



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

Award Contract Grant

Requested Board Meeting Date: 06/19/18

* = Mandatory, information must be provided

or Procurement Director Award

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

Achen-Gardner Construction, LLC (Headquarters: Chandler, AZ)

***Project Title/Description:**

Design-Build Services For Twin Peaks-Blue Bonnet Road Gravity Sewer Project (3TPBBS)

***Purpose:**

Award: Contract No. CT-WW-18-401. This award of contract is recommended to the highest qualified Design-Build team in the amount of \$620,020.25 for a contract term of 06/19/18 to 12/31/20 for Phase I design and pre-construction services for the Twin Peaks-Blue Bonnet Road Gravity Sewer 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: Regional Wastewater Reclamation.

***Procurement Method:**

Solicitation for Qualifications No. 289179 was conducted in accordance with A.R.S. § 34-603 and Pima County Board of Supervisors Policy D 29.1. Four (4) responsive statements of qualifications were received and evaluated by a seven (7) member committee using qualifications and experience-based selection criteria. Based upon the evaluation of the respondents' written representations of their qualifications and necessary due diligence, a short list of three (3) respondents were invited to interviews. As a result of the combined scoring of the written statements of qualifications and interviews, the highest qualified Design-Build team is recommended for award.

Attachments: Notice of Recommendation for Award and Contract.

***Program Goals/Predicted Outcomes:**

The Twin Peaks-Blue Bonnet Sewer Augmentation Project will provide sewer service to an area which currently has no service. The sewer services provided under this project will help accelerate development in the area without the need for expensive pump stations.

***Public Benefit:**

Completion of the Twin Peaks-Blue Bonnet Sewer project will result in additional sewer capacity and allow for additional growth in the Dove Mountain and Twin Peaks area.

***Metrics Available to Measure Performance:**

Successfully completing each phase of the project and receiving Arizona Department of Environmental Quality discharge permits within the time allotted for each phase of the project and completion of the entire project within budget.

***Retroactive:**

No

To: COP- 6-6-18
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Pgs- 204

Revised 8/2017 (1)

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Contract / Award Information

Document Type: CT Department Code: WW Contract Number (i.e., 15-123): 18-401

Effective Date: 06/19/18 Termination Date: 12/31/20 Prior Contract Number (Synergen/CMS): _____

Expense Amount: \$* 620,020.25 Revenue Amount: \$ _____

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

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

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

*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 22-73.

Amendment / Revised Award Information

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

Amendment No.: _____ AMS Version No.: _____

Effective Date: _____ New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

Expense or 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): _____

Effective 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: Keith E. Rogers *Keith E. Rogers* 6-1-18

Department: Procurement *Procurement* Telephone: 724-3542

Department Director Signature/Date: *[Signature]* 6/1/18

Deputy County Administrator Signature/Date: *[Signature]* 06/05/18

County Administrator Signature/Date: *[Signature]* 6/7/18

(Required for Board Agenda/Addendum Items)



PIMA COUNTY

JUNE 1, 2018

NOTICE OF RECOMMENDATION FOR AWARD

The Pima County Procurement Department - Design & Construction Division hereby issues formal notice to respondents to **Solicitation No. 289179 – Design Build Services For Twin Peaks-Blue Bonnet Gravity Sewer Project (3TPBBS)**; that the following listed respondent will be recommended for award as indicated below. The award action is scheduled to be performed by the Pima County Board of Supervisors on or after the regularly scheduled meeting **June 19, 2018**.

RECOMMENDED:

Achen-Gardner Construction, LLC / Engineering and Environmental Consultants, Inc. (EEC)

OTHER FINAL-LISTED TEAMS:

Borderland Construction Company, Inc. / Dibble & Associates Consulting Engineers, Inc., dba Dibble Engineering

Hunter Contracting Co. / Kimley-Horn and Associates Inc.

NOTE: Information regarding this solicitation will be disclosed in accordance with A.R.S. § 34-603(H).

/s/ <Keith E. Rogers

Keith E. Rogers, CPPB
Procurement Officer

Date: June 1, 2018

This notice is in compliance with Pima County Procurement Code.

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<p>Pima County Regional Wastewater Reclamation Department</p> <p>Project: Design-Build Services For: Twin Peaks-Blue Bonnet Road Gravity Sewer Project (3TPBBS)</p> <p>Contractor: Achen-Gardner Construction, LLC 550 South 79th St. Chandler, AZ 85226</p> <p>Amount: \$620,020.25</p> <p>Funding: Regional Wastewater Reclamation Department Obligations</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">CONTRACT</td> </tr> <tr> <td>NO. <u>CT-UW-18-401</u></td> </tr> <tr> <td>AMENDMENT NO. _____</td> </tr> <tr> <td style="font-size: small;">This number must appear on all invoices, correspondence and documents pertaining to this contract.</td> </tr> </table> <p style="text-align: center;">(STAMP HERE)</p>	CONTRACT	NO. <u>CT-UW-18-401</u>	AMENDMENT NO. _____	This number must appear on all invoices, correspondence and documents pertaining to this contract.
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AMENDMENT NO. _____					
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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 Achen-Gardner, LLC ("Design-Builder"). County and Design-Builder may also be individually referred to as a "Party" or collectively as the "Parties."
- 1.2. History. County previously issued Solicitation for Qualifications (SFQ) No. 289179 (hereinafter referred to as the "Solicitation") seeking a Design-Build services provider, the documents, addenda, requirements and specifications of which are all incorporated into this Contract by reference.
- 1.3. Design-Builder Selection. Design-Builder was selected by the 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. Effective Date. The Effective Date of this Contract is the date last signed below.
- 2.2. Term. Unless otherwise terminated or extended, in writing, pursuant to other provisions of this Contract, the Term of this Contract extends to one calendar year after the final acceptance date or, until 12/31/2020, whichever date is later.
- 2.3. Scheduled Major Milestones. Design-Builder provided County with a Preliminary Schedule covering the planning, design, and construction of the Project which schedule is attached hereto as Exhibit A. That schedule contemplates Phase 1 (Design and Pre-Construction Services) completion within 270 Days of the Phase 1 Notice to Proceed; and Phase 2 (Construction Services) completion within TBD Days of the Phase 2 Notice to Proceed, with Substantial Completion within TBD Days and Final Acceptance within TBD Days respectively of the Phase 2 Notice to Proceed.

3. Scope of Services.

This Contract is a Design-Build Contract for, engineering, and construction services (collectively, the "Work") for the Project, as more fully set forth in the following documents which are attached hereto and which are integral part of this Contract: Exhibit A – Preliminary Schedule (2 pages); Exhibit B –

Phase I Scope of Services and Fee Schedule (32 pages); Appendix "A" – Project Scope of Work (3 pages); Appendix "B" Design-Builder General Scope of Work (40 pages); Appendix "C" – Technical Specifications (6 pages); Appendix "D" – Design-Builder Special Conditions (18 pages); Appendix "E" – Design-Builder General Conditions (58 pages); Appendix "F" – Supplemental Provisions – Construction Costing (5 pages); Appendix "G" – Glossary or Terms and Conditions (9 pages). Also incorporated into this Contract by reference are the Pima Association of Governments Standard Specifications for Public Improvements.

- 3.1. Work under this Contract will proceed in two phases: Phase 1 - Design and Pre-Construction Services; and Phase 2 – Construction Services. The initial Contract covers only the Phase 1 portion of the Work as that is defined in the Scope. Prior to any Design-Builder work on Phase 2, Design-Builder will deliver to County a proposed GMP, or multiple GMPs, if construction is divided into multiple phases.
 - 3.2. With respect to the Phase 2 – Construction GMP, Design-Builder acknowledges that the Construction Documents may be incomplete at the time the Design-Builder delivers the GMP proposal, and that the Construction Documents may not be completed until after commencement of the construction phase of the Work. Nevertheless, the GMP proposal shall include all costs for the Work required by the completed Construction Documents, and if the GMP proposal is accepted by the County, the Design-Builder shall be entitled to no increase in the GMP if the Work required by the completed Construction Documents: (i) is required by the Contract for Design-Build Construction; (ii) is reasonably inferable from the incomplete documents; (iii) is consistent with the County's programmatic goals and objectives; (iv) is consistent with the 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 documents.
 - 3.3. If a GMP proposal is unacceptable to the County, the County will promptly notify the Design-Builder in writing. Within fourteen (14) calendar days of such notification, the 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.
 - 3.4. The County may, at its sole discretion and based upon its sole judgment: (i) indicate its acceptance of 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 the Design-Builder.
 - 3.5. If the County rejects a GMP proposal, neither party shall have any further obligation pursuant to this Contract.
 - 3.6. If the County accepts a GMP proposal, the parties will complete and execute an amendment to this Contract, and the County will issue a written Notice to Proceed to the Design-Builder establishing the date the next phase is to commence (the "Phase Commencement Date"). The Design-Builder shall not expend any monies for the new phase prior to receipt of such 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. Rates. County will pay Design-Builder at the rates set forth in Exhibit B during the Term of the Contract.
 - 5.2. Maximum Payment Amount. County's total payments to Design-Builder for Phase 1 Work, including sales taxes (if applicable), in the not to exceed amount of Six Hundred Twenty Thousand, Twenty Dollars and Twenty-Five Cents(\$620,020.25).

- 5.3. Sales Taxes. The payment amounts or rates in Exhibit C do not include sales taxes. Design-Builder may invoice County for sales taxes that Design-Builder is required to pay on goods supplied to the County under this Contract. Design-Builder will show sales taxes as a separate line item on invoices.
- 5.4. Timing of Invoices. Design-Builder will invoice County on a monthly basis unless a different billing period is set forth in Appendix B, Design-Builder General Scope of Work. County must receive invoices no more than 30 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 the County and, pursuant to A.R.S. § 11-622(C), will not pay for any product or service invoiced more than 6-months late.
- 5.5. Design-Builder will cite the Contract number on all invoices. The pre-printed terms and conditions on the 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.
- 5.6. County may, at any time during the Term and during the retention period set forth in Section 30 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 to County any overpayment that County cannot recover by set-off.
- 5.7. 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.
- 5.8. Price Guarantees.
 - 5.8.1. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the 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) General Conditions Cost; and (v) Design-Builder's Overhead and Profit, will not exceed the amount set forth in the agreed upon GMP. All costs or expenses that would cause this sum to exceed the GMP will be borne by the Design-Builder unless adjusted by a County approved Change Order.
 - 5.8.2. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the Design-Builder guarantees that the actual Cost of the Work, Design-Builder's Staffing Costs, General Conditions Cost, and Design-Builder's Overhead and Profit will not exceed the guaranteed maximum for each such category and that all costs or expenses that would cause any of these individual categories to exceed the guaranteed maximum for each such category in the agreed upon GMP will be borne by the Design-Builder unless adjusted by a County approved change order.
 - 5.8.3. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the Design-Builder certifies that: all factual unit costs supporting the GMP proposal are accurate, complete, and current at the time of negotiations; and that any other factual unit costs that may be furnished to the County in the future to support any additional amounts that may be authorized will also be accurate and complete. Payments to the Design-Builder will be reduced if the County determines such amounts were included due to materially inaccurate, incomplete, or non-current factual unit costs.
 - 5.8.4. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract the Design-Builder guarantees that, to the extent the accepted GMP includes contingency, Design-Builder will not use that contingency unless use has been specifically approved by County by Change Order prior to expenditure by the Design-Builder.

6. Insurance. The Insurance Requirements contained in Article 6, Paragraph 6.02, of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 6, Insurance.

The Insurance Requirements including coverage scope and limits are considered by Pima County to be minimum requirements. Design-Builder's insurance shall be placed with companies licensed in the State of Arizona and the insureds shall have an "A.M. Best" rating of not less than A- VII. Pima County in no way warrants that the minimum insurer rating is sufficient to protect the Design-Builder from potential insurer insolvency.

6.1 Minimum Scope and Limits of Insurance

Design-Builder shall procure and maintain, until all contractual obligations have been discharged, the insurance coverage with limits of liability not less than stated below.

6.1.1 Commercial General Liability (CGL): Occurrence Form

6.1.1.1 Design-Builder shall maintain CGL and, if necessary, commercial umbrella insurance with a total limit of not less than \$2,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project described in the scope of work for this contract

6.1.1.2 CGL insurance shall be written on ISO occurrence form CG 00 01 12 07 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

6.1.1.3 Design-Builder's CGL policy shall not be restricted in scope by the attachment of endorsements such as the subcontractor exception.

6.1.1.4 Pima County shall be included as an insured under the CGL, using ISO additional insured endorsements CG 20 10 and CG 20 37 or their equivalent, including coverage for Pima County with respect to liability arising out of the completed operations of Design-Builder.

6.1.2 Business Automobile Liability: Coverage to include Bodily Injury and Property Damage (Form CA 00 01) 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 each accident.

6.1.3 Workers' Compensation (WC) and Employers' Liability: Statutory requirements and benefits for Workers' Compensation. 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.

6.1.4 Professional Liability (Errors and Omissions) Insurance: This insurance is required when the Design-Builder's CGL insurance excludes coverage of the Design-Builder's professional error and omission exposures. The policy limits shall be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The insurance policy shall cover professional misconduct or negligent acts of anyone performing any professional services under this contract.

6.1.5 **Claim-Made Insurance Coverage:** If any part of the Required Insurance is written on a claims-made basis, any policy retroactive date must precede the effective date of this Contract, and Design-Builder must maintain such coverage for a period of not less than three (3) years following Contract expiration, termination or cancellation.

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:** The General Liability and Business Automobile Liability Policies shall each be endorsed to include Pima 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 the Design-Builder.

6.2.2 **Subrogation:** The General Liability, Business Automobile Liability and Workers' Compensation Policies shall each contain a waiver of subrogation endorsement in favor of Pima County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Design-Builder.

6.2.3 **Primary Insurance:** The Design-Builder's policies shall stipulate that the insurance afforded the Design-Builder shall be primary and that any insurance carried by Pima County, its agents, officials, or employees shall be excess and not contributory insurance.

6.2.4 **Subcontractors' Insurance.** Design-Builder shall cause each subcontractor employed by Design-Builder to purchase and maintain insurance of the type specified above. When requested by Pima County, Design-Builder shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

6.3 Coverage Verification Requirements

6.3.1 **Evidence of Insurance:** All certificates and endorsements, as required by this written agreement, are to be received and approved by the appropriate County Department before work commences and thereafter upon renewal or replacement of each certified coverage. Design-Builder shall furnish Pima County with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.

6.3.2 **Certificate of Insurance:** All certificates shall include the Pima County project or contract number and project description on the certificate. All certificates shall provide for 30 days written notice to Pima County prior to the cancellation of any insurance referred to therein, except 10-days prior notice is sufficient when the cancellation is for non-payment of a premium.

6.3.3 **Maintaining Insurance:** Failure to maintain the required insurance may result in termination of this contract at Pima County's option. If Design-Builder fails to maintain the insurance as set forth herein, Pima County shall have the right, but not the obligation, to purchase said insurance at Design-Builder's expense.

6.3.4 **No Representation of Coverage Adequacy:** By requiring insurance herein, Pima County does not represent that coverage and limits will necessarily be adequate to protect Design-Builder, and such coverage and limits shall not be deemed as a

limitation on Design-Builder's liability under the indemnities granted to Pima County in this contract

6.4 Approval and Modifications

The Pima County Risk Manager may approve a modification of the Insurance Requirements without the necessity of a formal Contract amendment, but the approval must be in writing. Neither the County's failure to obtain a required insurance certificate or endorsement, the County's failure to object to a non-complying insurance certificate or endorsement, or the County's receipt of any other information from the Design-Builder, its insurance broker(s) and/or insurer(s), constitutes a waiver of any of the Insurance Requirements or the Design-Builder's obligation to maintain such insurance.

6.4.1 Down-the-hole Coverage

6.4.1.1 Limits of coverage \$1,000,000 per occurrence

6.4.2 Design-Builders Pollution Liability

6.4.2.1 Design-Builder shall maintain in force for the full period of this contract insurance covering losses caused by pollution incidents that arise from the operations of the Design-Builder described under the scope of services of this contract.

6.4.2.2 Cover shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. The policy of insurance affording these required coverages shall be written in an amount of at least \$1,000,000 per claim, with an annual aggregate of at least \$2,000,000.

6.4.2.3 Certificate of Insurance shall identify if policy is written on an occurrence or claims-made basis.

6.4.2.4 The policy of insurance as required in this section shall include as an insured the Owner, officers, and employees.

6.4.2.5 If the scope of services as defined in this contract includes the disposal of any hazardous or nonhazardous materials from the job site, the Design-Builder must furnish to the Owner evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to the Owner under this Section for the disposal facility insurance must be maintained in minimum amounts of \$1,000,000 per loss, with an annual aggregate of at least \$5,000,000.

6.4.3 Builder's Risk - Installation Floater (if applicable)

6.4.3.1 Amount equal to the Contract Completed Value \$TBD.

6.4.3.2 Pima County, Design-Builder, subcontractor and any others with an insurable interest in the work **shall be Insureds** on the policy.

6.4.3.3 The Installation Floater must provide coverage from the time the equipment/material becomes the responsibility of the Design-Builder and shall continue without interruption during the installation, including any time during which the equipment/material is being transported to the installation site, or awaiting installation, whether on or off site.

- 6.4.3.4 Coverage shall be written on an "all risks" coverage on a "replacement cost basis without optional deductibles", replacement cost basis as well as coverage for losses that may occur during equipment testing.
- 6.4.3.5 Design-Builder shall be responsible for repairing damage to the work and other property not insured if the damage is caused "in whole or in part" by the Design-Builder or any subcontractors.
- 6.4.3.6 Policy shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use by the County.
- 6.4.3.7 Policy shall be maintained until whichever of the following shall first occur: (1) final payment has been made; or, (2) until no person or entity, other than the County, has an insurable interest in the property required to be covered.
- 6.4.3.8 Policy shall contain a waiver of subrogation endorsement in favor of Pima County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Design-Builder.
- 6.4.3.9 Design-Builder is responsible for the payment of all deductibles under the Installation Floater policy.

7 Payment and Performance Bonds. The Payment and Performance Bonds Requirements contained in Article 6, Paragraph 6.01 of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 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 5** hereto and must be issued by a surety company: (1) verified by the 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 the Company. In no event shall the Performance Bond or the Payment Bond serve as a limitation on the liability of the 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 Indemnification. The Indemnification Requirements contained in Article 7, Paragraph 7.19 of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 8, Indemnification.

To the fullest extent permitted by law, Design-Builder will defend, indemnify, and hold harmless Pima County and any related taxing district, and the officials and employees of each of them (collectively,

"County Indemnitees") from and against any and all claims, actions, liabilities, and Losses and Expenses (including reasonable attorney fees) (collectively, "Claims") arising out of actual or alleged injury of any person (including death) or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by any act or omission of Design-Builder or any of Design-Builder's directors, officers, agents, employees, volunteers, or subcontractors. This indemnity includes any claim or amount arising or recovered under the Workers' Compensation Law or arising out of the failure of Design-Builder to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. The County Indemnitees will, in all instances, except for Claims arising solely from the acts or omissions of the County Indemnitees, be indemnified by Design-Builder from and against any and all Claims. Design-Builder is responsible for primary loss investigation, defense, and judgment costs for any Claim to which this indemnity provision applies. This duty to indemnify will survive the expiration or termination of this Contract.

- 9 **Design-Builder's Performance.** Design-Builder is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its efforts and other services furnished by Design-Builder under this Contract. Without additional compensation, 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 products or the services. Any such resolution of deficiencies shall be at no cost to County.

10 **Excusable Delays**

10.1 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.

10.2 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.

10.3 Excusable Delays shall not include late performance by a subcontractor unless the delay arises out of an Uncontrollable Circumstance. The time of completion shall be extended, by a Change Order, for a period of time equal to the time the cause prevented the delayed Party from performing in accordance with this Contract.

- 11 **Liquidated Damages.** Design-Builder agrees to achieve Substantial Completion within the number of Days specified in Section 2.2, above (the "Time"). Design-Builder's failure to reach Substantial Completion within the Time will substantially harm the County. Because damages resulting from such a failure cannot be calculated with any degree of certainty, the Parties agree that if the Work is not Substantially Complete within the Time (as may be amended through written Change Orders), Design-Builder will pay to County as Liquidated Damages, and not a penalty, \$1,290.00 for each calendar day elapsing between the Agreed Date for Substantial Completion and the date Substantial Completion is actually achieved. The Parties further agree that the daily Liquidated Damages amount is fair, reasonable, and not subject to later challenge.

12 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 the County in writing of the Design-Builder's agreement (or disagreement) with any price, performance, or schedule relief, if any, as may be proposed by the County in the Unilateral Change Directive. No Unilateral Change Directive will be binding on either Party unless it has been approved by the County Board of Supervisors or, if authorized, the Procurement Director. A Unilateral Change Directive that is signed by Design-Builder and approved by the 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.

13 Suspension/Termination for Convenience

13.1 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 the County may determine necessary whenever such suspension or interruption would be in the best interest of the 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:

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

13.1.2 an equitable adjustment is made or denied by County.

13.2 Termination by County for Convenience.

13.2.1 The performance of the Work under this Contract may be terminated by County, in whole or in part, in accordance with this clause whenever the County reasonably determines that such termination is in the best interest of County. Any such termination will be effected 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.

13.2.2 If the Contract is terminated by the 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.

13.2.3 Termination of the Contract or any portion thereof by County for convenience will not relieve Design-Builder of its contractual responsibilities for Work completed.

14 Termination for Cause. This Contract may be terminated for cause upon the occurrence of one or more Events of Default:

14.1 Events of Default

14.1.1, If Design-Builder fails or neglects to carry out the Work in accordance with the provisions of the Contract Documents, and fails, after ten (10) calendar days written notice from County, to correct such failure or neglect and thereafter diligently pursue the Project to completion;

14.1.2 If Design-Builder materially breaches this Contract and fails, after ten (10) days written notice from the County, to correct such breach and thereafter diligently pursue the Project to completion; or

14.1.3 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 sixty (60) Days of its institution.

14.2 Remedies of County Upon an Event of Default.

14.2.1 Upon an Event of Default, County has the right to terminate this Contract upon an additional seven (7) Days' written notice to Design-Builder provided Design-Builder has not commenced a cure within such seven (7) Day period.

14.2.2 Without prejudice to any other rights or remedies of County, County may:

14.2.2.1 Take possession of all data, reports, and work in progress in possession of Design-Builder or to which Design-Builder otherwise has right;

14.2.2.2 Accept assignment of Subcontracts; and

14.2.2.3 Finish the Work by whatever reasonable method County may deem expedient.

14.2.3 When the County terminates the Contract as aforesaid, Design-Builder will not be 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.

15 Dispute Resolution.

15.1 In the event of any dispute arising 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 the dispute resolution procedures set forth herein. The Parties shall continue performance of their respective obligations hereunder notwithstanding the existence of a dispute.

15.1.1 The Parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as 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 so as 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.

15.1.2 Informal Dispute Resolution, 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. Such meeting shall be held at County's offices within three (3) working Days of written request therefor, which request shall specify in reasonable detail the nature of the dispute. The County's Project Manager and Design-Builder's Project Manager will attend the meeting. Such 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.

- 15.1.3 Mediation. If the Parties are unable to resolve the dispute through the special meeting and/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 the Site and any relevant documents. The mediator will call a meeting of the Parties within ten (10) working days after his/her appointment, which meeting will be attended by the County's Project Manager and Design-Builder's Project Manager. Such Authorized Representatives shall attempt in good faith to resolve the dispute. During such ten (10) Day period, the mediator may meet with the Parties separately.
- 15.1.4 Mediation Minutes. 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, will be non-binding, confidential, and without prejudice to the rights and remedies of any Party. The entire mediation process shall be completed within twenty (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,
- 15.1.5 Litigation. Nothing in this Section will operate to limit, interfere with, or delay 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 litigation.

16 No Consequential or Punitive Damages. In no event will either Party hereto 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 the County and the Design-Builder. Nothing in this Section shall limit the obligation of the Design-Builder to indemnify, defend and hold harmless the County Indemnitees for any special, incidental, consequential, punitive, or similar damages payable to third parties resulting from any act or circumstance for which the Design-Builder is obligated to indemnify the 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.

17 Laws and Regulations.

- 17.1 Compliance with Laws. Design-Builder will comply with all federal, state, and local laws, rules, regulations, standards, and Executive Orders.
- 17.2 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.
- 17.3 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.

18 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.

- 19 **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 the 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.
- 20 **Assignment.** Design-Builder may not assign its rights or obligations under this Contract, in whole or in part, without the County's prior written approval. County may withhold approval at its sole discretion.
- 21 **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.
- 22 **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.
- 23 **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.
- 24 **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.
- 25 **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.
- 26 **Notice.** Any notice required or permitted to be given under this Contract must be in writing and be served by personal delivery or by certified mail upon the other Party as follows:

County:

Jackson Jenkins, Director
Regional Wastewater Reclamation Department
201 N Stone Ave, 8th Floor
Tucson, AZ 85701
Tel: (520) 724-6500
Fax: (520) 724-9635

Design-Builder:

Dan Spitz, Vice President
Achen-Gardner Construction, LLC
550 South 79th St.
Chandler, AZ 85226
480-940-1300
480-940-4576

- 27 **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.
- 28 **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.
- 29 **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. The 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.
- 30 **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.
- 31 **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.
- 32 **Public Records.**
- 32.1 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.
- 32.2 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 Con 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.
- 33 **Legal Arizona Workers Act Compliance.**
- 33.1 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.
- 33.2 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.

33.3 **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.

33.4 **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."

34 **Grant Compliance.** Not Applicable.

35 **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 the County up to and including termination of this Contract.

36 **No Third Party Beneficiaries.** Unless explicitly stated otherwise elsewhere in this Contract, no person other than the Parties themselves has any rights or remedies under this Contract.

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37 **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

Chairman, Board of Supervisors

ATTEST

Clerk of the Board

Date

DESIGN-BUILDER



Authorized Officer Signature

Jason DeCarlo Area mgr.

Printed Name and Title

6/4/18

Date

APPROVED AS TO FORM



Deputy County Attorney

CHARLES WESSELHOFT

Print DCA Name

JUN 04 2018

Date



May 30, 2018

E-Mailed: May 30, 2018
Keith.Rogers@pima.gov

Keith E. Rogers, CPPB, Procurement Officer
Design & Construction Div.
Pima County Procurement Dept.
130 W. Congress, Third Floor
Mail Stop: DT-AB3-126

RE: Pima County SFQ 289179 (Twin Peaks-Blue Bonnet) Design-Build (DB)
Pima No. 3TPBBS / Achen-Gardner Construction, LLC Project No. 3645100

SUBJ: EXHIBIT B – Phase 1 Pre-Construction & Design Services Proposal (5-30-18)

Dear Mr. Rogers:

In accordance with the referenced solicitation and associated draft DB contract documents, we here in submit for your approval our May 30, 2018 proposed Phase 1 Scope of Services and Fee Schedule for our Pre-Construction & Design Services on the referenced project. We propose to complete these services for the not to exceed price of **\$620,020.25**.

Attached please find the following four EXHIBITS detailing the scope of services being provided:

- EXHIBIT B.1 – Pre-Construction Phase Services Cost Proposal
- EXHIBIT B.2 – Achen-Gardner Hourly Rate Summary
- EXHIBIT B.3 – Achen-Gardner Cost Type Summary
- EXHIBIT B.4 - EEC's May 24, 2018 Fee Proposal for Pre-Construction Phase Services

It is our understanding that this Proposal will be incorporated the DB Contract as EXHIBIT B. Should you have any questions or comments, please feel free to contact me at (480) 403-9432 or e-mail dspitza@achen.com or Carrie Cote at (602) 248-7702 EXT 7322 or ccote@eeccorp.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Spitza".

Dan Spitza, V.P., Design Services Manager

Attachments

cc: File 3645100, Pima Co. (Var), EEC (Var)

ACHEN-GARDNER CONSTRUCTION, LLC | www.achen.com

550 SOUTH 79TH STREET | CHANDLER, AZ 85226 | P: 480.940.1300 | P: 800.580.5548 | F: 480.940.4576

ARIZONA: 261745 A, 261746 B-1, 261747 B-4 | COLORADO: 20101257887 | NEW MEXICO: 365027

EXHIBIT B.1 - PRE-CONSTRUCTION PHASE SERVICES COST PROPOSAL (5-30-18)

**Pima County SFQ 289179 (Twin Peaks-Blue Bonnet) Design-Build (DB)
Pima No. 3TPBBS / Achen-Gardner Construction, LLC Project No. 3645100**

**PRE-CONSTRUCTION PHASE SERVICES COST PROPOSAL - EXHIBIT B.1
DESIGN BUILD SERVICES FOR TWIN PEAKS-BLUE BONNET ROAD GRAVITY SEWER PROJECT (PIMA CO. NO. 3TPBBS)**

Achen-Gardner Construction, LLC
550 South 79th Street
Chandler, AZ 85226-4706
Office: 480-940-1300 / Fax: 480-940-4578

Date: 5/30/2018
Version/Revision: 06

PROJECT: DB SERVICES FOR TWIN PEAK - BLUE BONNET ROAD GRAVITY SEWER PROJECT
ACHEN-GARDNER CONSTRUCTION, LLC Job No.: 3648100

TASK	Scope of Services (Assumed Duration 6 Months) Cost Type Unit Rate Total (\$/HR) (See Hrry Rate Schedule Below)	Quantity	PIC	AM	PM	PE	PS	GS	SE/LE	CE	PA	C	AG - Hourly Services	AG - Owner Contingency	EEC - Hourly Subconsultant	EEC - Owner Contingency	Estimated TOTALS
			\$161.00	\$126.05	\$103.35	\$81.35	\$126.05	\$130.45	\$116.10	\$138.25	\$67.35	\$45.35					
TASK 1 - PROJECT MANAGEMENT, ADMINISTRATION, AND COMMUNICATIONS																	
1.1	Project Kick-off and Chartering Meeting (Combined)	N/A															\$0.00
1.2	First Level Project Regular Bi-Weekly Meetings (2Hr/Ea)	12	24.00	24.00	24.00		12.00	4.00	12.00	4.00							\$13,114.20
1.3	Second Level Project Meetings and Coordination (Internal and Sub-Consultants) (1 Hr/Ea)	12	3.00	6.00	6.00		3.00	5.00	3.00	5.00							\$3,904.35
1.4	Site Visits (4Hr/Ea)	4	4.00	16.00	16.00		16.00	8.00	4.00								\$7,799.20
1.5	Specialty Meetings - See Attachment 2 (2Hr/Ea)	3	6.00	6.00	6.00		6.00		6.00								\$3,735.30
1.6	Specialty Meetings - Project Coordination, Communication, and Stakeholder Outreach (2Hr/Ea)	12	6.00	6.00	12.00		6.00										\$3,658.80
1.7	Weekly General Management Communications and Support	24	14.00	26.00	26.00							26.00					\$9,257.50
1.8	Monthly General Administration (Support, Invoices, Summaries, etc.)	6	12.00	6.00	12.00						12.00	24.00					\$5,705.10
1.9	Misc. Reproduction and Meeting Supplies	1												\$1,500.00			\$1,500.00
1.10	Communication Plan Development (Draft & Final)	N/A															\$0.00
1.11	Stakeholder Outreach Assistance in Support of Project Deliverables (Kareen As Required)	N/A															\$0.00
1.12	Project Schedule (Baseline Design, 30/60%, Const GMPs (Segment 1, 2, & 3)	4	4.00	8.00	16.00		8.00	4.00									\$4,796.20
1.13	Progress and Special Meeting Agendas and Minutes	21	5.00	5.00	10.00												\$2,418.75
1.14	Cost Model and Conceptual Estimate (Segments 1, 2, & 3)	N/A															\$0.00
1.15	Constructability Review & Preliminary Estimate DC/R/30%/60% (Segments 1, 2, & 3)	N/A															\$0.00
1.16	90% Constructability Reviews - Segment 2, 3, & 1	3	3.00	6.00	24.00		6.00	3.00	24.00								\$7,623.75
1.17	Construction GMPs - Segment 2, Segment 3, & Segment 1	3	12.00	24.00	72.00		6.00	6.00	120.00	12.00		12.00					\$29,964.60
1.18	EEC (DB Designer Sub-Consultant) See EEC 5-24-18 Proposal Attachment A 1	1													\$109,201.40		\$109,201.40
	TASK 1 SUB-TOTALS =		93.00	133.00	224.00	0.00	63.00	30.00	169.00	21.00	12.00	62.00			\$109,201.40	\$0.00	\$202,679.15
			\$14,043.00	\$16,764.65	\$23,150.40	\$0.00	\$7,941.15	\$3,913.50	\$19,620.90	\$2,924.25	\$808.20	\$2,611.70	\$91,977.75	\$1,500.00	\$109,201.40	\$0.00	\$202,679.15
TASK 2 - PERMITTING PLAN DEVELOPMENT																	
2.0	EEC (DB Designer Sub-Consultant) See EEC 5-24-18 Proposal Attachment A 1	1													\$9,018.68	\$2,500.00	\$11,518.68
	TASK 2 SUB-TOTALS =		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			\$9,018.68	\$2,500.00	\$11,518.68
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,018.68	\$2,500.00	\$11,518.68
TASK 3 - PRELIMINARY DESIGN																	
3.0	EEC (DB Designer Sub-Consultant) See EEC 5-24-18 Proposal Attachment A 1	1													\$100,171.09	\$9,800.00	\$109,971.09
	TASK 3 SUB-TOTALS =		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			\$100,171.09	\$9,800.00	\$109,971.09
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$100,171.09	\$9,800.00	\$109,971.09
TASK 4 - FIELD INVESTIGATIONS																	
4.1	Not Used																\$0.00
4.2	Not Used																\$0.00
4.3	Not Used																\$0.00
4.4	Not Used																\$0.00
4.5	Not Used																\$0.00
4.6	Not Used																\$0.00
	TASK 4 SUB-TOTALS =		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TASK 5 - DETAILED DESIGN																	
5.0	EEC (DB Designer Sub-Consultant) See EEC 5-24-18 Proposal Attachment A 1	1													\$171,338.94		\$171,338.94
	TASK 5 SUB-TOTALS =		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			\$171,338.94	\$0.00	\$171,338.94
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$171,338.94	\$0.00	\$171,338.94
ADDITIONAL OWNER CONTINGENCY ALLOWANCES AND REIMBURSABLES																	
Various	EEC (DB Designer Sub-Consultant) See EEC 5-24-18 Proposal Attachment A 1	1															\$164,162.40
	TASK 5 SUB-TOTALS =		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00	\$0.00	\$164,162.40	\$164,162.40
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$164,162.40	\$164,162.40
SUMMARY - BASE HOURLY SERVICES																	
Achen-Gardner Total Estimated Hours			93.00	133.00	224.00	0.00	63.00	30.00	169.00	21.00	12.00	62.00					
EEC Total Estimated Hourly Services			\$14,043.00	\$16,764.65	\$23,150.40	\$0.00	\$7,941.15	\$3,913.50	\$19,620.90	\$2,924.25	\$808.20	\$2,611.70	\$91,977.75	\$1,500.00	\$109,201.40	\$0.00	\$481,707.85
<i>Achen-Gardner Staff % of Time (6 Mos)</i>			8.8%	12.6%	21.2%	0.0%	6.0%	2.8%	16.0%	2.0%	1.1%	6.9%					
AG & EEC BASE HOURLY SERVICES SUB-TOTAL =																\$481,707.85	
SUMMARY - OWNER CONTINGENCY SERVICES																	
Achen-Gardner Total Estimated Allowances																\$1,500.00	\$1,500.00
EEC Total Estimated Allowances																\$136,812.40	\$136,812.40
OWNER CONTINGENCY SERVICES SUB-TOTAL =																\$138,312.40	
TOTAL ESTIMATED SERVICES =																\$620,020.25	

EXHIBIT B.2 - ACHEN-GARDNER HOURLY RATE SUMMARY (5-30-18)

**Pima County SFQ 289179 (Twin Peaks-Blue Bonnet) Design-Build (DB)
Pima No. 3TPBBS / Achen-Gardner Construction, LLC Project No. 3645100**

DESIGN BUILD SERVICES FOR TWIN PEAKS-BLUE BONNET ROAD GRAVITY SEWER PROJECT (PIMA CO. NO. 3TPBBS)

Achen-Gardner Construction, LLC

550 South 79th Street
Chandler, AZ 85226-4706
Office: 480-940-1300 / Fax: 480-940-4576

PROJECT: DB SERVICES FOR TWIN PEAK - BLUE BONNET ROAD GRAVITY SEWER PROJECT

ACHEN-GARDNER CONSTRUCTION, LLC Job No.: 3645100

Man Hour Rate Schedule - Position Description	Base (\$/Hr)	PR Tax + Fringes (%)	Labor Total (\$/Hr)	Equip. (\$/Hr)	L+E (\$/Hr)	Total Calc. Rate w/o Fee (\$/Hr)	15% OH & Fee	Total Calc. Rate (\$/Hr)	Total Rate (\$/Hr)
PIC - Principal in Charge (Dan Spitza)	\$72.10	53%	\$110.31	\$21.00	\$131.31	\$131.30	\$19.70	\$151.01	\$151.00
AM - Area Manager (Jason DeCarlo)	\$55.00	53%	\$84.15	\$25.46	\$109.61	\$109.60	\$16.44	\$126.05	\$126.05
PM - Project Manager (Ryan Montijo)	\$45.00	53%	\$68.85	\$21.00	\$89.85	\$89.85	\$13.48	\$103.33	\$103.35
PE - Project Engineer (TBD)	\$32.50	53%	\$49.73	\$21.00	\$70.73	\$70.75	\$10.61	\$81.33	\$81.35
PS - Project Superintendent (Johnny Martinez)	\$55.00	53%	\$84.15	\$25.46	\$109.61	\$109.60	\$16.44	\$126.05	\$126.05
GS - General Superintendent (Mike Gewecke)	\$57.50	53%	\$87.98	\$25.46	\$113.44	\$113.45	\$17.02	\$130.45	\$130.45
SE/LE - Senior Estimator (Various)	\$52.25	53%	\$79.94	\$21.00	\$100.94	\$100.95	\$15.14	\$116.08	\$116.10
CE - Chief Estimator (Kevin Nunez)	\$62.50	53%	\$95.63	\$25.46	\$121.09	\$121.10	\$18.16	\$139.25	\$139.25
PA - Project Administrator (Various)	\$35.00	53%	\$53.55	\$5.00	\$58.55	\$58.55	\$8.78	\$67.33	\$67.35
C - Clerical (Various)	\$22.50	53%	\$34.43	\$5.00	\$39.43	\$34.45	\$5.91	\$45.34	\$45.35

Note: 15% OH & Fee: Excludes tax and bond and includes 1.5% Insurance and 13.5% Corporate OH & Profit.

EXHIBIT B.3 - ACHEN-GARDNER COST TYPE SUMMARY (5-30-18)

**Pima County SFQ 289179 (Twin Peaks-Blue Bonnet) Design-Build (DB)
Pima No. 3TPBBS / Achen-Gardner Construction, LLC Project No. 3645100**

ACHEN-GARDNER COST TYPE SUMMARY - PRE-CONSTRUCTION PHASE SERVICES COST PROPOSAL - EXHIBIT B.3

DESIGN BUILD SERVICES FOR TWIN PEAKS-BLUE BONNET ROAD GRAVITY SEWER PROJECT (PIMA CO. NO. 3TPBBS)

Achen-Gardner Construction, LLC

550 South 79th Street
 Chandler, AZ 85226-4706
 Office: 480-940-1300 / Fax: 480-940-4576

Date: 5/30/2018
 Version/Revision: 06

PROJECT: DB SERVICES FOR TWIN PEAK - BLUE BONNET ROAD GRAVITY SEWER PROJECT
ACHEN-GARDNER CONSTRUCTION, LLC Job No.: 3645100

	RATE	HOURS	AMOUNT
PIC	\$151.00	93.00	\$14,043.00
AM	\$126.05	133.00	\$16,764.65
PM	\$103.35	224.00	\$23,150.40
PE	\$81.35	0.00	\$0.00
PS	\$126.05	63.00	\$7,941.15
GS	\$130.45	30.00	\$3,913.50
SE/LE	\$116.10	169.00	\$19,620.90
CE	\$139.25	21.00	\$2,924.25
PA	\$87.35	12.00	\$808.20
CE	\$45.35	62.00	\$2,811.70
ACHEN GARDNER TOTAL LABOR			\$91,977.75
ALLOWANCES			\$528,042.50
TOTAL CONTRACT			\$620,020.25

INCLUDES 15% MARKUP
SEE DETAIL BELOW

ALLOWANCES

REPO /SUPPLIES	\$1,500.00	
	\$0.00	
	\$0.00	
SUB TOTAL ACHEN GARDNER	\$1,500.00	\$1,500.00
EEC BASE SERVICE	\$389,730.10	
EEC SUBCONSULTANTS	\$136,812.40	
		\$136,812.40
SUB TOTAL EEC	\$528,542.50	\$138,312.40
TOTAL ALLOWANCES & CONTINGENCIES	\$528,042.50	

RECAP	
LABOR AND MARKUP	\$91,977.75
EEC SUB	\$528,542.50
OTHER	\$1,500.00
TOTAL CONTRACT	\$620,020.25

EXHIBIT B.4 - EEC'S MAY 24, 2018 FEE PROPOSAL (5-30-18)

**Pima County SFQ 289179 (Twin Peaks-Blue Bonnet) Design-Build (DB)
Pima No. 3TPBBS / Achen-Gardner Construction, LLC Project No. 3645100**



Engineering and Environmental Consultants, Inc.

555 E. River Road, Suite 301 | Tucson, Arizona 85704 | P: 520.321.4625

May 24, 2018

ATTN: Mr. Dan Spitz, P.E.

550 South 79th Street

Chandler, AZ 85226

Re: AG Project No. 3645100
Pima County – 3TPBBS Twin Peaks-Blue Bonnet Road Sewer Project
Fee Proposal for Pre-Construction Phase

Dear Mr. Spitz:

Engineering and Environmental Consultants, Inc. (EEC) is pleased to submit this proposal to provide professional engineering services for the Pre-Construction phase of the Twin Peaks-Blue Bonnet Road Sewer (3TPBBS) Project. This proposal is specifically for continuation of the detailed design phase for Segment 1, Segment 2 and Segment 3. We are including fee proposal documents that provide you details of our task breakdown. The Detailed Design Fee Estimate utilizes current labor rates, overhead and profit as stipulated by Pima County Procurement letter of April 24, 2018.

The following is our proposed Scope of Work for the Detailed Design Phase and attached **Exhibits A-1** is the estimated engineering fee associated with the outlined scope. This fee estimate assumes the continuation of design will be approximately another 8 months (or 32 weeks).

Proposed Scope of Work – Detailed Design Services

TASK 1 Project Management :

The purpose of this task is to manage, coordinate and communicate all design efforts with Achen-Gardner and the County:

- **First Level Project Meetings and Coordination:** During the detailed design phase we propose bi-weekly project coordination meetings with the County project team and EEC/Achen Gardner design team and encompass effort to prepare agendas and meeting minutes and supporting documents for each meeting.
- **Second Level Project Meetings and Coordination:** Bi-weekly EEC/Achen-Gardner design team meetings and EEC to track project progress and tasks
- **Third Level Project Meetings and Coordination:** Internal project meetings and coordination of EEC design team, sub-consultants and utility companies using task matrix tracking.
- **Stakeholder/Specialty Meetings and Coordination:** This includes preparation for and attendance of up to two stakeholder meetings along with specialty meetings involving specific design disciplines.

Integrity | Focus | Commitment | Communication

www.eec-info.com

- **Utility Coordination and Correspondence:** EEC will develop a utility contact list and coordinate and correspond with utility companies to obtain as-built information and coordinate project information.
- **Contract Administration:** Coordination with Achen-Gardner and County Project Manager on contract administration needs and includes preparation of invoices and oversight of project design team and sub-consultants.
- **Project Scheduling and Controls:** EEC will provide the information necessary to Achen-Gardner to prepare project schedules for design phase milestones.

TASK 2 Permitting Plan Development

Utilizing the Permitting Plan developed in the preliminary design phase, this task consists of continuing efforts to coordinate and attend meetings with review Agencies as well as preparation of permit applications.

TASK 3 Preliminary Design:

This task will be a continuation of providing field survey and mapping needs for development of base maps for Segment 1 and Segment 3. This task includes the following major task items:

- **Survey and Mapping:** EEC will provide continued surveying and mapping of Segment 1 and Segment 3 suitable for final design of the proposed gravity sewer. All work will be done under the direction of a Licensed Land Surveyor in the State of Arizona. The following activity framework will be used to guide the proposed survey:
 - ✓ Control Network: Basis of Bearing and coordinates will be Pima County control monumentation and/or OPUS control monumentation. Horizontal Basis will be Arizona State Plane NAD 83, 1992, international feet. Vertical Datum will be NAVD 88 and based on the same monumentation. Construction survey control monuments stamped and tagged by a Licensed Land Surveyor in the State of Arizona, will be set at approximately $\frac{1}{4}$ mile intervals for the length of the project.
 - ✓ Existing centerline and ROW monument that may be disturbed during construction will be tied and shown on plans with full description.
 - ✓ Existing culture and topography will be located by a combination of aerial photography and or ground truth direct observation.
 - ✓ Horizontal and Vertical control will be set and or verified to Arizona Licensing Standards and will be at a minimum of a nail and shiner in concrete/asphalt or a $\frac{1}{2}$ " rebar.
 - ✓ Both above ground and below ground utilities will be located when possible with rim and invert elevations being collected via ground truth in all cases.
 - ✓ Survey area will be Right-of-Way left to Right-of-Way right along the entire corridor from Cortaro Farms Road to Tangerine Road.

- ✓ Survey will encompass the first 200 feet all side street Right-of-Way.
- ✓ Water/Sewer/Storm laterals will be located out to the first manhole or valve.

- **Alignment Analysis:** Using as-built and survey information, a preliminary alignment will be developed for Phase 2, Segment 1 and Segment 3. This will include a review of potential alternative alignment at Tangerine Road and Twin Peaks Road, as well as for the tie-in location at Cortaro Farms Road.
- **Engineering Design Memorandum:** A Design Memorandum will be prepared to include the criteria established for the basis of design and include flow, hydraulic and alignment evaluation. This Design Memorandum will be submitted to ADEQ.

TASK 4 Field Investigation

The fee estimate for the Endangered Species Survey and Native Plant Survey under this task was developed for the Preliminary Design Phase.

TASK 5 Detailed Design

EEC will prepare design drawings in accordance to PCRWRD Engineering Design Standards (Updated 2017), comply with ADEQ requirements and shall adhere to the recommendations presented in the Design Memorandum. The following stages of submittals will be provided, along with other related tasks:

- **Combined 30%/60% Submittal:**
 - ✓ Plan/Profile and Detail Sheets
 - ✓ Specialty Designs and Design Report
 - ✓ Submittal to Agencies and Utilities
 - ✓ Review and Utility Conflict Meetings
- **90% Submittal:**
 - ✓ Revisions to design documents and response to comments
 - ✓ Submittal to Agencies and Utilities
 - ✓ Review and Utility Conflict Meetings
- **100% and Final Submittal:**
 - ✓ Revisions to design documents and response to comments
 - ✓ Submittal to Agencies and Utilities
 - ✓ Review and Utility Conflict Meetings
- **Constructability Reviews/Value Engineering:** EEC will provide documents for review and meet with Achen-Gardner for constructability reviews and value engineering reviews.
- **Public Relations Assistance:** EEC will provide Achen-Gardner exhibits as required for public information meetings

Mr. Dan Spitza, P.E.
Achen-Gardner
May 24, 2018
Page 4 of 4

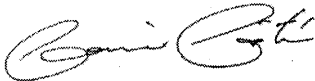
- **Final Documents for Agency Submittals:** EEC will coordinate and prepare final submittal packages to Agencies for review and approval

Allowances and Reimbursables

- **Subsurface Utility Engineering/Pothole Data:** This fee is for our sub-consultant, CARDNO, to provide potholing and utility locating services. The fee is approximately half of the estimated potholing needs for Segment 1 and Segment 3. The fee estimate is based on providing up to 15 off road potholes and 25 on pavement potholes. This fee also includes providing for up to 10 utility clearances for the geotechnical sub-consultant.
- **ROW, Easements and Legal Descriptions:** This allowance is for efforts to develop legal descriptions associated with obtaining ROW or easements for Segment 1 and Segment 3.
- **Structural Analysis:** EEC has included an allowance for a structural sub-consultant. It is projected that some structural analysis may be required for assessing decommissioning needs of the existing pump station as well as junction structures, should it be required. EEC would obtain approval from Achen-Gardner and provide a fee estimate
- **Review Fee Allowance:** This fee estimate is based on the assumption that two separate design submittals to ADEQ will be required. One for Segment 2 and a separate submittal for Segment 1 and 3. ADEQ fee is calculated based on the design flow. We have estimated the fee using the provide Average Day Flow of 1.05MGD.
- **Reimbursables:** This includes any reproduction costs in preparing and providing the required deliverables.

Thank you for the opportunity to provide this proposal. Should you have any questions, please do not hesitate to contact me directly at (602) 248-7702 EXT 7322.

Sincerely,

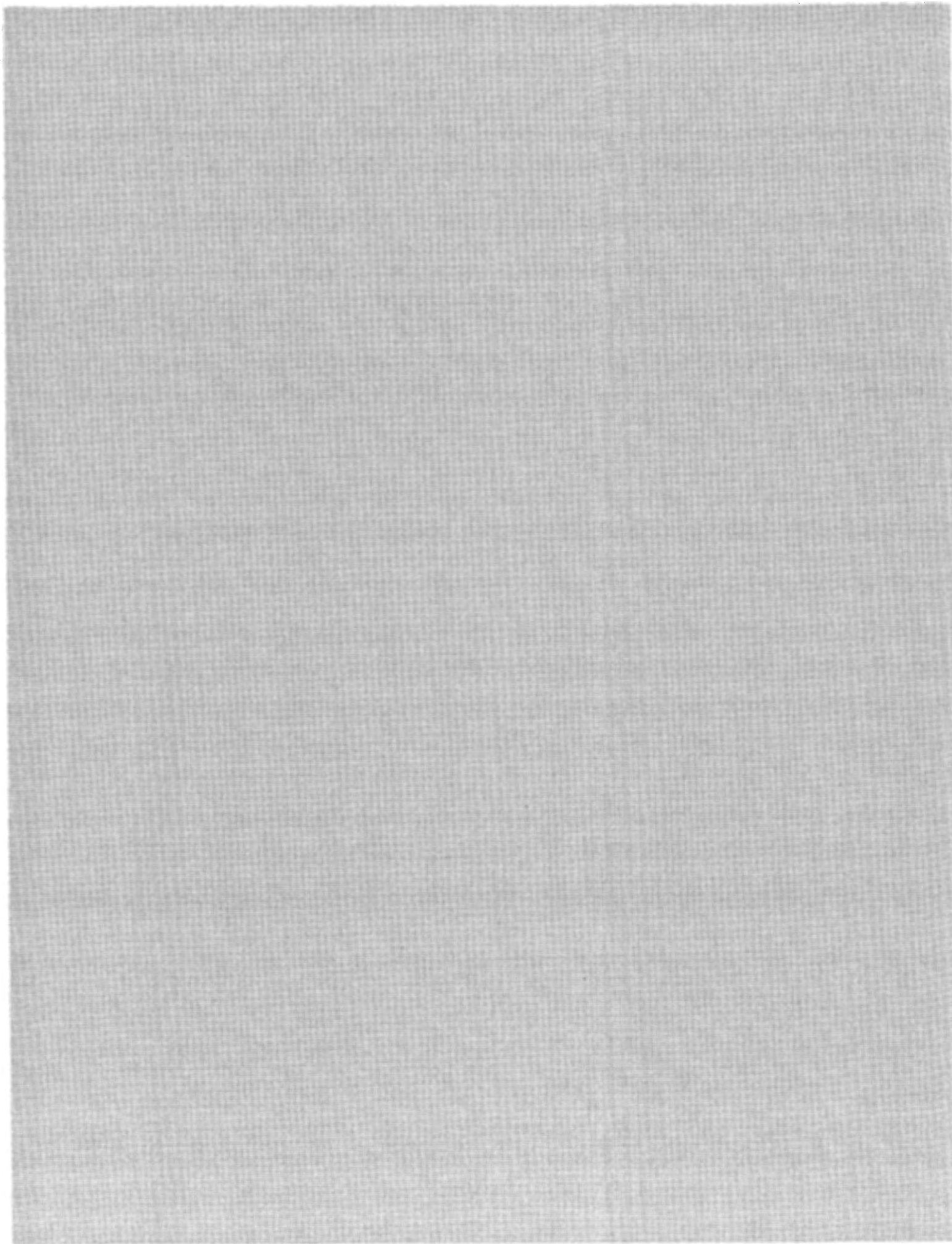


Carrie Cote, PE
Project Manager

Enclosures

Exhibit A-1

Fee Estimate – Detailed Design Phase



FEE ESTIMATE SUMMARY

PROJECT: 3TPBBS - Pima County Twin Peaks/Blue Bonnet Road Gravity Sewer

DATE: May 14/2018

PREPARED BY: Engineering and Environmental Consultants (EEC)

ITEM NO.	EEC Inc.	Discipline	Direct Labor Rate	Overhead 171.5%	Profit 8%	Billing Rate
1	Principal	Civil Engineering	\$75.00	\$128.63	\$16.29	\$219.92
2	Project Manager	Civil Engineering	\$59.95	\$102.81	\$13.02	\$175.79
3	Senior A/E	Civil Engineering	\$65.00	\$111.48	\$14.12	\$190.59
4	A/E	Civil Engineering	\$54.81	\$94.00	\$11.90	\$160.71
5	Designer	Civil Engineering	\$38.26	\$65.62	\$8.31	\$112.19
6	CADD	Civil Engineering	\$33.65	\$57.71	\$7.31	\$98.67
7	Professional Level IV	Civil Engineering	\$66.30	\$113.70	\$14.40	\$194.40
8	Professional Level III	Civil Engineering	\$54.81	\$94.00	\$11.90	\$160.71
9	Professional Level II	Civil Engineering	\$50.00	\$85.75	\$10.86	\$146.61
10	Professional Level I	Civil Engineering	\$41.51	\$71.19	\$9.02	\$121.72
11	Clerical/Admin	Civil Engineering	\$22.05	\$37.82	\$4.79	\$64.66
12	Survey Crew – 3 Man	Civil Engineering	\$81.00	\$138.92	\$17.59	\$237.51
13	Survey Crew – 2 Man	Civil Engineering	\$54.00	\$92.61	\$11.73	\$158.34
14	Survey Manager RLS	Civil Engineering	\$46.57	\$79.87	\$10.12	\$136.55
15						

Exhibit A-1: Fee Estimate (Detailed Design Phase - Design/Build Contract)					Bill	Carrie	Bob/Bruce	David/Jacob	Kim/David	Robert							
Pima County Project 3TPBB - Twin Peaks-Blue Bonnet Road Gravity Sewer Project																	
TASK	QCL Task No.	Task Description	Estimated Costs	Estimated Total Hours	Principal	PM	A/E	Prof Level III	Designer	CADD	ADMIN	SURVEY CREW	Expenses/subs				
					\$ 219.92	\$ 175.79	\$ 160.71	\$ 160.71	\$ 112.19	\$ 98.67	\$ 64.66	\$ 158.34					
		1.0 Project Management															
	2.1	1.1 First Level Project Meetings and Coordination (Bi-Weekly - 8 months))	\$ 17,427.84	112	\$ -	64 \$ 11,250.56	32 \$ 5,142.72	\$ -	\$ -	\$ -	\$ -	16 \$ 1,034.56	\$ -				
	2.2	1.2 Second Level Project Meetings and Coordination (Achen/EEC Bi-Wkly, 8mo)	\$ 6,057.00	36	\$ -	18 \$ 3,164.22	18 \$ 2,892.78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.3	1.3 Third Level Project Meetings and Coordination (Design Team/Subs)	\$ 48,835.20	336	16 \$ 3,518.72	64 \$ 11,250.56	64 \$ 10,285.44	64 \$ 10,285.44	64 \$ 7,180.16	64 \$ 6,314.88	\$ -	\$ -	\$ -				
		1.4 Stakeholder/Special Meetings and Coordination	\$ 13,304.80	88	8 \$ 1,759.36	16 \$ 2,812.64	32 \$ 5,142.72	\$ -	32 \$ 3,590.08	\$ -	\$ -	\$ -	\$ -				
		1.5 Utility Coordination and Correspondence	\$ 6,428.40	40	\$ -	\$ -	\$ -	40 \$ 6,428.40	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.4	1.6 Contract Administration	\$ 11,522.88	104	8 \$ 1,759.36	32 \$ 5,625.28	\$ -	\$ -	\$ -	\$ -	\$ -	64 \$ 4,138.24	\$ -				
		1.7 Project Scheduling and Controls	\$ 5,625.28	32	\$ -	32 \$ 5,625.28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Sub-Total Task 1	\$ 109,201.40	748													
		2.0 Permitting Plan Development (All Phases)															
	1.1	2.1 Permitting Workplan	\$ -	-	\$ -	0 \$ -	\$ -	0 \$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	1.2	2.2 Agency Coordination and Meetings	\$ 4,098.32	24	\$ -	16 \$ 2,812.64	8 \$ 1,285.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		2.3 Permit Applications and Submittals	\$ 4,920.36	44	\$ -	4 \$ 703.16	\$ -	\$ -	20 \$ 2,243.80	20 \$ 1,973.40	\$ -	\$ -	\$ -				
		Sub-Total Task 2	\$ 9,018.68	68													
		3.0 Preliminary Design (All Phases)															
	2.5	3.1 Data Research and Collection	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.6	3.2 Survey and Mapping/Locate Bluestake/Inverts/Linework (Phase 2)	\$ 65,021.20	460	\$ -	20 \$ 3,515.80	\$ -	80 \$ 12,856.80	\$ -	140 \$ 13,813.80	\$ -	220 \$ 34,834.80	\$ -				
	3.1	3.3 As-Built Validation and Development/Utility Coordination & Correspondence	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		3.4 Visual Inspections & Photography	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.8	3.5 Flow/Hydraulics - Design Criteria and Confirmation	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.9	3.6 Drainage and Scour Analysis	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	3.2 & Allow	3.7 ROW Research and Assistance	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	2.10	3.8 Jurisdictional Delineation	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	3.3	3.9 Existing Condition (Strip Map-Phase 2)	\$ 19,554.48	168	\$ -	\$ -	48 \$ 7,714.08	\$ -	\$ -	\$ -	\$ -	120 \$ 11,840.40	\$ -				
	2.12	3.10 Alignment Analysis (Phase 2)	\$ 15,595.40	140	\$ -	\$ -	20 \$ 3,214.20	\$ -	40 \$ 4,487.60	80 \$ 7,893.60	\$ -	\$ -	\$ -				
	2.13	3.11 Design Memorandum	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Sub-Total Task 3	\$ 100,171.08	768													
		4.0 Field Investigations															
	3.4	4.4 Review of Endangered Species Survey	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	3.5	4.5 Native Plant Survey	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Sub-Total Task 4	\$ -	-													
		5.0 Detailed Design															
	5.1	5.1 Combined 30%/60% Plan/Profile	\$ 58,672.50	510	\$ -	\$ -	30 \$ 4,821.30	\$ -	480 \$ 53,851.20	\$ -	\$ -	\$ -	\$ -				
	5.2	5.2 Combined 30%/60% Details and Design Report	\$ 15,948.91	113	8 \$ 1,759.36	15 \$ 2,636.85	30 \$ 4,821.30	\$ -	60 \$ 6,731.40	\$ -	\$ -	\$ -	\$ -				
	5.3	5.3 Combined 30%/60% Submittal Package	\$ 3,238.22	26	\$ -	2 \$ 351.58	4 \$ 642.84	\$ -	20 \$ 2,243.80	\$ -	\$ -	\$ -	\$ -				
	5.4	5.4 Combined 30%/60% Review & Conflict Review Meeting	\$ 4,172.04	28	\$ -	4 \$ 703.16	8 \$ 1,285.68	8 \$ 1,285.68	8 \$ 897.52	\$ -	\$ -	\$ -	\$ -				
	5.5	5.5 Combined 30%/60% Specifications and Design Report	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	5.6	5.6 90% Design Documents/Response to Comments	\$ 44,118.54	346	8 \$ 1,759.36	30 \$ 5,273.70	60 \$ 9,642.60	\$ -	240 \$ 26,925.60	\$ -	8 \$ 517.28	\$ -	\$ -				
	5.7	5.7 90% Submittal Package	\$ 2,374.96	20	\$ -	2 \$ 351.58	4 \$ 642.84	\$ -	10 \$ 1,121.90	\$ -	4 \$ 258.64	\$ -	\$ -				
	5.80	5.80 90% Review & Conflict Review Meeting	\$ 4,172.04	28	\$ -	4 \$ 703.16	8 \$ 1,285.68	8 \$ 1,285.68	8 \$ 897.52	\$ -	\$ -	\$ -	\$ -				
	5.90	5.90 100% & Final Design Documents/Response to Comments	\$ 21,800.63	169	4 \$ 879.68	15 \$ 2,636.85	30 \$ 4,821.30	\$ -	120 \$ 13,462.80	\$ -	\$ -	\$ -	\$ -				
	5.10	5.10 100% & Final Submittal Package	\$ 3,628.02	30	\$ -	4 \$ 703.16	8 \$ 1,285.68	\$ -	10 \$ 1,121.90	\$ -	8 \$ 517.28	\$ -	\$ -				
	5.11	5.11 ROW Assistance	\$ 2,490.68	28	\$ -	\$ -	\$ -	\$ -	\$ -	20 \$ 1,973.40	8 \$ 517.28	\$ -	\$ -				
	5.12	5.12 Native Plant Mitigation Plan	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	5.13	5.13 Constructability Reviews/Value Engineering	\$ 2,692.00	16	\$ -	8 \$ 1,406.32	8 \$ 1,285.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	5.14	5.14 Public Relations Assistance	\$ 2,692.00	16	\$ -	8 \$ 1,406.32	8 \$ 1,285.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	5.15	5.15 Final Documents for Agency Submittals	\$ 5,338.40	40	\$ -	10 \$ 1,757.90	10 \$ 1,607.10	\$ -	\$ -	20 \$ 1,973.40	\$ -	\$ -	\$ -				
		Sub-Total Task 5	\$ 171,338.94	1,370													
		Allowances and Reimbursable															
Allowance		ROW/Easement Legal Descriptions Allowance (EEC)	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Allowance		ROW Research & Assistance Allowance (Tierra ROW)	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Subsurface Utility Engineering/Pothole Data - Segments 1 & 3	\$ 40,830.00	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		ROW, Easements & Legal Descriptions - Segments 1 & 3	\$ 30,000.00	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Structural Analysis Allowance	\$ 10,000.00	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Review Fee Allowance	\$ 50,000.00	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Allowance		Reimbursable	\$ 5,982.40	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
		Allowances and Reimbursable Sub-Total	\$ 136,812.40	-													
			\$ -	-													
			\$ -	-													
		Total Fee	\$ 526,542.50	2,954	52 \$ 11,435.84	368 \$ 64,690.72	430 \$ 69,105.30	200 \$ 32,142.00	1112 \$ 124,755.28	464 \$ 45,782.88	108 \$ 6,983.28	220 \$ 34,834.80	0 \$ -				

FEE ESTIMATE SUMMARY

PROJECT: Twin Peaks-Blue Bonnet Road Gravity Sewer Project (3TPBBS)

DATE 5/3/2018

PREPARED BY: Cardno, Inc.

CONTRACT NO.: _____

ITEM NO.	Cardno	Discipline	A	B	C	D
			Direct Labor Rate	Overhead 192.12%	Profit 8%	Billing Rate
1	Principal	Subsurface Utility Engineering	\$84.14	\$161.65	\$19.66	\$265.45
2	Project Manager	Subsurface Utility Engineering	\$52.78	\$101.40	\$12.33	\$166.52
3	Senior A/E	Subsurface Utility Engineering	\$41.19	\$79.13	\$9.63	\$129.95
4	Designer	Subsurface Utility Engineering	\$37.13	\$71.33	\$8.68	\$117.14
5	CADD	Subsurface Utility Engineering	\$32.81	\$63.03	\$7.67	\$103.51
6	Prof Level IV (SUE Manager)	Subsurface Utility Engineering	\$39.98	\$76.81	\$9.34	\$126.13
7	Prof Level III (SUE Technician III)	Subsurface Utility Engineering	\$26.96	\$51.80	\$6.30	\$85.06
8	Prof Level II (SUE Technician II)	Subsurface Utility Engineering	\$20.93	\$40.21	\$4.89	\$66.03
9	Prof Level I (SUE Technician I)	Subsurface Utility Engineering	\$17.47	\$33.56	\$4.08	\$55.12
10	Clerical / Admin	Subsurface Utility Engineering	\$27.32	\$52.49	\$6.38	\$86.19
11	Survey Crew (2 Person)	Subsurface Utility Engineering	\$52.49	\$100.84	\$12.27	\$165.60

Formulas

(A) Direct Labor Rate

(B) Overhead @ ____ % X (A)

(C) Profit @ ____ % X (A+B)

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

Truck & Equipment

*Survey Truck & Equipment \$31/hour

*Designating Truck & Equipment \$22/hour

*Vacuum Excavation Truck & Equipment \$78/hour

*Note: Cardno audited OH separates the vehicle and equipment separately from the audit rate and the truck costs are outlined in the rates above. These rates need to be accounted for in the fully loaded rate base on the audit performed.

May 21, 2018



Carrie Côté, PE
Phoenix Office Manager
7740 N. 16th Street, Suite 135
Phoenix, AZ 85020

Re: Twin Peaks – Blue Bonnet Road Gravity Sewer Project (3TPBBS)
Pima County Wastewater Reclamation Dept.
½ of Phase 2, Project Segments 1 and 3
Revised Proposal for Subsurface Utility Engineering Services

Cardno

4855 N. Shamrock Place
Suite 109
Tucson, AZ 85705
USA
Phone 520.770.0021
Fax 520.408.3002
Email Dan.Padilla@Cardno.com

Dear Ms. Côté:

www.Cardno.com

Cardno is pleased to submit this proposal to provide professional Subsurface Utility Engineering (SUE) services for the above referenced project to EEC (Client). The scope of work and fee structure are as follows:

SCOPE OF WORK

Project Limits

The project limits for Subsurface Utility Engineering services include the Phase 2 – Segments 1 and 3 alignments as identified on attached exhibit. Segment 1 is approximately 1.9 miles in length and begins along the north side of Tangerine Road approximately 900 ft. west of Twin Peaks Rd proceeds south across Tangerine Rd then east across Twin Peaks Rd. to a point near the east right of way line then proceeds south for approximately 1.7 miles to the Blue Bonnet Road intersection. Segment 3 is approximately 1.5 miles in length beginning at the south right of way of Linda Vista Blvd. proceeding south near the center of Hartman Road to the south side of Cortaro Road.

Utility Locating (Potholing) Services

Cardno will provide up to eighty (40) compressed air/vacuum excavation test holes (potholes) without survey on existing subsurface utilities at locations yet to be identified along the Phase 2 – Segments 1 & 3 portions of the project. Survey of the requested potholes is not part of Cardno's scope for the project. Cardno requests that Client survey stake, field mark, and number the location of the potholes prior to excavation. Cardno will utilize these marks to ensure that excavation occurs at the Client's desired location and will be used by our crews to report the horizontal location adjustment of the utilities potholed. Cardno's vacuum excavation potholes will be approximately 12" in diameter and at each pothole location a 40D soil nail or PK nail on pavement will be placed over the center of each found utility and will be used as the basis for all horizontal and vertical measurements; once set these markers can be surveyed by the Client's surveyor after excavation of the potholes has been conducted to determine elevation of the potholed lines. The utility data obtained through our standard potholing procedure includes the depth, size and material composition of the utility exposed, horizontal location of found utility tied to existing structures using swing ties, backfill of excavated potholes using compacted native material, and pavement restoration using Perma Patch brand "permanent" asphalt cold patch.

Utility Designating (Surface Marking) Services

At five 10 ft. x 10 ft. yet to be identified soil bore locations Cardno will provide utility designating services of existing traceable (metallic or non-metallic buried with trace wire) subsurface utilities utilizing a variety of geophysical locating equipment to detect, verify and designate the approximate horizontal location of subsurface utilities from above ground. Once utilities have been investigated with traditional geophysical locating equipment an attempt will be made to detect non-metallic utilities using Ground Penetrating Radar (GPR) however the effectiveness of GPR

is dependent on proper soil conditions. Untraceable (non-metallic) utilities that cannot be traced using GPR equipment will not be marked. Designated utilities shall be marked in the field using the standard APWA color convention distinguished with white cross marks and pink end marks. Survey and CAD mapping is not part of the requested scope for this project. Cardno does not guarantee the completeness of utility designation services within the requested areas due to unforeseen field conditions, and the lack of utility as-built data. Use of this service does not negate an excavator's responsibility to notify the Arizona 811 Center 48 hours prior to any excavation. Client shall provide any available utility record information to Cardno prior to providing designating service. Also prior to service, Client will provide CAD files containing the project topographic base mapping (if available) for use by our field crews in generating a field sketch of designated utilities.

DELIVERABLES

Pertinent Utility Test Hole data will be presented in scanned electronic format on our standard field "Testhole Data Report" forms that include the depth, horizontal swing ties to markers set by client, size, and material composition of the utility line exposed. For our Utility Designating services, Cardno will provide one hard copy of Utility Field Sketch (not to scale) displaying designated utilities for use by Client in addition to the various utility designating paint markings placed on the ground surface.

SCHEDULE

Cardno will work closely with the project team to provide deliverables in a timeframe consistent with the overall project schedule. For the requested Utility Locating (Potholing) please allow 6 weeks from date of receipt of applicable permits for submittal of project deliverables. For the requested Utility Designating please allow 1 week from date of Notice to Proceed to schedule service.

ESTIMATED FEE

Cardno proposes compensation for the Subsurface Utility Engineering services as identified below.

½ PHASE 1 - UTILITY LOCATING (POTHOLING) & DESIGNATING - WITHOUT SURVEY

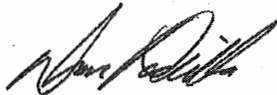
<u>Classification</u>	<u>Number</u>	<u>Rate</u>	<u>Total</u>
Air-Vacuum Utility Test Holes Off Road	15	\$500.00	\$7,500.00
Air-Vacuum Utility Test Holes On Pavement	25	\$550.00	\$13,750.00
Possible Surcharge for potholes greater than 8 ft. -- \$55.00 per ft. (Estimate Only)	12	\$55.00	\$660.00
Possible "Dry Holes" (See Below) - per Pothole	0	\$500.00	\$0.00
Utility Designating for Soil Bores - (10) 10'x10' Areas (Must be Requested as Group, Else \$450 Individually)	5	\$300.00	\$1,500.00
Senior Project Manager - Biweekly Progress Meetings	4	\$155.00	\$620.00
Subtotal			\$24,030.00

<u>Reimbursable Expenses</u>	<u>Number</u>	<u>Rate</u>	<u>Total</u>
Marana Right of Way Permitting (Estimate, Cost+10%)	-	-	\$600.00
Pima County Right of Way Permitting (Estimate, Cost+10%)	-	-	\$600.00
Traffic Control: Permits, Plans, and Control for Locating Effort (Estimate, Cost + 10%)	-	-	\$5,500.00

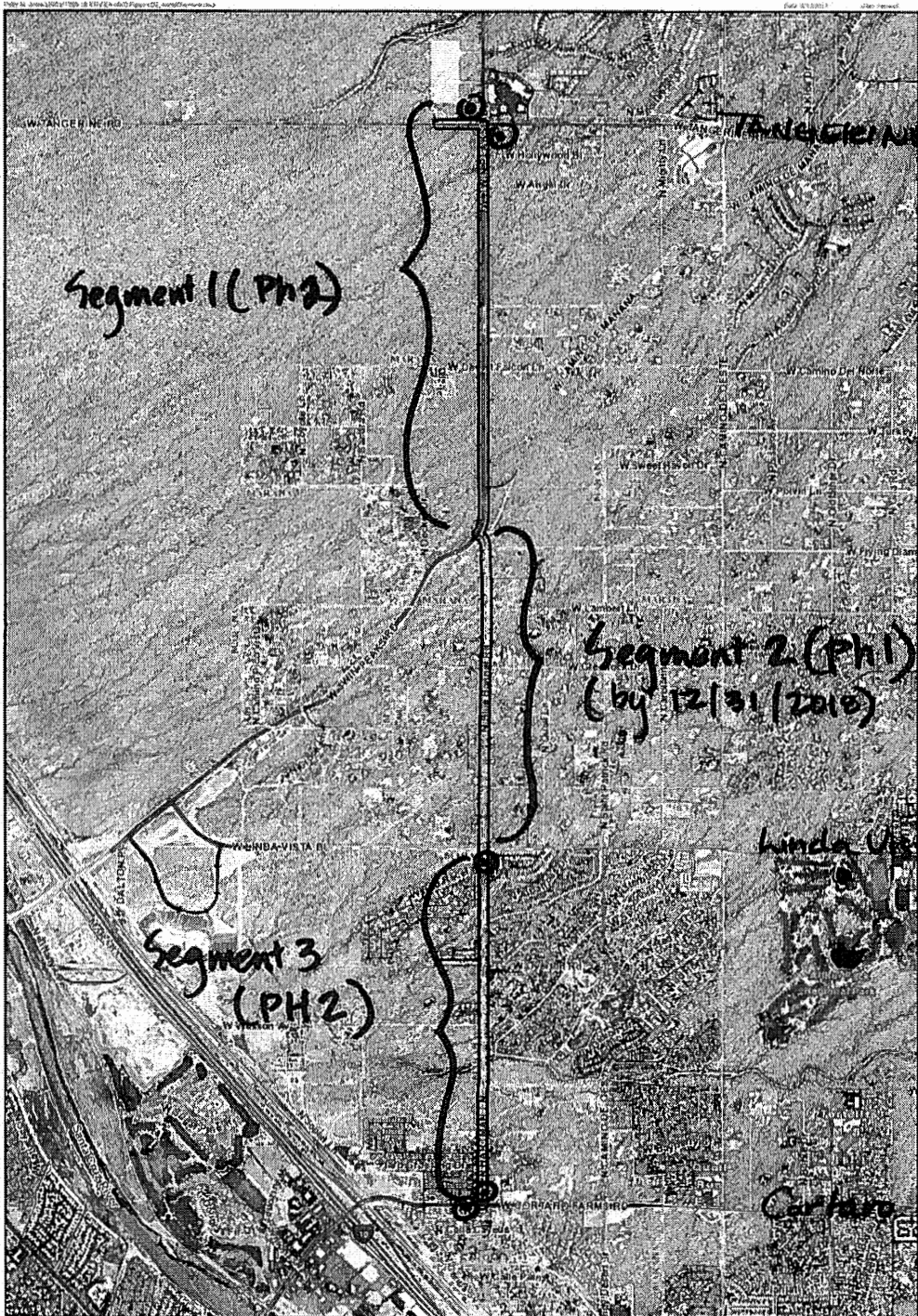
<u>Reimbursable Expenses (Continued)</u>	<u>Number</u>	<u>Rate</u>	<u>Total</u>
CLSM Backfill (Estimate, Invoiced at Cost + 10%)	-	-	\$2,250.00
Spoil Disposal (Estimate, Invoiced at Cost + 10%)	-	-	\$750.00
Asphalt Hot Patch (If Required, Estimate, Invoiced at Cost + 10%)	-	-	\$4,300.00
Traffic Control: Permits, Plans, and Control for Hot Patch Effort (If Hot Patch Required, Estimate, Cost + 10%)	-	-	<u>\$2,800.00</u>
Subtotal			\$16,800.00
TOTAL ESTIMATED FEE			\$40,830.00

The rates identified above for Air-Vacuum Testholes include project management, AZ 811 coordination, air-vacuum extraction excavation with two person crew, our standard backfill with native material compacted in lifts, our standard 12" x 12" pavement restoration with "Perma-Patch" brand asphalt cold patch for test holes in pavement, 12" x 12" concrete sidewalk restoration using bagged pre-mixed concrete for test holes in sidewalk, and project deliverable submitted on our "Testhole Data Summary" and Testhole Data Reports" in scanned electronic format. Please note that above fee schedule does not include such reimbursable expenses as uniformed police officers (if required), special backfill requirements, compaction testing, traffic control flag-men, and or replacement of full sections of concrete sidewalk; if any of these items should be required, they will be considered a reimbursable item, submitted to Client for pre-authorization, subcontracted, and billed separately. Reimbursable expenses for traffic control and traffic control plans will be invoiced at our cost plus ten percent. Cardno will not exceed the estimated fee without prior authorization from Client. **An invoice will be prepared upon completion for the actual work completed up to the estimated budget amount.** We appreciate this opportunity to provide Subsurface Utility Engineering services for this project. Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

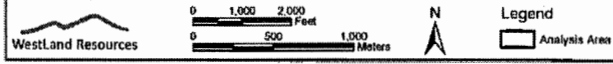


Dan Padilla
Senior Project Manager

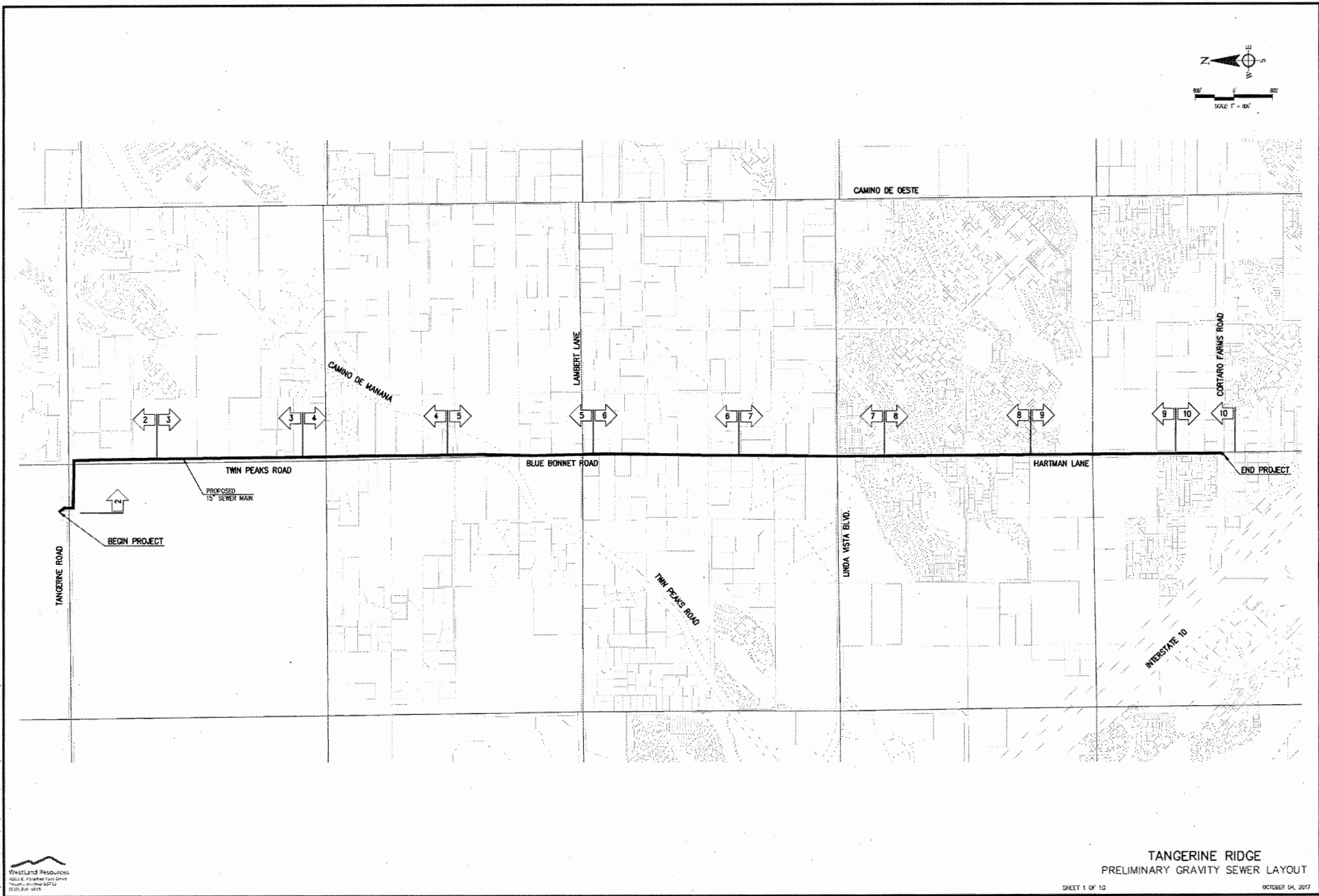
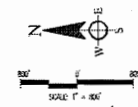


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 T12S, R12E, Portions of Sections, 1, 2, 11-14, and 23-26,
 Pima County, Arizona.
 Image Source: USDA 2015 NAIP Orthophoto

**TANGERINE ROAD RELIEF GRAVITY
 SEWER LINE PROJECT**
 Pima County Regional Wastewater
 Reclamation Department
 Environmental Overview



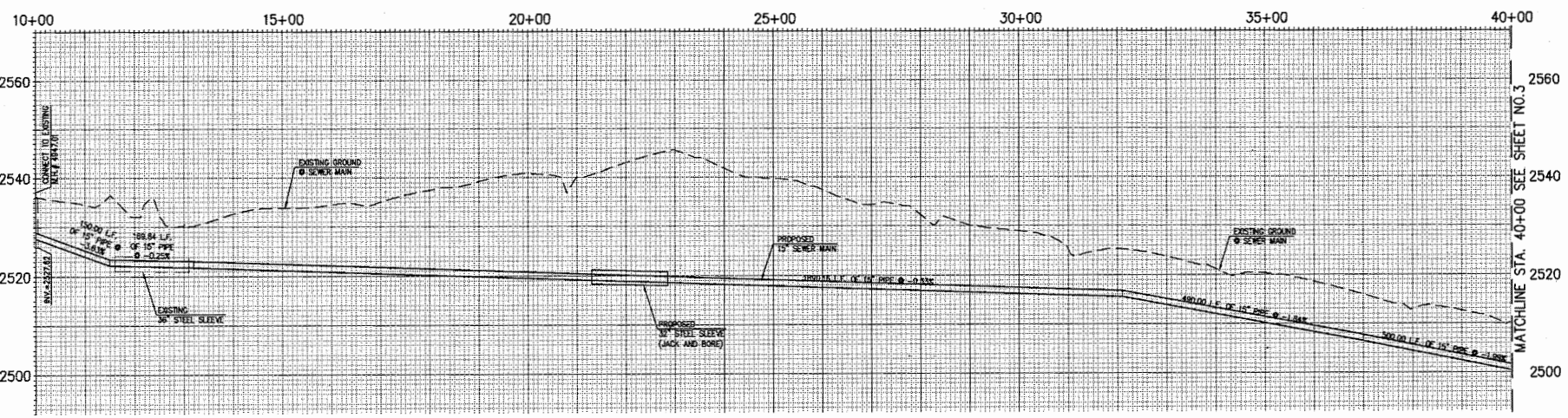
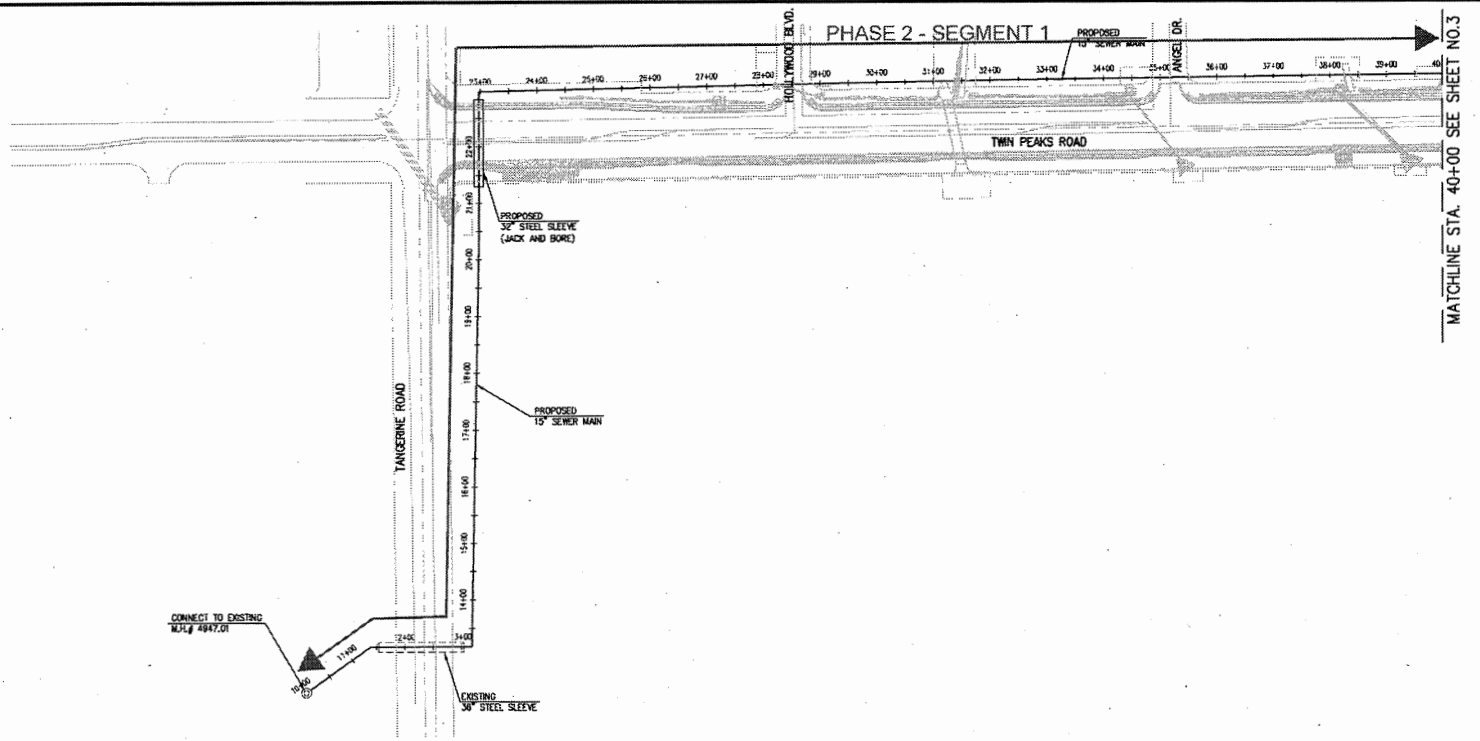
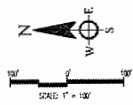
AERIAL OVERVIEW
 Figure 2



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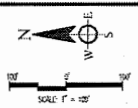
WestLand Resources
4001 E. Frontier Lane
Pueblo, Colorado 81024
303.796.4500

TANGERINE RIDGE
PRELIMINARY GRAVITY SEWER LAYOUT



TANGERINE RIDGE
PRELIMINARY GRAVITY SEWER LAYOUT

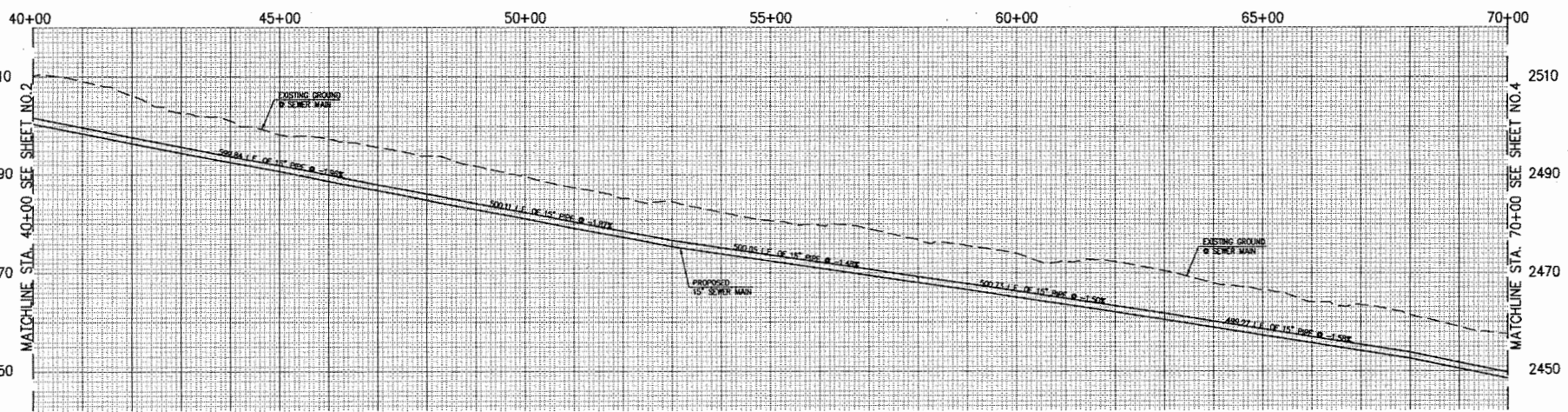
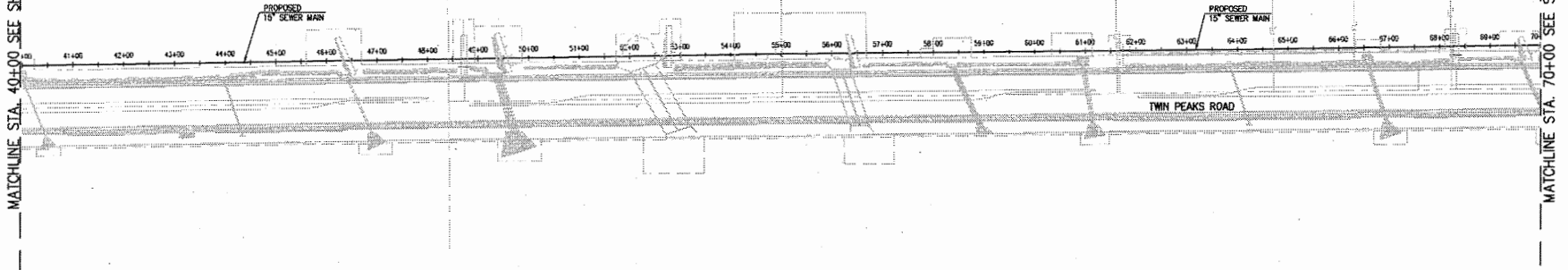
WestLand Resources
 4801 E. Mountain View Drive
 Phoenix, AZ 85044
 P: 602.974.4100



MATCHLINE STA. 40+00 SEE SHEET NO. 2

MATCHLINE STA. 70+00 SEE SHEET NO. 4

PHASE 2 - SEGMENT 1



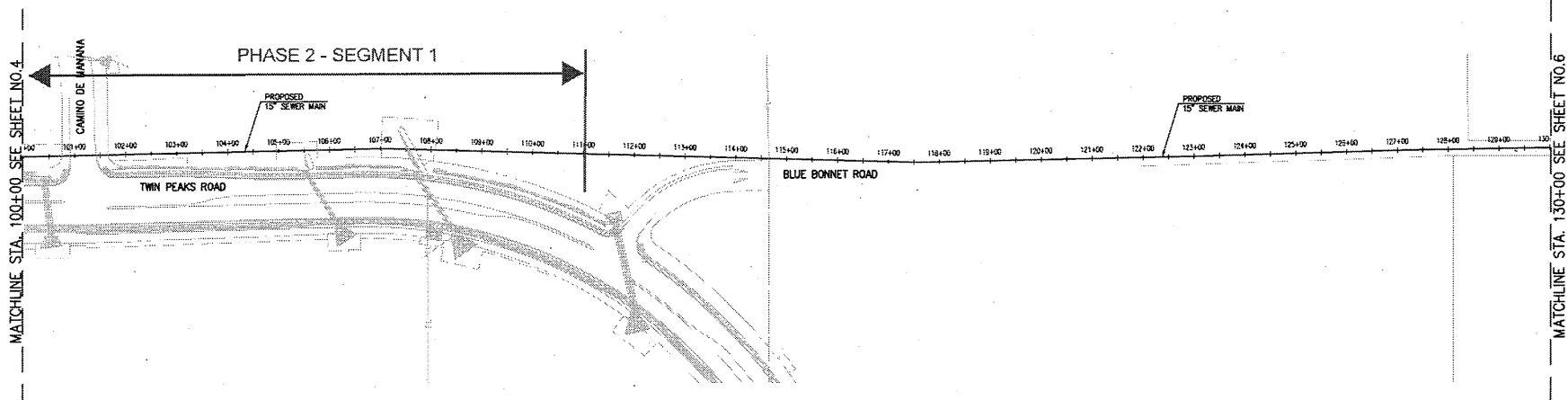
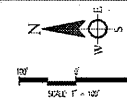
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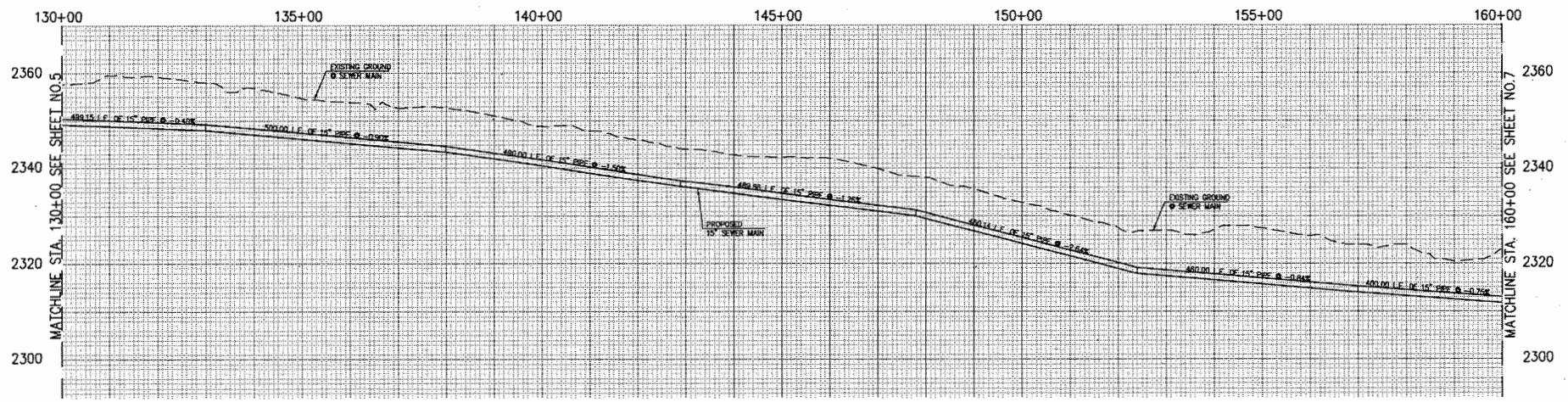
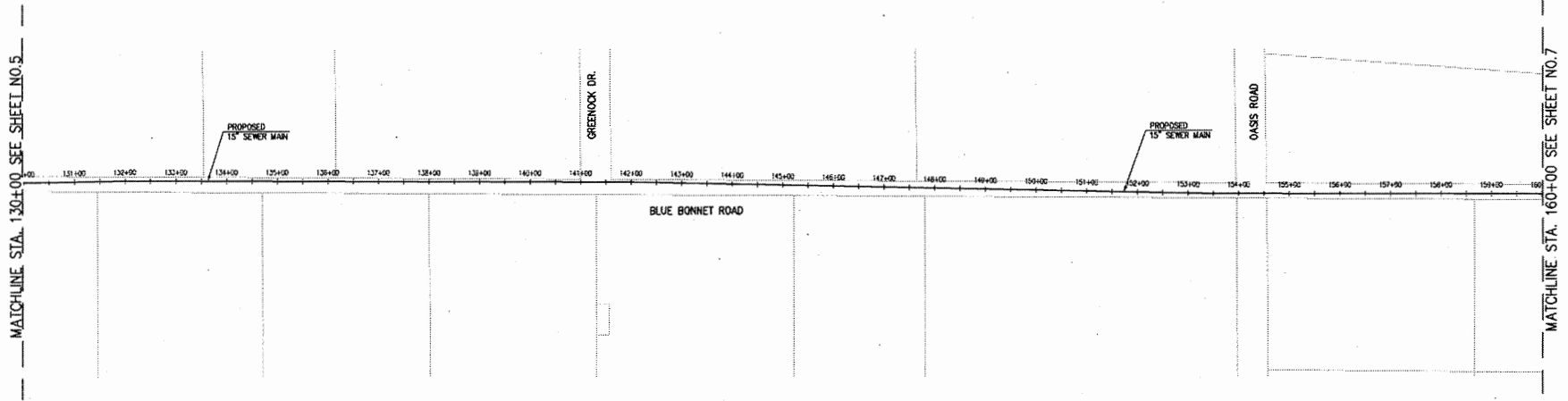
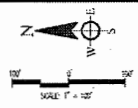
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Westland Resources
 402 E. 73rd Ave, Suite 200
 Denver, CO 80231
 303.750.0000

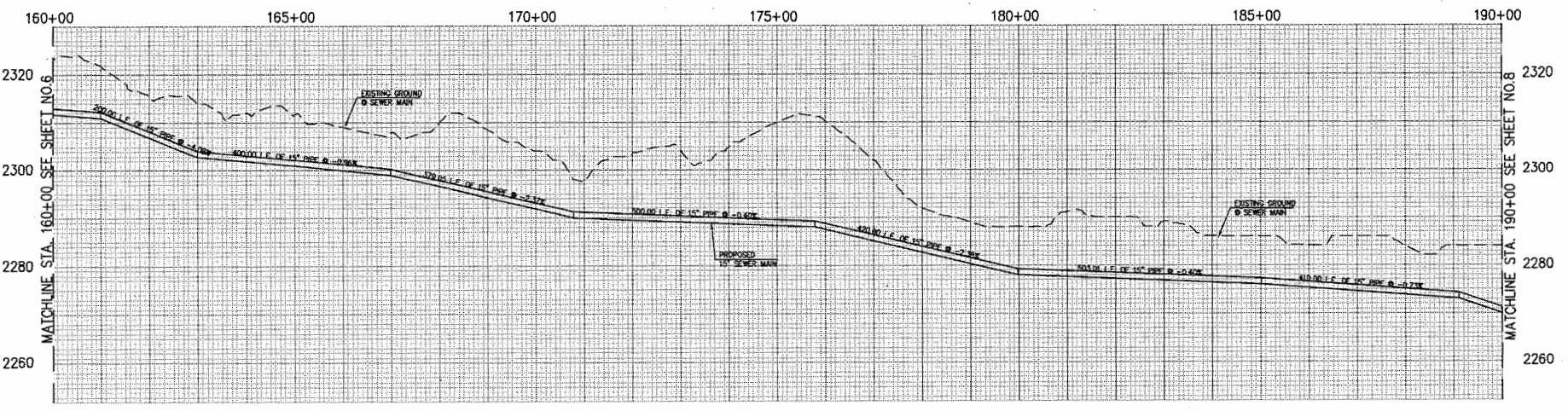
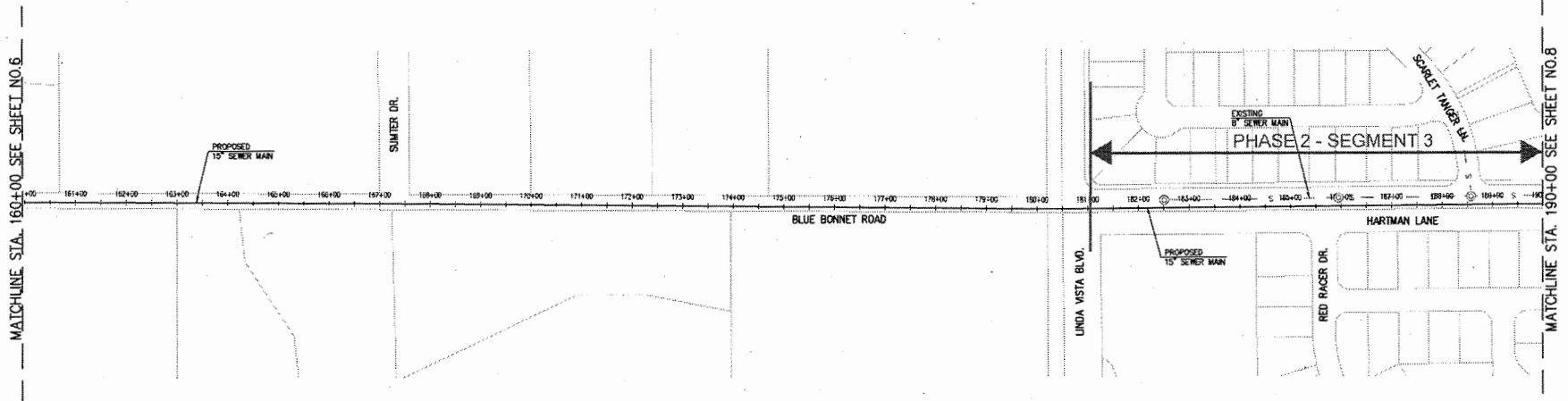
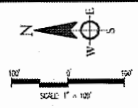
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Westland Resources
 401 E. 7th Street, Suite 200
 Troy, Michigan 48060
 313.286.4600

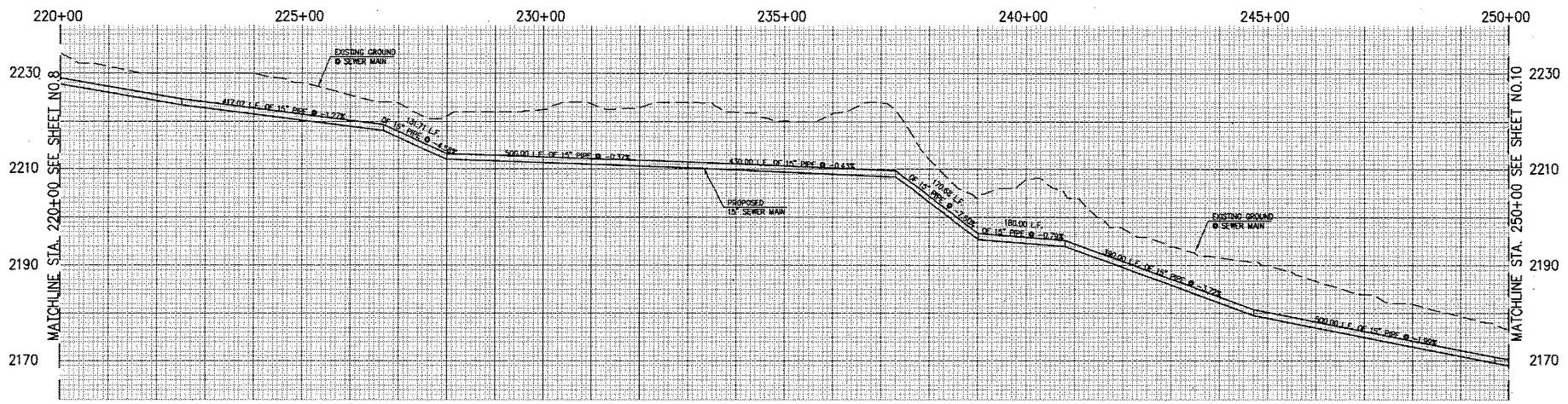
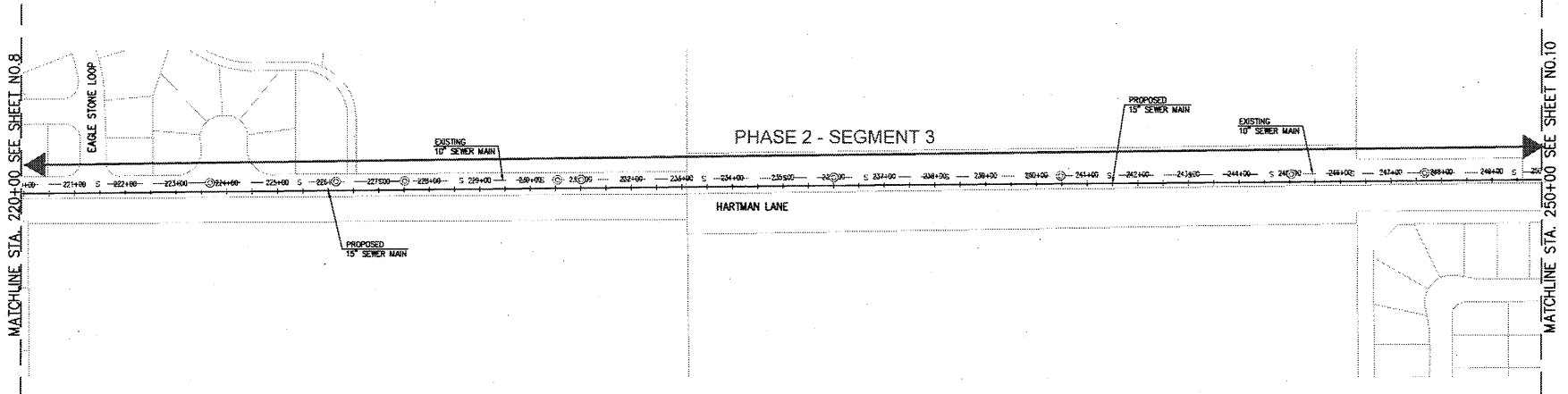
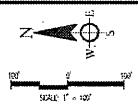
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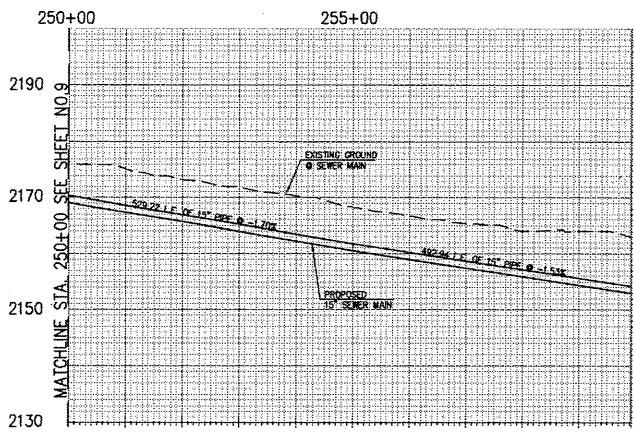
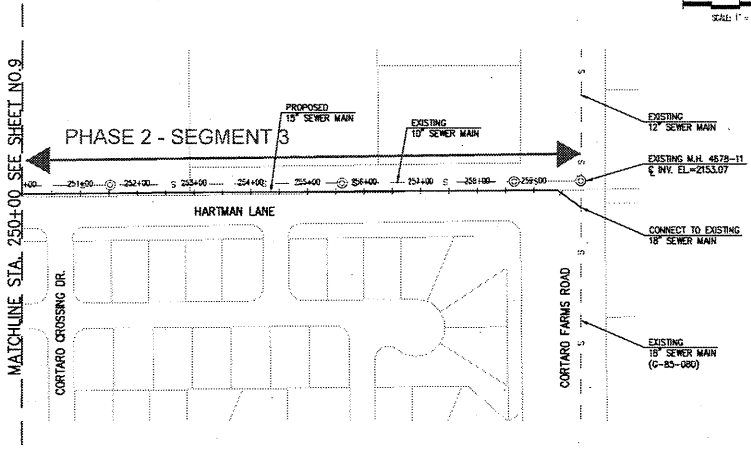
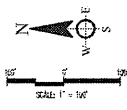
TANGERINE RIDGE
PRELIMINARY GRAVITY SEWER LAYOUT



Westland Resources
 400 S. Zeeb Road
 Troy, Michigan 48063
 Phone: 248.699.9572
 Fax: 248.699.9575



TANGERINE RIDGE
 PRELIMINARY GRAVITY SEWER LAYOUT



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TANGERINE RIDGE
PRELIMINARY GRAVITY SEWER LAYOUT

APPENDIX "A" (3 pages)

PROJECT SCOPE OF WORK

SCOPE OF SERVICES FOR TWIN PEAKS-BLUE BONNET ROAD GRAVITY SEWER PROJECT

Background

Development within the Twin Peaks corridor in Marana is intensifying. Several developments are currently in the planning stages, and lack suitable connections to the existing gravity sewer system. The development projects could install and operate their own pump stations; however, multiple pump stations are not in the best interest of Regional Wastewater Reclamation Department's (RWRD) ratepayers or Pima County residents. A gravity line is needed near the Twin Peaks Road/Blue Bonnet Road alignment to provide a gravity sewer connection for development. The line will extend north to the RWRD Tangerine Pump Station to take the pump station offline.

System Description and Components

This project consists of design and construction of a sewer collection system from approximately the Tangerine Road/Twin Peaks Road intersection south to the Cortaro Farms Road/Hartman Lane Intersection. The project will be constructed in three segments, in two phases, as identified below.

The first, time-sensitive, construction phase will include the following element:

- **Segment 2** - running from Blue Bonnet & Twin Peaks Road intersection to existing RWRD manhole 5175-34, approximately 200 feet south of the Linda Vista Blvd./Hartman Lane intersection.

The second construction phase will include the following elements:

- **Segment 1** - Sewer pipe, manholes, and appurtenances from Tangerine Road Pump Station south to the northern terminus of Segment 1 (Blue Bonnet/Twin Peaks Road intersection).
- **Segment 3** – Sewer pipe, manholes, and appurtenances from the southern terminus of Segment 2, (approximately 200 feet south of the Linda Vista Blvd./Hartman Lane intersection) to existing 18" RWRD sewer south of the Cortaro Farms/Hartman Lane intersection.
- Demolition of Tangerine Road Pump Station.
- Flow Monitoring Site.

Additional components of the Twin Peaks – Blue Bonnet Road Gravity Sewer Project include design and construction of a Flow Monitoring site.

- Flow Monitoring Site
The Design Builder will design one manhole on the new sewer alignment to serve as a Flow Monitoring Site. This manhole will be designed in accordance with RWRD existing flow monitoring manhole design standards. The flow monitoring site will include flow meter, electrical power, SCADA communication equipment, telemetry, and site security.

System Design Requirements

The collection system design will be based on the general features outlined above and described fully in the Project Technical Requirements. The design will be completed and detailed to provide an operational and fully functional conveyance system after construction. Design submittals will be made to RWRD at 30 percent, 60 percent, 90 percent and 100 percent of design. The Project Technical Requirements describe the design requirements and design submission requirements.

The Design-Builder team will have monthly meetings with RWRD. The Design-Builder will be responsible for the project schedule and monthly updates along with construction cost estimates from project initiation through construction completion.

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

System Performance Requirements

The Twin Peaks – Blue Bonnet Road Gravity Sewer Project will be designed to reliably convey the following sewage flows:

Concentration Point	ADWF (GPD)*	PDWF (GPD)**
Tangerine Road Pump Station	890,000	1,650,000
Linda Vista Blvd. & Blue Bonnet Road	1,050,000	1,900,000

ADWF = Average Dry Weather Flow
 PDWF = Peak Dry Weather Flow
 GPD = Gallons Per Day

Construction Requirements

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

The Design-Builder will prepare a project schedule from project initiation through construction completion. The first schedule will be submitted at the first monthly meeting. The schedule will be updated at least monthly throughout the project. Construction cost estimates will be prepared and included in the 30 percent, 60 percent, 90 percent and 100 percent of design submittals. When requested by RWRD, the Design-Builder will prepare a Guaranteed Maximum Price (GMP) for the construction and testing. The GMP will be based on an "open-book" bidding process from qualified subcontractors.

Project Schedule Requirements

The Design-Builder shall submit a proposed project schedule to the County within 30 days after the contract date for review and comment by the County. The schedule shall include a defined work calendar designating which days of the week will be workdays and dates of all scheduled non-workdays. The schedule shall encompass the entire Design-Build Period.

The schedule shall consist of, but not be limited to, the following:

- All design and permitting activities and milestones to be achieved in the design-build period.
- All construction activities and milestones to be achieved in the design-build period.
- Sequence of design-build work and the time of commencement and completion of each part.
- All design deliverables and the sequence for their review by the County.
- All permitting deliverables and the sequence for their review by the County.
- Sitework.
- Excavation.
- Shutdowns and tie-ins.
- Concrete placement (pour and cure time).

- Backfill and compacting.
- Major equipment installations.
- Order and delivery dates for all County furnished equipment.
- All testing.
- Record drawings and warranties.
- Final inspections and final punch list.

The schedule will highlight the milestones and critical dates for the successful design, construction and substantial completion of time-sensitive Project Segment 2 by December 31, 2018.

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

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

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

The Design-Builder shall meet with the County within 7 days after the County's receipt of the Design-Builder's proposed schedule for a joint review to identify any corrections or adjustments to the proposed schedule. Within 7 days of such joint review meeting, the Design-Builder shall submit a final schedule incorporating the County's comments into the proposed schedule. The finalization of the schedule shall be a precondition to the establishment of the construction date.

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

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

End of Appendix "A" – Project Scope of Work

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APPENDIX “B” (40 pages)

DESIGN-BUILDER GENERAL SCOPE OF WORK

Contents

PHASE 1 – PRELIMINARY DESIGN SERVICES

Task 1 Project Management.....

 Task 1.1 - Project Execution Plan

 Task 1.2 - Project Kick-off and Chartering Meeting.....

 Task 1.3 - Contract Administration.....

 Task 1.4 - Project Schedule and Controls

 Task 1 Deliverables.....

Task 2 Permitting Assistance

 Task 2.1 - Permitting Workplan

 Task 2 Deliverables.....

Task 3 Preliminary Design.....

 Task 3.1 - Data and Information Collection

 Task 3.2 - Survey and Mapping

 Task 3.3 - As-Built Validation/Development

 Task 3.4 - Visual Inspection and Photography.....

 Task 3.5 - Not Applicable

 Task 3.6 - Design Criteria Development/Confirmation.....

 Task 3.7 - Preliminary Design Report.....

 Task 3 Deliverables.....

Task 4 Field Investigations.....

 Task 4.1 - Geotechnical

 Task 4.2 - Corrosion.....

 Task 4.3 - Subsurface Utility Engineering

 Task 4.4 - Legal Survey

 Task 4.5 - Endangered Species Survey.....

 Task 4.6 - Arizona Native Plant Survey.....

 Task 4 Deliverables.....

Task 5 Schematic Design (30%)

 Task 5.1 - Civil and Site Development

 Task 5.2 - Landscape Architecture

- Task 5.3 - Architecture
- Task 5.4 - Structural
- Task 5.5 - Foundations/Excavation
- Task 5.6 - Process/Hydraulics (as applicable)
- Task 5.7 - Process Mechanical (as applicable)
- Task 5.8 - Building HVAC/Plumbing (as applicable)
- Task 5.9 - Electrical (as applicable)
- Task 5.10 - Instrumentation and Control Systems (as applicable)
- Task 5.11 - Ancillary Systems (as applicable)
- Task 5.12 - Updated MOPO Design Memorandum
- Task 5.13 - Schematic Design Report
- Task 5.14 - Schematic Design Construction Cost Estimate
- Task 5.15 - Schematic Design Model Review and Workshop
- Task 5 Deliverables

PHASE 2 – FINAL DESIGN SERVICES

Task 6 Design Development (60%)

- Task 6.1 - Civil and Site Development
- Task 6.2 - Landscape Architecture
- Task 6.3 - Architecture (as applicable)
- Task 6.4 - Structural (as applicable)
- Task 6.5 - Process/Hydraulics (as applicable)
- Task 6.6 - Process Mechanical (as applicable)
- Task 6.7 - Building HVAC/Plumbing (as applicable)
- Task 6.8 - Electrical (as applicable)
- Task 6.9 - Instrumentation and Control Systems (as applicable)
- Task 6.10 - Ancillary Systems
- Task 6.11 - Project Delivery/Construction Package Analysis
- Task 6.12 - Updated MOPO Design Memorandum
- Task 6.13 - Design Development Construction Cost Estimate
- Task 6.14 - Design Development Review with County
- Task 6 Deliverables

Task 7 Construction Document Preparation (95%)

- Task 7.1 - Develop 95% Construction Documents
- Task 7.2 - Construction Documents Construction Cost Estimate
- Task 7.3 - Construction Document Review with County

Task 7.4 - Construction Cost Estimate Reconciliation

Task 7.5 - Updated MOPO Design Memorandum

Task 7 Deliverables

Task 8 Construction GMP

Task 9 100% Construction Document Completion

Task 9.1 - Final Design Construction Documents

Task 9.2 - Final Design Report

Task 9 Deliverables

PHASE 3 - CONSTRUCTION

Task 10 Trade Contractor Selection Bidding and Negotiation

Task 10.1 - Bid Packages

Task 10.2 - Prequalification

Task 10.3 - Bidding

Task 10.4 - Budget Control

Task 10.5 - Bid Opening

Task 10.6 - Bid Evaluation and Award

Task 10.7 - County Approval Required to Proceed

Task 11 Design Professional's Role During and After Construction

Task 11.1 - Construction Administration

Task 11.2 - Advice and Consultation

Task 11.3 - Presence at Work Site

Task 11.4 - Certification of Pay Requests

Task 11.5 - Duty to Inspect

Task 11.6 - Submittals

Task 11.7 - Preparation of Change Orders

Task 11.8 - Interpretation

Task 11.9 - Aesthetic Review

Task 11.10 - Substantial and Final Completion

Task 11.11 - As-Built Drawings

Task 11.12 - Warranty Support

Task 12 Construction Supervision

Task 13 Reporting

Task 14 Miscellaneous Construction Phase Duties

Task 14.1 - GMP and Savings

Task 14.2 - Services Provided

Task 14.3 - Performance of Work

Task 14.4 - Reporting.....

Task 14.5 - Schedule

Task 14.6 - Work Management

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

Task 14.8 - Subcontractor Coordination

Task 14.9 - Work Site Cooperation

Task 14.9.1 - County Use of Work Site.....

Task 14.9.2 - Right to Comment on County Work Site Activity

Task 14.9.3 - Waiver of Claim against County

Task 14.9.4 - Duty to Remedy/Indemnification

Task 14.10 - Work Site Appearance

Task 15 Control of Construction Work.....

Task 15.1 - Means and Methods.....

Task 15.2 - Supervision and Coordination of Work.....

Task 15.3 - Lines of Authority

Task 15.4 - Direct Supervision of Work.....

Task 15.5 - Superintendent.....

Task 15.6 - Measurements

Task 15.7 - Field Measurements.....

Task 15.8 - Survey

Task 15.9 - Dust Control.....

Task 15.10 - Sanitary Provisions.....

Task 15.11 - On-Site Storage

Task 15.12 - Responsibility for Materials and Equipment

Task 16 Daily Log.....

Task 16.1 - Log Content

Task 16.2 - Copies to County

Task 17 Supervision and Construction Procedures.....

Task 17.1 - Duty to Supervise and Direct

Task 17.2 - Responsibility for Actions

Task 17.3 - Responsibility for Inspection Delays

Task 17.4 - Superintendent Authority

Task 17.5 - Skilled Employees

Task 17.6 - County Access to Work

Task 17.7 - Uncovering Work

Task 17.8 - Inspection Notice to County

Task 17.9 - County Authority to Keep Work Uncovered

Task 18 Construction Documents.....

Task 18.1 - Reporting of Errors

Task 18.2 - Shop Drawings Required.....

Task 18.3 - Interpretation of Construction Document Conflicts

Task 18.4 - Implied Minor Details.....

Task 19 Submittals, Drawings, and Shop Drawings.....

Task 19.1 - Records Maintained at Work Site.....

Task 19.2 - Submittals to County

Task 19.3 - Submittal Content Standards

Task 19.4 - Design-Builder Review of Subcontractor Submittals

Task 19.5 - Deviations from Contract Documents

Task 19.6 - Responsibility for Submittals

Task 19.7 - Design-Builder Representations Concerning Correctness of Submittals.....

Task 19.8 - County Review

Task 19.9 - Response to County Rejection or Comments

Task 19.10 - Untimely Submittal

Task 19.11 - Transmittal of Approved Submittals to Subcontractors.....

Task 20 Product Samples, Tests, and Certificates

Task 20.1 - Requirement to Furnish Product Samples

Task 20.2 - Submittal of Product Samples

Task 20.3 - Certification of Compliance

Task 20.4 - Duty to Perform.....

Task 20.5 - Destruction of Samples.....

Task 20.6 - County Testing Not Acceptance

Task 20.7 - Removal of Rejected Work.....

Task 20.8 - Cooperation with Testing Efforts

Task 20.9 - Trade Name Substitutions

Task 20.10 - Field Inspection.....

Task 21 Redline Drawings

Task 21.1 - Monthly Review.....

Task 21.2 - Changes Shown.....

Task 21.3 - Basis Documents.....

Task 21.4 - Changes after Substantial Completion.....

Task 22 Startup.....

Task 22.1 - Startup Plan.....

Task 22.2 - Startup.....

Task 23 Performance Testing......

Task 23.1 - Performance Test Plan.....

Task 23.2 - Performance Test Procedures and Standards.....

Task 23.3 - General Performance Standards.....

Task 23.4 - Performance Test Report.....

PROJECT DESCRIPTION

This scope of work describes the general services to be provided by the Design-Builder for the design and construction of the Twin Peaks-Blue Bonnet Road Gravity Sewer Project. A separate document, entitled "Technical Specifications," describes the key components of the Work as well as County technical requirements for the Work. The Technical Specifications define what will be done and the General Scope of Work defines how it will be done.

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

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

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

DESIGN PHASES SCOPE OF WORK

The following key assumptions were made in the development of the Scope of Work for design and in estimating level of effort. With the exception of the final review, the Project team will continue the design effort during formal reviews of deliverables by Pima County and regulatory agencies.

- County will provide one round of compiled review comments to the Design-Builder for each deliverable submitted for review.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the Project.
- County's design standards will be used. County will provide electronic copies of these documents in MS Word format to the Design-Builder.
- The drawings will follow the Design-Builder's CAE/ CAD standards. AutoCAD will be used to develop the drawings. At the conclusion of design, County will be given a 22"x 34" sized set of original signature drawings and an electronic set of drawings in pdf format. In addition, the County will be given a copy of the Design Documents on compact disk (CD-R) in AutoCAD format.

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

1. Preliminary Design Report (10%)
2. Schematic Design (30%)

3. Design Development (60%)
4. Construction Document Development (95%)
5. Construction Document Completion (100%)

PHASE 1 – PRELIMINARY DESIGN SERVICES

Task 1 Project Management

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

Task 1.1 - Project Execution Plan

Within 60 days of the Notice to Proceed, a Project Execution Plan will be prepared to guide the direction of the Design-Builder team. It will include descriptions of the roles and responsibilities of team members, communication plan, cost and schedule control procedures, document control, change management, and other Project management requirements. Also, the plan will define the CAD/CAE software standards, graphic standards, file naming conventions and standards, and other graphic standards. Design-Builder will utilize standards developed by the County as a basis for this element of the Plan. In addition, the Plan will include a Quality Management Plan and a Project Health and Safety Plan applicable to the Design-Builder Team. The Project Execution Plan will be distributed to the County and design team members.

Task 1.2 - Project Kick-off and Chartering Meeting

Task 1.2.1 - Project Kickoff Meeting

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

Task 1.2.2 - Chartering Meeting

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

Task 1.3 - Contract Administration

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

Task 1.4 - Project Schedule and Controls

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

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

Task 1.5 - Project Coordination and Progress Meetings

On a bi-weekly basis, the Design-Builder will conduct Project design progress meetings between the County and Design-Builder's project team members to discuss design elements of the Project. Meeting agendas will be prepared and distributed 2 days prior to the meeting and a meeting minute summary will be prepared and distributed by the Design-Builder within 3 business days following the design Project Coordination and Progress Meeting. In addition, the Design-Builder will conduct monthly progress report and invoice presentation meetings attended by the County to confirm the Design-Builder is meeting the requirements of the County. A summary of meetings will be prepared and distributed by the Design-Builder within 5 business days of the monthly progress report meeting. This task also allocates time for internal Project coordination meetings.

Task 1.6 - Not Applicable

Task 1.7 - Quality Assurance/Quality Control Management

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

Task 1.8 - Public Information Assistance

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

Task 1.9 - Construction Cost Estimating/Guaranteed Maximum Price Reviews

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

Task 1.10 - Project Closeout

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

Task 1 - Deliverables

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

Task 2 - Permitting Assistance

The purpose of this task is to develop a Permitting Workplan for obtaining the various permits, identifying the permits required for construction and operation of the project, preparing the permit applications for the various regulatory agencies, and submitting the permit applications to County for review and approval. County will then submit the completed applications to the various regulatory agencies and pay all the permit fees. For permit activities related to this Project, the Design-Builder will provide five copies of draft and final permit applications and accompanying material. An electronic file in .pdf format will be provided for draft and final submittals. The Design-Builder will develop a Permitting Workplan. The plan will list those permits that are necessary, the appropriate contacts for the permits, the time constraints associated with the permits, and a schedule for application of the permits. In addition to the Permitting Plan, permit applications will be developed, as appropriate, for each agency. County will take the lead in submittal of the permit applications. As requested by County, the Design-Builder will assist in the negotiation of these permits.

Task 2.1 - Permitting Workplan

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

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

Task 2 - Deliverables

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

Task 3 - Preliminary Design

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

Task 3.1 - Data and Information Collection

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

Task 3.2 - Survey and Mapping

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

- Establish Control Network: The Design-Builder will perform research, field surveys, and office work necessary to establish the Horizontal and Vertical Project Control Network meeting County standards. The Design-Builder will establish a survey control network which will encompass the Project area. The Project Control Network will also provide the basis of control for the construction phase of the Project. Survey control monuments will be located in areas that will not be disturbed during construction. Survey control monuments set by the RLS will be tagged or stamped.
- Survey monuments (property pins, section corners, witness comers, and bench marks) will be collected during the field survey with a description of the monuments (steel pin, O.I.P., L.C.P., and brass monument in concrete).
- A ground aerial survey will be performed and used to develop a site digital terrain model and existing facilities model, including all existing above grade structures and site features.
- Horizontal Control: Control traverses will be geometrically closed and the error of angular and horizontal closure for the unadjusted traverse will be shown in the field notes and on the required maps. Horizontal closures will be made using unadjusted angles and distances and will have a precision ratio of 1:20,000 or better. Set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations.
- Vertical Control: A control listing of the benchmarks used for the survey control network will be provided to the Design-Builder. The datum which the elevations are to be referenced will be included in the field research data. Set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations.
- Arizona State Plane Coordinates: The coordinate system for establishing the Project Control Network will be the North American Datum of 1983 (NAD-83) (1992) adjustment, Arizona State Plane Coordinate System in International feet reported in both grid and ground coordinates. The vertical datum will be North American Vertical c Datum of 1988 (NAVD88).

The survey and mapping activities associated with this project are defined as follows:

- Aerial Targets: Design-Builder will set up to 20 aerial targets for photo-control at locations determined by the aerial mapping firm within the defined Project limits.
- Aerial Photography: Design-Builder will acquire new color vertical aerial photography, +/- 1:2400 scale for design mapping at these facilities.

- DTM and 1-foot contours - Design Mapping: Using the acquired 1:2400 scale aerial photography, Design-Builder will generate a DTM for a 1"=20'scale, 1.0-foot contour interval contour mapping of the project site. The total area for 1.0-foot interval contour mapping will be for the entire project site.
- Other surveys (other than control surveys), will comply with FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C), and Facility Management with accuracy tolerances of +/-0.10- foot for the horizontal and +/-0.03-foot for the vertical (if applicable) on other hard surfaces and +/-0.10-foot for the vertical on soft or natural ground surfaces (if applicable).
- Planimetric Mapping: Using the acquired 1:2400 scale aerial photography, Design-Builder will generate a 1" =20'scale planimetric mapping of the entire 150 acre site. Above ground features (structures, roads, curbs, sidewalks, piping, walls or fencing, ditches, grade breaks, site lighting, and major vegetation) will be collected during the survey.
- Digital Orthophoto Images: Using the acquired 1:2400 scale photography, Design-Builder will generate digital orthophoto images at 0.2 ground distance pixel resolution covering the entire 150 acre site.
- Locate Utilities: The Design-Builder will locate at grade utilities and other physical obstructions within the Project site. The Design-Builder will also identify locations and elevations of inverts of sanitary sewers, storm sewers, other buried utilities, drainage structures, and other similar underground structures.
- Surveying services will be performed under the supervision of a qualified, Arizona registered, professional land surveyor.
- The units of measurement for this Project will be in International Feet.
- The Design-Builder will take reasonable precautions to prevent damage to public and private property, and will restore the site to the condition existing prior to the surveyor's entry.

Task 3.3 - As-Built Validation/Development

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

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

Assumptions:

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

Task 3.4 - Visual Inspection and Photography

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

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

Task 3.5 - Not Applicable

Task 3.6 - Design Criteria Development/Confirmation

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

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

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

Assumptions:

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

Task 3.6.1 - LEED Strategies (Reserved)

Task 3.6.2 - Project Design Standards

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

Task 3.6.3 - Design Submittals

Task 3.6.3.1 - Submittal

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

Task 3.6.3.2 - Submittal Requirements

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

- Date of submission
- Name of Project
- Location of Project
- Branch of Design Work (specification section)

- Project number
- Name of submitting Design-Builder
- Name of Subcontractors
- Revision number

Task 3.6.3.3 - Consistency with Technical Specifications

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

Task 3.6.3.4 - Identification of Deviations

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

Task 3.6.3.5 - Verification of Submittal

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

Task 3.6.3.6 - County Review

The County will review and approve submittals and drawings and return them to Design-Builder within five (5) days of receipt unless otherwise previously agreed in writing. For scheduling purposes, Design-Builder must assume a five (5) day review period for each submittal or set of drawings. For complex submittals, Design-Builder must assume two five (5) day review cycles. If review and approval are delayed beyond five (5) days, County will notify Design-Builder in writing stating the reason for the delay. Approval will not relieve the Design-Builder from responsibility for deviations from the Technical Specifications, unless it has been called to County's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to effect an improvement in the Work and does not increase the GMP or Contract Time(s). Any such modification is subject to all other provisions of the Technical Specifications and Contract and is without prejudice to any and all rights of County under any surety bonds.

Task 3.6.3.7 - Response to County Review

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

Task 3.6.3.8 - No Time Extension

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

Task 3.6.4 - Design Memoranda

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

Task 3.6.4.1 - Site Layout

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

Task 3.6.4.2 - Site Utility Requirements (Reserved)

Task 3.6.4.3 - Power/Electrical System (Reserved)

Task 3.6.4.4 - Instrumentation and Control Systems (SCADA) (Reserved)

Task 3.6.4.5 - Construction Packaging, Sequencing, and Duration

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

Assumptions:

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

Task 3.6.4.6 - Maintenance of Existing Operations During Construction (Reserved)

Task 3.6.4.7 - Security (Reserved)

Task 3.6.4.8 - (Reserved)