by a Subsurface Utility Engineering (SUE) firm will be obtained by Design-Builder for utilities at the proposed boring locations. A site reconnaissance will be made to evaluate site and access conditions by the SUE and soil boring driller. Cultural Resource (CR) clearances will be provided by County. One week minimum notification to CR prior to any drilling.
- For purposes of estimating cost, it is assumed that there will be 2 borings for a total footage of approximately 20 lineal feet each.
- The subsurface conditions encountered will be logged by a geologist or geotechnical engineer, and the soils encountered will be identified in accordance with ASTM D 248800, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. Standard Penetration Tests will be performed in accordance with ASTM D 1586-99, *Standard Test Method for Penetration Tests and Split-Barrel Sampling of Soils* at approximately 5 feet intervals. For soft fine-grained soils, relatively undisturbed Shelby tube samples will be obtained for laboratory testing, in general accordance with ASTM D 1587-00, *Standard Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes*. Where the soils are too stiff to use Shelby tube samples, ring samples will be taken in general accordance with ASTM D 3550-84, *Standard Practice for Ring-Lined Barrel Sampling of Soils*.
- Piezometers will be installed at 4 to 5 selected locations to determine the groundwater levels in the soil profile. Knowledge of groundwater conditions is important for design as well as for construction planning purposes.
- To aid in corrosion analysis, field resistivity soundings will be performed at various locations at the proposed plant site. The field resistivity soundings will be performed using the Wenner array in accordance with ASTM G57.

Task 4.1.2 - Laboratory Testing

Laboratory tests will be performed on samples obtained from the borings to evaluate certain physical and engineering parameters, including the following:

- One-Dimensional Consolidation (ASTM D 4546)
- Grain Size Distribution (ASTM C 136)
- Percent Passing the No. 200 Sieve (ASTM C 117)
- Atterberg Limits (ASTM D 4318)
- Consolidated Undrained Triaxial Compression Test (ASTM D 4767-02)
- R-Value (ASTM D 2844)
- Swell Potential
- In-Place Moisture and Dry Density
- Chemical Corrosivity Tests including pH, resistivity, and soluble salts.

Task 4.1.3 - Engineering Analysis and Geotechnical Report Preparation

An engineering analysis will be performed to provide the following design parameters:

- Allowable bearing pressures for all structures
- Estimated total and differential settlements
- Modulus of subgrade reaction for the design of mat-type foundations
- Coefficient of friction for the design of mat-type foundations or conventional spread footings
- Static lateral earth pressures for unrestrained and restrained subsurface walls such as vault structures including sloping backfill conditions
- Seismically induced lateral earth pressures for unrestrained and restrained subsurface walls such as vault structures including sloping backfill conditions
- Apparent earth pressures for the design of temporary excavation shoring
- Modulus of lateral earth reaction (E') for the design of flexible pipe
- Pipe/soil coefficient of friction
- Lateral earth support and coefficient of friction for pipe thrust blocks
- Seismically induced peak horizontal ground accelerations
- Non-dedicated asphalt concrete and Portland cement concrete pavements
- Dedicated off-site half street asphalt concrete pavements

A geotechnical report will be prepared to include a summary of the above, including preliminary mat and spread foundation bearing capacities and the boring logs.

Task 4.2 - Corrosion

Design-Builder will perform a soils analysis and corrosion control evaluation of the Project site. Investigations will include soil resistivity tests, soil box resistivity test, pH measurements, sulfur reducing bacteria tests, and a stray current potential evaluation. The analysis will be presented in a Design Memorandum with recommendations for corrosion protection design.

The Design-Builder's corrosion engineer will evaluate the corrosion protection requirements in potentially corrosive environments and provide recommendations in the DM on general materials and coatings to use in the Project.

Task 4.3 - Subsurface Utility Engineering

Design-Builder will map all underground utilities within all potential excavation areas at the Project site. This utility mapping will include developing base maps using existing record drawings and other existing information. Vacuum potholing and other locating methods will be used as needed to determine more exact utility locations for existing underground utilities. For purposes of estimating cost, it is assumed that up to three (3) crew days will be required for potholing. Once identified, the location of utilities will be surveyed and shown on the Project mapping. A Subsurface Utility Engineering firm may be used as needed for locating existing subsurface utilities.

Assumptions:

- This task includes three (3) crew days of a subsurface utility company at the Project site for potholing and surveying subsurface utilities.

Task 4.4 - Legal Survey

If required, County will furnish or direct the Design-Builder to obtain at County's expense, surveys describing physical characteristics, legal limitations, and utility locations for the Project site, and a written legal description of the Project site. The surveys and legal information will include, as applicable, grades and lines of streets, alleys, pavements, and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the site; locations, dimensions, and necessary data pertaining to existing buildings, other improvements, and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths.

Task 4.5 - Endangered Species Survey (as applicable)

The Design-Builder will hold informal consultations (2 meetings) with the USFWS regarding adverse impacts to any known species within the Project area.

Design-Builder's biologist will survey the Project area, document the results of the field survey, and submit the report to USFWS. The report will document the existence or absence of listed species in the Project area. It is anticipated that comments on the draft report will be received from USFWS. Upon receipt of the comments, a final report will be prepared and submitted to USFWS and County.

Task 4.6 - Arizona Native Plant Survey

Design-Builder will investigate, as applicable, U.S. Bureau of Reclamation (BOR), State of Arizona, and Pima County native plant mitigation requirements for areas that will be disturbed by construction.

Task 4.6.1 - Prepare Native Plant Mitigation Plan (as applicable)

The Design-Builder will map the Project area. The mapping will be prepared at a horizontal scale of T-40 and will use aerial photography prepared in Task 3.

The Design-Builder will consult with the State of Arizona to review the Project area and determine if refinements are required.

The Design-Builder will perform a full plant inventory of lands encompassing the Project. The Design-Builder will calculate plant mitigation fees for the Project area using the State Land Native Plant Value Methodology. The draft plant inventory and mitigation fee calculations will be submitted to County for review and comment. A final plant inventory and mitigation fee calculation will be prepared that addresses County comments. Final documents will be submitted to County for submission to the State of Arizona.

The Design-Builder will attend one pre-submittal conference with the State of Arizona and will provide technical assistance during the State's review period to answer questions or provide additional information, if required by the State. It is assumed that the Design-Builder will respond to two information requests.

Task 4.7 - Deliverables

1. Draft and Final Geotechnical Report
2. Draft and Final Corrosion Report

3. Draft and Final ANP Survey Results

Task 5 - Schematic Design (30%)

The purpose of this task is to use the data and guidelines developed in Task 3, Preliminary Design, to develop and evaluate alternative design concepts, and agree upon a single design concept for the Project. The primary products from this task will be design memorandums, a 30% level 3-D model, Schematic Design Report, and an initial 30% level construction cost estimate for the Project.

During the Schematic Design phase, the Design-Builder will develop renderings of facilities taken from the model, sketches, preliminary drawings, process and instrument diagrams (P&IDs), and narratives. At the conclusion of this phase of design, a 30% Design Briefing will be held with County. At this briefing, the 3-D model will be used to convey concepts and to solicit input. Meeting minutes will be prepared to capture comments and to document the decisions reached. Specific activities and deliverables from this task are as identified in the subtasks below. During the Schematic Design phase, the Design-Builder will focus on constructability aspects of Project, including facility layouts and construction sequencing.

If the County decides to proceed with a LEED certification approach for the Project, the LEED scorecard will be updated as part of the Schematic Design tasks for each discipline and preliminary LEED templates will be developed for each LEED point. The LEED certification process would also include registering the Project with the Green Building Council.

Task 5.1 - Civil and Site Development

Schematic design work for civil and site development will include the following activities:

- Develop site layouts of improvements for the facility developed to 30% level.
- Identify the locations of underground utilities and incorporate this information into site utility drawings.
- Prepare preliminary storm water calculations and develop preliminary storm water control concepts.
- Set preliminary finish grades of structures and roadways. Identify traffic flow patterns and patterns for delivery of equipment, chemicals, and materials to the site.
- Identify routes for emergency vehicles.
- Review concepts with Design-Builder quality control reviewers.
- Develop concepts for ingress and egress from the Project site.
- Develop potable water distribution system concepts.
- Develop reuse water distribution system concepts.
- Determine routes for major yard piping and site utilities. Coordinate with other projects in the area.
- Contractor entrance, offices, parking, and staging areas will be defined.

Task 5.2 - Landscape Architecture

The general landscape architecture concepts will be prepared by the County and provided to the Design-Builder for use in the Schematic Design phase of the Project. Schematic Design work for landscape architectural will include the following activities:

- Perform an analysis of existing site conditions to include existing vegetation, soil conditions, topography, drainage, and views.
- Coordinate irrigation system requirements with site civil for reclaimed water distribution irrigation supply.
- Develop concepts and layout for fencing, site screening and enclosures.
- Soil stabilization with 85% coverage.

Task 5.3 - Architecture

The general architectural concepts will be prepared by the County and provided to the Design-Builder for use in the Schematic Design phase of the Project. Schematic design work for architectural will include the following activities:

- Perform code review to determine requirements applicable to new facilities. Rehabilitation and code upgrading of existing facilities may be required in locations where existing facilities will be expanded or modified.
- Utilize architectural theme for buildings provided by County. An architectural review meeting will be held with County to review the architectural theme to be used for the above grade structures within the Project area, and for any fencing required. Select interior and exterior construction materials, roof type, slope, and roof support system.
- Assign code classification to new buildings.
- Compile list of chemicals and amounts to be used, if applicable, to determine any area classifications associated with chemical storage.
- Prepare preliminary layout of buildings (plan, section, and elevations).
- Determine building materials.
- Determine locations for personnel facilities in the existing and new buildings.
- Review concepts and draft work products with Design-Builder quality control reviewer.
- Coordinate with the County to schedule a meeting with building review officials. Meet with building review officials as needed to review building permit approach for new and/or modified existing facilities.

Task 5.4 - Structural

Schematic design for structural will include the following activities:

- Coordinate with architectural discipline on the selection of building concepts and building materials. Consult with County on building/structure layouts.
- Develop facility foundation and building concepts and structural design approach.
- Provide input on any modifications to existing facilities to incorporate new work or tie in new facilities.
- Review concepts -with Design-Builder quality control reviewer.

Task 5.5 - Foundations/Excavation

Schematic design for geotechnical will include the following activities:

- Based on the geotechnical investigation described in Task 4, evaluate foundation options.
- Perform an engineering analysis to develop design parameters for the foundation options.
- Review concepts with Design-Builder quality control reviewer.
- Coordinate with civil and structural design leads in making a decision on the preferred foundation option and finalizing design criteria.

Task 5.6 - Process/Hydraulics (as applicable)

Schematic design for process will include the following activities:

- Determine the size and capacity of unit treatment processes, pipelines, and ancillary systems.
- Develop liquids processes gravity flow and pumped flow hydraulics.
- Advance the design for any new outfall capacity determined to be needed as part of the preliminary design hydraulics analysis.

- Develop doses for chemical feed systems.
- Review capacities of existing equipment and pipelines that will interface with new equipment to verify adequacy or to determine replacement if necessary
- Prepare process flow diagrams.
- Develop process narratives.
- Develop plans and sections of various processes.
- Review and update as required the operations during construction design memorandum
- Review concepts with Design-Builder quality control reviewer.
- Develop process models (GPS-X and Pro2D). Provide comparison and summary of output for each model.

Task 5.7 - Process Mechanical (as applicable)

Schematic design for mechanical will include the following activities:

- Select and size major process equipment. Prepare sizing calculations and obtain review and approval of calculations as directed by the Design-Builder Quality Control Manager. Establish level of redundancy required for process equipment.
- Coordinate with the County on preferences of equipment manufacturer and processes. Prepare equipment list with sizing for major equipment.
- Determine equipment availability and delivery lead time requirements.
- Develop preliminary piping and valve schedules with input from County.
- Prepare mechanical specification list and draft piping and valve schedules.
- Prepare preliminary layouts for piping and equipment arrangements.
- Coordinate process and building mechanical water demands and define needs for effluent reuse water and for potable water.
- Coordinate with civil to determine location for new process and utility yard piping.
- Develop plans and sections of various processes.
- Review concepts with Design-Builder quality control reviewer.

Task 5.8 - Building HVAC/Plumbing (as applicable)

Schematic design for HVAC and plumbing will include the following activities:

- Select type of ventilation system to be used in process buildings and odor control facilities. Develop preliminary system sizing and determine locations for building mechanical equipment. Coordinate recommended control systems with appropriate County staff.
- Select type of heating system to be used.
- Select type of air conditioning system to be used.
- Coordinate with the architectural discipline to establish design R-values for exterior walls and roof systems.
- Perform a ventilation code review.
- Coordinate with local and State Fire Marshal and architect to determine requirements for sprinklers and fire protection.
- Determine plumbing utility requirements in existing and new facilities, coordinate with existing facilities and determine configuration for building plumbing drain systems
- Review concepts with Design-Builder quality control reviewer.

Task 5.9 - Electrical (as applicable)

Schematic design work for electrical will include the following activities:

- Prepare preliminary overall one-line diagram for the proposed facility.
- Prepare preliminary load calculations.
- Size electrical rooms, size equipment to fit into the rooms - existing and new buildings
- Determine equipment availability and delivery lead time requirements
- Determine number of electrical feeds to be provided. Coordinate with the electric service provider (ESP) to determine locations of power feeds, voltage, billing details (peak usage rates), requirements for reduced voltage starters, and substation requirements.
- Determine redundancy requirements for power supplies and power distribution.
- Determine any standby power requirements and potential sources.
- Establish preferred voltages for power distribution and equipment operation.
- Perform an electrical code review.
- Coordinate with other disciplines, including architectural and mechanical, to resolve code compliance issues specific to the disciplines. Develop preliminary schedule of hazardous and corrosive locations.
- Review concepts with Design-Builder quality control reviewer.
- Coordination with ESP.

Assumptions:

- This electrical scope may include developing a preliminary design for providing electrical power new facilities included in this Project. Modifications to existing facilities will be included where these modifications are necessary to provide power to the new facilities.

Schematic design work for the instrumentation and control will include the following activities:

- Coordinate with County to develop Preliminary P&IDs for each process.
- Add equipment/instrument tag numbering, naming, and abbreviation following existing County standard conventions.
- Identify equipment based on County standards.
- Determine equipment availability and delivery lead time requirements
- Design control system configuration in coordination with the County standards and review same with the County. Develop control system block diagram showing interface of new control systems with County standards.
- Work with process engineer to prepare written operational description of each major process.
- Develop overall control philosophy including local control approach, control system, level of automation, supervisory control based on County's SCADA standards. Coordinate SCADA criteria with SCADA Integrator and County.
- Review concepts with Design-Builder quality control reviewer.

Task 5.10 - Electrical (not applicable)

Task 5.11 - Ancillary Systems (as applicable)

Schematic design work for ancillary systems will include the following activities:

- Identify PCRWRD standards for telephone and intercom systems.

- Identify PCRWRD standards for security.
- Identify PCRWRD standards for fire alarm systems.
- Determine fire water demands.
- Identify data highway architecture.

Task 5.12 - Updated MOPO Design Memorandum

Update the MOPOs that were identified in Task 3.6.3.6 based on the additional design information developed in Task 6. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 5.13 - Schematic Design Report

A schematic design report will be developed including process control narratives, any design memoranda updates from the Preliminary Design Phase, and preliminary layout drawings.

Task 5.14 - Schematic Design Construction Cost Estimate

This task includes Design-Builder review of the cost estimate with County. Design-Builder and County will resolve any differences between the cost estimate and County's budget.

Assumptions:

- This task scope does not include a value engineering study of the schematic design or value engineering revisions of the schematic design.

Task 5.15 - Schematic Design Model Review and Workshop

Design-Builder will prepare a model of Project and use it to present major design concepts to County staff. Additional information, such as P&IDs and facility renderings, will be presented at the workshop. An update and status of permitting and stakeholder activities will be presented. The Schematic Design workshop is based on a 2-hour meeting to allow time to meet with all appropriate County staff. At the meeting, input on the design concepts will be discussed. Following the workshop, meeting minutes and responses to comments will be prepared and submitted to the County to address comments and to document decisions reached. The responses to comments will be incorporated in the 60% Design Development Document. The objective of these workshops is to get County input and freeze the 30% design prior to moving forward with the Design Development phase of the Project.

Task 5.16 - Deliverables

1. MOPO DM Update
2. Draft and Final Schematic Design Report
3. SD Workshop Summary
4. 3-D Model

PHASE 2 – FINAL DESIGN SERVICES

Task 6 - Design Development (60%)

The purpose of this task is to utilize the decisions that were made in the 30% schematic design task to finalize design development and to achieve a true "design freeze" at the conclusion of this task. Structures, equipment, major plant piping, any processes, and the site plan will be finalized during this task to allow for subsequent final detailing in the Construction Document Preparation phase. Specific activities and work products from this task are described in the following subtasks.

Should the Project include a LEED certification requirement, the LEED scorecard will be updated as part of the Design Development tasks for each discipline and the LEED templates will be developed for each LEED point. If the Project will be LEED certified, the Design-Builder will incorporate LEED requirements into the preliminary specifications and a commissioning lead will provide input into commissioning specifications.

Task 6.1 - Civil and Site Development

- Finalize horizontal locations of major site elements.
- Finalize floor, structure, and finish grade elevations.
- Define demolition requirements and limits.
- Define contractor staging, storage, access, parking, and off-site access corridors.
- Prepare preliminary site grading drawings.
- Develop preliminary yard piping and plant drain layouts.
- Show storm water control concepts (retention basins, swales, curb, and gutter) on the drawings.
- Finalize paving concepts.
- Prepare first draft of technical specifications.
- Review design development with Design-Builder quality control reviewer.

Task 6.2 - Landscape Architecture N/A

- Develop details, as necessary, for interpretive signage.
- Review design development with Design-Builder quality control reviewer.
- General ground cover - soil stabilization for 85% of disturbed ground areas.

Task 6.3 - Architecture (as applicable)

- Further develop a 3-D electronic model of the Project.
- From the models, generate floor plans and elevations.
- Size and locate electrical and control rooms.
- Select the type and location of HVAC equipment and controls, determine space requirements and routing for ductwork, and establish design R-values for exterior walls and roof systems.
- Define the structural design concepts for the facilities.
- Confirm applicable codes for buildings/structures with local code officials and State Fire Marshal. Complete building and fire code analysis. Attend one meeting with local code official to review floor plans.
- Prepare first draft of technical specifications.
- Develop first draft of architectural material schedules.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.4 - Structural (as applicable)

- Establish foundation design.
- Document structural design concepts for buildings and structures.
- Prepare preliminary floor and foundation plans for major structures.
- Prepare first draft of technical specifications.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.5 - Process/Hydraulics (as applicable)

- Finalize major equipment-sizing calculations.
- Finalize plant gravity hydraulics and pumping system hydraulics for major pumping systems.
- Complete internal reference P&IDs.
- Develop process control narratives.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.6 - Process Mechanical (as applicable)

- Prepare 3-D electronic model of mechanical layout.
- From the model, prepare preliminary mechanical plans and major sections.
- Assemble catalog cuts and equipment data sheets for major process equipment.
- Finalize P&IDs.
- Finalize ancillary equipment sizing and line sizing calculations.
- Finalize equipment selection (type, size, weight, arrangement).
- Prepare first draft of technical specifications.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.7 - Building HVAC/Plumbing (as applicable)

- Prepare sizing calculations for HVAC equipment.
- Prepare HVAC equipment data sheets and cut sheets.
- Create ventilation concept drawing.
- Locate duct routes and equipment locations.
- Prepare HVAC system block diagrams. Define HVAC system control philosophy with the County.
- Finalize routing for potable water, effluent reuse water, water for fire suppression, and plant drain system.
- Develop preliminary plumbing drawings including utility piping, drainage systems, and drain piping.
- Prepare first draft of technical specifications.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.8 - Electrical (as applicable)

- Determine location of Motor Control Centers (MCCs) and equipment to be powered out of each MCC.
- Prepare preliminary one-line diagrams for overall facility.
- Prepare detailed electrical load calculations.
- Prepare a preliminary layout of the major electrical equipment.
- Determine equipment requiring uninterruptible power supplies (UPS).
- Determine space requirements and locations for control equipment.
- Locate major I/O termination panels, terminal junction boxes, and control panels.
- Submit load calculations and one-lines to electric utility for review.
- Identify routing methods for electrical conduit and tray.
- Lay out duct bank systems (major runs/manholes).

- Coordinate with civil yard piping.
- Locate manholes and hand holes.
- Develop detailed lighting concepts and prepare preliminary site lighting layout.
- Define and document hazardous locations (NFPA 820).
- Prepare first draft of technical specifications.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.9 - Instrumentation and Control Systems (as applicable)

- Prepare final CAD-based P&ID drawings including loop numbers and instrumentation.
- Finalize I/O rack room sizing.
- Summarize I&C system design philosophy for each major process in a process control narrative.
- Prepare preliminary Instrument List, I/O List, and PLC Equipment List.
- Prepare preliminary panel drawings for control system control panels (not including vendor package system panels to be done by vendor).
- Update control system block diagram.
- Develop control diagrams/loop diagrams for each type of control scheme to be used following existing PCRWRD standards.
- Define control interfaces for package systems with local controls, including adjustable frequency drives.
- Prepare first draft of technical specifications, including incorporating County standards for instruments and I&C components.
- Coordinate with County on control system configuration, operation and full integration with Pima County's SCADA platform including read-write-and alarms for level control, temperature, heating, pressure, dome level, mixing, transfer pumps, flows, gas compressor, gas flow, gas pressure, and LEL monitoring.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.10 - Ancillary Systems

- Define and document the requirements for telephone and intercom systems.
- Determine the systems required for access control and security monitoring and surveillance systems and determine the methods of procuring such equipment (sole source negotiated price and performance specification). Coordinate security with County requirements.
- Define and document the concepts for fire alarm systems.
- Meet with the State Fire Marshal to determine fire water demands and requirements for fire suppression systems.
- Review design development work products with Design-Builder quality control reviewer.

Task 6.11 - Project Delivery/Construction Package Analysis

Design-Builder will conduct a Project delivery analysis, which will include consideration of the following:

- Finalize the list of any equipment to be pre-negotiated and/or County selected.
- Coordinate with vendors the equipment to be pre-procured and develop contract interface details.
- Receive County's review comments on 60% documents before development of 95% construction documents begins.
- Update and provide more detail on procurement and construction schedule and milestones. The results of this analysis will be discussed with the PCRWRD at the 60% Design Development Workshop.

Task 6.12 - Updated MOPO Design Memorandum

Update the MOPO DM, from Task 5.12, based on additional design information developed in Task 6. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 6.13 - Design Development Construction Cost Estimate

This task includes Design-Builder review of the cost estimate with the County. Construction cost estimating procedures are defined in Task 1.9.

In the event that the cost estimate exceeds the County budget, Design-Builder and County will meet as necessary to review and refine the cost estimate with the goal of reaching consensus on a workable Project cost.

Task 6.14 - Design Development Review with County

Design-Builder will assemble the work products from the tasks above and submit the 60% Design Development document to the County for review and comment. A workshop will be held with the County's personnel to review the 60% deliverable and 3-D model, to receive and discuss comments, and to reach closure on design issues. A 1-day workshop is included in this task to provide time to meet with all appropriate County staff. Following the workshop, meeting minutes and responses to comments will be prepared and submitted by Design-Builder. The responses to comments will be incorporated in the 95% Construction Documents.

Task 6.15 - Deliverables

1. Design Development Documents
2. Project Delivery/Construction Package Memoranda and Meeting Minutes
3. Updated MOPO DM
4. DD Construction Cost Estimate
5. DD Workshop Summary
6. 3-D model

Task 7 - Construction Document Preparation (95%)

The purpose of this task is to develop the final construction drawings, specifications, and schedules for the Construction Phase. The construction documents will be finalized in Task 9, by incorporating the 95% review comments.

Task 7.1 - Develop 95% Construction Documents

Specific activities performed by the Design-Builder during this phase will include the following:

- Incorporate responses to comments on the 60% Design Development Document.
- Complete the design around the equipment that has been pre-purchased.
- Prepare final construction drawings.
- Prepare final technical specifications.
- Prepare final calculations.
- Complete final checking and coordination review by design leads.
- Provide independent review by the Design-Builder quality control review team.
- Should the County decide to proceed with a LEED certification approach for the Project, the LEED scorecard will be updated as part of the Contract Document preparation tasks for each discipline and LEED templates and the documentation required for each LEED point will be finalized.

Task 7.2 - Construction Documents Construction Cost Estimate

A 95% definitive construction cost estimate will be prepared from 95% percent complete plans and elevations, piping and instrument diagrams, one-line electrical diagrams, equipment data sheets, vendor quotations, structural details, soil data, drawings of major foundations and buildings, and a complete set of specifications.

Task 7.3 - Construction Document Review with County

The Design-Builder will submit 95% Construction Documents to the County for review and comment. The County will prepare one set of collated and adjudicated review comments and provide to the Design-Builder prior to the 95% Review Workshop. The workshop will be held to discuss and resolve this final set of review comments. Following the workshop, meeting minutes and responses to comments will be submitted to the County to document decisions.

Task 7.4 - Construction Cost Estimate Reconciliation

This task includes Design-Builder review of the cost estimate with County. Construction cost estimating procedures are defined in Task 1.9.

In the event that the cost estimate exceeds the County budget, Design-Builder and County will meet as necessary to review and refine the cost estimate with the goal of reaching consensus on a workable Project cost.

Task 7.5 - Updated MOPO Design Memorandum

Update the MOPO DM from Task 6.12 based on additional design information developed in Task 7. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 7.6 - Deliverables

1. 95% Contract Documents
2. CD Construction Cost Estimate
3. Adjudicated Review Comments and Workshop Minutes
4. Updated MOPO DM

Task 8 - Construction GMP

Design-Builder will prepare and, by the date specified in the Contract, deliver to County a proposed GMP for the construction phase of the Project. At a minimum, the following component will be included in the proposed GMP:

- A recital of the specific Construction Documents, including drawings, specifications, and all addenda thereto, used in preparation of the GMP proposal.
- The five (5) elements of the Guaranteed Maximum Price:
 - a. Guaranteed Maximum Cost of the Work (hereinafter defined), detailed by each subcontract, trade, or bid division;
 - b. the Design-Builder's Contingency for the Work;
 - c. Guaranteed Maximum Design-Builder's Staffing Cost (hereinafter defined), detailed by expense category;
 - d. Guaranteed Maximum General Conditions Cost (includes bond & insurance costs) (hereinafter defined), detailed by expense category; and
 - e. Guaranteed Maximum for Design-Builder's Overhead and Profit.
- A draft schedule of values;
- A description of all other inclusions to, or exclusions from, the GMP;
- All assumptions and clarifications; and

- The final construction Project Schedule.

Task 9 - 100% Construction Document Completion

The purpose of this task is to prepare final Construction Documents to be used for construction and building permit review. The Design-Builder will perform the following subtasks as part of this task.

Task 9.1 - Final Design Construction Documents

The Design-Builder will modify the Construction Documents to incorporate agreed upon review comments from the County, applicable regulatory agencies, and the Design-Builder's quality control review team. The final documents will then be submitted to the County for final back-check and approval. The final back checking will consist of verifying the 95% responses to comments were adequately incorporated.

The final Construction Document production is based on a maximum of 3 construction packages.

The final Construction Documents will include 22-inch x 34-inch mylars sealed and signed, and contract specifications.

Task 9.2 - Final Design Report

The final design report will include the final updates of the predesign report technical memoranda, documenting design criteria, treatment facility and equipment sizing, redundancy, treatment facilities configuration, and design criteria for the engineering disciplines. This report will be in compliance with ADEQ requirements. The Design-Builder will submit the Final Design Report to County for County submission to ADEQ.

Task 9.3 - Deliverables

1. Final Contract Documents
2. Final Design Report
3. Final GPSX Model
4. Final 3-D Model
5. Final MOPO DM

PHASE 3 - CONSTRUCTION

General Intent. Design-Builder will perform all Work and construction administration services necessary to construct the Project in accordance with the Contract for Design-Build Construction and to render the Project and all of its components operational and functionally and legally usable. This includes, but is not limited to, completion of the following tasks.

Task 10 - Trade Contractor Selection Bidding and Negotiation

Task 10.1 - Bid Packages

Design-Builder will prepare and assemble document packets for use in bidding the subcontracts. Such packaging of the Work will be broken down to maximize both competition and the involvement of small businesses.

Task 10.2. - Prequalification

The Design-Builder will develop subcontractor and supplier interest for each division of the Work. A design professional on the Project Team will attend all pre-bid meetings with potential subcontractors and be available to respond to questions regarding the Construction Documents.

Task 10.3 - Bidding

The Design-Builder will competitively bid each trade category or, if approved by County, negotiate for the performance of a particular trade category.

Task 10.4 - Budget Control

The Design-Builder will use its best efforts to obtain bids which are less than the final GMP estimates.

Task 10.5 - Bid Opening

The Design-Builder will conduct bid openings in the presence of the County's Representative. The Design-Builder will provide the County with a copy of its preliminary bid tabulation and a copy of all bids.

Task 10.6 - Bid Evaluation and Award

The Design-Builder will, for each subcontract, trade, or bid division:

- determine the final bid amounts, having reviewed and clarified the scope of Work in detail with the apparent low responsive bidders to determine that their bids are complete but do not include duplicate scope items;
- prepare and furnish to the County a final bid tabulation summary which includes by subcontract, trade, and/or bid division, the applicable final GMP estimate and the related final bid amount and the details of all scope clarifications for County's review and approval;
- if requested by County, provide a list of all potential Direct Purchase Materials (hereinafter defined);
- identify to the County in writing the subcontractors to which the Design-Builder recommends award of subcontracts; and
- award and enter into a subcontract between itself and each subcontractor which it has recommended in accordance with this Scope unless otherwise notified by the County.

Task 10.7 - County Approval Required to Proceed

No portion of the Work may be performed by the Design-Builder or its affiliates except with County's approval.

Task 11 - Design Professional's Role During and After Construction

Although the design and construction of the Project are being provided through a Design-Build delivery method, because no additional design professionals have been retained by County to provide oversight during construction and warranty phase services, the lead design professionals on the Design-Builder's Project Team will be responsible for providing the services described herein. Such services will be provided by the lead design professionals without regard to the conflict of interests associated with the Design-Build delivery method. These services include:

Task 11.1 - Construction Administration

The design professionals will carry out the Construction Administration services set forth herein.

Task 11.2 - Advice and Consultation

The design professionals will be a representative of, and will advise and consult with, the County during construction until final payment is made. The Design-Builder will have authority to act on behalf of the County only to the extent provided in the Contract.

Task 11.3 - Presence at Work Site

The design professionals on the Project Team will attend regularly scheduled construction meetings at the Site and will provide such representation as may be required to fulfill the intent and interpretation of the plans and

specifications for the Project. In any event, the design professionals will visit the site as is reasonable and necessary to become familiar with the progress and quality of the Work completed and to determine if the Work is being performed in a manner indicating that the Work when completed will be in accordance with the Construction Documents. On the basis of on-site observations as an architect or as an engineer, the design professional will keep the County informed of the progress and quality of the Work and will guard the County against defects and deficiencies in the Work.

Task 11.4 - Certification of Pay Requests

Based on the design professionals' observations and evaluations of the Design-Builder's Applications for Payment, the design professional will review and certify the amounts due the Design-Builder. The design professional's certification for payment will constitute a representation to the County, based on the design professional's observations at the Project site and on the data comprising the Design-Builder's Application for Payment, that the Work has progressed to the point indicated and that, to the best of the design professional's knowledge, information, and belief, the quality of the Work is in accordance with the Construction Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Construction Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Construction Documents correctable prior to completion and to specific qualifications expressed by the design professional. The issuance of a Certificate for Payment will further constitute a representation that the Design-Builder is entitled to payment in the amount certified.

Task 11.5 - Duty to Inspect

The design professional will reject Work which does not conform to the Construction Documents. Whenever the design professional considers it necessary or advisable for implementation of the intent of the Construction Documents, the design professional will have authority to require additional inspection or testing of the Work in accordance with the provisions of the Design-Build Contract for Construction, whether or not such Work is fabricated, installed, or completed.

Task 11.6 - Submittals

The design professional will review, approve, reject, or take other appropriate action on construction-related inquiries and submittals, such as shop drawings, product data, and samples. The design professional will not approve any such submittals unless such submittals conform with: (i) the design concept; (ii) the Construction Documents; (iii) the County's total budgeted Construction Cost; (iv) the County's Design and Construction Standards; and (v) governing codes and authorities having jurisdiction. In the event the County's Design and Construction Standards exceed applicable legal requirements, those County standards will govern. The design professional's review will be completed so that all Work can be performed without delay and all products or materials may be ordered or fabricated with sufficient time to meet the Project Schedule.

Task 11.7 - Preparation of Change Orders

The design professional will prepare Change Orders, with supporting documentation and data, if the design professional determines the same is necessary for the County's approval and execution in accordance with the Design-Build Contract for Construction.

Task 11.8 - Interpretation

Interpretations and decisions of the design professionals will be consistent with the intent of, and reasonably inferable from, the Construction Documents and will be in writing or in the form of drawings.

Task 11.9 - Aesthetic Review

The design professionals' decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Construction Documents, and if concurred with by the County.

Task 11.10 - Substantial and Final Completion

The design professionals will, in conjunction with County personnel, conduct inspections to determine the dates of Substantial Completion and Final Completion, will receive and forward to the County for the County's review and records, written warranties, and related documents required by the Design-Build Contract for Construction and assembled by Design-Builder, and will issue a final Certificate for Payment upon compliance by the Design-Builder with the requirements of the Design-Build Contract for Construction. The design professionals will perform all services relating to Substantial Completion and Final Completion in accordance with County policies and procedures.

Task 11.11 - As-Built Drawings

The Design-Builder will prepare "As-Built" or record drawings at Project completion in accordance with the requirements set forth in the County Specifications. These drawings will include changes made to the Project by Change Orders, Addenda to the Construction Documents, Architect's Supplemental Information, field orders, field reports, Requests for Information, shop drawings, other directives and submittals, and information provided by the Design-Builder.

Task 11.12 - Warranty Support

The design professionals will respond to: County's requests to review design and construction issues during the construction warranty period; coordinate and participate in the end of the warranty period inspection in accordance with the County Specifications; and produce a summary report documenting deficiencies, problems, or other outstanding items.

Task 12 - Construction Supervision

Commencing with the award of the first subcontract and terminating on the date of Final Completion, the Design-Builder will provide the services described herein. The Design-Builder will, as the County's construction representative during construction, advise and consult with the County, and provide administration of the Construction Documents. The Design-Builder will supervise and direct the Work at the Site. The Design-Builder will, at a minimum, staff the Project Site with personnel who will:

- supervise and coordinate the Design-Builder's personnel and act as its primary liaison with the County;
- coordinate trade contractors and suppliers, and supervise Site construction management services;
- be familiar with all trade divisions and trade contractors' scopes of Work, all applicable building codes and standards, and the Contract for Design-Build Construction;
- check, review, coordinate and distribute shop drawings and check and review materials delivered to the Site, regularly review the Work to determine its compliance with the Construction Documents and this Agreement, confer with the appropriate County consultant(s) as necessary to assure acceptable levels of quality;
- prepare and maintain Project records and process documents;
- schedule and conduct weekly progress meetings with subcontractors to review such matters as jobsite safety, job procedures, construction progress, schedule, shop drawing status and other information as necessary and provide notification of, and minutes from, such meetings to County;
- schedule and conduct weekly progress meetings with the County to review such matters as construction progress, schedule, shop drawing status, and other information as necessary; and
- make provision for Project security to protect the Project site and materials stored off-site against theft, vandalism, fire, and accidents as required by the General Terms and Conditions.

Task 13 - Reporting

The Design-Builder will provide a monthly report in searchable PDF format summarizing the progress of the Project to the County including information on the subcontractors' Work, percentage of completion of the Work, current estimating, subcontract buyouts, computerized updated monthly Critical Path Method scheduling and Project accounting reports, including projected time to completion and estimated cost to complete the Work, progress photographs, project directory, logs for Requests for Information, submittals and shop drawings, Change Orders, cost change proposals, field directives, safety meetings, deficiencies, weather conditions, and meeting minutes.

Task 14 - Miscellaneous Construction Phase Duties

Task 14.1 - GMP and Savings

During the Construction Phase, Design-Builder will complete the Construction Work in accordance with the Construction Documents and the Contract in return for payment by County of the Costs of Construction, provided that in no event will the aggregate payments by County to Design-Builder for Construction Work exceed the Guaranteed Maximum Price.

Task 14.2 - Services Provided

Design-Builder's Construction Phase services include, without limitation: team management and coordination, scheduling, cost control and change order management, submittal process management, subcontracting, field management, safety program, close-out process, and warranty period services. This will include providing through itself or its Subcontractors all necessary supervision, labor, inspection, testing, startup, material, equipment, machinery, temporary utilities, and other temporary facilities to permit Design-Builder to complete all Construction Work in accordance with the Construction Documents and the Contract.

Task 14.3 - Performance of Work

Design-Builder will perform all construction activities efficiently and with the requisite expertise, skill, quality, and competence to satisfy the requirements of the Construction Documents and the Contract.

Task 14.4 - Reporting

Design-Builder will provide County, on a monthly basis, a written status report detailing the progress of the Construction Work during the Construction Phase, including whether the Work is proceeding according to the Project Schedule. Each monthly report during the Construction Phase will include: an updated Project Schedule; an updated Construction Work cash flow projection for the duration of the Project; copies of the Design-Builder's Superintendent's daily site reports made during the preceding month; identification of discrepancies, conflicts, or ambiguities existing in the Construction Documents that require resolution; identification of any health and safety issues that have arisen in connection with the Construction Work; and identification of other items that require resolution so as not to jeopardize Design-Builder's ability to complete the Construction Work for the GMP and within the Contract Time(s),

Task 14.5 - Schedule

During the Construction Phase, Design-Builder will maintain the Project Schedule and will promptly prepare a proposed updated Project Schedule and submit it to County for its review and approval whenever events occur or are likely to occur that require changes in the Project Schedule. The Project Schedule for the Construction Phase is the same and a continuation of the Project Schedule used for the Design Phases and will indicate the dates for the start and completion of the various stages of the Construction Work, including the dates when County information and approvals are required and all necessary shutdowns or suspensions of County or separate vendor activities on the Site (if any).

Task 14.6 - Work Management

The Design-Builder will provide leadership to Design-Builder's employees and Subcontractors during the Construction Phase for all matters relating to the Construction Work. The Design-Builder agrees to furnish efficient business administration and superintendence and to complete the Construction Work in an expeditious and economical manner.

Task 14.7 - Management Presence at Work Site/Approval of Replacement

Design-Builder 's Representative and the Design-Builder Superintendent will be at the Site at all times when Construction Work is being performed and will have the necessary expertise and experience required to supervise the Construction Work, Design-Builder 's Representative will communicate regularly with County and will be vested with the authority to act on behalf of Design-Builder, Design-Builder 's Representative and Design-Builder 's Superintendent may only be replaced with the mutual written agreement of County and Design-Builder, Notwithstanding the foregoing, the Design-Builder 's Representative and Design-Builder 's Superintendent will be replaced upon reasonable request of the County.

Task 14.8 - Subcontractor Coordination

Design-Builder is responsible for coordinating the activities of its own Subcontractors.

Task 14.9 - Work Site Cooperation

If County is performing other work with separate contractors under its control as part of the Project or as a separate project, Design-Builder agrees to cooperate and coordinate its Construction Work with the work of County's separate contractors so that the Project and any separate project(s) on which the separate contractors are working can be completed in an orderly and coordinated manner reasonably free of significant disruption to any party. In this regard:

Task 14.9.1 - County Use of Work Site

County reserves the right to award other contracts related to the Project, or to perform certain work. The County also reserves the right to award other contracts unrelated to the Project but involving work in the vicinity of the Project or to perform unrelated work itself. Such other work may or may not be known to the County or disclosed to the Design-Builder prior to the date of the Contract. The Design-Builder will afford the County and other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and will properly coordinate its Construction Work with theirs in such manner as County may direct. The Design-Builder will also permit reasonable access of other contractors to the Site and their work.

Task 14.9.2 - Right to Comment on County Work Site Activity

The County will timely provide the Design-Builder with a copy of all plans, specifications, schedules, and other data relating to other contracts or work. The Design-Builder will thoroughly examine these documents and will within three (3) days of completing such examination notify the County in writing of any conflicts with the Construction Work to be performed by the Design-Builder. In no event will such notice be given so late as to interfere with or delay Construction Work to be performed by the Design-Builder. Failure of Design-Builder to review or provide written notice as provided above will constitute a waiver of any objections or claims Design-Builder may have as a result of the necessity to coordinate Design-Builder 's Construction Work with other activities.

Task 14.9.3 - Waiver of Claim against County

Should Design-Builder sustain any property damage through any act or omission of any other contractor, Design-Builder will have no claim or cause of action against County for such damage and hereby waives any such claim. The Design-Builder does not waive any claim or cause of action against any other contractor or subcontractor to recover any and all damages sustained by reason of the acts or omissions of such other contractor. The phrase "acts or omissions" as used in this section will include, but not be limited to, any unreasonable delay by any such other contractors, whether due to negligence, gross negligence, inadvertence or any other cause.

Task 14.9.4 - Duty to Remedy/Indemnification

Should the Design-Builder cause damage to the work or property of any other contractor or of the County, the Design-Builder will upon receiving due notice promptly attempt to settle with such other contractor or the County by agreement, repair or otherwise to resolve the dispute. If such separate contractor sues or initiates a proceeding against the County on account of any damage caused by the Design-Builder, the County will notify the Design-Builder who will defend and indemnify County against such proceedings to the extent required by Article 8 of the Contract.

Task 14.10 - Work Site Appearance

Design-Builder will keep the Site free from debris, trash and construction wastes to permit Design-Builder to perform its Construction Work efficiently, safely, and so as not to interfere with the use of any adjacent land areas and will maintain the reasonable appearance of the jobsite and all storage/staging areas. Upon Substantial Completion of the entire Construction Work or a portion of the Construction Work to be accepted separately by County, Design-Builder will remove all debris, materials, wastes, equipment, machinery and tools from the Construction Work to permit County to occupy the entire Construction Work or portion of the Construction Work for the use for which it is intended.

Task 14.11 - Changes to Approved Work

Any changes affecting previously approved Construction Work will require prior written approval of County.

Task 15 - Control of Construction Work

Task 15.1 - Means and Methods

Design-Builder will at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction. Design-Builder will perform all construction activities efficiently and with the requisite expertise, skill, and competence to satisfy the requirements of the Contract and Construction Documents.

Task 15.2 - Supervision and Coordination of Work

The Design-Builder will supervise and direct the work of its employees and Subcontractors and coordinate the Construction Work with the activities and responsibilities of the County to complete the Construction Work in accordance with the Construction Documents and the Contract and within the Contract Time(s).

Task 15.3 - Lines of Authority

The Design-Builder will establish an on-site organization and lines of authority in order to carry out the overall plans for completion of the Construction Work.

Task 15.4 - Direct Supervision of Work

All elements of the Work will be under the direct supervision of a foreman or his designated representative on the Site who will have the authority to take actions required to properly carry out that particular element of the Work.

Task 15.5 - Superintendent

The Superintendent will represent the Design-Builder in its absence and all directions given to the Superintendent will be as binding as if given to the Design-Builder. Important directions will be confirmed by written request in each case. The Superintendent will give efficient supervision to the Work, using its best skill and attention. In the event of noncompliance with this Task, County may require the Design-Builder to stop or suspend the Work in whole or in part.

Task 15.6 - Measurements

Before ordering materials or doing work, the Design-Builder and each Subcontractor will verify measurements at the Site and will be responsible for the correctness of such measurements.

Task 15.7 - Field Measurements

Design-Builder will take field measurements and verify field conditions and will carefully compare such field measurements and conditions and other information known to the Design-Builder with the Construction Documents before commencing activities. Errors, inconsistencies, or omissions discovered will be reported to County at once.

Task 15.8 - Survey

Design-Builder will establish and maintain all building and construction grades, lines, levels, and benchmarks, and will be responsible for accuracy and protection of same. This Work will be performed or supervised by a civil engineer or surveyor licensed in the State of Arizona.

Task 15.9 - Dust Control

Design-Builder will take whatever steps, procedures, or means necessary to prevent any dust nuisance due to construction operations. The dust control measures will be maintained at all times to the reasonable satisfaction of County and in accordance with the requirements of the Pima County Department of Environmental Quality.

Task 15.10 - Sanitary Provisions

Design-Builder will provide and maintain in a neat and sanitary condition such accommodations for the use of its employees as may be necessary to comply with the requirements and regulations of the State Department of Health or other authorities having jurisdiction.

Task 15.11 - On-Site Storage

Only materials and equipment which are to be used directly in the Work will be brought to and stored on the Site by the Design-Builder. Equipment no longer required for the Work will be removed from the Site within a reasonable time.

Task 15.12 - Responsibility for Materials and Equipment

Protection of construction materials and equipment stored at the Site from weather, theft, damage, and all other adversity is the responsibility of the Design-Builder. No part of damage or loss arising from Design-Builder's failure to provide such protection will be compensable from the Design-Builder's contingency.

Task 16 - Daily Log

Task 16.1 - Log Content

The Design-Builder will maintain a daily log of construction activities for each calendar day during the Construction Phase, using a form approved by Design-Builder and County. The Design-Builder will document all activities at the Site, including:

- Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the Site, and any other weather conditions which adversely affect Construction Work at the Site;
- Soil conditions which adversely affect Construction Work at the Site;
- The hours of operation by Design-Builder and individual Subcontractor personnel;
- The number of Design-Builder and Subcontractor personnel present and working at the Site, by subcontract and trade, and updated schedule activity number;

- The equipment active or idle at the Site;
- A description of the Construction Work being performed at the Site by updated schedule activity number;
- Any delays, disruptions or unusual or special occurrences at the Site;
- Materials received at the Site; and
- A list of all visitors at the Site.

Task 16.2 - Copies to County

The Design-Builder will provide copies of the daily logs to County on a weekly basis. Providing copies of the daily log to County does not satisfy any requirement in the Design-Builder Contract for written notice to the County.

Task 17 - Supervision and Construction Procedures

Task 17.1 - Duty to Supervise and Direct

The Design-Builder will supervise and direct the Construction Work, using the Design-Builder's best skill and attention. The Design-Builder will be solely responsible for coordination and accomplishment of all portions of the Construction Work in accordance with the Construction Documents and the Contract.

Task 17.2 - Responsibility for Actions

The Design-Builder will be responsible to the County for the acts and omissions of all entities or persons employed by or operating under the direction of Design-Builder including, but not limited to, Subcontractors, material and equipment suppliers, vendors, and service providers.

Task 17.3 - Responsibility for Inspection Delays

Delays in or results from inspections, tests, or approvals required or performed by persons other than the Design-Builder will not relieve Design-Builder from its obligation to perform the Construction Work in accordance with the Construction Documents and the Contract. Nothing contained in this Task 17.3 precludes the Design-Builder from asserting any rights it may have under the Contract in the event County is responsible for unreasonable delays in the making of any inspections, tests, or approvals.

Task 17.4 - Superintendent Authority

The superintendent and representatives will represent the Design-Builder and all communications given to either representative will be binding on the Design-Builder. All oral communications will be confirmed in writing.

Task 17.5 - Skilled Employees

The Design-Builder will at all times enforce strict discipline and good order among its employees and its Subcontractors' employees and will not allow employment on the Construction Work of any unfit person or anyone not skilled in the task or trade assigned to him or her.

Task 17.6 - County Access to Work

The Design-Builder will at all times allow the County or any other representative designated by County access to the Construction Work to observe progress and inspect the quality of work and conformance to the Construction Documents and the Contract.

Task 17.7 - Uncovering Work

Any Construction Work required to be observed or inspected, as applicable, by the County prior to being covered, which is covered without prior observation or inspection, as applicable, or without prior consent of the County, must be uncovered and recovered by the Design-Builder, if requested by the County, at no cost to County, except where

Design-Builder has complied with the notice requirement of Task 17.8 and County or any other representative designated by County fails to inspect the Construction Work to be covered up.

Task 17.8 - Inspection Notice to County

Design-Builder will notify the County in writing at least twenty-four (24) hours prior to the time at which the County must be present to perform an inspection or observation, as applicable. Failure to provide such notice will make the Design-Builder responsible for uncovering the affected Construction Work including any costs to provide reasonable and required access to the Construction Work.

Task 17.9 - County Authority to Keep Work Uncovered

Notwithstanding the foregoing, if after inspection by County, the quality of the Construction Work is in question or an error in measurement is suspected, County may require that Design-Builder leave the work uncovered pending final resolution of the discrepancy.

Task 18 - Construction Documents

Task 18.1 - Reporting of Errors

Design-Builder will study and compare the Construction Documents in advance of beginning each portion of the Construction Work and immediately report to the County any material error, inconsistency, conflict, ambiguity, or omission that is discovered.

Task 18.2 - Shop Drawings Required

The drawings included in the Construction Documents are intended to show general arrangements, design, and extent of Construction Work and are not intended to serve as shop drawings. When specified by County, Design-Builder will not perform any portion of the Construction Work without approved shop drawings, product data, or samples. Any Construction Work performed in violation of this requirement will be solely at the Design-Builder's risk regardless of County's knowledge of such Construction Work.

Task 18.3 - Interpretation of Construction Document Conflicts

In the event of any conflict or ambiguity, the Construction Documents will be interpreted as being complementary, requiring a complete Project or designated portion thereof to be accepted separately by the County. Any requirement occurring in any one of the Construction Documents is as binding as though occurring in all Construction Documents. Generally, the specifications address quality, types of materials and contractual conditions while the drawings show placement, sizes, and fabrication details of materials. In the event of any conflict in the Construction Documents, the order of precedence stated below will govern:

- Contract addenda (subsequent addenda will govern over prior addenda only to the extent modified).
- The Contract document.
- Design-Builder Special Conditions.
- Technical Specifications.
- Standard Specifications & Details for Public Improvement, latest Edition.
- General Conditions.
- Glossary of Terms.
- In case of conflict between drawings and specifications, the specifications will govern.
- Conflicts within the drawings:
 - 1) Schedules, when identified as such, will govern over all other portions of the drawings.
 - 2) Specific notes will govern over all other notes and all other portions of the drawings, except the schedules described in Item (c)(1) above.

- 3) Larger scale drawings will govern over smaller scale drawings.
- 4) Figured or numerical dimensions will govern over dimensions obtained by scaling.
- If provisions of codes, safety orders, Construction Documents, referenced manufacturer's specifications, or industry standards are in conflict, the more restrictive or higher quality will govern.
- In the event of any conflict or ambiguity, Design-Builder will request an interpretation by the Design-Builder before performing the Construction Work.

Task 18.4 - Implied Minor Details

If the Construction Documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail will be deemed to be an implied requirement of the Construction Documents in accordance with such standard. "Minor detail" will include the concept of substantially identical components, where the price of each such component is small even through the aggregate cost or importance is substantial and will also include a single component which is incidental, even though its cost or importance may be substantial. The quality and quantity of parts or material so supplied will conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts or materials otherwise set forth in the Construction Documents.

Task 19 - Submittals, Drawings, and Shop Drawings

Task. 19.1 - Records Maintained at Work Site

The Design-Builder will maintain at the Site, for the use of County, one copy of all drawings, specifications, bulletins, addenda, Change Orders, field orders, approved shop drawings, approved submittals, supplementary instructions, requests for information, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, guarantees, and other Contract related documents and their modifications, if any, in good order and marked daily by the Design-Builder to record all approved changes made during construction. These will be turned over to the County by Design-Builder at Substantial Completion.

Task 19.2 - Submittals to County

The Design-Builder will submit to County, with such promptness as to cause no delay in the Construction Work or in the work of any other contractor, all submittals and shop drawings as required by the Construction Documents and the Contract or as necessary to illustrate details of the Construction Work.

Task 19.3 - Submittal Content Standards

Each submittal and shop drawing must be accompanied by a transmittal letter containing a list of the titles and numbers of the shop drawings. Each series will be numbered consecutively for ready reference and each submittal and shop drawing will be marked with the following information:

- Date of submission
- Name of Project
- Location of Project
- Branch of Construction Work (specification section)
- Project number
- Name of submitting Design-Builder
- Name of Subcontractors
- Revision number

Task 19.4 - Design-Builder Review of Subcontractor Submittals

All Subcontractor submittals and shop drawings will be reviewed by Design-Builder prior to being submitted to County and will bear a written statement by the Design-Builder that the submittals and shop drawings are consistent with the Construction Documents or, if not totally consistent, will bear a written statement indicating all deviations from the Construction Documents. By approving, verifying and submitting Shop Drawings, Product Data, Samples, and similar submittals, the Design-Builder represents that the Design-Builder has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents. Any submittals or shop drawings submitted without the statement will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted, and any delay caused thereby will be the Design-Builder's sole responsibility. This review by Design-Builder of Subcontractor submittals and shop drawings will not be construed as Design-Builder approval of the design therein except that it will be a representation that the letter accompanying the submittal or shop drawings does indicate all deviations from the Construction Documents as required by Task 19.5,

Task 19.5 - Deviations from Contract Documents

Design-Builder will include with submittals and shop drawings, a written statement indicating all deviations from the Construction Documents and Contract. Failure to notify County of such deviations may be grounds for subsequent rejection of the related Construction Work or materials. If, in the opinion of County, the deviations are not acceptable, the Design-Builder must furnish the item as specified or as indicated on the drawings included in the Construction Documents and in accordance with the Contract, Design-Builder will not be relieved of responsibility for deviations from requirements of the Contract Documents by County's approval of Shop Drawings, Product Data, Samples, or similar submittals unless Design-Builder has specifically informed County in writing of such deviation at the time of submittal and County has given written approval to the specific deviation. The Design-Builder will not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by approval thereof.

Task 19.6 - Responsibility for Submittals

It is the Design-Builder's obligation and responsibility to check all of its submittals and shop drawings and to be fully responsible for them and for coordination with connecting Construction Work. Submittals and shop drawings will indicate in detail all parts of an item of Construction Work, including, without limitation, erection and setting instructions, and engagements with work of other trades or other separate contractors.

Task 19.7 - Design-Builder Representations Concerning Correctness of Submittals

By reviewing or submitting submittals and/or shop drawings, the Design-Builder represents that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each submittal and/or shop drawing with the requirements of the Construction Documents and Contract. If any specified material item or part is not available, the Design-Builder will so indicate to County.

Task 19.8 - County Review

The County will review and approve submittals and shop drawings and return them to Design-Builder within ten (10) days of receipt unless otherwise previously agreed in writing. For scheduling purposes, Design-Builder must assume a ten (10) day review period for each submittal or set of shop drawings. For complex submittals, Design-Builder must assume two ten (10) day review cycles. If review and approval are delayed beyond ten (10) days, County will notify Design-Builder in writing stating the reason for the delay. Approval will not relieve the Design-Builder from responsibility for deviations from the Construction Documents or Contract, unless it has been called to County's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to affect an improvement in the Construction Work and does not increase the GMP or Contract Time(s). Any such modification is subject to all other provisions of the Construction Documents and Contract and is without prejudice to any and all rights of County under any surety bond.

Task 19.9 - Response to County Rejection or Comments

If the County returns a submittal or shop drawing to Design-Builder with the notation "rejected", "revise and resubmit", or "approved as noted", Design-Builder, so as not to delay the Construction Work, will promptly submit a submittal or shop drawing conforming to the requirements of the Construction Documents and Contract and indicating in writing on the submittal or shop drawing and on the transmittal what portions of the resubmittal have been altered in order to meet with the approval of the County. Any other differences between the resubmittal and the prior submittal will be indicated on the shop drawing and on the resubmittal as a special note.

Task 19.10 - Untimely Submittal

No extension of time will be granted to Design-Builder because of its failure to submit submittals or shop drawings in ample time to allow for review, possible resubmittal, and approval. Construction Work will not commence until the Design-Builder has received written approval.

Task 19.11 - Transmittal of Approved Submittals to Subcontractors

The Design-Builder will furnish prints of its approved submittals and shop drawings to all Subcontractors whose work is in any way related to the Construction Work covered by the Submittal or shop drawings.

Task 20 - Product Samples, Tests, and Certificates

Task 20.1 - Requirement to Furnish Product Samples

Design-Builder will furnish product samples of all items requested or required by the specifications. Product samples will be properly identified and submitted with such promptness as to cause no delay in Construction Work or in the work of any other contractor and to allow time for consideration by County. Design-Builder will submit product samples to County for review and approval in accordance with Task 19, above, and this Task 20.

Task 20.2 - Submittal of Product Samples

Each product sample must be accompanied by a letter of transmittal containing the following information:

- Date of submission
- Name of Project
- Location of Project
- Branch of Construction Work (specification section number) Project number
- Name of submitting Design-Builder
- Name of Subcontractor

Task 20.3 - Certification of Compliance

Design-Builder will furnish to County a certificate stating that material or equipment submitted complies with the Construction Documents and the other Contract Documents. If a certificate originates with the manufacturer, the Design-Builder will endorse it and submit it to County together with a statement of compliance in its own name.

Task 20.4 - Duty to Perform

No tests, inspections, observations or approvals performed or given by County or others acting for County, or any agency of Federal, State, or local government, nor any acts or omissions by County in administering the Contract will relieve Design-Builder from its duty to perform the Construction Work in accordance with the Construction Documents, the Contract, and applicable law.

Task 20.5 - Destruction of Samples

Unless the County is requested at the time of submittal to return samples at Design-Builder's expense, rejected samples will be destroyed.

Task 20.6 - County Testing Not Acceptance

After delivery of materials, County may make such tests as it deems necessary, with samples required for such tests being furnished by and at the cost of Design-Builder. Any such test is for the benefit of County and will not relieve Design-Builder of the responsibility for providing quality control measures to assure that Construction Work strictly complies with the Construction Documents and the Contract. No test will be construed as implying acceptance of materials, work, workmanship, equipment, accessories, or any other item or thing. Any material not meeting the requirements of the specifications may be rejected by County and will be removed immediately and replaced in an acceptable manner.

Task 20.7 - Removal of Rejected Work

On the basis of the test results, materials, workmanship, equipment, or accessories may be rejected even though general approval has been given, if items have been incorporated into the Construction Work, County will each have the right to cause their removal and replacement by items meeting Construction Document requirements or to demand and secure appropriate reparation to County from the Design-Builder.

Task 20.8 - Cooperation with Testing Efforts

Design-Builder will cooperate with the selected testing laboratory and all others responsible for testing and inspecting the work and will provide them access to the Work at all times. The County and/or selected testing laboratory will make every effort as to not delay the work.

Task 20.8.1 - Compliance with Work Site Rules

Any person employed by any testing laboratory who, in the opinion of the Design-Builder, does not perform his work in a proper, skillful, and safe manner or is intemperate or disorderly will, at the written request of the Design-Builder, be removed from the Work by County or testing laboratory employing such person, and will not be employed again in any portion of Work without the written approval of the Design-Builder.

Task 20.8.2 - Testing Prior to Delivery

At the option of County, materials may be tested at the source of supply before delivery is started. County will make every effort necessary to not delay the work if materials are to be tested at the source of supply.

Task 20.9 - Trade Name Substitutions

Unless the Contract Documents indicate that no substitutions are permitted, Design-Builder may, subject to the following conditions, substitute or supply alternate items when equipment, materials, or patented processes are referenced in the Contract Documents by manufacturer, trade name, make, or catalog number:

- The substitution will be submitted to County in writing by Design-Builder.
- Design-Builder will certify that the substitution will perform the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as that specified.
- The submittal will state any required changes in the Construction Documents to adapt the design to the proposed substitution.
- The submittal will contain an itemized estimate of all costs and credits that will result directly and indirectly from the acceptance of such substitution, including cost of design, license fees, royalties, and testing. Also, the submittal will include any adjustment in the Contract Time created by the substitution.

- Design-Builder, if requested by the County, will submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution

County will make the final decision and will notify Design-Builder in writing as to whether the substitution has been accepted or rejected. If County does not respond in a timely manner, Design-Builder will continue to perform the Work in accordance with the Contract and the substitution will be considered rejected.

Task 20.10 - Field Inspection

County may utilize field inspectors during construction to assist County in observing Design-Builder's performance. Such inspectors are solely for the purpose of assisting County and should not be confused with an inspector with a regulatory agency or with an inspector from a County-selected laboratory. In conjunction with these activities, the inspector may perform the following activities:

- Thorough onsite observation of the Work in progress and field checks of materials and equipment, the inspector will endeavor to provide protection against defects and deficiencies in the Work.
- The inspector will be authorized to inspect all Work and materials furnished. Such inspection may extend to all or part of the Work and to the preparation, fabrication, or manufacture of the materials to be used.
- The inspector will not be authorized to issue instructions contrary to the Construction Documents or to act as foremen for the Design-Builder.
- The inspector will have the authority to reject work or materials until any questions at issue can be decided by County.
- Throughout startup and commissioning, and at completion of performance testing, field inspectors will utilize optical gas imaging technologies for leak detection. Any defects or deficiencies in work must be remedied.

The use of such services by County will not make County responsible for or give the County control over construction means, methods, techniques, sequence, or procedures, or for safety precautions or programs, or responsibility for the Design-Builder's failure to perform the work in accordance with Contract Documents.

County and its representatives will at all reasonable times have access to the work wherever it is in preparation or progress. Design-Builder will provide proper facilities for such access and for inspection.

During the course of construction, as identified in the scheduled, initial construction inspections, if work fails to comply with the Project plans and specifications, Design-Builder will be responsible for all additional engineering consultant costs associated with re-inspections, meetings and reports.

Task 21 Redline Drawings

Task 21.1 - Monthly Review

On a monthly basis, the Design-Builder will complete and turn over to County redlined drawings for review. The redlined drawings will clearly indicate all field changes that were made to adapt to field conditions, field changes resulting from Change Orders, and all buried and concealed installation of piping, conduit and utility services. All buried and concealed items will be accurately located on the redlined drawings as to depth and in relationship to not less than two permanent features such as manholes or corners. The redlined drawings will be clean, and all changes, corrections, and dimensions will be given in a neat and legible manner in a contrasting color.

Task 21.2 - Changes Shown

Items required to be marked include but are not limited to:

- Dimensional changes to the drawings.
- Revisions to details shown on Drawings
- Depths of foundations or footings

- Locations and depths of underground utilities
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing, if any.
- Locations of concealed internal utilities.
- Changes made by Change Order.
- Details not on original Contract Drawings.

Task 21.3 - Basis Documents

Design-Builder will completely and accurately mark Project Red Line Record Drawing prints of Construction Documents or Shop Drawings, whichever is most capable of indicating the actual physical condition. Where Shop Drawings are marked, they must display a cross-reference to their location in the Construction Documents.

Task 21.4 - Changes after Substantial Completion

Changes or corrections in the Construction Work made subsequent to Substantial Completion will be submitted to County as part of the red line record drawings.

Task 22 - Startup

Task 22.1 - Startup Plan

D-B will develop a detailed plan for the startup of the Project (the "Startup Plan") and submit it to County for review and approval. The Startup Plan will address all tasks necessary for a successful startup of the Project including, without limitation, the following items:

- The responsible party for each task identified in the Startup Plan.
- A schedule for all Startup tasks.
- Actions to be taken should some portion of the Project become inoperable or fail to perform as anticipated.
- Expected sludge and chemical requirements and usage during commissioning and startup of the Project.
- County and D-B staffing during the startup.
- Communications procedures.
- SCADA system operation.
- Control of odors.
- The relationship between the steps in the Startup Plan and the steps specified below to be undertaken by D-B prior to commencement of Performance Testing.
- Identification of any special safety requirements for startup personnel.

Task 22.2 - Startup

D-B will conduct the Startup consistent with the Startup Plan.

Task 23 - Performance Testing

The purpose of the Performance Testing is to demonstrate that the Project meets all performance requirements set forth in the Contract.

Task 23.1 - Performance Test Plan

D-B will develop a detailed plan for conducting the Performance Test (the "Performance Test Plan") and submit it to County for review and approval. The Performance Test Plan will describe the D-B's approach and details for meeting the Contract requirements. The Performance Test Plan will address all tasks necessary to successfully test the performance of the Project including, without limitation, the following items:

- Facility configuration -identify which of the components in each unit process will be utilized in the test.
- Provide anticipated chemical dosages to be used.
- Test date -the scheduled date the test will be performed by the D-B.
- Related systems required if the test would involve coordination with ancillary or support systems, identify these ancillary or support systems in the plan and schedule.
- Tasks and responsibilities, staffing requirements, support -the specific tasks or activities, both non-process and process related, which are required for the successful completion of the test.
- Response procedures for unsuccessful test results including definition of threshold results that constitute overall Performance Test failure.
- Internal and external communications protocols.
- Operating and maintenance schedule during testing.
- Operating conditions for Influent and Effluent systems.
- Procedures for demonstrating compliance with every Performance Test Procedure and Standard.
- Procedure for testing cathodic protection systems, if such systems are provided.

The Performance Test Plan will also describe methods for demonstrating compliance with Performance Guarantees during the performance of the Performance Tests, including:

- A list of all parameters to be monitored and measurements to be made including but not limited to all Influent and Effluent and Sludge parameters to be monitored and a schedule of monitoring, describing sampling locations, analytical methods and sampling frequencies at which parameters will be monitored on a continuous or other defined basis.
- Identification of equipment calibrations to be performed, descriptions of all calibration techniques to be used and timing of calibrations relative to Performance Testing (all instruments used in Performance Testing operations and to monitor and evaluate Performance Testing will be calibrated in accordance with manufacturer's requirements), QA/QC procedures, including those to be utilized for all equipment used for testing and measuring different parameters within the treatment process and at the process control laboratory, contract laboratories and County laboratory. The description will address the calibration practices, including the frequency and accuracy requirements. The calibration procedures will consider intermediate spot and cross checks, in addition to the formal calibration periods.
- A full description of any analytical methods and techniques that will be utilized to ensure that all Applicable Law and Performance Guarantees are met. In addition, descriptions of how data collected will be compared with Performance Guarantees will be provided and will be in a manner that complies with Applicable Law. Provide examples of any tools such as flow charts, check sheets or any other data presentation and evaluation techniques that will be utilized.
- A list of real-time data fields that will be provided to the County during Performance Testing.
- A protocol for enabling the County to collect samples during Performance Testing.

The Performance Test Plan will also specify the form and content of the Performance Test report and include specific, detailed sampling protocols to be utilized while conducting the Performance Tests. Laboratory analyses to determine compliance with the Performance Guarantee will be conducted by the County laboratory.

Task 23.2 - Performance Test Procedures and Standards

D-B will perform Performance Testing in accordance with the requirements of the approved Performance Test Plan. If there is a failure to meet Performance Test Procedures and Standards, the D-B will conduct re-tests until the Performance Procedures and Standards are met in accordance with the Contract Technical Specifications. No temporary equipment will be allowed to operate during Acceptance Testing. The Performance Test will be repeated in its entirety at the D-B's expense if the D-B is forced to use any temporary equipment to maintain operation.

Task 23.3 - General Performance Standards

The D-B will perform the Performance Test for a continuous 60-day period to demonstrate that the Project can meet the Performance Guarantees over the range of sludge flows and loadings received at the Project. In order to satisfy the Performance Test requirements, the D-B must certify to the County in the Performance Test Report that the Project:

- Was designed and constructed in accordance with the Contract Standards.
- Operated in accordance with the Contract Standards with only the normal complement of employees included in the D-B's staffing plan. Additional staff may be on-site to aid with sample collection and engineering support only. Additional staff and duties to be approved and authorized by County. Use of unauthorized staff will be cause to invalidate the Performance Test.
- Operated with all automated and computerized systems in full and continuous operation.
- Operated properly during manual and automatic shutdown and start-up.
- Met the Performance Guarantees for the duration of the Performance Test.

Task 23.4 Performance Test Report.

The D-B will prepare reports describing and documenting each Performance Test. The report(s) will include, at a minimum, the following information:

- A certification stating that testing was conducted in accordance with the approved Performance Test Plan.
- A certification of the results of each Performance Test, including:
 - A determination of the extent to which the results comply with the Performance Test Procedures and Standards.
 - For each Performance Guarantee a determination of the extent to which the Facility complies with the Performance Guarantee.
- All required data measured and recorded during the Performance Test, including all laboratory analyses, chemical consumption, instrument calibrations, pressures, and other measurements. Copies of original data sheets, log sheets, calculations, laboratory reports, and test sheets will be provided. D-B will retain all original data sheets, log sheets, calculations, laboratory reports, and test sheets and make them available for County inspection upon request.
- All necessary certifications relating to testing, evaluation, analyses, and performance.
- A record of all equipment failures, repairs, and preventative maintenance.
- A summary of all data and calculations demonstrating the ability of the Project to meet the requirements of the Performance Guarantees.
- A summary of test results and conclusive evidence of compliance with all Performance Test requirements.
- Any additional data reasonably requested by the County in approving the Performance Test Plan to be included in such report.

All certifications required in the Performance Test report will be signed by the D-B and signed and sealed by an engineer employed by the lead design firm.

END APPENDIX A – PROJECT SCOPE OF WORK

APPENDIX B - SUPPLEMENTAL PROVISIONS – CONSTRUCTION COSTING (5 pages)

ARTICLE 1 – GENERAL

Design-Builder will develop the Guaranteed Maximum Price (GMP) as provided for in this Contract and appendices. The GMP Proposal for the entire Work (or portions thereof) will be presented in a format acceptable to County and will include the clarifications or assumptions upon which the GMP Proposal is based.

A. Unless otherwise directed by County, each GMP proposal will include all of the following components:

1. Summary of the GMP: A summary of the GMP with a total for each of the components of the GMP defined in the Construction Provisions (i.e. "Cost of the Work", "Design-Builder Contingency", "Fee") as described and as shown in **Attachment 1 to this GMP Appendix**. If there will be multiple GMPs, then the GMP Summary will be presented in a spreadsheet format with each successive GMP in a separate column with the total GMP in the rightmost column.
2. Description of Work: a brief description of the Work to be performed for the Project or phase(s) to which the GMP proposal applies. Exclusions must be clearly stated.
3. List of Plans and Specifications used for GMP Proposal: A list of the Plans and Specifications with latest issuance date including all addenda used in preparation of the GMP proposal. (Date stamped and signed by Design-Builder).
4. List of clarifications, assumptions and exclusions: A list of the clarifications, assumptions, and exclusions by Design-Builder with regard to the Scope of Work in the GMP proposal, to supplement the information contained in the documents.
5. Project Schedule in Critical Path Method format: A Critical Path Method (CPM) diagram construction schedule. An updated Project Management Plan will also be submitted with each GMP proposal.
6. A calendared spend plan to show a cash-flow forecast based on the proposed construction schedule, schedule of values and GMP. If the construction covered by the GMP overlaps construction performed under a prior GMP, their cash flows will be consolidated into a single cash-flow statement.
7. Subcontractor Selections / DBE Requirements / Utilization Form / Letters of Intent: A summary of the subcontractor selections, including an DBE requirements section addressing the goals set for the Project and the current status on meeting the Project goals. The Utilization Form and Letters of Intent must be attached when subcontractor selection has been made prior to final GMP submittal. Subcontractor selections must conform to the approved Subcontractor Selection Plan provided by Design-Builder.

B. Design-Builder must keep the submittal package as simple as possible and submit it on 8 ½ x 11-inch paper. Color or shading must be kept to a minimum. If used, the color or shading must not affect the reproduction of the submittal in black and white.

C. The Parties may, by agreement, use a simplified GMP format for smaller projects or phases, so long as the documents supporting the GMP clearly delineate the Work—or that portion of the Work—to which the GMP applies and provide a schedule for completion of the Work.

ARTICLE 2 – COST OF THE WORK

The term "Cost of the Work" means costs necessarily incurred by Design-Builder in the proper performance of the Work. Such costs will be at rates not higher than the standard paid at the place of the Project except with prior consent of County. The Cost of the Work includes only the items set forth in this Article.

1. Wages of direct employees of Design-Builder performing the Work at the site or, with County's agreement, at locations off the site, provided, however, that the costs for those employees of Design-Builder performing design services shall be calculated on the basis of prevailing market rates for design professionals performing such services or, if applicable, those rates set forth in an exhibit to this Agreement.
2. Wages or salaries of Design-Builder's supervisory and administrative personnel engaged in the performance of the Work and who are located at the site or working off-site to assist in the coordination, production or transportation of material and equipment necessary for the Work.
3. Wages or salaries of Design-Builder's personnel stationed at Design-Builder's principal or branch offices and performing the payment of the salaries of Design-Builder's project management, estimating, administrative, scheduling, safety and other personnel when working on items of Work specifically related to the Project at Design-Builder's principal office, Design Consultant(s)' office, job site, field office or any other location for that portion of their time spent in the performance of the Work for the Project shall be included in the Cost of the Work. The cost of Vice Presidents and the President of Design-Builder is included in Design-Builder's Fee and is not part of the Cost of the Work. The reimbursable costs of personnel stationed at Design-Builder's principal or branch offices shall include a fifty percent (50%) markup to compensate Design-Builder for the Project related overhead associated with such personnel.
4. Costs incurred by Design-Builder for employee benefits, premiums, taxes, insurance, contributions and assessments required by law, collective bargaining agreements, or which are customarily paid by Design-Builder, excluding bonuses, to the extent such costs are based on wages and salaries paid to employees of Design-Builder covered under paragraphs 1 through 3 of this Article.
5. The reasonable portion of the cost of travel, accommodations and meals for Design-Builder's personnel necessarily and directly incurred in connection with the performance of the Work.
6. Payments properly made by Design-Builder to Subcontractors and Design Consultants for performance of portions of the Work, including any insurance and bond premiums incurred by Subcontractors and Design Consultants.
7. Costs incurred by Design-Builder in repairing or correcting defective, damaged, or nonconforming Work, provided that such defective, damaged, or nonconforming Work was beyond the reasonable control of Design-Builder, or caused by the ordinary mistakes or inadvertence, and not the negligence of Design-Builder or those working by or through Design-Builder. If the costs associated with such defective, damaged or nonconforming Work are recoverable from insurance, Subcontractors or Design Consultants, Design-Builder will exercise best efforts to obtain recovery from the appropriate source and credit County if recovery is obtained.
8. Costs, including transportation, inspection, testing, storage and handling, of materials, equipment and supplies incorporated or reasonably used in completing the Work.
9. Costs less salvage value of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned Design-Builder employees or subcontractors that are not fully consumed in the performance of the Work and which remain the property of Design-Builder, including the costs of transporting, inspecting, testing, handling, installing, maintaining, dismantling and removing such items.
10. Costs of removal of debris and waste from the project site.
11. The reasonable costs and expenses incurred in establishing, operating, and demobilizing the site office, including the cost of facsimile transmissions, long-distance telephone calls, postage and express delivery charges, telephone service, photocopying, and reasonable petty cash expenses.
12. Rental charges and the costs of transportation, installation, minor repairs and replacements, dismantling and removal of temporary facilities, machinery, equipment, and hand tools not customarily owned by the workers, which are provided by Design-Builder at the project site, whether rented from Design-Builder or others, and incurred in the performance of the Work.
13. Premiums for insurance and bonds required by the Contract or the performance of the Work.
14. All fuel and utility costs incurred in the performance of the Work.

15. Sales, use, privilege, or similar taxes, tariffs, or duties incurred in the performance of the Work.
16. Costs for permits, royalties, licenses, tests, and inspections incurred by Design-Builder as a requirement of the Contract Documents provided, however, that costs for re-tests and re-inspections are not included in the Cost of Work to the extent the re-tests and re-inspections result from re-work or re-testing due to Design-Builder's failure to meet County requirements under this Contract.
17. Deposits which are lost, except to the extent caused by Design-Builder's negligence or delay.
18. Costs incurred in preventing damage, injury, or loss in case of an emergency affecting the safety of persons and property except to the extent the emergency was caused by Design-Builder's negligence.
19. Other costs reasonably and properly incurred in the performance of the Work to the extent approved in writing by County.

ARTICLE 3 - COSTS NOT TO BE REIMBURSED

The following are excluded from the Cost of the Work:

1. Compensation for Design-Builder's personnel stationed at Design-Builder's principal or branch offices, except as provided for in paragraphs 1 through 3 of Article 2.
2. Overhead and general expenses, except as provided for elsewhere in this definition, or which may be recoverable for changes to the Work.
3. The cost of Design-Builder's capital used in the performance of the Work.
4. Costs that would cause the GMP, as adjusted in accordance with the Contract Documents, to be exceeded.

ARTICLE 4 - DISCOUNTS, REBATES AND REFUNDS

- A. Cash discounts obtained on payments made by Design-Builder will accrue to County if (1) before making the payment, Design-Builder included them in an Application for Payment and received payment therefor from County, or (2) County has deposited funds with Design-Builder with which to make payments; otherwise, cash discounts will accrue to Design-Builder. Trade discounts, rebates, refunds, and amounts received from sales or surplus materials and equipment will accrue to County, and Design-Builder will make provisions so that they can be secured.
 1. Cost of the Work will be credited with all insurance policy discounts, performance and payment bond rebates or refunds, refunds or return premiums from any subcontractor default insurance, refunds or rebates from any Design-Builder controlled insurance programs applicable to the project, merchandise rebates of any nature, refunds of any nature, insurance dividends; and a portion of any volume rebates or free material credits earned with purchase of material or other goods and services charged to the job.
 2. "Cash" discounts which may accrue to Design-Builder will be limited to a maximum of one and one-half percent (1.5%) of invoice cost. Any portion of "Cash" discounts greater than one and one-half percent (1.5%) will automatically accrue to County if Design-Builder is eligible to take advantage of the discounts.
- B. Amounts that accrue to County in accordance with the provisions of Paragraph 4.A.1 will be credited to County as a deduction from the Cost of the Work.

ARTICLE 5 - CONTINGENCY FUND

Generally:

- A. The GMP may include a Design-Builder Contingency in the amount stated in the GMP Summary. Each line item of the GMP Summary for which risk remains for the Design-Builder after the Design and Preconstruction Phase will carry an agreed upon contingency that can be traced back to the initial cost model. Subject to the terms of the Contract Documents and with prior notification to and approval by County, Design-Builder

may allocate from and apply against the Design-Builder Contingency increases in the Cost of the Work that could not have been reasonably anticipated by a Design-Builder using the standard of care and skill that a professional Design-Builder in Arizona would exercise under similar conditions at the time the GMP was established or for increases in General Condition Costs. County may disallow such Design-Builder Contingency use and deny reimbursement in the absence of prior notice or if County determines that the use was not consistent with the Contract Documents.

- B. Design-Builder may not apply, use, or allocate from the Design-Builder Contingency any amounts for any of the foregoing purposes that are the result of a material breach or material failure to perform by Design-Builder, any Subcontractor, or vendor (except as necessary to replace any subcontractor, or vendor because of the bankruptcy or failure of such entity to perform), or any entity for which any of them are liable or responsible at law or under the Contract Documents, or for any non-allowable costs of the Work.
- C. Each application of the Design-Builder Contingency by Design-Builder will be reflected (with narrative explanation) on the Application for Progress Payment for the period during which Design-Builder makes such application. Application of Design-Builder Contingency to any particular risk event should not exceed the agreed associated amount of the Design-Builder Contingency previously assigned to the specific line item in the GMP. Any portion of the Design-Builder Contingency remaining unapplied at final completion will be a credit against and reduce the GMP. When Design-Builder utilizes Design-Builder's Contingency funds, Design-Builder will make the appropriate changes to the Schedule of Values with the next regular progress payment request. Design-Builder will deduct the amount of Design-Builder's Contingency funds used from Design-Builder's Contingency line item and add the same amount to the line item on the Schedule of Values where the funds were used. If Design-Builder's Contingency funds are used for a new line item that was not included in the original Schedule of Values, Design-Builder will so indicate.
- D. The Design-Builder Contingency is not cumulative across multiple GMPs.
- E. County's Contingency is a sum of money in the Contract but not included in the GMP that may be used at the discretion of County to cover any increases in Project costs that result from County-directed changes, changed site conditions, or additional costs of Allowance Items that exceeds the Allowance. County's Contingency will be added to the GMP amount provided by Design-Builder, the sum of which will be the full Contract price for construction. Markups for the Construction Fee, taxes, and overhead will be applied by Design-Builder at the time that County's Contingency is used.
- F. County's Contingency and the Design-Builder Contingency will not be combined into a single project contingency.

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ATTACHMENT 1 TO APPENDIX B

GMP Summary Format

CONSTRUCTION		AMOUNT
	CONSTRUCTION COSTS:	
	Cost of Construction	\$
	Design-Builder Contingency	\$
	Subtotal Direct Construction Costs	\$
	INDIRECT CONSTRUCTION COSTS:	
	General Conditions	\$
	Overhead	\$
	Insurance	\$
	Payment and Performance Bonds	\$
	Subtotal Direct Construction Cost + Gen Cond, Overhead, Bonds, Insurance	\$
	Construction Fee (As a percentage of Subtotal above or to exclude any items above)	
	Subtotal Direct Construction Cost + Gen Cond, Overhead, Bonds, Insurance and Fee	
	Arizona Gross Receipts Tax	\$
	Subtotal Direct Construction Cost + Gen Cond, Overhead, Bonds, Insurance, Fee and Tax	\$
	GUARANTEED MAXIMUM PRICE (GMP)	\$
	OTHER PROJECT COSTS:	
	County Contingency	\$
	TOTAL CONTRACT COST	\$

END OF APPENDIX B – SUPPLEMENTAL PROVISIONS—CONSTRUCTION COSTING

APPENDIX C - DESIGN-BUILDER GENERAL CONDITIONS (48 pages)

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ARTICLE 1 – GENERAL ARTICLES

1.1 MUTUAL OBLIGATIONS

County and Design-Builder (Design-Builder) which includes the Design Professional (DP) commit, at all times, to cooperate fully with each other, and proceed on the basis of trust, confidence, and good faith to permit each party to realize the benefits expected and afforded under the Contract Documents, which benefits include the satisfactory and timely completion of the Project and performance of all obligations required by or inferable from the Contract Documents.

1.2 BASIC DEFINITIONS

- 1.2.1 “Actual Cost of the Work” means the aggregate amount of Design-Builder Direct Construction Costs and Indirect Construction Costs properly and actually chargeable to County when calculated under the provisions of **Appendix B of the Design-Builder Contract** throughout the Project up to the time of Final Completion.
- 1.2.2 “Allowances” means items established by County in the GMP as estimates for the cost of items of included in the Work. To the extent that the Actual Cost of the Work is lesser or greater than the corresponding estimate, the GMP will be reduced or increased by Change Order with such amount being added to or taken from County’s Contingency.
- 1.2.3 “Bidding Contingency”, or “Design-Builder Contingency” means that part of the Guaranteed Maximum Price (GMP) the Design-Builder may use during the Bidding or Construction Phase as provided in these General Conditions at 7.11, to cover any excess of the amount bid by a subcontractor over the amount for that Work in the GMP, or to cover legitimate unforeseen construction expenses once construction begins. Contingency may not be used to cover the cost of any Work on the Project after issuance of the Certificate of Final Completion.
- 1.2.4 “Design-Builder Authorization” means Chapter 6 of Title 34, Arizona Revised Statutes
- 1.2.5 “Design-Builder” means the Design Builder and all persons and entities identified as members of the Design-Builder team including the registered professionals responsible for the design, in the Design-Builder’s response to County’s request for fee proposal that led to the Contract with all Contract Amendments, and any substitutes permitted under the terms of the Contract, and these General Conditions. The Design-Builder leads the Preconstruction Phase as set forth in Preconstruction Phase Services Contract by, among other things, developing design and a cost model and refining it during design to ensure construction costs remain within County’s budget, doing value engineering and reviewing constructability, preparing schedules, and identifying the life-cycle implications of alternate designs, systems, and materials. **During construction, the Design-Builder assumes all risk for price and schedule under the Contract and its GMP, except as otherwise provided in the Contract.**
- 1.2.6 “Construction General Conditions” means the following types of costs during construction: Project Director costs directly attributable to time expended in execution of the project, whether on- or off- site; payroll costs for project manager or construction manager for work conducted at the site; payroll costs for the superintendent and full-time general foremen; payroll costs for other management personnel resident and working on the site; general support workers not included in direct labor costs (e.g. loading/unloading, clean-up, etc.); on-site administrative office personnel; costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses; utilities, fuel, sanitary facilities and telephone services at the site; and fees for licenses. General Conditions specifically exclude, without limitation, the following: Home (off-site) Expenses, Profit & Overhead; Home Office Personnel such as Corporate Executive, Project Executive; Home Office Staff Transportation & Travel Costs; Home Office Accounting & Contract Forms; Legal Expenses; Project Staff Moving Expense; off-site Staff Training & Education; Pre-Mobilization Office Space; off-site Equipment & Supplies; Forms; Estimating & Value/Constructability Analysis; Warranty Coordination; Legal Expenses,

Contractor Yard not Dedicated to Project, Contractor Association Fees, Licenses & Memberships; Cost over GMP, Corrective Work, Bonuses, Cost of Living Allowance, marketing expenses, corporate sponsorships and entertainment, and Promotional or Celebratory Expenses the Design-Builder incurs while performing and completing the Project. The Parties acknowledge that some portion of the General Conditions represent upfront costs associated with mobilization and startup of construction. These amounts will be deducted from the total amount of General Conditions in the GMP and the balance will be divided by the number of days allowed for performance to arrive at a fixed daily rate for use in estimating the amount, if any, of the adjustment for General Conditions associated with changes in Contract Time or for the number of workdays in any particular month.

- 1.2.7 “Construction Documents” means the plans and specifications prepared by the DP under the Design-Builder for the Project, approved by County, and incorporated into the Contract by reference after such approval, to be used to construct the Project. All Contract Amendments, Change Orders, and other modifications to the Construction Documents must be approved by County prior to incorporation into the Contract.
- 1.2.8 “Construction Phase Fee” means profit and unallowable costs, and overhead in the case of vertical construction. The Construction Phase Fee will initially be calculated not to exceed seven percent (7%) of Direct Construction Cost only and then will be fixed as a dollar amount as mutually negotiated and agreed to by the Parties. Overhead will be treated as described in 1.2.24.
- 1.2.9 “Contract Float” means the number of calendar days between Design-Builder’s anticipated date for early completion of all or any such part of the Work and the corresponding specified Contract Time and provided that the CPM schedule of the Work anticipates early completion of all or any part of the Work. It is owned jointly by County and Design-Builder.
- 1.2.10 “Contract Time” means the time allotted in the Contract Documents for completion of the Work.
- 1.2.11 “Cost of the Work” means those items of Work which are paid for by County to the Design-Builder consisting of those Direct Construction Costs and Indirect Construction Costs set forth as allowable in **Appendix B Construction Costing**.
- 1.2.12 “Day” means a calendar day unless otherwise denoted.
- 1.2.13 “Deliverables” - the Work product prepared by the Design-Builder within the definition of the Scope of Work in the Contract. Some of these deliverables provided by the Design-Builder during the Preconstruction Phase included the Design Submission Documents, the Cost Model, Project Schedule, Schedule of Values, Evaluations of Alternatives, Procurement Strategies, proposed DBE Utilization, Subcontractor and Supplier bid packages and Contracts.
- 1.2.14 Design Professional (“DP”) means an individual contracted through the Design-Builder who is (a) a qualified professional properly licensed in the State of Arizona to furnish applicable design services (and construction administration services, if so designated by County), and (b) responsible for the review of submittals, responding to Design-Builder Requests for Information (RFI), and Substantial Completion, if so designated.
- 1.2.15 “Design Submission Documents” means the drawings, specifications, structural calculations and any the documents required to communicate the construction requirements and are submitted at specific milestones in the design effort by the DP and other documents prepared by the Design- Builder that are submitted for County’s approval for each milestone in Project design. Because design milestones may vary from project to project, County will notify Design-Builder in writing of the milestones applicable to the project covered by this Contract. Such milestones will be as binding as if set forth herein.
- 1.2.16 Direct Construction Cost means the sum of all applicable Construction General Conditions costs, subcontractor costs, costs of self-performed Work (if approved in writing in advance by County), Allowances and Contingencies. Contingencies specifically include Bidding and Construction

Contingency, Design Contingency, and Schedule Contingency, as applicable.

- 1.2.17 "Final Completion" means 100% completion of all Work described by or reasonably inferred from the Project Criteria and Contract Documents, including but not limited to all punch lists, Close-Out Documents, and County training/start up activities, if included.
- 1.2.18 "Guaranteed Maximum Price" (GMP) means the dollar amount that the Design-Builder guarantees to be the maximum amount due from County to the Design-Builder under the Contract for Construction Phase services. It is the sum of Design-Builder's Construction Phase Fee, the Cost of the Work, and Contingencies and Allowances established in accordance with the Contract. The GMP is subject to additions or deductions due to changes in the Scope of Work. All costs, which exceed the GMP and are not authorized by written Change Order, are to be paid by the Design- Builder and not County.
- 1.2.19 Governmental Agency means any unit of federal, state, or local government with regulatory authority over any aspect of the Work.
- 1.2.20 "Hazardous Material" means any waste, substance, object, or material deemed hazardous under federal, state, or local law, including "hazardous substance" as defined under CERCLA, "hazardous waste" as defined under RCRA, and "hazardous material" as defined under US DOT regulations (49 CFR 100-180).
- 1.2.21 Indirect Construction Cost means the sum of all applicable insurance costs, bond costs and applicable sales or use taxes, but excludes Construction Phase Fee.
- 1.2.22 "Legal Requirements" means all regulations, policies, procedures, and practices of County and all applicable rules, laws, codes, ordinances, and regulations of any federal, state, or local government or quasi-governmental entity having jurisdiction over the Work, the practices involved in the Work, or any Work performed.
- 1.2.23 "Open Book Cost" means the Actual Cost of the Work as compiled and recorded in accordance with the provisions of Subsection 2.1.14 of these General Conditions.
- 1.2.24 "Overhead" means those items specifically excluded from General Conditions in paragraph 1.2.6 except for Estimating and Value/Constructability Analysis and profit. If this Contract is for vertical construction, Overhead will be included in the Construction Fee. If this Contract is not for vertical construction, then Overhead will be separately stated in the GMP Summary. Job Overhead will be included in General Conditions.
- 1.2.25 "Partnering or Teaming" means a mutual effort by all parties involved in the Project, principally County, the DP contracted by the Design-Builder, to cooperate and coordinate efforts to achieve the final result intended by the Project criteria. All involved use their expertise for the benefit of all. Partnering requires flexibility and appreciation of the positions of other parties and willingness to make compromises for the benefit of all. County has the exclusive right to decide whether to use Partnering on the Project and will indicate its decision during the Preconstruction Phase.
- 1.2.26 "Design and Preconstruction Phase Fee" means all direct and indirect costs of Design-Builder in providing Design and Preconstruction Phase Services until completion of the Construction Documents and the award of all bid packages, plus associated overhead and profit. The Design and Preconstruction Phase Fee also includes the cost of the DP to develop the architectural program, design, document, attend meetings, etc. during the design phase of the project.
- 1.2.27 "Project Budget" means the funding available to County for the total cost of the Project, including the Design and Preconstruction Phase Fee, the GMP (including DP's Construction Phase Fee, Construction Services, and Contingencies), permit fees, and other costs necessary to achieve Final Completion of the Project.
- 1.2.28 "Project Criteria" means criteria developed by or for County to describe County's program, requirements and objectives for the Project, including use, space, price, time, site, utility,

parking, and expandability requirements, as well as all submittal requirements and other requirements affecting Design-Builder's performance of its Work. The Project Criteria may include conceptual documents, design criteria, performance requirements, and other Project specific technical materials and requirements prepared by or for County.

- 1.2.29 "Project Manager" means County's Representative who is responsible to County for the Project completion within County established Schedule, Budget and Scope. In this document "Project Manager" is the same as "County"
- 1.2.30 "Punch List" means those minor items of Work identified and listed by County or DP and agreed to be completed by Design-Builder after Substantial Completion and prior to Final Completion, which do not prevent the Project from being fully used for the purpose for which it is intended.
- 1.2.31 "Savings" means the difference, if any, between the GMP and the Actual Cost of the Work and will be allocated as set forth in Article 7. Amount of savings is to be determined by County with such assistance as County requests of Design-Builder and is to be based on the GMP in effect on the date of Final Completion of the entire Work.
- 1.2.32 "Site" means the land and other areas on which the Project is located.
- 1.2.33 "Subcontractor" (of any tier) means any entity or person who performs a portion of the Work, on or off-site, directly on behalf of the Design-Builder, including any materials, workers and suppliers, and includes all employees, agents and authorized representatives of such entities or persons.
- 1.2.34 "Substantial Completion" means the date on which Design-Builder's Work, or an agreed upon portion of the Work, is sufficiently complete, as determined by the DP or County's issuance of a Certificate of Substantial Completion, so that County can fully occupy and utilize the Project, or a portion thereof, for the purposes for which it is intended. In order to achieve substantial completion, all Work must be complete, including all tests and inspections, except for items included on the approved punch list.
- 1.2.35 "Total Float" means the number of calendar days by which the Work or any part of the Work may be delayed without necessarily extending a pertinent Contract Time. Total Float is at least equal to Contract Float.
- 1.2.36 "Value Engineering Proposal" means a modification to the Work proposed by the Design-Builder after the Effective Date of the Contract for the purpose of reducing the total cost of construction while still delivering a quality and functional Project. Value Engineering is part of the broader goal of obtaining optimum value for each dollar County spends on the Project.
- 1.2.37 "Work" means comprised of all activities required in order to complete the Project as defined by the Project Criteria and Contract Documents, including procuring and furnishing all materials, equipment, services, and labor reasonably inferable from the Contract Documents, or from prevailing trade usage and custom

1.3 CONTRACT GENERAL CONDITIONS

The following are the mutual understanding and agreement of the Parties regarding the Contract general conditions or subjects addressed therein.

- 1.3.1 The Design-Builder shall design the Project.
- 1.3.2 The design for the Project may not be complete at a) the time the GMP is agreed to; b) the time of execution of the Contract; or c) both a and b.
- 1.3.3 Design-Builder will produce a completed design for the Project that is acceptable to County, as more fully described in the Contract Documents.

- 1.3.4 When the Design Documents are complete and requisite approvals obtained and County then accepts them, they become part of the Contract Documents without further action by the Parties as though they were specifically set forth therein at the time of execution of the Contract.

ARTICLE 2 – DESIGN-BUILDER’S SERVICES AND RESPONSIBILITIES

2.1 GENERAL SERVICES

- 2.1.1 Design-Builder's Representative will attend all meetings and assist County during the Design and Preconstruction Phase in accordance with these General Conditions. During the Construction Phase, the Design-Builder's Representative, and Superintendent as necessary, will be at the site at all times when Work is being performed, and will have the necessary expertise and experience required to properly supervise the Work. Design-Builder's Representative will communicate regularly with County and be vested with the authority to act on behalf of Design-Builder as to all matters. The expectation is that meetings will be collaborative among County and the Design- Builder as described below.
- 2.1.1.1 The Design-Builder and County will attend all regular meetings, including rolling design reviews, and such additional meetings that are called as provided below.
- 2.1.1.2 During the Design and Preconstruction Phase Design-Builder will schedule all regular meetings with the agreement and approval of County. Unless otherwise agreed, meetings will be held weekly for the purpose of tracking design progress and consistency with County's requirements. Design-Builder shall track and report on the design evolution log. At these meetings, Design-Builder is responsible for progressing the design, cost, and scope tracking; early identification of long-lead items; and making recommendations regarding constructability, construction sequencing, materials, and other factors that can have a material impact on cost or schedule. County will schedule all additional meetings.
- 2.1.1.3 During the Design Phase, Design-Builder will take minutes at each meeting and distribute draft minutes within three business days after each meeting. County will promptly review the minutes of each meeting and deliver any comments to the Design-Builder. The Design- Builder will promptly issue final minutes of each meeting, which will be approved by Design- Builder and County.
- 2.1.1.4 At the commencement of the Construction Phase, County and Design-Builder will meet to review cooperation, coordination, and if applicable, partnering during the construction phase and to establish procedures governing, among other matters, submittals and scheduling of site activities.
- 2.1.1.5 During the Construction Phase there will be weekly progress meetings of the Design-Builder and County. The Design-Builder will schedule and conduct the progress meetings during the Construction Phase. The weekly progress meetings will include joint discussions about such matters as procedures, progress, scheduling, submittals, requests for information (RFI), any Work deficiencies, any other actual problems or potential problems, fixes to and limits on actual problems, and ways to avoid, limit, or fix potential problems. At each meeting, the Design-Builder will provide and discuss a CPM-based look ahead schedule of construction activities to be accomplished in the next three weeks. County, and Design-Builder will contribute their good faith efforts in such discussions to find ways (i) to complete the Project within the Contract Time(s) in accordance with the Construction Documents and the other Design-Builder Contract Documents and within the Guaranteed Maximum Price; (ii) to limit and fix actual problems; (iii) to anticipate and then avoid, limit or fix potential problems; and(iv) to discuss and decide other matters brought up by County or Design-Builder. None of these discussions will affect or impair the respective rights, responsibilities and obligations of County and the Design-Builder.
- 2.1.1.6 During the Construction Phase, County or Design-Builder may request special on-site

meetings as necessary to resolve issue and maintain the construction schedule and meet the requirement of the construction documents.

- 2.1.1.7 During the Construction Phase, the Design-Builder will take minutes at each meeting and distribute draft minutes within three business days after each meeting. The DP and County will promptly review the minutes of each meeting and deliver any comments to the Design- Builder. The Design-Builder will promptly issue final minutes of each meeting, which will be approved by Design-Builder, DP, and County.
- 2.1.1.8 Design-Builder, when requested by County, will attend, make presentations and participate as may be appropriate in public agency or community meetings related to the Project. Design-Builder will provide drawings and illustrations and Design-Builder will provide schedule diagrams, budget charts and other materials describing the Project when their use is required or appropriate in any such meetings.
- 2.1.2 During the Construction Phase, the Design-Builder will provide County, on a monthly basis, a written status report detailing the progress of the Work during that month. Design-Builder's monthly report shall state whether the Work is proceeding according to Schedule and include (1) an updated and current Critical Path Method (CPM) Schedule, (2) an updated and current Work cash flow projection for the duration of the Project, (3) copies of the construction Superintendent's daily site reports, (4) identification of any discrepancies, conflicts, or ambiguities existing in the Construction Documents that require resolution, (5) whether health and safety issues have arisen in connection with performance of the Work, and (6) whether other matters exist that require resolution so as not to jeopardize Design-Builder's ability to complete the Work for the GMP(s) on schedule and within the Contract Time(s). The Design-Builder's monthly report will also include a cost tracking report with the updated Cost Model, projected final cost, subcontract amounts and buy-out status, and status of contingency and allowance usage.
- 2.1.3 Within 30 days after executing the Contract, Design-Builder will prepare and submit to County:
 - 2.1.3.1 A Milestone Schedule for the Work including the activities in the Design Phase and the Construction Phase through bid and award. The Milestone Schedule must include three weeks of County review time for Design Submission Documents at each milestone and adequate time for Government Agency and for other regulatory-type reviews and for all other necessary approvals. The CPM Schedule will indicate the dates for the start and completion of the various stages of Work, including the dates when County information and approvals are required and all necessary shutdowns or suspensions of County or separate vendor activities on the site (if any). The Milestone Schedule must allow for such multiple bid packages and fast-tracked construction as may be required and include any contemplated completion date(s) earlier than those required by the Contract Documents.
 - 2.1.3.2 A Cost Model for construction of the project. The Cost Model must contain all of the costs that will be included in the GMP, including cost of the Work, general conditions, bonds, insurance, permits, taxes, including, without limitation, applicable sales taxes and transaction privilege tax, Design-Builder's construction fee, contingency, and any other costs in the Cost Model. As part of the Cost Model, the Design-Builder will also identify all areas of concern or risk and assign a separate and reasonable contingency to each of them. County will review these submissions and may request changes. Final contingency amounts will be as agreed by the Project Team. The statement of areas of concern/risks will be stratified by cost to enable the Project Team to focus in preconstruction on resolving or eliminating the costly uncertainties.
- 2.1.4 County and Design-Builder will have an initial meeting promptly after selection of the Design-Builder team to discuss issues affecting Project administration and to implement procedures to permit County and Design-Builder to perform their respective obligations under the Design-Builder Contract. Among other matters to be covered at this meeting will be procedures for

efficient interaction during the Design and Preconstruction Phase so that each can perform its activities, functions, and obligations in an efficient, cooperative, coordinated, collaborative, and communicative manner. Among other subjects to be covered by the procedures will be:

- 2.1.4.1 Design-Builder will be responsible for (1) preparing Design Submission Documents, the Design-Builder's Construction Cost Estimates, as required during the development of Preliminary Design, Schematic Design, and Construction Documents; and (2) submitting each set of Design Submission Documents and the related Design-Builder Construction Cost Estimates to County for review and comment by County and for group discussion among the Design-Builder and County.
- 2.1.4.2 Arrangements that encourage frequent informal interaction, cooperation, coordination, collaboration, and communication among County and Design-Builder during the Design and Preconstruction Phase, especially between submissions of Design Submission Documents and Construction Cost Estimates. These will include among other activities, the Design-Builder offering value engineering and constructability recommendations on the design of the Project and the Design-Builder using that information in its design work on the Project.
- 2.1.4.3 A schedule for the activities of the Design-Builder and County during the Design and Preconstruction Phase.
- 2.1.4.4 Formal partnering for the Design Phase, at the option of County. Partnering is a mutual effort to cooperate and coordinate efforts in order to benefit and achieve the final result of an active and functional facility. Partnering requires that all parties use their particular expertise for the mutual benefit of all, rather than for the benefit of the one. Partnering requires flexibility, the ability to appreciate the positions of the other parties and to make compromises for the benefit of all. Partnering will be implemented through a formal partnering process developed as described above and presented in a separate workshop attended by Design-Builder, County and their key participants. Follow up sessions will

occur every three months or as mutually agreed to ensure that all commitments are updated and being followed by all parties. The cost of this partnering effort shall be shared by the Parties.
- 2.1.4.5 A responsibility matrix developed with the cooperation and collaboration of County, and Design-Builder.
- 2.1.5 No action, or attempted action, of cooperation, coordination, collaboration, or communication, and no failure to cooperate, coordinate, collaborate, or communicate, on any matter will affect or impair the respective rights and obligations of County and Design-Builder under the Design-Builder Contract. No failure by any one party to perform its obligations under this Section excuses any failure by another party to perform any obligation under other provisions of the Contract Documents, unless the obligation that the first party failed to perform is an essential predicate to performance by the second party. In such case, it is the second party's duty to make all reasonable efforts to perform its obligations.
- 2.1.6 The Design-Builder will interact and cooperate fully with County during the Design and Preconstruction and Construction Phases so as to keep the Work within County's budget and schedule limitations.
- 2.1.7 The Design-Builder agrees to furnish its best skill and judgment and to cooperate with County in furthering the interests of County. Design-Builder agrees to furnish efficient business administration and superintendence and to use its best efforts to timely complete the Work in an expeditious and economical manner consistent with the interests of County.
- 2.1.8 The Design-Builder and County, collectively the "Project Team", will cooperatively work together

during all phases of the Work to achieve completion. The Design-Builder will provide leadership to the Project Team during the Design and Preconstruction Phase for all design, cost, schedule, or alternative systems issues, and all matters relating to construction. During the Design and Preconstruction phase the Design-Builder will provide to County a written evaluation of County's Project Program and Project Budget and Schedule, each in relationship to the other with recommendations on the appropriateness of each.

- 2.1.9 The Contract Documents do not give any third party any claim or right of action against County or Design-Builder which does not otherwise explicitly exist in the Contract Documents.
- 2.1.10 The Design-Builder's initial Work consists of its services in connection with the Design and Preconstruction Phase. The Design-Builder's Services in that phase include the DP's Services. Design-Builder will prepare an itemized systems type cost estimate at the completion of the Schematic Design Phase, and at other times as agreed upon by the Project Team, in a format otherwise mutually agreed upon prior to the cost estimate preparation. Design-Builder will prepare Construction Specifications Institute (CSI) Master Formatted cost estimates at each submittal phase after the completion of Schematic/Conceptual Design, to verify that the Project is staying within the applicable portions of County's identified budget. Design-Builder will keep all Deliverables required of it up to date during the Design and Preconstruction Phase so that the Project activities will continue uninterrupted while progressing into the Construction Phase.
- 2.1.11 The Design-Builder will provide a GMP during the Design and Preconstruction Phase as required in **Article 3.2 of the Contract**.
- 2.1.12 Subject to the other provisions of these General Conditions, execution of the Contract by the Design-Builder is an assurance that the Design-Builder has visited the site, has become familiar with the locale and any specific conditions under which the Work is to be performed, and has correlated Design-Builder's personal observations with the requirements of County's Project criteria.
- 2.1.13 The Parties' intent is that the Contract Documents include all items and services necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one is binding as if required by all. Work not covered in the Contract Documents but that the Design-Builder considers necessary for the proper completion of the Work will be required of Design-Builder unless it is inconsistent with the Contract Documents or is not reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations that have well known technical or trade meanings are used in the Contract Documents in accordance with their recognized meanings.
- 2.1.14 The organization of the Specifications into division, section, and article, and the arrangement of Drawings does not obligate or control the Design-Builder in dividing performance of the Work among subcontractors, or in establishing the extent of the Work to be performed by any one trade.
- 2.1.15 With respect to all Work performed by Design-Builder and its Subcontractors and Consultants, Design-Builder and its Subcontractors and Consultants will keep full and detailed accounts and exercise such cost controls as may be necessary for proper financial management, using accounting and control systems in accordance with generally accepted accounting principles and subject to review by County. During performance of the Work and for five years after Final Payment, the Design-Builder will retain and will also require all Subcontractors and Consultants to retain for review or audit, or both, by County all correspondence, meeting minutes, memoranda, electronic media, books, accounts, reports, files, time cards, material invoices, payrolls, and evidence of all communications, direct and indirect costs, and all other matters related to the Work. Upon request by County, Design-Builder will produce a legible copy or the original of any or all such records as are described above at any time during or after the Work. Upon request by County, the Design-Builder will submit to County copies of all payrolls, reports, estimates, records, Change Order costs and data, and any other data concerning Work performed or to be performed, materials supplied or to be supplied, including Subcontractor or

Consultant payment applications or invoices and such Subcontractor's or Consultant's progress payment checks. The Design-Builder will include the requirements of this Section in all contracts between the Design-Builder and its Subcontractors and Consultants. County may exercise its rights under this Paragraph as often as reasonably necessary in County's sole judgment to assure County that it has a complete and accurate understanding of all Project costs.

2.2 DESIGN AND PRECONSTRUCTION SERVICES

The Design-Builder's primary responsibility during Design and Preconstruction is to apply its knowledge and experience to developing and keeping the design capable of being constructed within the budget and schedule. The Design-Builder must track costs on an ongoing basis and proactively advise County of lower cost or more effective means, methods, materials, design aspects, etc., or anytime when construction costs exceed, or threaten to exceed the budget, so the Project Team can take appropriate action.

2.2.1 The Design-Builder will develop a Construction Cost Model for the Project for County's review and approval. County will advise the Design-Builder in writing of the amount of County's Construction Budget. The Design-Builder will evaluate County's Construction Budget for cost realism and prepare construction cost estimates for the completion of the Work. Design-Builder's cost estimates must include all of the costs that will be included in the GMP, including labor, materials, general conditions, bonds, taxes, Design-Builder construction fee, Design-Builder's contingency, and all other GMP costs. Design-Builder with input from County will reconcile the differences between County's Construction Budget and the Design-Builder estimates, if any, to develop an agreed estimate for the cost of construction. If the agreed estimate exceeds County's Construction Budget, County, at its sole discretion, may (1) seek additional funding; (2) direct redesign or re-scoping of the Project to bring it within the available funding; or (3) any combination of 1 and 2; or (4) determine not to go forward with this Contract for all or part of the Project. Any adjustment to County's budget or scope must be in writing and approved by County.

2.2.2 Unless otherwise agreed to by County, County may retain or authorize Design-Builder to retain surveyors, engineers, or other consultants in connection with the following items, provided such information is specifically requested by County:

- a. A survey of existing site conditions. A complete and accurate survey of the Project site and existing improvements including, but not limited to, grades and lines of streets, pavements, and adjoining properties, contours of the site, and full information as to sewer, water, gas, electrical service, telephone lines, or other utilities.
- b. A report on subsurface investigations. Professional recommendations regarding local conditions accompanied by test borings, or test pits, soil bearing values, percolation tests, air and water pollution tests, ground corrosion, and resistivity tests including necessary operations for determining subsoil, air and water conditions, and chemical, mechanical, laboratory, or other tests.
- c. Design-Builder may recommend such additional geotechnical or investigative tests, such as potholing, as Design-Builder believes may be necessary to support construction on the site.
- d. As-built information in possession of County concerning any existing improvements that will remain on the site and that will be incorporated into the Project, to which the Project will be attached, or with which the Project will be interconnected.
- e. Other tests recommended by Design-Builder and agreed to by County.

In addition to the above information, the Design-Builder is responsible for obtaining information concerning conditions of the site required by law or typically obtained within the DP's industry to assess conditions for similar projects and will advise County of any such information so obtained that may be significant to the Project.

County will deliver to Design-Builder a copy of all available surveys, reports, test results, and other information described in this Section 2.2.2. These items, any other information concerning the site delivered by County to Design-Builder, and all information Design-Builder is obligated to obtain on its own initiative are referred to as the "site Information". The Design-Builder will thoroughly acquaint themselves with all site Information.

By making each submission of any Design Submission Documents (including, without limitation, the Construction Documents) the Design-Builder represents and warrants to County that Design-Builder has examined and evaluated the site Information and has taken the site Information into account in preparing the Design Submission Documents.

The Design-Builder has the right to rely upon surveys, soil test reports, other test reports and other information provided by County, but only to the extent provided in said reports or information. The Design-Builder will carefully examine all surveys, soil test reports, other test reports and other information, whether obtained by the Design-Builder or County, and will promptly report to County any obvious or reasonably suspected errors, omissions, or inadequacies in such surveys, soil test reports, other test reports, and other information of which the Design-Builder becomes aware as a result of such examination or otherwise, and of any disagreement the Design-Builder may have with the conclusions of such surveys, soil test reports, other test reports, and other information. The Design-Builder's Consultants will make themselves available to the soils engineer and any other person retained by County to prepare any surveys, soils test reports, other test reports, or other information, for the purpose of reconciling such concerns.

- 2.2.3 The Design-Builder will submit to County all required Design Submission Documents to describe the Project's essential elements. The required Design Submission Documents required will include such drawings, specifications, and other documents as may be necessary to fully identify the Project scope and materials, together with the Design-Builder's Construction Cost Estimates. The Design-Builder will submit to County, detailed Construction Cost Estimates as part of each design submission. At the time of each scheduled submission, Design-Builder and County will meet and confer about the submission. During the meeting, the Design-Builder will identify, among other things, the evolution of the design and any significant changes or deviations from previously submitted Design Submission Documents and any changes in the Design-Builder's Construction Cost. Within three weeks following each design review meeting, County will approve or reject the Design Submission Documents, Design-Builder's Construction Cost Estimate. County may reject in full or in part any Design Submission Documents or Construction Cost Estimates (1) that do not conform to County's Project Criteria or overall Project concepts, (2) that exceed the Construction Budget, (3) are not within the Guaranteed Maximum Price, (4) are not consistent with the GMP Setting Drawings, Specifications, Assumptions, and Clarifications (unless the inconsistency was approved or requested by County), or (5) for any other reasonable cause consistent with the intent of the Design-Builder Contract Documents or the Design-Builder Contract Documents, as applicable. In the event of such rejection, the Design-Builder will bear the costs of redesign or of revising the construction costs estimates, unless the deficiencies upon which rejection is based are attributable to County-requested changes. All deviations from County's Project Criteria, the Construction Budget, the Guaranteed Maximum Price, or the GMP Setting Drawings, Specifications, Assumptions, and Clarifications must be approved in writing by County.

- 2.2.4 The Design-Builder will prepare a Project Management Plan (PMP), which will include:
- a. Project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the Project,
 - b. Required and recommended investigations to be undertaken to ascertain subsurface conditions and physical conditions of existing surface and subsurface facilities and underground utilities,

- c. Alternate strategies for fast-tracking and/or phasing the construction,
- d. Permitting strategy,
- e. Cost estimate and basis of the cost model,
- f. Defined scope basis,
- g. Organization chart, and
- h. Procurement plan

The purpose of the PMP is to identify, coordinate, and record the tasks and activities to be performed by all of the Project Team members. The Project Team will utilize the PMP as a basis for managing and monitoring all members' compliance with the requirements of the Project. Project Team members are responsible for their compliance with the PMP requirements. A member's failure to complete a task does not excuse a subsequent failure by another member unless the first member's task is a direct prerequisite to the latter's performance provide, however, the latter team member must make reasonable efforts to mitigate impacts of the failure. Resolution of compatibility issues between the different tracking programs that may be used is the responsibility of the Design- Builder.

- 2.2.5 The schedule for performance of the Construction Work will be a CPM schedule with reasonable detail, including a time-scaled network and computer printout in accordance with the following requirements:

The Design-Builder will use scheduling software acceptable to County to develop the Project Schedule. The Project Schedule will be presented in graphical and/or tabular reports as agreed upon by the Project Team. If Project phasing, as described below, is required, the Project Schedule will indicate milestone dates for the phases, once determined.

The Project Schedule will provide three weeks for County to review Design Submission Documents at each sub-phase of the Design Phase and provide adequate time for Government Agency reviews and all other necessary approvals and permits. The Project Schedule will indicate the dates for the start and completion of the various stages of the Project, including, among others, the dates when County information and approvals are required and all necessary shutdowns or suspensions of County or separate vendor activities on the site (if any). Design-Builder will update and reissue the Project Schedule throughout the Design Phase and the Construction Phase, as necessary and appropriate to reflect adjustments in the schedule. Updates will be subject to approval by County

The Project Schedule will be in Days (five days constitutes one week, otherwise directed by County) and indicate task duration (earliest start/latest completion) for all activities. Float times for all activities will be shown. The CPM diagram will be presented in a time scaled graphical format for the Project as a whole.

The Project Schedule must indicate all relationships between activities.

The activities making up the Project Schedule will be in sufficient detail to assure that adequate planning has been done for proper execution of the Work so that it provides an appropriate basis for monitoring and evaluating progress of the Work.

The activities upon which the Project Schedule is based will coincide with the Schedule of Values.

The Project Schedule will show all submittals associated with each Work activity and the review

time for each submittal.

The Project Schedule will show milestones, including milestones for all Project Team members.

The Project Schedule does not include anticipated rain delays. This will be addressed during the construction of the project.

Throughout the Design Phase, Design-Builder will provide updates and/or revisions to the Project Schedule for use by the Project Team, whenever required, but no less often than monthly. The Design-Builder will add detail to previous version of the Project Schedule to keep it current throughout the Design Phase, so that the Project Schedule is ready for implementation at the start of the construction phase. The update/revisions will include:

- a. A narrative showing progress to-date vs. planned
- b. The fast-tracking of any of the construction, or other chosen construction delivery methods
- c. Illustrate the requisite number of separate bidding/permit packages for advertisement.
- d. The status of the procurement of long-lead time equipment and materials

As phased construction is deemed appropriate for this project, and County and Design-Builder approve, Design-Builder will review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of shortening the Construction Time and/or reducing the Cost of the Work. The Design- Builder will take into consideration such factors as natural and practical lines of Work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, effect on traffic or public access, and any other factors pertinent to saving time and cost. Design-Builder will adjust the Project Schedule to allow for phased construction or for portions of the Construction Work to be accepted separately by County, if required by County.

2.3 DESIGN-BUILDER DESIGN SERVICES

2.3.1 Design-Builder will continuously and actively track Project costs throughout the design phase, will proactively advise County, and will make recommendations relating to construction costs and concerns regarding the feasibility and practicality of any proposed means and methods, selected materials, equipment, building systems, and labor and material availability, and long-lead items. Design-Builder will further advise County regarding proposed site improvements, excavation, utility coordination, traffic control and public access, or other issues, as well as any concerns regarding the coordination of drawings and specifications. Design-Builder will advise County any time that a design revision results in the Design-Builder's estimate of the Cost of Construction exceeding County's construction budget.

2.3.2 Program Verification/Schematic Design

- a. The Design-Builder will review County's Project Criteria to ascertain the basic requirements for the Project.
- b. The Design-Builder will prepare an expanded Project Program for review by County and for County's approval, which expands and refines the Project Criteria. The Program shall contain all space needs necessary for the operation of the facility including FFE. The description will include all site conditions affecting the Project, including utilities, drainage and flood control implications, and other requirements specified by County. County will promptly review the Program Document and approve, approve with comments or reject the document.

- c. The Design-Builder will develop a Schematic Design Submission for review by County. The submission shall include at a minimum site plan, floor plan, ceiling plan, roof plan, building elevations and sections and the preliminary calculations to understand utility requirements, metal building requirements, equipment selections, geotechnical requirements and other information necessary to develop the estimated cost of construction.
- d. The Design-Builder will develop and submit to County and DP a conceptual Construction Cost Estimate.
- e. Depending upon the stage of the Project at the inception of this Contract, County, in its sole discretion, may decide to forgo performance of the activities under this Paragraph 2.3.2 in whole or in part without liability to Design-Builder.

2.3.4 Construction Documents

The Design-Builder will review the Schematic Design with County, solicit and receive comments and recommendations from County, confirm County's understanding of the subject matter, determine any additional, modified or alternative requirements, and obtain County's approval.

Based on the Schematic Design documents and any amendments thereto approved by County to the Project or the amount of County's Construction Budget, the Design-Builder will prepare 50% and 90% Construction Documents for review with County and the Design-Builder and for County's approval. The CDs will consist of drawings and other documents to delineate and define the general design of the entire Project.

The Design-Builder for each submittal shall submit a Construction Cost Estimate for review and approval by County. The Design-Builder with County shall reconcile the estimate with County's construction budget and modify the design to meet the budget.

2.3.5 Final Construction Documents

Based upon the approved 90% Construction Documents and any further amendments thereto of any kind approved by County, the Design-Builder will prepare detailed Final Construction Documents setting forth the requirements for construction of the entire Project, including complete Drawings, Specifications, calculations and reports and any other information required for the building and other construction permits. If the GMP(s) is agreed to approved prior to the final CDs then a cost evaluation shall be provided. The Design-Builder must be aware of, and conform to, the **order of precedence provisions in Section 2.6.12.3**. The Construction Documents are subject to review and approval by County.

If the GMP has been agreed by County and Design-Builder before completion of the Construction Documents, the Construction Documents will be subject to review by Design-Builder for conformance with the GMP Drawings, Specifications, Assumptions, and Clarifications as provided in **Sections 3.2 to 3.5**.

All drawings and specifications included in the Construction Documents must bear the dated signature and seal of the Design-Builder's DP. The Design-Builder's is fully responsible for all designs it provides for the Project.

County will submit the Design-Builder's documents for the Building Construction Permit thru Pima County Development Services Department and the Arizona State Fire Marshal. The Design-Builder will be responsible for all other permits including those of a temporary nature required for the construction and related to the means and methods of the Design-Builder's construction plan. County will cooperate with the Design-Builder in preparing applications for necessary approvals, sign applications, and pay applicable fees. The Design-Builder will also assure that the Project meets all applicable statutory requirements for public works of the nature

of the Project.

2.3.6 Design-Builder's Construction Cost Estimates

Each Design-Builder Construction Cost Estimate will include without duplication:

- a. All labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Construction Work, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Construction Work. All fixed equipment, site improvements, utility and utility relocations, and equipment installations will also be included.
- b. General Conditions;
- c. The Construction Phase Fee;
- d. All bond and insurance premiums;
- e. All applicable taxes, including, without limitation, applicable sales taxes and transaction privilege tax; and
- f. Contingency as applicable.

The Design-Builder Construction Cost Estimates will include the costs of the Construction Work and will not include the Design-Builder's Design Phase Services Fee, Preconstruction Fee, costs of land, rights of way, financing, or other costs which are the responsibility of County. Design-Builder's allowable labor rates within rates or part of Construction General Conditions are restricted to direct labor costs, *i.e.*, actual salaries/wages plus associated costs required by statute or regulation (social security, Medicare employee's match, unemployment, etc.) and employee benefits (vacations, health insurance, etc.). Non-Project specific training costs, bonuses, cost of living allowances, education, and training are not allowable labor costs and are not reimbursable. Promotional or celebratory expenses the Design-Builder incurs while performing and completing the Project are not reimbursable as part of Construction General Conditions and must be paid out of the Design-Builder Construction Phase fee.

The Design-Builder will base each of their Construction Cost Estimates on the latest Design Submissions Documents. The Design-Builder will discuss the materials, equipment, component systems, and types of construction contemplated by the Design-Builder to the extent such items are not in the latest Design Submission Documents.

The Design-Builder, prior to and in preparing its estimates of Construction Costs and providing the GMP, will consult with the DP to determine to the extent possible what materials, equipment, component systems, and types of construction are to be included in the Construction Documents and to make recommendations for reasonable adjustments in the Scope of Work, and to include in the Construction Documents such alternate items as County approves in writing.

The Design-Builder will take the lead in developing a cost model, preparing an estimate of Construction Cost as soon as major Project requirements have been identified, and updating the cost model and estimate for each submittal of the Design Submission Documents specified in 1.2.15 of the General Conditions. For all Bid Packages for Construction, the Design-Builder will prepare a quantity take-off cost estimate based on CSI formats within two weeks of receipt of applicable documents from the DP. All estimates of Construction Cost must make allowance for bidding and price escalation. During the Preconstruction Phase, the Design-Builder will continually monitor the cost estimates and develop a cost estimate to help assure that the Cost of the Work remains within the applicable portion of the Project Budget or GMP, as applicable. No Construction Services or

Work to be performed under the Contract will commence until a GMP is established by the Design-Builder, submitted and accepted by County, and incorporated into this Contract by Contract Amendment.

All Design-Builder cost estimates will be based on quantitative takeoffs whenever possible and will be completed in sufficient depth and organization to be used in preparing budgets based on sub-trades, combinations of sub-trades, building systems (if any), and Bid Packages. Lump sum estimates are not acceptable.

All Design-Builder Construction Cost Estimates will use a consistent method of allocating costs of the Construction Work, will follow the standard construction format, and will otherwise be in a form agreed to by County.

After County and Design-Builder agree on a GMP and in any event during the Construction Documents sub-phase of the Design Phase, Design-Builder will continually monitor costs and develop cost estimates to help ensure that the cost of the Construction Work remains within both County's Construction Budget and the GMP.

In the event the reconciled Cost Estimates are not within County's Construction Budget or GMP, the Design-Builder will:

- a. Notify County if it appears that the Design-Builder's Construction Cost Estimate will exceed County's Construction Budget or the GMP.
- b. Satisfactorily demonstrate the accuracy of its estimate in such detail as County may reasonably require.
- c. Make reasonable recommendations for corrective action to bring the estimates back within County's Construction Budget or the GMP, if the estimates exceed County's Construction Budget.

The overall design objective is to develop a design that can be constructed for an amount within County's Construction Budget. If, in connection with any submission of Design Submission Documents and Cost Estimates, the Cost Estimates exceed County's Construction Budget, then the costs of redesign and of revising the cost estimates will be allocated as follows:

- a. If the excess costs of the Design Submission Documents are attributable to County - directed design choices, unanticipated significant materials cost increases or other unforeseen market dislocations, or other causes beyond the control of Design-Builder, then the costs of revision will be the responsibility of County.
- b. If the excess costs are attributable to unapproved deviations from County's Final Schematic Design Report or County determines design choices unreasonable or negligent, then the costs of revision will be the responsibility of Design-Builder.
- c. If the excess costs are attributable to the application of unsubstantiated deviations from the cost model by Design-Builder, then the costs of revising the costs estimates will be the responsibility of Design-Builder.
- d. If the excess costs are attributable to any combination of the causes identified above, then the costs of design and or cost estimate revision will be allocated to each party in the percentage by which their cause contributed to the excess.
- e. In the event the excess costs are attributable to an unanticipated cause not identified above, then the costs of revision will be the responsibility of County.
- f. If the Parties are unable to agree on causation or the allocation of costs, then County will make

a determination with respect thereto and provide a copy of the determination in writing to each of the other parties. County's determination will be final and conclusive unless, within seven calendar days from delivery of County's determination, the party or parties objecting to County's determination notifies each of the other parties in writing that they are initiating the Dispute Resolution procedure of the Contract. The notice will include a brief statement of the basis for the initiating party's objection to County's determination.

2.3.7 Budgeting and Guaranteed Maximum Price

2.3.7.1 The Design-Builder will provide its Design and Preconstruction Services for the Design and Preconstruction Phase Fee identified in the Contract. That fee will be earned based upon the amount of Design and Preconstruction Phase Work completed. That fee will be billed and payable monthly as a percentage of completion of Design and Preconstruction Services. The Construction Phase services of Design-Builder will be provided based upon an Open Book Cost of the Work, plus the separate Construction Phase Fee for Design-Builder identified in the Contract.

2.3.7.2 As provided for in the Contract and when the design has sufficiently progressed, County will require the Design-Builder to propose a GMP for the construction that is to be based on the Cost of the Work. The GMP will be prepared in accordance with these Sections 2.3.7.2 and **Appendix B Construction Costing**.

2.3.7.3 County may accept the GMP submitted by Design-Builder, request that Design-Builder submit another GMP, or reject the GMP and terminate all contracts and agreements with the Design-Builder. In the event of such a termination, the Design-Builder will receive payment for services it has provided to date. In this situation, there will be no amounts paid for any termination cost, lost profits, lost opportunity or any other reason.

2.3.7.4 Once accepted by County, the GMP may be revised only by an approved Change Order or Contract Amendment.

2.3.7.5 In the event the Design-Builder elects, in its sole discretion, to maintain a construction contingency within the GMP, the criteria for the development of that contingency must be acceptable to County.

Thereafter, the Design-Builder must inform and receive approval from County of any intended usage of the contingency, with supporting itemized schedule and pricing documentation, to maintain complete records and confirm its appropriate use for the Project.

2.3.8 Intentionally Omitted

2.3.9 Other Preconstruction Services

2.3.9.1 The Design-Builder will review the Drawings and Specifications as they are being prepared, recommending alternative materials, alternatives, methods, means, constructability, and/or sequencing whenever design details affect construction feasibility, schedules, or cost.

2.3.9.2 The Design-Builder will make recommendations to County regarding the division of work in the Drawings and Specifications to facilitate the bidding and awarding of subcontracts, allowing for phased construction, if applicable, taking into consideration such factors as time of performance, availability of labor, overlapping trade jurisdictions, provisions for temporary facilities, and similar factors.

2.3.9.3 The Design-Builder will provide a written Constructability Review of all Drawings and Specifications, in a form acceptable to County. The Constructability Review will (a) minimize areas of conflict, errors, omissions, and overlapping of the Work to be

performed by the various subcontractors; (b) confirm that the full Scope of Work has been included in the drawings; (c) endeavor to minimize cost and to Value Engineer where appropriate; and (d) allow for phased and/or fast-track bid packages and construction, as required. An acceptable and effective Constructability Review is a goal for the Design-Builder and County.

- 2.3.9.4 The Design-Builder will schedule and attend all regular meetings with County and the Design-Builder shall attend all meetings as part of the Design-Builder team. County will schedule all additional meetings.
- 2.3.9.5 The Design-Builder will investigate and recommend materials and equipment that County could purchase directly; consider long lead time procurement and mass purchasing power in making such recommendations; recommend a schedule for such purchases after coordination with the Design-Builder regarding the timetable for preparation of Construction Documents; and expedite and coordinate delivery of these purchases to facilitate their delivery by the required dates.
- 2.3.9.6 If County determines that Building Information Modeling (BIM) objectives will benefit the Project and it is or will be to the advantage of County or the Project to select certain subcontracting trades to participate in the design process during the Design and Preconstruction Phase, as well as provide Construction Services during the Construction Phase, then the following procedures will apply:
 - a. Design-Builder will prequalify Subcontractors from the trades needed in the Preconstruction Phase.
 - b. Upon acceptance of County, a Request for Proposal (RFP) will be requested from pre-qualified Subcontractors. The RFP will request additional qualification information in addition to pricing information, such as labor rates and overhead and profit factors.
 - c. The Statement of Qualifications (SOQ) from the Subcontractors will be reviewed by a committee consisting of Design-Builder, County, and DP team members. The qualification and pricing information will be scored by a pre-determined weighted scoring system.
 - d. The committee will develop a list of firms and determine if interviews are required and conduct the interviews.
 - e. The Subcontractors will be ranked, and the highest ranked Subcontractor will be selected to provide the services.
 - f. All Subcontractor selections will be in accordance with A.R.S. 34-603(C)(2)(e)(i) and DP's Subcontractor Selection Plan.

For Subcontractors selected in this manner, the Design-Builder must establish to County's satisfaction that the Subcontractor's price submission is reasonable and appropriate by following the procedures outlined for the Design-Builder in Article 2.3.9.11 and 2.3.9.12.

- 2.3.9.7 The Design-Builder will: assist County in the preparation of the necessary and appropriate bidding information, bidding forms, and pre-qualification criteria for bidders; develop subcontractor interest; establish bidding schedules; advertise for bids; and conduct pre-bid conferences to familiarize bidders with the bidding documents and management techniques and with any special systems, materials, or methods. The Design-Builder will review all potential subcontractors with County and obtain County's approval of the pre-qualification of any subcontractor. If the Design-Builder becomes aware prior to any bid date that fewer than three pre-qualified subcontractors plan to

bid any portion of any Bid Package or that anticipated bids from previously approved or pre-qualified subcontractors are likely to exceed the current Schedule of Values or estimate of Construction Cost, the Design-Builder will promptly notify County.

- 2.3.9.8 The Design-Builders post-bid selection of any subcontractor must be based on qualifications alone, or on a combination of qualifications and price selection, but will not be based on price alone. The Design-Builder will receive and open bids when advertised, prepare a bid analysis, conduct pre-award conferences, and notify County concerning which bids from pre-qualified subcontractors will be accepted and awarded. The Design-Builder will notify County of the time and place of all bid openings and will permit County to attend such openings with their representatives and guests. Design-Builder will justify in writing any proposal to accept other than a low lump sum bid with sufficient detail to satisfy County, and the proposal will be subject to prior written approval by County, with no increase in the GMP. Once approved by County, Design-Builder may not replace any subcontractor without County's prior approval and any change in cost to Design-Builder will not be a responsibility of County and there will be no increase in GMP or contract price by reason of such change of subcontractor. Within 10 days after award, Design-Builder will furnish one fully executed subcontract for work or services on this Project to County together with all special or supplementary conditions applicable to the subcontract work.
- 2.3.9.9 The Design-Builder will provide County with requirements and assignment of responsibilities for safety precautions and programs as required for the execution of the Work, temporary Project facilities and for equipment, materials and services for common use of subcontractors and verify that all such information is included in the Construction Documents.
- 2.3.9.10 If the Design-Builder indicates it desires to self-perform any portion of the Construction Work, the following procedures will be followed: The Design-Builder must submit its qualifications to do the listed portion(s) of the Construction Work to County and if County is satisfied with Design-Builder's qualifications as to that portion of the Construction Work, County will designate the Design-Builder as a pre-qualified Subcontractor for that portion of the Construction Work. A bid package for each portion of the Construction Work as to which Design-Builder is a pre-qualified Subcontractor will be prepared in the same manner and content as bid packages for Subcontractors in other trades. Design-Builder will submit a proposed price for each of these portions of the Construction Work. This proposed price will include labor rates and certify that sub-sub trades and materials will be bid with a minimum of three pre-qualified bidders.
- 2.3.9.11 In order to evaluate the Design-Builder's Price Submission on self-performed Work, County may do any or all of the following: (i) engage an estimator selected by County to prepare an independent estimate of this portion of the Construction Work; (ii) engage the DP, or other consultants to do a construction market study to confirm construction market impacts to the cost of this portion of the Construction Work; or (iii) take other action to evaluate the Design-Builder's Price Submission. In any event, Design-Builder is responsible to establish to County's satisfaction that the Design-Builder's Price Submission is reasonable and appropriate. If County is satisfied that the Design-Builder Price Submission is reasonable and appropriate, County will advise the Design-Builder that the Design-Builder is selected as Subcontractor for the respective portion of the Construction Work.
- 2.3.9.12 If at the conclusion of the review of the Design-Builder proposed price for self-performed work, County is not satisfied that the Design-Builder's Price Submission is reasonable and appropriate, County will so advise the Design-Builder and the Design-Builder will conduct a normal Subcontractor bid competition for selection of the Subcontractor to perform this portion of the Construction Work, in accordance with the procedures in Section 2.3.9.7, except that, notwithstanding any other provision of the Design-Builder

Design Phase Services Contract Documents to the contrary, (i) the Design-Builder's Price Submission will be the Design-Builder's bid for that portion of the Construction Work in the Subcontractor bidding process; (ii) the Design-Builder must obtain bids for that portion of the Construction Work from a minimum of two other pre-qualified Subcontractors; (iii) the Subcontractor bids for that portion of the Construction Work must be delivered to County rather than the Design-Builder; and (iv) County will decide which Subcontractor bid to accept, in accordance with Article 2.3.9.8.

2.4 LEGAL REQUIREMENTS.

Design-Builder will perform all Work in accordance with all applicable Legal Requirements as described in Article 1.2.22 and otherwise will provide all notices applicable to the Work. It is the responsibility of the Design-Builder during the Design and Preconstruction Phase to assist County to ascertain that the Construction Documents under preparation are in compliance with all applicable laws, statutes, ordinances, building codes, rules, and regulations.

2.5 GOVERNMENTAL APPROVALS AND PERMITS

Unless otherwise provided in the contract documents County will obtain and pay for the building permit, Fire Marshal permit, utility permit applications and costs. The Design-Builder will assist in provided the necessary documents to obtain the permits and will assist in any coordination, corrections, etc. to obtain the permits. The Design-Builder will provide and pay or all temporary construction permits required for the construction means and methods such as dust control permits, NESHAP, etc. and include in the GMP.

2.6 DESIGN-BUILDER'S CONSTRUCTION PHASE SERVICES

- 2.6.1 Unless otherwise provided in the Contract Documents to be the responsibility of County or a separate Contractor(s), Design-Builder's construction phase services will include: team management and coordination, scheduling, cost controls and Change Order management, submittal process management, subcontracting, field management, safety program, closeout process, and warranty period services. This responsibility includes providing, through itself or its Subcontractors, all necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities, and other temporary facilities needed to complete construction of all Work consistent with the Construction Documents.
- 2.6.2 Design-Builder will perform all construction Work, services, and activities efficiently and with the requisite expertise, skill, quality, and competence necessary to satisfy the requirements of the Contract Documents. Design-Builder will at all times exercise complete and exclusive control over the means, methods, sequences, and techniques of construction.
- 2.6.3 Design-Builder will only employ Subcontractors (of any tier) who are properly licensed and fully able and committed to performing the Work in compliance with the Construction Documents and with the same degree of skill, quality and competence as Design-Builder.
- 2.6.4 Design-Builder is fully responsible for the work of its Subcontractors and any of their acts and omissions in connection with the performance of their work. Nothing in the Contract Documents creates any legal or contractual relationship between County and a Subcontractor (of any tier). In addition, nothing in the Contract Documents creates any third-party beneficiary rights.
- 2.6.5 Design-Builder is responsible for coordinating the activities and Work of all Subcontractors. If County is performing other work with separate Contractors under County's control, Design-Builder agrees to cooperate and coordinate its Work with the work of County's separate Contractors so that the Project can be completed in an orderly, efficient, and coordinated manner reasonably free of significant disruption to any party.

2.6.5.1 County reserves the right to award other contracts related to the Project, or to perform

certain portions of the Work itself. Any such other work may or may not be known to County or disclosed to the Design-Builder prior to execution of the Contract. The Design-Builder will afford County and such other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and will properly coordinate its work with theirs in such manner as County may direct. The Design- Builder will also assure at its own cost reasonable access of other contractors to their site and their work.

- 2.6.5.2 The Design-Builder with the DP as part of their team will provide Drawings, Specifications, Schedules or other needed data relating to such other contracts or work as may be necessary to meet Design-Builder's duty to coordinate. The Design-Builder will thoroughly examine these documents and within three work days of completing such examination will notify County in writing of any conflicts with the Work to be performed by the Design- Builder. In no event will such notice be given by Design-Builder so late as to interfere with or delay the Work to be performed by the Design-Builder. Failure of the Design-Builder to request, review, or provide written notice as provided above constitutes a waiver of any objections or claims the Design-Builder may otherwise have as a result of the necessity to coordinate the Design-Builder Work with other activities.
- 2.6.5.3 Should the Design-Builder sustain any damage through any act or omission of any other contractor or subcontractor, Design-Builder has no claim or cause of action against County for such damage and hereby waives any such claim. The Design-Builder does not waive any claim or cause of action against any other contractor or subcontractor to recover any and all damages sustained by reason of the acts or omissions of such other contractor or subcontractor. The phrase "act or omission" as used in this section includes, but is not limited to, any delay on the part of any such other contractor or subcontractor, whether due to negligence, gross negligence, inadvertence, or any other cause.
- 2.6.5.4 Should the Design-Builder cause damage to the work or property of any other contractor or subcontractor of County, the Design-Builder will upon receiving due notice of damage promptly attempt to settle with such other contractor by contract, repair, or otherwise to resolve the dispute. If any such separate contractor sues or initiates a proceeding against County on account of any damage alleged to have been caused by the Design-Builder or its subcontractors, County will notify the Design-Builder who will at its own cost indemnify and defend County in such proceedings, or pay the costs of County defending such proceedings, and if any judgment or award against County arises therefrom, the Design- Builder will pay or satisfy it and will reimburse County for all attorney's fees and court or other costs which County has incurred in connection with the matter.
- 2.6.6 Design-Builder will keep the site free from debris, trash, and construction waste to permit Design-Builder to perform its construction services efficiently, safely, and so as not to interfere with the use of any adjacent land areas, including the reasonable aesthetic appearance of the jobsite and all storage and staging areas. Design-Builder is also responsible for and will take precautions and measures to fully secure, safeguard, and protect the Work during the Construction Phase. Unless previously released of responsibility by County, Design-Builder's responsibility to secure, safeguard, and protect continues until final completion and acceptance.

- 2.6.7 Prior to Substantial Completion of the Work, or a portion of the Work, Design-Builder will remove all debris, materials, waste, equipment, machinery, and tools from the Work so as to permit County to safely occupy the Work or a portion of the Work for the use for which it is intended.
- 2.6.8 Control of the Work
- 2.6.8.1 The Design-Builder will supervise and direct the work of its employees and Subcontractors and coordinate the work with the activities and responsibilities of County so as to complete the Work in accordance with County's objectives of cost, time, and quality as set forth in the Contract Documents.
- 2.6.8.2 The Design-Builder will establish an on-site organization with lines of authority in order to carry out the overall plans for completion of the Work.
- 2.6.8.3 The Design-Builder will schedule, notice, conduct, and take and distribute minutes of weekly progress meetings at which County, and Design-Builder can discuss jointly such matters as procedures, progress, and problems.
- 2.6.9 Daily Log
- 2.6.9.1 The Design-Builder will maintain a daily log of construction activities for each calendar day of the Contract Time. In that log, the Design-Builder will document all activities at the Work site, including, but not limited to:
- a. Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the job site, and any other weather conditions which adversely affect work at the site;
 - b. Soil conditions which adversely affect work at the site;
 - c. The hours of operation by Design-Builder and individual Subcontractor personnel;
 - d. The number of Design-Builder and Subcontractor personnel present and working at the site, by subcontract and trade, and updated schedule activity number;
 - e. The equipment active or idle at the site;
 - f. A description of the work being performed at the site by updated schedule activity number;
 - g. Any delays, disruptions or unusual or special occurrences at the site;
 - h. Materials received at job site; and
 - i. A list of all visitors at the site.
 - j. Any other relevant information as to activities on the site that day.
- 2.6.9.2 The Design-Builder will provide copies of the daily logs to County on a weekly basis. The daily log does not constitute written notice to County of any event or occurrence when such notice is required by the Contract Documents.
- 2.6.9.3 Any changes affecting previously approved work requires prior written approval of County.

2.6.10 Supervision and Construction Procedures

- 2.6.10.1 The Design-Builder will supervise and direct the Work using the Design-Builder's best skill and attention. The Design-Builder is solely responsible for the coordination and accomplishment of all portions of the Work under the Contract Documents.
- 2.6.10.2 Design-Builder is responsible to County for the acts and omissions of Design-Builder's employees, Subcontractors of all tiers, their agents and employees, and any other persons performing any of the Work or furnishing materials under a contract with the Design-Builder.
- 2.6.10.3 The Design-Builder will not be relieved from its obligation to perform the Work in accordance with the Contract Documents either by the activities or duties of the Design-Builder in its administration of this Contract, or by inspections, tests, or approvals required or performed by persons other than the Design-Builder. Nothing contained in this paragraph precludes the Design-Builder from asserting any rights it may have under this Contract in the event of unreasonable delays to the Design-Builder in the conduct of any inspections, test, approvals, or other actions by the DP upon which Design-Builder's schedule depends.
- 2.6.10.4 The Design-Builder will employ a competent County-approved Superintendent and necessary assistants, who will be in attendance at the Project site during the progress of the Work. The Design-Builder will also employ a County-approved additional staff, such as project engineer, as may be reasonably required and appropriate to the stage of construction work. Once designated, the Superintendent and other staff of Design-Builder will not be changed except with the prior consent of County, unless the Superintendent or Representative proves to be unsatisfactory to the Design-Builder or ceases to be in its employ. The Superintendent and on-site staff will represent the Design-Builder and all communications given to the Representative are binding on the Design-Builder. All such communications will be confirmed in writing by Design-Builder.
- 2.6.10.5 The Design-Builder will at all times enforce strict discipline and good order among its employees and its Subcontractors' employees and will not allow employment on the Work of any unfit person or anyone not skilled in and capable of performing the task assigned to them.
- 2.6.10.6 The Design-Builder will at all times allow County, or any other designated representatives access to the construction work to observe progress and inspect the quality of work and conformance to the Construction Documents.
- 2.6.10.7 Any Work required to be inspected by County prior to being covered, which is covered up without prior inspection or without prior consent of County, must be uncovered by the Design-Builder, if requested by County, and then re-covered at no cost to County, notwithstanding the provisions of the following subsection. Design-Builder will notify County in writing at least 48 hours prior to the time at which County must be present to perform an inspection. Failure to provide such notice makes the Design-Builder solely responsible for all consequences of non-inspection and any required access to or uncovering of such Work.

2.6.11 Administration

- 2.6.11.1 Except as may be expressly provided to the contrary in the Contract Documents, the Design-Builder's Representative will forward all communications in writing and all documents simultaneously to County's Representative as listed below:

Design-Builder's
Representative:
(NAME)

County's
Representative:
(NAME)

2.6.12 Drawings and Specifications

- 2.6.12.1 The DP is an agent of the Design-Builder under this contract. The DP shall be responsible for providing the design documents with the competency and care as a technical registrant in the State of Arizona. Any DP members not under the jurisdiction of the State of Arizona shall meet the standards of any professional organization related to the field within their scope of services. The Design-Builder will study and compare the Construction Documents prior to beginning Work on each phase or portion of the Work and immediately report any material error, inconsistency, conflict, ambiguity, or omission that is discovered to the DP and County.
- 2.6.12.2 The Construction Drawings are intended to show general arrangements, design, and extent of Work and are not intended to serve as Shop Drawings. Where required, the Design-Builder will perform no portion of the Work without having Shop Drawings, Product Data, or Samples approved; any Work performed in violation of this provision will be solely at the Design-Builder's risk regardless of County's knowledge of such Work being performed.
- 2.6.12.3 In the event of any conflict or ambiguity, the Construction Documents will be interpreted as being complementary, requiring delivery by Design-Builder of a complete Project, or designated portion thereof. Any requirement occurring in any one of the Construction Documents is as binding as though occurring in all Construction Documents. In the event of any conflict or ambiguity, perceived or real, the Design-Builder will provide an interpretation before performing the Work. Generally, the Specifications address quality, types of materials, and contractual conditions while the Drawings show placement, sizes, and fabrication details of materials. In the event a conflict is discovered in the Construction Documents, the priorities stated below govern and control:
- a. Addenda govern over all other Construction Documents;
 - b. Subsequent addenda govern over prior addenda, but only to the extent modified;
 - c. In case of conflict between Drawings and Specifications, the Specifications govern;
 - d. Conflicts within the Drawings:
 - (1) Schedules, when identified as such, govern over all other portions of the Drawings.
 - (2) Specific notes govern over all other notes and all other portions of the Drawings, except the schedules described in 2.6.12.3(d)(1) above.
 - (3) Larger scale drawings govern over smaller scale drawings.
 - (4) Figured or numerical dimensions govern over dimensions obtained by scaling.
 - e. Conflicts within the Specifications: These General Conditions govern over all sections of the Specifications except for specific modifications thereto that may be stated in Special Conditions or addenda. No other section of the Specifications modifies these General Conditions; and
 - f. In the event provisions of codes, safety orders, Construction Documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive or higher quality governs.

- 2.6.12.4 In the event of conflict between County's Technical Standards and the Drawings and Specifications, Design-Builder will promptly call the conflict to the attention of County and will defer the use of such Drawing until resolution of the conflict to County's satisfaction.
- 2.6.12.5 If the Construction Documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail will be an implied requirement of the Construction Documents in accordance with such standard. A "minor detail" includes (a) the concept of substantially identical components, where the price of each such component is small even through the aggregate cost or importance is substantial, and includes a single component which is incidental, even though its cost or importance may be substantial; and (b) the quality and quantity of the parts or materials so supplied will conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts or materials otherwise set forth in the Construction Documents.

2.6.13 Submittals, Drawings and Shop Drawings

- 2.6.13.1 The Design-Builder will maintain at the site, for the use of County , one copy of all Drawings, Specifications, bulletins, addenda, Change Orders, field orders, approved Shop Drawings, approved Submittals, supplementary instructions, requests for information, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, guarantees, and other contract-related documents and their modifications, if any, in good order and marked daily by the Design-Builder to record all approved changes made during construction. The Design-Builder at the time of Substantial Completion will turn these over to County for use by County.
- 2.6.13.2 The Design-Builder will submit, with such promptness as to cause no delay in its work or in the work of any other Contractor, all Submittals and Shop Drawings as are required by the Construction Documents or are necessary to illustrate details of the Work.
- 2.6.13.3 Each Submittal and Shop Drawing must be accompanied by a Design-Builder transmittal letter containing a list of the titles and numbers of the Shop Drawings. Each series must be numbered consecutively for ready reference. Each Submittal and Shop Drawing will be marked with the following information:
- a. Date of Submission
 - b. Name of Project
 - c. Location of Project
 - d. Branch of Work (Specification Section)
 - e. Project Number
 - f. Name of Submitting Design-Builder
 - g. Name of Subcontractors
 - h. Revision Number
- County will identify Submittals that must be submitted to County for its review. During Construction Phase Design-Builder will promptly provide County with an electronic copy of all approved submittals.
- 2.6.13.4 The Design-Builder will review all Subcontractor Submittals and Shop Drawings prior to being submitted to the DP and each must bear a written statement by the

Design- Builder that the Submittals and shop drawings are consistent with the Construction Documents and other Contract Documents or, if not totally consistent, they must bear a written statement indicating all variances from the Construction Documents and other applicable Documents. Any submittals or shop drawings submitted without the statements will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted; and any delay caused thereby is the Design- Builder's sole responsibility. This review by Design-Builder of Subcontractor submittals and shop drawings is not Design-Builder approval of the design therein except that it is a representation that the letter accompanying the submittal or shop drawings does indicate all variations from the Construction Documents and other Contract Documents as required by Section 2.6.13.5.

- 2.6.13.5 The Design-Builder will include with Submittals and Shop Drawings, a letter indicating all variances from the Drawings and Specifications. Failure to so notify the DP of such variances will be grounds for subsequent rejection of the related Work or materials. If, in the opinion of the DP, the variances are not acceptable, the Design-Builder must furnish the item as specified or as indicated on the Construction Drawings.
- 2.6.13.6 The Design-Builder must check all of its Submittals and Shop Drawings and be fully responsible for them and for coordination with connecting Work. Submittals and Shop Drawings must indicate in detail all parts of an item of Work, including erection and setting instructions and engagements with work of other trades or other separate Contractors.
- 2.6.13.7 By the act of reviewing or submitting to County Submittals or Shop Drawings, the Design-Builder represents to County that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each Submittal and/or Shop Drawing with the requirements of the Work and of the Construction Documents. If any specified material item or part is not available, the Design-Builder must so indicate to County.
- 2.6.13.8 The DP will review and approve Submittals and Shop Drawings and return them to the Design-Builder within 20 calendar days of receipt unless otherwise previously agreed in writing. For scheduling purposes, the Design-Builder must assume a 20-day review period for each Submittal or set of Shop Drawings, and 10 calendar days for resubmittals, except for complex submittals identified by the DP as having significant deficiencies, in which event the resubmittal turnaround time will be within 20 calendar days. If review and approval are delayed beyond 20 calendar days, the DP will notify the Design-Builder and County in writing stating the reason for the delay. Reviews of submittals and shop drawings by the DP are the responsibility of the Design-Builder under this Design-Build Contract and any delays associated with the DP's review are not the responsibility of County. Approval does not relieve the Design-Builder from the responsibility for variances from the drawings and specifications, unless it has been called to the DP's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to affect an improvement in the Work and does not increase the GMP or Contract Time. Any such modification is subject generally to all other provisions of the Construction Documents and is without prejudice to any and all rights under any surety bond.
- 2.6.13.9 If the DP returns a Submittal or Shop Drawing to the Design-Builder with the notation "rejected", "revise and resubmit", or "approved as noted", the Design-Builder, so as not to delay the Work, will promptly resubmit a Submittal or Shop Drawing conforming to the requirements of the Construction Documents and indicating in writing on the Submittal or Shop Drawing and on the transmittal what portions of the

resubmittal have been altered in order to meet with the approval of the DP. Design-Builder will also indicate any other differences between the resubmittal and the prior submittal on the Shop Drawing and on the resubmittal as a special note.

- 2.6.13.10 No extension of Contract Time will be granted to the Design-Builder because of its failure to submit Submittals or Shop Drawings in ample time to allow for review, possible resubmittals, and approval. Fabrication of Work will not commence until the Design-Builder has received written approval. The Design-Builder will furnish prints of its approved Submittals and Shop Drawings to all the Subcontractors whose work is in any way related to those Submittals or Drawings. Only prints bearing this approval will be allowed on the Site.
- 2.6.13.11 The DP will solicit and receive County's review/comments on all submittals/shop drawings within the designated time for the review prior to completing their review and returning to the Design-Builder.

2.6.14 Product Samples, Tests, and Certificates

- 2.6.14.1 The Design-Builder will furnish Product Samples of all items requested or required by the Specifications. Product Samples must be properly identified and submitted with such promptness as to cause no delay in Work or in the work of any other Contractor and to allow time for consideration by County. The DP or County will review Product Samples in accordance with Sections 2.6.13.2 – 2.6.13.11 above.
- 2.5.14.2 Each Product Sample must be accompanied by a letter of transmittal containing the following information:
 - a) Date of Submission
 - b) Name of Project
 - c) Location of Project
 - d) Branch of Work (Specification Section Number)
 - e) Project Number
 - f) Name of Submitting Design-Builder
 - g) Name of Subcontractor
- 2.6.14.3 The Design-Builder will furnish the DP a certificate stating that material or equipment submitted by Design-Builder complies with Contract Documents. If a certificate originates with the manufacturer, the Design-Builder will endorse it and submit it to the DP together with a statement of compliance in its own name.
- 2.6.14.4 No tests, inspections or approvals performed or given by County P or others acting for County or any agency of Federal, State, or Local government nor any acts or omissions by County in administering this Contract relieve the Design-Builder from its duty to perform the Work in accordance with the Contract Documents and all applicable law or regulation or code.
- 2.6.14.5 Unless the DP is authorized at the time of submittal to return samples at the Design-Builder's expense, rejected samples will be destroyed.
- 2.6.14.6 After delivery of materials by Design-Builder, the DP may make such tests, as it deems necessary, with samples required for such tests being furnished by and at the cost of the Design-Builder. Any test is for the benefit of County and does not relieve Design-Builder of the responsibility for providing quality control measures to assure that the Work strictly complies with the Construction Documents. No test

implies acceptance of materials, Work, workmanship, equipment, accessories or any other item or thing.

- 2.6.14.7 Materials, workmanship, equipment or accessories may be rejected by County on the basis of the test results even though general approval has been previously given. If items have been incorporated in the Work, the DP has the right to cause their removal and replacement by items meeting Construction Document requirements, with the cost therefor being borne by the Design-Builder and not County, or to demand and secure appropriate reparation to or price adjustment for the benefit of County from the Design- Builder.

2.6.15 As-Built Drawings

- 2.6.15.1 The Design-Builder shall maintain a set of as-builts on-site that show the changes that have occurred including changes to the following dimensions, product changes, clarifications, RFIs, ASIs, work that is concealed in walls, slabs or ceilings, underground utilities, etc. The as-builts shall be reviewed at a minimum of once a month by the DP.
- 2.6.15.2 Prior to Final Payment, the Design-Builder will complete and turn over to the DP the digital file of the Red Line Drawings kept current at the Project site by Design-Builder. Red Line Drawings will consist of a set of digital drawings that clearly indicate all field changes that were made during contract performance to adapt to field conditions, changes resulting from Change Orders and all buried and concealed installation of piping, conduit and utility services. All buried and concealed items both inside and outside the facility must be accurately located on the Red Line Drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The Red Line Drawings must be clean and all changes, corrections, and dimensions will be given in a neat and legible manner in a contrasting color. The DP will use the Design-Builder Red Line Drawings to finalize the As Built Drawings (Record Drawings) which, in turn, will be turned over to County at the end of construction.
- 2.6.15.3 With respect to any changes or corrections in the Work which are made subsequent to Substantial Completion, such revisions must be submitted to the DP for approval prior to Final Payment.
- 2.6.15.4 The DP shall review the Red Line Drawings prior to the acceptance and approval to County by Design-Builder of the monthly payment application to ensure the As-Built Drawings are updated and represent the construction progress of the Project. If the As-Built Drawings do not reflect the current progress the payment application shall not be approved by the DP and County until that are brought up to a satisfactory level.

2.6.16 Schedule and Coordination

- 2.6.16.1 The Design-Builder will schedule and coordinate the Work of all of its Subcontractors on the Project including their use of the site. The Design-Builder will keep the Subcontractors informed of the Project CPM Schedule to enable the Subcontractors to plan and perform their Work properly.
- 2.6.16.2 At the time of the submission of the GMP, the Design-Builder will submit to County a detailed CPM Schedule for the Work, which will provide for the expeditious and practicable execution of the Work. The CPM Schedule will be consistent with and build upon any previous schedules issued during the Design and Preconstruction Phase. The CPM Schedule is not to exceed time limits under the GMP/Contract Documents and must be related to the entire Work to the extent required by the Contract Documents.
- 2.6.16.3 The CPM Schedule required for the performance of the Work will include reasonable

detail including a time scaled network and computer printout in accordance with the following requirements:

- a. no activity may be longer than 14 calendar days (i.e. task line-item duration in the CPM Schedule) in length except fabrication and delivery activities;
 - b. each activity must be logically tied to another activity to show its interdependency with other activities;
 - c. installation activities must be logically tied to submittal/approval, fabrication and delivery;
 - d. only a single critical path is allowed; and
 - e. all activities on the schedule must be clearly designated.
- 2.6.16.4 The GMP will prepare and keep current, for the DP and County, a submittal schedule which is coordinated with the Design-Builder's CPM Schedule for the Work and allows the DP and County the specified time to review submittals. The schedule must allow for the review periods and take into account lead times for products and materials.
- 2.6.16.5 The Design-Builder will revise the CPM Schedule monthly to reflect actual conditions in the field and transmit it monthly to County with a copy and a Narrative Report including a description of current and anticipated problem areas, delaying factors and their impact and corrective action taken or proposed. This update is to be submitted to County by Design-Builder with each Application for Progress Payment. County's review of the CPM Schedule update does not relieve Design-Builder of its complete and exclusive control over the means, methods, sequences, and techniques of construction. The monthly updated CPM Schedule will be the basis for the analysis and granting or rejection of time extensions by County in accordance with Article 9 of these General Conditions.
- 2.6.16.6 In addition to the monthly CPM Schedule update, the Design-Builder will also revise its schedule at appropriate intervals as required by the conditions of the Work or as directed by County with an electronic copy of the revision submitted to County in a format acceptable to County.
- 2.6.16.7 The Design-Builder will perform the Work at all times during the Construction Phase within the identified times of the most recent County-approved schedule and consistent with the established Contract Time.
- 2.6.16.8 If the Design-Builder submits an original or updated CPM schedule which shows the Project and/or individual Milestone(s) for the Project completing earlier than required by the adjusted contractual completion date(s), the differences between the forecasted early completion and the required completion will be considered Project-owned float available for use by both County and the Design-Builder.
- 2.6.16.9 Since float time within the CPM Schedule is jointly owned, County will grant no time extensions and will pay no delay damages until a critical path activity delay occurs which extends the Work beyond the adjusted contractual completion date. Since float time within the CPM Schedule is jointly owned, County-caused delays on the Project may be offset by County-caused time savings which result in a critical path activity savings of time to the Design-Builder. In that event, the Design-Builder is not entitled to receive a time extension or delay damages until all County-caused time savings are exhausted and the applicable contractual completion date or milestone date is also exceeded. The Design-Builder is not entitled to a time extension due to failure by the DP to respond to clarifications in the construction documents, delays in submittal reviews or any other delay attributed to the DP's delay in providing information as part of the Design-Builder Team to keep the construction schedule.

- 2.6.16.10 No time extensions will be granted or delay damages paid unless (1) the delay is clearly demonstrated by the updated CPM Schedule and the current and supporting narrative as of the month the change was issued or occurred, or the delay took place, and (2) the delay cannot be mitigated, offset, or eliminated through such actions as revising the intended sequence of Work or other reasonable or industry recognized means of mitigating schedule slippage.

2.7 DESIGN-BUILDER'S RESPONSIBILITY FOR PROJECT SAFETY

- 2.7.1 Design-Builder recognizes the importance of performing its Work in the safest manner possible so as to prevent damage, injury or loss to (a) all individuals at or in the vicinity of the Work, whether working or visiting the Project; (b) all Work, including materials and equipment incorporated or stored on or off-site; and (c) all property adjacent to the site. On that basis Design-Builder assumes sole responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work and will submit a Safety Plan in complete form to County at the time of issuance of the Notice to Proceed with the Work. Design-Builder will, prior to commencing construction, designate a safety manager with the necessary qualifications and experience to supervise the implementation of the plan and the monitoring of all safety precautions and programs related to the Work. The safety manager will make routine daily inspections of the Work site, and will hold at least weekly safety meetings with Design-Builder's personnel and Subcontractors.
- 2.7.2 Design-Builder and its Subcontractors will comply with all legal requirements relating to safety, as well as any County specific safety requirements set forth in the Contract Documents. Design-Builder will immediately report, in writing, to County's Representative and all government or quasi- government authorities having jurisdiction over matters involving the Work, any injury, loss, damage, or accident occurring at the site of the Work.
- 2.7.3 Design-Builder's responsibility for safety under this Section 2.7 is not intended to relieve Design-Builder's Subcontractors (of any tier) from applicable obligations and responsibilities for complying with all legal requirements, including those related to health and safety matters, and their taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages, or accidents resulting from their performance of the Work.

2.8 WARRANTY

- 2.8.1 Design-Builder warrants to County that the construction, including all materials and equipment furnished as part of the Work, will be new, unless otherwise specified in the Contract Documents; of good quality, in conformance with the Contract Documents; and free of defects in materials and workmanship. Design-Builder's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the Work by persons other than Design-Builder, Design- Builder's subcontractors, or others under Design-Builder's control. Nothing in this warranty by Design-Builder limits any manufacturer's warranty which provides County with greater warranty rights than set forth in this Section 2.8 or the Contract Documents.
- 2.8.2 Design-Builder will provide County with all manufacturers' warranties and Operation and Maintenance Manuals upon the date of Substantial Completion of the Work. Design-Builder will provide County a two-year warranty for all portions of the Work, which warranty commences upon Substantial Completion and acceptance by County of the final phase of the Project. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited or superseded by this provision.
- 2.8.3 The Warranties identified herein do not limit or control other remedies available to County at law or their limitation periods, if any.

2.9 CORRECTION OF DEFECTIVE WORK

- 2.9.1 If any portion of the Work is covered over by Design-Builder or its subcontractor contrary to the

request of County, or as required by the Construction Documents, or the applicable building standards or codes if requested in writing by County, that Work or portion thereof must be promptly uncovered for observation at the Design-Builder's own expense.

- 2.9.2 If any portion of the Work, other than those portions required to be inspected by County, or others, prior to being covered, has been covered over, County may request that it be uncovered for observation. If such portion of the Work is found to be in accordance with the requirements of the Construction Documents, the cost of uncovering it will be charged to County as a Change Order. If such portion of the Work is found not to be in compliance with the requirements of the Contract Documents, the Design-Builder shall bear such costs to uncover, to remove and replace, or to repair. Unless a specific written waiver of such non-conformance has been provided to the Design-Builder, Design-Builder will promptly correct any Work that is found not to be in conformance with the Contract Documents, whether previously inspected by County's representatives or not. This obligation of Design-Builder continues for a period of two years from the date of Substantial Completion. Nothing in this Section waives any other rights or remedies that County may have under applicable law.
- 2.9.3 Design-Builder, upon receipt of written notice from County that the Work is not in conformance with the Contract Documents, will, within seven days (except in the case of an emergency or an item on the schedule critical path, which will require immediate response) commence correction of such nonconforming Work, including the correction, removal, or replacement of the nonconforming Work and any damage caused to any other parts of the Work affected by the nonconforming Work. In the event Design-Builder fails to commence the necessary corrective steps within seven days of the Notice, County, in addition to any other remedies provided under the Contract Documents, may at the end of the seven-day period commence to correct or cause the correction of such nonconforming Work with its own or other forces. Design-Builder is responsible for all costs and expenses that County incurs in remedying any such Work not in conformance with the Contract Documents, including at County's sole discretion, any of its own staff time costs. County will notify Design-Builder of its intent to make such corrections at or before the commencement of the corrective work.
- 2.9.4 The two-year warranty period referenced in Section 2.8.1 applies only to the Design-Builder's obligation to correct Work not in compliance with the Construction Documents and does not constitute a period of limitations with respect to any other rights or remedies County may have with respect to Design-Builder's other obligations under the Contract Documents. Design-Builder acknowledges that, for purposes of statutes of limitations, County is a body politic and corporate of the State of Arizona acting in its governmental capacity for the general good.

ARTICLE 3 – DESIGN-BUILDER’S DESIGN SERVICES AND RESPONSIBILITIES

In addition to the Design-Builder Design Responsibilities outlined in Article 2,

- 3.1 The Design-Builder Design Professional will be the initial interpreter of the intent and requirements of the Construction Documents. The DP will render written initial interpretations with reasonable promptness following a written request from County or the Design-Builder. These initial interpretations will be consistent with the intent of the Contract Documents.
- 3.2 The DP will timely review and approve or take other appropriate action upon the Design-Builder's submittals, such as Shop Drawings, Product Data and Samples, for conformance with the Construction Documents. The DP will take such action with reasonable promptness as specified so as to cause no delay. The DP's approval of a specific item or component does not indicate approval of an assembly of which the item is a component.
- 3.3 Following consultation with County, the DP will take appropriate action on issuance of Change Orders and may authorize minor changes in the Work as defined in Section 10.3.
- 3.4 The DP and County each have authority to reject Work which does not conform to the Contract Documents and to require special inspection or testing but may take such action only after consultation with the other. However, neither the authority to act given to the DP and County under this subparagraph nor any decision made by them in good faith either to exercise or not exercise such authority gives rise to any duty or responsibility by them to the Design-Builder, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.
- 3.5 Based on its observations of the Work and evaluation of applications for payment, County or County's designee will have the responsibility to approve the amounts owing the Design-Builder from time to time under and in accordance with Article 7 of these General Conditions and applicable law.

ARTICLE 4 COUNTY’S SERVICES AND RESPONSIBILITIES

In addition to its responsibilities outlined in Article 2,

- 4.1 County will, throughout the performance of the Contract, cooperate with Design-Builder and perform its responsibilities, obligations and services in a timely manner so as not to delay or interfere with Design-Builder's performance of its obligations under the Contract Documents.
- 4.2 County's Representative is responsible for processing and delivery of County-supplied information and approvals or rejections in a timely manner to permit Design-Builder to fulfill its obligations under the Contract Documents. County's Representative will also provide Design-Builder with reasonably prompt notice if and when it observes any failure on the part of Design-Builder to fulfill its contractual obligations, including errors, omissions, or defects in the Design-Builder's performance of its Work. Failure of County or its representatives to notify the Design-Builder hereunder will not alter the duties and obligations of Design-Builder under the Contract Documents.
- 4.3 County will provide reviews and approvals or rejections of the Design-Builder's cost estimate portion of the Design Submission within three weeks of receipt of those documents. County will review documents submitted by the Design-Builder and render any decisions pertaining thereto without unreasonable delay.
- 4.4 County is responsible for all Work performed at the Project by parties under County's control other than Design-Builder. County will contractually require such parties to cooperate with and coordinate their activities with Design-Builder so as not to unreasonably interfere with Design-Builder's ability to complete the Work in a timely manner, consistent with the Contract Documents.
- 4.5 County will interact and cooperate with the Design-Builder to keep the Work within the portions of the Project Budget or GMP, as may be applicable, including but not limited to giving appropriate and reasonable consideration to all reasonable recommendations of the Design-Builder, approving redesign, deductive alternatives or reductions in the Work, consideration of any requested additional

Value Engineering, making modifications to the Contract Documents, or exercising such other rights or remedies as may be available elsewhere under this Contract including termination for convenience. If at any time, it is apparent that the cost of the Work cannot be kept within the Project Budget or GMP, County may terminate this Contract in accordance with the termination for convenience provisions set forth below.

- 4.6 The DP acting through the Design-Builder, will furnish County a sufficient quantity of documents and information required for the Design-Builder's performance of its Design and Preconstruction Services.

ARTICLE 5 – HAZARDOUS MATERIALS AND UNFORESEEN PROJECT SITE CONDITIONS

5.1 HAZARDOUS MATERIALS

- 5.1.1 Design-Builder is solely responsible for properly removing and disposing of any Hazardous Materials in the Project identified as such in the Contract Documents by County. Design-Builder, upon encountering any Hazardous Materials not identified in the Contract Documents, will stop work immediately in the affected area and notify County and, if required by applicable rules, all governmental or quasi-governmental entities with jurisdiction over the Project. County has responsibility to take the necessary measures required to properly remove and dispose of Hazardous Materials not identified in the Contract Documents as being the responsibility of the Design-Builder.
- 5.1.2 Design-Builder will be entitled, in accordance with the provisions of these General Conditions, to an adjustment in the GMP or Contract Time(s) of performance, or both, to the extent that the Design-Builder's costs or time of performance have been adversely and materially impacted by the presence of unforeseen or undisclosed Hazardous Materials.
- 5.1.3 County is not responsible for Hazardous Materials introduced to the site by Design-Builder, Design-Builder's Subcontractors (at any tier), or anyone else for whom the Design-Builder is responsible unless the Contract Documents explicitly call for either the provision or removal of the specific Hazardous Materials.
- 5.1.4 Design-Builder will indemnify, defend, and hold harmless County and others under County's control, and the officers, directors, employees and agents of each of them, from and against all claims, losses, liabilities, costs and expenses, including but not limited to attorney's fees and expenses, arising out of or resulting from Design-Builder's importation, improper handling, storage, abatement, removal, remediation, or disposal of any Hazardous Materials.
- 5.1.5 Upon any release of any Hazardous Material in connection with the Work, whether relating to a pre-existing condition or to acts or omissions of Design-Builder, Design-Builder will take immediate action reasonably necessary to contain the release and if the Hazardous Material release is not a Design-Builder release, County will pay Design-Builder the reasonable costs incurred by Design-Builder in taking such containment action. County may elect to have Design-Builder control and carry out any removal and remediation activity needed, provided that if the release is not a Design-Builder release, County will be responsible to pay Design-Builder for such Design-Builder removal and remediation activities in accordance with the Change Order provision set forth in Section 10.4 of these General Conditions, including allowance of additional Contract Time.

5.2 UNFORESEEN PROJECT SITE CONDITIONS

- 5.2.1 If Design-Builder encounters, during the performance of the Work, concealed or latent physical conditions or subsurface conditions at the Project which (a) materially differ from the conditions indicated in the Contract Documents; or (b) are of an unusual nature which differ materially from the conditions ordinarily encountered and generally recognized as inherent in the sort of work provided for in the Contract Documents, Design-Builder will immediately provide written notice to County apprising County of the unforeseen conditions encountered. Design-Builder will not disturb or modify such conditions without County's prior written consent. County will promptly investigate Design-Builder's notice of an unforeseen site condition and advise Design-Builder of its findings and determination.

- 5.2.2 If County determines that the conditions encountered by Design-Builder under Section 5.2.1 are an unforeseen Project site condition, Design-Builder will be entitled, in accordance with the provisions of these General Conditions, to an adjustment in its GMP or Contract Time(s) of performance, or both, to the extent that Design-Builder's cost or time of performance have been adversely impacted by the unforeseen conditions. Adjustments to GMP will be for the actual direct cost impact incurred by Design-Builder to address and resolve the unforeseen conditions.
- 5.2.3 County will not consider or allow any claim by the Design-Builder for an increase in the GMP or in Contract Time(s) without compliance with the advance notice requirement set forth above, submission of verifiable documentation of specific direct cost impact, and an adequate opportunity for County to investigate. Extensions of Contract Time(s) will be considered and allowed only when based upon submission of an updated CPM Schedule and supporting narrative showing an actual unavoidable delay to the Project Critical Path due to the unforeseen Project Site Conditions.
- 5.2.4 In no event will the Contract Time or GMP be adjusted for conditions that Design-Builder could or should have identified through past work or its investigations or survey of existing conditions prior to submission and establishment of the GMP and the GMP Schedule.
- 5.2.5 If County determines Design-Builder has no entitlement to an adjustment in GMP or Contract Time for what Design-Builder contends is an unforeseen Project Site Condition, Design-Builder may only proceed in pursuit of its position or claim in accordance with the Dispute Resolution provisions of the Contract.

5.3 ARCHEOLOGICAL CONDITIONS:

If in the course of performing the Work, the Design-Builder, any subcontractor, or other persons or entities under the control of Design-Builder, encounter any Native American burial site or other archeological artifacts, Design-Builder will immediately notify County and suspend any Work or activity in the vicinity of the burial site or artifact. County will determine with reasonable promptness what action, if any, needs to be taken and advise Design-Builder how to proceed or adjust the Work. Any claim for adjustment in Contract Time or GMP will be handled under 5.2.2 above.

ARTICLE 6 – RESERVED

ARTICLE 7 – PAYMENT

7.1 GUARANTEED MAXIMUM PRICE; SAVINGS.

- 7.1.1 County will pay the Design-Builder for the Design-Builder's performance and the Design-Builder accepts the Design and Preconstruction Phase Fee in full payment for Preconstruction services, and the Actual Cost of Work (as defined in Appendix B hereto) plus the Construction Phase Fee for construction services, provided, however, that the amount paid to Design-Builder will not exceed the GMP as originally fixed or as adjusted from time to time as provided in these General Conditions.
- 7.1.2 Savings will be calculated and paid upon Final Completion of the Work. One hundred percent of all savings will be allocated to County. Savings returned to County will not include return of Construction Phase Fee for the amount of the savings but will include an appropriate percentage of bonds and insurance premiums and taxes attributable to the savings amount. One hundred percent of allocations to GMP for allowance and contingency items that remain unused upon Final Completion will be returned to County.

7.2 SCHEDULE OF VALUES.

- 7.2.1 Before issuance of the Notice to proceed and commencement of the Work in the Construction Phase, the Design-Builder will submit to County, and County and the Design-Builder shall agree upon, a complete Schedule of Values on the items constituting the GMP following the sample outline in **Appendix B**, setting forth the various portions of the Work, and the portions of the

GMP allocated to each portion of the Work. This Schedule of Values will also be the basis for payment as the Work progresses. Those portions of the Schedule of Values allocable to Work to be performed by Subcontractors of the Design-Builder will be finalized as and when the Subcontracts are executed. All estimated construction costs not specifically allocated to a Subcontract (including Work self-performed) or to Construction General Conditions will be allocated to "Bidding Contingency" and will, upon approval of County, be available for later use by the Design-Builder as Construction Contingency, for reallocation to other line items as provided for in these General Conditions.

7.3 APPLICATIONS FOR PROGRESS PAYMENTS.

- 7.3.1 Design-Builder will deliver to County (or such other person as is designated by County) on the last day of each month a sworn application for progress payment in the format specified by County. Each such application for payment will be based on the Schedule of Values and be in an amount determined by the percentage of completion of the Work in the month being billed. It will show the percentage of completion of each category of the Work performed in the billing period. The payment application must be accompanied (as separate documents) by (a) an updated CPM Schedule and narrative schedule update report as provided for herein; and (b) conditional lien waivers from each subcontractor or supplier entitled to progress payment thereunder. In addition, the Design-Builder will provide the following documentation upon specific request by County: (a) a written accounting in a form agreed by Design-Builder and County of the actual cost of the Work completed; (b) a report by Design-Builder on Subcontractor buy-out status, contract sums, and subcontractor pay applications; (c) a copy of job cost ledger; (d) a copy of timecards for all employees charged to the Project; and (e) a copy each of Construction General Conditions invoices and purchase orders for the time periods periodically requested by County.
- 7.3.2 The Design-Builder Construction Phase Fee and the Construction General Conditions will be paid monthly by County, in accordance with the percentage of completion of the Work. The amount approved by County and paid for progress achieved in the month billed for is not final acceptance of the Work and is subject to final adjustment at the time of Final Acceptance and Final Payment. At no time may the cumulative value of past progress payments plus the current requested progress payment on any pay application exceed the GMP as it may be adjusted under these General Conditions.
- 7.3.3 County, within seven days after receipt of Design-Builder's application for progress payment, and no later, will either issue (a) a certificate of approval for payment of such amount as is invoiced in the payment application; or (b) specific written findings setting forth those items in detail in the estimate of the Work in the pay application that are not approved for payment under the Contract. All items in the payment application are considered approved that are not made the subject of the written detailed finding of non-approval.
- 7.3.4 County may withhold an amount from the progress payment to be made for the time period billed for a sufficient sum to pay the expenses that County reasonably expects to incur in correcting the deficiencies set forth in the written finding issued by County as to the items not approved for payment.

7.4 PAYMENT AND RETAINAGE.

- 7.4.1 The DP shall review the payment application with County prior to approving to verify that the work completed is consistent with the percentage identified in the payment application, stored materials documentation is provided to County, and retention amounts are accurate. Within 14 days following the receipt of the DP certificate of approval for payment and the written detailed findings of items not approved, if any, County will pay the amount due on the progress payment application to the Design-Builder. Payment will be limited to 90% of the value approved of the Construction Work in place and for materials suitably stored in accordance with Section 7.6, below, of these General Conditions during the month being billed. County will retain the remaining 10% until the Contract is 50% complete, at which time County may, in its sole

discretion, reduce the retainage to 5%; provided that: (a) the Design-Builder is making satisfactory progress on the Contract; and (b) in County's sole judgment, there is no specific cause or claim requiring a greater amount than 5% to be retained. Thereafter, County will pay the Design-Builder 95% of the value of the Construction Work and materials on approved progress billings, unless and until County determines, in its sole discretion that satisfactory progress is not being made, at which time County may reinstate 10% retainage. Such 10% reinstatement is equal to 10% of the total Contract value of Construction Work in place and materials stored. County's determinations concerning the satisfactory progress of the Work for retainage adjustment purposes is final.

- 7.4.2 Within 60 days after the issuance of the Certificate of Final Completion by the DP and receipt by County of all other documents required from Design-Builder by the Contract Documents, County will pay all retained amounts to Design-Builder as part of Final Payment, provided, however, (a) the Final Payment is not due from County until the Design-Builder delivers full and final unconditional lien releases in statutory form from all Subcontractors and major Suppliers (any claim filed thereafter is the responsibility of the Design-Builder), and (b) if any claim remains unsatisfied after all payments are made by County, the Design-Builder will immediately, upon demand, refund to County all monies that County may be compelled to pay in discharging such unsatisfied claims including all costs, interest, and attorneys' fees.

7.5 EARLY RELEASE OF SUBCONTRACTOR RETAINAGE.

If a Subcontractor has completed its portion of the Work (including all Punch list items) pursuant to its Subcontract, the Design-Builder may ask County to disburse the amount of Retainage allocable to such Subcontractor after delivering to County, when required by County, consent to such disbursement from such Subcontractor's surety, in a form satisfactory to County, and a final lien release from the Subcontractor. If County is satisfied that the Subcontractor's Work has been fully and finally completed in accordance with the Contract Documents, County may disburse said Retainage to Design-Builder for payment over to the Subcontractor. However, the two-year warranty period with respect to such Subcontractor Work will not commence until Substantial Completion of the entire Project.

7.6 PAYMENT FOR ON-SITE AND OFF-SITE MATERIALS.

County will make progress payments when due to Design-Builder on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. County may similarly make payment to Design-Builder for materials and equipment suitably stored off the site, conditioned upon the Design-Builder furnishing satisfactory evidence to County that (a) title to the materials and equipment will pass to County upon payment for same; (b) there are no claims of third parties; (c) the materials and equipment are adequately insured for full replacement value plus delivery; and (d) such other matters as County may reasonably request in order to protect its interests.

7.7 OWNERSHIP OF CONSTRUCTION WORK.

- 7.7.1 The Design-Builder warrants that title to all Construction Work included in an Application for Progress Payment will pass to County no later than the time of payment therefor. The Design-Builder further warrants and represents to County that upon submittal of an Application for Payment, all Construction Work for which Applications for Payment have been previously issued and payments received from County will, to the best of the Design-Builder's knowledge, information and belief, be free and clear of liens, claims, security interests, or encumbrances in favor of the Design-Builder, its Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.
- 7.7.2 As a condition precedent to Final Payment from County the Design-Builder will provide unconditional waivers of lien in statutory form from all Subcontractors, material suppliers, and other persons or entities having provided labor, materials and equipment relating to the Work.

7.8 SUBSTANTIAL COMPLETION.

When the Design-Builder believes the Work, or a portion thereof which County wants and agrees to accept separately, is Substantially Complete, the Design-Builder will notify County and will submit to County a comprehensive list of items to be completed or corrected as to that Work or all Work. Within five working days of receipt of the Design-Builder's notice and list, County, the DP, and Design-Builder will jointly inspect the Project to determine whether Substantial Completion has in fact occurred. If County determines that the Work, or the relevant portion thereof, is Substantially Complete, County will issue the Punch List and the Certificate of Substantial Completion stating the date of Substantial Completion, which certificate will be executed by County and the Design-Builder. The Design-Builder will thereupon proceed promptly to complete or correct Punch List items. Failure to include an item on the Punch List does not alleviate or alter the responsibility of the Design-Builder to complete all Work in accordance with the Contract Documents.

7.9 FINAL COMPLETION AND FINAL PAYMENT

- 7.9.1 Completion of all outstanding Work items noted in the Substantial Completion "Punch List" for the entire Work, or relevant portion thereof, and other Contract requirements are necessary for County to certify Final Completion. Requirements for this certification also include, but are not limited to, completion of equipment operating training for County and the submission and approval by County of (a) all Record and Close Out Documents; (b) copies of all Construction General Conditions and Purchase Orders not previously provided; and (c) all required reports.
- 7.9.2 Neither Final Payment nor any final release of Retainage become due until such time as Design-Builder submits all of the following to County:
- a. An affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which County or County's property might be responsible or encumbered (less amounts withheld by County) have been paid or otherwise satisfied by Design-Builder;
 - b. A certificate evidencing that insurance required by the Contract Documents to remain in force after Final Payment is currently in effect and will not be canceled or allowed to expire until at least 60 days' prior written notice has been given to County;
 - c. Consent of Sureties to final payment;
 - d. Unconditional waivers of lien in statutory form from all Subcontractors, material suppliers, and other persons or entities having provided labor, materials, and equipment relating to the Work;
 - e. If required by County, other data establishing payment or satisfaction of obligations, such as receipts; releases; and waivers of liens, claims, security interests, or encumbrances arising out of the Contract Documents;
 - f. All Project warranty documents;
 - g. Final Subcontractor List;
 - h. All approved Submittals and Shop Drawings (electronic copy);
 - i. Schedule of Required Maintenance;
 - j. Operation and Maintenance Manuals (electronic and hard copies);
 - k. As-Builts (electronic copies, hard copies and BIM Model, if any);
 - l. Any required County training provided by Design-Builder;

- m. State Fire Marshal and State Elevator Inspection approvals and certificates received, if applicable;
- n. Commissioning completed and reports received, if applicable; and
- o. Any other items identified by County, and agreed to by Design-Builder in Contract Documents, to be received by County.

7.9.3 If, after Substantial Completion of the Project has been achieved, Final Completion is materially delayed through no fault of the Design-Builder, or by the issuance of additional Change Orders by County, County may at its sole discretion, upon request of the Design-Builder, and without terminating the Contract, make payment to Design-Builder of the balance due for that portion of the Work fully completed. If the remaining balance for Work not fully completed is less than the Retainage, and if bonds have been furnished, the written consent of surety to payment for that portion of the Work fully completed must be delivered by the Design-Builder to County, and such payment will be made under the terms and conditions governing Final Payment, except that such payment does not constitute a waiver of claims by either the Design-Builder or County.

7.9.4 Acceptance of Final Payment by the Design-Builder constitutes a waiver of all affirmative claims by the Design-Builder in connection with the Contract and construction of the Project. Final Payment by County constitutes a waiver of claims by County, except those arising from (a) liens, claims, security interests, and encumbrances arising out of the Work after final payment; (b) latent defects which County becomes aware of after Final Payment; or (c) the terms of warranties required by the Contract Documents and other rights provided under applicable law.

7.10 ALLOWANCES.

The Design-Builder will include in the GMP all allowances required by County. Items covered by allowances will be supplied for such amounts and by such persons or entities as County may direct, but the Design-Builder is not required to employ persons or entities against which the Design-Builder makes reasonable objection. Unless otherwise provided in the Contract Documents:

- a. County will select materials and equipment under an Allowance within a reasonable time frame as defined in County-approved Project CPM Schedule;
- b. Allowances will cover the cost to the Design-Builder of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- c. Allowances will not include professional or construction fees, Construction General Conditions, bond and insurance premiums;
- d. Allowances will cover Design-Builder's costs for unloading and handling at the site, labor, installation costs and other expenses;

- e. Whenever costs are more than or less than Allowances, the GMP may be adjusted accordingly by Change Order in accordance with provisions of Article 10. The amount of the Change Order will reflect the difference between Actual Costs and the Allowances plus Fee on such difference in accordance with Article 10 hereof if the Actual Costs are greater than the allowances.

7.11 CONTINGENCIES.

7.11.1 Bidding Contingency

7.11.1.1 The GMP contains a line item for a "Bidding Contingency". The Bidding Contingency, upon approval of County, is for the Design-Builder's use and will be increased by amounts not expended on other line-item bid packages and will decrease by additional amounts required to be expended on other line-item bid packages. Following completion of all contract execution by subcontractors (Project buy-out), Bidding Contingency becomes Construction (Design-Builder) Contingency and Design-Builder may use this Construction (Design-Builder) Contingency for legitimate unforeseen construction expenses, subject to County's review and approval. Design-Builder will submit detailed monthly reports to County indicating how the Construction (Design-Builder) Contingency was used in the reporting period, and the status of the Construction (Design-Builder) Contingency. County has the authority to reject any use of the Construction (Design-Builder) Contingency after it has been submitted if County believes, in its reasonable judgment, that some or all of the amount included in the use of the Construction (Design-Builder) Contingency is not a legitimate expense for the Project. Upon County's rejection of a Construction (Design-Builder) Contingency use, the Design-Builder will thereupon credit the Construction (Design-Builder) Contingency amount back to the Construction (Design-Builder) Contingency in the next subsequent payment request. Any amounts remaining in Bidding / Construction (Design-Builder) Contingency at Final Completion are Savings and will be allocated to County. Should the Bidding / Construction (Design-Builder) Contingency be exhausted prior to award of all the bid packages, any subsequent overruns in bid package costs will be the Design-Builder's sole responsibility, with no additional compensation due therefor from County.

7.11.1.2 Total Bidding Contingency will be determined pending mutual agreement by County and Design-Builder per GMP.

7.11.1.3 Upon award of each Bid Package, the difference between the Design-Builder's estimated Cost of the Work contained within the Bid Package, exclusive of contingency, versus the actual award cost thereof as determined by the bidding and award of the package will be promptly calculated. If the award cost exceeds the Design-Builder's estimated cost in the GMP, any necessary portion of the Bidding Contingency identified in subparagraph 7.11.1.2 above will be applied, subject to County's approval, to cover any overrun, and any underrun amount will be used to increase the Bidding Contingency.

7.11.2 Design-Builder will include in all subcontracts an explicit requirement that Change Orders between Design-Builder and the subcontractors will be priced consistently with the requirements of Article 10 of these General Conditions, with adequate itemized Change Order pricing regardless of whether or not there is a comparable Change Order between Design-Builder and County. In addition, Design-Builder will retain, and make available to County upon request, all bid documents including requests for proposals, requests for quotes, and bid responses from both successful and unsuccessful bidding subcontractors.

ARTICLE 8 – INDEMNIFICATION

8.1 PROPRIETARY RIGHTS, PATENT AND COPYRIGHT INFRINGEMENT

- 8.1.1 Design-Builder will defend any action or proceeding brought against County based on any assertion or claim that the Work, or any part thereof, or the operation thereof or use of the Work or any part thereof, constitutes infringement of any proprietary rights or United States patent or copyright, now or hereafter issued. County agrees to give prompt notice in writing to Design-Builder of any such action or proceeding and to provide authority, information and assistance in the defense of same. Design-Builder will indemnify and hold harmless County from and against all damages and costs, including attorney's fees, awarded against County or Design-Builder in any such action or proceeding. Design-Builder further agrees to keep County informed of all developments in the defense of such actions or proceedings.
- 8.1.2 In the event that County is enjoined from the operations or use of the Work, or any part thereof in connection with any proprietary rights, patent suit, claim, or proceeding, Design-Builder will at its sole expense take reasonable steps to procure the right or license to operate or use the Work. If Design-Builder cannot so procure the aforesaid right within a reasonable time, Design-Builder will then promptly, at Design-Builder's option and at Design-Builder's expense (a) modify the Work so to avoid infringement of any patents, or copyrights; or (b) replace said Work with Work that does not infringe or violate any such proprietary rights, patent, or copyright.
- 8.1.3 Sections 8.1.1 and 8.1.2 above do not apply to any action or proceeding based on infringement or violation of a proprietary right, patent, or copyright (a) relating solely to a particular process or the product of a particular manufacturer specified by County and such processes or products are something other than that which has been offered or recommended by Design-Builder to County; or (b) arising from modifications to the Work by County or its agents after acceptance of the Work.
- 8.1.4 Design-Builder's warranty and indemnification obligations survive expiration or termination of this Contract unless otherwise specifically stated.
- 8.1.5 The obligations set forth in this "Proprietary Rights, Patent and Copyright Infringement" section constitute the sole agreement between the parties relating to liability for infringement or violation of any proprietary rights, patent or copyright.

8.2 GENERAL INDEMNITY

To the fullest extent permitted by law, Design-Builder will defend , indemnify, and hold harmless County and its officers, officials, agents, and employees (hereinafter referred to as "Indemnitees") from and against any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation and litigation) (hereinafter referred to as "Claims") arising out of actual or alleged bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, by any acts or omissions of Design-Builder or any of its owners, officers, directors, agents, employees, or subcontractors, arising out of performance of the Work or this Contract, or in connection with the Project or defects in the Work, or any materials supplied. This indemnity includes any claim or amount arising out of or recovered under the Workers' Compensation Law or arising out of the failure of such Design-Builder to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. County indemnitees will, in all instances, except for Claims arising solely from the acts or omissions of County Indemnitees, be indemnified by Design-Builder from and against any and all Claims. or other deficiencies in all products of its efforts and other services provided. Design-Builder will be responsible for primary loss investigation, defense, and judgment costs where this indemnification is applicable. In consideration of the award of this Contract, the Design-Builder waives all rights of subrogation against Indemnitees for losses arising from the Work performed by the Design-Builder for County. This duty to indemnify will survive the expiration or termination of this Contract.

8.3 CUMULATIVE RIGHTS

The rights of indemnification in this Article 8 are cumulative and in addition to any other rights of indemnification under this Contract. Nothing in this Article 8 limits or otherwise impairs any other right of indemnification in this Contract.

ARTICLE 9 – TIME AND DELAY

- 9.1 All time limits set forth in the Contract Documents for performance are of the essence of this Contract. Design-Builder agrees that it will commence performance of the Work, achieve Substantial and Final Completion of the entire Project, and achieve any interim Milestones for Substantial and Final Completion in compliance with all contractual time requirements.
- 9.2 Time is of the essence of each and every part of the Contract Documents and of the Specifications wherein a definite and certain length of time is fixed for the performance of any act or activity whatsoever. Where, under the Contract Documents, additional time is allowed for the completion of any Work, the new time limit fixed by such extension is also of the essence of this Contract.
- 9.3 Failure of the Design-Builder to achieve the completion dates for Substantial or Final Completion set forth in the Contract will result in the assessment of Liquidated Damages as required by the Contract. Design-Builder will pay the per diem amount for Liquidated Damages provided for in the Contract for each and every calendar day that the Design- Builder is not in full compliance with the time(s) stipulated in the Contract for completing the Work. The Liquidated Damages per diem amount is fixed and agreed upon by and between the Design-Builder and County because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages County would in such event sustain. County may withhold any such sums from Final Payment due hereunder or from retainage.
- 9.4 If Design-Builder is delayed in the performance of the Work and such delay actually and directly delays the timely achievement of a critical path activity, element, or component, based upon an analysis of the current CPM Schedule due to acts, omissions, conditions, events, or circumstances beyond its reasonable control or prevention and due to no legal fault of its own or those for whom Design-Builder is responsible under the terms of the Contract Documents, the time for Substantial Completion of the Work, and to the extent applicable, any interim milestones or Substantial Completion dates for portions of the Work will be extended by written Change Order for the amount of time attributable to such events or circumstances. By way of example only, such acts, omissions, conditions, events, and circumstances which would entitle Design-Builder to an extension of the Contract Time(s), include acts or omissions of County, or anyone under County's control, including changes made by separate contractors in the Work by County, unforeseeable Project site conditions, wars, floods, labor disputes, unusual delay in transportation, and unusually adverse weather conditions.
- 9.5 The Design-Builder has included a specified number of days of weather-related delays within the CPM Schedule which County has approved, and that number of days is incorporated herein by reference. If the Project experiences weather-related delays beyond the contractually specified number of weather days, the Design-Builder is entitled to a commensurate extension of time.
- 9.6 Design-Builder is entitled to an appropriate adjustment of its GMP for extended Construction General Conditions only for mutually determined delays directly caused by the actions, omissions, or inactions of County and upon proof of the actual, direct additional cost to the Design-Builder for such delays.
- 9.7 Design-Builder will provide notice of any delay in performance of the Work that Design- Builder attributes to County in writing to County immediately but in no event later than twenty-four (24) hours after discovery of the event giving rise to the delay. The Design- Builder will then provide additional details concerning the delay in writing to County within seven (7) calendar days from the delay notice. Failure to satisfy each of these time requirements will absolutely bar any and all later delay claims. The detailed notice will indicate the cause of the delay, the anticipated length of the delay in reasonable detail, the probable effect of such delay upon the progress and Cost of the Work, and possible mitigation plans. If the cause of the delay is ongoing, the Design-Builder must give further detailed notice every month at the same time it submits the updated progress Narrative Report to County.
- 9.8 Design-Builder will, upon discovering an event giving rise to a delay, as promptly as possible, make all reasonable efforts to mitigate the impact of the delay.

- 9.9 Within 15 calendar days after elimination of any such delay, the Design-Builder will, unless the time is extended in a Change Order approved by County, submit further documentation concerning the delay and, if appropriate, a formal written request requesting an extension of time for such delay and any compensation sought for the delay. The written request for time extension will state the cause of the delay, the number of days of extension requested and the compensation sought and provide a fully documented analysis of the Progress Schedule, including any data demonstrating a delay in the critical path of the Work or individual milestone or the overall Project completion. If the Design-Builder does not timely comply with the notice and documentation requirements set forth in this Section 9.1.9, the Design-Builder's claim for delay is barred.
- 9.10 In the event the Design-Builder gives notice to County of compensable delay alleging that County is responsible for the delay as to which the notice was given and the delay is unreasonable under the circumstances and was not within the contemplation of County and Design-Builder when they entered into the Contract, County will enter into negotiations with Design-Builder as to Design-Builder's damages, if any.

ARTICLE 10 – CHANGES TO THE CONTRACT PRICE AND TIME

10.1 CHANGES

- 10.1.1 After the Contract is signed, modifications to the Contract, including any changes to GMP, the Contract Time(s) or Scope of Work, may only be made by a written Contract Amendment or written Change Order.
- 10.1.2 The Design-Builder will not proceed with the Work on any change involving an increase or decrease in cost or time without prior approval of the Change Order or Contract Amendment by the Board of Supervisors or the Procurement Director, as required by Section 11.16.010(C) of the Pima County Procurement Code. If the Design-Builder proceeds with any change involving an increase or decrease in cost or time without written authorization from County as required by this paragraph, the Design-Builder hereby waives all rights or claims Design-Builder may have in connection with or as a result of the change.
- 10.1.3 County's right to make changes in the Work will not invalidate this Contract, relieve the Design-Builder of any responsibility, or require County to give notice to the Surety. Any requirement of notice to the Surety of a change in the Work is the sole responsibility of Design-Builder.
- 10.1.4 A Contract Amendment or Change Order is a written instrument issued after execution of the Contract signed by County and Design-Builder, stating their agreement upon all of the following:
- a. The scope of the change in the Work;
 - b. The amount of the adjustment, if any, to the GMP; and
 - c. The extent of the adjustment, if any, to the Contract Time(s) for performance set forth in the Contract Documents.
- 10.1.5 All changes in the Work authorized by a Contract Amendment or Change Order will be performed under the applicable terms of the Contract Documents, and County, and Design- Builder will negotiate in good faith and as expeditiously as possible on the appropriate adjustments, if any, in Contract Time or GMP. No GMP adjustment on account of a Change Order will include the Design-Builder's or Subcontractor's profit, fee, home office overhead, or a formula allocation of indirect costs except as allowed in Section 10.3.1 below unless otherwise specifically allowed under these General Conditions.

10.2 MINOR CHANGES IN THE WORK

- 10.2.1 County may make minor changes in the Work consistent with the intent of the Contract Documents providing such changes do not involve an adjustment in the GMP or Contract Time(s) of performance and do not materially affect or alter the design, quality, or performance. The DP will promptly inform County, in writing, of any such changes, and verify that Design-Builder has recorded such changes on the As-Built Documents.

10.3 PRICE, TIME, OR SCOPE OF WORK ADJUSTMENT

- 10.3.1 The cost of or credit to County resulting from a change in the Work will be determined in one or more of the following ways:

- a. By unit prices stated in the Contract Documents;
- b. By cost, as defined below, and described in Appendix C, properly itemized and supported by sufficient data reduced to meaningful unit prices for each assembled component of the Work in order to facilitate evaluation. Such costs will be itemized by crafts as defined within the Schedule of Values, submitted in a format approved by County, and limited to items directly allocable to the change in the Work:

- 1) Cost of materials, including delivery;
- 2) Cost of labor, fully-burdened, including, but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation and fringe benefits required by contract or routinely paid by Design-Builder, and workers' compensation insurance but excluding Subcontractor's labor;
- 3) Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, Design-Builder must prove reasonable rental rate pursuant to actual ownership costs. County will not pay for equipment idle time unless the equipment is engaged in County- authorized force account or other time and materials work, and then only for the time it is engaged in such work. When the authorized force account or time and materials work is completed or the equipment ceases to be used for that work, payment for idle time stops;
- 4) As a guideline, on a not-to-exceed ("NTE") percentage of Direct Construction Cost only basis, the following overhead, general conditions and fee percentages will be utilized, and will be fixed as a dollar amount, unless otherwise established in the Contract, or otherwise mutually agreed upon and documented in the Change Order description:

Subcontractor Fee (profit):	5%
Subcontractor Overhead & General Conditions, NTE:	<u>10%</u>
Total Subcontractor Markups, NTE:	15%

Design-Builder Fee (profit), approximately or as per Design-Builder Contract:	5%
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Design-Builder Overhead & General Conditions, NTE or as per Design-Builder Contract:	<u>5%</u>
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Total Design-Builder Markups, NTE:	10%
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- 5) The Contract may include provisions for some situations where larger

amounts of Overhead and General Conditions are needed to address extenuating site-related circumstances. However, the combined total fee, Profit, Overhead and General Conditions, including the Design-Builder and all levels or tiers of subcontractors, will not exceed twenty-five percent (25%) of the total direct costs of materials, labor, rental equipment, and subcontractor insurance and bonds.

- c. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to facilitate evaluations; provided that such lump sum will not exceed that amount calculated under (b) above.
- 10.3.2 Any dispute regarding the pricing methodology or cost of a change does not relieve the Design-Builder of the obligation to proceed with work on the change. Any such dispute will be preserved by inclusion in the Change Order or Contract Amendment.
- 10.3.3 A County-approved written Contract Amendment or Change Order is full and final settlement of all entitlement claims for direct, indirect, delay, disruption, inefficiency, productivity, and any other consequential costs related to items covered or affected, as well as for related delays. Design-Builder irrevocably waives any such claim not presented for inclusion in the Contract Amendment or Change Order prior to signature.
- 10.3.4 In the event that County and the Design-Builder disagree upon whether Design-Builder is entitled to be paid for any Change Order services required of Design-Builder by County, or as to amount of compensation in the event of any other disagreement over the Scope of Work or proposed changes to the Work, County and Design-Builder will resolve all such disagreements consistent initially with Article 10 of these General Conditions and thereafter if not resolved, in accordance with the Dispute Resolution provisions of the Contract. As part of the negotiation process, Design-Builder will furnish County with a good faith estimate of the costs to perform the disputed services or Work in accordance with County's interpretations. If the parties are unable to agree, and County expects Design-Builder to promptly perform the services in accordance with County's or DP's interpretations of the documents, Design-Builder will proceed to perform the disputed services, conditioned upon County issuing a written order to Design-Builder directing Design-Builder to proceed and specifying County's interpretation of the services that are to be performed.
- 10.3.5 The requirements set forth above as to Design-Builder providing detailed, itemized pricing on subcontractor Change Orders is fully applicable to Change Orders from Design-Builder to subcontractor where there is no comparable Change Order between County and Design-Builder.

10.4 EMERGENCIES

In any emergency affecting the safety of persons or property, Design-Builder will promptly act, at its discretion, to prevent threatened damage, injury or loss. Any increase in the Guaranteed Maximum Price or Contract Time(s) of performance or both claimed by Design-Builder on account of emergency work will be determined as provided in this Article.

ARTICLE 11 – STOP WORK AND TERMINATION

11.1 COUNTY'S RIGHT TO STOP WORK OR TERMINATE FOR CONVENIENCE

- 11.1.1 County at any time may, without cause and for its convenience, order Design-Builder in writing to stop or suspend the Work, for a period not to exceed 60 calendar days. In that event, Design-Builder may seek an adjustment of the GMP or Contract Time(s) of performance or both under Article 10 of the General Conditions to the extent that its Work has been adversely impacted by any such suspension or stoppage of the Work by County, unless actions, omissions or inactions of the Design-Builder are the cause of County stopping or suspending the Work.
- 11.1.2 Upon seven days written notice to Design-Builder, County may, without cause and without

prejudice to any other right or remedy of County, elect to terminate the Contract for convenience of County. In such case Design-Builder will be paid (without duplication of any items): a) for completed and accepted Work executed in accordance with Contract Documents prior to the effective date of the termination, including fair and reasonable sums for overhead and profit on such Work; b) for expenses sustained prior to termination in performing services and furnishing labor, materials, and equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; c) for all claims, costs, losses, and damages incurred in settlement of terminated contracts with subcontractors, suppliers, and others; and d) for reasonable expenses directly attributable to termination.

- 11.1.3 Upon receiving a Notice of Termination for Convenience, the Design-Builder will proceed as follows: a) stop Work as specified in the Notice; b) place no further subcontracts on purchase orders; c) terminate all subcontracts to the extent they relate to the Work terminated; d) assign to County all rights of the Design-Builder under terminated subcontracts, in which case County has the right to settle or to pay any termination settlement proposal arising out of these terminations; and e) submit complete termination inventory schedules to County no later than 120 days from date of the Notice of Termination.

11.2 COUNTY'S RIGHT TO TERMINATE FOR DEFAULT AND CAUSE

- 11.2.1 If Design-Builder persistently fails to (a) provide a sufficient number of skilled workers, the materials required by the Construction Documents, or both; (b) comply with applicable legal requirements; (c) pay, without cause, its Subcontractors or suppliers; (d) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s) as may be from time to time adjusted; (e) maintain contractor, business, or other required licenses or authority; (f) otherwise perform the Work and its obligations in compliance with the Contract Documents; or (g) if, for any reason, Design-Builder curtails or ceases business or business operations to a degree that would substantially impair or preclude Design-Builder's performance of this Contract, County has the right, in addition to any other rights and remedies provided in the Contract Documents or by law, after seven (7) days' written notice of default to Design-Builder and its surety and Design-Builder's (or its surety's) failure to cure within that seven day period, to (i) perform and furnish through itself or through others it selects any such labor, materials, or Work, and to deduct the cost thereof from any monies due or to become due to Design-Builder under the Contract Documents; or (ii) terminate the Contract with Design-Builder for all or any portion of the Work, enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment scaffolds, tools, appliances, and other items thereon, all of which Design-Builder hereby transfers, assigns, and sets over to County for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment, and other items; or (iii) both (i) and (ii) above. Upon exercising its right to Terminate for Default for any reason set forth above, County, at its discretion, may also exercise the right to have each or any of Design-Builder's subcontractor and supply contracts assigned to County, or County's nominee, provided however, County will have no responsibility or liability for acts or omission of Design-Builder under such Contracts and the sole recourse of subcontractors on pre-termination events will be against Design-Builder. Design-Builder will ensure that a clause providing for this conditional assignment on the foregoing terms is included in each subcontract.

- 11.2.2 In the event of such termination for default:

- 11.2.2.1 Design-Builder is not entitled to recover any further payment until the Work is completed and will then only be entitled to be paid for all acceptable Work performed prior to its date of default minus costs incurred by County to complete the Project exceeding the GMP as described below. In the event County's cost and expense of completing Design-Builder's Work exceeds the GMP, then Design-Builder or its surety will promptly pay the difference to County. Such costs and expense will include not only the cost of completing the Work to the satisfaction of County and of performing and furnishing all labor, services, tools, equipment and other items

required in the Contract Documents, but also losses, damages, costs and expense, including consultant and attorney's fees and expenses incurred in connection with any additional procurement and the defending of claims, if any, arising from or related to Design-Builder's default.

11.2.2.2 All finished and unfinished As-Built, shop drawings, documents, data, studies, surveys, drawings, photographs, reports, and other information in whatever form, including electronic, acquired, or prepared by Design-Builder for this project become County's property and will be delivered to County not later than five (5) business days after the effective date of the termination.

11.2.2.3 County may withhold payments to Design-Builder arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due County from Design-Builder is determined

11.2.3 In the event that County terminates the Contract for default and such termination is ultimately determined to be improper or wrongful, the termination for default will be automatically converted to a termination for convenience and the provisions of 11.1 of these General Conditions will apply.

11.2.4 If Design-Builder institutes or has instituted against it a proceeding under the United States Bankruptcy Code, such event is a default that may impair or frustrate Design-Builder's performance of its obligations under the Contract Documents. Accordingly, if such event of default occurs, County is entitled to request Design-Builder, its trustee, or other successor, to provide adequate assurance of future performance. If Design-Builder or Design-Builder's trustee, or other successor fails to comply with such request within 10 days after receiving notice of the request, County, in addition to any other rights and remedies provided by the Contract Documents, or by law, is entitled to terminate the Contract. County will thereupon be entitled to perform and furnish through itself or through others any such labor, materials, or equipment necessary for the completion of the Work and necessary to maintain the Contract Time(s) of performance, and to deduct the costs from any monies due or to become due Design-Builder under the Contract Documents pending receipt of adequate assurances of performance and actual performance in accordance herewith. In the event of any such bankruptcy proceedings, the Contract will terminate if Design-Builder rejects the Contract or if there has been a default under the Contract Documents, and Design-Builder is unable to give adequate assurances that it will perform as provided in the Contract Documents or otherwise is unable to comply with the requirements for assuming the Contract under the applicable provisions of the Bankruptcy Code.

11.3 DESIGN-BUILDER'S RIGHT TO STOP WORK AND TERMINATE FOR CAUSE

11.3.1 Design-Builder may, in addition to any other rights afforded it under the Contract Documents or by applicable law, either stop Work or terminate the Contract for cause upon County's failure to timely pay an amount in excess of \$100,000 properly due to Design-Builder under any Design-Builder Application for Payment. In this regard Design-Builder will provide County with written notice indicating that such non-payment condition has occurred, and that it is Design-Builder's intention to stop Work or terminate the Contract only if the non-payment condition is not cured within seven days from County's receipt of Design-Builder's notice. In the event that Design-Builder elects to only stop Work, it may nonetheless later indicate its intention to terminate the Contract by providing County with written notice that Design-Builder will terminate the Contract within seven days from receipt of Design-Builder's notice; unless the alleged cause of termination is cured in the interim.

11.3.2 In the event Design-Builder properly and lawfully elects to stop Work under section 11.3.1 for non-payment and then resumes Work, Design-Builder will be entitled to make a claim for adjustment to the GMP and Contract Time(s) of performance to the extent Design-Builder has been adversely impacted by the stoppage of Work. In the event that Design-Builder elects to terminate the Contract on the basis permitted under Section 11.3.1, Design-Builder will be entitled to recover the same costs it would be

permitted to recover had County terminated this Contract for convenience under Section 11.1 of these General Conditions.

- 11.4 If the Contract is terminated for any of the reasons set forth above, Design-Builder's contracts with its subcontractors and suppliers, at County's option and without further action by Design-Builder, will be assigned to County; provided however, that County will have no liability for any pre-existing acts or omissions or default by Design-Builder under such contracts and the sole recourse of such subcontractors and suppliers for any such events will be against Design-Builder.

End of Appendix C – Design Builder General Condition



April 19, 2023

Dawn Dargan, Procurement Officer
Pima County Procurement Department
150 West Congress Street, 5th Floor
Tucson, AZ 85701

Re: RFQu-2400009444 Draft Design and Preconstruction Scope of Work for Tres Rios WRF Digester

Dear Ms. Dargan,

We are pleased to provide this Scope of Work for Design and Pre-Construction Services for the Tres Rios WRF Digester. The Preconstruction Scope of Work we are including is based on Appendix A – Project Scope of Work provided with the Intro to Negotiations letter sent on April 8th, 2025. The Design and Preconstruction duration assumed is 12 months. Please see attached Draft Design Scope of Work and Schedule. This Document is for discussion purposes to reach a mutual agreement with Pima County on Phase I of the Project.

This Scope of Work is based on the Preparation of the Following Design Packages:

1. Early Work Package (EWP) Including Long-Lead Procurement and Excavation and Structural Concrete for the Digester (60%, 90%, IFC)
2. Balance of Design (BOP) Package (30%, 60%, 90%, IFC)

Scope of Work

II. Design Engineering – See Attached Proposal from Hazen & Sawyer

III. Preconstruction Services

A. Project Management

1. Prepare and Submit Project Execution Plan, including the Designer's Project Management Plan
2. Project Kick-off / Partnering Meeting
3. Monthly Invoices
4. CPM Baseline Schedule and Monthly Updates
5. Weekly Task Force Meetings and Model-Walks for Early-Work Design Packages
6. Bi-Weekly Design Update Meetings and Model-Walks for Balance-of-Plant Design
7. Setup Document Control System, Tracking Systems for Design Decisions, Value-Engineering, Cost Model, and Task-Force Action Items

B. Permitting Assistance

1. Permitting Work Plan
2. Coordination Meetings with ADEQ for Aquifer Protection Permit
3. DSD Permit Application and Fee

C. Preliminary Design

1. Constructability, Cost and Schedule Reviews for All Design Packages, Technical Memos, and Design Reports

2. Preparation of Initial Cost Model
 3. Value-Engineering Tracking, Cost Estimate, and Evaluation
 4. Outline of Startup and Operator Training Plan
- D. Field Investigations
1. Constructability, Cost and Schedule Review of Draft and Final Geotechnical Report
 2. Review of Draft and Final Corrosion Report
 3. Review of AZ Native Plant Survey and Cultural Resource Survey from county
 4. Potholing and Subsurface Utility Investigation
- E. Schematic Design (30%)
1. Preliminary MOPO Design Memo
 2. Schematic Design Workshop and 3-D Model Walk
 3. Cost Model Update for 30% Design
 4. Value Engineering, Cost Estimates, and Evaluation for 30% Design
- F. Detailed Design (60%)
1. Update MOPO Design Memo for EWP and BOP
 2. Detailed Design Workshop and 3-D Model Walk for EWP and BOP
 3. Cost Model Update for 60% EWP and BOP
 4. Cost Model Update for EWP and BOP
 5. Value Engineering, Cost Estimates, and Evaluation for 60% Design
- G. Construction Documents (90%)
1. Final MOPO Design Memo for 1 Early Work Package (EWP) and 1 Balance of Plant (BOP) Design Package
 2. Detailed Design Workshop and 3-D Model Walk for 90% EWP and BOP
 3. Value Engineering, Cost Estimates, and Evaluation for 90% Design
- H. Construction GMP
1. Preparation of Construction GMP-1 based on EWP 90%
 2. Cost Model Update for entire project based on EWP 90%
 3. Preparation of Construction GMP-2 based on BOP 90%
- I. Issue-for-Construction (IFC) Documents
1. Permit Application and Coordination Meetings
 2. Review Conformed BODR
 3. Issue Design Turnover Documentation

Scope of Services – Phase 1
Pima County Regional Wastewater Reclamation Department
Tres Rios Water Reclamation Facility Digester Design Build

INTRODUCTION

Pima County Regional Wastewater Reclamation Department (COUNTY) has selected the Kiewit (CONTRACTOR) and Hazen and Sawyer (DESIGNER) team for design and construction of a new digester fully integrated into Building 60 at the Tres Rios Water Reclamation Facility (TRWRF) to provide redundancy and operational flexibility.

Work will be delivered in a phased approach as follows:

- Phase 1: Design / Pre-Construction
- Phase 2: Construction and Engineering Services During Construction

SCOPE OF SERVICES

Task 1: Project Management

Task 1.1 - Project Management

DESIGNER shall manage the design services required to complete the Project tasks. Project management consists of project administration including development of a project management plan, coordination and supervision of the project design team and resources, external project coordination, and management for project milestones and deliverables to meet the project schedule and budget.

DESIGNER shall provide project status information to the CONTRACTOR's Project Manager including a monthly progress report that includes design and schedule updates.

Deliverable(s):

- Project Management plan in electronic PDF format
- Monthly invoice with progress report submitted electronically to CONTRACTOR

Task 1.2 - Project Meetings

DESIGNER shall attend progress and coordination meetings throughout the duration of the project. Project meetings are anticipated to be attended by the CONTRACTOR and COUNTY. Such meetings shall serve as a forum for the exchange of information concerning the project, review of design progress, and discussion of any proposed changes in the scope of the project.

DESIGNER shall also meet with CONTRACTOR, COUNTY, and stakeholders to review design comments after each submittal and discuss constructability and value-engineering options.

Deliverable(s):

- Participation in project kick-off meeting to be held on-site
- Participation in virtual weekly project coordination meetings of one hour duration, totaling twenty-four (24) meetings for early work design package. Meetings shall be attended by up to three (3) DESIGNER staff.

- Participation in virtual bi-weekly project coordination meetings of one hour duration, totaling fifteen (15) meetings for balance-of-plant design. Meetings shall be attended by up to three (3) DESIGNER staff.
- 30% Design Review Workshop, including agenda and minutes, to be held on-site
- 60% Design Review Workshop, including agenda and minutes, to be held on-site
- 90% Design Review Workshop, including agenda and minutes, to be held on-site
- Participation in up to two (2) additional meetings/workshops to be held on-site

Task 1.3 – Quality Assurance/Quality Control Management

DESIGNER will maintain a Quality Control Program focused on providing a product that is in accordance with the industry's accepted standard of care. The program shall include quality control checklists and in-house reviews. QC reviews will be completed on each deliverable and review comments addressed before submission to the COUNTY.

Task 1 Assumptions:

- Phase 1 duration is estimated at 12 months from notice to proceed.
- DESIGNER will provide Project Management Plan to the CONTRACTOR to inform the development of the Project Execution Plan. CONTRACTOR will be responsible for the development of Project Execution Plan and for establishing and maintaining a Management Information System to govern communication between CONTRACTOR, DESIGNER, and COUNTY.
- All project documentation and deliverables are to be provided electronically.
- In-person meetings will be attended by up to three (3) DESIGNER staff

Task 2: Permitting Assistance

DESIGNER will coordinate with the COUNTY for submission of applicable permit applications and will provide design information required for submission including drawings, specifications, and sealed design calculations, as required.

DESIGNER will contact Arizona Department of Environmental Quality (ADEQ) at an appropriate time to advise the agency of the project and obtain more detailed information about anticipated permitting requirements expected by the agency. DESIGNER will schedule and participate, along with the CONTRACTOR and COUNTY in a pre-application meeting with ADEQ to discuss the project and receive guidance on requirements for applying for an APP modification, as applicable.

DESIGNER shall prepare all aspects of the APP application pertinent to the Tres Rios WRF and in coordination with other ongoing projects (3TRCAB and 3ANOMX) and revise the document in response to ADEQ if any. DESIGNER shall continue to communicate and coordinate with ADEQ until the APP permit is completed and issued to the COUNTY.

Task 2 Assumptions:

- Payment of permit fees will be made by others.
- Resolution of APP review comments will be coordinated with the COUNTY during a regularly-scheduled progress meeting.

Deliverable(s):

- Participation in APP re-application meeting with ADEQ and up to two (2) follow-up meetings as necessary to resolve comments.

- Application for APP permit modification in accordance with ADEQ procedures; in .pdf format.

Task 3: Preliminary Design

Task 3.1 - Data and Information Collection

DESIGNER will prepare and submit to the COUNTY a data request for pertinent available information not already in DESIGNER's possession. DESIGNER shall review the pertinent existing information as provided by the COUNTY on this task or previously, including but not limited to existing operating conditions; record drawings of existing facilities; and operations and maintenance information.

Deliverable(s):

- Data request letter in electronic PDF format

Task 3.2 – Basis of Design

Following review of the data obtained in Task 3.1, DESIGNER will confirm design criteria for one additional digester at Building 60 to match existing. DESIGNER will evaluate the following:

- Modifications required to sludge pumping systems.
- Modifications required to replace the existing compressors with variable-speed blowers.
- Modifications required to gas-handling infrastructure to handle additional gas volume.
- Impact of proposed PONDUS system (Contract 3TRCAB) on heat requirements.

DESIGNER will prepare a report describing the basis of design criteria for all components of the project. Report shall identify the design parameters, criteria, and concepts necessary for preparation of detailed plans and specifications.

DESIGNER will also develop drawings to approximately 10% completion, which will include the following:

- Major equipment layout in schematic format with some plans and sections
- Preliminary process flow diagram
- Overall control system architecture and major systems preliminary P&IDs
- Electrical one-line diagram and preliminary switchgear layout with sequencing

Deliverable(s):

- Draft and Final Basis of Design Report, including 10%-level drawings, in electronic PDF format

Task 3.3 - 30% Design

Once the basis of design has been confirmed with the COUNTY, the DESIGNER will proceed with preliminary design consisting of 30% level drawings. The intent of this phase is to lock in the design concept. The design components that will be evaluated include:

- Preliminary site layout
- Site civil engineering, including grading and stormwater handling, parking, and service access
- Piping connections to existing utilities
- Process mechanical engineering, including digester cover, mixing, heating, and gas-handling systems
- Geotechnical and foundation requirements

- Instrumentation, controls, and SCADA improvements and interface with existing system (by others)
- Electrical supply and distribution (including emergency power), building electrical and lighting, and site lighting, as required (by others)

Deliverable(s):

- 30% balance of plant drawings in electronic PDF format
- Specification list for balance of plant

Task 3 Assumptions:

- New digester shall match existing digesters in Building 60 complex in capacity, cover type, mixing, and heating. Evaluation of alternative process mechanical components is not required and is excluded from this scope of services.
- DESIGNER shall be responsible for the design of general arrangement, process mechanical, structural, and civil site components.
- DESIGNER will coordinate electrical and instrumentation and control (I&C) design for a complete, functional system; electrical and I&C design shall be by others.
- Modifications to building mechanical components (i.e., HVAC, plumbing, fire protection) within Building 60 shall not be required.
- Modifications to/rehabilitation of existing digesters is excluded from this scope of services.
- Improvements to existing RNG facility are excluded from this scope of services.

Task 4: Detailed Design

Task 4.1 – Early Work Package

Following development of basis of design in Task 3.2, DESIGNER will develop Contract Documents for recommended improvements, consisting of drawings and technical specifications, on an expedited schedule for early work items consisting of major electrical equipment and excavation and structural concrete work for the new digester. Design documents for balance of plant work will be developed concurrently via Tasks 4.2, 4.3, and 4.4.

Deliverable(s):

- 60% early work package drawings and specifications in electronic PDF format
- 90% early work package drawings and specifications in electronic PDF format
- 100% early work package drawings and specifications in electronic PDF format

Task 4.2 – Balance of Plant 60% Design

At the 60% stage for balance of plant design, DESIGNER will provide definite design conclusions based on the continued design development and on the comments received during 30% stage review. The plans will have further developed the approved 30% stage.

Deliverable(s):

- 60% balance of plant drawings and specifications in electronic PDF format

Task 4.3 - Balance of Plant 90% Design

DESIGNER will have built upon the comments received during the 60% stage review and will be nearly complete design plans for balance of plant. At this stage, DESIGNER anticipates that there will be no major design alterations from the plans approved during the 60% stage. This submittal will likely

form the basis of any required regulatory agency submittals. Upon approval of this stage of the plans by the COUNTY's Representative, DESIGNER will begin execution on the final construction documents.

Deliverable(s):

- 90% balance of plant drawings and specifications in electronic PDF format

Task 4.4 - Balance of Plant 100% Final for Construction/Signature Design

DESIGNER will provide a complete set of plans and technical specifications necessary to construct the balance of plant. This submittal will resolve any outstanding issues from the 90% stage and be fully coordinated between all disciplines, utilities, regulatory agencies, and projects. During development of the final construction documents, we will prepare any remaining governmental submittals.

Deliverable(s):

- 100% balance of plant drawings and specifications in electronic PDF format

Task 4 Assumptions:

- Design assumptions from Task 3 are also applicable to Task 4.
- Design documents will be prepared in compliance with the County's design standards.
- Construction documents shall be prepared by an Arizona registered professional DESIGNER.
- Drawings and specifications will use DESIGNER's standard format.
- CONTRACTOR will update cost model at each stage of design to facilitate COUNTY review and identify whether there is a need for value engineering. Design changes that result from value engineering during the detailed design stage would be considered extra work and would be provided as an amendment to the contract.
- Geotechnical recommendations will be available prior to commencement of 60% early work package design.

OTHER DIRECT COSTS (ODCs)

Direct costs including travel to attend project-related meetings and workshops.

ALLOWANCES

Additional Engineering Services

Allowance for additional engineering services not identified in previous tasks. The scope, level of effort, and associated cost for additional engineering services will be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.

Geotechnical Investigation

Allowance for geotechnical investigation to assist in the design of a new structure adjacent to existing digesters (Building 60). The scope, level of effort, and associated cost for geotechnical investigation will be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.

Survey

Allowance for survey services to assist in the design of a new structure adjacent to existing digesters (Building 60) and tied into existing building equipment and piping. Survey services may include verification of horizontal and vertical control on existing structures and pipelines, topographic survey identifying typical surface features, and 3D laser scanning services as required to field verify existing conditions and potentially support development of a Building Information Model (BIM) within Building 60. The final scope, level of effort, and associated cost for survey services will be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.



Tres Rios WRF Digester

Design and Pre-Construction Fee Estimate Summary

Rev 0

5/12/2025

	Labor	Expenses	Total
Design Engineering - Hazen & Sawyer	\$ 1,772,733.20	\$ 18,061.52	\$ 1,790,794.72
Pre-Construction Services - Kiewit	\$ 921,775.86	\$ 19,046.53	\$ 940,822.39
Allowance 1 - Additional Engineering Services			\$ 30,000.00
Allowance 2 - Geotechnical Investigation			\$ 29,900.00
Allowance 3 - Surveying and 3D Scanning			\$ 40,000.00
Allowance 4 - Permit Fees			\$ 30,000.00
Allowance 5 - Potholing and Subsurface Investigation			\$ 19,600.00
Grand Total This Task Order:	\$ 2,694,509.06	\$ 37,108.05	\$ 2,881,117.11



Tres Rios WRF Digester
Preconstruction Labor Summary - Hours by Category

Code	Title	District	Project Mangement	Permitting Assistance	Preliminary Design	Field Investigations	Schematic Design (30%)	Detailed Design (60%)	Construction Documentation Prep (95%)	Construction GMP	100% Construction Document Completion	Total
PM	Project Manager	KIWC	522.5	7.0	184.5	28.0	52.0	67.0	56.0	-	56.0	973.0
SR EST	Sr. Estimating Manager	KIWC	-	-	-	-	-	-	-	240.0	-	240.0
CM	Construction Manager	KIWC	-	-	48.0	-	48.0	48.0	48.0	-	-	192.0
GEN SUPT	General Superintendent	KIWC	-	-	64.0	-	68.0	64.0	56.0	-	16.0	268.0
PE	Project Engineer	KIWC	60.0	18.0	12.0	-	-	12.0	-	-	-	102.0
BUS MGR	Business Manager	KIWC	12.0	-	-	-	-	-	-	-	-	12.0
ESTIMATOR	Estimator	KIWC	-	-	-	-	-	-	-	840.0	-	840.0
SCHEDULR	Scheduler	KIWC	38.0	-	-	-	-	-	-	-	-	38.0
MECH E	Mechanical Engineer	KIWE	-	-	24.0	-	-	-	-	-	-	24.0
I&C E	I&C Engineer	KIWE	-	-	24.0	-	-	-	-	-	-	24.0
PROC E	Process Engineer	KIWE	-	-	44.0	-	-	-	-	-	-	44.0
EM	Engineering Manager	KIWE	340.0	-	152.0	8.0	28.0	-	-	-	-	528.0
ANALYST	Project Controls Analyst	KIWE	31.0	-	-	-	-	-	-	-	-	31.0
DOC CTRL	Document Control	KIWE	-	-	591.0	-	-	120.0	120.0	-	120.0	951.0
PROC LD	Procurement Lead	KSN	-	-	-	-	-	-	-	100.0	-	100.0
			-	-	-	-	-	-	-	-	-	-
	Subtotal - KIWC		632.5	25.0	308.5	28.0	168.0	191.0	160.0	1,080.0	72.0	2,665.0
	Subtotal - KSN		-	-	-	-	-	-	-	100.0	-	100.0
	Subtotal - KIWE		371.0	-	835.0	8.0	28.0	120.0	120.0	-	120.0	1,602.0
	Grand Total		1,003.5	25.0	1,143.5	36.0	196.0	311.0	280.0	1,180.0	192.0	4,367.0

Tres Rios WRF Digester
Preconstruction Labor Summary - Cost by Category

Code	Title	District	Rate	Project Mangement	Permitting Assistance	Preliminary Design	Field Investigations	Schematic Design (30%)	Detailed Design (60%)	Construction Documentation Prep (95%)	Construction GMP	100% Construction Document Completion	Total
PM	Project Manager	KIWC	\$ 286.27	\$ 149,574.21	\$ 2,003.86	\$ 52,816.15	\$ 8,015.46	\$ 14,885.85	\$ 19,179.85	\$ 16,030.92	\$ -	\$ 16,030.92	\$ 278,537.23
SR EST	Sr. Estimating Manager	KIWC	\$ 239.24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57,418.28	\$ -	\$ 57,418.28
CM	Construction Manager	KIWC	\$ 251.62	\$ -	\$ -	\$ 12,077.64	\$ -	\$ 12,077.64	\$ 12,077.64	\$ 12,077.64	\$ -	\$ -	\$ 48,310.55
GEN SUPT	General Superintendent	KIWC	\$ 222.74	\$ -	\$ -	\$ 14,255.57	\$ -	\$ 15,146.55	\$ 14,255.57	\$ 12,473.63	\$ -	\$ 3,563.89	\$ 59,695.21
PE	Project Engineer	KIWC	\$ 165.00	\$ 9,899.70	\$ 2,969.91	\$ 1,979.94	\$ -	\$ -	\$ 1,979.94	\$ -	\$ -	\$ -	\$ 16,829.50
BUS MGR	Business Manager	KIWC	\$ 156.75	\$ 1,880.94	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,880.94
ESTIMATOR	Estimator	KIWC	\$ 140.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 117,806.47	\$ -	\$ 117,806.47
SCHEDULR	Scheduler	KIWC	\$ 165.00	\$ 6,269.81	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,269.81
MECH E	Mechanical Engineer	KIWE	\$ 240.10	\$ -	\$ -	\$ 5,762.42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,762.42
I&C E	I&C Engineer	KIWE	\$ 240.10	\$ -	\$ -	\$ 5,762.42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,762.42
PROC E	Process Engineer	KIWE	\$ 240.10	\$ -	\$ -	\$ 10,564.44	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,564.44
EM	Engineering Manager	KIWE	\$ 329.68	\$ 112,091.17	\$ -	\$ 50,111.35	\$ 2,637.44	\$ 9,231.04	\$ -	\$ -	\$ -	\$ -	\$ 174,071.00
ANALYST	Project Controls Analyst	KIWE	\$ 144.77	\$ 4,487.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,487.77
DOC CTRL	Document Control	KIWE	\$ 120.05	\$ -	\$ -	\$ 70,949.79	\$ -	\$ -	\$ 14,406.05	\$ 14,406.05	\$ -	\$ 14,406.05	\$ 114,167.93
PROC LD	Procurement Lead	KSN	\$ 202.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,211.89	\$ -	\$ 20,211.89
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal - KIWC			\$ 167,624.66	\$ 4,973.78	\$ 81,129.31	\$ 8,015.46	\$ 42,110.04	\$ 47,493.00	\$ 40,582.18	\$ 175,224.75	\$ 19,594.81	\$ 586,747.99
	Subtotal - KSN			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,211.89	\$ -	\$ 20,211.89
	Subtotal - KIWE			\$ 116,578.94	\$ -	\$ 143,150.41	\$ 2,637.44	\$ 9,231.04	\$ 14,406.05	\$ 14,406.05	\$ -	\$ 14,406.05	\$ 314,815.97
	Grand Total			\$ 284,203.60	\$ 4,973.78	\$ 224,279.72	\$ 10,652.90	\$ 51,341.08	\$ 61,899.05	\$ 54,988.23	\$ 195,436.64	\$ 34,000.86	\$ 921,775.86



Tres Rios WRF Digester
Billable Rates Table

Position	Hourly Base Wage Rate	Total Benefits, Tax, Insurance	Overhead @ 133.897%*	Profit @ 8%	Billable Rate
Project Manager	\$ 95.08	\$ 42.66	\$ 127.31	\$ 21.20	\$ 286.27
Construction Manager	\$ 83.57	\$ 37.50	\$ 111.90	\$ 18.64	\$ 251.62
General Superintendent	\$ 73.98	\$ 33.20	\$ 99.06	\$ 16.50	\$ 222.74
Project Engineer	\$ 54.80	\$ 24.59	\$ 73.38	\$ 12.22	\$ 165.00
Engineer 2	\$ 43.84	\$ 19.67	\$ 58.70	\$ 9.78	\$ 132.00
Engineer	\$ 46.58	\$ 20.90	\$ 62.37	\$ 10.39	\$ 140.25
Sr. Estimating Manager	\$ 79.46	\$ 35.66	\$ 106.40	\$ 17.72	\$ 239.24
Survey Manager	\$ 54.80	\$ 24.59	\$ 73.38	\$ 12.22	\$ 165.00
Surveyor	\$ 49.32	\$ 22.13	\$ 66.04	\$ 11.00	\$ 148.50
Estimator	\$ 63.02	\$ 28.28	\$ 84.39	\$ 14.06	\$ 189.74
Scheduler	\$ 76.72	\$ 34.43	\$ 102.73	\$ 17.11	\$ 230.99
Procurement Lead	\$ 52.06	\$ 23.36	\$ 69.71	\$ 11.61	\$ 156.75
Procurement Manager	\$ 67.13	\$ 30.12	\$ 89.89	\$ 14.97	\$ 202.12
Mechanical Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Electrical Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Structural Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Civil Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
I&C Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Architectural Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Geotechnical Design Engineer	\$ 92.65	\$ 41.57	\$ 124.06	\$ 20.66	\$ 278.94
Process Design Engineer	\$ 79.75	\$ 35.78	\$ 106.78	\$ 17.79	\$ 240.10
Engineering Project Manager	\$ 109.50	\$ 49.13	\$ 146.62	\$ 24.42	\$ 329.68
Project Controls Analyst	\$ 48.08	\$ 21.58	\$ 64.38	\$ 10.72	\$ 144.77
Accounting	\$ 48.08	\$ 21.58	\$ 64.38	\$ 10.72	\$ 144.77
Document Control	\$ 39.87	\$ 17.89	\$ 53.39	\$ 8.89	\$ 120.05



Tres Rios WRF Digester

Kiewit Travel Expenses Schedule

Mileage: per U.S. GSA rate - \$0.67/mile

Mileage from 3888 E. Broadway Rd. Phoenix is 97 miles

Air Travel estimated at \$600 R/T, will be billed at cost

Lodging and meal rates is U.S. General Services Administration rates for fiscal years 2024 and 2025 (\$171 Jan-Mar; \$123 Apr-Dec)

FY25 max per diem is \$80 per day and \$60 on first and last day of travel.

Car rental estimated at \$75/day, unlimited mileage, fill gas

Task	Plane Trips (RT)	Car Trips (1-Way)	Total Miles	Total Hotel Nights	Max Hotel Rate	Max Per Diem Rate	Mileage	Air Travel	Lodging	Per Diem	Car Rental	Total
Project Kick-Off	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
30% Design Development Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
30% Design Review Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
60% Design Development Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
60% Design Review Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 60.63	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,016.63
90% Design Development Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
90% Design Review Workshop	2	1	97	2	\$ 123.00	\$ 80.00	\$ 64.99	\$ 1,200.00	\$ 246.00	\$ 360.00	\$ 150.00	\$ 2,020.99
Additional ad-hoc site visits	4	4	388	8	\$ 123.00	\$ 80.00	\$ 259.96	\$ 2,400.00	\$ 984.00	\$ 960.00	\$ 300.00	\$ 4,903.96
							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total							\$ 710.53	\$ 10,800.00	\$ 2,706.00	\$ 3,480.00	\$ 1,350.00	\$ 19,046.53



Hazen and Sawyer
1626 N. Litchfield Road, Suite 330
Goodyear, AZ 85395

May 8, 2025

Mr. Gabriel Gaytan
Project Manager
Kiewit Infrastructure West Co.
3888 East Broadway Road
Phoenix, AZ 85040

**Re: Tres Rios Water Reclamation Facility Digester Design Build
Proposal for Design Services**

Dear Mr. Gaytan:

We are herewith enclosing our scope, fee, hourly rate table, travel expense sheet, and schedule for Pima County Regional Wastewater Reclamation Department's Tres Rios Water Reclamation Facility Digester Design Build. It is anticipated that this phase consists entirely of design services encompassing the following general task items:

- Project Management
- Permitting Assistance
- Basis of Design
- Design

The fee for these services is not to exceed \$1,790,795.72 in base services plus \$99,9000.00 in allowances for a total of \$1,890,694.72.

Please do not hesitate to contact me if you have any questions. I can be reached by cell at 214-682-4996 or by email at AODEGARDBEGAY@HAZENANDSAWYER.COM.

Very truly yours,

A handwritten signature in black ink that reads "A.M. Odegard-Begay". The signature is fluid and cursive, with the first initials "A.M." clearly visible.

Andrea Odegard-Begay, PE
Senior Associate

Scope of Services – Phase 1
Pima County Regional Wastewater Reclamation Department
Tres Rios Water Reclamation Facility Digester Design Build

INTRODUCTION

Pima County Regional Wastewater Reclamation Department (COUNTY) has selected the Kiewit (CONTRACTOR), Hazen and Sawyer (DESIGNER), and HDR (DESIGNER subconsultant) team for design and construction of a new digester fully integrated into Building 60 at the Tres Rios Water Reclamation Facility (TRWRF) to provide redundancy and operational flexibility. The project also includes replacing the existing compressors in Building 60 with variable frequency drive (VFD)-controlled centrifugal blowers designed to accommodate future biogas production at the digester complex. These new blowers shall serve existing Digesters No. 5 and 6 and new Digester No. 7.

Work shall be delivered in a phased approach as follows:

- Phase 1: Design / Pre-Construction
- Phase 2: Construction and Engineering Services During Construction

SCOPE OF SERVICES

Task 1: Project Management

Task 1.1 - Project Management

DESIGNER shall manage the design services required to complete the Project tasks. Project management consists of project administration including development of a project management plan, coordination and supervision of the project design team and resources, external project coordination, and management for project milestones and deliverables to meet the project schedule and budget.

DESIGNER shall provide project status information to the CONTRACTOR's Project Manager including a monthly progress report that includes description of work completed in billing month, upcoming work, and deliverable status.

Deliverable(s):

- Project Management plan, including CAD-BIM management, in electronic PDF format.
- Monthly invoice with progress report submitted electronically to CONTRACTOR.

Task 1.2 - Project Meetings

DESIGNER shall attend progress and coordination meetings throughout the duration of the project. Project meetings are anticipated to be attended by the CONTRACTOR and COUNTY. Such meetings shall serve as a forum for the exchange of information concerning the project, review of design progress, and discussion of any proposed changes in the scope of the project.

DESIGNER shall also meet with CONTRACTOR, COUNTY, and stakeholders to review design comments after each submittal and discuss constructability and value-engineering options.

Deliverable(s):

- Participation in Phase 1 Planning Workshop to be held at DESIGNER's office.
- Participation in project kick-off meeting to be held on-site.
- Participation in virtual bi-weekly project coordination meetings of one hour duration, totaling thirty (30) meetings. Meetings shall be attended by up to three (3) DESIGNER staff and up to three (3) DESIGNER subconsultant staff.
- Basis of Design and 30% Design Development Workshop, including agenda and notes, to be held on-site.
- 30% Design Review and comment resolution Workshop, including agenda and notes, to be held on-site.
- 60% Design Development Workshop, including agenda and notes, to be held on-site.
- 60% Design Review and comment resolution Workshop, including agenda and notes, to be held on-site.
- 90% Design Development Workshop, including agenda and notes, to be held on-site.
- 90% Design Review and comment resolution Workshop, including agenda and notes, to be held on-site.

Task 1.3 – Quality Assurance/Quality Control Management

DESIGNER shall maintain a Quality Control Program focused on providing a product that is in accordance with the industry's accepted standard of care. The program shall include quality control checklists and in-house reviews. QC reviews shall be completed on each deliverable and review comments addressed before submission to the COUNTY.

Task 1 Assumptions:

- Phase 1 duration is estimated at 14 months from notice to proceed.
- DESIGNER shall provide Project Management Plan to the CONTRACTOR to inform the development of the Project Execution Plan. Project Management Plan shall include CAD-BIM management. CONTRACTOR shall be responsible for the development of Project Execution Plan and for establishing and maintaining a Management Information System to govern communication between CONTRACTOR, DESIGNER, and COUNTY.
- Project Management Plan shall be updated during the project if there are scope or schedule changes.
- All project documentation and deliverables are to be provided electronically via CONTRACTOR Management Information System (InEight).
- In-person meetings shall be attended by up to three (3) DESIGNER staff and up to two (2) DESIGNER subconsultant staff. Other DESIGNER and DESIGNER subconsultant staff may attend virtually.
- DESIGNER shall be responsible for leading/facilitating design development and design review meetings, including development of agenda and documentation of meeting notes and action items.

Task 2: Permitting Assistance

DESIGNER shall coordinate with the COUNTY for submission of applicable permit applications and shall provide design information required for submission including drawings, specifications, and sealed design calculations, as required.

DESIGNER shall contact Arizona Department of Environmental Quality (ADEQ) at an appropriate time, typically following the 60% design deliverable, to advise the agency of the project and obtain

more detailed information about anticipated permitting requirements expected by the agency. DESIGNER shall schedule and participate, along with the CONTRACTOR and COUNTY in a pre-application meeting with ADEQ to discuss the project and receive guidance on requirements for applying for an APP modification, as applicable.

DESIGNER shall prepare all aspects of the APP application pertinent to the Tres Rios WRF and in coordination with other ongoing projects (3TRCAB, 3TREBP, and 3ANOMX) and revise the document in response to ADEQ comments, if any. DESIGNER shall continue to communicate and coordinate with ADEQ until the APP permit is completed and issued to the COUNTY.

Task 2 Assumptions:

- Payment of permit fees shall be by CONTRACTOR.
- Resolution of APP review comments shall be coordinated with the COUNTY during a regularly-scheduled progress meeting.

Deliverable(s):

- Participation in APP pre-application meeting with ADEQ and up to two (2) follow-up meetings as necessary to resolve comments.
- Application for APP permit modification in accordance with ADEQ procedures in electronic PDF format

Task 3: Basis of Design

Task 3.1 - Data and Information Collection

DESIGNER shall prepare and submit to the COUNTY a data request for pertinent available information not already in DESIGNER's possession. DESIGNER shall review the pertinent existing information as provided by the COUNTY on this task or previously, including but not limited to existing operating conditions; record drawings of existing facilities; and operations and maintenance information.

In addition, DESIGNER shall conduct a field evaluation with DESIGNER subconsultant to confirm existing electrical and controls equipment in the Building 60 control building, evaluate the performance of the existing gas compressors, and evaluate impacts on the gas cleaning facility.

Deliverable(s):

- Data request letter in electronic PDF format
- Electrical/I&C-focused field evaluation

Task 3.2 – Basis of Design

Following review of the data obtained in Task 3.1, DESIGNER shall confirm design criteria for one additional digester at Building 60 to match existing. DESIGNER shall evaluate the following:

- Modifications required to sludge pumping systems.
- Modifications required to replace the existing compressors with variable-speed blowers.
- Modifications required to gas-handling infrastructure to handle additional gas volume.
- Impact of proposed PONDUS system (Contract 3TRCAB) on heat requirements.

DESIGNER shall prepare a report describing the basis of design criteria for all components of the project. Report shall identify the design parameters, criteria, and concepts necessary for preparation of detailed plans and specifications.

DESIGNER shall also develop drawings to approximately 10% completion, which shall include the following:

- Major equipment layout in schematic format with some plans and sections
- Preliminary process flow diagram
- Overall control system architecture and major systems preliminary P&IDs
- Electrical one-line diagram and preliminary switchgear layout with sequencing

Deliverable(s):

- Draft Basis of Design Report, including 10%-level drawings, in electronic PDF format
- Final Basis of Design Report, including 10%-level drawings, in electronic PDF format.
- Geolocated 3D model of the project area showing representative location of existing and new infrastructure.

Task 3 Assumptions:

- New digester shall match existing digesters in Building 60 complex in capacity, cover type, mixing, and heating. Evaluation of alternative process mechanical components is not required and is excluded from this scope of services.
- DESIGNER shall be responsible for the design of general arrangement, process mechanical, structural, and civil site components.
- DESIGNER shall coordinate electrical and instrumentation and control (I&C) design for a complete, functional system; electrical and I&C design shall be by DESIGNER subconsultant.
- SCADA programming, PLC code development, and site-wide control system master planning are excluded unless specifically included under future task orders.
- Modifications to building mechanical components (i.e., HVAC, plumbing, fire protection) within Building 60 shall not be required.
- Scope is limited to tie-in interfaces with existing digesters and existing control building; condition assessment, rehabilitation design, or performance evaluation of existing units is excluded.
- Improvements to existing RNG facility are excluded from this scope of services.
- Deliverable documents shall be submitted electronically via CONTRACTOR Management Information System (InEight). Management Information System. InEight access and training shall be provided by CONTRACTOR.
- Requested data shall be provided by COUNTY within 10 business days.
- Survey and 3D scanning results as well as geotechnical recommendations shall be available at least 15 business days prior to completion of basis of design.
- COUNTY reviews shall be completed within 10 business days.

Task 4: Design

Task 4.1 – Early Work Package

Following development of basis of design in Task 3.2, DESIGNER shall develop Contract Documents consisting of drawings and technical specifications, on an expedited schedule for early work items consisting of pre-identified major electrical equipment, digester lid, and excavation, including sheet pile installation, and structural concrete work for the new digester. Design effort is limited to elements

required for early construction and procurement activities only. Design documents for balance of plant work shall be developed concurrently via Tasks 4.2, 4.3, 4.4, and 4.5.

Deliverable(s):

- 60% early work package drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Responses to 60% early work package review comments via electronic review comment log managed by CONTRACTOR.
- 90% early work package drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Responses to 90% early work package review comments via electronic review comment log managed by CONTRACTOR.
- 100% early work package drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Geolocated 3D model of the project area incorporating design information at each respective work package design level.

Task 4.2 - Balance of Plant 30% Design

Once the basis of design has been confirmed with the COUNTY, the DESIGNER shall proceed with preliminary design for balance of plant consisting of 30% level drawings. The intent of this phase is to lock in the design concept for the balance of plant work. The design components that shall be evaluated include:

- Preliminary site layout
- Site civil engineering, including grading and stormwater handling, parking, and service access
- Piping connections to existing utilities
- Process mechanical engineering, including mixing, heating, and gas-handling systems
- Instrumentation, controls, and SCADA improvements and interface with existing system (by DESIGNER subconsultant)
- Electrical supply and distribution (including emergency power), building electrical and lighting, and site lighting, as required (by DESIGNER subconsultant)

Deliverable(s):

- Geolocated 3D model of the project area incorporating 30% design information, including:
 - tie-in locations
 - preliminary piping
 - civil surfaces
 - concrete structures
- 30% balance of plant drawings in electronic PDF format containing requisite information defined by the project design definition document.
- Specification list for balance of plant

Task 4.3 – Balance of Plant 60% Design

At the 60% stage for balance of plant design, DESIGNER shall provide definite design conclusions based on the accepted 30% design and COUNTY-approved direction. The plans shall have further developed the approved 30% stage.

Deliverable(s):

- Responses to 30% balance of plant package review comments via electronic review comment log managed by CONTRACTOR.
- 60% balance of plant drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Geolocated 3D model of the project area incorporating 60% design information.

Task 4.4 - Balance of Plant 90% Design

DESIGNER shall advance the design to 90% based on the accepted 60% design and COUNTY-approved direction. At this stage, the DESIGNER shall incorporate all prior review comments and finalize design details; no major design changes shall occur beyond those approved at the 60% stage. This submittal shall form the basis for any required regulatory agency submittals. Upon approval of this stage of the plans by the COUNTY's Representative, DESIGNER shall begin execution on the final construction documents.

Deliverable(s):

- Responses to 60% balance of plant package review comments via electronic review comment log managed by CONTRACTOR.
- 90% balance of plant drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Geolocated 3D model of the project area incorporating 90% design information.

Task 4.5 - Balance of Plant 100% Final for Construction/Signature Design

DESIGNER shall provide a complete set of plans and technical specifications necessary to construct the balance of plant. This submittal shall resolve any outstanding issues from the 90% stage and be fully coordinated between all disciplines, utilities, regulatory agencies, and projects. During development of the final construction documents, DESIGNER shall prepare any remaining governmental submittals.

Deliverable(s):

- Responses to 90% balance of plant package review comments via electronic review comment log managed by CONTRACTOR.
- 100% balance of plant drawings containing requisite information defined by the project design definition document and specifications in electronic PDF format.
- Geolocated 3D model of the project area incorporating 100% design information.

Task 4 Assumptions:

- Design assumptions from Task 3 are also applicable to Task 4.
- Design documents shall be prepared in compliance with the COUNTY's design standards.
- Construction documents shall be prepared by an Arizona registered professional DESIGNER.
- Drawings and specifications shall use DESIGNER's standard format with specifications being CSI MasterFormat 50 Division.
- CONTRACTOR shall update cost model at each stage of design to facilitate COUNTY review and identify whether there is a need for value engineering. Design changes that result from value engineering during the detailed design stage, after the completion of the respective 60% design drawings defined in the Tasks above, would be considered extra work and would be provided as an amendment to the contract.

- The 60% early work package shall serve as the basis for pre-procurement of long lead equipment items.
- Updating arc-flash and/or short circuit studies are excluded from this scope of work.
- An electrical power system study is excluded from this scope of work.
- Coordination with external utilities, regulatory agencies, or other projects is limited to design-level coordination based on available information at time of final submittal.

OTHER DIRECT COSTS (ODCs)

Direct costs including travel to attend project-related meetings and workshops.

ALLOWANCES

Additional Engineering Services

Allowance for additional engineering services not identified in previous tasks. The scope, level of effort, and associated cost for additional engineering services shall be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.

Geotechnical Investigation

Allowance for geotechnical investigation to assist in the design of a new structure adjacent to existing digesters (Building 60). The scope, level of effort, and associated cost for geotechnical investigation shall be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.

Survey and 3D Scanning

Allowance for survey services to assist in the design of a new structure adjacent to existing digesters (Building 60) and tied into existing building equipment and piping. Survey services may include verification of horizontal and vertical control on existing structures and pipelines, topographic survey identifying typical surface features, and 3D laser scanning services as required to field verify existing conditions and potentially support development of a Building Information Model (BIM) within and around Building 60. The final scope, level of effort, and associated cost for survey services shall be as determined and agreed upon by the COUNTY, CONTRACTOR, and DESIGNER before the work is performed.

Pima County Regional Wastewater Reclamation Department Tres Rios Water Reclamation Facility Digester Design Build											Fee Proposal Hazen 5/8/2025	
Task No.	Description	VP	SA	A	SPE	PE	SD	Admin	Hazen	Hazen	HDR	Total
		\$ 299.47	\$ 286.45	\$ 273.43	\$ 240.88	\$ 198.56	\$ 130.20	\$ 110.67	Hours	Subtotal	Subtotal	
Task 1	Project Management											
Task 1.1	Project Management	8	36	0	0	0	0	12	56	\$ 14,036.00	\$ 69,451.00	\$ 83,487.00
Task 1.2	Project Meetings	0	138	0	90	90	0	0	318	\$ 79,079.70	\$ 81,415.00	\$ 160,494.70
Task 1.3	Quality Assurance / Quality Control Management	128	168	320	0	0	0	0	616	\$ 173,953.36	\$ 27,547.00	\$ 201,500.36
Project Management Subtotal		136	342	320	90	90	0	12	990	\$ 267,069.06	\$ 178,413.00	\$ 445,482.06
Task 2	Permitting Assistance											
Task 2.1	Permitting Assistance	0	4	0	0	40	0	0	44	\$ 9,088.20	\$ -	\$ 9,088.20
Permitting Assistance Subtotal		0	4	0	0	40	0	0	44	\$ 9,088.20	\$ -	\$ 9,088.20
Task 3	Basis of Design											
Task 3.1	Data and Information Collection and Review	4	12	0	16	16	0	0	48	\$ 11,666.32	\$ 21,660.00	\$ 33,326.32
Task 3.2	Preliminary Design Report	0	40	28	32	240	80	8	428	\$ 85,777.96	\$ 23,770.00	\$ 109,547.96
Basis of Design Subtotal		4	52	28	48	256	80	8	476	\$ 97,444.28	\$ 45,430.00	\$ 142,874.28
Task 4	Design											
Task 4.1	Early Work Package	0	100	108	328	216	336	24	1,112	\$ 226,476.32	\$ 50,210.00	\$ 276,686.32
Task 4.2	Balance of Plant 30% Design	0	88	88	108	240	120	8	652	\$ 139,448.24	\$ 103,668.00	\$ 243,116.24
Task 4.3	Balance of Plant 60% Design	0	88	144	188	180	176	8	784	\$ 169,408.32	\$ 108,857.00	\$ 278,265.32
Task 4.4	Balance of Plant 90% Design	0	72	118	148	144	140	8	630	\$ 136,245.38	\$ 109,408.00	\$ 245,653.38
Task 4.5	Balance of Plant 100% Design	0	52	80	104	92	96	8	432	\$ 93,473.40	\$ 38,094.00	\$ 131,567.40
Design Subtotal		0	400	538	876	872	868	56	3,610	\$ 765,051.66	\$ 410,237.00	\$ 1,175,288.66
Other Direct Costs												
Other Direct Costs										\$ 9,667.52	\$ 8,394.00	\$ 18,061.52
Other Direct Costs Subtotal										\$ 9,667.52	\$ 8,394.00	\$ 18,061.52
Allowances												
Additional Engineering Services												\$ 30,000.00
Geotechnical Investigation												\$ 29,900.00
Survey and 3D Scanning												\$ 40,000.00
Additional Allowance Subtotal												\$ 99,900.00
TOTAL		140	798	886	1,014	1,258	948	76	5,120	\$ 1,148,320.72	\$ 642,474.00	\$ 1,890,694.72

Labor Category	Rate
VP - Vice-President	\$ 299.47
AVP - Associate Vice-President	\$ 292.96
SA - Senior Associate	\$ 286.45
A - Associate	\$ 273.43
SPE - Senior Principal Engineer	\$ 240.88
PE - Principal Engineer	\$ 198.56
AE II - Assistant Engineer II	\$ 169.27
AE I - Assistant Engineer I	\$ 159.50
SPD - Senior Principapl CAD/BIM Designer	\$ 192.05
SD - Senior CAD/BIM Designer	\$ 130.20
A - Administrative Assistant	\$ 110.67

Tres Rios Water Reclamation Facility Digester Design Build

Hazen Hourly Rates Table

Category	A Hourly Base Wage Rate	B Overhead	C Profit	D Billable Rate
Vice President	\$92.00	\$185.29	\$22.18	\$299.47
Associate Vice President	\$90.00	\$181.26	\$21.70	\$292.96
Senior Associate	\$88.00	\$177.23	\$21.22	\$286.45
Associate	\$84.00	\$169.18	\$20.25	\$273.43
Senior Principal Engineer	\$74.00	\$149.04	\$17.84	\$240.88
Principal Engineer	\$61.00	\$122.85	\$14.71	\$198.56
Assistant Engineer II	\$52.00	\$104.73	\$12.54	\$169.27
Assistant Engineer I	\$49.00	\$98.69	\$11.81	\$159.50
Senior Principal CAD/BIM Designer	\$59.00	\$118.83	\$14.23	\$192.05
Principal CAD/BIM Designer	\$53.00	\$106.74	\$12.78	\$172.52
Senior CAD/BIM Designer	\$40.00	\$80.56	\$9.64	\$130.20
CAD/BIM Designer	\$34.00	\$68.48	\$8.20	\$110.67
Assistant CAD/BIM Designer	\$28.00	\$56.39	\$6.75	\$91.14
Administrative Assistant	\$34.00	\$68.48	\$8.20	\$110.67

(B) Overhead Rate = OHR x (A)

OHR =

201.40%

(C) Profit = PR x (A + B)

PR =

8.00%

(D) Billing Rate = (A + B + C)

Hazen Travel Expenses Schedule

Mileage: per AZDOA rate - \$0.67/mile

Mileage from 1400 E. Southern Avenue, Tempe, AZ is 98 miles

Air Travel estimated at \$600 R/T, will be billed at cost

Lodging is estimated \$171(Jan-Mar) and \$123 (Apr-Dec); max per diem is \$60/day and \$45 on travel days per AZDOA

Car rental estimated @ \$75/Day, unlimited mileage, fill gas

Task	Plane Trips (RT)	Car Trips (1-Way)	Total Miles	Total Hotel Nights	Max Hotel Rate	Max Per Diem Rate	Mileage	Air Travel	Lodging	Per Diem	Car Rental	Total	Notes
Project Kick-Off and Site Visit	1	2	196	1	\$ 123.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 123.00	\$ 105.00	\$ 75.00	\$ 1,034.32	1 person, 1 night lodging in Tucson area
30% Design Development Workshop	1	2	196	1	\$ 123.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 123.00	\$ 105.00	\$ 75.00	\$ 1,034.32	1 person, 1 night lodging in Tucson area
30% Design Review Workshop	1	2	196	1	\$ 123.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 123.00	\$ 105.00	\$ 75.00	\$ 1,034.32	1 person, 1 night lodging in Tucson area
60% Design Development Workshop	1	2	196	1	\$ 123.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 123.00	\$ 105.00	\$ 75.00	\$ 1,034.32	1 person, 1 night lodging in Tucson area
60% Design Review Workshop	1	2	196	1	\$ 171.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 171.00	\$ 105.00	\$ 75.00	\$ 1,082.32	1 person, 1 night lodging in Tucson area
90% Design Development Workshop	1	2	196	1	\$ 171.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 171.00	\$ 105.00	\$ 75.00	\$ 1,082.32	1 person, 1 night lodging in Tucson area
90% Design Review Workshop	1	2	196	1	\$ 123.00	\$ 60.00	\$ 131.32	\$ 600.00	\$ 123.00	\$ 105.00	\$ 75.00	\$ 1,034.32	1 person, 1 night lodging in Tucson area
Additional Site Visits, As Needed	2	8	784	2	\$ 123.00	\$ 60.00	\$ 525.28	\$ 1,200.00	\$ 246.00	\$ 210.00	\$ 150.00	\$ 2,331.28	1 person, 1 night lodging in Tucson area
Total							\$ 1,444.52	\$ 5,400.00	\$ 1,203.00	\$ 945.00	\$ 675.00	\$ 9,667.52	



May 14, 2025

Sent via e-mail

Andrea Odegard-Begay, PE
Hazen and Sawyer
1626 N. Litchfield Road, Suite 300
Goodyear, AZ 85395

Subject: HDR Proposal for Pima County Regional Wastewater Reclamation Department Tres Rios Water Reclamation Facility Digester Design Build

Dear Andrea,

HDR Engineering, Inc. (HDR) is pleased to submit this proposal to Hazen and Sawyer for the subject project. This proposal includes HDR's effort to support Hazen and Sawyer with the digester design, including design of the electrical and instrumentation and control systems, and mechanical design of the biogas blower system.

We look forward to the opportunity to work with you. If you have any questions regarding our proposal, please contact Ty Morton at 520.584.3643.

Sincerely,
HDR Engineering, Inc.

A blue ink signature of Jason Fort, written in a cursive style.

Jason Fort, PE
Vice President, Area Manager

A blue ink signature of Ty Morton, written in a cursive style.

Ty Morton, PE
Project Manager

SCOPE OF SERVICES – Phase 1

Background

The Kiewit, Hazen and Sawyer, and HDR team was selected to design a new anaerobic digester for Pima County at their Tres Rios Wastewater Reclamation Facility (TRWRF). The project will be delivered through a progressive design build (PDB) delivery model, and HDR is a subconsultant to Hazen and Sawyer. The new digester will be installed to supplement the existing six digesters. Digester nos. 1 through 4 were constructed over 40 years ago and digester nos. 5 and 6 were constructed 15 years ago. Per the County, to rehabilitate the four oldest digesters, they must be taken out of service and the capacity transferred to the newer digesters. Currently, the TRWRF digester capacity is not sufficient to transfer capacity and continue to provide a level of safe redundancy needed to complete the rehabilitation.

The new digester should be designed to accommodate future biogas production. The project includes the replacement of existing compressors with variable frequency drive (VFD) controlled centrifugal blowers, which will service the existing two newer digesters (nos. 5 and 6) as well as the new digester no. 7. HDR will be responsible for the following design phase elements:

- Electrical design
- Instrumentation and controls design
- Replacement of the existing natural gas compressor system with new VFD controlled centrifugal blowers.

Per the County, the mechanical and electrical tie-ins for the new digester are anticipated to be similar to the existing digester nos. 5 and 6, within the basement of the existing digester control building, which was designed to accommodate future digesters. Rehabilitation of the main Motor Control Center (MCC) building is anticipated to accommodate electrical equipment for the new digester.

The work will be delivered in a phased approach as follows:

- Phase 1: Design / Pre-Construction
- Phase 2: Construction and Engineering Services During Design

Scope of Services

1.0 Project Management

1.1 PROJECT MANAGEMENT

The purpose of this task is to manage the HDR team, coordinate with the PDB team, County staff, control and adjust scope, schedule, and budget as well as provide monthly status reporting, accounting, and invoicing. The following scope supplements the original contract scope.

- Coordinate and manage the project team.

- Prepare project management plan, quality management plans, and health and safety plans.
- Prepare monthly status reports describing the following:
 - Services completed during the month
 - Services planned for the next month
 - Schedule update and financial status summary
- Prepare monthly invoices formatted in accordance with contract terms.

1.2 PROJECT MEETINGS

HDR will participate in project progress, design coordination, and design review meetings throughout the 14-month duration of the project. Key meetings will consist of:

- Attend Phase 1 planning workshop to be held at Hazen and Sawyer's office. The meeting will be attended in-person by HDR's project manager and virtually by the electrical and instrumentation and controls (I&C) leads.
- Attend the kickoff meeting at Tres Rios WRF, in-person, to be attended by HDR's project manager, electrical and I&C leads.
- Conduct bi-weekly telephone conference calls with the PDB team to review the status of work in progress and project needs. The calls may include multiple project staff depending upon topic.
- Attend monthly meetings and/or workshops with the County, to be attended in person by HDR's project manager and virtually by the electrical and I&C task leads.
- 60-percent design review workshop: HDR will participate in a 60-percent review workshop with the PDB team and County to review design progress and receive comments for incorporation into the design. BIM will be used to communicate the design approach for mechanical process components.
- 90-percent design review workshop: HDR will participate in a 90-percent review workshop with the PDB team and County to review design progress and receive comments for incorporation into the design. BIM will be used to communicate the design approach for mechanical process components.
- Design Coordination Meetings with PDB team and County: HDR will participate in monthly design coordination meetings. The meetings will cover current design progress with the intent of obtaining feedback from the County. HDR will include the electrical and I&C design leads in the meeting depending on the meeting agenda. Each meeting is assumed to be two (2) hours in duration and will have up to three (3) HDR staff members in attendance. Eight (8) meetings are assumed.
- Preliminary Construction Sequence and Maintenance of Plant Operations (MOPO) Workshops: HDR will participate in two workshops with the PDB team and County to discuss and coordinate construction sequencing and MOPO.
- Decision Log: HDR will maintain an internal Decision Log throughout the Design Phase of the project to carry ongoing action items and issues requiring resolution and document their outcome and will update these decisions in a master Decision Log maintained by the PDB team.

Assumptions

- The duration for design-phase services will be approximately 14 months from notice-to-proceed (NTP).
- HDR will attend bi-weekly project management meetings. Up to one hour of project manager time will be required for each meeting including attendance, follow-up, and notes. HDR attendees will include Project Manager, electrical and I&C leads, and CAD lead.
- Schedule will be reviewed as part of bi-weekly discussions on the project status.

Deliverables

- Monthly reports and invoices
- Monthly project schedule and budget updates
- Project management meeting agenda and notes

2.0 Permitting Assistance

Not applicable.

3.0 Basis of Design

HDR will conduct a review of the existing facility planning documents, as-built drawings, and O&M documentation, and use this material to develop necessary process and equipment selections to develop a complete basis of design for the electrical, I&C, and blower portions of the project. This task will include the necessary workshops and field analysis to make specific equipment selections, summarized in short technical memorandums that will be incorporated in the Basis of Design Report (BODR).

HDR will review facility plan documentation for the existing digester complex (Building 60), review the existing operation of the biogas compressor, and develop recommendations for the digester electrical configuration and controls systems. HDR will also develop recommendations for replacing the existing compressors with VFD controlled centrifugal blowers. A summary of work to be completed:

- Prepare technology fact sheets summarizing (2) digester waste gas pumping systems
- Prepare recommendations for electrical upgrades to accommodate the new mechanical components for digester no. 7
- Prepare controls process and instrumentation diagrams for all new mechanical components

3.1 DATA AND INFORMATION COLLECTION

HDR will participate in a field evaluation with the PDB team. This task will be used to confirm existing electrical and controls equipment in the Building 60 control building, evaluate the performance of the existing gas compressors and impacts on the gas cleaning facility.

- An assessment will be performed for the following equipment/systems:
 - Biogas collection and transmission system
 - Biogas waste gas burner
 - Biogas cleaning facility

- Conduct a meeting with County staff to discuss operations of the biogas system(s) and request operating data.
- Review existing as-built documentation provided by the County for the electrical and controls systems and biogas handling systems.

3.2 BASIS OF DESIGN

HDR will contribute to the recommended basis of design for the electrical, controls, and biogas project elements, to augment the remainder of the report prepared by Hazen and Sawyer. HDR will recommend procurement packages for long lead equipment to provide a more advantageous bidding environment and to advance the construction schedule. The following services will be performed.

Preliminary Process and Equipment Selection

- Refine the design elements to determine the County's preferred equipment.
- Combine the selected design elements and equipment to correspond to the selected construction packages.

Design Delivery Packaging and Approach

- Work with the PDB team and County staff to identify equipment for early procurement.

Preliminary Drawings

- P&IDs – up to eight (8) P&IDs for major process areas, including digester feed modifications, transfer pumping, heating, hot water system, gas monitoring, and gas blowers.
- Electrical one-line diagram
- Blower system – one plan layout.
- CAD – Use AutoCAD Civil3D to prepare preliminary P&IDs and Revit for blower configurations

Draft BOD Report

- Prepare contributions to the Draft BODR.

Final BOD Report

- Prepare contributions to the Final BODR. County comments on the draft report will be addressed in the final document.

Kiewit / Hazen and Sawyer Responsibilities

- Incorporate HDR technical sections into BODR report
- Coordinate with the County to receive review comments on the draft BODR
- Sharing of technical information related to Hazen and Sawyer preliminary design components
- Develop file-sharing system that enables HDR access to project documentation, BODR files, and preliminary CAD files.

Assumptions

- Drawings will be limited to initial P&IDs for each mechanical system, and a preliminary equipment plan for the blowers. The electrical discipline will include a basis of design narrative regarding design standards and approaches but will not include drawings.

- No improvements to the existing gas cleaning facility will be performed as part of this project. The assessment will be solely to understand the interaction between the existing gas compressors and the existing gas cleaning system to inform the design of the new blowers. If, during the assessment of the existing gas cleaning system, HDR identifies any necessary modifications to improve overall performance, or accommodate the new blowers, that design effort will be considered an Additional Service.
- Specifications will not be included at this stage, though an overall specification list will be created.

Deliverables

- Contributions to Draft BODR
- Contributions to Final BODR including providing responses to Kiewit and County comments in resolved comment log

4.0 Design

Prepare 60-percent, 90-percent and 100-percent (Issue for Construction) design plans and specifications.

4.1 EARLY WORK PACKAGE

Biogas blowers and VFDs, electrical, and controls panels are likely to require extensive time for fabrication and delivery. It is assumed that the PDB team will develop pre-procurement packages from the design packages and contract documents, negotiate with each vendor and compile the vendor/supplier/manufacture responses.

HDR will develop a design package, including specifications and drawings, to provide the PDB team with guidance to pre-procure equipment as noted in this section. HDR will assist the PDB by reviewing the scope, schedule, warranty and price components of select equipment quotes provided by Kiewit.

Coordination with PDB Team and County Staff

Meet with County staff and PDB team to coordinate schedule and responsibilities. One 2-hour virtual meeting is assumed, with three (3) members of the HDR team attending.

Control Systems Coordination

New control panels to be provided by vendors will require integration with new and existing plant control systems. Interconnection requirements will be provided by the County and included in the technical specifications for the selected equipment.

Assumptions

- The PDB team will prepare all contract and pre-procurement documents, including general conditions, contract, forms, and other information for proposers.
- Drawings and specifications prepared for the pre-procurement packages will be based on the 60-percent submittal design documents. Limited effort is anticipated to edit the 60-percent documents for the pre-procurement packages. Drawings and specifications for pre-procurement will not be signed or stamped for construction.
- A single update for each piece of equipment's technical specification listed in this section is assumed following the HDR review of the vendor proposals. Updates to the design

drawings because of HDR review of vendor proposals after the 90-percent submittal design documents is considered a change.

- The level of effort for reviewing vendor shop drawings assumes that information will be complete in the first proposal submission, technical submittal, and O&M and that resubmittals will not be required.
- Pre-procurement of equipment and contract management is assumed to be the sole responsibility of the PDB team. Negotiations and price estimation for all changes to the listed equipment are the responsibility of the PDB team.
- Inspection of delivered equipment will be the responsibility of others.

Kiewit / Hazen and Sawyer Responsibilities:

- Identify procedures for sole-source equipment pre-procurement.
- Identify sales tax requirements for pre-purchased equipment.
- Review and approve contracts for each vendor.
- Participate in Bluebeam review sessions and provide timely comments in a single document.

Deliverables:

- Technical specifications and drawings for equipment pre-procurement as noted in the above scope section.
- Written comments on equipment shop drawings provided by the vendors.

4.2 BALANCE OF PLANT 30% DESIGN

Develop the 30-percent drawings, specifications, and Building Information Model (BIM) for process improvements. Conduct a review session with the County to review the design and receive feedback. The 30-percent Design Drawings and Specifications consist of:

- General drawings
- P&IDs
- Mechanical plans and sections (no details), with BIM provided in Revit format
- One-line electrical diagrams
- List of specifications

4.3 BALANCE OF PLANT 60% DESIGN

Develop the 60-percent drawings, specifications, and BIM for process improvements. Conduct a review session with the County to review the design and receive feedback. The 60-percent Design Drawings and Specifications consist of:

- General drawings
- P&IDs
- Mechanical plans and sections (no details), with BIM provided in Revit format
- One-line electrical diagrams
- 60-percent technical specifications, including Division 1 documents

4.4 BALANCE OF PLANT 90% DESIGN

Develop the 90-percent drawings, specifications, and BIM. Conduct a review session with the PDB team and Owner to review the design and receive feedback. The 90-percent Design Drawings and Specifications consist of:

- 90-percent technical specifications
- 90-percent drawings
- BIM, provided in Revit format

4.5 BALANCE OF PLANT 100% FINAL FOR CONSTRUCTION / SIGNATURE DESIGN

Develop the final drawings, specifications, and BIM. The final Design Drawings and Specifications consist of:

- Final technical specifications
- Final drawings
- BIM model, provided in Revit format

4.6 DESIGN REVIEW WORKSHOPS AND COORDINATION MEETINGS

Assumptions

- Specifications for this project will follow CSI MasterFormat 50 Divisions criteria.
- HDR's labor estimate is based on the drawings identified in the Drawing List provided herein.
- HDR's scope of work is intended to be performed on a continuous basis without disruption from the issuance of NTP through completion of this scope.
- HDR will not be required to revise the design or the contract documents at HDR's own cost where such revisions are due to changes by the Owner after decisions have been agreed to and documented.
- Incorporation of Value Engineering (VE) concepts, assessment of VE concepts after a design element is developed or resulting redesign will be considered an Additional Service.
- HDR's scope and Fee are based upon the acceptance of each deliverable milestone by the Owner qualifying as final decisions allowing the design to be built upon those decisions without modifying or re-work of previously developed design content.
- HDR will coordinate with the PDB team to schedule coordination meetings at mutually agreeable date and times. It is assumed that meetings will take place weekly and last for one (1) hour. Three HDR team members are assumed to attend.
- The Final Design Drawings and Specifications submittal does not include a review session.
- Three design workshops will be conducted for the 30-, 60-, and 90-percent design reviews and are assumed to be up to four (4) hours each attended by three (3) HDR staff members. The intent will be to orient the County staff to the current model status and review design progress. The 30-percent workshop will be attended in-person by the HDR project manager with discipline leads attending virtually. The 60- and 90-percent workshops will be attended in-person by three (3) HDR staff members. HDR staff

attending these workshops will take advantage of their time on site to field validate the design.

- Design regarding the biogas system beyond the replacement of the compressors is not included. This exclusion applies to the existing waste gas burner and biogas cleaning facility.
- Any design regarding NFPA 820 compliance for any existing structures is excluded from this scope of work.
- Updating arc-flash and/or short circuit studies are not part of this scope of work.
- An electrical power system study is not included in the scope.
- Kiewit will prepare opinions of probable costs and guaranteed maximum prices for preliminary and final design submittals.
- HDR will provide written responses to County and PDB team comments at 60- and 90-percent design within 20 business days of receipt of consolidated County and PDB team comments.

Kiewit / Hazen and Sawyer Responsibilities

- Coordinate and schedule the design review and coordination workshops.
- Provide written comments to HDR deliverables
- Sharing of technical information related to Hazen and Sawyer design components
- Develop a file-sharing system that enables HDR access to project CAD files.

Deliverables

- Written responses to County and PDB team comments at 30-, 60-, and 90-percent design milestones.
- 30-percent design documents, to include drawings and a list of specifications, submitted electronically
- 60-percent design documents, to include specifications and drawings, submitted electronically
- 90-percent design documents, to include specifications and drawings, submitted electronically
- Final Design Documents Submittal, to include specifications and drawings, submitted electronically

5.0 Equipment Pre-Procurement

Design Schedule

It is assumed a design schedule from NTP through final design will be prepared by Hazen and Sawyer. HDR's level of effort is based on completing final design within 14 months from NTP.

Schedule Assumptions and Clarifications:

- Achieving the timeframes agreed to in schedule is contingent upon a timely review / turnaround on all HDR's submissions within the durations outlined in the schedule. HDR is not responsible for any delays arising from reviews that extend beyond the assumed schedule durations.

- HDR is not responsible for timely action or inaction of County and PDB teams, or any other entity not under the control of HDR.
- HDR's NTP will correspond with the execution date of this agreement, or on the date of the Owner's Notice to Proceed, whichever is later.
- Additional design or redesign related to these tasks outside the work described in this Agreement may be considered Additional Services subject to a Change Order for added time and or cost.
- Improvements to the existing digesters nos. 1 through 4 (Buildings 10 and 11) are not included in this Agreement.
- No resubmittals of design deliverable packages are assumed. The review comments will be addressed in HDR's subsequent design submittals, or in a single response document delivered within 30 days of receipt of the comments, which is not a resubmission of the current package.
- All proposed refinements and comments from the PDB team and County to the design packages and/or design submittals will be submitted to HDR within 15 business days of receipt of the deliverables as outlined in the design schedule. Proposed refinements and comments provided by the County after such date will be subject to a design amendment.
- Preliminary Drawing List:

SHEET NO.	DWG NO.	TITLE	30%	60%	90%	100%
General						
1	60-G-xxx	Instrumentation and Control Legend - 1	X	X	X	X
2	60-G-xxx	Instrumentation and Control Legend - 2	X	X	X	X
3	60-G-xxx	Electrical Legend - 1	X	X	X	X
4	60-G-xxx	Electrical Legend - 2	X	X	X	X
5	60-G-xxx	Electrical Legend - 3	X	X	X	X
Demolition						
6	60-D-xxx	Gas Compressor Demolition Plan	X	X	X	X
7	60-D-xxx	Gas Compressor Demolition Section			X	X
Mechanical/Process						
8	60-M-xxx	Gas Blowers - Ground Floor Plan	X	X	X	X
9	60-M-xxx	Gas Blowers - Ground Floor Sections I	X	X	X	X
10	60-M-xxx	Gas Blowers - Ground Floor Sections II	X	X	X	X
11	60-M-xxx	Gas Blowers - Details I			X	X

SHEET NO.	DWG NO.	TITLE	30%	60%	90%	100%
12	60-M-xxx	Gas Blowers - Details II			X	X
Electrical						
13	60-E-xxx	Control Building Enlarged Lower Floor Process Plan I	X	X	X	X
14	60-E-xxx	Control Building Enlarged Lower Floor Process Plan II	X	X	X	X
15	60-E-xxx	Control Building Ground Floor Process Plan	X	X	X	X
16	60-E-xxx	Digester No. 7 Ground Level Process Plan	X	X	X	X
17	60-E-xxx	Digester No. 7 Top Plan	X	X	X	X
18	60-E-xxx	Area Classification Plan and Section	X	X	X	X
19	60-E-xxx	Cable Track Detail			X	X
20	60-E-xxx	Panel Boards			X	X
21	60-E-xxx	MCC One-Line Diagram	X	X	X	X
22	60-E-xxx	Control Diagrams I	X	X	X	X
23	60-E-xxx	Control Diagrams II	X	X	X	X
24	60-E-xxx	Control Diagrams III	X	X	X	X
25	60-E-xxx	Panel Schedules			X	X
26	60-E-xxx	Electrical Details I			X	X
27	60-E-xxx	Electrical Details II			X	X
Instrumentation and Controls						
28	60-I-xxx	P&ID - Existing Digester Feed Modifications	X	X	X	X
29	60-I-xxx	P&ID - Digester Feed	X	X	X	X
30	60-I-xxx	P&ID - Digester DS Transfer Pumping	X	X	X	X
31	60-I-xxx	P&ID - Digester Heating	X	X	X	X
32	60-I-xxx	P&ID - Digester Hot Water	X	X	X	X
33	60-I-xxx	P&ID - Digester Gas	X	X	X	X
34	60-I-xxx	P&ID - Digester Gas Blowers	X	X	X	X
35	60-I-xxx	P&ID - Miscellaneous			X	X
36	60-I-xxx	SCADA System Block Diagram I	X	X	X	X
37	60-I-xxx	SCADA System Block Diagram II	X	X	X	X



SHEET NO.	DWG NO.	TITLE	30%	60%	90%	100%
38	60-I-xxx	PLC Panel Elevation and Power Diagram - Typical			X	X
39	60-I-xxx	PLC I/O Panel Wiring - Typical			X	X
40	60-I-xxx	Analog Loop Diagram - Typical	X	X	X	X
41	60-I-xxx	CPxx Panel Elevation			X	X
42	60-I-xxx	Digester Overflow Panel			X	X
43	60-I-xxx	I&C Details I			X	X
44	60-I-xxx	I&C Details II			X	X

Pima County - Tres Rios WRF Digester: HDR Fee Summary

Task		Total HDR	Total HDR	Total HDR	Total HDR
No.	Task Description	Labor Hours	Labor (\$)	Expenses (\$)	
	Billing Rate				
1.0	Project Management				
1.1	Project Management	264	\$69,451	\$ 2,000	\$ 71,451
1.2	Project Meetings	373	\$81,415	\$ 6,394	\$ 87,809
1.3	QA/QC Management	97	\$27,547	\$ -	\$ 27,547
	Subtotal Task 1	734	\$178,412	\$ 8,394	\$ 186,806
3.0	Basis of Design				
3.1	Data and Information Collection	108	\$21,660	\$ -	\$ 21,660
3.2	Basis of Design	122	\$23,770	\$ -	\$ 23,770
	Subtotal Task 3	230	\$ 45,430	\$ -	\$ 45,430
4.0	Design				
4.1	Early Work Package	293	\$50,210	\$ -	\$ 50,210
4.2	Balance of Plant 30% Design	594	\$103,668	\$ -	\$ 103,668
4.3	Balance of Plant 60% Design	594	\$108,857	\$ -	\$ 108,857
4.4	Balance of Plant 90% Design	598	\$109,408	\$ -	\$ 109,408
4.5	Balance of Plant 100% Final	205	\$38,094	\$ -	\$ 38,094
	Subtotal Task 4	2,284	\$ 410,237	\$ -	\$ 410,237
		3,249	\$634,079	\$8,394	\$642,474

Tres Rios Nutrient Pima County Tres Rios WRF Digester - HDR Fee Year 1 (2025)

Task		Engr	PIC	QA/QC	Sr Tech	Process	Elect	I&C	CADD	Admin/	Total HDR	Total HDR	Total HDR	Total HDR
No.	Task Description	PM			Advisor	Engr	Engr	Engr	Tech	Clerical	Labor Hours	Labor (\$)	Expenses (\$)	
	Billing Rate	\$ 315.00	\$ 325.00	\$ 275.00	\$ 275.00	\$ 200.00	\$ 190.00	\$ 190.00	\$ 145.00	\$ 125.00				
1.0	Project Management													
1.1	Project Management	60	8		24					40	132	\$33,100	\$ 2,000	\$ 35,100
1.2	Project Meetings	35	4		19	39	39	39	26		201	\$43,940	\$ 3,197	\$ 47,137
1.3	QA/QC Management			42							42	\$11,478	\$ -	\$ 11,478
	Subtotal Task 1	95	12	42	43	39	39	39	26	40	375	\$88,518	\$ 5,197	\$ 93,715
3.0	Basis of Design													
3.1	Data and Information Collection	4				64	24	16			108	\$21,660	\$ -	\$ 21,660
3.2	Basis of Design	8	2		8	24	24	24	24	8	122	\$23,770	\$ -	\$ 23,770
	Subtotal Task 3	12	2	-	8	88	48	40	24	8	230	\$ 45,430	\$ -	\$ 45,430
4.0	Design													
4.1	Early Work Package	4	2			24	64	57	138	4	293	\$50,210	\$ -	\$ 50,210
4.2	Balance of Plant 30% Design	20	4			47	128	114	277	4	594	\$103,668	\$ -	\$ 103,668
4.3	Balance of Plant 60% Design										0	\$0	\$ -	\$ -
4.4	Balance of Plant 90% Design										0	\$0	\$ -	\$ -
4.5	Balance of Plant 100% Final										0	\$0	\$ -	\$ -
	Subtotal Task 4	24	6	-	-	71	192	171	415	8	887	\$ 153,878	\$ -	\$ 153,878
		131	20	42	51	198	279	250	465	56	1,492	\$287,826	\$5,197	\$293,023

Pima County Tres Rios WRF Digester - HDR Fee Year 2 (2026)

Task		Engr	PIC	QA/QC	Sr Tech	Process	Elect	I&C	CADD	Admin/	Total HDR	Total HDR	Total HDR	Total HDR
No.	Task Description	PM			Advisor	Engr	Engr	Engr	Tech	Clerical	Labor Hours	Labor (\$)	Expenses (\$)	
	Billing Rate	\$ 330.75	\$ 341.25	\$ 288.75	\$ 288.75	\$ 210.00	\$ 199.50	\$ 199.50	\$ 152.25	\$ 131.25				
1.0	Project Management													
1.1	Project Management	68	8		24					32	132	\$36,351	\$ -	\$ 36,351
1.2	Project Meetings	23			8	40	40	40	21		172	\$37,475	\$ 3,197	\$ 40,672
1.3	QA/QC Management			56							56	\$16,069	\$ -	\$ 16,069
	Subtotal Task 1	91	8	56	32	40	40	40	21	32	360	\$89,894	\$ 3,197	\$ 93,092
3.0	Basis of Design													
3.1	Data and Information Collection										0	\$0	\$ -	\$ -
3.2	Basis of Design										0	\$0	\$ -	\$ -
	Subtotal Task 3	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -
4.0	Design													
4.1	Early Work Package										0	\$0	\$ -	\$ -
4.2	Balance of Plant 30% Design										0	\$0	\$ -	\$ -
4.3	Balance of Plant 60% Design	20	4			48	128	114	277	4	594	\$108,857	\$ -	\$ 108,857
4.4	Balance of Plant 90% Design	20	4			48	128	114	277	8	598	\$109,408	\$ -	\$ 109,408
4.5	Balance of Plant 100% Final	10	2			16	43	38	93	4	205	\$38,094	\$ -	\$ 38,094
	Subtotal Task 4	50	10	-	-	111	299	266	646	16	1,397	\$ 256,359	\$ -	\$ 256,359
		141	18	56	32	151	339	306	667	48	1,757	\$346,254	\$3,197	\$349,451

HDR Expenses Schedule

Mileage: Per AZ DOA Rate - \$0.67/mile

Air Travel: Pass through at cost, no markup. Assume \$600 R/T

Lodging and per diem maximum is per GSA schedule for Tucson, AZ

(\$171/nt Jan-Mar, \$123/nt Apr - Dec, M&IE - \$60/day first and last day of travel)

Car rental @ \$75/day, unlimite mileage, fill gas

Miscellaneous ODCs (reproduction, project expendibles, unplanned travel, etc.) billed at cost

Task	Mileage	Air Travel	Lodging	Per Diem	Car Rental	Miscellaneous ODCs	Total	Notes
1.0 - Project Management						\$2,000	\$2,000	Miscellaneous mileage, site visits
1.2 - Project Meetings	\$148	\$3,600	\$1,476	\$720	\$450		\$6,394	Ty drive to H&S for initial planning session. Oscar and Mike flying in for kickoff.
Total							\$8,394	

Rate Information Table

DATE:

5/6/2025

Firm Name: HDR Engineering, Inc.
Project/Contract RFQu-240000944 for Design Build Services
Description Pima County Tres Rios Wastewater Reclamation Facility Digester

Overhead %
Profit %

183.39%
10.0%

	A	B	C	D
Discipline	Direct Labor Rate	Overhead	Profit	Billing Rate
Principal-in-Charge	\$ 105.59	\$ 195.34	\$ 24.07	\$ 325.00
Engr Project Manager	\$ 102.34	\$ 189.33	\$ 23.33	\$ 315.00
Sr Tech Advisor	\$ 105.59	\$ 195.34	\$ 24.07	\$ 325.00
QA/QC	\$ 89.34	\$ 165.29	\$ 20.37	\$ 275.00
Process Engineer	\$ 64.98	\$ 120.21	\$ 14.81	\$ 200.00
Electrical Engineer	\$ 61.73	\$ 114.20	\$ 14.07	\$ 190.00
I&C Engineer	\$ 61.73	\$ 114.20	\$ 14.07	\$ 190.00
CAD Technician	\$ 47.11	\$ 87.15	\$ 10.74	\$ 145.00
Admin / Accounting	\$ 40.61	\$ 75.13	\$ 9.26	\$ 125.00

Formulas

(A) Direct Labor Rate
 (B) Overhead @ 183.39% x (A)
 (C) Profit @ 10% x (A+B)
 (D) Billing Rate (A+B+C)

HDR Billing Rate Schedule: Calendar Years 2025 - 2026

Personnel Classification	Personnel Hourly Billing Rates	
	2025	2026
Principal-in-Charge	\$ 325.00	\$ 341.25
Engr Project Manager	\$ 315.00	\$ 330.75
Sr Tech Advisor	\$ 325.00	\$ 341.25
QA/QC	\$ 275.00	\$ 288.75
Process Engineer	\$ 200.00	\$ 210.00
Electrical Engineer	\$ 190.00	\$ 199.50
I&C Engineer	\$ 190.00	\$ 199.50
CAD Technician	\$ 145.00	\$ 152.25
Admin / Accounting	\$ 125.00	\$ 131.25

Rates based on the following:

Engineering staff average hourly raw labor rate + Overhead (183.39%) + Profit (10%)

Annual escalation is based on max allowable CPI, estimated at 5%



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

6/12/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Midwest Agencies, Inc. 1550 Mike Fahey Street Omaha, NE 68102	CONTACT NAME: Traci Sutton	FAX (A/C, No): 402-271-2997	
	PHONE (A/C, No, Ext): 402-271-2956	E-MAIL ADDRESS: Traci.Sutton@MidwestAgenciesInc.com	
INSURED Kiewit Infrastructure West Co. 3888 E. Broadway Rd. Phoenix AZ 85040-2924	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Old Republic Insurance Company		24147
	INSURER B:		
	INSURER C:		
	INSURER D:		
	INSURER E:		
INSURER F:			

COVERAGES

CERTIFICATE NUMBER: 85752446

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability <input checked="" type="checkbox"/> XCU Included GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MWZY 312911 25	3/1/2025	3/1/2026	EACH OCCURRENCE \$5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$5,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$5,000,000 GENERAL AGGREGATE \$10,000,000 PRODUCTS - COMP/OP AGG \$10,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MWTB 312910 25	3/1/2025	3/1/2026	COMBINED SINGLE LIMIT (Ea accident) \$5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	MWC 312908 25 MWXS 312909 25 MWFEX 312928-FL MWXS 316021 25 - CA USL&H & Jones Act StopGap	3/1/2025 3/1/2025 3/1/2025 3/1/2025	3/1/2026 3/1/2026 3/1/2026 3/1/2026	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$5,000,000 E.L. DISEASE - EA EMPLOYEE \$5,000,000 E.L. DISEASE - POLICY LIMIT \$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Contract No. PO2500016871, Design-Build Services - Pima County Tres Rios Wastewater Reclamation Facility Digester. Pima County, its departments, districts, boards, commissions, officers, officials, agents, and employees are named as additional insured with respect to liability arising out of the activities performed by or on behalf of the Design-Builder with respect to general liability and auto liability as required by written contract. Coverage is primary and non-contributory. A waiver of subrogation included.

CERTIFICATE HOLDER

CANCELLATION

Pima County
Procurement Dept.
Design and Construction Division
150 W. Congress, 5th floor
Tucson AZ 85701

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Philip G. Dehn

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ACORD 25 (2016/03)

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SCHEDULE OF OTHER POLICIES

DATE ISSUED
6/12/2025

NAMED INSURED: Kiewit Infrastructure West Co. 3888 E. Broadway Rd. Phoenix AZ 85040-2924	CERTIFICATE HOLDER: Pima County Procurement Dept. Design and Construction Division 150 W. Congress, 5th floor Tucosn AZ 85701
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Type of Insurance	Insurer - NAIC No.	AI	SW	Policy Number	Eff / Exp	Limits
Contractor's Professional Liability 2025-2026	Old Republic Insurance Co. - 24147			MWZZ 312912	3/1/2025 3/1/2026	\$5,000,000 per claim / \$5,000,000 aggregate

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: Peter Kiewit Sons', Inc.

Endorsement Effective Date: 03/01/25

SCHEDULE

Name Of Person(s) Or Organization(s):

Any person or organization to whom or which you are required to provide additional insured status or additional insured status on a primary, non-contributory basis, in a written contract or written agreement executed prior to loss, except where such contract or agreement is prohibited by law.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph **A.1.** of Section **II** – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph **D.2.** of Section **I** – Covered Autos Coverages of the Auto Dealers Coverage Form.

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION, NONRENEWAL OR MATERIAL CHANGE IN COVERAGE TO SCHEDULED PERSON(S) OR ORGANIZATION(S)

SCHEDULE

Person(s) or Organization(s):

All Certificate Holders where Notice of Cancellation is required by written contract with the Named Insured

Address:

Reasons:

Number of Days Notice

Nonpayment Of Premium: _____ 10 _____ Days

Cancellation For Any Other Reason: _____ 90 _____ Days

Nonrenewal (When We Do Not Renew): _____ 90 _____ Days

Material Change In Coverage: _____ 90 _____ Days

For any reasons described in the above Schedule for which the Number of Days Notice is completed, we agree to mail advance written notice of not less than the Number of Days shown in the above Schedule to the Person(s) or Organization(s) at the Address shown in the above Schedule.

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

OTHER INSURANCE AMENDMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SECTION IV – BUSINESS AUTO CONDITIONS, B. General Conditions, 5. Other Insurance is deleted and replaced by the following:

5. Other Insurance

- a. For any covered "auto" you own, this Coverage Form provides primary insurance. For any covered "auto" you don't own, the insurance provided by this Coverage Form is excess over any other collectible insurance. To the extent, the protection provided by this coverage may be broader or less restrictive than the protection provided to you under other policies, such protection as provide by this coverage will respond to any accidents not covered by other insurance policies. With respect to accidents, which are covered by other insurance policies, such protection as is provided by this coverage will be excess of the insurance provided by other insurance policies. The excess insurance will be limited to the difference between the limits of liability provided by this coverage and the limits of liability provided by the other insurance policy. However, while a covered "auto" which is a "trailer" is connected to another vehicle, the liability coverage this Coverage Form provides for the "trailer" is:
 - (1) Excess while it is connected to a motor vehicle you do not own; or
 - (2) Primary while it is connected to a covered "auto" you own.
- b. For Hired Auto Physical Damage Coverage, any covered "auto" you lease, hire, rent or borrow is deemed to be a covered "auto" you own. However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".
- c. Regardless of the provisions of paragraph a. above, this Coverage Form's liability coverage is primary for any liability assumed under an "insured contract".
- d. When this Coverage Form and any other Coverage Form or policy covers on the same basis, either excess or primary, we will pay only our share. Our share is the proportion that the limit of insurance of our Coverage Form bears to the total of the limits of all the Coverage Forms and policies covering on the same basis

All other terms and conditions of this policy remain unchanged.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

Any person or organization whom you are required in a written contract or written agreement to add as an additional insured on this policy and for whom no other endorsement on this policy provides additional insured status.

Location And Description of Completed Operations:**Additional Premium:**

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION, NONRENEWAL OR MATERIAL CHANGE IN COVERAGE TO SCHEDULED PERSON(S) OR ORGANIZATION(S)

SCHEDULE

Person(s) or Organization(s):

All Certificate Holders where Notice of Cancellation is required by written contract with the Named Insured

Address:

Reasons:

Number of Days Notice

Nonpayment Of Premium: _____ 10 _____ Days

Cancellation For Any Other Reason: _____ 90 _____ Days

Nonrenewal (When We Do Not Renew): _____ 90 _____ Days

Material Change In Coverage: _____ 90 _____ Days

For any reasons described in the above Schedule for which the Number of Days Notice is completed, we agree to mail advance written notice of not less than the Number of Days shown in the above Schedule to the Person(s) or Organization(s) at the Address shown in the above Schedule.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET NOTIFICATION TO OTHERS OF CANCELLATION

This endorsement modifies insurance provided under the following:

CONTRACTOR'S PROFESSIONAL LIABILITY INSURANCE

- A.** If we cancel this policy by written notice to the first "Named Insured" for any reason other than nonpayment of premium, we will deliver electronic notification that such policy has been cancelled to each person or organization shown in a Schedule provided to us by the First "Named Insured". Such Schedule:
1. Must be initially provided to us within 15 days:
 - a. After the beginning of the "Policy Period" shown in the Declarations; or
 - b. After this endorsement has been added to policy;
 2. Must contain the names and e-mail addresses of only the persons or organizations requiring notification that such policy has been cancelled;
 3. Must be in an electronic format that is acceptable to us; and
 4. Must be accurate.
- Such Schedule may be updated and provided to us by the first "Named Insured" during the "Policy Period". Such updated Schedule must comply with Paragraphs **2.**, **3.**, and **4.** above.
- B.** Our delivery of the electronic notification as described in Paragraph **A.** of this endorsement will be based on the most recent Schedule in our records as of the date the notice of cancellation is mailed or delivered to the first "Named Insured". Delivery of the notification as described in Paragraph **A.** of this endorsement will be completed as soon as practicable after the effective date of cancellation to the first "Named Insured".
- C.** Proof of emailing the electronic notification will be sufficient proof that we have complied with Paragraphs **A.** and **B.** of this endorsement.
- D.** Our delivery of electronic notification described in Paragraphs **A.** and **B.** of this endorsement is intended as a courtesy only. Our failure to provide such delivery of electronic notification will not:
1. Extend the policy cancellation date;
 2. Negate the cancellation; or
 3. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- E.** We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the Schedule provided to us as described in Paragraphs **A.** and **B.** of this endorsement.

CPL 765 010 0318

Page 1 of 1

OLD REPUBLIC INSURANCE COMPANY

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY POLICY

DESIGNATED ENTITY - NOTICE OF CANCELATION PROVIDED BY US ENDORSEMENT

SCHEDULE

Number of Days Notice of Cancellation: 90

Person or Organization:

ALL CERTIFICATE HOLDERS WHERE NOTICE OF CANCELLATION IS
REQUIRED BY WRITTEN CONTRACT WITH THE NAMED INSURED

Address:

If we cancel this policy for any statutorily permitted reason other than nonpayment of premium, and a number of days is shown for cancelation in the schedule above, we will mail notice of cancelation to the person or organization shown in the schedule above. We will mail such notice to the address shown in the schedule above at least the number of days shown for cancelation in the schedule above before the effective date of cancelation.

POLICY NUMBER: MWC 312908 25

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

WHERE REQUIRED BY WRITTEN CONTRACT

DATE OF ISSUE:

WC 00 03 13

(Ed. 4-84)

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

Any person or organization whom you are required in a written contract or written agreement to add as an additional insured on this policy and for whom no other endorsement on this policy provides additional insured status.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with

such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

SCHEDULE

Name of Person or Organization:

All Persons and/or Organizations that require a written contract or agreement with the insured, executed prior to the accident or loss, that waiver of subrogation be provided under this policy for work performed by you for that Person and/or Organization.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The **Transfer Of Rights Of Recovery Against Others To Us** Condition is changed by adding the following:

We waive any right of recovery we may have against the person(s) or organization(s) shown in the Schedule because of payments we make for injury or damage. This waiver applies only to the person or organization shown in the Schedule.

IL 10 (12/06) OLD REPUBLIC INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

SCHEDULE

Name of Person or Organization:

All Persons and/or Organizations that require a written contract or agreement with the insured, executed prior to the accident or loss, that waiver of subrogation be provided under this policy for work performed by you for that Person and/or Organization.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The **Transfer Of Rights Of Recovery Against Others To Us** Condition is changed by adding the following:

We waive any right of recovery we may have against the person(s) or organization(s) shown in the Schedule because of payments we make for injury or damage. This waiver applies only to the person or organization shown in the Schedule.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

SCHEDULE

Name Of Person(s) Or Organization(s):

Any person or organization that requires you to waive your rights of recovery, in a written contract or agreement with the Named Insured that is executed prior to the accident or loss.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions**:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

SCHEDULE

Name Of Person(s) Or Organization(s):

Any person or organization that requires you to waive your rights of recovery, in a written contract or agreement with the Named Insured that is executed prior to the accident or loss.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions**:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.



PROCUREMENT DEPARTMENT

DESIGN & CONSTRUCTION DIVISION | 150 W. CONGRESS ST., 5TH FLOOR | TUCSON, AZ 85701
PHONE: 520-724-8161 | FAX: 520-724-3646

Insurance carrier verifies Pima County is named as Additional Insured to the Comprehensive Commercial General Liability policy AND the Comprehensive Automobile Liability policy referenced below, the County being added by ENDORSEMENT to the policies.

Kiewit Infrastructure West Co.

Insured Firm

CGL: MWZY 31291125

AL: MWTB31291025

Policy Number

Old Republic Insurance Company

Insurance Carrier

Authorized Carrier Signature

Philip G. Dehn

Printed Name

6/10/2025

Date of Signature

NOTE: This document must be included with Insurance Certificates at time of signing contract or renewing contract.