



## BOARD OF SUPERVISORS AGENDA ITEM REPORT AWARDS / CONTRACTS / GRANTS

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: 10/15/2024

\* = Mandatory, information must be provided

or Procurement Director Award: ☐

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

EX2 Technology, LLC (Headquarters: Omaha, NE)

**\*Project Title/Description:**

Design-Build Services – Pima County Regional Middle Mile Project (PCRMMP)

**\*Purpose:**

Award: Contract No. PO2400008167. This award of contract is recommended to the highest qualified contractor in the amount of \$4,187,734.29 for a contract term from 10/15/24 to 06/30/28 to provide Design and Pre-construction Services for the Pima County Regional Middle Mile Project. 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 \$35,456,163.00. 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 \$35,456,163.00 and the contract expiration date does not exceed 06/30/28, which allows for all contract close-out activities and final submittals.

**\*Procurement Method:**

Solicitation for Qualifications No. RFQu-24000087 was conducted in accordance with A.R.S. § 34-603 and Pima County Board Supervisors Policy D29.1. Three (3) responsive statement of qualifications were received and evaluated by a seven (7) member committee using qualifications and experience-based selection criteria. As a result of the scoring of the written statements of qualifications, the highest qualified contractor is recommended for award.

Attachments: Notice of Recommendation for Award, Risk Management Approval, and Contract.

**\*Program Goals/Predicted Outcomes:**

Pima County received grant funding from the National Telecommunications and Information Administration (NTIA) Enabling Middle Mile Broadband Infrastructure to expand and extend middle mile infrastructure to create a 134 mile contiguous open access fiber optic network ring around its urban core.

**\*Public Benefit:**

The proposed middle mile infrastructure project will reduce the cost for last mile providers to connect unserved and under-served communities by providing a neutral network that last mile providers can access in a non-discriminatory open access model.

**\*Metrics Available to Measure Performance:**

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): PO2400008167

Commencement Date: 10/15/24

Termination Date: 06/30/28

Prior Contract Number (Synergen/CMS): \_\_\_\_\_

☒ Expense Amount \$ \$4,187,734.29\*

☐ Revenue Amount: \$ \_\_\_\_\_

**\*Funding Source(s) required: Non-Bond Projects Funds (Capital Project Funds)**

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? Vendor

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: 2024.09.18 14:01:22  
+0700

Division Manager: Scott Loomis  
Digitally signed by Scott Loomis  
Date: 2024.09.18 14:02:40 +0700

Department: Procurement Director: Terri Spencer  
Digitally signed by Terri Spencer  
Date: 2024.09.18 14:07:36 +0700 Telephone: 520-724-9071

Department Director Signature: [Signature] Date: 9/18/24

Deputy County Administrator Signature: [Signature] Date: 9/19/2024

County Administrator Signature: [Signature] Date: 9/19/2024



**Modification to Insurance or Indemnity Clause**

**Date:** 9/16/2024

**Requestor Name:** Dawn Dargan

**Department:** Procurement



**Change to Insurance**



**Change to Indemnity**

**Supplier Name:** EX2 Technology, LLC

**Contract No:** PO2400008167

**Project Title/Description:**

Design-Build Services – Pima County Regional Middle Mile Project (PCRMMP)

**Requested Change:**

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 " Special 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. Design Professional Liability (Errors and Omissions) Insurance – This insurance is



**Approved**



**Denied**

**Risk Management:**

Christina Garcia

**Comments:**

Approved with the above changes.



## **NOTICE OF RECOMMENDATION FOR AWARD**

Date of Issue: September 17, 2024

The Pima County Procurement Department hereby issues formal notice to respondents to **Solicitation No. RFQu-24000087 for Design Build Services for Pima County Regional Middle Mile Project (PCRMMP)** 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, October 15, 2024.

Award is recommended to the Most Qualified Respondent.

### **AWARDEE NAME**

EX2 Technology, LLC

### **OTHER RESPONDENT'S NAMES**

MasTec North America, Inc.  
MP Nexlevel, LLC

***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](mailto:SBE@pima.gov)



**PIMA COUNTY PROJECT DESIGN & CONSTRUCTION DEPARTMENT**

**PROJECT:** Design-Build Services – Pima County Regional Middle Mile Project (PCRMMP)

**CONTRACTOR:** EX2 Technology, LLC  
3805 S. 148th Street,  
Omaha, NE 68144

**CONTRACT NO.:** PO2400008167

**AMOUNT:** \$4,187,734.29

**FUNDING:** Non-Bond Projects Funds (Capital Project Funds)

**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 EX2 Technology, LLC (“Design-Builder”). County and Design-Builder may also be individually to as a “Party” or collectively as the “Parties.”
- 1.2. History. County previously issued Solicitation for Qualifications (RFQu) No. RFQu-24000087 (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 October 15, 2024, and terminate on June 30, 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 (32 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); Appendix D – Contract Provisions (2 pages) and Appendix E – Design and Preconstruction Services Fee Proposal (46 pages).
- 3.2. This Contract is funded wholly or partially by the National Telecommunications and Information Administration (NTIA) and is subject to the requirements of Appendix D – Contract Provisions.

- 3.3. 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.
- 3.4. With respect to Phase 2 – Construction Services, the parties acknowledges 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.
- 3.5. 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.
- 3.6. 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.
- 3.7. If County rejects a GMP proposal, neither party shall have any further obligation pursuant to this Contract.
- 3.8. 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 \$4,187,734.29 (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 and Design-Builder cannot produce evidence to the contrary.

**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 "Special Coverage." 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. Design 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 two (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:  
Rod Lane, Director  
Project Design & Construction  
150 W. Congress, 3<sup>rd</sup> Floor  
Tucson, AZ 85701  
Tel:(520) 724-3085

Design-Builder:  
Jeff Sobotka, Vice President, Government  
3805 S. 148<sup>th</sup> Street  
Omaha, NE 68144  
Tel: (602) 432-0004

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. **Grant Compliance.** This Contract is funded wholly or partially by the National Telecommunications and Information Administration (NTIA) and is subject to the requirements of Appendix D – Contract Provisions (2 pages).
34. **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.
35. **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
36. **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

- 37. 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.
- 38. 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; (c) third, Appendix A - Scope of Services; (d) fourth, Appendix C - General Conditions; (e) fifth, Appendix B - Construction Costing; (f) sixth, Contract Provisions in Appendix D; and (g) seventh, Design and Preconstruction Services Fee Proposal in Appendix E any Appendices to this Agreement.
- 39. 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

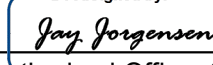
APPROVED AS TO FORM

  
\_\_\_\_\_  
Deputy County Attorney

Kyle Johnson  
\_\_\_\_\_  
Print DCA Name

9/24/2024  
\_\_\_\_\_  
Date

**DESIGN-BUILDER**

DocuSigned by:  
  
\_\_\_\_\_  
Authorized Officer Signature  
Jay Jorgensen Chief Operating Officer  
\_\_\_\_\_  
Printed Name and Title  
10/1/2024 | 5:07 PM CDT  
\_\_\_\_\_  
Date

## APPENDIX A – PROJECT SCOPE OF WORK (32 pages)



### PIMA COUNTY PROJECT DESIGN & CONSTRUCTION

#### SCOPE OF SERVICES REQUIRED

**DATE (Version):** August 29, 2024

**PROJECT NAME:** DESIGN-BUILD SERVICES FOR –  
PIMA COUNTY REGIONAL MIDDLE MILE PROJECT

---

#### DR 100 GENERAL INFORMATION

Pima County hired Community Broadband Advocates, LLC in early 2022 to write the grant for the Enabling Middle Mile Broadband Infrastructure Program through the National Telecommunications and Information Administration (NTIA). The program funds projects to construct, improve, or acquire middle mile infrastructure. The purpose of the grant program is to expand and extend middle mile infrastructure to reduce the cost of connecting areas that are unserved or underserved to the internet backbone (See references, DR200).

The grant application required detailed information about technical specifications and the costs associated with parts and work activities. Community Broadband Advocates, LLC contracted with Team Fishel to create the conceptual design and cost analysis for use in the grant application. The documents created by Team Fishel for the grant application are included as part of this solicitation. These documents include recommendations and suggestions for a conceptual design and identify best practices that meet the details of the grant application requirements from NTIA. The recommendations are not meant to direct the details of submissions to this solicitation. All design requirements are found in section DR 200.

#### DR 110 LOCATION

The proposed Environmental Assessment/Design-Build project work is located within Tucson and surrounding areas within Pima County as indicated on the provided map (See Attachment 1).

#### DR 120 SCOPE OF WORK GENERAL

Pima County will create a 134-mile contiguous open access fiber optic network ring around its urban core. The proposed middle mile infrastructure project will reduce the cost for last mile providers to connect unserved and underserved communities by providing a neutral network that last mile providers can access in a non-discriminatory open access model. This solicitation includes specific grant requirements for an environmental assessment per NTIA in accordance with the National Environmental Protection Act (NEPA) and National Historic Preservation Act (NHPA) and design-build scope of work for the 134-mile fiber optic network ring (See references, DR200, DR300).

**Environmental Requirements:** The proposed project will include an analysis of potential environmental impacts, as required by the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.), including all required environmental documentation (See references DR 400, DR522) describing the physical project location, photographs, and details for compliance with applicable environmental and national historical preservation requirements. The project will be designed to minimize the potential for adverse impacts on the environment,

identifying feasible measures to reduce or avoid any identified adverse environmental impacts. Additionally, the proposed project must sufficiently account for current and future weather – and climate-related risks to broadband networks including wildfires, extreme heat and cold, inland and coastal flooding, and the extreme winds produced by weather events such as tornadoes, hurricanes, and other weather events.

The proposed infrastructure project is expected to have a lifetime of 20 years or more. The proposal must account not only for current risks but also for how the frequency, severity, and nature of these extreme events may plausibly evolve as our climate continues to change over the coming decades (See references DR 200, DR 400).

**Design Recommendations:** The proposed design will consist of two SDR-11 7-channel Micro-Duct direct bury conduits. One 432 strand micro-fiber will be run in each of the two conduits utilizing one of the 7 micro-ducts allowing the remaining six micro-ducts in each conduit to be available for lease, share, or swap from providers and other government entities (See references, DR200). This future-proof design has the capacity to accommodate expansive growth in the region.

The network is designed in a ring surrounding the outer area of greater Tucson and surrounding rural communities. The proposed open-access fiber optic ring path runs around the unincorporated portions of the county, spanning from Oro Valley and Marana on the north side, south to Three Points, east covering the entire Drexel Heights area, south to Sahuarita, east from Sahuarita through Corona de Tucson, and north through Vail and the County's eastern portion to the Catalina Foothills, culminating back at Oro Valley.

This project will have three phases:

1. **Preconstruction and Policy Adoption:** including route design done by a procured resource and obtaining required permits, easements, rights-of-way and environmental and culturally relevant historic reviews and approvals and the development of reasonable interconnection policies; materials/resource management; and engineering and design. Design packages should be prepared based on logical segment lengths (ie segments requiring specific permitting requirements, sections within a single city/town, location within the alignment. All elements of the environmental assessment and culturally relevant historic review must be approved by Pima County and NTIA before work in Phase 2 can proceed.
2. **Construction:** three concurrent segments, with segments determined based on having equivalent amounts of difficulties. Additional concurrent segments may be added with approval by Pima County. Upon completion of each 10-mile segment, Pima County shall be provided with a one-line AutoCad based route drawing for upload to AZ811 to protect the new infrastructure during construction. Construction will be broken into three underground dig methods, depending on the geography/topography of the segment. Methodologies include plowing (for relatively level areas with soft base); trenching; and boring (effective for crossing washes, rivers and canals). All trenches and bore pits shall be backfilled per industry best practices. Regardless of dig method, the Right of Way shall be restored to previous conditions.
3. **Internet tie-in:** to the four central office (CO) anchor points. Addresses are as follows:
  - a. 14100 E Old Spanish Trail, Tucson, AZ 85747
  - b. 16290 S Houghton Rd, Corona De Tucson, AZ 85641
  - c. 12199 W Orange Grove Rd, Tucson, AZ 85743
  - d. 1111 W Magee Rd, Tucson, AZ 85704

**The following major elements are associated with the improvements for this project:**

#### **Fiber Optic Conduit/Cable**

- New (2) two 7- way Futurepath® 14mm/18mm conduits or equivalent product
- New (2) Diverse redundant 432-strand (36F/Tube) SMF-28 Ultra Fiber, Single Mode fiber optic cable or equivalent product (must be manufactured in the United States)
- New #10 AWG Green Stranded Tracer Wire
- 2'x6'x4' Concrete Pull Box with Manhole Collar and Steel Cover – 3,000' intervals
- 6'x8'x7' Concrete Pull Box with Manhole Collar and Steel Cover – 25,000' intervals

#### **New Conduit/Pull Box Location**

- The new multi-duct conduit location will not be prescribed.
- No trenching will be allowed within any travel lanes without permission. Boring under the roadway will be required where the new conduit crosses travel lanes as a general rule.
- Conduit shall be placed a minimum depth of 40". If depth cannot be achieved, conduit not placed at minimum depth shall be rigid galvanized steel, or concrete encased.

- Conduit under washes/rivers shall be placed a minimum of 6 feet below grade, or below the scour depth per Regional Flood Control guidelines.
- New pull/distribution boxes shall be installed with spacing of no more than 3,000 feet for each of the two conduit paths, or as appropriate based on existing traffic intersections (TI).
- New pull/Backbone splicing boxes shall be installed with spacing of no more than 25,000 feet for each of the two conduit paths, or as appropriate based on existing traffic intersections (TI).
- New pull boxes shall be located on the unpaved shoulder, refer to local PCDOT ITS Conduit Design Guidelines Section 975 specs/regulations <https://content.civicplus.com/api/assets/3739dadd-f176-4902-a648-5a7bc634391c>.
- Pull Boxes shall be set on a minimum 1-foot lift of #57 Clean 1" gravel, and have sump knocked out prior to placement.
- Refer to Pima County Regional Middle Mile Diagram for details (See references, DR200).

#### **Fiber Testing and Certification**

- All installed fiber optic cable shall be tested and certified by the Contractor. Bi-directional Optical Time Domain Reflectometer (OTDR) and Power Meter testing shall be performed on each fiber strand. OTDR test results shall show irregularities, discontinuities, micro-bends, and improper splices for each strand under test. Test results in electronic and .pdf hard copy form shall be provided to the engineer for review and approval prior to final payment.
- Fiber optic cable shall be broken out, terminated, tested, and certified, at 25,000-foot intervals.

#### **Maintenance items**

- Fiber optic cable shall be terminated in the appropriate enclosure.
- A maintenance loop of fiber optic cable shall be stored in each pull box at 25,000-foot intervals.
- A maintenance loop of fiber optic cable shall be stored in each pull box at 3,000-foot intervals.
- The total length of fiber optic cable required for the maintenance loops shall not exceed 10%, or 13 miles, of the overall fiber optic cable length of 134-miles.
- Fiber optic cable shall be labeled at each pull box location.

#### **Professional Services**

The following professional services for this Environmental Assessment/Design-Build middle mile infrastructure project may include, but are not limited to:

- National Environmental Policy Act, Environmental Assessment, as required in the grant documents
- Survey and Mapping
- Geotechnical Investigation
- Traffic Design (Traffic Control and Maintenance of Traffic)
- Structural Design
- Erosion Control Design
- Utility Design and Coordination
- Environmental (Remediation and Climate Resiliency) Coordination
- Railroad Coordination
- Building Industry Consulting Service International (BICSI)
- Registered Communications Distribution Designer (RCDD) with an Outside Plant (OSP) certification

### **DR 130 PURPOSE**

The purpose of this project is to install the improvements described in Section DR 120.

The Design-Build method of contracting has been selected for this project due to the potential for providing cost-effective innovations while accelerating the completion of improvements.

### **DR 200 GRANT REFERENCES: FEDERAL GUIDELINES AND REQUIREMENTS**

1. CD450 (Grant Agreement): [04-40-MM588 Pima CD-450](#)
  - a. Cooperation to meet performance and financial reporting requirements:
    - Worker Documentation and Demographics (gender, nationality, etc.)
    - Timely submission of invoices
    - Inclusion of requirement in any subcontract awarded



- Development of a plan to assess changing weather and climate risks and incorporated into network design, maintenance, upgrades and similar work performed during period of performance.
    - Documentation of compliance with Davis-Bacon prevailing wages, certification, recordkeeping, and signage requirements
  - b. Posting public signage at work site and acknowledgement of federal funding under the Bipartisan Infrastructure Law
2. NIST General Terms and Conditions: see above link
- a. Cooperate with County to ensure:
    - Adequate inspection and testing of all materials and equipment used to follow specifications and standards
    - Use of energy efficient design and construction principles
    - Complying with construction completion and monitoring requirements, including compliance by any subcontractors
  - b. Compliance with all applicable federal, state and local laws and regulations, including, without limitation civil rights and non-discrimination laws and regulations, and ensuring that any lower-tier subcontractors are also in compliance.
  - c. Compliance with requirements that project implementation (other than engineering design, permitting and work related to environmental, historical and cultural reviews) and limited preliminary procurement) may not proceed before completion of an environmental review and receipt of a decision document meeting requirements of National Environmental Review and National Historic Preservation Act.
  - d. Compliance with Build America, Buy America—Required Use of Domestic Fiber Optic Glass and Fiber Optic Cable unless a waiver exists. <https://www.commerce.gov/oam/build-america-buy-america>
  - e. Prohibition on use of grant funds to purchase or support any covered communications equipment or service (as defined in section 9 of the Secure and Trusted Communications Networks Act of 2019, 47 USC § 1608). <https://www.law.cornell.edu/uscode/text/47/1608>. See also 2 CFR 200.216. <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-C/section-200.216>
  - f. Compliance with whistleblower protections as set forth in 41 USC § 4712, including the requirement to inform employees in writing of the rights and remedies afforded to them under 41 USC § 4712. [https://uscode.house.gov/view.xhtml?req=\(title:41%20section:4712%20edition:prelim\)](https://uscode.house.gov/view.xhtml?req=(title:41%20section:4712%20edition:prelim)) Any person believing they have been the subject of retaliation for protected whistleblowing can contact the Department of Commerce, Office of the Inspector General Hotline, as indicated at <https://www.oig.doc.gov/Pages/Hotline.aspx>, or the US Office of the Special Counsel, toll free at 1-800-872-9855.
3. Department of Commerce Financial Assistance Standard Terms and Conditions: [https://www2.ntia.doc.gov/files/award\\_docs/DOC-STCsMAR08Rev.pdf](https://www2.ntia.doc.gov/files/award_docs/DOC-STCsMAR08Rev.pdf)
- a. Acknowledgment that Contractor is subject to 2 CFR Part 1326, Subpart C “Governmentwide Debarment and Suspension (Non procurement)” and 15 CFR Part 28, “New Restrictions on Lobbying.” Contractor further agrees to include form CD-512, “Certification Regarding Lobbying—Lower Tier Covered Transactions” completed without modification. <https://oceanacidification.noaa.gov/sites/oap-redesign/OAP%20FFO%20Applicant%20Documents/CD-512.pdf> Contractor will include the governmentwide debarment and suspension term in all lower tier covered transactions and will include the lobbying disclosure requirements in any lower-tier covered transaction exceeding \$100,000, with a requirement for the subcontractor to complete form SF-LLL. [https://www.epa.gov/sites/default/files/2020-06/documents/sflll\\_1\\_2-v1.2\\_fill-sign.pdf](https://www.epa.gov/sites/default/files/2020-06/documents/sflll_1_2-v1.2_fill-sign.pdf).
  - b. Compliance with provisions of the Drug-Free Workplace Act of 1988 (Public Law 100-690, title V, Sec. 5153, as amended by Public Law 105-85, Div. A, title VII, Sec. 809, as codified at 41 USC § 702) and Department of Commerce implementing regulations published at 15 CFR Part 29, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), published in the *Federal Register* on November 26, 2003, 68 FR 66534. <https://www.federalregister.gov/documents/2005/03/11/05-4850/government-wide-debarment-and-suspension-nonprocurement-and-government-wide-requirements-for>
  - c. Contractor will obtain Pima County’s prior approval before sub-awarding or sub-contracting any part of this agreement.
  - d. Pursuant to Executive Order 13043, Contractor is encouraged to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicles.
  - e. Commit to preserve open competition and government and neutrality towards government contractors’ labor relations on federal and federally-funded construction projects, pursuant to Executive Order 13202.

- f. Compliance with the Trafficking Victims Protection Act of 2000 (22 USC § 7104(g), as amended and the implementing regulations at 2 CFR Part 175. <https://uscode.house.gov/view.xhtml?path=/prelim@title22/chapter78&edition=prelim>
  - g. Provide timely data to Pima County to comply with the Federal Funding Accountability and Transparency Act of 2006. <https://www.frs.gov/>
4. Contract Provisions for Non-Federal Entity Contracts Under Federal Awards (2 CFR Part 200, Appendix II). [Purchases Funded by Federal Grants PO-31 Rev \(00938740.DOCX;2\) \(pima.gov\)](#)—see Appendix D.
  5. Notice of Funding Opportunity. [NTIA-MMG-2022 NOFO.pdf](#)
    - a. Technical qualification to complete the construction within the period of performance specified by grant and to meet all build-out requirements.
    - b. Demonstrated record of fair labor practices and a written plan for compliance with federal labor and employment laws.
    - c. Provide written disclosure of any instances in which Contractor has been found to have violated employment laws such as Occupational Safety and Health Act, Fair Labor Standards Act or any other applicable labor and employment laws in the three preceding years. Require and lower-tier subcontractor to provide the same information.
    - d. Requirement to use appropriately skilled workforce (such as through Registered Apprenticeships or other joint labor-management training programs that serve all workers); steps taken to ensure project workforce will have appropriate credentials; status of workforce as union or non-union. If not unionized, job titles and size of the workforce required to carry out the proposed work. For each job title, a description of the safety training, certification and/or licensure requirements, including whether there is a robust in-house training program with established requirements tied to certifications, title; and information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high standard. Provide same information for any work to be performed by a sub-contractor.
    - e. Cooperate with County to review climate resilience of project plan and scope.
    - f. The non-discrimination provisions of §§ 202 and 203 of Executive Order 11246 and Department of Labor regulations implementing this Executive Order are incorporated by reference herein and Contractor agrees to fulfil such requirements.
    - g. Contractor may not use any funds received under this Agreement to support or oppose union organizing.
    - h. Contractor may not use any funds received under this Agreement for broadband infrastructure costs that are not necessary to complete the Project.
  6. Design recommendations—Team Fishel
    - a. Conceptual design and specifications pursuant to the network design grant application requirements found here: [Pima County Middle Mile Preliminary Engineering and Budget Team Fishel](#)

## DR 300 DESIGN REFERENCES

The following list of references is intended only to assist the Design-BUILDER in identifying the relevant references (manuals, guidelines, reports, studies, regulations, design codes, design standards, and design specifications). It is the Design-BUILDER's responsibility to determine if other relevant references are also applicable.

The design of the project work shall be in accordance with this Scope of Work (SOW) and the references listed herein. Design criteria and provisions in these Design Requirements take precedence over listed references. References specifically cited in Sections DR 400 and DR 500 of the Design Requirements shall take precedence over all others. Also listed in this section are project-specific references that the Design-BUILDER will need to address. Should modifications be necessary, all modifications must be approved by the Department. It is the responsibility of the Design-BUILDER to obtain clarification on ambiguities and conflicts prior to the end of the question period. The Design-BUILDER shall be responsible for providing project-related information to its subcontractors/subconsultants. If a standard, manual, or guideline is superseded, expires, or revisions are issued during the Project, the Design-BUILDER shall contact Pima County to determine whether to continue using the standard, manual, or guideline, or to use a replacement or revision identified by Pima County. The Design-BUILDER shall use the most current version of a standard, reference, manual or guideline as of the date of submission of the Technical and Price Proposals, unless otherwise stated in this SOW.

Standard drawings are listed as a source of information of a preferred and acceptable means of performing redundant type work. The Design-BUILDER may use the standard drawings as appropriate for the specific design for

the project. If a standard drawing is specified in Design Requirements Sections DR 400 or DR 500 as a project requirement, the Design-Builder shall use as provided with no modification.

## **DR 400 REPORTS, STUDIES, AND REFERENCE MATERIALS**

The Reference Information Documents are included in the SOW for the purpose of providing information that is in Pima County's possession to Proposers. Pima County has not determined whether the Reference Information Documents are accurate, complete or pertinent, or of any value to Proposers. Except as may be provided otherwise in the SOW, Pima County makes no representation, warranty or guarantee as to, and shall not be responsible for, the accuracy, completeness, or pertinence of the Reference Information Documents, and, in addition, shall not be responsible for any conclusions drawn therefrom.

## **Documents with Project Requirements**

The following list of documents contains provisions and constraints that must be followed and/or incorporated into the project by the Design-Builder:

- Requirements specified herein
- The following reports and references:
  - NEPA Environmental Assessment Requirements
  - NTIA Grant Requirements
  - Design recommendations—Team Fishel

## **Reference Information Documents**

The following list of documents is provided to the Design-Builder for background information about the project. The information contained within these documents are not project requirements but may be used by the Design-Builder at its discretion in the formulation of the final design.

- Digital Aerial Photos
- Google Earth KMZ file and GIS files containing known archaeological sites within the project limits. This files and the locations shall not be distributed to the public.
- Utility facility maps and as-builts obtained from Arizona 811 (no CAD base file will be provided)
- Pima County record drawings are available on Pima Maps:  
<https://www.pima.gov/1949/PimaMaps>

## **Environmental References**

### **Federal**

- National Environmental Policy Act of 1969 (42 U.S.C. § 4321)
- Council of Environmental Quality EQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508)
- Clean Air Act of 1970 (42 U.S.C. § 7401)
- Floodplain Management (Executive Order 11988)
- Fish and Wildlife Coordination Act (16 U.S.C. § 661)
- Section 106 of the NHPA (36 CFR Part 800)
- National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470)
- National Register of Historic Places (36 CFR Part 60)
- FHWA Environmental Impact and Related Procedures (23 CFR Part 771)
- FHWA Procedures for the Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772)
- Determining Conformity of Federal Actions to State or Federal Implementation Plans (40 CFR Part 93)
- FHWA Section 4(f) of the Department of Transportation Act, 1966 (23 CFR Part 774)
- FHWA Technical Advisory T6640.8, "Guidance Material for the Preparation of Environmental Documents", 1987
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646)
- Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.)
- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) 42 U.S.C. § 9601 et seq.
- Superfund Amendments and Reauthorization Act (SARA), 1986 (42 U.S.C. § 9601 et seq.)
- Section 401 Clean Water Act (Certification), 1977 (33 U.S.C. § 1341 1251 et seq.)

- Section 402 Clean Water Act (NPDES), 1977 (33 U.S.C. § 1251 et seq.)
- Section 404 Clean Water Act (Permits for Dredge or Fill Material), 1977 (33 U.S.C. § 1251 et seq.)
- Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq. P.L. 93-205)
- Invasive Species (Executive Order 13112)
- Environmental Justice (Executive Order 12898)
- Proposed Right-of-Way Guidelines, July 26, 2011

## **State**

- State Water Quality Law (Section 401)
- Hazardous Waste Management Act (HWMA)
- Underground Storage Tank Act of 1986

## **Local**

- Local codes and ordinances relating to air quality, noise, dust abatement, traffic coordination, permits, etc.

## **Pima County Design References**

The 2013 Fourth Edition of the Pima County Roadway Design Manual (RDM), and relevant updates, shall be used to provide roadway and drainage design criteria. All design work shall be performed with the guidance provided in the current Pima County Standards and procedures. Standards from other agencies may be used as a design guide wherever there are no applicable local standards available. The latest edition and all applicable updates of the following list of standards apply:

- The 2015 Edition of the Pima Association of Governments (PAG) Standard Specifications and Details for Public Improvements including amendments.
- Pima County Department of Transportation Supplemental Specifications and Details
- A Policy of Geometric Design of Highways and Streets, 2018, American Association of State Highway and Transportation Officials (AASHTO)
- AASHTO Roadside Design Guide, 2011
- Manual on Uniform Traffic Control Devices, 2009
- Arizona supplement to the 2009 MUTCD
- Arizona Department of Transportation, Standard Drawings and Standard Specifications
- Pima County Department of Transportation Traffic Engineering Division Street Lighting and ITS Conduit Design Manual Section 975

## **ADOT Design References**

The following references may be used as a design guide wherever there are no applicable local standards available:

- ADOT Current Roadway Design Standards and Memorandums located at the following website: <https://azdot.gov/business/engineering-and-construction/roadway-engineering/roadway-design/roadway-design-memorandums>
- ADOT Roadway Design Guidelines (RDG), January 2021
- ADOT CADD Standards, 1990 including current revisions and amendments
- ADOT Drafting Guides for Use in Office and Field, 2015
- ADOT Dictionary of Standardized Work Tasks
- ADOT Interim Auxiliary Lane Design Guidelines, 1996
- ADOT Standard Specifications for Road and Bridge Construction, 2021 (hereafter Standard Specifications) and appropriate Stored Specifications
- ADOT Construction Standard Drawings, May 2012, with current amendments
- ADOT Construction Manual, August 2015
- ADOT Manual for Field Surveys, June 2010
- ADOT Materials Preliminary Engineering and Design (MPE&D) Manual - This manual was previously developed and issued in its entirety in March of 1989 as the Third Guide. As of October 2, 2017, Chapters 2 and 4 are hereby deleted, and the updated information previously contained within those chapters can now be found in the "Pavement Design Manual."
- ADOT Materials Testing Manual
- ADOT Materials Practice and Procedure Directives (PPD) Manual
- ADOT Pavement Design Manual, 2017
- ADOT Pavement Design Standard Items

- ADOT Bridge Group Structure Detail Drawings – SD Series
- ADOT Bridge Group Bridge Design Guidelines
- ADOT Bridge Group Bridge Practice Guidelines
- ADOT Noise Abatement Requirements, 2017 (NAR)
- ADOT Approved Products List
- ADOT Utility Coordination Guide for Design Consultants, Latest Edition
- Utility Report Template
- URR Stage Submittal Checklist
- ADOT Landscape Design Guidelines for Urban Highways
- ADOT Manual of Approved Signs
- ADOT Traffic Signals and Lighting Standard Drawings, March 2020, with current revisions and amendments
- ADOT Signing and Marking Standard Drawings, June 2014, with current revisions and amendments
- ADOT Arizona Supplement to the Manual on Uniform Traffic Control Devices, 2009 Edition
- ADOT Traffic Control Design Guidelines, October 2011
- ADOT Traffic Engineering CADD Standards, As of May 2014 and later revisions
- ADOT Implementation Guidelines for Work Zone Safety & Mobility, September 2020
- ADOT Traffic Engineering Guidelines and Processes (TGP)
- ADOT Highways Division Policy and Implementation Memorandum 95-02
- ADOT ITS Design Guide, most recent
- ADOT Systems Engineering Checklist
- ADOT ITS Standard Drawings
- ADOT FMS Communications Master Plan
- ADOT Erosion and Pollution Control Manual, December 2012
- ADOT Erosion/Sediment & Water Quality Protection BMP Details of Stored Specification
- ADOT Post-Construction Best Management Practices Manual for Water Quality (2016)
- ADOT SWPPP Template
- ADOT – ITS Design Guide
- ADOT – Ramp Metering Design Guide, 2013
- ADOT- Systems Engineering Checklist, 2019
- ADOT – ITS Test Forms, 2018
- ADOT – Arizona Statewide ITS Architecture, 2018
- ADOT – ITS Standard Drawings, April 2019
- ADOT -DMS Master Plan, 2011
- ADOT - FMS Communications Master Plan, 2010

## **AASHTO, FHWA, and Other References**

Pima County references and publications shall control the work, though local municipalities specific requirements may need to be referenced when entering ROW controlled by them, and any necessary supplementation should be provided by appropriate AASHTO, FHWA or other references. The following general regulations, references, and publications supplement the Pima County references and those specifically referenced in the Design Requirements shall be selected by the Design-Builder as appropriate to conduct the Work described in the Contract Documents. Inconsistencies and conflicts shall be directed to the attention of the Engineer.

## **Roadway**

- AASHTO - A Policy on Geometric Design of Highways and Streets 2018, and current revisions
- AASHTO - Roadside Design Guide, 2011
- AASHTO – Manual of Assessing Safety Hardware (MASH), 2016
- TRB - Highway Capacity Manual (HCM) 2016
- TRB – Highway Capacity Report, Special Report 209

## **Bridges/Structures**

- AASHTO LRFD Bridge Design Specifications, 8<sup>th</sup> Edition, 2017
- Construction Handbook for Bridge Temporary Works, 2<sup>nd</sup> Edition, 2017
- ADOT Standard Specifications for Road and Bridge Construction, 2021
- LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 1<sup>st</sup> Edition With 2017 Interim Revisions
- AASHTO Guide Specifications for Structural Design of Sound Barriers, 1989 with 1992 and 2002 interim revisions (GSSB-1-M)



- AASHTO/AWS D1.5M/D1.5:2010 Bridge Welding Code, 6<sup>th</sup> Edition, with 2011 and 2012 AASHTO Interim Revisions (BWC-6-M)

#### **AASHTO Guide Design Specifications for Bridge Temporary Works, 2<sup>nd</sup> Edition, 2017**

- AASHTO Manual for Bridge Evaluation, 2<sup>nd</sup> Edition, 2011 (MBE-2), with 2011, 2013, 2014 and 2015 interim revisions
- AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges, 2<sup>nd</sup> Edition, 1999 with 2003 interim revisions (GSCB-2-UL)
- FHWA (2015), Geotechnical Engineering Circular No. 7, Soil Nail Walls - Reference Manual; Publication No. FHWA-NHI-14-007; Authors: Lazarte, Robinson, Gomez, Baxter, Cadden, Berg.
- FHWA (2009), "Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes; Publication No. FHWA-NHI-10-024 and FHWA-NHI-10-025; Authors: Berg, R. R., Christopher, B. R., and Samtani, N. C.
- FHWA (1999), Geotechnical Engineering Circular No. 4, Ground Anchors and Anchored Systems; Publication No. FHWA-IF-99-015; Authors: Sabatini, P.J., Pass, D.G., Bachus, R.C.

### **Foundations**

- AASHTO LRFD Bridge Design Specifications, 6<sup>th</sup> Edition, 2016 (LRFDUS-6)

### **Materials**

- AASHTO LRFD Bridge Design Specifications, 6<sup>th</sup> Edition, 2012 with 2013 Interim Revisions (LRFDUS-6)

#### **Book of AASHTO Testing Standards, current edition**

#### **Book of American Society for Testing and Materials (ASTM) Standards, current edition**

- AASHTO Guide for Design of Pavement Structures, 1993 (I-GDPS-4) and 1998 Supplement
- Strategic Highway Research Program, AHRP Distress Identification Manual for Long-Term Pavement Performance Project SHRP-P-338, 1993
- DARWin Pavement Design Software

### **Drainage/Hydraulics/Hydrology (use most current edition)**

#### **HDS No. 5, Hydraulic Design Series No. 5, Hydraulic Design of Highway Culverts, FHWA**

- HEC-HMS; Hydraulic Engineering Center-Hydrologic Modeling System, United States Army Corps of Engineers (USACE)

#### **HEC-11, Hydraulic Engineering Circular, Design of Riprap Revetment, FHWA**

- HEC-14, Hydraulic Engineering Circular, Hydraulic Design of Energy Dissipators for Culverts and Channels, FHWA
- HEC-15, Hydraulic Engineering Circular, Drainage of Roadside Channels with Flexible Linings, FHWA
- HEC-21, Hydraulic Engineering Circular, Design of Bridge Deck Drainage, FHWA.

#### **HEC-22, Hydraulic Engineering Circular, Urban Drainage Design Manual, FHWA**

- HEC-23, Hydraulic Engineering Circular, Bridge Scour and Stream Instability Countermeasures, FHWA
- HEC-RAS, Hydraulic Engineering Center – River Analysis System United States Army Corps of Engineers (USACE)
- Flood Insurance Study – Santa Cruz County, Arizona and Incorporated Areas; Volumes 1-3, December 2011
- AASHTO Construction Stormwater Field Guide

## **Water Quality**

- AASHTO Highway Drainage Guidelines, Volume III (Federal Funds)

## **Signing, Marking and Traffic Signals**

### **Manual on Uniform Traffic Control Devices (MUTCD), 2009**

- Pima County / City of Tucson Signing and Pavement Marking Manual, 2020 First Edition

## **Illumination**

### **AASHTO Roadway Lighting Design Guide, October 2005, With 2010 Errata**

- Illuminating Engineering Society (IES) Standards

## **Landscape and Irrigation**

- AASHTO - A Guide for Transportation Landscape and Environmental Design (1991)
- ASTM Specifications C136, Elland C150
- Underwriters Laboratories (UL) – UL wires and cables
- American National Standards Institute, Inc. (ANSI)
- American Standard for Nursery Stock (Sponsor American Association of Nurserymen, Inc.), 2004 or current edition.
- Arizona Nursery Association Container Grown Tree Guide, current edition

## **Electrical Installation**

- National Fire Protection Association Publication 70 (National Electrical Code)
- ADOT Traffic Signal and Lighting Standard Drawings, March 2010, With Current Revisions and Amendments

### **ADOT Standard Specifications for Road and Bridge Construction, 2021**

- International Municipal Signal Association (IMSA) Certifications

## **Bicycle and Pedestrian**

- Guide for the Development of Bicycle Facilities, AASHTO, 2012, With February 2013 and 2017 Errata
- Guide for Planning, Design and Operation of Pedestrian Facilities, AASHTO, 2004
- Americans with Disabilities Act Standards for Accessible Design, 2010
- Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way, July 26, 2011

## **DR 500      DESIGN CRITERIA**

### **DR 501      GENERAL**

The Design Criteria shown in the DR 300s and DR 400s sections shall apply. If the Design Criteria are not achievable, the Design-BUILDER shall submit to the Department clear documentation of what cannot be achieved and a proposed alternative for review and approval per the process outlined in DR 1000.

### **Design Controls**

The requirements within the Pima County Roadway Design Manual (RDM), the PAG Standard Specifications and Details for Public Improvements and the Pima County Department of Transportation Supplemental Specifications and Details apply.

The requirements within the ADOT Roadway Design Guidelines (RDG) and ADOT Construction Standard Drawings may be used wherever there are no applicable local standards available:

## **DR 502 CROSS-SECTION ELEMENTS**

### **Roadway Barrier**

The following items apply to the use of guard rail and end treatments:

- Guard rail end treatment selection and usage shall conform to ADOT design guidelines.
- Selection and usage of crash cushions shall be from the ADOT Pride Program Approved Products List Category V-1 and shall meet Test Level 3—per NCHRP (National Cooperative Highway Research Program) Report 350, or for Test Level 3 per MASH (AASHTO Manual for Assessing Safety Hardware). The Design-Builder shall follow the ADOT “Crash Cushion Selection Procedures” located at: [https://apps.azdot.gov/files/roadway-engineering/standards/roadway-design-memos/crash\\_cushion\\_memo\\_signed.pdf](https://apps.azdot.gov/files/roadway-engineering/standards/roadway-design-memos/crash_cushion_memo_signed.pdf).

**In addition, for maintenance purposes, the approval of the District Maintenance Engineer must be obtained prior to use.**

## **DR 503 ALIGNMENT**

### **Horizontal Clearance**

Horizontal clearance to all obstructions, not protected by guardrail or concrete barrier, will require evaluation by the Design-Builder during design. Horizontal clearances and recovery areas shall meet the requirements of the Pima County RDM and the AASTHO Roadside Design Guide, 2011.

## **DR 504 OTHER FEATURES**

A minimum clearance (clear zone), per the ADOT RDG, shall be maintained on all roadways at all times, including when traffic lanes are temporarily shifted. Objects within the clear zone shall be temporarily removed or protected with barrier and attenuation devices as approved by the Engineer.

MASH-compliant crash attenuation devices shall be required at all barrier approaches.

## **DR 505 RIGHT-OF-WAY**

All work associated with this project is anticipated to be performed within the existing right-of-way and easement limits. The existing right-of-way may not be monumented.

Any costs for additional permanent right-of-way or easements proposed by the Design-Builder, and agreed to by Pima County, or Temporary Construction Easements (TCEs) proposed by the Design-Builder shall be the sole responsibility of the Design-Builder.

Innovations, proposed by the Design-Builder, requiring additional permanent right-of-way, easements or TCE's that would require re-evaluation of the environmental clearance document may be cause for rejection of the innovations. Rejection of the innovations shall be at the sole discretion of the Department.

## **DR 506 DESIGN WORK PERFORMED BY DESIGN-BUILDER**

The Design-Builder shall be responsible for providing the engineering services required to accomplish the work identified in the SOW and references listed herein. The services may include, but not necessarily be limited to, the tasks of data preparation, data interpretation, and document preparation including Contract Plans, Supplemental Technical Specifications, and construction estimate.

The Design-Builder shall develop a design based on the general purpose, function, and expectations outlined in the SOW and the references listed herein. It is intended there be considerable flexibility in the final design, provided the overall project scope and concepts, specific deliverables, design guidelines and environmental mitigation requirements listed in this SOW are not compromised in the final design.

Unsolicited alternatives that deviate from the scope, function and expectations or the requirements contained in the SOW shall be identified as innovations for the purpose of this project. Unsolicited alternatives that would require re-evaluation of the approved environmental document may be cause for rejection of the concept at the sole discretion of the Department. The Design-Builder is responsible for the costs of any additional environmental studies or consultations that may be required because of unsolicited alternatives or innovations. Unsolicited alternatives that

deviate from the overall project scope, design criteria, or mitigation requirements of the environmental documents may be identified in the proposal under innovations.

## **DR 507 DESIGN FEATURES**

All proposed improvements for this project shall be within 15 feet of the outside edge of pavement.

Some of the non-typical permits and coordination that the Design-Builder shall be responsible for shall include:

- Stormwater Pollution Prevention Plan.
- Arizona Pollutant Discharge Elimination System Notice of Intent and the Notice of Termination to the Arizona Department of Environmental Quality.

## **DR 508 DESIGN EXCEPTIONS**

No design exceptions are anticipated for this project. Any design exceptions and variations shall be identified in advance by the Design-Builder for the Department's consideration. Any design exceptions or variations that are not approved shall not be included in the Technical and Price Proposal. The Design-Builder shall be responsible for obtaining formal approval from Pima County for all design exceptions, including any identified after award.

## **DR 509 SURVEYS AND MAPPING**

The Design-Builder shall be responsible for providing all field surveys required to produce design documents and to adequately construct the project. All surveys performed for this Contract shall meet the requirements of the Arizona State Board of Technical Registration and ADOT practices.

Horizontal and vertical control required for surveys shall be based on ADOT survey control points. Arizona State Plane Coordinates, Central Zone, in NAD 83 will be the basis of horizontal control. NAVD 88 will be the basis of vertical control. All coordinates shall be International Feet units and scaled to ground. The Design-Builder shall verify all survey requirements and notify the Department of any discrepancies prior to performing any survey work.

Completed surveys shall be submitted in permanently bound books (3 ring binders are not acceptable) with the final plans. The surveys shall include locations, stakes and references of control points, (including the beginning and ending points of the project) set at minimum 1,000 feet apart, whenever practical, and a maximum of 1,300 feet. Any survey data provided must be certified by an Arizona Registered Land Surveyor. All surveys shall be in substantial compliance with the Department ESS Manual for Field Surveys, July 1993.

Surveys may include, as applicable:

- Base line control
  - Topographic surveys
  - Utility locations
  - Centerline and edge elevations of existing pavement
  - Tie to Arizona State Plane Coordinates

The Design-Builder shall obtain any permits that may be required prior to beginning field work. A traffic control plan may also be required.

Unless otherwise directed by the Engineer, the Design-Builder shall be responsible for selecting a scale that results in good plan clarity.

Completed surveys and maps shall be recorded in an acceptable format. Upon final approval, the books, maps and CADD files, and other data, shall be submitted to the Engineer. The Engineer shall contact Engineering Records to obtain a survey number for recording and filing the project books and maps. The Engineer shall then submit the books, maps, etc. and a "completed location survey by Design-Builder" transmittal letter to Engineering Records.

## **DR 510 SPECIAL MATERIALS**

In the case where a special material(s), (i.e. a material with characteristics and design values out of the normal range), is required to meet exacting design requirements, the Design-Builder shall coordinate with Pima County to obtain approval before changing the design or researching the location of such material(s).

## **DR 520 ENVIRONMENTAL REQUIREMENTS**

Requirements related to environmental assessment are described in Section DR 400 and DR 522.

## Necessary Permits

The Design-Builder is responsible for obtaining all permits, certifications and licenses that may be required by federal, state or local authorities.

Activities which may require other approvals include, but are not limited to:

- Construction activities may require an AZPDES Stormwater Permit. Prior to the commencement of activities herein certified, the Design-Builder will have available for inspection onsite a copy of the Notice of Intent (NOI) and associated ADEQ authorization letter, and a Stormwater Pollution Prevention Plan as required by the applicable stormwater regulations.
- If reclaimed wastewater is used for dust control, a Reclaimed Water Permit will be required and an AZPDES Permit may be required if in a Waters of the U.S. In any case, water used for dust suppression shall not contain contaminants that could violate Surface Water Quality Standards.
- If dewatering operations are needed, this water shall not be discharged into a Waters of the U.S. without proper permits, including, but not necessarily limited to an AZPDES Permit.

## DR 521 LEAD BASED PAINT AND ASBESTOS SURVEYS

Lead Based Paint and Asbestos Surveys must be completed for any existing structures that are anticipated to be disturbed during construction. A Lead Based Paint or Asbestos Removal and Abatement Plan will be required if these painted surfaces will be disturbed during construction activities.

## DR 522 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

Consultant will complete a Draft Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) that conforms to the National Telecommunications and Information Administration (NTIA) Guidance and all other relevant federal requirements.

**Required Format:** The format of the EA shall follow the NTIA EA Template and Guidance.

**Required Sections:** Additional guidance on each section and subsection is provided in the NTIA EA Template and Guidance.

1. **Executive Summary:** This section includes brief introduction and discussion of the project's purpose and need, description of the proposed action, summary of alternatives considered, and results of the impact analyses by resource area.
2. **Purpose and Need:** This section needs to explain:
  - a. The underlying purpose of and need for the applicant's proposal and for which NTIA financial assistance is being requested; and
  - b. NTIA's authority and program objectives in responding to the proposal under consideration.
3. **Description of Proposed Action and Alternatives:** This section includes the project proposal, reasonable alternatives considered that effectively meet the proposed project's purpose and need, are technically implementable and economically feasible, and make common sense. It should also include alternatives considered but eliminated from further review. Specific subsections will include:
  - a. Introduction to Alternatives Analysis
  - b. Description of Proposed Action: must include sufficient detail so that effects on the surrounding environment can be clearly understood
  - c. No Action Alternative: must consider the effects of not implementing the Proposed Action or other action alternatives
  - d. Alternatives: may include design alternatives, siting and location alternatives, system capacities, project timing etc.; and/or alternative corridors or routes for infrastructure proposals
  - e. Alternatives considered but eliminated from further discussion: briefly describe any alternatives considered during project development but eliminated before drafting the EA and why each was eliminated from further discussion
4. **Description of the Affected Environment:** This section provides baseline conditions for resource areas potentially affected by the Proposed Action or alternatives, including the No Action Alternative. Descriptions

of actions, areas, or resources should be discussed proportionate to their level of importance or impacts. Use maps, photographs, illustrations, and other graphics as appropriate. The specific resource areas and subareas to be considered include the following:

- a. Noise
- b. Air Quality
- c. Geology and Soils
- d. Water Resources
  - i. Surface Water
  - ii. Groundwater
  - iii. Coastal Zone, Estuary and Inter-tidal Areas
  - iv. Flood Plains
  - v. Wild and Scenic Rivers
- e. Biological Resources
  - i. Threatened and Endangered Species and other Special Status Species
  - ii. Critical or Threatened/Endangered Habitat
  - iii. Wetland Habitats
- f. Cultural Resources

Information pertaining to this section will be provided by Pima County. Cultural resources inventory, documentation, assessment, mitigation and monitoring will run concurrently with NEPA via a separate consultant under direct contract to Pima County.

  - i. Archaeological Resources
  - ii. Architectural/Historic Resources
  - iii. Native American Traditional, Cultural, or Religious Resources
- g. Aesthetic and Visual Resources
- h. Land Use
- i. Infrastructure
- j. Socioeconomic Resources
- k. Human Health and Safety

5. **Analysis of Environmental Impacts:** This section provides a comprehensive analysis of the potential direct and indirect effects of the Proposed Action and discusses the level of significance for each effect identified. The same resources areas identified in Section 4 should be addressed, in addition to cumulative impacts:

- a. Noise
- b. Air Quality
- c. Geology and Soils
- d. Water Resources
- e. Biological Resources
- f. Historic and Cultural Resources (information needed to author this section will be provided by Pima County)
- g. Aesthetic and Visual Resources
- h. Land Use
- i. Infrastructure
- j. Socioeconomic Resources
- k. Human Health and Safety
- l. Cumulative impacts

6. **Applicable Environmental Permits and Regulatory Requirements:** This section provides a complete listing of the applicable permitting and regulatory requirements. This information may be more effectively presented in a table; see NTIA EA Template and Guidance for more info.

7. **Consultations:** This section includes a list of agencies and individuals that were contacted in the process of developing the EA. Copies of correspondence should be attached in an appendix

8. **References:** This section includes information sources used in the EA.

## **Cultural Resources Compliance**

Prior to the completion of design, the Design-Builder will be provided with Cultural Resources Special Provisions. All project activities following design are subject to compliance with, at minimum, a Programmatic Agreement and Historic Properties Treatment Plan established for compliance with Section 106 of the National Historic Preservation Act (54 USC 300101-307108; 36 CFR 800). All terms within these special provisions apply to the Design-Builder and any of their employees, subsidiaries, contractors, subcontractors, consultants, sub-consultants, and other affiliates.

### **DR 530 UTILITIES AND RAILROADS**

- A. The Design-Builder is directed to review the base maps and permit logs. It is the responsibility of the Design-Builder to ensure that all utilities in the project area have been identified. The Design-Builder will be responsible for obtaining any missing utility base maps or as-builts not provided with this SOW. The Design-Builder will be responsible for potholes as necessary to confirm utility locations and conflicts. All utility designation shall follow the American Society of Civil Engineers-"Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data" (CI/ASCE 38-02). All pothole information shall be provided to Pima County.
- B. The Design-Builder shall coordinate with Arizona 811 and the Department will not be responsible for any delays or costs associated with Arizona 811 coordination.
- C. Right-Of-Way: Pima County is conducting a ROW study during the initial design period to obtain ROW clearance for the route. The Design-Builder shall assist in the development of exhibits for transfer of right-of-way if requested by Pima County.

### **DR 531 UTILITY CONFLICTS AND ADJUSTMENTS**

- A. It shall be the responsibility of the Design-Builder to identify all conflicts and coordinate mitigations and/or relocations with the affected utilities. The Design-Builder shall take into account each utilities' design, relocation construction sequencing and durations into the Design-Build project schedule. The Design-Builder is responsible for coordinating any work that may be necessary to resolve conflicts during construction.
- B. After design mitigation efforts are exhausted the Design-Builder shall determine all project impacts on utilities based on conflict criteria which require the utility to be relocated or adjusted and shall advise URR and the utility company. The Design-Builder shall delineate the extent of utility conflicts with the project within the Utility Report and advise the impacted utilities.
- C. The Design-Builder shall advise URR if upgrades or betterments are requested by utility companies.
- D. When property is acquired for a highway project, private utility issues related to those parcels are resolved as part of the right-of-way acquisition. The Design-Builder shall coordinate these and any private utility issues with the Pima County Right-of-Way Coordinator and the Project Manager.
- E. The Design-Builder shall hold utility coordination meetings with the County and the utilities to discuss project progress, issues, and planned work for all phases of utility work, including design and construction. The coordination meetings shall be held on an as needed basis and at a minimum of once per month. The Design-Builder shall notify the Department and utilities at least one week in advance of each meeting.

The Design-Builder shall develop the agenda for these meetings. Attendees should include the Design-Builder's and the County's key personnel who have responsibility for utilities, environmental assessments, and right of way. Representatives from utility companies must be invited to all meetings. The Design-Builder shall produce meeting minutes of all meetings and distribute the meeting minutes to participants, including representatives of utility companies who have facilities in the areas reviewed (even if they did not attend the meeting) per Section DR 1023. A weekly progress report shall be submitted to the Department documenting the most current utility contact information, status of all utility related coordination and work. The progress report shall include a Utility Conflict Matrix.

The design-builder shall maintain documentation of contact and discussions with utility companies and provide to the Department copies of all correspondence between the Design-Builder Design and Construction Utility Manager and any utility company within one working day of receiving it or sending it, as applicable.

Any delays resulting from the Design-Builder's failure to schedule and coordinate its work with the utilities are the responsibility of the Design-Builder.

- F. Should any utility claim prior rights during the Contract Time, the Design-Builder shall be required to gather the prior rights documentation from the utility. The Design-Builder will submit the documentation to Pima County for an initial determination.

The Design-Builder shall review all utility relocations that are to be paid for by the County and advise the County if the relocations include betterments. Betterments are any facility improvements over and above replacing in-kind.

Pima County will make the final determination of prior rights. The Design-Builder is advised that the County requires 21 calendar days to make the final determination.

If the prior rights determination package provided by the Design-Builder is incomplete, the package will be rejected and returned with comments to the Design-Builder to resubmit. The Department review time will start over for any rejected submittal packages. The Design-Builder shall coordinate with the utility companies to continue to resolve the potential utility conflicts pending the prior rights determination.

- G. The Design-Builder shall provide a Design and Construction Utility Manager to act as the overall Utility Coordinator to ensure adequate coordination during development, mobilization and construction activities, and reviews of utility work. The Design and Construction Utility Manager shall coordinate, cooperate, and work with the contact person designated in Section DR 531 of this document or as otherwise assigned by the utility. The Design and Construction Utility Manager shall have previous experience with coordinating work between the Design-Builder and utility companies and be knowledgeable with ADOT URR guidelines and procedures.
- H. The Design and Construction Utility Manager shall be responsible for reviewing relocation plans produced by utility companies to ensure that all anticipated utility conflicts with project plans and with planned utility relocations are mitigated.
- I. If the Design-Builder changes the project design after utility work has been performed resulting in a new conflict, cost for the design and construction of additional utility work shall be paid in full by the Design-Builder at no cost to the County. The Design-Builder shall make adjustments for any additional time that may be required for the utility company to review modified plans and perform utility work on its facilities when required.
- J. The Design-Builder shall submit a Utility Report at substantial completion. The Report shall include the following:
- Utility conflict tracking matrix.
  - A list of all utility companies in the project area along with their contact person and contact information.
  - Identify the quality of utility information shown on the final RFC plans per CI/ASCE 38-02.
  - Provide a summary of the meetings held with each utility company - what was discussed and when, and what actions were taken to arrive at the selected mitigation measure.
  - A list of pothole data requested and obtained.
  - A copy of all correspondence between the Design-Builder and each utility company.
  - A list of permits issued for utility relocation plans.

## **DR 532 UTILITY PLANS**

- A. Utility conflicts and relocations shall be noted on the construction plans.
- B. The Design-Builder shall indicate potential areas of conflict between utility facilities and project improvements. The Design-Builder shall work with the utility companies to mitigate conflicts. The design is to be adjusted as much as possible to avoid utility conflicts without negatively affecting the needs of the project or public safety. Any required potholing will be the responsibility of the Design-Builder.
- C. After the project design has advanced sufficiently to clearly define the extent of the utility work, the Design-Builder shall coordinate with the utility companies to obtain relocation plans.

Utility relocation plans shall identify the extent of the utility work required and clearly show the proposed roadway improvements. The Design-Builder shall coordinate as necessary with each utility company to accomplish the relocation(s).



All utility relocation work will be the responsibility of the utility owner to design and construct. The Design-Builder may contract directly with the utility companies to design and construct their relocations on their behalf. Independent of who designs or constructs the relocation work, the Design-Builder shall be responsible for coordinating with the affected utility to allow for the completion of their design and relocations within the construction schedule provided by the Design-Builder.

## **DR 533 UTILITY RELOCATIONS AND ADJUSTMENTS**

Where a utility relocation may be required:

- A. The Design-Builder shall identify possible alternatives (including joint use of trenches) to minimize the number of utility conflicts and minimize the cost of mitigating conflicts.
- B. The Design-Builder shall notify URR promptly upon determination that relocation of a utility company facility is required.
- C. The Design-Builder shall be required to gather the prior rights documentation from the utility and provide to Pima County. Refer to Section 531F of this document for prior rights determination.
- D. Utility agreements may be required between the County and the utility companies. Pima County will be responsible for preparing the agreements, with assistance from the Design-Builder. The agreements shall follow Pima County's standard format including recital with Buy America language and the exhibits listed below.

Exhibit A: Cost estimate

Exhibit B: Utility relocation plans

Exhibit C: Prior rights documentation

Exhibit D: Relocation schedule

The Design-Builder shall allow adequate time in preparing and executing utility agreements including review by the County and affected utility.

Process and Payments for Utility Relocation with Prior Rights:

- a) If the Utility performs the relocation, the agreement will be drafted and signed by Pima County. Payments to the Utility will be made by Pima County.
  - b) If the Design-Builder relocates a prior right utility, Pima County will pay the relocation cost to the Design-Builder through a force account. The agreement will be drafted and executed by Pima County.
- E. Unknown Utilities

### **Unknown Utilities**

- An unknown utility is defined as: When the Design-Builder has followed Arizona 811 requirements and no utility owner has been identified.
- Should the Design-Builder find an unknown utility that is in conflict with the proposed improvements, the Design-Builder shall coordinate with the Engineer for the removal of the unknown utility.

## **DR 534 UTILITY SPECIAL PROVISIONS AND CLEARANCE LETTER**

The Design-Builder shall prepare an initial utility clearance letter. The Design-Builder's utility clearance letter shall include individual letters from utilities indicating their commitments for the relocation schedule and their responsibilities or confirmation of no conflict. The Design-Builder shall approve and send the clearance letter to Pima County for their record/information. The clearance letter shall list each utility company separately, showing:

- 1. The name of the company.
- 2. Permit number and jurisdiction issuing the permit.
- 3. The nature of required adjustment, if any.
- 4. The status of Agreements and permits, if any.
- 5. The status of the utility adjustment, if any, includes the following:
  - a) Completed
  - b) To be done by Design-Builder during construction
  - c) To be done by utility company during construction, with estimated completion date or number of working days
  - d) In progress, with estimated completion date
  - e) The status of all necessary utility relocation agreements

If there are no conflicts, a statement that there are no utilities in conflict with construction shall be used when there are no utility facilities needing adjustment or when all adjustments have been completed prior to writing the clearance letter.

Email correspondence with the utility will be an acceptable form of verification from the utility.

The Design-Builder shall prepare a final utility clearance closeout letter at the completion of the utility relocation work. The clearance letter shall list each utility company separately, showing:

1. The name of the company.
2. The nature of required adjustment, if any.
3. Date of completed relocation.
4. Record drawings including x, y and z coordinates (final plans if record drawings are not available)
5. Permit number

## **DR 535 ESTABLISHING UTILITY SERVICE CONNECTION**

The Design-Builder is responsible for securing establishment of service connections prior to construction.

New service connections and modifications to existing service connections will be needed for this project. The Design-Builder shall coordinate with Pima County to obtain the meter address and billing information. The Design-Builder shall submit the service request letter directly to the appropriate utility company and make the necessary arrangements for new service connections and modifications.

The Design-Builder shall furnish the necessary equipment required by the utility companies, as applicable, at the point of source; this includes any fence enclosures or gates required by the utility and required retrofit of existing facilities to accommodate the utility connection and meter.

All necessary special trench and backfill for utility service connections shall be included in the work. The Design-Builder shall coordinate with the utility on these requirements, and associated inspections and approvals by the utility company.

## **DR 540 TRAFFIC CONTROL**

### **General**

Detailed construction phasing and traffic control plans shall be developed during the final design. The preparation and operation of all traffic control plans and measures are the responsibility of the Design-Builder but shall be subject to the approval of the Engineer. The Design-Builder shall be responsible for submitting traffic control plans in sufficient time to allow 14 calendar days for the Engineer's review and approval. No phase of traffic control shall be started before the Engineer's approval of the traffic control plans.

See DR 509 for additional information and requirements.

### **Traffic Control Plan Requirements**

All traffic control plans shall meet the following requirements:

- Traffic will be managed by detailed traffic control plans and procedures and guidelines specified in Part VI of the Manual of Uniform Traffic Control Devices (MUTCD), 2009 Version, and by the Arizona Supplement to Part VI of the MUTCD and the ADOT Traffic Control Guidelines.
- Changeable message board legends shall be concurrently submitted with the TCP to the Engineer for review and approval.

## **DR 541 RIGHT-OF-WAY AND SITE ACCESS**

All work associated with this project is anticipated to be performed within the existing right-of-way limits.

The Design-Builder shall not use any commercial parking lots for parking, construction access or any construction activities. The Design-Builder may coordinate directly with commercial development owners/managers to seek authorization for such activities. The Design-Builder shall provide the Engineer with written documentation of all authorizations prior to use of the parking area.

## **DR 542 TEMPORARY CONSTRUCTION EASEMENTS**

No Temporary Construction Easements (TCEs) are anticipated. If any are required, they shall be requested by the Design-Builder through the County. The TCEs will be obtained by the Department. The costs for obtaining the

easements shall be borne by the Design-Builder. The Design-Builder should allow at least 120 calendar days for the County to process TCE requests that are required for construction.

#### **DR 543 TECHNICAL SPECIFICATIONS**

The design of the project shall be in accordance with the Standard Specifications and the Technical Specifications. If additional specifications are necessary, the Design-Builder shall prepare Draft Supplemental Technical Specifications (Sections 200 through 1000) for items, details, and procedures not adequately covered by the Standard Specifications and Technical Specifications. The Draft Supplemental Technical Specifications shall be reviewed according to DR 1060.

Final Supplemental Technical Specifications shall be sealed by the professional engineer in responsible charge of the work and included on plan sheets (for record drawing purposes). The Design-Builder is advised that the final supplemental technical specifications shall be shown on plan sheets (for record drawing purposes). Simply referencing the page number from this SOW to the applicable technical specification in a note on the plan sheets will not be accepted. Unusual requirements necessary for obtaining permits for hauling materials shall also be included.

#### **DR 544 TRANSPORTATION MANAGEMENT PLAN**

The Design-Builder shall prepare a Transportation Management Plan (TMP) memo including:

- Traffic Control Plans or a reference to their location in the project design plans
- An Arizona specific Emergency Vehicle Access Plan (EVAP)

The TMP shall be submitted at the pre-construction meeting. The Design-Builder shall coordinate with and obtain approval from the Engineer for the required content of the TMP. Additional background information on the requirements can be found in the Arizona Department of Transportation Implementation Guidelines for Work Zone Safety & Mobility, available on the Department's website (<https://azdot.gov/sites/default/files/media/2021/06/Implementation-Guidelines-for-WZSM-2021.pdf>).

#### **DR 1000 CONTRACT ADMINISTRATION**

##### **DR 1010 PIMA COUNTY**

The County will:

1. Conduct ongoing reviews of the Design-Builder's progress in performing the work and ensure timely comments from the technical review groups.
2. Participate in design consensus, design and construction progress, and team building meetings with all appropriate partners at the start and on a routine basis during the project development period.
3. Review the Design-Builder's billings.
4. Review and evaluate the Design-Builder's requests for extension of time and supplemental agreements, if any.
5. Review all correspondence with public agencies prior to the Design-Builder's mailing of any correspondence. PCDOT Communications will be involved in review of all releases to the public.
6. Coordinate the distribution of public information utilizing PCDOT Communications and/or its Public Involvement Consortium.
7. Provide a focal-point contact for all questions, requests, and submittals.
8. Review the technical design submittals by the Design-Builder.
9. Conduct quality acceptance functions described in the Technical Specifications based on the Final Plans, working drawings, and other materials required per the contract.

Review by the County does not include detailed review or checking of design of components and related details, or of the accuracy with which such designs are depicted on the plans.

##### **DR 1020 DESIGN-BUILDER**

The Design-Builder shall:

1. Maintain an adequate staff of qualified support personnel to perform the work necessary to complete the project and participate in the community relations effort.

2. Establish internal accounting methods and procedures for documenting and monitoring project costs that meet the Department's requirements.
3. Establish and maintain Contract administration procedures, which will include, but not be limited to, supplemental agreements, time extensions and subcontracts.
4. Conduct design consensus, design and construction progress, and team building meetings with all appropriate partners at the start, on a routine basis during the project development period, and as needed to maintain the design and construction schedule. The Engineer and Design-Builder shall jointly determine the frequency of the meetings.

The Design-Builder is responsible for the accuracy and completeness of Contract Documents and related design prepared under this project. The plans will be reviewed by the County for conformity with Pima County procedures and the terms of the contract.

#### **DR 1021 PROJECT CONTROL**

The Design-Builder shall provide data, upon request, in the format specified by the County to monitor costs, manpower, and equipment and to report progress.

The project control system may include features to:

1. Determine and highlight critical path work from initial plans as work progresses.
2. Identify progress against schedule for each identified work item.
3. Forecast completion dates from current progress.
4. Highlight rescheduled work in any area which is out of the required sequence.
5. Determine any physical area that requires more resources than originally allocated.
6. Forecast future conflicts in any area, and potential delays.
7. Provide estimates of time, materials, manpower, equipment, and cost required at the lowest work element tracked, based upon current expenditures versus schedule.
8. Provide the capability of random inquiry concerning the status of any work element in terms of schedule, manpower, equipment, and cost.

#### **DR 1022 SUBCONTRACT SERVICES**

The Design-Builder shall comply with Section DR200, 3.C. regarding subcontracting work. However, the subcontracting firms must be approved in writing prior to initiation of any work. The Design-Builder shall allow at least five working days for the County to process subcontractor paperwork. The volume of work performed by subcontractors/subconsultants shall not exceed 70 percent of the total contract value.

#### **DR 1023 PROJECT-RELATED CORRESPONDENCE**

The Design-Builder shall furnish written documentation of communications between the Design-Builder, and any party pertaining specifically to this project, to the Department for their records within one week of the communication. The Design-Builder is responsible for recording and distributing to the participants the minutes of all meetings pertaining to this project within one week of the meeting.

#### **DR 1024 DESIGN QUALITY MANAGEMENT PLAN**

The Design-Builder shall prepare a Quality Management Plan that addresses both design and construction phases. The Construction Quality Management Plan requirements are shown in Sections DR 500-DR 544 The Design Quality Management Plan requirements are as specified in Section DR 1025.

<b>Quality Management Program</b>	
Design Quality Management Plan	Construction Quality Management Plan
	Materials Quality Management Plan Sampling & Testing

The Design-Builder is responsible for the accuracy and completeness of the plans specifications and related design prepared under this Contract and shall check all such material accordingly. The Design-Builder shall have a Design Quality Management Plan in effect during the entire time work is being performed under this contract. The Plan shall establish a process whereby plans, calculations and documents submitted for review shall be clearly marked

as being fully checked by a qualified individual other than the originator. Non-compliance will be sufficient cause for rejection of submittal. Periodic Quality Control audits may be performed by the Engineer.

County at the predesign conference. The plan shall comply with the requirements of Section DR 1025.

## **DR 1025      DESIGN QUALITY MANAGEMENT PLAN REQUIREMENTS**

The Design Quality Management Plan (DQMP) shall include the following:

### **1. Identification of key personnel and their specific responsibilities:**

The Plan shall identify, by name, the specific project personnel and their individual responsibilities relative to the project and the Quality Management process.

### **2. Technical review process:**

Technical review shall be distinguished from checking. Checking is for verification of the accuracy of the documents; technical review is for the verification of the overall design concept of the project. As a minimum, technical reviews shall do the following:

- a. Determine the adequacy of the Design-Build process to achieve the desired goals (does it meet design criteria?).
- b. Evaluate the general selection and sizing of materials and equipment.
- c. Determine if all viable alternatives have been considered.
- d. Determine the practicality of the design (does it meet standards?).
- e. Determine if legal and physical restraints were considered.
- f. Determine if the design theory, concepts, and project layout are logical.
- g. Determine applicability of computer programs used.
- h. Determine if the Technical Specifications are sufficiently comprehensive.
- i. Determine the constructability of the selected design.

### **3. Checking procedures:**

The checking process should assure that all documents produced, including but not limited to, plans, reports, calculations, supplemental Technical Specifications, estimates, and schedules, are thoroughly checked by an individual at least equally competent to the originator of the document to verify accuracy. The process will address resolution of conflict and assure agreement of computer programs and procedures for checking computer input and output. Checking shall not only confirm the accuracy of calculations but shall include a thorough review of the proper use of Standard Drawings, Drafting Guide, Project Design Guidelines, and other manuals and documents referenced under Section DR 400.

### **4. Program to train employees in the quality management requirements:**

The training program should provide an opportunity for all project staff to become familiar with the design and the quality control process that will be required on this project. Particular attention should be directed to defining specific individual responsibilities and assuring their understanding.

### **5. Process to monitor and document quality management activities:**

A method for monitoring and documenting the required processes is essential to achieve desired results. This process should easily and quickly verify the entire Quality Management process. A checklist should be developed for quick reference and periodic review by the Department.

#### **1. Process for design changes after approval:**

The Plan shall describe the process for design changes after approval, including Field Design Changes (FDCs) and Notice of Design Changes (NDCs).

## **DR 1026      DESIGN-BUILDER PERSONNEL**

The Design-Builder's work shall be performed and/or directed by the key personnel identified in the Technical Proposal. Any changes in the indicated key personnel or the Design-Builder's officer-in-charge of the work, as identified in the Design-Builder's Proposal, shall be subject to review and approval by the County.

## **DR 1030      ACCEPTABILITY OF THE WORK**

The plans, design, requested calculations, reports and other documents furnished under this Design Requirements shall conform to "standards-of-the industry" quality. The criteria for acceptance of these products are:

1. Well organized and of neat appearance.
2. Accurate and complete
3. Technically and grammatically correct
4. Checked and revised as necessary in accordance with the approved Quality Management Program.

## **DR 1040      DESIGN DOCUMENTATION**

The Design-Builder shall document engineering and design progress, and any changes in its engineering and design schedule (including work on any design change), in the monthly report to the County.

1. If design work is done by change orders (or for potential claim situation), for which a price has not been established prior to the start of work, the Design-Builder shall keep a detailed diary of all work performed by each person involved in the design. The Design-Builder shall track time worked on design changes (or potential claim situation) separately from regular design work on the project.
2. If requested, the Design-Builder shall submit any design notes, sketches, worksheets, and computations to document the design conclusions reached during the development of the design plans and specifications to the County for review.
3. Structural calculations will only be submitted when requested by the PCDOT and for specific elements.
4. At the project completion, a final set of project documentation sheets, sealed by a Professional Engineer registered in the State of Arizona, shall be submitted with the record set of plans and tracings. Project Documentation shall include, but not necessarily limited to, the following data:
  - a. Design criteria used for the project.
  - b. Final Geotechnical reports for the pavement and/or structure design.
  - c. Documentation of decisions reached resulting from meetings, telephone conversations or site visits.
  - d. Final Drainage reports.
  - e. At project completion, the Record Drawing Plans (with updated indexes) shall be sealed and signed by the original discipline engineer if possible, (otherwise, the post design engineer) and delivered to Pima County for its final records. An electronic version of the entire plan set shall also be included in both pdf and an approved CADD software format.
    - (1) The various consultants developing components of the project i.e., Bridges, Signals, Lighting, Landscaping, should update, seal, and sign their respective plan sheets and supply a PDF copy to Post Design Engineer for inclusion into the final Record Drawing plan set. Electronic files should also be submitted to the Post Design Engineer for inclusion in the final submittal to Pima County.
    - (2) The latest version of the original signed half size paper plots, including updated indexes, shall be assembled into a record set and placed in the project files at the completion of the project.
    - (3) The original Field Change Memo electronic files shall also be submitted to Pima County at the completion of the project.
    - (4) The plans shall be updated to depict all changes that occurred from Field Change Memo's and field supplied daily diaries and As-Built sketches. As Field Change Memo information is incorporated into the plans, the As-Built box on the Field Change Memo form shall be checked and dated.
    - (5) For the electronic information each sheet electronically should be "Writable" (Not Read Only), and "Stand Alone" such that pertinent reference files and other information are copied into each sheet. Referencing of files is not desired in the final electronic Record Drawing version.
    - (6) Traffic Control plans shall not be included in the final Record Drawing plan set.
    - (7) Strike-through and highlight techniques or any other methods to note changes that occurred during construction shall not be included on the final Record Drawing plan set.
    - (8) The revision clouds and numbered triangles shall be removed throughout the plans but the revision block in the lower right corner containing descriptions of revisions shall remain.

- (9) The Sheet No., Total Sheets, and Record Drawing block in the upper right corner of each sheet shall be completed on the final plots. The Record Drawing block should contain date and technician's initials.
- (10) Do not place the words "As-Built" on any sheets. The following statement should be stamped or plotted on the right border above the revision block of every sheet instead.

"RECORD DRAWING, Record drawings are based on design changes and field observations. No field survey to verify actual conditions has been completed."

Note: Each face sheet of a site plan set, or overall plan set, shall contain the above note with an adjacent signature block signed by responsible person.

- (11) Although this is one project, the "Record Drawing" plans shall remain divided into segments developed for the project.

5. Computer-Aided Drafting and Design (CADD)

Drawings shall conform to the applicable Pima County drafting and CADD standards.

Pima County shall retain all rights and ownership of all Electronic Files and Hardcopy Deliverables throughout the Design Phases.

### **Engineering Surveys:**

All designers of Pima County projects shall provide the following information to the Engineering Survey Section:

- Ground Adjustment Factor (G.A.F.):
- Contour Interval (C.I.):
- Project Scale:
- Horizontal and Vertical Datums:
- Arizona Zone:
- Hard copy of reports including any plots
- Additional items to be delivered:
- Hard Copies shall consist of the following:
- Field notes
- Sketches
- Transit and Level books
- Plots
- Reports
- All Project Control
- Section Corners
- R/W Monumentation
- Structures
- Edge of pavement
- Centerline and driving stripes

6. The Design-Builder shall also submit electronic copies of all design documents and reports in pdf format to the County.

## **DR 1060      DESIGN REVIEWS**

### **DR 1061      DESIGN-BUILDER REPRESENTATIVES**

As a minimum, the Design-Builder's engineer in responsible charge of the work and the Design-Builder's appropriate design manager(s) for the discipline(s) involved in the design (i.e.; Structures Design Manager, Roadway Design Manager, etc.) shall be present for and participate in all reviews. The Design-Builder's Design Quality Assurance (QA) Manager shall conduct oversight reviews. Pima County will participate in these reviews to the extent deemed necessary or advisable to the County.

### **DR 1062      SCHEDULING REVIEWS AND SUBMITTALS**

For each design item, segment, or phase of construction designated by the Design-Builder, the Design-Builder shall include the Department oversight reviews in its Initial Plan Updates and Monthly Plan Updates, and, through day-to-day communications, keep the County up to date on exact timing of scheduled County oversight reviews.

The Design-Builder shall allow 10 working days, per Sections DR500-DR544, in its schedule for each County oversight review, including County oversight review of 100 percent designs and final designs (release for construction). The 100 percent design is defined as completion of design products listed in the Design Requirements. Final design is defined as the design reflected on the release for construction plans. Initial Submittals for oversight review shall be submitted only after the predesign conference has been held per Sections DR500-DR544 of this SOW.

The schedule impacts and costs of revisions arising from County oversight review and caused by the Design-Builder's non-compliance with Contract requirements, including the County's time for reviewing submittal revisions, shall be borne by the Design-Builder.

## **County Oversight Review Documents**

For any type of review, at the request of the County, the Design-Builder shall provide any design documents, electronic or otherwise, related to the design for further examination.

The Design-Builder shall provide three hard copies of 11"x17" size plans and one 11"x17" size pdf file for each Department oversight review submittal. The pdf file shall be created directly from the CADD design drawings. No pdf files created from scanned hard copies are acceptable. When plans are ready to be released for construction, the Design-Builder shall provide 12 copies of 11"x17" size plans and one pdf file.

## **DR 1063      REVIEW TYPES**

### **Project Design Initiation**

The Design-Builder shall coordinate initiation of project design activities with the Pima County Project Manager prior to submitting plans for Department oversight review.

### **Design-Builder Internal Reviews (see also Sections DR 1065 and DR 1067)**

The Design-Builder, through its Design Quality Manager (DQM), shall conduct internal reviews. These internal reviews shall consist of checks to ensure that Contract requirements and design criteria are being followed, and that Quality Management activities are following the Design-Builder's approved Quality Management Plan. The internal reviews, at a minimum, shall include review of design drawings, electronic files, calculations as appropriate, reports, specifications, geotechnical data, and other relevant design information. The DQM shall produce documentation of the review.

The Department will participate in the Design-Builder internal reviews to the extent deemed necessary or advisable to the County.

### **County Over-the-Shoulder Reviews**

The County will participate in over-the-shoulder reviews, in addition to the scheduled County oversight reviews for each submittal. The over-the-shoulder reviews are intended to be informal reviews. However, the County retains the authority to engage in more detailed reviews at its discretion. The County over-the-shoulder reviews shall be conducted in the office of the Design-Builder or its designer, and in the presence of the Design-Builder's design personnel, with the intent to minimize disruption of ongoing design work. As opposed to the formal submittals associated with traditional design reviews, this review technique will provide the ability to review specific areas of the design in an informal interactive environment. The DQM and design staff shall determine the materials to be compiled for the County over-the-shoulder review. Formal assembly and submittal of drawings or other documents will not be required for County over-the-shoulder reviews. The review may be of progress prints, computer images, draft documents, working calculations, draft specifications or reports, or other design documents as jointly determined by the Design-Builder and the DQM and design staff in the design workshops (see Section DR 1065). If mutually agreed for specific review items, the over-the-shoulder review may consist of an exchange of electronic files between the Design-Builder's designer and the County's review team. The informal County over-the-shoulder reviews shall not take the place of the Department oversight submittal reviews, as described in the following headings.

### **County Early Release for Construction Oversight Reviews, (ERFC) (see also Section DR 1066)**

Early release for construction (ERFC) reviews shall be County oversight reviews of items or segments on which the Design-Builder intends to begin construction prior to completion of 100 percent design drawings. The Design-Builder shall demonstrate to the Department that the ERFC items are critical path construction items. Items to be included



as part of the ERFC documents shall be approved by the Engineer. ERFC County oversight reviews will be conducted in the Design-Builder's or its designer's office. For each ERFC submittal, the Design-Builder shall allow 10 working days in its schedule for the County to review.

### **County Mid-Point and 100 percent Design Oversight Reviews (see also Section DR 1069)**

Review of the 100 percent design shall be a County oversight review of items or segments of completed design as defined by the Design Requirements. The 100 percent County oversight review will take place in the Design-Builder's or its designer's office. For each submittal, the Design-Builder shall allow 10 working days, in its schedule for the County to review.

### **County RFC Design Oversight Reviews (see also Section DR 1069)**

Review of the RFC design shall be a County oversight review of items or segments of completed design as defined by the Design Requirements.

The Design-Builder shall address all Mid-Point Design Submittal comments by the 100 percent Design Submittal prior to submitting the RFC Submittal. The Design-Builder acknowledges and agrees that resubmittal may be required by the County. No additional compensation and/or time extension is allowed for any resubmittals.

### **County NDC/FDC and Shop/Working Drawing Design Oversight Reviews**

Review of the NDC/FDC design shall be a County oversight review of items or segments of previously completed design that has been revised after the plans have been released for construction.

Review of Shop/Working Drawings shall be a County oversight review at the Engineer's discretion.

### **DR 1064 DESIGN-BUILDER'S DESIGN QUALITY REVIEW**

As a minimum, all designs will be reviewed by an experienced licensed engineer(s) with specified skills within the discipline. The review engineer shall not be directly involved with the design of the item, segment, or phase being checked. The review of structural design shall include independent calculation for the structural elements of the design. All reviews shall be consistent with the Design-Builder's approved Quality Management Plan.

### **DR 1065 IN-PROGRESS DESIGN WORKSHOPS AND OVERSIGHT VISITS**

The Design-Builder's Initial Plan Update and/or Monthly Plan Update shall include design workshops early in the project schedule to familiarize the designers and the County's review personnel with the design concepts, issues, status, and review procedures. The agenda of the workshops and how they will be organized (e.g., by work segment, engineering discipline, etc.) will be jointly developed by the Design-Builder and the County. The intent of the workshops is to make the subsequent oversight and over-the-shoulder reviews more effective and efficient for both parties.

The County may also make periodic visits to the designer(s) offices to discuss and verify design progress and the designer's Design Quality Management Plan. The County will give the Design-Builder five calendar days advance notice of its intent to make an oversight visit.

Throughout the design process, the Design-Builder may request additional oversight visits by the County to discuss and verify design progress and to assist the Design-Builder and/or its designer(s) in resolving design questions and issues. The Design-Builder shall give the County five calendar days' notice of its requested oversight visit.

### **DR 1066 DESIGN OVERSIGHT REVIEW FOR EARLY CONSTRUCTION (ERFC)**

The Design-Builder's schedule and work plan shall identify the items, segments, or phases that the Design-Builder plans to release for early construction (i.e., construction that is to start prior to completion of 100 percent design documents). County oversight reviews shall be conducted for items or segments of permanent construction work identified by the Design-Builder for early construction. The Design-Builder may start construction of any element of the project only after all the following bulleted items have occurred:

- The Design-Builder has completed its design technical review in accordance with the Design Quality Management Plan, has completed and assembled design documentation, and certifies in writing that the design is ready to be released for early construction.
- The Design-Builder's DQM has also stated in writing that the item, segment, or phase of work has been designed in accordance with Contract requirements.
- The design has been subjected to a constructability review to determine that the work: (1) can proceed safely from the aspects of public and worker safety, (2) the work does not unduly obstruct access to other

subsequent work, (3) the work is compatible with subsequent work and will not require repairs, alterations or partial removals to achieve compatibility, and (4) the work can be adequately protected against damage or excessive wear from construction activities.

- The project has progressed to the point that the work may be released for early construction and not require subsequent change in design affecting construction.
- The responsible Arizona-licensed Professional Engineer shall have sealed, signed and dated the plans and specifications for early construction.
- The Design-Builder shall prepare and maintain daily an index of all documents released for construction. The index shall include a list of the issued drawings with the most current date and revision status.
- Adequate stakes, lines and grades shall have been established in the field to control the work.

The Design-Builder shall not begin work, at its own risk, on permanent or non-permanent construction without approved plans.

The Design-Builder shall allow 10 working days in its schedule for County oversight review of ERFC documents. If the County, in its review, observes that the Design-Builder is not in compliance with Contract requirements and/or that the Quality Reviews are not complete, it will notify the Design-Builder in writing. The County oversight review and comments shall not constitute approval or acceptance of the final design or subsequent construction.

The construction on the item, segment, or phase covered by the DQM's statement approving early construction shall only progress to the point covered by the design documents included in that statement. Prior to construction progressing further, the Design-Builder shall complete the next phase of design or complete the 100 percent design, in which case, construction could proceed under Section DR 1069.

Subsequent phases of design being released for construction shall be checked and released by the Design-Builder's DQM, as indicated above, for the initial item or segment of work. A County oversight review shall be conducted as each phase of design is released for construction.

If there is evidence that the Design-Builder's or designer's Quality procedures are not adequate (for example, if a problem is identified during the County oversight reviews or becomes evident during construction), the County may, at its sole discretion, put a hold on future early construction until sufficient Quality procedures are in place. If the deficiency affects construction in progress, the County will require correction of the design and/or construction defects before construction can proceed further.

## **DR 1067 OTHER INTERIM COUNTY OVERSIGHT REVIEWS**

For any designs for which ERFC reviews will not be conducted, at least one County oversight review shall be conducted before completion of 100 percent design. The percentage of design at the interim stage shall be mutually agreed upon between the Design-Builder and the County but should be near the mid-point of design.

Prior to the County's participation in an oversight review, the Design-Builder's Design QA Manager shall certify that the item or segment of work (1) has been designed in accordance with Contract requirements, and (2) has been checked in accordance with the Design-Builder's approved Quality Management Plan.

The County will participate in an oversight review of all elements specifically stated in the performance specifications. For each submittal, the Design-Builder shall allow 10 working days, in its schedule for the County to review.

The Design-Builder may request that the County participate in other interim design oversight reviews.

## **DR 1068 DESIGN CHANGES**

The Design-Builder or Pima County may initiate design changes. Design changes may occur on items or segments undergoing early construction or may occur after final design.

The final plans shall reflect the most current design standards, specifications and the County policy in effect at the time of advertisement for this project. Therefore, the Design-Builder shall be responsible for studying revisions to the plans made during the development of the project and ascertaining how the design will be affected. The Design-Builder shall work with the Engineer, who will give the final authorization, in determining the propriety of modifying the design to accommodate the revised standards, specifications, and the County policy. The Design-Builder shall be compensated by Contract modification for any significant redesign resulting from this requirement; compensation will be evaluated on a case-by-case basis.

All design changes shall undergo the same Quality Reviews as the original design. Both design changes during early construction, before final designs are complete, and design changes to final designs shall be approved in writing by the engineer in responsible charge of the original design. All design change plans, specifications, calculations, and reports shall be stamped, sealed and dated by an Arizona licensed Professional Engineer. In both cases, the Design-Builder's DQM shall certify in writing that the design change: (1) has been designed in accordance with Contract requirements, (2) has been reviewed in accordance with the Design-Builder's Approved Design Quality Management Plan, and (3) is consistent with other elements of the original design. The Design-Builder shall request and schedule interim and 100 percent oversight review(s) by the Department for all design changes.

A methodology and process will be developed jointly between the Design-Builder team and the County, to document Design Field changes that occur once plans have been issued and tasks are under construction.

County review, comment and/or approval of Design-Builder proposals for modifications, design exceptions, design variances and counter proposals will require more than 10 business days from the receipt of the item for consideration.

## **DR 1069      REVIEW OF 100 PERCENT DESIGN**

When the Design-Builder has completed the 100 percent design for an item or segment, the Design-Builder's DQM shall certify that the work:

1. Has been designed in accordance with Contract requirements.
2. Has been reviewed in accordance with the Design-Builder's approved Design Quality Management Plan.
3. Is ready for construction to 100 percent completion.

If such certifications are completed, the County will participate in an oversight review of the 100 percent design. The Design-Builder shall develop a method to redline the design package to document the DQM and the County's comments given at the 100 percent review and shall provide a method to document the incorporation of these comments in the formal final design submittal. After the Design-Builder has incorporated the 100 percent design review comments in its design and/or resolved any questions to the satisfaction of the County, the Design-Builder shall prepare a formal final design submittal for Release For Construction (RFC) and submit it to the County. The formal final design submittal for RFC shall include:

1. All design plans
2. Design calculations, as requested
3. Design reports
4. Specifications
5. Estimated quantities, as required (see Section DR 1070)
6. Electronic files, as requested

All submittals shall be in accordance with Section DR 1040.

All plans, reports, and specifications shall be sealed and signed by the engineer in responsible charge. The Design-Builder shall address and/or incorporate all comments from the County in its final design RFC before the County will review the final design RFC submittal. A check shall be made by the County to see that the comments given at the 100 percent design review and the interim design review(s) were incorporated in the RFC documents. If necessary, the Design-Builder shall resubmit revised final design RFC documents if all comments have not been addressed, or if new information not previously reviewed has been included in the submittal, which results in additional comments. The resubmitted RFC documents shall include revisions to estimated quantities (See Section DR 1070). The County will review and approve or comment on the final design RFC submittal or resubmitted RFC documents as required, within 10 working days of receipt of the final design documents. For each RFC submittal, the Design-Builder shall allow 10 working days in its schedule for the County to review.

The Design-Builder shall not commence construction on any items included within a final design RFC plan submittal until the County has approved the final design RFC for that item of work, or segment of work.

## **DR 1070      QUANTITY ESTIMATES**

The Design-Builder shall provide quantity estimates for work covered by early construction plans, for work covered by 100 percent plans, and for work covered by final plans being released for construction. The quantity estimates shall be in units that facilitate quality assurance sampling and testing; i.e., the units shall be consistent with the units used to determine frequency of sampling and testing. For example, if X numbers of compaction tests are specified to be taken for every Y cubic yards of embankment, the quantity estimate needs to be in cubic yards of embankment.

The Design-Builder will not be allowed to commence construction on any items included within an early construction submittal, a 100% plan submittal or a final released for construction submittal until the County has received the estimated quantities for that item of work or segment of work as described in Section DR 1066.

#### **DR 1071      SCHEDULE REQUIREMENTS**

The Design-Builder shall submit its proposed design and County oversight review schedule for review and approval by the County. In the schedule, the Design-Builder shall provide the estimated size of the submittal packages. The Design-Builder shall include any revisions in the monthly plan updates. The schedules shall indicate the date and location for each Department review planned by the Design-Builder. The number of reviews in a given time period, especially if concurrent reviews are scheduled, shall be coordinated with and approved by the Department.

#### **DR 1072      DESIGN REVIEW DOCUMENTATION**

The Design-Builder shall maintain a written record of all design reviews and oversight visits. The written record shall:

1. List the participants of each review or visit.
2. Cover the items discussed.
3. Identify discrepancies noted and report on corrective action taken or planned.
4. Identify follow-up action items and due dates and the party responsible for future action.
5. Identify items needing resolution and time constraints for resolution.

These reports on design reviews and oversight visits shall be submitted to the County within 7 calendar days of the completion of the review or visit.

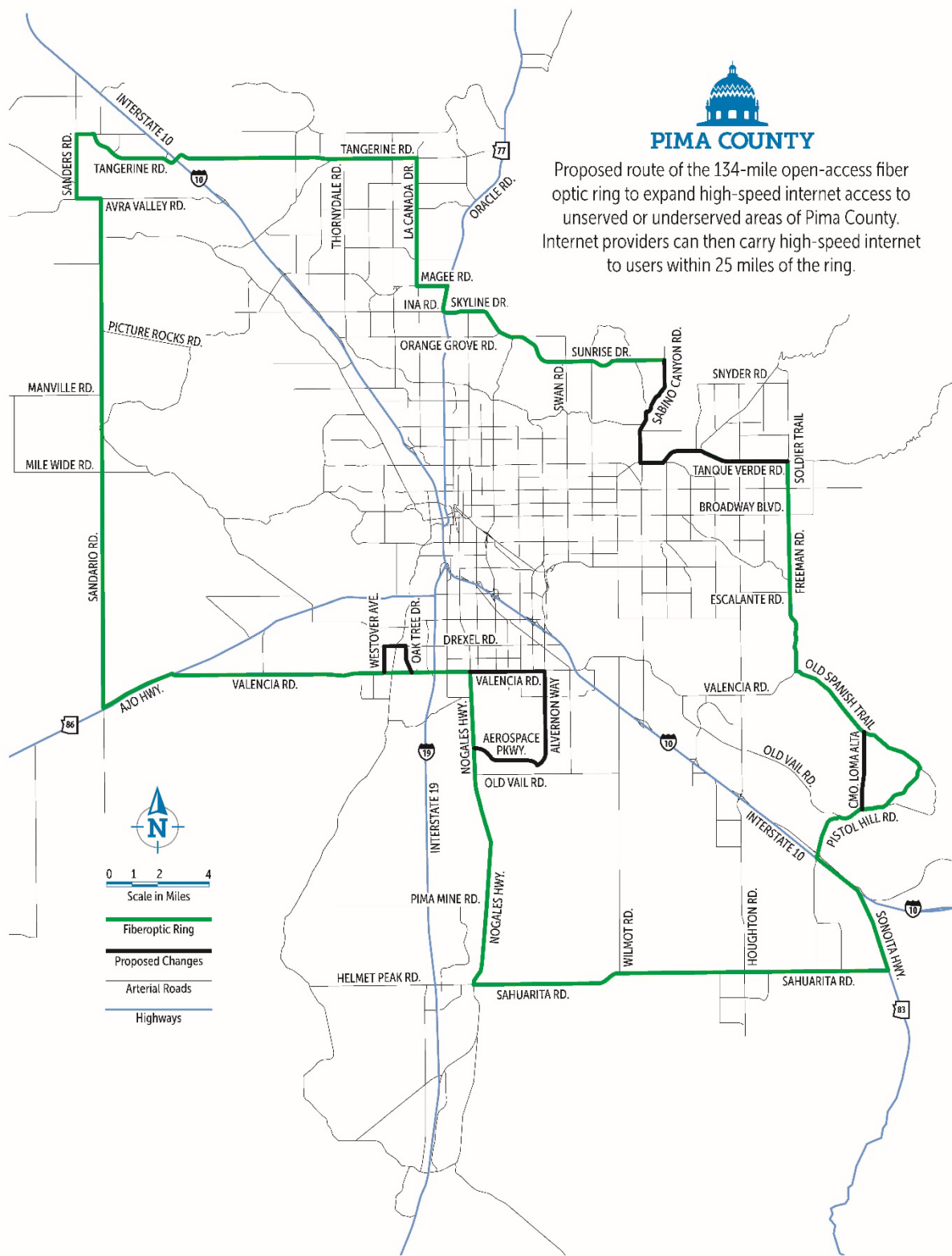
The Design-Builder shall also maintain a record of internal Quality Management efforts. A summary of internal Quality Management activities shall be included in monthly progress reports.

#### **DR 1073      ACCEPTANCE OF DESIGN**

Acceptance of design will occur essentially at the time of acceptance of construction for any work segment. The Design-Builder shall submit all record drawing documents (see Section DR 1040), as well as those documents required for final design approval as a condition of acceptance of design and construction.

*(The remainder of this page intentionally left blank)*

ATTACHMENT 1 – PROJECT MAP



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.

***(The remainder of this page intentionally left blank)***

## ATTACHMENT 1 TO APPENDIX B

### GMP Summary Format

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

**END OF APPENDIX B – SUPPLEMENTAL PROVISIONS—CONSTRUCTION COSTING**

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

### **TABLE OF CONTENTS**

#### **ARTICLE 1 – GENERAL ARTICLES**

- 1.1 Mutual Obligations
- 1.2 Basic Definitions
- 1.3 Contract General Conditions

#### **ARTICLE 2 – DESIGN-BUILDER’S SERVICES AND RESPONSIBILITIES**

- 2.1 General Services
- 2.2 Design and Preconstruction Services
- 2.3 Design-Builder Design Services
- 2.4 Legal Requirements
- 2.5 Government Approvals and Permits
- 2.6 Design-Builder's Construction Phase Services
- 2.7 Design-Builder's Responsibility for Project Safety
- 2.8 Warranty
- 2.9 Correction of Defective Work

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

#### **ARTICLE 4 – COUNTY’S SERVICES AND RESPONSIBILITIES**

#### **ARTICLE 5 – HAZARDOUS CONDITIONS AND UNFORESEEN PROJECT SITE CONDITIONS**

- 5.1 Hazardous Materials
- 5.2 Unforeseen Project Site Conditions
- 5.3 Archeological Conditions

#### **ARTICLE 6 – RESERVED**

#### **ARTICLE 7 - PAYMENT**

- 7.1 Guaranteed Maximum Price; Savings
- 7.2 Schedule of Values
- 7.3 Applications for Progress Payments
- 7.4 Payments and Retainage
- 7.5 Early Release of Subcontractor Retainage
- 7.6 Payment for On-Site and Off-Site Materials
- 7.7 Ownership of Construction Work
- 7.8 Substantial Completion
- 7.9 Final Completion and Final Payment

7.10 Allowances

7.11 Contingencies

**ARTICLE 8 – INDEMNIFICATION**

8.1 Proprietary Rights, Patent and Copyright Infringement

8.2 General Indemnity

8.3 Cumulative Rights

**ARTICLE 9 – TIME AND DELAY**

**ARTICLE 10 – CHANGES TO THE CONTRACT PRICE AND TIME**

10.1 Changes

10.2 Minor Changes in the Work

10.3 Price, Time, or Scope of Work Adjustment

10.4 Emergencies

**ARTICLE 11 – STOP WORK AND TERMINATION**

11.1 County's Right to Stop Work or Terminate for Convenience

11.2 County's Right to Perform and Terminate for Cause

11.3 Design-Builder's Right to Stop Work and Terminate for Cause

*(The remainder of this page intentionally left blank)*

## **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-Builder's 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.

7.4.3 Retainage will not be applied to preconstruction and or design invoices.

## **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%
---	----

Design-Builder Overhead & General Conditions, NTE or as per Design-Builder Contract:	<u>5%</u>
--	-----------

Total Design-Builder Markups, NTE:	10%
------------------------------------	-----

- 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-Builts, 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 Conditions**

## APPENDIX D – CONTRACT PROVISIONS (2 Pages)

In addition to other provisions required by the Federal agency or non-Federal entity, County is required to include the following additional provisions, as applicable, under 2 C.F.R. Pt. 200, Appendix II.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by [41 U.S.C. 1908](#), must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under [41 CFR Part 60](#), all contracts that meet the definition of “federally assisted construction contract” in [41 CFR Part 60–1.3](#) must include the equal opportunity clause provided under [41 CFR 60–1.4\(b\)](#), in accordance with Executive Order 11246, “Equal Employment Opportunity” ([30 FR 12319](#), [12935](#), [3 CFR Part, 1964](#)–1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at [41 CFR part 60](#), “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended ([40 U.S.C. 3141–3148](#)). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act ([40 U.S.C. 3141–3144](#), and [3146–3148](#)) as supplemented by Department of Labor regulations ([29 CFR Part 5](#), “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act ([40 U.S.C. 3145](#)), as supplemented by Department of Labor regulations ([29 CFR Part 3](#), “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act ([40 U.S.C. 3701–3708](#)). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with [40 U.S.C. 3702](#) and [3704](#), as supplemented by Department of Labor regulations ([29 CFR Part 5](#)). Under [40 U.S.C. 3702](#) of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of [40 U.S.C. 3704](#) are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or Sections ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under [37 CFR § 401.2 \(a\)](#) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of [37 CFR Part 401](#), “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act ([42 U.S.C. 7401–7671q](#).) and the Federal Water Pollution Control Act ([33 U.S.C. 1251–1387](#)), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act ([42 U.S.C. 7401–7671q](#)) and the Federal Water Pollution Control Act as amended ([33 U.S.C. 1251–1387](#)). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see [2 CFR 180.220](#)) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment ([31 U.S.C. 1352](#))—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by [31 U.S.C. 1352](#). Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See [§ 200.323](#). Procurement of recovered materials.

(K) See [§ 200.216](#). Prohibition on certain telecommunications and video surveillance services or equipment.

(L) See [§ 200.322](#). Domestic preference for procurements, and 2 CFR Part 184, Buy America preferences for infrastructure projects.

(M) Compliance with 1933 Buy American Act requirements if applicable.

#### **End of Appendix D – Contract Provisions**



September 13, 2024

Dawn Dargan  
Procurement Officer – Design and Construction  
Pima County Procurement Department  
150 W. Congress, 5<sup>th</sup> Floor  
Tucson, AZ 85701

RE: Pima County Middle Mile design phase cost proposal

Dear Dawn,

On behalf of eX<sup>2</sup> Technology we would like to sincerely thank you for the opportunity to present our design fee proposal and narratives of work to be performed for the Pima County Regional Middle Mile project. We greatly appreciate your consideration and the trust you have placed in us to assist with this important project.

We have carefully crafted the proposal to reflect our commitment to providing high-quality, efficient, and cost-effective solutions. As prime contractor eX<sup>2</sup> will be providing the following services during the design phase:

- Overall project management, decision-making and strategic direction
- Single point of contact for Pima County Contract administration, reporting and coordination
- Subcontractor management for permit planning
- Material vendor coordination
- Project accounting, billing and invoicing
- Design and constructability reviews
- Development of the GMP

In addition, during the design phase, our lead construction team member Team Fishel will be providing the following services:

- Design and constructability reviews
- Construction ride outs and field walks for constructability reviews

Finally, our A&E team member Kimley-Horn will be providing all design development, engineering documentation, utility coordination and permitting required. Please see the updated attached proposal from Kimley-Horn with the latest pricing and clarifications as requested.

Please feel free to reach out with any additional questions, we look forward to finalizing the contract and getting started on this important project towards developing ubiquitous and affordable broadband for the Pima County community.

Sincerely,

Jeff Sobotka  
Vice President of Government

6X <sup>2</sup> Technology Pima County Cost Proposal																																				
Staff Category	Hourly Rate	Overhead	Home Facilities Cost of Money	Profit	Total Unit Rate	Total Quantity	Total	DR 200 - Grant References	DR 630 - Through 534 - Utility Design & Coordination	DR 1020 - through 1023 - Project Administration, Accounting, & Coordination	DR 1080 - Design Reviews	Appendix B - Development of GMP	Appendix C - Design & Pre-Construction Services	DR 500 - Field Reviews, Design Coordination with Environmental, Plan Sheets	DR 600 - Design Work	DR 609 - Surveys and Mapping	DR 621 LEAD BASED PAINT AND ASBESTOS SURVEYS	DR 622 - NEPA Compliance Draft EA	DR 630 - Utilities and Railroads	DR 631 - Utility Conflicts and Adjustments	DR 632 - Utility Plans	DR 633 - Relocations and Adjustments	DR 634 - Utility Special Provisions and Clearance Letter	DR 640 - Traffic Control	DR 644 - Transportation Management Plan	DR 1000 CONTRACT ADMINISTRATION	DR 1020 - DESIGN-BUILDER ACTIVITIES	DR 1025 - DQMP Requirements	DR 1060 - Design Review2	DR 1063 - Review Types	DR 1065 - In Progress Design Workshops	DR 1067 - Other Interim County Oversight Reviews	DR 1068 - Design Changes	DR 1069 - Review of 100 Percent Design	DR 1070 - Quantity Estimates	
							\$ 4,167,734.29	\$ 15,984.16	\$ 27,194.32	\$ 480,696.03	\$ 46,021.11	\$ 20,617.14	\$ 17,359.80	\$ 224,688.32	\$ 1,460,306.89	\$ 263,808.48	\$ 17,652.00	\$ 181,650.12	\$ 253,492.47	\$ 37,697.56	\$ 12,276.22	\$ 12,049.06	\$ 23,041.67	\$ 62,914.00	\$ 11,425.92	\$ 714,889.16	\$ 5,180.08	\$ 11,988.22	\$ 94,673.16	\$ 161,692.82	\$ 10,696.74	\$ 10,630.20	\$ 3,398.67	\$ 3,937.06	\$ 6,635.40	
<b>6X<sup>2</sup> Technology Direct Labor</b>																																				
Director of Operations	\$ 138.79	\$ 22.21	\$ -	\$ 16.10	\$ 177.10	352	\$ 62,339.20	-	-	352	-	-	-	\$ 224,688.32																						
Project Manager	\$ 124.23	\$ 19.88	\$ -	\$ 14.41	\$ 158.52	1,560	\$ 247,291.20			1,560																										
Engineering Manager	\$ 118.40	\$ 18.64	\$ -	\$ 13.73	\$ 151.07	400	\$ 60,430.00		180				170	30	20																					
Permitting Manager	\$ 96.55	\$ 15.45	\$ -	\$ 11.20	\$ 123.20	120	\$ 14,744.00						90	-	30																					
GISP Engineer	\$ 84.80	\$ 13.58	\$ -	\$ 9.85	\$ 108.33	110	\$ 11,916.30						90	-	20																					
Designer/Team Lead	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ -																													
GIS Specialist	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ -																													
Estimator Manager	\$ 109.25	\$ 17.48	\$ -	\$ 12.67	\$ 139.40	200	\$ 27,880.00	80					80	40																						
Procurement Manager	\$ 94.68	\$ 15.15	\$ -	\$ 10.98	\$ 120.81	104	\$ 12,564.24	40					40	24																						
Contracts Manager	\$ 85.94	\$ 13.75	\$ -	\$ 9.97	\$ 109.66	1,560	\$ 17,109.60			1,560																										
Business Manager	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ -																													
<b>Kimley Horn Direct Labor</b>																																				
Sr. Professional III	\$ 108.16	\$ 211.63	\$ 1.05	\$ 31.97	\$ 352.71	424	\$ 149,547.56																													
Sr. Professional II	\$ 97.20	\$ 170.54	\$ 0.93	\$ 23.77	\$ 294.36	1,288	\$ 385,306.24																													
Sr. Professional I	\$ 74.88	\$ 146.44	\$ 0.73	\$ 22.13	\$ 244.18	1,031	\$ 251,751.06																													
Professional	\$ 58.40	\$ 114.21	\$ 0.57	\$ 17.26	\$ 190.44	2,188	\$ 416,684.14																													
Analyst	\$ 45.80	\$ 89.89	\$ 0.46	\$ 13.45	\$ 149.37	3,527	\$ 523,315.09																													
Designer	\$ 69.39	\$ 135.71	\$ 0.67	\$ 20.51	\$ 226.28	1,509	\$ 341,454.57																													
Technical	\$ 41.40	\$ 80.97	\$ 0.40	\$ 12.24	\$ 135.00	2,322	\$ 299,978.24																													
Admin	\$ 34.03	\$ 66.85	\$ 0.33	\$ 10.06	\$ 110.97	403	\$ 44,843.16																													
<b>Kimley Horn Direct Expenses</b>																																				
Construction Plans (11"x17")	\$ 9.91	\$ -	\$ -	\$ -	\$ 9.91	620	\$ 6,144.20																													
Roll Pads	\$ 39.13	\$ -	\$ -	\$ -	\$ 39.13	14	\$ 547.82																													
<b>Hornbeck Direct Labor</b>																																				
Project Principal	\$ 114.76	\$ 203.94	\$ 0.43	\$ 31.91	\$ 351.04	18	\$ 6,318.73																													
Project Manager	\$ 118.46	\$ 210.52	\$ 0.44	\$ 32.94	\$ 362.36	197	\$ 56,890.30																													
Sr. Project Engineer	\$ 93.87	\$ 166.38	\$ 0.35	\$ 28.02	\$ 288.22	111	\$ 31,770.63																													
Sr. Utility Engineer	\$ 101.80	\$ 180.91	\$ 0.38	\$ 28.31	\$ 311.40	301	\$ 93,730.53																													
Design Engineer	\$ 69.73	\$ 116.81	\$ 0.28	\$ 18.28	\$ 201.06	436	\$ 87,663.12																													
Sr. Designer	\$ 76.40	\$ 140.21	\$ 0.25	\$ 21.94	\$ 241.35	251	\$ 60,576.36																													
Designer	\$ 40.29	\$ 71.80	\$ 0.15	\$ 11.20	\$ 123.24	1,299	\$ 151,486.28																													
Utility Coordinator	\$ 48.28	\$ 85.80	\$ 0.18	\$ 13.43	\$ 147.68	338	\$ 49,971.20																													
CADD Technician	\$ 53.39	\$ 94.88	\$ 0.20	\$ 14.80	\$ 163.27	918	\$ 149,623.40																													
Administrative	\$ 47.55	\$ 84.80	\$ 0.18	\$ 13.22	\$ 145.45	12	\$ 1,745.41																													
Const. Cost Estimator	\$ 86.54	\$ 153.79	\$ 0.32	\$ 24.07	\$ 264.72	-	\$ -																													
<b>Aerotech Mapping Direct Labor</b>																																				
Principal	\$ 92.52	\$ 141.06	\$ -	\$ -	\$ 234.08	4	\$ 936.30																													
Project Manager	\$ 69.07	\$ 106.00	\$ -	\$ -	\$ 175.17	58	\$ 10,252.72																													
Flight Crew - Manager	\$ 73.35	\$ 112.23	\$ -	\$ -	\$ 185.58	18	\$ 3,340.36																													
Flight Crew - Pilot	\$ 30.19	\$ 46.19	\$ -	\$ -	\$ 76.38	198	\$ 1,374.85																													
Aerial Translogation & Calibration	\$ 32.15	\$ 49.19	\$ -	\$ -	\$ 81.34	140	\$ 1,137.53																													
Certified Photogrammetrist (Mapper)	\$ 40.38	\$ 61.78	\$ -	\$ -	\$ 102.16	-	\$ -																													
Stereoplotter Operations (Mapper)	\$ 24.93	\$ 38.14	\$ -	\$ -	\$ 63.07	-	\$ -																													
Orthophoto Technician	\$ 26.30	\$ 40.24	\$ -	\$ -	\$ 66.54	320	\$ 21,204.48																													
Lidar Technician (Classification)	\$ 27.50	\$ 42.08	\$ -	\$ -	\$ 69.58	-	\$ -																													
Stakeholder Operations (Mapper)	\$ 31.96	\$ 48.80	\$ -	\$ -	\$ 80.86	80	\$ 6,489.70																													
CAD Technician	\$ 24.93	\$ 38.14	\$ -	\$ -	\$ 63.07	290	\$ 18,177.50																													
Secretary / Clerical	\$ 33.50	\$ 51.26	\$ -	\$ -	\$ 84.76	1	\$ 84.76																													
<b>Aerotech Mapping Direct Expenses</b>																																				
Aerial Image Contact Prints / JPEG Files	\$ 3.15	\$ -	\$ -	\$ -	\$ 3.15	-	\$ -																													
Printer Media - 20x30	\$ 5.00	\$ -	\$ -	\$ -	\$ 5.00	-	\$ -																													
Travel Time	\$ 109.50	\$ -	\$ -	\$ -	\$ 109.50	-	\$ -																													
Aircraft Mobilization (Flight Time)	\$ 825.00	\$ -	\$ -	\$ -	\$ 825.00	18	\$ 14,850.00																													
Aircraft Camera	\$ 950.00	\$ -	\$																																	



September 12, 2024

Jake Loghry  
EX2 Technology  
3805 S. 148<sup>th</sup> Street  
Omaha, NE 68144

Re: Letter Agreement for Professional Services for  
RFQu-24000087; Design Build Services for Pima County Regional Middle Mile Project  
(PCRMMP)

Dear Mr. Loghry:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") submits this Letter Agreement ("Agreement") to EX2 Technology ("Client") for providing Final Design Services and Environmental Assessment for the PCRMMP ("Project").

### **Project Understanding**

Pima County applied for federal funding to create a 134-mile contiguous open access fiber optic network ring around its urban core. The proposed middle mile infrastructure project will reduce the cost for last mile providers to connect unserved and underserved communities by providing a neutral network that last mile providers can access in a non-discriminatory open access model. This project is funded partially by the National Telecommunications and Information Administration (NTIA).

Kimley-Horn and Associates, Inc (KHA) partnered with EX Technology and Team Fishel to form the Design-Build team. KHA's role on the project is prime designer providing final design professional services.

### **Scope of Services**

Kimley-Horn will provide the services specifically set forth below.

1. RFQu-24000087 - Appendix A – Project Scope of Work & Appendix C – Design-Builder General Conditions
2. Project Assumptions

### **Project Assumptions**

Per the Pima County Design Fee meeting held on 8/22/24 from 3-4pm attended by Pima county, EX2 Technology, and Kimley-Horn stakeholders below are the project assumptions that were incorporated onto the Design Fee development:

1. The 10-mile maximum design package requirement was not the intent of the RFQu and Pima County expectations. It is assumed 18-20 mile design segments are preferred by the County in addition to the specific permit packages for areas within the project limits that require long review periods by stakeholders other than County staff.
2. Assumed Design Segment Limits
  - a. West Segment– Marana HS to SR 86 (along Sandario Road) (100 Scale Plan Sheets)

- b. Valencia Segment – SR 86 to Alvernon Way (along Valencia Road) (50 Scale Plan Sheets)
  - c. South Segment – Alvernon Way to Aerospace Parkway to Nogales Highway to Sahuarita Road (100 Scale Plan Sheets)
  - d. Sahuarita Segment – Nogales Highway to SR 83 (100 Scale Plan Sheets)
  - e. East Segment – I-10/Colossal Cave Road TI to Freeman Road/Speedway Boulevard (100 Scale Plan Sheets)
  - f. Northeast Segment - Freeman Road/Speedway Boulevard to Ina Road/Sr 77 (50 Scale Plan Sheets)
  - g. North Segment – Magee Road/SR 77 to La Canada Drive/Tangerine Road (50 Scale Plan Sheets)
  - h. Marana Segment – Project Limits within Town Limits
3. Assumed Specific Permit Packages
- a. ADOT Package
    - i. SR 86 – Sandario Road to Valencia Road
    - ii. SR 83 – Sahuarita Road to I-10
    - iii. I-10 - SR 83 to Colossal Cave Road
    - iv. SR 77 – Ina Road to Magee Road
    - v. I-10/Tangerine Road TI Crossing
    - vi. I-19/Valencia Road TI Crossing
  - b. UPRR Package
    - i. All design crossing UPRR ROW
  - c. Central Arizona Project (CAP) Package
    - i. 2 CAP crossing along Sandario Road
  - d. Pima County Flood Control District Package
    - i. 9 Bridge Crossings
4. There is an ongoing TRICO electric project along Tangerine Road in which Pima County will receive conduit approximately from the intersection of Tangerine Rd/Adonis Rd (Sta. 454+24.88) to Sta. 567+80.00. The County is also discussing adding a conduit within existing ADOT ROW at I-10/Tangerine Rd TI. This project will populate the conduit with fiber.

**Additional Services**

Any services not specifically provided for in the above scope will be billed as additional services and performed at Kimley-Horn's then-current hourly rates.

**Information Provided By Client**

Kimley-Horn shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

**Schedule**

Kimley-Horn will perform the services as expeditiously as practicable with the goal of meeting a mutually agreed upon schedule.

**Fee and Expenses**

Kimley-Horn will perform the services in Attachment A – Final Design Fee on a labor fee plus expense basis.

Kimley-Horn will not exceed the total maximum labor fee shown without authorization from the Client. However, Kimley-Horn reserves the right to reallocate amounts among tasks as necessary.

Labor fee will be billed on an hourly basis according to our then-current rates. All permitting, application, and similar project fees will be paid directly by the Client. Should the Client request Kimley-Horn to advance any such project fees on the Client's behalf, an invoice for such fees, with a fifteen percent (15%) markup, will be immediately issued to and paid by the Client.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

## Closure

In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard Provisions, "Kimley-Horn" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to EX2 Technology.

To proceed with the services, please have an authorized person sign this Agreement below and return to us. We will commence services only after we have received a fully-executed agreement. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

To ensure proper set up of your projects so that we can get started, please complete and return with the signed copy of this Agreement the attached Request for Information. Failure to supply this information could result in delay in starting work on this project.

We appreciate the opportunity to provide these services. Please contact me if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Signed:



Printed Name: Tom McCullough, P.E.

Title: Associate



EX2 Technology

SIGNED: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

Attachment A – Final Design Fee

Attachment B – Standard Provisions

**ATTACHMENT A – Final Design Fee**

Pima County Regional Middle Mile Project (PCRMMP)

Fee Calculation - Task A: DESIGN SERVICES

Kimley-Horn and Associates, Inc.

September 4, 2024

Direct Labor

<u>Classification</u>	<u>Total Hours</u>	<u>Hourly Rate</u>	<u>Labor Cost</u>
Sr. Professional III	424	\$108.16	\$ 45,859.84
Sr. Professional II	1,285	\$87.20	\$ 112,052.00
Sr. Professional I	1,031	\$74.88	\$ 77,201.28
Professional	2,188	\$58.40	\$ 127,779.20
Analyst	3,527	\$45.50	\$ 160,478.50
Designer	1,509	\$69.39	\$ 104,709.51
Technician	2,222	\$41.40	\$ 91,990.80
Admin	405	\$34.03	\$ 13,782.15
	12,591	Total Labor Cost:	<u>\$ 733,853.28</u>

Overhead

Overhead (Audited Overhead Rate)	195.57%	<u>\$ 1,435,196.86</u>
Home Facilities Capital Cost of Money	0.97%	<u>\$ 7,118.38</u>
	Subtotal	<u>\$ 2,176,168.52</u>

Direct Expenses

<u>Type</u>	<u>Amount</u>	<u>Unit Costs</u>	<u>Cost</u>
Construction Plans (11"x17")	620	\$9.91	\$ 6,144.20
Roll Plots	14	\$39.13	\$ 547.82
Total Estimated Direct Expenses:			<u>\$ 6,692.02</u>

Outside Services, Allowances, and Consultants

	<u>Subconsultant</u>	<u>Service</u>	<u>Cost</u>
Task A	Horrocks	Segment Lead/Utility Coordination	\$ 690,004.07
Task A	Terracon	Geotechnical	\$ 62,721.47
Task A	Psomas	Project Survey	\$ 132,957.44
Task A	Aerotech	Project Aerial Survey	\$ 113,825.20
Task A	OG Engineering	UPRR RR Coordination	\$ 78,000.00
Task A	Newton Environmental Consulting	Hazardous Materials Testing	\$ 11,864.87
	Total of Subconsultants		<u>\$ 1,089,373.05</u>

10% - Fixed Fee (Direct labor + Overhead x Multiplier) \$ 216,905.01

Total Fee: \$ 3,489,138.60

Pima County Regional Middle Mile Project (PCRMMP)  
Derivation of Hours

Task No.	Description	# Sheets	KH Budget	KH Hours	Sr. Professional III	Sr. Professional II	Sr. Professional I	Professional	Analyst	Designer	Technician	Admin
	TASK A - DESIGN SERVICES											
	TASK A.1 - DR 506 DESIGN WORK PERFORMED BY DESIGN-BUILDER		\$ 1,390,937.30	7808	0	295	530	1534	2334	1300	1815	0
A.1.1	Develop ITS Basefiles based on Survey topo		\$ 31,468.03	150		10	40	40	30	30		
	Develop & Maintain KMZ File (Preliminary, 60%, 100%, RFC)		\$ 9,464.51	60			2	3	5	10	40	
	Develop Details (11 Details) (60%, 100%, RFC)	11	\$ 23,866.25	120		8	12	20	30	40	10	
	Develop Special Details (3 Details) (60%, 100%, RFC)	3	\$ 7,528.08	40		3	3	6	8	10	10	
	Splice Details (1 Sheet)	1	\$ 2,245.31	12			1	2	3	4	2	
	Face Sheet, Index Sheet, General Notes Sheet, Construction Notes Sheet	4	\$ 6,051.90	32		2	2	4	6	10	8	
	Design Data Sheets	2	\$ 4,816.06	24		2	2	4	8			
	Project Control & Survey Sheets	45	\$ 113,411.64	720		20	25	135	225		315	
	Project Control Information Sheets	2	\$ 4,954.59	28		2	2	8	16			
	Geometric Key Maps (Project Segments)	5	\$ 14,009.26	90		2	3	15	30		40	
	Geometric Layout Sheets	70	\$ 177,922.43	1120		30	40	250	300		500	
	Pima County and City of Tucson Submittal Packages											
	West Segment Summittal Package (19 Miles) (Rural Area) (60%, 100%, RFC) (100 Scale)	43	\$ 96,385.46	526		26	50	100	170	90	90	
	Valencia Segment Submittal Package (17 Miles) (Urban Area) (60%, 100%, RFC) (50 Scale)	76	\$ 180,689.68	967		31	62	205	300	256	113	
	South Segment Submittal Package (17 Miles) (Rural Area) (60%, 100%, RFC) (100 Scale)	38	\$ 85,106.74	469		21	41	88	163	78	78	
	Sahuarita Segment Submittal Package (18 Miles) (Rural Area) (60%, 100%, RFC) (100 Scale)	41	\$ 90,341.94	497		23	43	95	170	83	83	
	East Segment Summittal Package (18 Miles) (Rural Area) (60%, 100%, RFC) (100 Scale)	41	\$ 90,341.94	497		23	43	95	170	83	83	
	Northeast Segment Summittal Package (13 Miles) (Urban Area) (60%, 100%, RFC) (50 Scale)	59	\$ 143,019.12	769		24	48	160	250	199	88	
	North Segment Summittal Package (18 Miles) (Urban Area) (60%, 100%, RFC) (50 Scale)	81	\$ 197,338.03	1062		33	66	219	350	274	120	
	Railroad Crossing Submittal Packages (6 UPRR Crossings) (6 Sheets) (60%, 100%, RFC)	6	\$ 19,147.89	108		6	6	12	12	24	48	
	CAP Submittal Packages (2 CAP Crossings) (2 Sheets) (60%, 100%, RFC)	2	\$ 6,382.63	36		2	2	4	4	8	16	
	Pima County Flood Control District Submittal Packages (7 Bridge Crossings) (7 Sheets) (60%, 100%, RFC)	7	\$ 22,339.21	126		7	7	14	14	28	56	
	ADOT Submittal Packages (5 ADOT Crossings) (32 Sheets) (60%, 100%, RFC)	32	\$ 43,684.44	240		15	20	40	40	45	80	
	SWPPP	4	\$ 20,422.15	115		5	10	15	30	20	35	
			\$ -									
	TASK A.4 - DR 521 LEAD BASED PAINT AND ASBESTOS SURVEYS		\$ 5,687.13	20	0	20	0	0	0	0	0	0
A.4.1	Coordination with Sub Consultant		\$ 5,687.13	20		20						
			\$ -									
	TASK A.5 - DR 522 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE		\$ 181,650.10	909	0	313	44	0	552	0	0	0
A.5.1	Draft Environmental Assessment (DEA)		\$ -	0								
A.5.2	Executive Summary		\$ 2,324.42	12		4			8			
A.5.3	Purpose and Need		\$ 3,301.14	16		4	4		8			
A.5.4	Description of Proposed Action and Alternatives		\$ 8,252.86	40		10	10		20			
A.5.5	Description of the Affected Environment:		\$ 26,211.67	140		40			100			
A.5.6	Analysis of Environmental Impacts:		\$ 26,211.67	140		40			100			
A.5.7	Applicable Environmental Permits and Regulatory Requirements		\$ 4,327.31	20		10			10			
A.5.8	Consultations		\$ 581.10	3		1			2			
A.5.9	References		\$ 432.73	2		1			1			
A.5.10	Draft Environmental Assessment (DEA) Sub1		\$ 5,811.05	30		10			20			
A.5.11	Address NTIA Comments on DEA Sub1		\$ 11,622.10	60		20			40			
A.5.12	DEA Sub2		\$ 2,905.52	15		5			10			
A.5.13	Address NTIA Comments on DEA Sub2		\$ 5,811.05	30		10			20			
A.5.14	DEA Sub3/Public Comment Period		\$ 1,162.21	6		2			4			
A.5.15	Address Public Comments		\$ 5,811.05	30		10			20			
A.5.16	Final EA (FEA) Sub1		\$ 1,594.94	8		3			5			

Pima County Regional Middle Mile Project (PCRMMP)  
Derivation of Hours

Task No.	Description	# Sheets	KH Budget	KH Hours	Sr. Professional III	Sr. Professional II	Sr. Professional I	Professional	Analyst	Designer	Technician	Admin
A.5.17	Address FEA Sub1 Comments		\$ 1,162.21	6		2			4			
A.5.18	FEA Sub2 Approved/Finding of No Significant Impact (FONSI) issued		\$ 284.36	1		1						
A.5.19	Technical Documents to in Support of EA		\$ -	0								
A.5.20	Biological Evaluation		\$ 14,589.58	80		20			60			
A.5.21	Preliminary Initial Site Assessment		\$ 11,746.01	70		10			60			
A.5.22	Section 404/401 Desktop Compliance Memorandum		\$ 14,589.58	80		20			60			
A.5.23	Cultural Resources Compliance County Coordination on Avoidance Areas/Compliance		\$ 15,856.14	60		30	30					
A.5.24	Coordination with NTIA NEPA Planner		\$ 17,061.40	60		60						
			\$ -									
	TASK A.6 - DR 530 UTILITIES AND RAILROAD		\$ 35,569.81	196	0	18	18	30	40	30	40	20
	Utility Coordination Design Updates		\$ 35,569.81	196		18	18	30	40	30	40	20
			\$ -									
	TASK A.7 - DR 540 TRAFFIC CONTROL		\$ 52,913.99	265	0	19	82	75	89	0	0	0
A.7.1	Traffic Control General Notes		\$ 1,650.57	8		2	2		4			
A.7.2	Maintenance of Traffic Table		\$ 9,672.04	49		4	15	10	20			
A.7.3	Traffic Control Detail - Work Beyond The Clearzone / Behind Curb		\$ 3,199.34	16		1	5	5	5			
A.7.4	Traffic Control Detail - Single Lane Closure on a Multi-Lane Roadway		\$ 6,398.67	32		2	10	10	10			
A.7.5	Traffic Control Detail - Multiple Lane Closure on a Multi-Lane Roadway		\$ 6,398.67	32		2	10	10	10			
A.7.6	Traffic Control Detail - Single Lane Closure at Intersections		\$ 6,398.67	32		2	10	10	10			
A.7.7	Traffic Control Detail - Shoulder Closure		\$ 3,199.34	16		1	5	5	5			
A.7.8	Traffic Control Detail - Shoulder Closure at Intersections		\$ 3,199.34	16		1	5	5	5			
A.7.9	Traffic Control Detail - Soldier Trail - Speedway to Tanque Verde		\$ 6,398.67	32		2	10	10	10			
A.7.10	Traffic Control Detail - Lane Shift on a Multi-Lane Roadway		\$ 6,398.67	32		2	10	10	10			
			\$ -									
	TASK A.8 - DR 544 TRANSPORTATION MANAGEMENT PLAN		\$ 11,425.92	47	4	8	20	15	0	0	0	0
A.8.1	Develop TMP Memo		\$ 11,425.92	47	4	8	20	15				
			\$ -									
	TASK A.9 - DR 1000 CONTRACT ADMINISTRATION		\$ 714,889.11	3346	420	612	337	534	512	179	367	385
A.9.1	Project Management & Administration		\$ 134,938.60	665	20	225	40	80	150			150
A.9.2	Subconsultant Coordination		\$ 57,001.92	255		80	30	75		35	35	
A.9.3	Quality Control/Quality Assurance Review (60%, 100%, RFC)		\$ 140,328.66	510	250	50	80	50				80
A.9.4	Design Documentation		\$ 93,769.84	500		50	50	80	120	80	120	
A.9.5	Develop and Maintain Project Design Schedule		\$ 18,695.14	90		30		30	30			
A.9.6	OTS Submittal Reviews (12 In-Person)		\$ 30,126.67	114		57	57					
A.9.7	Design Workshops (Assume 2 Workshop Meetings)		\$ 19,973.31	112		16	16	16	16		32	16
A.9.8	Submit 60% Design Level Packages (12 Segments/Submittals)		\$ 13,913.91	76		8	8	16	12	8	16	8
A.9.9	Submit 100% Design Level Packages (12 Segments/Submittals)		\$ 13,913.91	76		8	8	16	12	8	16	8
A.9.10	Submit RFC% Design Level Packages (12 Segments/Submittals)		\$ 13,913.91	76		8	8	16	12	8	16	8
A.9.11	Segment Quantity Estimates		\$ 40,715.17	250		10	20	40	80		100	
A.9.12	Develop DQMP, Checking Procedures, Training Class, and Monitoring of Quality		\$ 76,584.53	290	150	20		40	40			40
A.9.13	Develop Technical Specifications		\$ 12,482.34	60		10	10	30	10			
A.9.14	Compile and Address Summary of Comments for Each Segment Submittal		\$ 20,916.02	140		10	10	15	30			75
A.9.15	Set up Project Wise Software Platform and Project Folders		\$ 6,582.92	42						10	32	
A.9.16	Participate in Development of GMP Packages		\$ 21,032.28	90		30		30		30		

September 3, 2024

Thomas McCullough, P.E.  
Kimley-Horn  
1661 East Camelback Road  
Suite 400  
Phoenix, AZ 85016

Subject: Pima County, Middle Mile- Survey Services  
Psomas:7KHA240201

Dear Thomas,

In accordance with your request, Psomas is pleased to submit this Proposal to provide Professional Surveying Services for RFQu-24000087; Design Build Services for Pima County Regional Middle Mile Project (PCRMMP). Working together with you, Psomas will provide individual attention, integrity, and our commitment to a successful project.

This Proposal reflects your request for Survey Professional Services for a 134-mile continuous open-access fiber optic network ring surrounding the outer area of greater Tucson and its rural communities to include unincorporated portions of Pima County.

Psomas proposes to provide this Scope of Work for a fee of one-hundred thirty-two thousand nine-hundred fifty-seven dollars and forty-four cents (\$132,957.44). This Proposal is subject to a Fully Executed Agreement between All Associated "Parties" and a Notice to Proceed.

If you have any questions concerning the proposal, please do not hesitate to give me a call at (520) 690-7805. We appreciate the opportunity to provide our services to Kimley-Horn and Pima County.

Respectfully Submitted,

**P S O M A S**



Richard Iman, RLS

EXHIBIT A  
SCOPE OF WORK

Project: Pima County, Middle Mile

Job Number: 7KHA240201

Psomas will provide Professional Surveying Services for RFQu-24000087; Design Build Services for Pima County Regional Middle Mile Project (PCRMMP) to expand and extend middle mile broadband infrastructure. The PCRMMP is located within Tucson and the surrounding unincorporated portions of Pima County as indicated on Exhibit “B” Project Map and consists of design build for a 134-mile contiguous open access fiber optic network ring around its urban core.

**SCOPE OF WORK (SOW)**

Psomas will provide the following services as a part of this SOW:

- **Coordination Meetings:** Psomas will attend up to four (4), one-hour meetings. One (1) meeting will be with the Pima County Surveyor prior to the project start to discuss the SOW, procedures, and deliverables. The remaining three (3), one-hour meetings will be coordination meetings with the design team to discuss progress and scheduling.
- **Datum/Basis of Bearing/Control:** Horizontal control will be based upon the Arizona State Plane Coordinate System of 1983 (SPCS) Central Zone, with units in International Feet, referenced to the North American Datum of 1983 (NAD83) reference frame. Elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88).
- **Topographic Mapping:** Psomas will set one hundred ninety-eight (198) aerial ground targets (GCPs). Aerial Photo and LiDAR mapping will be provided by AeroTech. Psomas will provide Photo-ID points for locations where GCPs go missing between the time they were set and the flight. Psomas will provide a random sample of ground shots and test the surface-model against them to determine accuracy level of the surface model.
- **Culture Surveys:** Psomas will perform a culture survey at up to five (5) UPRR crossing sites and up to five (5) overhead utility crossing sites. Culture may be collected using a combination of laser scan data, and field data collected by RTK GNSS and/or conventional survey methods. Psomas survey will provide additional as built information at these ten (10) locations as requested by the Project Engineer. Items to be collected may include spot elevations at tie points of existing pavement, drainage structures, culverts, sidewalks, walls, visible evidence of utilities, and other miscellaneous items as required.

Psomas Fee ..... \$ **132,957.44**

Completion of any work under this SOW is subject to a prior Fully Executed Agreement between ALL Parties along with a Notice to Proceed.

Any work performed outside of this SOW is subject to be performed on a Cost-Plus basis at Psomas’ Hourly Rates per Exhibit D-Direct Rates with a ten percent (10%) fee with prior written authorization.

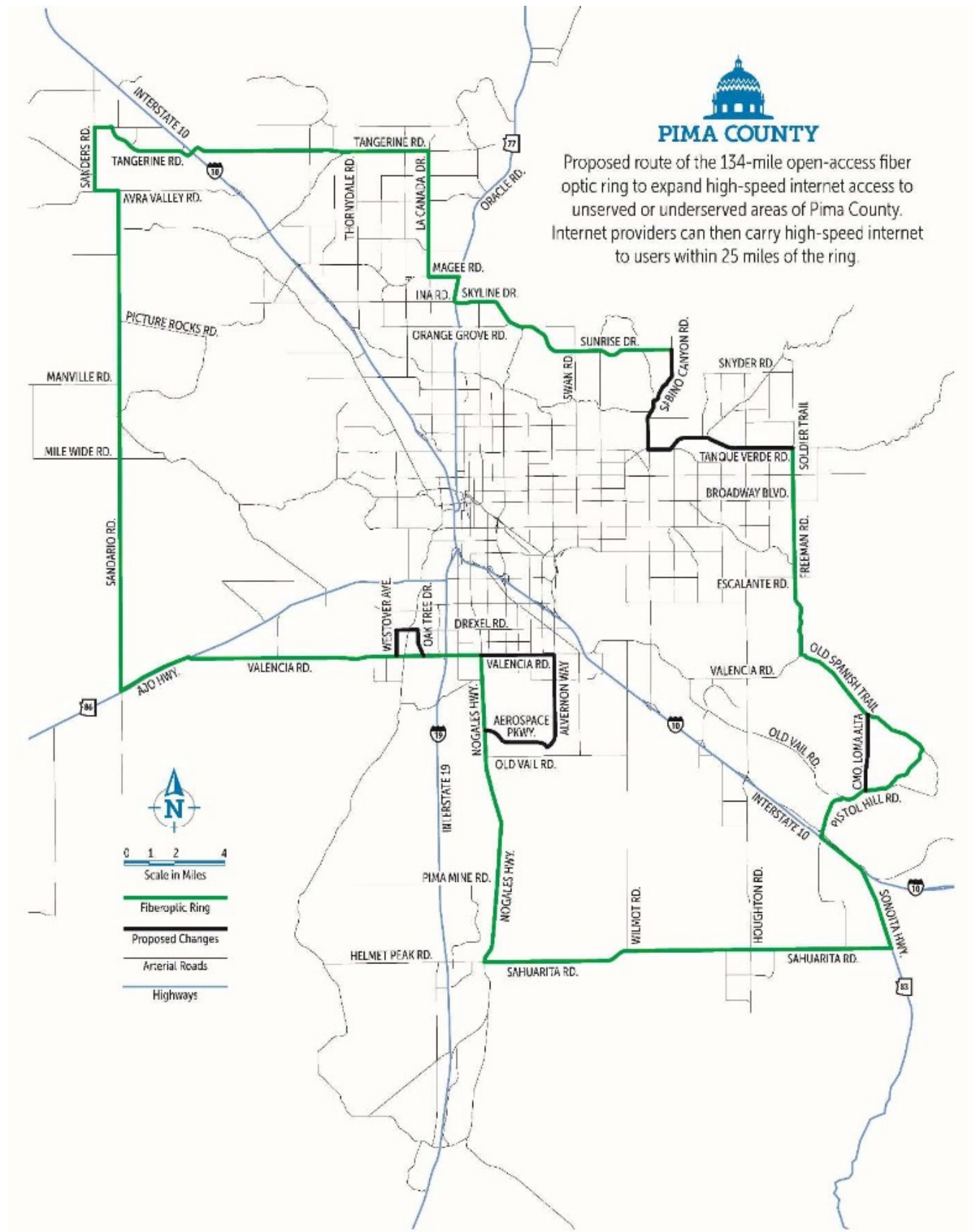
**Exclusions:**

Section line, Rights-of-Way, Property line, Easement research & boundary surveys  
Acquisition/Review of Title Reports  
Right-of-Way Plans  
Preparation of Legal Descriptions with exhibits and Temporary Construction Easements (TCEs)  
Staking/Locating Bore-holes for Geotech  
BlueStake & Sub-surface Utility Detection  
Storm and sanitary sewer structure invert elevations  
Construction staking

**TOTAL NOT-TO-EXCEED FEE ..... \$132,957.44**



## EXHIBIT B PROJECT MAP



## EXHIBIT C HOURS

PSOMAS		Project Number:		7KHA240201									
Project Fee Estimate/ Authorized Task List		Project Name:		Pima County- Middle Mile									
		Project Manager:		Richard Iman									
Labor Cost = Direct Labor Rates + Overhead		Date:		9/3/2024									
BLI No.	Design Description	Survey Manager		Project Surveyor		Party Chief		2-Person Crew		Survey Tech		Psomas Labor Cost	Task Total
		\$ 166.96 /Hr.		\$ 155.08 /Hr.		\$ 97.80 /Hr.		\$ 169.06 /Hr.		\$ 87.32 /Hr.			
		Hrs.	Amount	Hrs.	Amount	Hrs.	Amount	Hrs.	Amount	Hrs.	Amount		
Task # 1 Survey and Mapping													
1.1	Project Control	2	\$ 333.92	16	\$ 2,481.28	4	\$ 391.20	40	\$ 6,762.40		\$ -	\$ 9,968.80	\$ 10,965.68
1.2	Aerial GCPs	2	\$ 333.92	32	\$ 4,962.56	24	\$ 2,347.20	240	\$ 40,574.40	160	\$ 13,971.20	\$ 62,189.28	\$ 68,408.21
1.3	Aerial Photo IDs	2	\$ 333.92	24	\$ 3,721.92	4	\$ 391.20	40	\$ 6,762.40		\$ -	\$ 11,209.44	\$ 12,330.38
1.4	Aerial Ground-truthing	2	\$ 333.92	32	\$ 4,962.56	8	\$ 782.40	80	\$ 13,524.80		\$ -	\$ 19,603.68	\$ 21,564.05
1.5	5 RR X-ing sites	1	\$ 166.96	4	\$ 620.32	4	\$ 391.20	40	\$ 6,762.40	8	\$ 698.56	\$ 8,639.44	\$ 9,503.38
1.6	5 OH Utility sites	1	\$ 166.96	4	\$ 620.32	4	\$ 391.20	40	\$ 6,762.40	8	\$ 698.56	\$ 8,639.44	\$ 9,503.38
1.7	Coordination & Meetings		\$ -	4	\$ 620.32		\$ -		\$ -		\$ -	\$ 620.32	\$ 682.35
Total Survey and Mapping		10	\$ 1,669.60	116	\$ 17,989.28	48	\$ 4,694.40	480	\$ 81,148.80	176	\$ 15,368.32	\$ 120,870.40	\$ 132,957.44

**EXHIBIT D  
DIRECT RATES**

<b>PIMA COUNTY MIDDLE MILE DIRECT BILLING RATES PSOMAS</b>			
<b>Labor Classification</b>	<b>2023 Direct Labor Rates</b>	<b>Overhead 179.43%</b>	<b>Direct +OH Labor Rate</b>
Survey Manager	\$ 59.75	\$ 107.21	\$ 166.96
Project Surveyor	\$ 55.50	\$ 99.58	\$ 155.08
Party Chief	\$ 35.00	\$ 62.80	\$ 97.80
2-Person Survey Crew	\$ 60.50	\$ 108.56	\$ 169.06
Survey Tech	\$ 31.25	\$ 56.07	\$ 87.32
Administration	\$ 33.50	\$ 60.11	\$ 93.61

**EXHIBIT E  
FEE BY TASK**

<b>PSOMAS SERVICES</b>			
<b>Task</b>	<b>Description</b>	<b>Task Total</b>	<b>Fee 10%</b>
Task # 1	Survey and Mapping		
1.1	Project Control	\$ 9,968.80	\$ 996.88
1.2	Aerial GCPs	\$ 62,189.28	\$ 6,218.93
1.3	Aerial Photo IDs	\$ 11,209.44	\$ 1,120.94
1.4	Aerial Ground-truthing	\$ 19,603.68	\$ 1,960.37
1.5	5 RR X-ing sites	\$ 8,639.44	\$ 863.94
1.6	5 OH Utility sites	\$ 8,639.44	\$ 863.94
1.7	Coordination & Meetings	\$ 620.32	\$ 62.03
<b>TASK TOTALS</b>		<b>\$ 120,870.40</b>	<b>\$ 12,087.04</b>

**Fee (10%)** **\$ 12,087.04**

**Contract Total \$ 132,957.44**

EXHIBIT F  
TOTAL COST

<b><u>ESTIMATED DIRECT LABOR (PSOMAS)</u></b>				
<b><u>Classification</u></b>	<b><u>Estimated Man-Hours</u></b>	<b><u>Direct+OH Labor Rate</u></b>	<b><u>Direct Hourly Rate</u></b>	<b><u>Loaded Labor Costs</u></b>
Survey Manager	10	\$ 166.96	\$ 59.75	\$ 1,669.60
Project Surveyor	116	\$ 155.08	\$ 55.50	\$ 17,989.28
Party Chief	48	\$ 97.80	\$ 35.00	\$ 4,694.40
2-Person Survey Crew	480	\$ 169.06	\$ 60.50	\$ 81,148.80
Survey Tech	176	\$ 87.32	\$ 31.25	\$ 15,368.32
Administration	0	\$ 93.61	\$ 33.50	\$ -
<b>Direct Labor Total</b>	<b>830.00</b>			<b>\$ 120,870.40</b>

TOTAL ESTIMATED LABOR (PSOMAS)	\$ 120,870.40
FEE (10%)	\$ 12,087.04
<b>SUBTOTAL</b>	<b>\$ 132,957.44</b>
<b>CONTRACT TOTAL</b>	<b>\$ 132,957.44</b>

9/3/2024

FIRM NAME: Horrocks

9/3/2024

CONTRACT NO.: u-24000087

PROJECT NO.: RFQ-u24000087

PROJECT NAME: Pima County Regional Middle Mile (PCRMMP)

## DERIVATION OF COST PROPOSAL SUMMARY

## ESTIMATED DIRECT LABOR

CLASSIFICATION	ESTIMATED PERSON-HOURS	AVG. HOURLY RATE	LABOR COSTS
Project Principal	18	\$ 114.76	\$ 2,065.68
Project Manager	157	\$ 118.46	\$ 18,598.22
Sr Project Engineer	111	\$ 93.57	\$ 10,386.27
Sr Utility Engineer	301	\$ 101.80	\$ 30,641.80
Design Engineer	436	\$ 65.73	\$ 28,658.28
Sr. Designer	251	\$ 78.90	\$ 19,803.90
Designer	1229	\$ 40.29	\$ 49,516.41
Utility Coordinator	338	\$ 48.28	\$ 16,318.64
CADD Technician	918	\$ 53.39	\$ 49,012.02
Administrative	12	\$ 47.55	\$ 570.60
Const. Cost Estimator	0	\$ 86.54	\$ -
Total Hours	3771		\$ 225,571.82

Total Labor Cost		\$ 225,571.82
Negotiated Overhead	177.71% of Direct Labor	\$ 400,863.68
Negotiated Facilities Capital Cost of Money (FCCM)	0.3728% of Direct Labor	\$ 840.93

**SUB-TOTAL DIRECT LABOR** **\$ 627,276.43**

## ESTIMATED DIRECT EXPENSES

	COST
0	
Lodging	\$ -
Per Diem	\$ -
Mileage - \$0.67/mile	\$ -
<b>Subtotal Travel</b>	<b>\$ -</b>

## SUMMARY

TOTAL ESTIMATED COST TO CONSULTANT		\$ 627,276.43
NET FEE = (Direct Labor + Overhead) X Multiplier	10.00%	\$ 62,727.64

**TOTAL LUMP SUM COST** **\$ 690,004.07**

Brian Christensen, Project Principal

Date

FIRM NAME: Horrocks

CONTRACT NO.: u-24000087  
 PROJECT NO.: RFQ-u24000087  
 PROJECT NAME: Pima County Regional Middle Mile (PCRMP)

**SUMMARY OF PERSON-HOURS**

TASK	DESCRIPTION	CLASSIFICATION											TOTAL	
		Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator		
1	GENERAL / MANAGEMENT & ADMINISTRATION	0	8	12	0	16	24	0	0	0	12	0	72	
2	UTILITIES	0	0	0	109	0	0	668	302	392	0	0	1,471	
3	REVIEWS AND MEETINGS	12	120	80	148	121	160	237	36	4	0	0	918	
4	DESIGN	6	27	17	44	263	67	324	0	522	0	0	1,270	
5	QUANTITIES	0	2	2	0	36	0	0	0	0	0	0	40	
TOTALS		18	157	111	301	436	251	1229	338	918	12	0	3,771	

PERCENTAGES	0.48%	4.16%	2.94%	7.98%	11.56%	6.66%	32.59%	8.96%	24.34%	0.32%	0.00%	100.00%
-------------	-------	-------	-------	-------	--------	-------	--------	-------	--------	-------	-------	---------

FIRM NAME: Horrocks

CONTRACT NO.: u-24000087  
 PROJECT NO.: RFQ-u24000087  
 PROJECT NAME: Pima County Regional Middle Mile (PCRMP)  
 \_\_\_\_\_  
 \_\_\_\_\_

**DERIVATION OF PERSON-HOURS****GENERAL / MANAGEMENT & ADMINISTRATION**

TASK				Scale (Full Size)	No. of Sheets	Hrs/Sht	Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator	TOTAL		
PROJECT MANAGEMENT																				
DR 1020	DESIGN-BUILDER ACTIVITIES						-	-	12	-	-	-	-	-	-	-	12	-	24	12 month design duration
	Maintain adequate staff of personnel						-	-	-	-	-	-	-	-	-	-	-	-	-	
	Establish Internal accounting methods, monitor costs						-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maintain contract administration procedures						-	-	12	-	-	-	-	-	-	-	12	-	24	
	Design consensus, team building meetings						-	-	-	-	-	-	-	-	-	-	-	-	-	no team building meetings
DR 1021	PROJECT CONTROL						-	-	-	-	-	-	-	-	-	-	-	-	-	
	Develop and maintain project progress/schedule						-	-	-	-	-	-	-	-	-	-	-	-	-	
DR 1025	DESIGN QUALITY MANAGEMENT PLAN						-	8	-	-	16	24	-	-	-	-	-	-	48	
	Identify personnel and responsibilities						-	-	-	-	-	-	-	-	-	-	-	-	-	Prime consultant will do DQMP
	Technical review of the design						-	4	-	-	8	12	-	-	-	-	-	-	24	Prime consultant will do DQMP
	Checking the design						-	4	-	-	8	12	-	-	-	-	-	-	24	
	Training of employees in the QMP						-	-	-	-	-	-	-	-	-	-	-	-	-	Prime consultant will do DQMP
	Monitor and document QMP						-	-	-	-	-	-	-	-	-	-	-	-	-	Prime consultant will do DQMP
DR 1040	DESIGN DOCUMENTATION						-	-	-	-	-	-	-	-	-	-	-	-	-	
	Design documentation						-	-	-	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL							-	8	12	-	16	24	-	-	-	-	12	-	72	



FIRM NAME: Horrocks

CONTRACT NO.:	u-24000087
PROJECT NO.:	RFQ-u24000087
PROJECT NAME:	Pima County Regional Middle Mile (PCRMMP)

## DERIVATION OF PERSON-HOURS

UTILITIES

TASK	Scale (Full Size)	No. of Sheets	Hrs/Sht	Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator	TOTAL	
UTILITY COORDINATION																
DR 530 Utility Coordination / Oversight				-	-	-	21	-	-	292	226	392	-	-	931	Assume 8 submittal packages
Coordinate with 811 / Review Utility Owners / Set up mapping request tracker				-	-	-	1	-	-	-	28	-	-	-	29	
Contact Utility companies / Request Utility mapping				-	-	-	8	-	-	28	72	-	-	-	108	
Review Utility base maps and permit logs				-	-	-	2	-	-	96	14	-	-	-	112	
Develop project-wide utility base map				-	-	-	8	-	-	56	-	392	-	-	456	
Research Utility easements/right-of-way				-	-	-	2	-	-	112	112	-	-	-	226	R/W project not including private utility easement deliverables, only title searches from parcel properties
DR 531 Utility Conflicts and Adjustments				-	-	-	40	-	-	204	-	-	-	-	244	Assume 8 submittal packages
Identify conflicts and mitigations				-	-	-	-	-	-	-	-	-	-	-	-	no data to measure against
Develop Utility Conflict Matrix for each submittal package (assume 8 packages)				-	-	-	-	-	-	-	-	-	-	-	-	utility name and contact person only
Develop and submit Weekly Progress Report				-	-	-	4	-	-	104	-	-	-	-	108	assume 52 week design schedule
Prepare for and hold Utility Coordination Meetings (assume 16 1-hr meetings)				-	-	-	20	-	-	20	-	-	-	-	40	
Utility Coordination Meeting minutes / Distribute meeting minutes				-	-	-	2	-	-	24	-	-	-	-	26	
Develop and submit Utility Report				-	-	-	14	-	-	56	-	-	-	-	70	submit at substantial completion (8 packages)
DR 532 Utility Plans				-	-	-	4	-	-	32	48	-	-	-	84	Assume 8 submittal packages
Review construction plans				-	-	-	4	-	-	24	-	-	-	-	28	review of construction plans regarding utilities
Compile and Submit project plans to utility owners (assume 8 packages, 3 milestones ea)				-	-	-	-	-	-	8	48	-	-	-	56	
Coordinate project with Utilities, One-on-one meetings with Utility owners (assume 1 per Utility for each segment)				-	-	-	-	-	-	-	-	-	-	-	-	handled in DR531 above
DR 533 Utility Relocations and Adjustments				-	-	-	8	-	-	44	28	-	-	-	80	Assume no utilities will be relocated or adjusted
Coordinate conflict with Utility Owner, Identify possible alternatives				-	-	-	-	-	-	-	-	-	-	-	-	
Coordinate with URR (outside of team/review meetings)				-	-	-	-	-	-	-	-	-	-	-	-	will be invited to attend utility coord mtgs
Gather prior rights for utilities				-	-	-	8	-	-	12	28	-	-	-	48	Assume 2 utilities per package will need licenses
Assist Pima County with utility license agreement development				-	-	-	-	-	-	32	-	-	-	-	32	Assume 2 utilities per package will need licenses
DR 534 Utility Special Provisions and Clearance Letter				-	-	-	36	-	-	96	-	-	-	-	132	Assume 14 submittal packages
Develop utility clearance letter for each utility for each submittal package (assume 14 pkgs)				-	-	-	12	-	-	64	-	-	-	-	76	
Develop Final utility clearance closeout letter				-	-	-	24	-	-	32	-	-	-	-	56	
SUBTOTAL				-	-	-	109	-	-	668	302	392	-	-	1,471	

FIRM NAME: Horrocks

CONTRACT NO.:	u-24000087
PROJECT NO.:	RFQ-u24000087
PROJECT NAME:	Pima County Regional Middle Mile (PCRMMP)

**DERIVATION OF PERSON-HOURS****REVIEWS AND MEETINGS**

TASK	Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator	TOTAL	
<b>REVIEWS AND MEETINGS</b>													
<b>DR 1060 DESIGN REVIEWS</b>	-	12	-	-	-	-	-	-	-	-	-	12	
Coordination with design team on review schedule	-	12	-	-	-	-	-	-	-	-	-	12	
	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	
<b>DR 1063 REVIEW TYPES</b>	12	80	76	124	110	156	220	4	4	-	-	786	
Project Design Initiation	2	8	4	4	2	4	4	4	4	-	-	36	
Design Builder Internal Reviews	2	18	18	24	24	16	48	-	-	-	-	150	
County Over-the-Shoulder Reviews	2	18	18	24	24	16	48	-	-	-	-	150	
County Early Release for Construction Oversight Reviews	-	-	-	-	-	-	-	-	-	-	-	-	assume no early release packages
County Mid-Point and 100% Design Oversight Reviews	2	12	12	24	24	48	48	-	-	-	-	170	
County RFC Design Oversight Reviews	2	12	12	24	24	48	48	-	-	-	-	170	
County NDC/FDC and Shop/Working drawing Oversight Reviews	2	12	12	24	12	24	24	-	-	-	-	110	
<b>DR 1065 IN-PROGRESS DESIGN WORKSHOPS AND OVERSIGHT VISITS</b>	-	12	-	12	-	-	6	12	-	-	-	42	
Internal design workshops (assume 6)	-	12	-	12	-	-	6	12	-	-	-	42	
<b>DR 1066 DESIGN OVERSIGHT REVIEW FOR EARLY CONSTRUCTION</b>	-	-	-	-	-	-	-	-	-	-	-	-	
Assume none	-	-	-	-	-	-	-	-	-	-	-	-	assume no early release packages
<b>DR 1067 OTHER INTERIM COUNTY OVERSIGHT REVIEWS</b>	-	12	-	12	3	-	3	12	-	-	-	42	
Attend interim design workshop reviews (assume 12)	-	12	-	12	3	-	3	12	-	-	-	42	
<b>DR 1068 DESIGN CHANGES</b>	-	4	4	-	4	-	-	-	-	-	-	12	
Attend design change meetings (assume 4)	-	4	4	-	4	-	-	-	-	-	-	12	
<b>DR 1069 REVIEW OF 100 PERCENT DESIGN</b>	-	-	-	-	4	4	8	8	-	-	-	24	
Attend final review of release packages (assume 8)	-	-	-	-	4	4	8	8	-	-	-	24	
<b>SUBTOTAL</b>	12	120	80	148	121	160	237	36	4	-	-	918	

FIRM NAME: Horrocks

CONTRACT NO.: u-24000087  
 PROJECT NO.: RFQ-u24000087  
 PROJECT NAME: ma County Regional Middle Mile (PCRMMP)

**DERIVATION OF PERSON-HOURS****DESIGN**

TASK	Scale (Full Size)	No. of Sheets	Hrs/Sht	Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator	TOTAL	
<b>DR 500 Field Reviews</b>				-	16	8	32	32	40	-	-	-	-	-	128	
Field review and establishment of running line (3 days)				-	16	8	32	32	40	-	-	-	-	-	128	
Confirm running line with construction team (2 Days)				-	-	-	-	-	-	-	-	-	-	-	-	
<b>DR 500 Design Coordination with Environmental</b>				-	-	-	-	-	-	-	-	-	-	-	-	
Coordination with Environmental				-	-	-	-	-	-	-	-	-	-	-	-	
Revisions to design (assume 6)				-	-	-	-	-	-	-	-	-	-	-	-	
<b>DR 500 Plan Sheets</b>				6	11	9	12	231	27	324	-	522	-	-	1,142	
60% - Face Sheet ( 2 packages)		3	4	-		-	-	2	1	2	-	6	-	-	11	2 packages include Marana segment and ADOT package
100% - Face Sheet (2 packages)		3	4	-	1	-	-	2	1	2	-	6	-	-	12	
RFC sealed - Face Sheet (2 packages)		3	4	-	1	-	-	2	1	2	-	6	-	-	12	
60% - Design Sheets Index (Cross Reference) - (2 packages)		15	2	-		1	-	1	1	6	-	16	-	-	25	
100% - Design Sheets Index (Cross Reference) - (2 packages)		15	2	-		1	-	1	1	6	-	16	-	-	25	
RFC Sealed - Design Sheets Index (Cross Reference) - (2 packages)		15	2	-	1	1	-	1	1	6	-	16	-	-	26	
60% - Typical Sections (2 packages)		6	2	-		-	-	2	1	2	-	8	-	-	13	Typical sections of utility trench or bore in various locations
100% - Typical Sections (2 packages)		6	2	-		-	-	2	1	2	-	8	-	-	13	
RFC Sealed - Typical Sections (2 packages)		6	2	-	1	-	-	2	1	2	-	8	-	-	14	
60% - Detail Sheets (2 packages)		12	3	-		-	-	8	-	2	-	24	-	-	34	
100% - Detail Sheets (2 packages)		12	3	-		-	-	8	-	2	-	24	-	-	34	
RFC Sealed - Detail Sheets (2 packages)		12	3	-	1	-	-	8	-	2	-	24	-	-	35	
60% - Plan Sheets (90 @ 100 Scale)		90	3	2	2	2	4	64	6	96	-	120	-	-	296	
100% - Plan Sheets (90 @ 100 Scale)		90	3	2	2	2	4	64	6	96	-	120	-	-	296	
RFC Sealed - Plan Sheets (90 @ 100 Scale)		90	3	2	2	2	4	64	6	96	-	120	-	-	296	
<b>SUBTOTAL</b>				6	27	17	44	263	67	324	-	522	-	-	1,270	

FIRM NAME: Horrocks

CONTRACT NO.: u-24000087

PROJECT NO.: RFQ-u24000087

PROJECT NAME: Pima County Regional Middle Mile (PCRMP)

DERIVATION OF PERSON-HOURS

QUANTITIES

TASK			Scale (Full Size)	No. of Sheets	Hrs/Sht	Project Principal	Project Manager	Sr Project Engineer	Sr Utility Engineer	Design Engineer	Sr. Designer	Designer	Utility Coordinator	CADD Technician	Administrative	Const. Cost Estimator	TOTAL		
QUANTITIES																			
1070	Quantities Take Off					-	2	2	-	36	-	-	-	-	-	-	-	40	
		60% Bid Item and Quantity Take Off (2 packages)				-	-	-	-	12	-	-	-	-	-	-	-	12	
		100% Bid Item and Quantity Take Off (2 packages)				-	-	-	-	12	-	-	-	-	-	-	-	12	
		RFC - Bid Item and Quantity Take Off (2 packages)				-	2	2	-	12	-	-	-	-	-	-	-	16	
SUBTOTAL						-	2	2	-	36	-	-	-	-	-	-	-	40	



August 26, 2024

Jennifer Simpkins  
Kimley Horn  
1661 East Camelback Road, Suite 400  
Phoenix, AZ 85016

Project Name: PIMA COUNTY REGIONAL MIDDLE MILE PROJECT (PCRMMP)

Re: Scope of Work and Cost Estimate for Hazardous Materials Sampling and Report

Dear Ms. Simpkins,

Newton Environmental Consulting, LLC (NEC) is pleased to submit for your consideration our Scope of Services and Cost Estimate for the completion of Hazardous Materials Sampling (HMS) report for lead based paint (LBP) and asbestos containing material (ACM) for the PCRMMP project in Pima County, AZ.

We hope that you will find this Scope of Services and Cost Estimate complete. Please call me directly at 602.332.9642, should you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "Angela Newton". The signature is fluid and cursive.

Angela Newton Principal

Attachments: Cost Derivation Sheets

## **NEC SCOPE-OF-SERVICES PIMA COUNTY REGIONAL MIDDLE MILE PROJECT**

### **HAZARDOUS MATERIALS ASSUMPTIONS**

Pima County will create a 134 mile contiguous open access fiber optic network ring around its urban core. The proposed middle mile infrastructure project will reduce the cost for last mile providers to connect unserved and underserved communities by providing a neutral network that last mile providers can access in a non discriminatory open access model.

NEC assumes the number of asbestos containing material (ACM) and lead based paint (LBP) samples are based on information provided by KHA and current Google Earth imagery. State and Vicinity Maps, as well as scope of work (SOW) will be provided by KHA.

### **TASKS DESCRIPTIONS**

#### **1. Project Management**

- Scheduling and billing services.

#### **2. Coordination**

- Coordination with Kimley Horn and Pima County.

#### **3. Hazardous Materials**

- Pre and post field activities including COC preparation, lab drop off, and equipment clean up. Pre and post field operations.
- Conduct a site visit to review the project limits and collect soil samples and samples for the ACM and LBP analysis along the proposed bridge crossings.

#### **4. Reports**

- Prepare and submit a draft HMS report for the internal team to review.
- Address comments per internal team review and revise report for final submittal.



Project Name: PCRMMP

August 26, 2024

NEC Project No.: 2024-KH\_PCRMMP

**DERIVATION OF COST PROPOSAL SUMMARY**

**DIRECT LABOR**

<u>Classification</u>	<u>Labor Hours</u>	<u>Rate</u>	<u>Labor Cost</u>
Project Manager - Sr.	12	\$181.21	\$2,174.52
Environmental Coordinator/Program Manager	56	\$156.00	\$8,736.00
Project Administrator	5	\$72.07	\$360.35
<b>Total Hours:</b>	<b>73</b>	<b>Total Direct Labor:</b>	<b>\$11,270.87</b>

**SEE OTHER DIRECT COST BREAKDOWN**

(Listed by item at estimated actual cost - NO MARKUP)

Sampling Lab Fees	\$594.00
<b>Total Other Direct Costs:</b>	<b>\$594.00</b>

**TOTAL LUMP SUM COST: \$11,864.87**

A handwritten signature in black ink that reads "Angela Newton".

Angela Newton  
Principal

8/26/24  
Date



Project Name: PCRMMP

August 26, 2024

NEC Project No.: 2024-KH\_PCRMMP

TASK NO.	TASK DESCRIPTION	Project Manager - Sr.	Environmental Coordinator/Program Manager	Project Administrator	Task Hour
		\$181.21	\$156.00	\$72.07	
1	<b>100- PROJECT MANAGEMENT</b>				
	Scheduling and billing services. Project supervision and close-out.	4	8	5	17
2	<b>200- COORDINATION</b>				
	Coordination with KHA and Pima County.	4	4		8
3	<b>300- HAZARDOUS MATERIALS</b>				
	Pre- and post-field activities including COC preparation, lab drop off, and equipment clean-up.		8		8
	Travel to site and lab. (2-person team)		10		10
	Site visit for soil and ACM/LBP sampling. (2-person team)		12		12
4	<b>400- SAMPLING REPORTS</b>				
	Prepare and submit a draft HMS report for the internal team to review.	2	12		14
	Address comments per internal team review and revise report for final submittal.	2	2		4
Total Hours		12	56	5	73





Project Name: PCRMMP

August 26, 2024

NEC Project No.: 2024-KH\_PCRMMP

**OTHER DIRECT COSTS BREAKDOWN**

**Testing**

Fiberquant ACM sample analysis	1	site visit/month x	36	samples @	\$16.50	per	\$594.00
							<b>Subtotal Testing: \$594.00</b>

---

**TOTAL OTHER DIRECT COSTS: \$594.00**



Ashton Koons  
Newton Environmental Consulting, LLC

3/28/2022

Dear Ms. Koons

Thank you for your interest in using our PLM services for determining asbestos concentrations in bulk materials. As discussed, our fee for roadway projects would be \$16.50 per sample with a 1-3 day turnaround time. FAA services for testing lead in paint is also \$16.50 per sample with a 1-3 day turnaround time.

Sincerely,

A handwritten signature in black ink that reads "Michael Breu". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Michael Breu  
Technical Manager  
Fiberquant Analytical Services



Thomas McCullough, PE  
**Kimley-Horn and Associates, Inc.**  
7740 North 16th Street Suite 300  
Phoenix, AZ 85020

August 31, 2024

**Proposal: Pima County Fiber ~600' x 152 Mile Orthophotography; See Exhibit A.**

AeroTech Mapping (ATM) is pleased to present the following Geospatial cost proposal for aerial photography and digital imagery for the project cited above. See Exhibit A. pdf layout. See Exhibit B. KMZ layout.

**Mapping Scope of Work**

ATM's Design Scale Mapping acquisition and map production specifications for photography (Illustrated in Exhibit A.) will be produced from:

- ✓ Area of interest, 152 Miles, located in Pima County, AZ
- ✓ Photography utilizing ATM's Vexcel Falcon Prime Digital Camera for 66 flight lines and 1374 exposures
- ✓ LiDAR for Future Use, Internal to Rectify Imagery
- ✓ Orthophotography at 0.25' GSD

Mapping Scale	Contour Intervals	Digital Camera Flight Resolution	Mapping Vertical Accuracy	Mapping Horizontal Accuracy
1" = 40'	N/A	5.5cm suitable for 1" = 40'	± 0.18' ASPRS standard	± 0.36' ASPRS standard

**Aerial Ground Control**

Kimley-Horn and Associates, Inc. will be responsible for establishing ground control for the geospatial mapping. The final survey scope will be negotiated at Notice to Proceed.

Aerial Targets	Size of Targets	Control Delivery
198 targets	6" wide material or paint and 6' total length	Electronic Text (TXT) File suggested format: ID, N, E, Z, DESC
Notes		
Submit control and survey data (if providing) in an Electronic Text (TXT) file. Preferred deliver: ID, N, E, Z, DESC. Only provide ground elevation data.		
If using client layers, please provide.		
For LiDAR deliverable projects, please provide Horizontal & Vertical Datum, GeoID, Units, and Scale Factor.		



## Deliverables

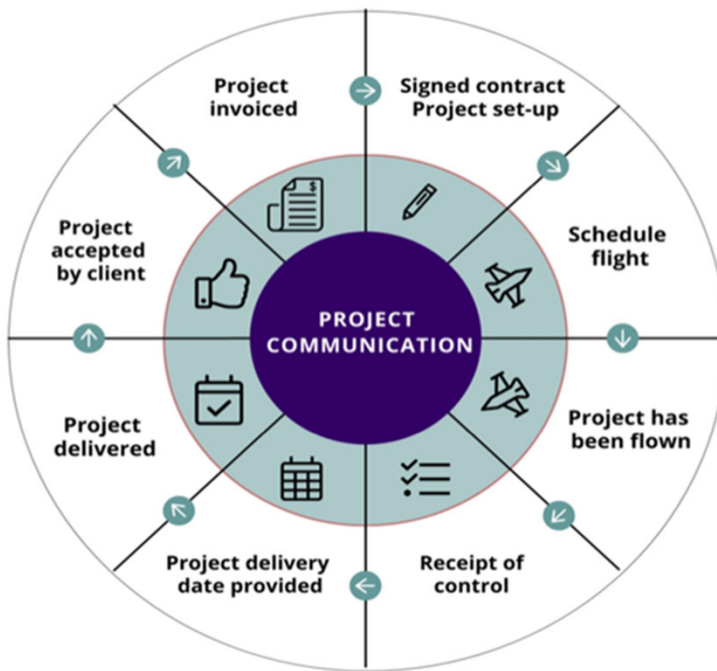
- ✓ Format: AutoCAD C3D with ATM CAD standards
- ✓ Orthophoto Imagery: TIFF & SID
- ✓ Reports PDF: Aerotriangulation

## Estimated Project Schedule

The Project Management Professional (PMP)® structured framework is applied to manage all projects. From initiating, planning, executing, monitoring & controlling to closing, we quality assure at every stage to ensure delivery of accurate mapping products and mitigate unforeseen schedule and cost overrun delays.

ATM anticipates completing this project consecutive working days after both imagery is completed and the receipt of control is acquired. Please note that unavoidable or unforeseen delays, i.e., weather, flight restrictions, and aircraft maintenance, may exist beyond our control.

Sonia Hernandez ([SoniaHernandez@atmlv.com](mailto:SoniaHernandez@atmlv.com)) will be your Project Coordinator. She works closely with the business development and production team, and will communicate the milestones of your project.



Arizona

California

Nevada

New Mexico

Texas

Utah

[www.atmlv.com](http://www.atmlv.com)

## GEOSPATIAL TECHNOLOGY

AeroTech Mapping Equipped With Cutting Edge Tools

### 2 - Cessna 206

Turbo Charged



### Vexcel Ultracam

Falcon Mark II  
Digital Camera



### Lidar Sensor

Teledyne Optec CM2000



### Seafloor Hydrone

Bathymetric Boat



### DJI Matrice 300 RTK

LiDAR Sensor  
Thermal Sensor



### Mobile LiDAR Scanner

ROCK R360



### AutoDesk Software

Autocad Civil 3D 2022



### Microstation Software

Modeling, Documentation,  
Visualization Software



### Trimble Inpho Software

Datum Stereoplotter





Summary of Geospatial Services		
Services	Description	Proposed Schedule
Aerial Photography Acquisition	5.5cm GSD	<b>30-35 Working Days</b>  Provide Image Tiling Scheme
Digital Imagery	66 Flight Lines & 1374 Exposures	
LiDAR	Internal Use Only	
Mapping Scale	1" = 40'	
Planimetric Compilation	No Mapping	Run LiDAR with Camera (Dual Acquisition) for Future Mapping & Survey Needs
Orthophotography	0.25' GSD	
CAD Format	AutoCAD C3D or MicroStation	
Image Format	Tiff & SID	
Aerial Ground Targets	198	
Delivery Media	ShareFile	

**\*Mapping Budget****\$113,825.20****Initials:** \_\_\_\_\_

\*Additional costs and fees may apply. See attached supplemental cost sheet.

**Payment Terms: Net 30 or subject to terms of existing MSA**

This proposal will remain in effect for 60 days after the date of this letter. If you have questions, please do not hesitate to contact us at any time. ATM appreciates the opportunity to submit this proposal, and we look forward to working with Kimley-Horn and Associates, Inc..

Your signature indicates your acceptance of the scope of work, terms of the proposal, and serves as our Notice to Proceed.

Sincerely,

Accepted By: Kimley-Horn and Associates, Inc.

Alicia Mendoza, Account Manager

Thomas McCullough, PE

Client Project Number

Date

Arizona

California

Nevada

New Mexico

Texas

Utah

[www.atmlv.com](http://www.atmlv.com)

### Supplemental Cost Sheet

ATM offers additional services and options. Review the Options & Additional Costs sheet listed below and select all options and quantities. Some options & additions require pre-approval and/or negotiation. Return the proposal with your requests to your ATM representative for price adjustment.

Options & Additional Costs	Price	QTY	Total Costs
Topo & Image Plot Paper Plus Shipping	\$85.00	0	\$0.00
Integration of Survey Data - Before Map Compilation	\$140.00	0	\$0.00
Integration of Survey Data - After Map Compilation	\$420.00	0	\$0.00
Professional Liability: Non-Standard / Non-Blanket Additional Insured, Waiver, & Subrogation Clauses	\$180.00	0	\$0.00
Aviation COI: Non-Standard / Non-Blanket Additional Insured Waiver, & Subrogation Clauses	\$180.00	0	\$0.00
Aviation Insurance over ATM's Standard of \$25M - Call for a quote	TBD	0	\$0.00
Options & Additional Costs	%	Yes or No	Total Costs
Rush Service Fee (If available, must be negotiated)	10%	No	\$0.00
Credit Card Payment Surcharge	3%	No	\$0.00
Tax (NM Only if NTTC form is not provided)	7.75%	No	\$0.00
<b>Options &amp; Additional Costs</b>			<b>\$0.00</b>

**Kimley-Horn and Associates Inc.**  
**Pima County Fiber Orthophotos ~600' x 152.4 Miles**  
**COST PROPOSAL SUMMARY**



**CONSULTANT:** AeroTech Mapping Inc.

**PROJECT NAME:** Pima County Fiber

**CONTRACT NO.:**

**WORK ASSIGNMENT:** Orthophotography

**DATE:** August 31, 2024

**DIRECT LABOR**

Classifications	Man-hours	Hourly Rates	Labor Costs
Principal	4	\$ 92.52	\$ 370.08
Project Manager	58	\$ 69.87	\$ 4,052.46
Flight Crew - Manager	18	\$ 73.35	\$ 1,320.30
Flight Crew - Pilot	18	\$ 30.19	\$ 543.42
AeroTriangulation & Calibration	140	\$ 32.15	\$ 4,501.00
Certified Photogrammetrist (Mapper)	0	\$ 40.38	\$ -
Stereoplotter Operators (Mapper)	0	\$ 24.93	\$ -
Orthophoto Technicians	320	\$ 26.30	\$ 8,416.00
LiDAR Technician (Classification)	0	\$ 27.50	\$ -
CAD Manager	80	\$ 31.96	\$ 2,556.80
CAD Technicians	240	\$ 24.93	\$ 5,983.20
Secretary/Clerical	1	\$ 33.50	\$ 33.50

Consultant's Subtotal Direct Labor	\$	27,776.76
Consultant's Overhead % of Direct Labor	153.0%	\$ 42,498.44
Consultant's Profit % of Direct Labor	0%	\$ -
<b>Consultant's Total Direct Labor</b>	<b>\$</b>	<b>70,275.20</b>

**DIRECT AND OUTSIDE EXPENSES**

DESCRIPTION	Quantity	Unit Cost	Expense Amount
Aerial Image Contact Prints / JPEG Files	0	\$ 3.15	\$ -
Paper media - 20"x30"	0	\$ 5.00	\$ -
Travel Time	0	\$ 109.50	\$ -
Aircraft Mobilization (Flight Time)	18	\$ 825.00	\$ 14,850.00
Aircraft-Camera	18	\$ 950.00	\$ 17,100.00
Aircraft-LiDAR	8	\$ 1,450.00	\$ 11,600.00

Total Expenses \$ 43,550.00

**TOTAL PROPOSED FEE \$ 113,825.20**

Leo Torres  
Principal



# O.G. Engineering LLC

Roads and Rails

[www.OGEngineeringPro.com](http://www.OGEngineeringPro.com)

August 6, 2024

Mr. Tom McCullough, PE  
Kimley-Horn  
1661 E Camelback Rd, Ste 400  
Phoenix, AZ 85016  
Office: (602) 216-1298  
Cell: (602) 509-2763  
[thomas.mccullough@kimley-horn.com](mailto:thomas.mccullough@kimley-horn.com)

Subject: Quote for providing supporting services for fiber utility design and permitting crossings of UPRR in Pima County

Dear Mr. McCullough,

This quote is to provide support services for design and permitting from UPRR for five fiber utility crossing projects at the UPRR railroad in Pima County, AZ. Below is a summary of the proposed services.

## TASK Design Services and railroad coordination

- Provide support to preparation of the fiber utilities crossing plans and exhibits at UPRR, ensure compliance with the railroad standards, requirements and UP processes.
- Submit up to five applications to UPRR at the following approximate locations:
  - MP 965.690 Gila Sub (near or at Tangerine Rd at UPRR crossing)
  - MP 9.280 Nogales Sub (near or at Aerospace Pkwy at UPRR crossing)
  - MP 0.063 Asarco Lead (near or at Nogales Hwy at UPRR crossing)
  - MP 18.515 Nogales Sub (near or at Sahuarita Rd at UPRR crossing)
  - MP 1003.800 Lordsburg Sub (near or at Colossal Cave Rd at UPRR crossing)
- Coordinate UPRR's review of applications and plans and coordinate responses to UP comments to submittals.
- Provide support for railroad permitting for potholing, surveying and other investigation for planning purposes.
- Provide support and coordination for obtaining contractor's right of entry from UPRR, flagging and observations as applicable during construction and required by the railroad.
- Participate in meetings with the Client, County, UPRR and other stakeholders.
- Other services as necessary or requested by Client.



## Deliverables include:

- Review project documents and provide input via email (PDF), phone or hard copy as requested by Client.
- Participate in meetings with the Client, the railroad, City of Chandler and others as necessary or as requested by the Client.
- Provide any other support and coordination services as requested by Client.

## SCHEDULE OF DELIVERABLES

- The schedule for completion of each plan review is 5 to 10 business days after receipt of such plan(s).
- Respond to emails and calls within 1 to 3 business days and reply via email, phone or hard copy as appropriated.
- Provide instant feedback during in-person or virtual meetings (web based, phone conference calls).
- Participate in meetings and conference calls on notice.
- Participate in on-site visits/meetings as necessary.

## FEE

- For the services described in the Tasks above, the Client agrees to pay O.G. Engineering a fee of up to \$78,000.
- The cost of service does not include the UPRR application fees, review fees, permitting fees, easement charges or other applicable fees as required by UPRR to receive, review and permit the utility crossings of their ROW.

Fee is based on previous experience of similar projects. O.G. Engineering will charge actual costs based on the number of hours worked. Payments of invoices are due within 30 days of being submitted.

You may indicate your acceptance of the proposal by signing and returning this quote via email. If you have any questions regarding this quote or would like further information, please feel free to contact us.

Thank you

O.G. Engineering LLC.

AGREED TO AND ACCEPTED BY:

\_\_\_\_\_  
Alex Popovici

\_\_\_\_\_  
Date

\_\_\_\_\_  
Kimley-Horn

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Fiber Crossings Pima County Kimley-Horn August 6, 2024					
		Alex Popovici PM, RR Coordination QA/QC	Total Hours	Labor Cost per task	Total
	Hourly billing Rate	\$ 195.00			
<b>Task - Utilities Design and Coordination</b>					
	Plans preparation and review, coordination with stakeholders, conference calls and meetings, site visits.	400	400	\$ 78,000	
	Subtotal	400	300	\$ 78,000	<b>\$ 78,000</b>

Kimley-Horn and Associates Inc  
Detailed Cost Estimate for Geotechnical Engineering Services  
Middle Mile Fiber  
Pima County  
Terracon Reference No. P63245074



PAY ITEM	Work Tasks (Proposed Hours/Units)					Total HRS/UNITS	Direct Labor Rate	Total Direct Costs
	1	2	3	4	5			
Senior Geotechnical Engineer	1	3	2	4	4	14	76.00	\$ 1,064.00
Senior Project Manager	16	20	4	18	4	62	55.00	\$ 3,410.00
Project Engineer	2	8		10		20	41.00	\$ 820.00
Staff Engineer/Field Engineer	18	100	6	16		140	35.00	\$ 4,900.00
Clerical	2			3		5	22.00	\$ 110.00
<b>Subtotal Labor Costs:</b>								<b>\$ 10,304.00</b>
<b>Overhead Rate @ 199.72%</b>								<b>\$ 20,579.15</b>
<b>Fee (Profit) @ 10%</b>								<b>\$ 3,088.32</b>
<b>Total Estimated Project Labor Costs</b>								<b>\$ 33,971.47</b>
<b>Other Direct Project Costs:</b>								
ROW Permits	4					4	250.00	1,000.00
Drilling Subcontractor - per day (Southlands)		10				10	2,025.00	20,250.00
<b>Subtotal Direct Costs:</b>								<b>21,250.00</b>
<b>Laboratory Testing:</b>								
R-Value						0	490.00	-
Sieve Analysis, Coarse and Fine, Washed (ASTM C136, AASHTO T27, ARIZ 201)			25			25	130.00	3,250.00
Plasticity Index (ASTM D4318, AASHTO T89/90)			25			25	100.00	2,500.00
Moisture Content						0	20.00	-
Soil Unit Weight (Undisturbed Sample) with Moisture Content (ASTM C29)			50			50	35.00	1,750.00
Soluble Sulfates						0	50.00	-
Soluble Chlorides						0	50.00	-
pH & Resistivity						0	180.00	-
Direct Shear (3 Point)						0	550.00	-
Standard Proctor						0	175.00	-
Consolidation						0	195.00	-
<b>Subtotal for Laboratory Testing:</b>								<b>7,500.00</b>
<b>Estimated Man Hours For Project &amp; Direct Project Costs</b>	39	131	12	51	8	241		<b>\$ 62,721.47</b>

Terracon Task	Direct Labor Costs	Overhead @199.72%	Profit @10%	Subcontract and Lab Costs	Total Costs
Task 1 - Project Setup, ROW Permit Preparation, and Staking	\$ 1,712.00	\$ 3,419.21	\$ 513.12	\$ 1,000.00	\$ 6,644.33
Task 2 - Field Exploration: Geotechnical Borings	\$ 5,156.00	\$ 10,297.56	\$ 1,545.36	\$ 20,250.00	\$ 37,248.92
Task 3 - Sample Review, Lab Work Order and Laboratory Testing	\$ 582.00	\$ 1,162.37	\$ 174.44	\$ 7,500.00	\$ 9,418.81
Task 4 - Preparation of Geotechnical Data Report	\$ 2,330.00	\$ 4,653.48	\$ 698.35	\$ -	\$ 7,681.83
Task 5 - Project Meetings	\$ 524.00	\$ 1,046.53	\$ 157.05	\$ -	\$ 1,727.58
<b>Total for Above Services</b>	<b>\$ 10,304.00</b>	<b>\$ 20,579.15</b>	<b>\$ 3,088.32</b>	<b>\$ 28,750.00</b>	<b>\$ 62,721.47</b>

ATTACHMENT B - KIMLEY-HORN AND ASSOCIATES, INC.  
STANDARD PROVISIONS

- 1) **Kimley-Horn's Scope of Services and Additional Services.** Kimley-Horn will perform only the services specifically described in this Agreement ("Services"). Any services that are not set forth in the scope of Services described herein will constitute additional services ("Additional Services"). If requested by the Client and agreed to by Kimley-Horn, Kimley-Horn will perform Additional Services, which shall be governed by these provisions. Unless otherwise agreed to in writing, the Client shall pay Kimley-Horn for any Additional Services an amount based upon Kimley-Horn's then-current hourly rates plus an amount to cover certain direct expenses including telecommunications, in-house reproduction, postage, supplies, project related computer time, and local mileage. Other direct expenses will be billed at 1.15 times cost.
- 2) **Client's Responsibilities.** In addition to other responsibilities herein or imposed by law, the Client shall:
  - a. Designate in writing a person to act as its representative, such person having complete authority to transmit instructions, receive information, and make or interpret the Client's decisions.
  - b. Provide all information and criteria as to the Client's requirements, objectives, and expectations for the project and all standards of development, design, or construction.
  - c. Provide Kimley-Horn all available studies, plans, or other documents pertaining to the project, such as surveys, engineering data, environmental information, etc., all of which Kimley-Horn may rely upon.
  - d. Arrange for access to the site and other property as required for Kimley-Horn to provide its services.
  - e. Review all documents or reports presented by Kimley-Horn and communicate decisions pertaining thereto within a reasonable time so as not to delay Kimley-Horn.
  - f. Furnish approvals and permits from governmental authorities having jurisdiction over the project and approvals and consents from other parties as may be necessary.
  - g. Obtain any independent accounting, legal, insurance, cost estimating, and feasibility services required by Client.
  - h. Give prompt written notice to Kimley-Horn whenever the Client becomes aware of any development that affects Kimley-Horn's services or any defect or noncompliance in any aspect of the project.
- 3) **Period of Services.** Unless otherwise stated herein, Kimley-Horn will begin work after receipt of a properly executed copy of this Agreement. This Agreement assumes conditions permitting continuous and orderly progress through completion of the services. Times for performance shall be extended as necessary for delays or suspensions due to circumstances that Kimley-Horn does not control. If such delay or suspension extends for more than six months, Kimley-Horn's compensation shall be renegotiated.
- 4) **Method of Payment.** Client shall pay Kimley-Horn as follows:
  - a. Invoices will be submitted periodically for services performed and expenses incurred. Payment of each invoice will be due within 25 days of receipt. The Client shall also pay any applicable sales tax. All retainers will be held by Kimley-Horn and applied against the final invoice. Interest will be added to accounts not paid within 25 days at the maximum rate allowed by law. If the Client fails to make any payment due under this or any other agreement within 30 days after Kimley-Horn's transmittal of its invoice, Kimley-Horn may, after giving notice to the Client, suspend services and withhold deliverables until all amounts due are paid.
  - b. The Client will remit all payments electronically to:
  - c. The Client will send the project number, invoice number and other remittance information by e-mail to [payments@kimley-horn.com](mailto:payments@kimley-horn.com) at the time of payment.
  - d. If the Client relies on payment or proceeds from a third party to pay Kimley-Horn and Client does not pay Kimley-Horn's invoice within 60 days of receipt, Kimley-Horn may communicate directly with such third party to secure payment.
  - e. If the Client objects to an invoice, it must advise Kimley-Horn in writing giving its reasons within 14 days of receipt of the invoice or the Client's objections will be waived, and the invoice shall conclusively be deemed due and owing. If the Client objects to only a portion of the invoice, payment for all other portions remains due.
  - f. If Kimley-Horn initiates legal proceedings to collect payment, it shall recover, in addition to all amounts due, its reasonable attorneys' fees, reasonable experts' fees, and other expenses related to the proceedings.

Such expenses shall include the cost, at Kimley-Horn's normal hourly billing rates, of the time devoted to such proceedings by its employees.

- g. The Client agrees that the payment to Kimley-Horn is not subject to any contingency or condition. Kimley-Horn may negotiate payment of any check tendered by the Client, even if the words "in full satisfaction" or words intended to have similar effect appear on the check without such negotiation being an accord and satisfaction of any disputed debt and without prejudicing any right of Kimley-Horn to collect additional amounts from the Client.
- 5) **Use of Deliverables.** All documents, data, and other deliverables prepared by Kimley-Horn are related exclusively to the services described in this Agreement and may be used only if the Client has satisfied all of its obligations under this Agreement. They are not intended or represented to be suitable for use or reuse by the Client or others on extensions of this project or on any other project. Any modifications by the Client to any of Kimley-Horn's deliverables, or any reuse of the deliverables without written authorization by Kimley-Horn will be at the Client's sole risk and without liability to Kimley-Horn, and the Client shall indemnify, defend and hold Kimley-Horn harmless from all claims, damages, losses and expenses, including but not limited to attorneys' fees, resulting therefrom. Kimley-Horn's electronic files and source code remain the property of Kimley-Horn and shall be provided to the Client only if expressly provided for in this Agreement. Any electronic files not containing an electronic seal are provided only for the convenience of the Client and use of them is at the Client's sole risk. In the case of any defects in the electronic files or any discrepancies between them and the hardcopy of the deliverables prepared by Kimley-Horn, the hardcopy shall govern.
- 6) **Intellectual Property.** Kimley-Horn may use or develop its proprietary software, patents, copyrights, trademarks, trade secrets, and other intellectual property owned by Kimley-Horn or its affiliates ("Intellectual Property") in the performance of this Agreement. Intellectual Property, for purposes of this section, does not include deliverables specifically created for Client pursuant to the Agreement and use of such deliverables is governed by section 5 of this Agreement. Unless explicitly agreed to in writing by both parties to the contrary, Kimley-Horn maintains all interest in and ownership of its Intellectual Property and conveys no interest, ownership, license to use, or any other rights in the Intellectual Property to Client. Any enhancements of Intellectual Property made during the performance of this Agreement are solely owned by Kimley-Horn and its affiliates. If Kimley-Horn's services include providing Client with access to or a license for Kimley-Horn's (or its affiliates') proprietary software or technology, Client agrees to the terms of the Software License Agreement set forth at <https://www.kimley-horn.com/khts-software-license-agreement> ("the License Agreement") which terms are incorporated herein by reference.
- 7) **Opinions of Cost.** Because Kimley-Horn does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to the costs of construction and materials, are made solely based on its judgment as a professional familiar with the industry. Kimley-Horn cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. If the Client wishes greater assurance as to the amount of any cost, it shall employ an independent cost estimator. Kimley-Horn's services required to bring costs within any limitation established by the Client will be paid for as Additional Services.
- 8) **Termination.** The obligation to provide further services under this Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or upon thirty days' written notice for the convenience of the terminating party. Kimley-Horn shall be paid for all services rendered and expenses incurred to the effective date of termination, and other reasonable expenses incurred by Kimley-Horn as a result of such termination.
- 9) **Standard of Care.** The standard of care applicable to Kimley-Horn's services will be the degree of care and skill ordinarily exercised by consultants performing the same or similar services in the same locality at the time the services are provided. No warranty, express or implied, is made or intended by Kimley-Horn's performance of services, and it is agreed that Kimley-Horn is not a fiduciary with respect to the Client.
- 10) **LIMITATION OF LIABILITY.** In recognition of the relative risks and benefits of the Project to the Client and Kimley-Horn, the risks are allocated such that, to the fullest extent allowed by law, and notwithstanding any other provisions of this Agreement or the existence of applicable insurance coverage, that the total liability, in the aggregate, of Kimley-Horn and Kimley-Horn's officers, directors, employees, agents, and subconsultants to the Client or to anyone claiming by, through or under the Client, for any and all claims,

losses, costs, attorneys' fees, or damages whatsoever arising out of or in any way related to the services under this Agreement from any causes, including but not limited to, the negligence, professional errors or omissions, strict liability or breach of contract or any warranty, express or implied, of Kimley-Horn or Kimley-Horn's officers, directors, employees, agents, and subconsultants, shall not exceed twice the total compensation received by Kimley-Horn under this Agreement or \$50,000, whichever is greater. Higher limits of liability may be negotiated for additional fee. This Section is intended solely to limit the remedies available to the Client or those claiming by or through the Client, and nothing in this Section shall require the Client to indemnify Kimley-Horn.

- 11) **Mutual Waiver of Consequential Damages.** In no event shall either party be liable to the other for any consequential, incidental, punitive, or indirect damages including but not limited to loss of income or loss of profits.
- 12) **Construction Costs.** Under no circumstances shall Kimley-Horn be liable for extra costs or other consequences due to changed or unknown conditions or related to the failure of contractors to perform work in accordance with the plans and specifications. Kimley-Horn shall have no liability whatsoever for any costs arising out of the Client's decision to obtain bids or proceed with construction before Kimley-Horn has issued final, fully approved plans and specifications. The Client acknowledges that all preliminary plans are subject to substantial revision until plans are fully approved and all permits obtained.
- 13) **Certifications.** All requests for Kimley-Horn to execute certificates, lender consents, or other third-party reliance letters must be submitted to Kimley-Horn at least 14 days prior to the requested date of execution. Kimley-Horn shall not be required to execute certificates, consents, or third-party reliance letters that are inaccurate, that relate to facts of which Kimley-Horn does not have actual knowledge, or that would cause Kimley-Horn to violate applicable rules of professional responsibility.
- 14) **Dispute Resolution.** All claims arising out of this Agreement or its breach shall be submitted first to mediation in accordance with the American Arbitration Association as a condition precedent to litigation. Any mediation or civil action by Client must be commenced within one year of the accrual of the cause of action asserted but in no event later than allowed by applicable statutes.
- 15) **Hazardous Substances and Conditions.** Kimley-Horn shall not be a custodian, transporter, handler, arranger, contractor, or remediator with respect to hazardous substances and conditions. Kimley-Horn's services will be limited to analysis, recommendations, and reporting, including, when agreed to, plans and specifications for isolation, removal, or remediation. Kimley-Horn will notify the Client of unanticipated hazardous substances or conditions of which Kimley-Horn actually becomes aware. Kimley-Horn may stop affected portions of its services until the hazardous substance or condition is eliminated.
- 16) **Construction Phase Services.**
  - a. If Kimley-Horn prepares construction documents and Kimley-Horn is not retained to make periodic site visits, the Client assumes all responsibility for interpretation of the documents and for construction observation, and the Client waives any claims against Kimley-Horn in any way connected thereto.
  - b. Kimley-Horn shall have no responsibility for any contractor's means, methods, techniques, equipment choice and usage, equipment maintenance and inspection, sequence, schedule, safety programs, or safety practices, nor shall Kimley-Horn have any authority or responsibility to stop or direct the work of any contractor. Kimley-Horn's visits will be for the purpose of observing construction and reporting to the Client whether the contractors' work generally conforms to the construction documents prepared by Kimley-Horn. Kimley-Horn neither guarantees the performance of contractors, nor assumes responsibility for any contractor's failure to perform its work in accordance with the contract documents.
  - c. Kimley-Horn is not responsible for any duties assigned to it in the construction contract that are not expressly provided for in this Agreement. The Client agrees that each contract with any contractor shall state that the contractor shall be solely responsible for job site safety and its means and methods; that the contractor shall indemnify the Client and Kimley-Horn for all claims and liability arising out of job site accidents; and that the Client and Kimley-Horn shall be made additional insureds under the contractor's general liability insurance policy.
- 17) **No Third-Party Beneficiaries; Assignment and Subcontracting.** This Agreement gives no rights or benefits to anyone other than the Client and Kimley-Horn, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole benefit of the Client and Kimley-Horn. The Client shall not assign or transfer any rights under or interest in this Agreement, or any claim arising out of the performance

of services by Kimley-Horn, without the written consent of Kimley-Horn. Kimley-Horn reserves the right to augment its staff with subconsultants as it deems appropriate due to project logistics, schedules, or market conditions. If Kimley-Horn exercises this right, Kimley-Horn will maintain the agreed-upon billing rates for services identified in the contract, regardless of whether the services are provided by in-house employees, contract employees, or independent subconsultants.

- 18) **Confidentiality.** The Client consents to the use and dissemination by Kimley-Horn of photographs of the project and to the use by Kimley-Horn of facts, data and information obtained by Kimley-Horn in the performance of its services. If, however, any facts, data or information are specifically identified in writing by the Client as confidential, Kimley-Horn shall use reasonable care to maintain the confidentiality of that material.
- 19) **Miscellaneous Provisions.** This Agreement is to be governed by the law of the State where the Project is located. This Agreement contains the entire and fully integrated agreement between the parties and supersedes all prior and contemporaneous negotiations, representations, agreements, or understandings, whether written or oral. Except as provided in Section 1, this Agreement can be supplemented or amended only by a written document executed by both parties. Any conflicting or additional terms on any purchase order issued by the Client shall be void and are hereby expressly rejected by Kimley-Horn. If Client requires Kimley-Horn to register with or use an online vendor portal for payment or any other purpose, any terms included in the registration or use of the online vendor portal that are inconsistent or in addition to these terms shall be void and shall have no effect on Kimley-Horn or this Agreement. Any provision in this Agreement that is unenforceable shall be ineffective to the extent of such unenforceability without invalidating the remaining provisions. The non-enforcement of any provision by either party shall not constitute a waiver of that provision nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

**Staff Hourly Rate Schedule**

Staff Category	Hourly Rate	Overhead	Home Facilities Cost of Money	Profit	Total Unit Rate
<b>eX2 Technology Direct Labor</b>		<b>16.00%</b>		<b>10.00%</b>	
Director of Operations	\$ 138.79	\$ 22.21		\$ 16.10	\$ 177.10
Project Manager	\$ 124.23	\$ 19.88		\$ 14.41	\$ 158.52
Engineering Manager	\$ 118.40	\$ 18.94		\$ 13.73	\$ 151.07
Permitting Manager	\$ 96.55	\$ 15.45		\$ 11.20	\$ 123.20
OSP Engineer	\$ 84.90	\$ 13.58		\$ 9.85	\$ 108.33
Designer Team Lead	\$ -	\$ -		\$ -	\$ -
GIS Specialist	\$ -	\$ -		\$ -	\$ -
Estimator Manager	\$ 109.25	\$ 17.48		\$ 12.67	\$ 139.40
Procurement Manager	\$ 94.68	\$ 15.15		\$ 10.98	\$ 120.81
Contracts Manager	\$ 85.94	\$ 13.75		\$ 9.97	\$ 109.66
Business Manager	\$ -	\$ -		\$ -	\$ -
<b>Kimley Horn Direct Labor</b>		<b>195.57%</b>	<b>0.97%</b>	<b>10.00%</b>	
Sr. Professional III	\$ 108.16	\$ 211.53	\$ 1.05	\$ 31.97	\$ 352.71
Sr. Professional II	\$ 87.20	\$ 170.54	\$ 0.85	\$ 25.77	\$ 284.36
Sr. Professional I	\$ 74.88	\$ 146.44	\$ 0.73	\$ 22.13	\$ 244.18
Professional	\$ 58.40	\$ 114.21	\$ 0.57	\$ 17.26	\$ 190.44
Analyst	\$ 45.50	\$ 88.98	\$ 0.44	\$ 13.45	\$ 148.37
Designer	\$ 69.39	\$ 135.71	\$ 0.67	\$ 20.51	\$ 226.28
Technical	\$ 41.40	\$ 80.97	\$ 0.40	\$ 12.24	\$ 135.00
Admin	\$ 34.03	\$ 66.55	\$ 0.33	\$ 10.06	\$ 110.97
<b>Kimley Horn Direct Expenses</b>					
Construction Plans (11"x17")	\$ 9.91				\$ 9.91
Roll Plots	\$ 39.13				\$ 39.13
<b>Horrocks Direct Labor</b>		<b>177.71%</b>	<b>0.3728%</b>	<b>10.00%</b>	
Project Principal	\$ 114.76	\$ 203.94	\$ 0.43	\$ 31.91	\$ 351.04
Project Manager	\$ 118.46	\$ 210.52	\$ 0.44	\$ 32.94	\$ 362.36
Sr. Project Engineer	\$ 93.57	\$ 166.28	\$ 0.35	\$ 26.02	\$ 286.22
Sr. Utility Engineer	\$ 101.80	\$ 180.91	\$ 0.38	\$ 28.31	\$ 311.40
Design Engineer	\$ 65.73	\$ 116.81	\$ 0.25	\$ 18.28	\$ 201.06
Sr. Designer	\$ 78.90	\$ 140.21	\$ 0.29	\$ 21.94	\$ 241.35
Designer	\$ 40.29	\$ 71.60	\$ 0.15	\$ 11.20	\$ 123.24
Utility Coordinator	\$ 48.28	\$ 85.80	\$ 0.18	\$ 13.43	\$ 147.68
CADD Technician	\$ 53.39	\$ 94.88	\$ 0.20	\$ 14.85	\$ 163.32
Administrative	\$ 47.55	\$ 84.50	\$ 0.18	\$ 13.22	\$ 145.45
Const. Cost Estimator	\$ 86.54	\$ 153.79	\$ 0.32	\$ 24.07	\$ 264.72
<b>Aerotech Mapping Direct Labor</b>		<b>153.00%</b>		<b>0.00%</b>	
Principal	\$ 92.52	\$ 141.56		\$ -	\$ 234.08
Project Manager	\$ 69.87	\$ 106.90		\$ -	\$ 176.77
Flight Crew - Manager	\$ 73.35	\$ 112.23		\$ -	\$ 185.58
Flight Crew - Pilot	\$ 30.19	\$ 46.19		\$ -	\$ 76.38
Aero Triangulation & Calibration	\$ 32.15	\$ 49.19		\$ -	\$ 81.34
Certified Photogrammetrist (Mapper)	\$ 40.38	\$ 61.78		\$ -	\$ 102.16
Stereoplotter Operations (Mapper)	\$ 24.93	\$ 38.14		\$ -	\$ 63.07
Orthophoto Technician	\$ 26.30	\$ 40.24		\$ -	\$ 66.54
LiDar Technician (Classification)	\$ 27.50	\$ 42.08		\$ -	\$ 69.58
CAD Manager	\$ 31.96	\$ 48.90		\$ -	\$ 80.86
CAD Technician	\$ 24.93	\$ 38.14		\$ -	\$ 63.07
Secretary / Clerical	\$ 33.50	\$ 51.26		\$ -	\$ 84.76
<b>Aerotech Mapping Direct Expenses</b>					
Aerial Image Contact Prints / JPEG Files	\$ 3.15				\$ 3.15
Paper Media - 20x30	\$ 5.00				\$ 5.00
Travel Time	\$ 109.50				\$ 109.50
Aircraft Mobilization (Flight Time)	\$ 825.00				\$ 825.00
Aircraft Camera	\$ 950.00				\$ 950.00
Aircraft LiDAR	\$ 1,450.00				\$ 1,450.00
<b>Newton Environmental Consultant Direct Labor</b>					
Project Manager Sr.	\$ 181.21				\$ 181.21



Environmental Coordinator / Program Manager	\$ 156.00				\$ 156.00
Project Administrator	\$ 72.07				\$ 72.07
<b>Newton Environmental Consultant Direct Expenses</b>					
Fiberquant ACM Sample Analysis	\$ 16.50				\$ 16.50
<b>O.G. Engineering Direct Labor</b>					
OG PM RR Coordination QA/QC	\$ 195.00				\$ 195.00
<b>Psomas Direct Labor</b>		<b>179.43%</b>		<b>10.00%</b>	
Survey Manager	\$ 59.75	\$ 107.21		\$ 16.70	\$ 183.66
Project Survey	\$ 55.50	\$ 99.58		\$ 15.51	\$ 170.59
Party Chief	\$ 35.00	\$ 62.80		\$ 9.78	\$ 107.58
2-Person Crew	\$ 60.50	\$ 108.56		\$ 16.91	\$ 185.96
Survey Tech	\$ 31.25	\$ 56.07		\$ 8.73	\$ 96.05
Administration	\$ 33.50	\$ 60.11		\$ 9.36	\$ 102.97
<b>Terracon Direct Labor</b>		<b>199.72%</b>		<b>10.00%</b>	
Senior Geotechnical Engineer	\$ 76.00	\$ 151.79		\$ 22.78	\$ 250.57
Senior Project Manager	\$ 55.00	\$ 109.85		\$ 16.48	\$ 181.33
Project Engineer	\$ 41.00	\$ 81.89		\$ 12.29	\$ 135.17
Staff Engineer/Field Engineer	\$ 35.00	\$ 69.90		\$ 10.49	\$ 115.39
Clerical	\$ 22.00	\$ 43.94		\$ 6.59	\$ 72.53
<b>Terracon Direct Expenses</b>					
ROW Permits	\$ 250.00				\$ 250.00
Drilling Subcontractor - per day (Southland)	\$ 2,025.00				\$ 2,025.00
Sieve Analysis, Coarse and Fine, Washed (ASTM C136, AASHTO T27, ARIZ 201)	\$ 130.00				\$ 130.00
Plasticity Index (ASTM D4318, AASHTO T89/90)	\$ 100.00				\$ 100.00
Soil Unit Weight (Undisturbed Sample) with Moisture Content (ASTM C29)	\$ 35.00				\$ 35.00
<b>Team Fishel Direct Labor</b>		<b>4.51%</b>		<b>10.00%</b>	
Project Manager	\$ 130.95	\$ 5.91		\$ 13.69	\$ 150.54

**End of Appendix E – Design and Preconstruction Services Fee Proposal**



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
09/27/2024

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).

<b>PRODUCER</b> Aon Risk Services South, Inc. Richmond VA Office 7325 Beaufont Springs Drive Suite 300 Richmond VA 23225 USA	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C. No. Ext): (402) 697-1400 <b>FAX</b> (A/C. No.): (402) 697-1594 <b>E-MAIL ADDRESS:</b>														
<b>INSURED</b> EX2 Technology LLC 3805 South 148th Street Omaha NE 68144 USA	<table><tr><th>INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A: Valley Forge Insurance Co</td><td>20508</td></tr><tr><td>INSURER B: The Continental Insurance Company</td><td>35289</td></tr><tr><td>INSURER C: AXIS Surplus Insurance Company</td><td>26620</td></tr><tr><td>INSURER D:</td><td></td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Valley Forge Insurance Co	20508	INSURER B: The Continental Insurance Company	35289	INSURER C: AXIS Surplus Insurance Company	26620	INSURER D:		INSURER E:		INSURER F:	
INSURER(S) AFFORDING COVERAGE	NAIC #														
INSURER A: Valley Forge Insurance Co	20508														
INSURER B: The Continental Insurance Company	35289														
INSURER C: AXIS Surplus Insurance Company	26620														
INSURER D:															
INSURER E:															
INSURER F:															

**COVERAGES** **CERTIFICATE NUMBER:** 570108515597 **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.

INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	Limits shown as requested	
B	X	COMMERCIAL GENERAL LIABILITY			7092157904	06/18/2024	06/18/2025	EACH OCCURRENCE	\$1,000,000
		CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$100,000
								MED EXP (Any one person)	\$15,000
								PERSONAL & ADV INJURY	\$1,000,000
								GENERAL AGGREGATE	\$2,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	\$2,000,000
		X POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC							
		OTHER:							
A		AUTOMOBILE LIABILITY			7092157899	06/18/2024	06/18/2025	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
	X	ANY AUTO						BODILY INJURY (Per person)	
		OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS						BODILY INJURY (Per accident)	
		HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
								Comp./Coll. Deductible	\$1,000
B	X	UMBRELLA LIAB			7092157921	06/18/2024	06/18/2025	EACH OCCURRENCE	\$1,000,000
		EXCESS LIAB						AGGREGATE	\$1,000,000
		DED X RETENTION \$10,000							
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			7092157918	06/18/2024	06/18/2025	X PER STATUTE <input type="checkbox"/> OTHER	
		ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH)	Y/N <input checked="" type="checkbox"/> N	N/A				E.L. EACH ACCIDENT	\$1,000,000
		If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	\$1,000,000
								E.L. DISEASE-POLICY LIMIT	\$1,000,000
C		Environmental Contractor			CM003961062024	09/01/2024	06/18/2025	Limit (1)	\$2,000,000
		Poll/Prof [E&O]						SIR/Deductible (1)	\$50,000
								Limit (2)	\$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Design Engineering Services For: Design Engineering Services For: Design-Build Services - Pima County Regional Middle Mile Project (PCRMP). Pima County Procurement Department, County, its departments, districts, boards, commissions, officers, officials, agents and employees are included as Additional Insured in accordance with the policy provisions of the General Liability and Automobile Liability policies. General Liability and Automobile Liability policies evidenced herein are Primary and Non-Contributory to other insurance available to Additional Insured, but only in accordance with the policy's provisions. A Waiver of Subrogation is granted in favor of County, its departments, districts, boards, commissions, officers, officials, agents and employees in accordance with the policy provisions of the General Liability, Automobile Liability and workers'

## CERTIFICATE HOLDER

<p>Pima County Procurement Department Design &amp; Construction Division Administration Building 150 W. Congress St., 5th Floor Tucson AZ 85701-1207 USA</p>	<b>CANCELLATION</b> <p>SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.</p> <p>AUTHORIZED REPRESENTATIVE</p> <p><i>Aon Risk Services South Inc.</i></p>
--	--





**ADDITIONAL REMARKS SCHEDULE**

Page \_ of \_

AGENCY Aon Risk Services South, Inc.		NAMED INSURED EX2 Technology LLC	
POLICY NUMBER See Certificate Number: 570108515597			
CARRIER See Certificate Number: 570108515597	NAIC CODE	EFFECTIVE DATE:	

**ADDITIONAL REMARKS****THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,****FORM NUMBER:** ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

Additional Description of Operations / Locations / Vehicles:

Compensation policies.



## Workers Compensation And Employers Liability Insurance Policy Endorsement

### 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.

Any person or organization for which the employer has agreed by written contract, executed prior to loss, may execute a waiver of subrogation. However, for purposes of work performed by the employer in Missouri, this waiver of subrogation does not apply to any construction group of classifications as designated by the waiver of right to recover from others (subrogation) rule in our manual.

#### Schedule

Any Person or Organization on whose behalf you are required to obtain this waiver of our right to recover from under a written contract or agreement.

The premium charge for the endorsement is reflected in the Schedule of Operations.

All other terms and conditions of the policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the policy issued by the designated Insurers, takes effect on the Policy Effective Date of said policy at the hour stated in said policy, unless another effective date (the Endorsement Effective Date) is shown below, and expires concurrently with said policy unless another expiration date is shown below.

Form No: WC 00 03 13 (04-1984)

Endorsement Effective Date:

Endorsement No: 4; Page: 1 of 1

Underwriting Company: Valley Forge Insurance Company, 151 N Franklin St, Chicago, IL 60606

Endorsement Expiration Date:

Policy No: WC 7 92157918

Policy Effective Date: 06/18/2024

Policy Page: 109 of 182



WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF  
SUBROGATION) – AUTOMATIC WHEN REQUIRED BY WRITTEN CONTRACT OR AGREEMENT

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

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 the endorsement.

The **Transfer Of Rights Of Recovery Against Others To Us** Condition does not apply to any person(s) or organization(s) for whom you are required to waive subrogation with respect to the coverage provided under this Coverage Form, but only to the extent that subrogation is waived:

- A. Under a written contact or agreement with such person(s) or organization(s); and
- B. Prior to the "accident" or the "loss."



ADDITIONAL INSURED - PRIMARY AND NON-CONTRIBUTORY

It is understood and agreed that this endorsement amends the **BUSINESS AUTO COVERAGE FORM** as follows:

**SCHEDULE**

**Name of Additional Insured Person Or Organization**

ANY PERSON OR ORGANIZATION THAT YOU ARE REQUIRED BY WRITTEN CONTRACT OR WRITTEN AGREEMENT TO NAME AS AN ADDITIONAL INSURED.

1. In conformance with paragraph **A.1.c.** of **Who Is An Insured** of Section **II - LIABILITY COVERAGE**, the person or organization scheduled above is an insured under this policy.
2. The insurance afforded to the additional insured under this policy will apply on a primary and non-contributory basis if you have committed it to be so in a written contract or written agreement executed prior to the date of the "**accident**" for which the additional insured seeks coverage under this policy.

All other terms and conditions of the policy remain unchanged

This endorsement, which forms a part of and is for attachment to the policy issued by the designated Insurers, takes effect on the Policy Effective date of said policy at the hour stated in said policy, unless another effective date (the Endorsement Effective Date) is shown below, and expires concurrently with said policy.

Form No: CNA71527XX (10-2012)

Endorsement Effective Date:

Endorsement Expiration Date:

Endorsement No: 26; Page: 1 of 1

Underwriting Company: Valley Forge Insurance Company, 151 N Franklin St, Chicago, IL 60606

Policy No: BUA 7092157899

Policy Effective Date: 06/18/2024

Policy Page: 115 of 152

**Contractors' General Liability Extension Endorsement**

- a. the **Named Insured's** acts or omissions; or
  - b. the acts or omissions of those acting on the **Named Insured's** behalf,
- in the performance of the **Named Insured's** ongoing operations at the trade show event premises during the trade show event.
- 2. The coverage granted by this paragraph does not apply to **bodily injury** or **property damage** included within the **products-completed operations hazard**.

**2. ADDITIONAL INSURED - PRIMARY AND NON-CONTRIBUTORY TO ADDITIONAL INSURED'S INSURANCE**

The **Other Insurance** Condition in the **COMMERCIAL GENERAL LIABILITY CONDITIONS** Section is amended to add the following paragraph:

If the **Named Insured** has agreed in writing in a contract or agreement that this insurance is primary and non-contributory relative to an additional insured's own insurance, then this insurance is primary, and the Insurer will not seek contribution from that other insurance. For the purpose of this Provision **2.**, the additional insured's own insurance means insurance on which the additional insured is a named insured. Otherwise, and notwithstanding anything to the contrary elsewhere in this Condition, the insurance provided to such person or organization is excess of any other insurance available to such person or organization.

**3. BODILY INJURY – EXPANDED DEFINITION**

Under **DEFINITIONS**, the definition of **bodily injury** is deleted and replaced by the following:

**Bodily injury** means physical injury, sickness or disease sustained by a person, including death, humiliation, shock, mental anguish or mental injury sustained by that person at any time which results as a consequence of the physical injury, sickness or disease.

**4. BROAD KNOWLEDGE OF OCCURRENCE/ NOTICE OF OCCURRENCE**

Under **CONDITIONS**, the condition entitled **Duties in The Event of Occurrence, Offense, Claim or Suit** is amended to add the following provisions:

**A. BROAD KNOWLEDGE OF OCCURRENCE**

The **Named Insured** must give the Insurer or the Insurer's authorized representative notice of an **occurrence**, offense or **claim** only when the **occurrence**, offense or **claim** is known to a natural person **Named Insured**, to a partner, executive officer, manager or member of a **Named Insured**, or an **employee** designated by any of the above to give such notice.

**B. NOTICE OF OCCURRENCE**

The **Named Insured's** rights under this **Coverage Part** will not be prejudiced if the **Named Insured** fails to give the Insurer notice of an **occurrence**, offense or **claim** and that failure is solely due to the **Named Insured's** reasonable belief that the **bodily injury** or **property damage** is not covered under this **Coverage Part**. However, the **Named Insured** shall give written notice of such **occurrence**, offense or **claim** to the Insurer as soon as the **Named Insured** is aware that this insurance may apply to such **occurrence**, offense or **claim**.

**5. BROAD NAMED INSURED**

**WHO IS AN INSURED** is amended to delete its Paragraph **3.** in its entirety and replace it with the following:

- 3. Pursuant to the limitations described in Paragraph **4.** below, any organization in which a **Named Insured** has management control:
  - a. on the effective date of this **Coverage Part**; or



**Contractors' General Liability Extension Endorsement**

- B.** Solely for the purpose of the coverage provided by this **PROPERTY DAMAGE – ELEVATORS** Provision, the **Other Insurance** conditions is amended to add the following paragraph:

This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis that is Property insurance covering property of others damaged from the use of elevators.

**23. SUPPLEMENTARY PAYMENTS**

The section entitled **SUPPLEMENTARY PAYMENTS – COVERAGES A AND B** is amended as follows:

- A.** Paragraph **1.b.** is amended to delete the \$250 limit shown for the cost of bail bonds and replace it with a \$5,000. limit; and
- B.** Paragraph **1.d.** is amended to delete the limit of \$250 shown for daily loss of earnings and replace it with a \$1,000. limit.

**24. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS**

If the **Named Insured** unintentionally fails to disclose all existing hazards at the inception date of the **Named Insured's Coverage Part**, the Insurer will not deny coverage under this **Coverage Part** because of such failure.

**25. WAIVER OF SUBROGATION - BLANKET**

Under **CONDITIONS**, the condition entitled **Transfer Of Rights Of Recovery Against Others To Us** is amended to add the following:

The Insurer waives any right of recovery the Insurer may have against any person or organization because of payments the Insurer makes for injury or damage arising out of:

1. the **Named Insured's** ongoing operations; or
2. **your work** included in the **products-completed operations hazard**.

However, this waiver applies only when the **Named Insured** has agreed in writing to waive such rights of recovery in a written contract or written agreement, and only if such contract or agreement:

1. is in effect or becomes effective during the term of this **Coverage Part**; and
2. was executed prior to the **bodily injury, property damage** or **personal and advertising injury** giving rise to the **claim**.

**26. WRAP-UP EXTENSION: OCIP, CCIP, OR CONSOLIDATED (WRAP-UP) INSURANCE PROGRAMS**

**Note:** The following provision does not apply to any public construction project in the state of Oklahoma, nor to any construction project in the state of Alaska, that is not permitted to be insured under a **consolidated (wrap-up) insurance program** by applicable state statute or regulation.

If the endorsement **EXCLUSION – CONSTRUCTION WRAP-UP** is attached to this policy, or another exclusionary endorsement pertaining to Owner Controlled Insurance Programs (O.C.I.P.) or Contractor Controlled Insurance Programs (C.C.I.P.) is attached, then the following changes apply:

- A.** The following wording is added to the above-referenced endorsement:

With respect to a **consolidated (wrap-up) insurance program** project in which the **Named Insured** is or was involved, this exclusion does not apply to those sums the **Named Insured** become legally obligated to pay as **damages** because of:

1. **Bodily injury, property damage, or personal or advertising injury** that occurs during the **Named Insured's** ongoing operations at the project, or during such operations of anyone acting on the **Named Insured's** behalf; nor

**Blanket Additional Insured - Owners, Lessees or Contractors -  
with Products-Completed Operations Coverage Endorsement**

This endorsement modifies insurance provided under the following:

**COMMERCIAL GENERAL LIABILITY COVERAGE PART**

It is understood and agreed as follows:

- I. WHO IS AN INSURED** is amended to include as an **Insured** any person or organization whom you are required by **written contract** to add as an additional insured on this **Coverage Part**, but only with respect to liability for **bodily injury, property damage** or **personal and advertising injury** caused in whole or in part by your acts or omissions, or the acts or omissions of those acting on your behalf:
- A.** In the performance of your ongoing operations subject to such **written contract**; or
  - B.** In the performance of **your work** subject to such **written contract**, but only with respect to **bodily injury** or **property damage** included in the **products-completed operations hazard**, and only if:
    - 1. The **written contract** requires you to provide the additional insured such coverage; and
    - 2. This **Coverage Part** provides such coverage; and
  - C.** Subject always to the terms and conditions of this policy, including the limits of insurance, the Insurer will not provide such additional insured with:
    - 1. Coverage broader than what you are required to provide by the **written contract**; or
    - 2. A higher limit of insurance than what you are required to provide by the **written contract**.

Any coverage granted by this Paragraph **I.** shall apply solely to the extent permissible by law.

- II.** If the written contract requires additional insured coverage under the 07-04 edition of CG2010 or CG2037, then paragraph **I.** above is deleted in its entirety and replaced by the following:

**WHO IS AN INSURED** is amended to include as an **Insured** any person or organization whom you are required by **written contract** to add as an additional insured on this **Coverage Part**, but only with respect to liability for **bodily injury, property damage** or **personal and advertising injury** caused in whole or in part by your acts or omissions, or the acts or omissions of those acting on your behalf:

- A.** In the performance of your ongoing operations subject to such **written contract**; or
- B.** In the performance of **your work** subject to such **written contract**, but only with respect to **bodily injury** or **property damage** included in the **products-completed operations hazard**, and only if:
  - 1. The **written contract** requires you to provide the additional insured such coverage; and
  - 2. This **Coverage Part** provides such coverage.

- III.** But if the **written contract** requires:

- A.** Additional insured coverage under the 11-85 edition, 10-93 edition, or 10-01 edition of CG2010, or under the 10-01 edition of CG2037; or
- B.** Additional insured coverage with "arising out of" language;

then paragraph **I.** above is deleted in its entirety and replaced by the following:

**WHO IS AN INSURED** is amended to include as an **Insured** any person or organization whom you are required by **written contract** to add as an additional insured on this **Coverage Part**, but only with respect to liability for **bodily injury, property damage** or **personal and advertising injury** arising out of **your work** that is subject to such **written contract**.

20020000470921579042418



**Blanket Additional Insured - Owners, Lessees or Contractors -  
with Products-Completed Operations Coverage Endorsement**

IV. But if the **written contract** requires additional insured coverage to the greatest extent permissible by law, then paragraph I. above is deleted in its entirety and replaced by the following:

**WHO IS AN INSURED** is amended to include as an **Insured** any person or organization whom you are required by **written contract** to add as an additional insured on this **Coverage Part**, but only with respect to liability for **bodily injury, property damage** or **personal and advertising injury** arising out of **your work** that is subject to such **written contract**.

V. The insurance granted by this endorsement to the additional insured does not apply to **bodily injury, property damage, or personal and advertising injury** arising out of:

A. The rendering of, or the failure to render, any professional architectural, engineering, or surveying services, including:

1. The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and
2. Supervisory, inspection, architectural or engineering activities; or

B. Any premises or work for which the additional insured is specifically listed as an additional insured on another endorsement attached to this **Coverage Part**.

VI. Under **COMMERCIAL GENERAL LIABILITY CONDITIONS**, the Condition entitled **Other Insurance** is amended to add the following, which supersedes any provision to the contrary in this Condition or elsewhere in this **Coverage Part**:

**Primary and Noncontributory Insurance**

With respect to other insurance available to the additional insured under which the additional insured is a named insured, this insurance is primary to and will not seek contribution from such other insurance, provided that a **written contract** requires the insurance provided by this policy to be:

1. Primary and non-contributing with other insurance available to the additional insured; or
2. Primary and to not seek contribution from any other insurance available to the additional insured.

But except as specified above, this insurance will be excess of all other insurance available to the additional insured.

VII. Solely with respect to the insurance granted by this endorsement, the section entitled **COMMERCIAL GENERAL LIABILITY CONDITIONS** is amended as follows:

The Condition entitled **Duties In The Event of Occurrence, Offense, Claim or Suit** is amended with the addition of the following:

Any additional insured pursuant to this endorsement will as soon as practicable:

1. Give the Insurer written notice of any **claim**, or any **occurrence** or offense which may result in a **claim**;
2. Send the Insurer copies of all legal papers received, and otherwise cooperate with the Insurer in the investigation, defense, or settlement of the **claim**; and
3. Make available any other insurance, and endeavor to tender the defense and indemnity of any **claim** to any other insurer or self-insurer, whose policy or program applies to a loss that the Insurer covers under this **coverage part**. However, if the **written contract** requires this insurance to be primary and non-contributory, this paragraph 3. does not apply to other insurance under which the additional insured is a named insured.

The Insurer has no duty to defend or indemnify an additional insured under this endorsement until the Insurer receives written notice of a **claim** from the additional insured.

**Blanket Additional Insured - Owners, Lessees or Contractors -  
with Products-Completed Operations Coverage Endorsement**

VIII. Solely with respect to the insurance granted by this endorsement, the section entitled **DEFINITIONS** is amended to add the following definition:

**Written contract** means a written contract or written agreement that requires you to make a person or organization an additional insured on this **Coverage Part**, provided the contract or agreement:

**A.** Was executed prior to:

1. The **bodily injury** or **property damage**; or
2. The offense that caused the **personal and advertising injury**;  
for which the additional insured seeks coverage; and

**B.** Is still in effect at the time of the **bodily injury** or **property damage occurrence** or **personal and advertising injury** offense.

All other terms and conditions of the Policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the Policy issued by the designated Insurers, takes effect on the effective date of said Policy at the hour stated in said Policy, unless another effective date is shown below, and expires concurrently with said Policy.

20020000470921579042419

