

APPENDIX C: SECTION RESERVED

01/06/15

APPENDIX D: CONSTRUCTION COSTING

ARTICLE 1 – GENERAL

The Guaranteed Maximum Price (GMP) shall be developed as provided for in this Appendix. The GMP Proposal for the entire Work (or portions thereof) will be presented in a format acceptable to COUNTY, and shall include the clarifications or assumptions upon which the GMP Proposal is based.

A. The format of the GMP proposal shall generally adhere to the following:

1. Summary of the GMP: A summary of the GMP with a total for each of the components of the GMP defined in the Construction Provisions (i.e. "Cost of the Work", "CMAR Contingency", "Fee") as described and as shown in Attachment 1 to this GMP Appendix. If there will be multiple GMPs, then the GMP Summary will be presented in a spreadsheet format with each successive GMP in a separate column with the total GMP in the rightmost column.
2. Scope of Work: a brief description of the work to be performed for the Project or phase(s) to which the GMP proposal applies. Exclusions must be clearly stated.
3. Schedule of Values – summary spreadsheet and backup documents: Spreadsheet with the estimated cost organized by subcontract categories, systems, etc., and used to review the contractor's applications for progress payments. The supporting document(s) for the spreadsheet must be provided in an organized manner that correlates with the schedule of values. The backup information shall consist of the request for bids, bids received, and clarification assumptions used for the particular bid item listed on the schedule of values, if applicable.
4. List of Plans and Specifications used for GMP Proposal: A list of the Plans and Specifications with latest issuance date including all addenda used in preparation of the GMP proposal. (Date stamped and signed by CMAR).
5. List of clarifications, assumptions and exclusions: A list of the clarifications, assumptions, and exclusions by CMAR with regard to the Scope of Work in the GMP proposal, to supplement the information contained in the documents.
6. Project Schedule in CPM format: A Critical Path Method (CPM) diagram construction schedule. An updated Project Management Plan shall also be submitted with each GMP proposal.
7. A cash-flow forecast based on the proposed construction schedule, schedule of values and GMP. If the construction covered by the GMP overlaps construction performed under a prior GMP, their cash flows will be consolidated into a single cash-flow statement.
8. Subcontractor Selections / SBE Requirements / Utilization Form / Letters of Intent: A summary of the Subcontractor Selections, including an SBE requirements section addressing the goals set for the Project and the current status on meeting the Project goals. The Utilization form and Letters of Intent must be attached when subcontractor selection has been made prior to final GMP submittal. Subcontractor selections must conform to the approved Subcontractor Selection Plan.

B. The submittal package must be kept as simple as possible all on 8 ½ x 11 sheets. Color or shading must be kept to a minimum. If used, make sure the color or shading will not affect the reproduction of the submittal in black and white.

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

ARTICLE 2 – COST OF THE WORK

A. Cost of the Work

The term "Cost of the Work" shall mean costs necessarily incurred by the Contractor in the proper performance of the Work. Such costs shall be at rates not higher than the standard paid at the place of the Project except with prior consent of the COUNTY. The Cost of the Work shall include only the items set forth in this **Article 2**.

B. Labor Costs

1. Wages of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with the COUNTY's approval, at off-site workshops. *Cost to be reimbursed will be the actual wages paid to the individuals performing the work.*
2. Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site with the COUNTY's approval. No Contractor personnel stationed at the Contractor's home or branch offices shall be charged to the Cost of the Work. Non-field office based Contractor management and support personnel are expected to provide service and advice from time to time throughout the job and their time devoted to project matters is considered to be covered by the Contractor's overhead.
3. Wages and salaries of the Contractor's supervisory or administrative personnel who would normally be stationed at the field office but who become engaged, at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.
4. Employee bonuses and/or costs associated with Employee Stock Ownership Plans (ESOP) will not be considered reimbursable labor or labor burden costs and will be considered non-reimbursable costs covered by the Contractor's Fee.
5. Costs paid or incurred by the Contractor for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Subparagraphs B.1 through B.3.
6. When computing actual costs chargeable to the Cost of the Work for payroll taxes, the Contractor shall give proper consideration to the annual limitations of the wages subject to applicable payroll taxes. The Contractor may accomplish this through the use of an accounting system which computes actual costs for payroll taxes when incurred up to the wage limit cut-off and allocated same to all jobs by individual based on the time worked on each job by the individual. Alternatively the Contractor may use an estimated net effective payroll tax percentage to allocate payroll tax costs during the year and make appropriate adjustments at the end of the year or at the end of the project (whichever is more appropriate) to adjust the costs to actual net payroll tax cost. Using the latter approach, if 50% of the wages paid to an employee during the year were chargeable to the Cost of the Work, then only 50% of the actual annual costs of payroll taxes would be allocable to the Cost of the Work, etc.
7. Cost of the Work shall include the actual net cost to the Contractor for worker's compensation insurance attributable to the wages chargeable to the Cost of the Work per this agreement. The actual net cost of worker's compensation shall take into consideration all cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, any applicable weekly maximums, etc. The Contractor may charge an estimated amount for worker's compensation insurance costs, but will make appropriate cost adjustments to actual costs within 45 days of receipt of actual cost adjustments from the insurance carrier.
8. Overtime wages paid to onsite salaried personnel (if approved in advance in writing by the COUNTY) will be reimbursed at the actual rate of overtime pay paid to the individual. No time charges for overtime hours worked on the project will be allowed if the individual is not paid for the overtime worked.

9. Any overtime premium or shift differential expense to be incurred by Contractor for hourly workers shall require COUNTY's advance written approval before the incremental cost of the overtime premium or shift differential will be considered a reimbursable cost. If the Contractor is required to work overtime as a result of an inexcusable delay or other coordination problems caused by the Contractor or anyone for whom they are responsible, the overtime premium and/or shift differential expense portion of the payroll expense and related labor burden costs will be considered as cost not to be reimbursed.
10. Reimbursable labor burden costs will be limited to payroll taxes, worker's compensation insurance, the employer's portion of union benefit costs for union employees working on the project, and the actual verifiable fringe benefit costs incurred by Contractor for non-union individuals working on the project subject to the following maximum percentages for the following reimbursable non-union fringe benefit costs. The following maximums (as a percentage of reimbursable actual wages by individual) shall apply for each of the following types of fringe benefit costs specifically attributable to the each of the non-union personnel working on the project:

Medical Insurance, Dental, Life & AD&D Insurance	12.00%
Holiday, vacation and other paid time not worked	10.00%
Pension Plan Contributions to Vested Employee Account, Simplified Employee Pension Plans, or 401K matching plans (Note: ESOP related costs are covered by Contractor FEE)	10.00%

Note: For non-union personnel, no other fringe benefit costs (other than the 3 specific categories listed immediately above shall be considered reimbursable Cost of the Work. Any labor burden costs that are in excess of the amounts considered reimbursable or are otherwise not considered reimbursable under the terms of this agreement are intended to be covered by Contractor FEE.

C. Subcontract Costs

1. Payments made by the Contractor to Subcontractors in accordance with the requirements of the subcontracts.
2. For scope of work bid packages typically performed by subcontractors, Contractor may "self-perform" such work in accordance with **Sections 2.2.4.10 – 12 of the General Conditions**. All savings under any such subcontract for "self-performed work" shall be applied to reduce the Cost of the Work under this Contract and the Guaranteed Maximum Price of this Contract. For purposes of defining "self-performed work" subject to this contract, any division of Contractor, or any separate Contractor or subcontractor that is partially owned or wholly owned by the Contractor or any of their employees or employee's relatives will be considered a related party entity and will be subject to this provision regarding "self-performed work". No self-performed work will be allowed to be performed on a lump sum basis.
3. Contractor (with respect to its suppliers, subcontractors and all lower tier subcontractors) shall provide COUNTY advance written notice and shall obtain COUNTY's approval for any proposed subcontract change order, material purchase order, or other financial commitment in an amount in excess of \$5,000 prior to placing such order or entering into such agreement (regardless of whether or not any such commitment will affect the prime contract Guaranteed Maximum Cost). It is agreed that sums applicable to any subcontract change order, purchase order or other financial commitment entered into in violation of the above notice and approval requirement shall not be included in the amounts owing to Contractor whether as Costs of the Work or as reasonable termination costs in the event of termination.

D. Overhead

1. Corporate overhead properly allocable to the project shall be considered a reimbursable cost.
2. The amount or rate of contribution to overhead must be established by independent audit and the same or similar rate applied to other contracts with public or private entities.

E. Costs of Materials and Equipment Incorporated in the Completed Construction

1. Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.
2. Costs of materials described in the preceding Subparagraph D.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the COUNTY's property at the completion of the Work or, at the COUNTY's option, shall be sold by the Contractor. Any amounts realized from such sales shall be credited to the COUNTY as a deduction from the Cost of the Work.
3. Proceeds from the sale of recyclable materials, scrap, waste, etc. shall be credited to job cost.

F. Costs of Other Materials and Equipment, Temporary Facilities and Related Items

1. Costs, including transportation and storage, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers, that are provided by the Contractor at the site and fully consumed in the performance of the Work; and cost (less salvage value) of such items if not fully consumed; whether sold to others or retained by the Contractor. Cost for items previously used by the Contractor shall mean fair market value.
2. Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by the Contractor at the site, whether rented from the Contractor or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rates and quantities of equipment rented shall be subject to the COUNTY's prior approval.
3. The projected usage for each piece of equipment to be rented for use on the project and the estimated total rentals shall be considered by the Contractor before the piece of equipment is rented so that an appropriate rent versus buy decision can be made. Purchased equipment shall be considered "job owned". At the completion of the project, the Contractor shall transfer title and possession of all remaining job-owned equipment to the COUNTY, or Contractor may keep any such equipment for an appropriate fair market value credit to job cost mutually agreed by COUNTY and Contractor.
4. Each piece of equipment to be rented shall have hourly, daily, weekly and monthly rates and the most economical rate available shall be reimbursed based on the circumstances of actual need and usage of the piece of equipment while it is stationed at the jobsite. When the piece of equipment is no longer needed for the work, no rental charges will be reimbursed if the piece of equipment remains at the jobsite for the convenience of the contractor.
5. Reimbursable equipment rental rates for CMAR-owned equipment shall not exceed the published rates in the latest edition of the "Rental Equipment Blue Book." If the Blue Book does not contain information related to the type of equipment rented, the Contractor will be allowed to use a maximum equipment rental rate not greater than current competitive rental rates from local third party equipment rental companies.
6. The aggregate rentals chargeable for each piece of CMAR-owned tools or equipment shall not exceed 50% of the fair market value of such equipment at the time of its commitment to the Work. The original purchase price and date of purchase of the equipment will be documented with a copy of the purchase invoice for the piece of equipment. Such aggregate limitations will apply and no further rentals shall be charged even if a piece of equipment is taken off the job and is later replaced by a similar piece of equipment. For purposes of computing the aggregate rentals applicable to aggregate rental limitations, rental charges for similar pieces of equipment will be combined if the pieces of equipment were not used at the same time.
7. Fair market value for used material and equipment as referred to in this contract shall mean the estimated price a reasonable purchaser would pay to purchase the used material or equipment at the time it was initially needed for the job. Note: This is usually lower than the price a reasonable purchaser would pay for similar new construction material or construction equipment.

8. Rental charges for equipment which is not owned by Contractor or any of its affiliates, subsidiaries, or other related parties and is rented from third parties for proper use in completion of the Work shall be considered reimbursable, will be reimbursed at actual costs, as long as rental rates are generally competitive with those prevailing in the locality. For any lease/purchase arrangement where any of the lease/purchase rental charges were charged to COUNTY as reimbursable job costs, appropriate credit adjustments to job cost will be made for an appropriate pro rata share of the fair market value of the equipment at the time it was last used on the job.
9. Except for charges incurred in responding to an emergency, standby or idle time charges for CMAR-owned equipment are allowable only to the extent specifically approved by COUNTY as part of a changed conditions claim or force account work. County will not pay for equipment idle time unless the equipment is engaged in County-authorized force account or other time and materials work, and then only for the time it is engaged in such work. When the work is completed or the equipment ceases to be used for that work, payment for idle time stops. Standby and idle time charges not specifically so approved are not allowable. Allowable standby and idle time charges may not exceed 8 hours in any one working day nor 40 hours in any workweek. The charge for standby or idle time may not exceed 33% of the agreed rental rate for the particular piece of equipment. No standby or idle time charges shall apply after the last use of equipment on the project for both CMAR-owned equipment and equipment rented from third parties.
10. All losses resulting from lost, damaged or stolen tools and equipment shall be the sole responsibility of the Contractor, and not the COUNTY, and the cost of such losses shall not be reimbursable under this contract.
11. The Contractor shall be required to maintain a detailed equipment inventory of all job-owned equipment (either purchased and charged to job cost or job-owned through aggregate rentals) and such inventory shall be submitted to COUNTY each month. For each piece of equipment, such inventory should contain at a minimum (1) original purchase price or acquisition cost (2) acquisition date (3) approved FMV at the time the piece of equipment was first used on the job and (4) final disposition.
12. All costs incurred for minor maintenance and repairs shall be reimbursed at actual cost. Such costs include routine and preventive maintenance, minor repairs and other incidental costs. Repairs and/or replacement of a capital nature are considered to be covered by the rental rates. Major repairs and overhauls are not considered routine and ordinary, consequently such costs are not reimbursable and are intended to be covered by the rental rates.
13. Costs of removal of debris from the site.
14. Costs of document reproductions, facsimile transmissions and long-distance telephone calls, postage and parcel delivery charges, telephone service at the site and reasonable petty cash expenses of the site office.
15. That portion of the reasonable expenses of the Contractor's personnel incurred while traveling in discharge of duties connected with the Work.
16. No travel expenses will be reimbursed to Contractor's representatives unless Project related travel required them to travel to a destination more than 50 miles from the project location. Any travel involving airfare will require advance written approval by COUNTY's authorized representative. If approved, compensation for travel shall be subject to COUNTY's current travel policy or, in absence thereof, the then current U.S. General Services Administration per diem rates.
17. Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by the COUNTY.
18. Reproduction costs will be the actual costs of reproduction subject to a maximum of five cents (\$.05) per square foot for prints and a maximum of five cents (\$.05) per 8 1/2 by 11 inch page for offset print or photo copied contract documents, specifications, etc. Telephone costs will be the actual costs paid to the third party telephone company for the field office telephone.

G. Miscellaneous Costs

1. That portion of insurance and bond premiums that can be directly attributed to this Contract:
2. The Contractor's actual cost for insurance shall be considered to be included within the Maximum limit for General Conditions costs. All premiums for any insurance and bonds required for the project shall reflect the net actual costs to Contractor after taking into consideration cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, refunds, etc.
3. The amount to be reimbursed to the contractor for all contractually required liability insurance will be actual costs not to exceed a total of 0.5% of the net reimbursable Cost of Work (not including liability insurance and not including fee). If the Contractor's cost of contractually required liability insurance is greater than the amount agreed to be reimbursed per this contract provision, the difference shall be considered to be covered by the Contractor's fee.
4. In the event the contractor elects to utilize worker's compensation insurance programs that involve either self-insurance and/or large deductibles, the maximum amount to be considered reimbursable costs under this contract will not exceed an amount equal to 40% of the standard state worker's compensation rates applicable times contractor straight time wages. Any contractor costs incurred in connection with the contractor's elected worker's compensation insurance program that exceeds the amount reimbursed by the COUNTY under the formula in this paragraph will be considered to be covered by the Contractor's fee.
5. In the event that the contractor elects to utilize a subcontractor default insurance program (sometimes referred to as SUBGUARD), the maximum amount to be considered reimbursable costs under this contract will be 0.7% of the total amount of subcontracts enrolled in such an insurance program. Enrollment in any such program will be limited to subcontracts in excess of \$100,000. Any contractor costs incurred in connection with the contractor's elected subcontractor default insurance program that exceed the amount reimbursed by the COUNTY under the formula in this paragraph will be considered to be covered by the Contractor's fee. In the event the Contractor elects to bond selected subcontractors rather than enroll them in the subcontractor default insurance program, the net cost to purchase any such bonds will be reimbursed in lieu of the 0.7%
6. In the event that the contractor elects to utilize a Contractor Controlled Insurance Program (CCIP) the maximum to be considered reimbursable costs under this contract will be 2% of the final agreed upon Guaranteed Maximum Price of this contract. This 2% cost factor will cover all insurance required to be carried by the prime contractor and all applicable subcontractors covered by this agreement (specifically worker's compensation insurance, general liability insurance, excess liability insurance, umbrella liability insurance). Any contractor cost incurred in connection with the contractor's elected CCIP program that exceeds the amount reimbursed by the COUNTY under the formula in this paragraph will be considered to be covered by the Contractor's fee.
7. Sales, franchise, use or other taxes imposed by a governmental authority that are related to the Work.
8. Fees and assessments for the building permit and for other permits, licenses and inspections for which the Contractor is required by the Contract Documents to pay.
9. Fees of laboratories for tests required by the Contract Documents, except those related to defective or nonconforming Work and which do not fall within the scope of Subparagraph 2.H.3.
10. Royalties and license fees paid for the use of a particular design, process or product required by the Contract Documents; the cost of defending suits or claims for infringement of patent rights arising from such requirement of the Contract Documents; and payments made in accordance with legal judgments against Contractor resulting from such suits or claims and payments of settlements made with the COUNTY's consent. However, such costs of legal defenses, judgments and settlements shall not be included in the calculation of the Contractor's Fee or subject to the Guaranteed Maximum Price.
11. Data processing costs related to the Work.

12. However, any such data processing costs will be limited to the cost of personal computer hardware used at the field office in the normal day to day administration, management and control of the project. The aggregate charges for any such hardware shall not exceed the FMV of the hardware at the time it was brought to the field office. If the total charges for any particular piece of hardware reach an amount equal to the FMV, that particular piece of hardware shall be turned over to the COUNTY whenever it is no longer needed for the project. If the Contractor elects to keep the particular piece of hardware, the job costs shall be credited with a mutually agreeable amount which shall represent the FMV of the particular piece of hardware at the time it was no longer needed for the job. Software or other costs associated with the use of computer programs shall not be considered to be a reimbursable cost and will be considered to be covered by the Contractor's Fee.
13. Deposits lost for causes other than the Contractor's negligence or failure to fulfill a specific responsibility to the COUNTY as set forth in the Contract Documents.
14. Expenses incurred in accordance with the Contractor's standard personnel policy for relocation and temporary living allowances of personnel required for the Work, if approved **in advance** by the COUNTY. *Note: At the current time, it is not anticipated that any such costs will be necessary to staff the project. If, however, the Contractor determines that such expenses will be necessary to properly staff the job, the COUNTY's advance written approval will be required before any such costs are considered reimbursable. In the event that the COUNTY authorizes the reimbursement of relocation costs, the reimbursable relocation expenses will be limited to a maximum of \$50,000 per person. Any relocation cost incurred by Contractor in excess of the amount reimbursed by COUNTY will be considered to be covered by the Contractor's FEE.*

H. Other Costs and Emergencies

1. Other costs incurred in the performance of the Work if and to the extent approved in advance in writing by the COUNTY.
2. Costs incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property.
3. Costs of repairing or correcting damaged or nonconforming Work executed by the Contractor, Subcontractors or suppliers, provided that such damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of the Contractor and only to the extent that the cost of repair or correction is not recoverable by the Contractor from insurance, sureties, Subcontractors or suppliers.
4. Costs incurred to provide site safety, including all Traffic Control; however, to the extent any cost referred to in this paragraph is incurred by reason of the negligence or other fault of CMAR or any Subcontractor or sub-subcontractor or is reimbursable by insurance or otherwise, then such costs shall be excluded from the Cost of the Work.

ARTICLE 3 - COSTS NOT TO BE REIMBURSED

A. The Cost of the Work shall not include:

1. Expenses of the Contractor's principal office and offices other than the site office and salaries and other compensation of personnel stationed at the Contractor's principal office or offices other than the site office may not be charged directly to the project. Such expenses shall be included in overhead.
2. Costs of Contractor's home office computer services or other outside computer processing services shall be considered overhead and general expense. Accordingly the Contractor should not plan to perform any such computer related services or alternatives at the field office when such services or functions can be performed at the Contractor's home or branch offices, or other outside service locations.
3. The Contractor's capital expenses, including interest on the Contractor's capital employed for the Work.

4. Rental costs of machinery and equipment, except as specifically provided in Subparagraph 2.F.2.

5. Except as provided in Subparagraph 2.H.3 of this Agreement, costs due to the negligence or failure to fulfill a specific responsibility of the Contractor, Subcontractors and suppliers or anyone directly or indirectly employed by any of them or for whose acts of them may be liable.

B. Any cost not specifically and expressly described in Article 2.

C. Costs, other than costs included in Change Orders approved by the COUNTY, that would cause the Guaranteed Maximum Price to be exceeded. All costs, if any, in excess of the cumulative GMP as set forth in the Contract.

D. Legal expenses incurred in prosecuting or defending claims in mediation or litigation (including without limitation, legal expenses incurred pursuant to indemnifying the COUNTY and other Covered Parties).

ARTICLE 4 - DISCOUNTS, REBATES AND REFUNDS

A. Cash discounts obtained on payments made by the Contractor shall accrue to the COUNTY if (1) before making the payment, the Contractor included them in an Application for Payment and received payment therefore from the COUNTY, or (2) the COUNTY has deposited funds with the Contractor with which to make payments; otherwise, cash discounts shall accrue to the Contractor. Trade discounts, rebates, refunds and amounts received from sales or surplus materials and equipment shall accrue to the COUNTY, and the Contractor shall make provisions so that they can be secured.

1. Cost of the Work will be credited with all insurance policy discounts, performance and payment bond rebates or refunds, refunds or return premiums from any subcontractor default insurance, refunds or rebates from any contractor controlled insurance programs applicable to the project, merchandise rebates of any nature, refunds of any nature, insurance dividends; and a portion of any volume rebates or free material credits earned with purchase of material or other goods and services charged to the job.

2. "Cash" discounts which may accrue to the Contractor will be limited to a maximum of 1.5% of invoice cost. Any portion of "Cash" discounts greater than 1.5% shall automatically accrue to COUNTY if the contractor is eligible to take advantage of the discounts.

B. Amounts that accrue to the COUNTY in accordance with the provisions of Paragraph 4.A.1 shall be credited to the COUNTY as a deduction from the Cost of the Work.

ARTICLE 5 - CONTINGENCY FUND

Generally:

A. The GMP may include a CMAR Contingency in the amount stated in the GMP Summary. Each line item of the GMP Summary for which risk remains after preconstruction will carry an agreed on contingency that can be traced back to the initial cost model. Subject to the terms of the Contract Documents and with prior notification to and approval by COUNTY, CMAR shall be entitled to allocate from and apply against the CMAR Contingency increases in the Cost of the Work that could not have been reasonably anticipated by a contractor using the standard of care and skill that a professional CMAR in Arizona would exercise under similar conditions at the time the GMP was established or for increases in General Condition Costs. The COUNTY may disallow such contingency use and deny reimbursement in the absence of prior notice or if the COUNTY determines that the use was not consistent with the Contract documents.

B. CMAR may not apply, use or allocate from the CMAR Contingency any amounts for any of the foregoing purposes that are the result of a material breach or material failure to perform by CMAR, any subcontractor or vendor (except as necessary to replace any subcontractor or vendor because of the bankruptcy or failure of such party to perform), or any party for which any of them are liable or responsible at law or under the contract documents, or for any non-allowable costs of the work.

- C. Each application of the CMAR contingency by CMAR shall be reflected (with narrative explanation) on the Application for Progress Payment for the period during which CMAR makes such application. Application of contingency to any particular risk event should not exceed the agreed associated amount of the contingency previously assigned to the specific line item in the GMP. Any portion of the CMAR contingency remaining unapplied at final completion shall be a credit against and reduce the GMP. When the CMAR utilizes CMAR's Contingency funds, the CMAR shall make the appropriate changes to the schedule of values with the next regular progress payment request. The CMAR shall deduct the amount of CMAR's Contingency funds used from the CMAR's Contingency line item and add the same amount to the line item on the schedule of values where the funds were used. If the CMAR's Contingency funds are used for a new line item that was not included in the original schedule of values, that will be so indicated.
- D. CMAR contingency is not cumulative across multiple GMPs.
- E. Owner's Contingency is a sum of money in the Contract but not included in the GMP that may be used at the discretion of the COUNTY to cover any increases in Project costs that result from COUNTY directed changes, changed site conditions, or additional costs of Allowance Items the cost of which exceeds the Allowance therefor. Owner's Contingency will be added to the GMP amount provided by the CMAR, the sum of which will be the full contract price for construction. Markups for Construction Fee, taxes and overhead shall be applied by CMAR at the time that Owner's Contingency is used.
- F. Owner's Contingency and CMAR Contingency shall not be combined into a single project contingency.

GMP SUMMARY FORMAT - ATTACHMENT 1 TO APPENDIX "D"

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

END APPENDIX "D"

APPENDIX E: ESTIMATED PRECONSTRUCTION FEE

As detailed in Exhibits A1 – A₅ attached

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-1" - FEE SUMMARY (BY TASK)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: 3ASC15
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

Phase I - Pre-Construction Services Anticipated Tasks/Coordination Efforts:	Amount
Task I - Preliminary Design and Report	\$ 30,856.00
Task II - 30% Design	\$ 132,946.00
Task III - 60% Design	\$ 45,228.00
Task IV - 99% Design (Final Preliminary)	\$ 32,148.00
Task V - Final Design (Sealed & Signed)	\$ 9,160.00
Task VI - Project Meetings/Coordination	\$ 30,476.00
Task VII - GMP Development	\$ 42,984.00
Task VIII - Working Area/Construction Access Coordination	\$ 6,440.00
Task IX - As-Needed Allowances (Owner Directed)	\$ 173,769.00
SUBTOTAL PRE-CONSTRUCTION SERVICE DIRECT COSTS	\$ 504,007.00
Overhead (9.43%)	\$ 47,527.86
Profit (5%)	\$ 25,200.35
TOTAL NOT-TO-EXCEED PRE-CONSTRUCTION SERVICES AMOUNT	\$ 576,735.21
<i>See "Exhibit A-2" for line item fee schedule by task and personnel/resource</i>	
<i>See "Exhibit A-3" for anticipated hours of participation by task and personnel/resource</i>	
<i>Fee Summary is based on an anticipated 18-month Pre-Construction Phase</i>	

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-2" - ESTIMATED FEE SCHEDULE (BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: 3ASC15
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

A. Personnel/Resource Description		B. Unit	C. Estimated Quantity*	D. Unit Cost/ Direct Hourly Rate	E. Estimated Direct Cost (C x D)
Task I Preliminary Design and Report	Principal/ Project Director	Hours	32.0	\$ 122.00	\$ 3,904.00
	Project Manager	Hours	184.0	\$ 83.00	\$ 15,272.00
	Project Engineer	Hours	80.0	\$ 59.00	\$ 4,720.00
	Project Superintendent	Hours	80.0	\$ 87.00	\$ 6,960.00
	Takeoff Engineer	Hours	0.0	\$ 40.00	\$ -
	Estimator	Hours	0.0	\$ 83.00	\$ -
	Task I. Subtotal				\$ 30,856.00
Task II 30% Design	Principal/ Project Director	Hours	60.0	\$ 122.00	\$ 7,320.00
	Project Manager	Hours	256.0	\$ 83.00	\$ 21,248.00
	Project Engineer	Hours	304.0	\$ 59.00	\$ 17,936.00
	Project Superintendent	Hours	148.0	\$ 87.00	\$ 12,876.00
	Takeoff Engineer	Hours	24.0	\$ 40.00	\$ 960.00
	Estimator	Hours	16.0	\$ 83.00	\$ 1,328.00
	II.E - Field Crew Allowance**	Lump Sum	1.0	\$ 71,278.00	\$ 71,278.00
	Task II. Subtotal				\$ 132,946.00
Task III 60% Design	Principal/ Project Director	Hours	60.0	\$ 122.00	\$ 7,320.00
	Project Manager	Hours	216.0	\$ 83.00	\$ 17,928.00
	Project Engineer	Hours	176.0	\$ 59.00	\$ 10,384.00
	Project Superintendent	Hours	84.0	\$ 87.00	\$ 7,308.00
	Takeoff Engineer	Hours	24.0	\$ 40.00	\$ 960.00
	Estimator	Hours	16.0	\$ 83.00	\$ 1,328.00
	Task III. Subtotal				\$ 45,228.00
Task IV 99% Design (Final Preliminary)	Principal/ Project Director	Hours	32.0	\$ 122.00	\$ 3,904.00
	Project Manager	Hours	156.0	\$ 83.00	\$ 12,948.00
	Project Engineer	Hours	132.0	\$ 59.00	\$ 7,788.00
	Project Superintendent	Hours	60.0	\$ 87.00	\$ 5,220.00
	Takeoff Engineer	Hours	24.0	\$ 40.00	\$ 960.00
	Estimator	Hours	16.0	\$ 83.00	\$ 1,328.00
	Task IV. Subtotal				\$ 32,148.00
Task V Final Design (Sealed & Signed)	Principal/ Project Director	Hours	8.0	\$ 122.00	\$ 976.00
	Project Manager	Hours	32.0	\$ 83.00	\$ 2,656.00
	Project Engineer	Hours	48.0	\$ 59.00	\$ 2,832.00
	Project Superintendent	Hours	16.0	\$ 87.00	\$ 1,392.00
	Takeoff Engineer	Hours	16.0	\$ 40.00	\$ 640.00
	Estimator	Hours	8.0	\$ 83.00	\$ 664.00
	Task V. Subtotal				\$ 9,160.00

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-2" - ESTIMATED FEE SCHEDULE (BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: 3ASC15
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

A. Personnel/Resource Description		B. Unit	C. Estimated Quantity*	D. Unit Cost/ Direct Hourly Rate	E. Estimated Direct Cost (C x D)
Task VI Project Meetings/ Coordination	Principal/ Project Director	Hours	72.0	\$ 122.00	\$ 8,784.00
	Project Manager	Hours	116.0	\$ 83.00	\$ 9,628.00
	Project Engineer	Hours	116.0	\$ 59.00	\$ 6,844.00
	Project Superintendent	Hours	60.0	\$ 87.00	\$ 5,220.00
	Takeoff Engineer	Hours	0.0	\$ 40.00	\$ -
	Estimator	Hours	0.0	\$ 83.00	\$ -
	Task VI. Subtotal				\$ 30,476.00
Task VII GMP Development	Principal/ Project Director	Hours	32.0	\$ 122.00	\$ 3,904.00
	Project Manager	Hours	120.0	\$ 83.00	\$ 9,960.00
	Project Engineer	Hours	160.0	\$ 59.00	\$ 9,440.00
	Project Superintendent	Hours	0.0	\$ 87.00	\$ -
	Takeoff Engineer	Hours	160.0	\$ 40.00	\$ 6,400.00
	Estimator	Hours	160.0	\$ 83.00	\$ 13,280.00
	Task VII. Subtotal				\$ 42,984.00
Task VIII Working Area/Construction Access	Principal/ Project Director	Hours	0.0	\$ 122.00	\$ -
	Project Manager	Hours	24.0	\$ 83.00	\$ 1,992.00
	Project Engineer	Hours	40.0	\$ 59.00	\$ 2,360.00
	Project Superintendent	Hours	24.0	\$ 87.00	\$ 2,088.00
	Takeoff Engineer	Hours	0.0	\$ 40.00	\$ -
	Estimator	Hours	0.0	\$ 83.00	\$ -
	Task VIII. Subtotal				\$ 6,440.00
Task IX As-Needed Allowances (Owner Directed)	Principal/ Project Director	Hours	40.0	\$ 122.00	\$ 4,880.00
	Project Manager	Hours	746.0	\$ 83.00	\$ 61,918.00
	Project Engineer	Hours	240.0	\$ 59.00	\$ 14,160.00
	Project Superintendent	Hours	128.0	\$ 87.00	\$ 11,136.00
	Takeoff Engineer	Hours	40.0	\$ 40.00	\$ 1,600.00
	Estimator	Hours	40.0	\$ 83.00	\$ 3,320.00
	IX.D - Field Crew Allowance**	Lump Sum	1.0	\$ 21,945.00	\$ 21,945.00
	IX.E - Field Crew Allowance**	Lump Sum	1.0	\$ 54,810.00	\$ 54,810.00
	Task IX. Subtotal				\$ 173,769.00
SUBTOTAL OF ESTIMATED DIRECT COSTS (TASKS I - IX)					\$ 504,007.00
*See "Exhibit A-3" for anticipated hours of participation by task and resource type					
**See "Exhibit A-4" for establishment of "Lump Sum" unit cost (for field crew allowance)					
Fee Summary is based on an anticipated 18-month Pre-Construction Phase					

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-3" - ANTICIPATED RESOURCE REQUIREMENT (HOURS OF PARTICIPATION BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation

PROJECT NUMBER: ASC15

PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)

CMAR: Borderland Construction Company, Inc.

Phase I - Pre-Construction Services Anticipated Tasks/Coordination Efforts <i>(Hourly Estimates Assume an 18 Month Pre-Construction Phase)</i>		Estimated Hours by Personnel/Resource							Field Crew Allowance (Each)
		Project Director	Project Manager	Assistant Project Manager (As-Needed)	Project Engineer	Project Superintendent	Takeoff Engineer	Estimator	
Task I Preliminary Design and Report	A. Review/comment on the identification of all utility conflicts along the route	8	64	-	16	16	-	-	-
	B. Review/comment on the identification of all other potential conflicts constructability issues to design or construction, including an analysis of the conceptual pipeline alignment, depth, and slope	24	80	-	40	40	-	-	-
	C. Coordinate with Engineer for performance of the Utility Information & Coordination. (Subsurface Utility Engineering Analysis, Quality Level B) (Data to be incorporated in 30% plans)	-	40	-	24	24	-	-	-
	Subtotal Task I	32	184	0	80	80	0	0	-
Task II 30% Design	A. Begin development of the Cost Model and Construction Schedule	8	40	-	32	16	24	16	-
	B. Review/comment on design of gravity sewer (include align., pipe material selection, MH material selection, install methods, MH locations & final sizing)	32	80	-	40	24	-	-	-
	C. CMAR to review and comment on the proposed plan for resolution of any potential conflicts, including wash crossing alternative analysis, intersection crossing alternative analysis, and alternative means/methods analysis	12	40	-	40	24	-	-	-
	D. CMAR to coordinate with the Engineer for the preparation of preliminary by-pass pumping plan, routing, flow rate analysis, and odor control issues	8	24	-	24	4	-	-	-
	E. Coordinate with Engineer in obtaining Utility Information & Coordination (Subsurface Utility Engineering Analysis, Quality Level A) for all identified potential conflicts. (Data to be incorporated in 60% plans)*	-	40	-	120	80	-	-	1
	F. Review/comment on site surveys and initial permitting strategy for Section 401, 402, 404 Permits and Biological Evaluation	-	8	-	16	-	-	-	-
	G. Coordinate with Engineer on the UPRR alignment within the UPRR ROW	-	24	-	32	-	-	-	-
	Subtotal Task II	60	256	0	304	148	24	16	-

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-3" - ANTICIPATED RESOURCE REQUIREMENT (HOURS OF PARTICIPATION BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: ASC15
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

Phase I - Pre-Construction Services Anticipated Tasks/Coordination Efforts <i>(Hourly Estimates Assume an 18 Month Pre-Construction Phase)</i>		Estimated Hours by Personnel/Resource							Field Crew Allowance (Each)
		Project Director	Project Manager	Assistant Project Manager (As-Needed)	Project Engineer	Project Superintendent	Takeoff Engineer	Estimator	
Task III 60% Design	A. Develop 60% Cost Model and Construction Schedule	8	40	-	32	16	24	16	-
	B. Review/comment on the design of the gravity sewer to include plan and profile drawings consistent with 60% completion of the design	24	80	-	40	32	-	-	-
	C. Review/comment on the draft submittal log based on the provided Plans and Specifications	4	16	-	24	8	-	-	-
	D. Coordinate with Engineer for the revision of by-pass pumping plan, if necessary, including routing, flow rate analysis, and odor control issues	8	24	-	24	4	-	-	-
	E. Coordinate with Engineer for the resolution of any utility conflicts	8	32	-	40	8	-	-	-
	F. Review/comment on the NPPO Design (60%)	-	4	-	4	-	-	-	-
	G. Review/comment on the Section 401 Permit	-	4	-	4	-	-	-	-
	H. Review/comment on the Section 404 Permit (Nationwide or Individual) These studies to be completed in this phase of the design	8	8	-	4	8	-	-	-
	I. Review/comment on the Section 402, NPDES Permit (including storm water)	-	8	-	4	8	-	-	-
Subtotal Task III		60	216	0	176	84	24	16	-
Task IV 99% Design (Final Preliminary)	A. Develop 99% Cost Model and Schedule	8	40	-	32	16	24	16	-
	B. Review/comment on the design of the gravity sewer to include plan and specifications ready to be sealed and signed	16	64	-	32	24	-	-	-
	C. Review/comment on the submittal log based on the provided Plans and Specifications	4	12	-	16	4	-	-	-
	D. Coordinate with Engineer for the resolution of any utility conflicts	-	16	-	24	4	-	-	-
	E. CMAR to coordinate with the Engineer in finalized by-pass pumping plan, including routing, flow rate analysis, and odor control issues	4	16	-	24	4	-	-	-
	F. Review/comment on the NPPO design (99%, ready to be sealed and signed)	-	8	-	4	8	-	-	-
Subtotal Task IV		32	156	0	132	60	24	16	-

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-3" - ANTICIPATED RESOURCE REQUIREMENT (HOURS OF PARTICIPATION BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: ASC15
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

Phase I - Pre-Construction Services Anticipated Tasks/Coordination Efforts <i>(Hourly Estimates Assume an 18 Month Pre-Construction Phase)</i>		Estimated Hours by Personnel/Resource							Field Crew Allowance (Each)
		Project Director	Project Manager	Assistant Project Manager (As-Needed)	Project Engineer	Project Superintendent	Takeoff Engineer	Estimator	
Task V Final Design (Sealed & Signed)	A. Finalize Cost Model and Construction Schedule	4	16	-	24	8	16	8	-
	B. Review/comment on Contractual Documents, including Biddable Plans (if req'd)	4	16	-	24	8	-	-	-
	Subtotal Task V	8	32	0	48	16	16	8	-
Task VI Project Meetings/ Coordination	A. Kick-Off/Partnering Meeting (Assume 1 meeting, 4 Hours)	8	4	4	8	8	-	-	-
	B. Bi-weekly Team Meetings (Assume 18 months, 36 meetings, 2 Hrs/Mtg)	48	72	-	72	16	-	-	-
	C. Field Meetings/Investigations (Assume 1 per month, 18 meetings, 2 Hrs/Mtg)	16	36	-	36	36	-	-	-
	Subtotal Task VI	72	112	4	116	60	0	0	-
Task VII GMP Development	A. Develop GMP for Phase 1 (ASC - Hughes Access Rd to ASPC)	8	32	-	40	-	40	40	-
	B. Develop GMP for Phase 2 (PAS - Park Ave to Drexel Rd)	8	32	-	40	-	40	40	-
	C. Develop GMP for Phase 3 (ONI - 36th Street to Hughes Access Rd)	16	56	-	80	-	80	80	-
	Subtotal Task VII	32	120	0	160	0	160	160	-
Task VIII Working Area/Construction Access Coordination	A. Temporary Construction Easement Coordination	-	24	-	40	24	-	-	-
	Subtotal Task VIII	0	24	0	40	24	0	0	-
Task IX As-Needed Allowances (Owner Directed)	A. Public Relations Coordination with PCRWRD, Westland, & Kaneen Advertising	8	32	-	40	-	-	-	-
	B. Stakeholder Coordination Meetings	8	32	-	40	24	-	-	-
	C. Develop Additional GMP's (As Directed by RWRD)	8	32	-	40	-	40	40	-
	D. Subsurface Utility Engineering Analysis (Quality Level A) (Data to be incorporated into 60%-99% designs)	-	12	-	40	24	-	-	1
	E. Subsurface Condition Analysis - Verification of Existing Soil Conditions (at Proposed Trench Depth/Boring Locations)	16	24	-	80	80	-	-	1
	F. Assistant Project Manager (CMAR) Allowance	-	-	614	-	-	-	-	-
	Subtotal Task IX	40	132	614	240	128	40	40	-
TOTAL ESTIMATED HOURS BY PERSONNEL (TASKS I - IX)		336	1232	618	1296	600	288	256	-

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-4" - SUBSURFACE UTILITY ENGINEERING & CONDITIONS ANALYSIS (BY TASK AND PERSONNEL/RESOURCE)

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Aug.

PROJECT NUMBER: 3ASC15

PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)

CMAR: Borderland Construction Company, Inc.

A. Field Task Description		B. Unit	C. Estimated Quantity*	D. Unit Cost/ Direct Hourly Rate	E. Estimated Direct Cost (C x D)
Task II.E Subsurface Utility Engineering Analysis Quality Level A (Data to be incorporated into 60% plans)	Verification of Existing Utilities (<4')	Each	11.0	\$ 507.00	\$ 5,577.00
	Verification of Existing Utilities (4'-8')	Each	50.0	\$ 811.00	\$ 40,550.00
	Verification of Existing Utilities (8'-13')	Each	10.0	\$ 1,216.00	\$ 12,160.00
	Asphalt Patch	Each	12.0	\$ 143.00	\$ 1,716.00
	Traffic Control Plans	Each	10.0	\$ 200.00	\$ 2,000.00
	Temporary Traffic Control	Each	10.0	\$ 500.00	\$ 5,000.00
	Right-of-Way permitting	Each	15.0	\$ 285.00	\$ 4,275.00
	Task II.E (Subsurface Utility Engineering Analysis, Quality Level A) - TOTAL				\$ 71,278.00
	*See Exhibit A-5 for summary of estimated quantity/anticipated locations				

A. Field Task Description		B. Unit	C. Estimated Quantity	D. Unit Cost/ Direct Hourly Rate	E. Estimated Direct Cost (C x D)
Task IX.D Subsurface Utility Engineering Analysis Quality Level A (Data to be incorporated into 60%-99% designs)	Verification of Existing Utilities (<4')	Each	10.0	\$ 507.00	\$ 5,070.00
	Verification of Existing Utilities (4'-8')	Each	10.0	\$ 811.00	\$ 8,110.00
	Verification of Existing Utilities (8'-13')	Each	5.0	\$ 1,216.00	\$ 6,080.00
	Asphalt Patch	Each	5.0	\$ 143.00	\$ 715.00
	Traffic Control Plans	Each	2.0	\$ 200.00	\$ 400.00
	Temporary Traffic Control	Each	2.0	\$ 500.00	\$ 1,000.00
	Right-of-Way permitting	Each	2.0	\$ 285.00	\$ 570.00
	Task IX.D (Subsurface Utility Engineering Analysis, Quality Level A) - TOTAL				\$ 21,945.00

A. Field Task Description		B. Unit	C. Estimated Quantity	D. Unit Cost/ Direct Hourly Rate	E. Estimated Direct Cost (C x D)
Task IX.E Subsurface Condition Analysis - Verification of Existing Soil Conditions (at Proposed Trench Depth/Boring Locations)	Verification of Existing Soil Conditions at Proposed Trench Depth/Boring Locations	Each	20.0	\$ 2,248.00	\$ 44,960.00
	Traffic Control Plans	Each	10.0	\$ 200.00	\$ 2,000.00
	Temporary Traffic Control	Each	10.0	\$ 500.00	\$ 5,000.00
	Right-of-Way permitting	Each	10.0	\$ 285.00	\$ 2,850.00
	Task IX.E (Verification of Existing Soil Conditions) - TOTAL				\$ 54,810.00

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-5" - ANTICIPATED LOCATIONS FOR VERIFICATION OF EXISTING UTILITIES

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: 3ASC16
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

UPRR/NOGALES HWY - 36TH STREET TO HUGHES ACCESS RD							
LOCATION NUMBER	STATION	LINE SIZE (INCHES)	LINE TYPE	WESTLAND LOCATION	IN PAVEMENT	ROADWAY/ INTERSECTION	ROADWAY JURISDICTION
1	12+70	12	WATER	YES	NO	NOG HWY/HUGHES ACCESS	Pima County
2	15+30	16	WATER	YES	NO	NOG HWY/HUGHES ACCESS	Pima County
3	15+40	36	WATER	YES	NO	NOG HWY/HUGHES ACCESS	Pima County
4	49+00	36	WATER	YES	NO	NOGALES HWY	Pima County
5	62+60		GAS	YES	NO	NOG HWY/HERMANS RD	Pima County
6	63+30		GAS	YES	NO	NOG HWY/HERMANS RD	Pima County
7	67+00	16	WATER	YES	NO	NOG HWY/HERMANS RD	Pima County
8	84+60		GAS	YES	NO	NOG HWY/VAMORI ST	Pima County
9	86+40		WATER	YES	NO	NOG HWY/VAMORI ST	Pima County
10	136+20		GAS	YES	YES	NOGALES HWY	City of Tucson
11	137+50		WATER	YES	YES	NOGALES HWY	City of Tucson
12	144+00		GAS	YES	YES	NOGALES HWY	City of Tucson
13	148+00		GAS	YES	YES	NOGALES HWY	City of Tucson
14	150+70		GAS	YES	YES	NOGALES HWY	City of Tucson
15	157+10		WATER	YES	YES	NOGALES HWY	City of Tucson
16	157+30		GAS	YES	YES	NOGALES HWY	City of Tucson
17	169+60	16	WATER	YES	YES	NOG HWY/VALENCIA RD	City of Tucson
18	170+00		GAS	YES	YES	NOG HWY/VALENCIA RD	City of Tucson
19	170+20	42	WATER	YES	YES	NOG HWY/VALENCIA RD	City of Tucson
20	183+50		GAS	NO	NO	NOGALES HWY	City of Tucson
21	218+20	36	WATER	YES	NO	NOGALES HWY	City of Tucson
22	222+00		GAS	YES	NO	NOG HWY/DREXEL RD	City of Tucson
23	223+10		GAS	YES	YES	NOG HWY/DREXEL RD	City of Tucson
24	223+20	8	WATER	YES	YES	NOG HWY/DREXEL RD	City of Tucson
25	224+00	24	WATER	YES	NO	NOGALES HWY	City of Tucson
26	231+20		GAS	YES	YES	FLETCHER AVE	City of Tucson
27	236+40		GAS	YES	NO	FLETCHER AVE	City of Tucson
28	250+40	8	WATER	YES	NO	FLETCHER AVE	City of Tucson
29	253+30		GAS	YES	NO	FLETCHER AVE	City of Tucson
30	257+00		GAS	YES	NO	FLETCHER AVE	City of Tucson
31	268+20		GAS	YES	NO	FLETCHER AVE	City of Tucson
32	273+50		GAS	YES	NO	FLETCHER AVE	City of Tucson
33	277+00	12	WATER	YES	YES	FLETCHER AVE/IRV RD	City of Tucson
34	277+20	6	WATER	YES	YES	FLETCHER AVE/IRV RD	City of Tucson
35	288+70		GAS	NO	NO	RODEO WASH	City of Tucson
36	290+50	12	WATER	YES	NO	RODEO WASH	City of Tucson
37	290+70		GAS	YES	NO	RODEO WASH	City of Tucson
38	297+70		GAS	YES	NO	FAIR AVE	City of Tucson
39	303+75	8	WATER	YES	YES	FAIR AVE/FAIR ST	City of Tucson
40	307+60	12	WATER	YES	NO	FAIR AVE	City of Tucson
41	319+30	12	WATER	YES	NO	FAIR AVE	City of Tucson
42	330+??		ST LIGHTING	NO	YES	FAIR AVE/AJO WY	City of Tucson
43	330+00	12	WATER	YES	YES	FAIR AVE/AJO WY	City of Tucson
44	330+90	10	GAS	YES	YES	FAIR AVE/AJO WY	City of Tucson
45	331+00		GAS	YES	NO	UPRR	UPRR
46	354+40		GAS	YES	NO	UPRR	UPRR
47	355+10		GAS	YES	NO	UPRR/I-10	UPRR/ADOT

**CONSTRUCTION MANAGER AT RISK (CMAR)
PHASE I PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT A-5" - ANTICIPATED LOCATIONS FOR VERIFICATION OF EXISTING UTILITIES

PROJECT NAME: Old Nogales Interceptor/Aerospace Corridor/Park Avenue Sewer Augmentation
PROJECT NUMBER: 3ASC16
PROJECT OWNER: Pima County Regional Wastewater Reclamation Department (PCRWRD)
CMAR: Borderland Construction Company, Inc.

UPRR/NOGALES HWY - 36TH STREET TO HUGHES ACCESS RD							
LOCATION NUMBER	STATION	LINE SIZE (INCHES)	LINE TYPE	WESTLAND LOCATION	IN PAVEMENT	ROADWAY/ INTERSECTION	ROADWAY JURISDICTION
48	355+90		FMS	NO	NO	UPRR/I-10	UPRR/ADOT
49	357+70		FMS	NO	NO	I-10	ADOT
50	359+60		FMS	NO	NO	I-10	ADOT
51	369+60	8	GAS	YES	NO	Private Property	Private Prop.
52	370+30	12	GAS	YES	NO	Private Property	Private Prop.
53	371+70	6	GAS	YES	NO	Private Property	Private Prop.

OLD VAIL CONNECTION RD - NOGALES HWY/HUGHES ACCESS RD TO ARIZONA STATE PRISON							
LOCATION NUMBER	STATION	LINE SIZE (Inches)	LINE TYPE	WESTLAND LOCATION	IN PAVEMENT	INTERSECTION	ROADWAY JURISDICTION
54	9+70	36	WATER	YES	NO	NOG HWY/HUGHES ACCESS	Pima County
55	10+05	12	WATER	YES	NO	NOG HWY/HUGHES ACCESS	Pima County
56	45+90		WATER	YES	NO	UPRR	UPRR
57	54+80		GAS	YES	NO	UPRR	UPRR
58	98+90	12	WATER	YES	NO	OLD VAIL CONNECTION RD	City of Tucson
59	102+50		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
60	105+10		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
61	108+00		ELECTRIC	YES	NO	OLD VAIL CONNECTION RD	City of Tucson
62	119+80		WATER	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
63	120+00		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
64	125+50		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
65	127+90		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
66	131+50		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
67	136+30		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
68	137+70		ELECTRIC	NO	NO	OLD VAIL CONNECTION RD	City of Tucson
69	139+10		WATER	YES	NO	OLD VAIL CONNECTION RD	City of Tucson
70	179+10	12	WATER	YES	NO	OLD VAIL CONNECTION RD	City of Tucson
71	339+87.96		SEWER CONNECTION	NO	NO	OLD VAIL CONNECTION RD	City of Tucson

APPENDIX F: INCORPORATED STANDARD DOCUMENTS

DESIGN STANDARDS, SPECIFICATIONS & DETAILS

The new 2012 Standards for Public Sanitary Sewers in Pima County were approved and adopted by the Pima County Board of Supervisors on December 18, 2012.

These Standards are divided into two separate documents: Pima County Regional Wastewater Reclamation Department's Engineering Design Standards 2012 and the Pima County Regional Wastewater Reclamation Department's Standard Specifications and Details for Construction 2012.

Hard Copies are **not** available through the Pima County Regional Wastewater Reclamation Department.

Please note that the new 2012 Design Standards do **not** include the requirements for how public sanitary sewer facilities are to be shown on tentative plans and development plans, nor does it supersede the Preliminary Sewer Layout Requirements, March 1984 that was adopted by Resolution (1984-44) of the Pima County Board of Supervisors.

These documents are available for viewing or downloading at:
<http://webcms.pima.gov/cms/one.aspx?portalId=169&pageId=56988>.

APPENDIX G: SMALL BUSINESS ENTERPRISES REQUIREMENTS

1. **Goal Setting Meeting:** The CMAR, based on information provided by DP and OWNER and prior to preparing each GMP Proposal, will meet with Owner's Vendor Relations & SBE Division to obtain Small Business Enterprise goals. The CMAR will make a presentation to the Vendor Relations & SBE Division to identify the estimated value of Work to be performed by each Subcontractor/ Supplier. The Vendor Relations & SBE Division will establish the minimum goals for Work to be performed during the construction phase by Owner-certified SBE firms, expressed as a percentage of estimated construction costs for the Project. The CMAR shall meet or exceed the minimum goals set for each phase of the Project.
2. **Documentation:** The CMAR will submit the following documents with each GMP Proposal package if subcontractors have been selected prior to submission of the GMP Proposal. If the GMP Proposal is submitted prior to subcontractor selection, the CMAR will submit these documents before the selected SBE subcontractor commences onsite construction operations.
 - a) **SBE Utilization Form.** The Owner will provide the Form to the CMAR as required. The CMAR shall list all proposed certified SBE subcontractors who will be performing work under the respective GMP Proposal package. On the form the CMAR will list the name of the firm, the value of work to be performed by that firm, and the estimated percentage of the total Project construction cost to be performed by that firm. When received by the Owner, these Utilization forms will be sent to Vendor Relations & SBE Division to verify that the firms are properly certified within the Owner's system.
 - b) **Letters of Intent to Perform as a Subcontractor.** These letters must be submitted for each Subcontractor or Supplier listed on the SBE Utilization form. These letters are prepared by the respective subcontractors and indicate the subcontractors' intent to perform the work as detailed on the CMAR's Utilization form for the indicated price.
3. **Goal:** The Agreed SBE goal for this Project is as follows:

SBE = TBD (This usually has a range of 5 to 15%)
4. **SBE Utilization:**
 - 4.1 CMAR shall utilize the Subcontractors stated on the Contractor's Statement of Proposed SBE Utilization form as part of each GMP submittal.
 - 4.2 **ONLY certified firms whose business is located within the Tucson Metropolitan Statistical Area may be counted against the SBE goal for each phase of the Project.** The most recent City of Tucson/Pima County Construction SBE directory is available at <http://www.pima.gov/procure/sbe/SBEDir.pdf>
5. **Compliance:** Submittal of the GMP to Owner shall constitute an agreement by the CMAR to comply with the SBE utilization requirements of this Section. This includes, but is not limited to, the following compliance activities:
 - 5.1 CMAR shall contract, or attempt to contract, in good faith with all SBE firms listed on the Statement of Proposed SBE Utilization form submitted with its GMP. The subcontract shall be for an amount that is equal to, or greater than, the total dollar amount listed on the form, with the exception of instances where Owner changes a scope of work in a GMP that would reduce the available Work in the Subcontractor's area of performance.
 - 5.2 CMAR shall notify the Vendor Relations/SBE Division of the County Procurement Department immediately if any firm listed on the Statement of Proposed SBE Utilization form refuses to enter into a subcontract or fails to perform according to the requirements of the subcontract.
 - 5.3 CMAR shall act in good faith to meet the SBE utilization goals and provide all necessary documentation to show proof of those efforts as requested by Owner.

5.4 CMAR shall participate in compliance reviews as determined necessary by Owner. This includes, but is not limited to, participating in on-site reviews and providing monthly utilization reports of SBE activity including signed copies of subcontracts and/or purchase orders with each SBE listed on the Statement of Proposed SBE Utilization form.

6. Breach: The CMAR further agrees that breach of the SBE provisions contained herein may subject it to any or all of the following remedies:

- a) Withholding of ten percent (10%) of all future payments under the involved eligible project until it is determined that the CMAR is in compliance;
- b) Withholding of all future payments under the involved project until it is determined that the CMAR is in compliance;
- c) Consideration for suspension or debarment under Chapters 11.28 and 11.32 of the Pima County Procurement Code.

6. Waiver: CMAR may submit a Certificate of Good Faith Effort/Request for Waiver and documentary evidence to support a full or partial waiver of the subcontracting goal if the goal is not met. A request for waiver may be rejected by Owner. Good faith efforts to meet a goal will not be recognized if CMAR failed to contact the County SBE Program Coordinator to request assistance at (520) 724-8260