



INTERMODAL TRANSPORTATION DIVISION

**CONSTRUCTION MANAGER AT RISK (CMAR)
PROCESS GUIDE**

2nd Edition

September 2014

Published by:

ADOT Construction Group

206 S. 17th Ave., Rm. 193

Phoenix, AZ 85007

(602) 712-7323

TABLE OF CONTENTS

SECTION 1 INTRODUCTION	5
1.1 PURPOSE.....	5
1.2 SCOPE	5
1.3 AUTHORITY	5
1.4 DEFINITIONS	5
1.5 BACKGROUND	9
SECTION 2 PROJECT ADMINISTRATION	12
2.1 PROJECT SELECTION	12
2.2 BUDGET	13
2.3 MANAGEMENT APPROVAL.....	13
2.4 ROLE OF THE STATE ENGINEER.....	13
2.5 ROLE OF THE CONTRACTS AND SPECIFICATIONS (C&S) SECTION	14
2.6 ROLE OF THE ENGINEERING CONSULTANTS SECTION (ECS)	14
2.7 ROLE OF AUDIT AND ANALYSIS	15
2.8 ROLE OF THE CONSTRUCTION GROUP	15
2.9 ROLE OF THE INDEPENDENT REVIEWER (INDEPENDENT COST ESTIMATOR)	15
2.10 ROLE OF THE DEPARTMENT’S PROJECT MANAGER (PM)	15
2.11 ROLE OF THE TECHNICAL LEADERS AND MANAGERS	16
2.12 ROLE OF THE DISTRICT.....	16
2.13 ROLE OF THE RESIDENT ENGINEER (RE)	17
2.14 ROLE OF THE DESIGN FIRM	17
2.15 ROLE OF THE CMAR CONTRACTOR.....	18
2.16 ROLE OF FHWA	18
2.17 ROLE OF ADOT COMMUNICATIONS	18
2.18 ROLE OF THE BUSINESS ENGAGEMENT AND COMPLIANCE OFFICE (BECO)	19
SECTION 3 SELECTING THE CMAR CONTRACTOR	20
3.1 GENERAL.....	20
3.2 CMAR ADVERTISEMENT	20
3.3 PRESUBMITTAL CONFERENCE FOR THE STATEMENTS OF QUALIFICATIONS	20
3.4 REQUEST FOR STATEMENTS OF QUALIFICATIONS	21

3.5 STATEMENTS OF QUALIFICATIONS REQUIREMENTS.....	21
3.6 NON-RESPONSIVE STATEMENT OF QUALIFICATIONS (SOQ) SUBMITTAL	22
3.7 PROTESTS OF REQUEST FOR SOQs	22
3.8 CMAR CONTRACTOR SOQ QUESTIONS AND ANSWERS	22
3.9 SELECTION TEAM.....	22
3.10 EVALUATION OF STATEMENTS OF QUALIFICATIONS	23
3.11 EVALUATION AND SELECTION OF THE CMAR CONTRACTOR.....	24
3.12 PROTEST OF CMAR CONTRACTOR SELECTED	25
3.13 PRECONSTRUCTION SERVICES NEGOTIATIONS.....	25
3.14 EXECUTION OF THE PRECONSTRUCTION SERVICES CONTRACT.....	26
SECTION 4 PRECONSTRUCTION SERVICES DURING DESIGN.....	27
4.1 DESIGN PHASE COOPERATION, COORDINATION, COLLABORATION AND COMMUNICATION	27
4.2 VALUE ENGINEERING (VE) STUDY	27
4.3 CONSTRUCTION MANAGEMENT PLAN.....	27
4.4 PROJECT SCHEDULE	28
4.5 DESIGN.....	29
4.6 COST MODEL	29
4.7 COST MODEL AND GMP RECORD DOCUMENTATION CONFIDENTIALITY	31
4.8 GUARANTEED MAXIMUM PRICE PROPOSALS	31
4.9 GMP ALLOWANCES.....	31
4.10 MULTIPLE GMPS	32
4.11 GMP PROPOSAL REVIEW AND APPROVAL	33
SECTION 5 CONSTRUCTION ADMINISTRATION.....	34
5.1 CONSTRUCTION PHASE	34
5.2 SUPPLEMENTAL AGREEMENTS.....	34
5.3 VALUE ENGINEERING PROPOSALS (VEP).....	34
5.4 MAINTENANCE AND PROTECTION OF TRAFFIC (MPT)	35
5.5 MEASUREMENT AND PAYMENT.....	35
5.6 CONTRACTOR AND SUBCONTRACTOR RECORDS.....	35
APPENDIX A. ARIZONA REVISED STATUTE 28-7361	36
APPENDIX B. ARIZONA REVISED STATUTE 28-7365	38
APPENDIX C. ARIZONA REVISED STATUTE 28-7366	40

APPENDIX D. SAMPLE GMP TABLE44
APPENDIX E. SAMPLE STATEMENT OF QUALIFICATIONS FORMAT.....45
APPENDIX F. SAMPLE SCORING MATRIX49
APPENDIX G. SAMPLE CONTRACT MODIFICATION REQUEST50
APPENDIX H. SAMPLE ASSUMPTIONS AND CLARIFICATIONS51
APPENDIX I. SAMPLE PRECONSTRUCTION CONTRACT AGREEMENT52
APPENDIX J. SAMPLE CONSTRUCTION CONTRACT AGREEMENT89
APPENDIX K. CONTRACT DELIVERY METHODS.....93

SECTION 1 INTRODUCTION

1.1 PURPOSE

The purpose of this document is to explain the Department's process for procuring and administering both the design and construction of a highway facility through the Construction Manager at Risk (CMAR) method of Procurement. The CMAR Contractor and the Designer work collaboratively, while each has a direct contractual responsibility to ADOT. This method provides for concurrent execution of design and construction, which optimizes the potential for an earlier completion schedule. CMAR procurement also reduces ADOT's risk through agreement of a Guaranteed Maximum Price (GMP) during the design due to the CMAR Contractor's participation in reviewing contract documents. Designer-contractor disputes are reduced through conducting constructability reviews as the design progresses. Project quality, cost and construction time have the potential to be improved with this project delivery method.

1.2 SCOPE

This guidance governs all ADOT personnel associated with the design and construction of major bridges, highways or other transportation-related projects using the Construction Manager at Risk process.

1.3 AUTHORITY

Arizona Revised Statutes 28-7361 (see [Appendix A](#)), 28-7365 (see [Appendix B](#)) and 28-7366 (see [Appendix C](#)).

1.4 DEFINITIONS

The definitions and terms listed below are intended to aid the reader.

Advertisement: Public announcement inviting Statements of Qualifications (SOQs), containing an outline of the proposed work and contact information.

Business Engagement and Compliance Office (BECO): The ADOT Section that facilitates access and equal opportunity for disadvantaged business to participate in federal aid transportation projects; promotes a diverse contracting workforce while fulfilling federal obligations and requirements.

CMAR (Construction Manager at Risk) Contractor: Contractor engaged by the Department for the project and the Contractor's officers, employees, agents and authorized representatives involved in any way in the project. The CMAR Contractor is the entity contracting with the Department for the performance of the Preconstruction and Construction Services. CMAR is also used to describe the project delivery method process. For clarity, this manual uses the term "CMAR Contractor" when indicating the construction firm.

CMAR (Construction Manager at Risk) Process: An ADOT alternative procurement process used to select both a Contractor and a Designer, based on criteria that combine qualifications, experience and the proposed project team. Separate contracts are executed (one for design services - preconstruction and another for construction services).

Constructability Review: A process that integrates the contractor's perspective into the Design Phase. By active involvement, the contractor lends its expertise and experience to the design in order to identify potential problems and constructability issues.

Construction Contract: A written agreement between the Department and the CMAR Contractor setting forth the obligation of the parties, including the performance of the work, the furnishing of labor and materials, and the basis of payment.

The construction contract includes the GMP, GMP Record Documentation, any addenda, contract agreement and contract bonds, certificates of insurance, Standard Specifications, Special Provisions, project plans, Standard Drawings, documents incorporated by reference, and any supplemental agreements that are required to complete the construction in an acceptable manner, including authorized time extensions, all of which constitute one instrument (see [Appendix J](#) for an example of a Construction Contract Agreement).

Construction Group: The Champion of the CMAR process (mentors, educates, and lends technical expertise).

Construction Management Plan (CMP): A compilation of various resources that the CMAR Contractor is required to submit to the PM. The plan needs to address project milestone dates and project schedule; investigations; alternate strategies for fast-tracking/phasing construction; listing of all work segments to be constructed under multiple GMPs; agreements with subcontractors and suppliers; permitting strategy; safety and training programs; quality control; security; and a matrix that summarizes each Project Team member's responsibilities and roles.

Construction Phase: The time period when the CMAR Contractor performs the construction. The time begins after the construction contract Notice of Award is issued.

Contracts and Specifications (C&S): The ADOT Section responsible for developing and advertising the Request for SOQs Package and developing the construction contract.

Contract Execution (Preconstruction Services): Signing of the contract by both ADOT and the consultant to perform services outlined in the contract.

Contract Modification (CM): A legal adjustment to the contract. CMs, once approved, become part of the contract.

Contract Modification Request: An alternative contracting (CMAR and D-B) form initiated by either the Department or the CMAR Contractor to provide notification of a potential supplemental agreement.

Cost Model: Cost tabulation for the construction of the project developed by the CMAR Contractor. The Cost Model is based on the Department's list of standard pay items.

Design-Bid-Build (D-B-B): Low-bid traditional procurement method for constructing transportation system improvements where the Department (or a consulting engineer working for the Department) designs the project. The Department solicits bids and awards a contract to the lowest responsive and responsible bidder.

Design-Build (D-B): Project delivery method that results in awarding a contract between the Department and a Design-Builder in which the Design-Builder agrees to simultaneously design and construct a highway, structure, intelligent transportation system, facility or other items specified in the contract.

Design Consultant: The Designer engaged by the Department for the project, and the Designer's officers, employees, agents, independent contractors and authorized representatives involved in any way in the project.

Design Team: Representatives from the CMAR Contractor, Designer, Project Manager (PM) and ADOT construction and technical areas responsible for completing the final design.

Dictionary of Standardized Work Tasks: A compilation of work activities and standards to be completed by the consultants during project implementation.

Engineering Consultants Section (ECS): The ADOT section responsible for the selection and administration of the Design and Preconstruction Services CMAR contracts.

Executive Partnering Team: An advisory team composed of the Department’s Project Manager, Resident Engineer, District Engineer, Assistant State Engineer for Construction, Deputy State Engineer, and representatives from Partnering, the CMAR Contractor and FHWA. The Team meets periodically to discuss issues and provide guidance.

Final List: The top three to five CMAR firms - determined by the Selection Team’s evaluation of SOQ submittals and oral interviews, if held.

GMP (Guaranteed Maximum Price): The total itemized dollar amount negotiated between the CMAR Contractor and ADOT for constructing the project or portions thereof. The CMAR Contractor agrees to construct the project for this amount or less. It includes – but is not limited to - a construction schedule, all traffic control, quality testing, survey, public information, and coordination costs.

GMP Allowance: Funds included in the GMP to be used by the CMAR Contractor only with the written consent of the Department. Each allowance is item-specific. The allowances establish the type and amount of risk that the Department and the CMAR Contractor have assumed in agreeing to the GMP. Allowances are either fixed, open, or provisional (see [4.9 GMP Allowances](#)).

GMP Item Schedule: A list of pay item numbers, descriptions, quantities, units of measurement, unit prices and extended amounts, allowances, field and corporate overhead, taxes, bond and fixed fee that make up the GMP. Similar in appearance to D-B-B bid schedule.

GMP Record Documentation: The GMP Record Documentation consists of the GMP, the GMP Item Schedule and all documents used to generate them, including material incorporated by reference.

GMP Table: Recap of construction costs (CMAR Contractor and subcontractors), allowances, fees, home office and field office overhead, bond and taxes. The CMAR Contractor must include a completed GMP Table (see [Appendix D](#)) with each GMP Proposal.

Independent Reviewer (Independent Cost Estimator): Third-party consultant that assists the Assistant State Engineer for Construction with the cost aspects of the CMAR project.

Notice of Award (Construction Contract): A written notice given by C&S to the CMAR Contractor stating that its GMP has been accepted by the Transportation Board.

Notice to Proceed (NTP): A written authorization from the State to the consultant/contractor to start work on a contract (or any unit or element of the contract). Specific tasks delineated in the contract may be performed after the contract has been signed.

Off-site Overhead: The CMAR Contractor's home office overhead that will be attributed to the project. Off-site overhead will be negotiated and agreed upon between the Department and the CMAR Contractor prior to execution of the construction contract.

On-site Overhead: The CMAR Contractor's on-site supervision and management staff, including required temporary facilities, site office expenses, insurance and bonds, and other agreed upon on-site overhead costs. The on-site overhead will be negotiated and agreed upon between the Department and the CMAR Contractor prior to execution of the construction contract.

Preconstruction Contract: A written agreement between the Department and the CMAR Contractor setting forth the obligation of the parties for the Preconstruction Phase (see [Appendix I](#) for an example of a Preconstruction Contract Agreement).

Preconstruction Phase: The first phase of the project when the CMAR Contractor performs the activities under the Preconstruction Contract.

Preconstruction Services Cost Proposal: The CMAR Contractor's proposal for performing the advisory role contained in the Request for SOQs and specified in the CMAR Contractor Solicitation. This proposal is independent of the GMP. The proposal is presented in the same manner as typically submitted for design contracts. Compensation for labor hours and expenses is outlined in the Preconstruction Services Contract Request for SOQs. The CMAR Contractor advises the Department and the Design Consultant concerning the design and provides the other services described in the Scope of Work.

Project Manager (PM): The individual responsible for coordinating the procurement and oversight of design and CMAR Preconstruction Services; the Department's main point of contact for the Design Team.

Project Schedule: Critical Path Method (CPM), graphical and tabular listing of all tasks and submittals that are required by each member of the Project Team to complete the project. The Project Schedule includes all preconstruction submittals (Stage II; Stage III; Stage IV), with milestones.

Project Team: A team composed of representatives from ADOT, the Design Consultant, the CMAR Contractor (including its subconsultants and subcontractors), local governments, communities, stakeholders and utilities. FHWA is also included for federally funded projects. The involvement/role of each team member depends on expertise and the task.

Qualification-Based Selection (QBS): A competitive contract procurement process whereby consulting firms submit qualifications to the procuring entity (the State) that evaluates and selects the most qualified firm, and then negotiates the project scope of work, schedule, budget, consultant fee, etc. Under the QBS process, the cost of the work (price) is not considered when making the initial selection of the best or most qualified provider of the professional engineering services required. The cost for services is negotiated, following selection/awarding of the contract, with the most qualified firm and before the contract is signed by both parties.

Request for Statements of Qualifications Package: Document published by the Department that contains the Advertisement, the CMAR Contractor Request for SOQs, the CMAR Contractor's Scope of Work for Preconstruction Services, the Project Scope of Work, General Requirements, Technical Specifications, the Designer's Scope of Work, and any forms, drawings and other supporting documents necessary to prepare a proposal for construction of the project.

Resident Engineer (RE): Individual designated to administer the Construction Services contract on behalf of the Department. Assists with development of the Request for SOQs, defining the Scope of Work and may serve on the Selection Team to choose the CMAR Contractor.

Scope of Work: Defines the project's intent and purpose, its limits, elements of work and schedule.

SEP-14 (Special Experimental Project No. 14 – Alternative Contracting): FHWA program that allows State DOTs to evaluate non-traditional contracting techniques. After evaluation, FHWA determines whether the practices are suitable for use as operational practices.

Under Moving Ahead for Progress in the 21st Century (MAP-21), CMAR was accepted by FHWA as an approved delivery method. Effective October 1, 2012, CMAR projects are no longer required to seek experimental FHWA SEP-14 approval. FHWA's website has information and examples of [SEP-14](#) submittals.

Selection Team: Individuals selected to evaluate the CMAR SOQs and oral interviews, if held. ADOT requires all team members to successfully complete the ADOT required training class prior to serving. The team shall consist of at least three members and may be either Department employees or outside consultants. At least one shall be a senior management employee of a licensed contractor who is not involved in the project. At least half the team must be professionally licensed engineers or architects ([ARS 28-7365 B](#)).

Specific Rate: Used when the Scope of Work and the required work effort cannot be determined at the time of signing/executing the consultant contract. The consultant is paid at an agreed specific fixed hourly or daily rate for actual hours engaged in the work. Specific rates are based on direct labor hours at specified fixed hourly rates (including wages, overhead, general & administrative cost, and profit) and material at cost.

Statements of Qualifications (SOQs): The response to the Request for SOQs from potential CMAR Contractors. The SOQ contains information about firm capabilities, key personnel, previous experience, project understanding/approach, planned involvement of subs, and safety.

Surety (Contract) Bond: The security furnished with the GMP to guarantee that the CMAR Contractor will enter into the contract if accepted.

Value Engineering (VE): A function-oriented, systematic team approach to add customer value to a project, program, facility, system or service. CMAR requires a study in the early design phase on each project.

1.5 BACKGROUND

Design-Bid-Build (D-B-B) is the most common contracting approach for public owners. This traditional approach develops a design (in-house or consultant), bids the project through the low-bid process, and constructs the project with the lowest responsive and responsible contractor.

ADOT has also adopted Design-Build (D-B) as an alternative project delivery method in which the Department procures both design and construction services in the same contract from a single, legal entity, referred to as the Design-Builder. The Department develops the Request for SOQ, evaluates responses and awards one contract for both design and construction services.

Many construction owners have also undertaken the development of CMAR as another alternative project delivery method. CMAR project delivery procurement occupies the middle ground between D-B-B and D-B. The

CMAR procurement method involves contracts between the Department and the Designer and between the Department and the CMAR Contractor. During design the CMAR Contractor serves as an advisor. CMAR project delivery involves two contracts with the contractor; one is for Preconstruction Services during design and the second is for the construction itself.

CMAR is an integrated team approach to planning, designing, and constructing a highway project, to control schedule and budget, and to ensure quality for the project owner. Expertise is engaged early in the design process to manage risk, improve constructability and facilitate concurrent execution of design and construction without the owner relinquishing control over design details (unlike Design-Build). Owner control is enhanced through more involvement with design details. The major difference between Design-Build and CMAR is that the contractor evaluates the plans and reviews quantities for accuracy and therefore has contractual responsibility for those verifications.

CMAR's benefits include:

- increased cooperation and coordination among the CMAR Contractor, the Designer and ADOT;
- increased effectiveness and constructability of the design due to the contractor's input into the preconstruction design and environmental clearance process;
- design decisions affecting both the types of materials specified and the means of construction are made with full consideration of the construction perspective;
- the CMAR Contractor provides a Cost Model, participates in a Value Engineering study (VE), and provides constructability review comments;
- reduced ADOT exposure to contractor claims and supplemental agreements that arise over design and constructability issues;
- the Designer providing a schedule, cost estimate, participates in a Value Engineering study (VE), and incorporates constructability review comments into the design;
- the Designer has the opportunity to tailor the design to the CMAR Contractor's strengths and preferred Means and Methods; to provide more detail; and potentially reducing construction time. This collaborative approach with CMAR project delivery should also result in savings for Post Design Services;
- reduced time to design and construct;
- the CMAR Contractor and the Designer work collaboratively, while each has a direct contractual responsibility to ADOT;
- providing the ability to procure early work packages, mitigating the risk of construction price volatility and accelerating the schedule;
- identifying and mitigating project risks by the CMAR Contractor, the Designer and the Department working together. The CMAR contract provides a mechanism to negotiate the allocation of risk between the Department and the CMAR Contractor through the Contractor's pricing structure.

The CMAR Contractor and the Department can negotiate multiple GMPs and propose to construct portions of the work at any time, often while design of unrelated portions has not started. The CMAR Contractor and the Department negotiate a GMP based on the design at that time, which includes the CMAR Contractor's Cost Model for the remaining design features. The Cost Model includes the plans, Special Provisions, contract time, allowances, all assumptions, explanations and other data necessary to understand the methodology. If using

federal funds for construction, such construction should not start until the GMP has been approved by the Transportation Board and funding has been authorized by FHWA.

It is the Department's prerogative to determine at what design stage it would be most beneficial to engage the CMAR Contractor. In many cases the maximum benefit is obtained when the CMAR Contractor is engaged after completion of Stage II (30%) design documents. There are instances where it may be more desirable to select the CMAR Contractor at another stage of development, based on the specific needs of a given project.

NOTE: If using multiple GMPs, FHWA requires that each GMP must result in a "stand-alone" product.

SECTION 2 PROJECT ADMINISTRATION

2.1 PROJECT SELECTION

CMAR is an advantageous project delivery method (see [Appendix K](#)) when one or more of the following is present:

- the design is technically complex, difficult to define, subject to change and/or has several design options that would benefit from contractor input prior to construction;
- there is a high coordination requirement with various stakeholders, including external agencies, that make cost over-runs and construction schedule a pressing concern;
- the project is facing budget constraints;
- the project is perceived as high risk and/or unknown risk;
- the project is sequence (complex phasing) or schedule sensitive;
- there is a need to prioritize acquisition of right-of-way parcels, factoring in the contractor's phasing and preferred means and methods;
- collaboration is required for complex third-party (i.e., utilities, local jurisdictions, private developers, etc.) issues;
- environmental considerations need to be factored in earlier and need to be more clearly defined for all stakeholders;
- advance purchase of materials would be beneficial to meet schedule requirements.

CMAR project delivery is less suitable for straightforward projects that are easily defined and lack schedule sensitivity. Projects are nominated by the PM to the State Engineer's Office for consideration.

Criteria for project selection suitability for the CMAR method of project delivery are as follows:

Programming: The project is programmed into ADOT's 5-year Highway Construction Program, although the method of procurement is not always specified. Emergency repair projects can also be considered for CMAR contracting.

Time: There should be sufficient time to allow for the Design/Preconstruction and the construction of the project.

Available CMAR Contractors: There should be a sufficient pool of available capable highway/heavy construction contractors having experience with constructability, value engineering and scheduling.

Department Capabilities: There should be in-house staff and consulting expertise, knowledgeable in the CMAR process, readily available to manage and oversee the execution of the project's distinct phases. The Department's PM should have either prior CMAR experience or experience in handling both design and construction of complex, urgent transportation projects. **NOTE:** The Department can use in-house staff for all design services up to final design for bridges only. All other transportation facilities in-house design services are capped at 20 percent of the design work.

Environmental Issues: The preparation of all environmental documents and the obtaining of required environmental and regulatory clearances shall be performed by ADOT (or its consultant). CMAR delivery requires extra diligence to be “out ahead” – to not impede the time savings that should accrue to this method of alternative delivery. The scope of any remedial actions, such as environmental mitigation measures, site cleanup, or hazardous materials abatement, shall be clearly identified in the environmental documents and the Request for SOQ Package. **NOTE:** Environmental clearances can also be completed after the CMAR Contractor is on-board. The CMAR approach can influence design and the environmental clearance approach.

Right-of-Way Procurement: Right-of-way acquisitions are the responsibility of ADOT. Since available right-of-way significantly affects the final design, all efforts are expended to acquire necessary parcels prior to construction. It is permissible to specify right-of-way limits and require all design features to remain within ADOT’s right-of-way.

Utilities: The utility coordination and relocation requirements can be either the CMAR Contractor’s preconstruction duties or the Department’s. This may impact the final schedule and the GMP. The CMAR Contractor should identify long-lead construction items. The cost and design should be agreed upon before the final project design is complete, in order to reduce the impact to the overall schedule (See Standard Specification 106.02).

2.2 BUDGET

When a section of roadway or transportation facility is being considered for CMAR contracting, adequate funding must be identified and approved for the work. Funds must be established in the 5-year Highway Construction Program before the advertisement and the selection process begins. An exception would be Emergency repair projects, which may also be considered for CMAR contracting.

2.3 MANAGEMENT APPROVAL

Prior to the CMAR Solicitation, the PM prepares a written statement describing the reasons for using the CMAR project delivery method and submits the statement to the State Engineer for management approval. The State Engineer will make the final determination whether to use the CMAR contracting method.

2.4 ROLE OF THE STATE ENGINEER

The State Engineer’s Office provides the overall direction and support for the CMAR process. The Office is instrumental in framing project selection criteria and recommends the final GMP to the Transportation Board for approval. The State Engineer’s Office will maintain open dialog with key stakeholders, such as:

- FHWA
- Department Staff
- Arizona Council of Engineering Consultants (ACEC of AZ)
- Arizona Associated General Contractors (AZ AGC)
- Local Governments
- Attorney General’s Office
- Public

2.5 ROLE OF THE CONTRACTS AND SPECIFICATIONS (C&S) SECTION

The Contracts and Specifications Section initial responsibility in the CMAR process is to notify ECS that a pending project will be delivered utilizing the CMAR method. The preparation of the Request for SOQs, including Section 100 of the Special Provisions, remains the purview of C&S (with input from the PM and ECS). C&S assists in developing the schedules for advertising, and reviewing and selecting the CMAR Contractor. The Section compiles project information in order to advertise for selection of the CMAR Contractor ([Advertised Alternative Delivery Projects](#)).

C&S and ECS jointly decide whether a submitted SOQ meets the required format.

Other C&S responsibilities include:

- receiving the SOQs submittals;
- providing the Department's engineer estimate and reviewing Cost Models at each stage of development;
- attending project meetings – to gain a better understand of the project (i.e., to aid in the development and preparation of estimates and to provide insight into the review of costs);
- participating in the development of item specifications for allowances.

C&S also provides ongoing technical assistance to the Construction Group. A vital function is also to finalize contract documents - including specifications, GMP Table, GMP, bond, etc., prior to award by the State Transportation Board. C&S also assists with the development and approval of the GMP.

2.6 ROLE OF THE ENGINEERING CONSULTANTS SECTION (ECS)

ADOT's engineering consultant contracts are awarded in accordance with a [Qualification-Based Selection \(QBS\)](#) procurement process similar to the one established by the United States Congress as a part of the Brooks Act-Public Law 92-582 (40 USC 1101 et. seq.). QBS is a competitive contract procurement process whereby consulting firms submit qualifications to the procuring entity (the State). The Selection Team evaluates and selects the most qualified firm. ECS negotiates the project scope of work, schedule, budget, consultant fee, etc. Under the QBS process, the cost of the work (price) is not considered when making the initial selection of the best or most qualified provider of the professional engineering services required.

Other ECS responsibilities include:

- obtaining SOQ submittals from C&S, confirming that submitted SOQs meet format requirements, confirming availability of Selection Team members and scheduling meetings for the selection process.
- facilitating Selection Team meetings, checking references, facilitating oral interviews and all communicating with potential CMAR Contractor firms.
- awarding contract for Preconstruction Services.
- executing and administering the Preconstruction Services Contract.

2.7 ROLE OF AUDIT AND ANALYSIS

In the Preconstruction Phase, the Department's Audit & Analysis Section reviews cost information submitted by prospective contractors. ECS is advised on the allocability, allowability, fairness and reasonableness of the labor rates and other costs included in the contractor's proposal.

2.8 ROLE OF THE CONSTRUCTION GROUP

The Construction Group's primary responsibility is to lead the CMAR process. Each CMAR project has different challenges and opportunities that require an understanding of the process and the law. The Construction Group heads the effort to educate ADOT staff, identify technical expertise needed for the selection process, assists in negotiations, and reviews all Cost Models and GMPs.

Other responsibilities include:

- reviewing and providing input for the Request for SOQs
- recommending the Final GMP to the State Engineer
- providing guidance to District staff
 - Contract Administration
 - Supplemental Agreements ([Contract Modification Request](#))
- documenting and sharing challenges, successes and summarize all lessons learned

2.9 ROLE OF THE INDEPENDENT REVIEWER (INDEPENDENT COST ESTIMATOR)

The primary responsibility of the [Independent Reviewer](#) is to engage in a constructive dialog with the Department, the Designer and the CMAR Contractor during the Preconstruction Phase of the project. The Independent Reviewer will develop a detailed independent cost estimate (ICE) for the contract items and also review the CMAR Contractor's schedule and Cost Model. The Independent Reviewer's analysis will red-flag cost and/or schedule variances, validate the CMAR Contractor's price structure and assist in negotiation of the GMP.

The secondary role of the Independent Reviewer is to provide technical support during the development of the project plans, as follows:

- attend task meetings as required
- provide guidance on reasonable fees and overhead
- document lessons learned

2.10 ROLE OF THE DEPARTMENT'S PROJECT MANAGER (PM)

The PM is the Department's lead individual and main point of contact for the project during design. The PM will be responsible for coordinating the procurement and oversight of design and CMAR Preconstruction Services.

The PM should participate with Pre-Design in the initial scoping of the project, including the development of the Design Concept Report (DCR) or Scoping Letter. Involvement is required in the necessary environmental studies, permits, and assessments required for the project - including reviewing environmental, archeological and right-of-way documents. An involved and well-informed PM can accurately communicate the Department's scoping,

right-of-way, and environmental concerns when developing the Request for SOQs, ensuring that the SOQ is prepared in accordance with the scoping and environmental documents and that the SOQ meets the needs of ADOT management and key project stakeholders. The PM is also responsible to secure funding for the CMAR Contractor to perform Preconstruction Services duties, as well as funding for the Independent Reviewer.

Prior to the CMAR advertisement date, the PM must be prepared to provide information about the project. When meeting with these firms, the PM should prepare an outline to ensure the same information is provided to all prospective CMAR Contractor firms. The PM shall also be prepared to answer questions posed by the prospective firms. The questions and answers should be documented and retained in the project file.

When the Statements of Qualifications are received by the Department, ECS will schedule a kickoff meeting for the Selection Team. The PM or the design consultant shall present the project to the Selection Team and explain the important issues and project goals. ECS should also emphasize what the Team should look for in reviewing the SOQs. If any of the evaluation criteria in the Request for SOQs require more explanation, the PM can arrange to have an appropriate technical group representative educate the Selection Team about the particular evaluation criteria.

The PM plays an integral part in negotiating the Preconstruction Services Contract and is required to maintain the comment resolution database, accessible by all of the CMAR team. Responsibilities include entering the contractor's schedule into Primavera within 30 days of contract execution and approving the Contractor's monthly invoices for Preconstruction Services. The PM coordinates and implements constructability review recommendations; supports the RE, the District, and the Construction Group by reviewing all Cost Models, GMPs, allowances, Assumptions and Clarifications, the Construction contract, and the Preconstruction Services schedule.

2.11 ROLE OF THE TECHNICAL LEADERS AND MANAGERS

Technical leaders and managers from the various design and technical groups oversee the design process similar to a D-B-B project. CMAR schedule is critical; therefore timely reviews by technical leaders are crucial. The PM is ultimately responsible to ensure that issues are resolved in a timely manner.

2.12 ROLE OF THE DISTRICT

The state is geographically split into nine districts, each led by a District Engineer. The District is instrumental to the success of a CMAR project, leading the effort to recommend a project for consideration, participating on the CMAR selection team and contributing to the SOQ development process. The District provides a foundation for the requirements of the Preconstruction Services Contract and engages the CMAR Contractor to improve the quality of the plans, manage scope creep, shorten project schedule and analyze budget constraints.

The District role in the Preconstruction Phase is very similar to the District role in the traditional Departmental development process, with the exception of contractor involvement. The District is engaged in the negotiation of the GMP, the contract allowances and assumptions.

The District leads the effort to provide guidance to District staff during the Construction Phase. This can entail documenting background information on how the GMP was developed, the types of allowances, allowable mark-ups on supplemental agreements and pay item documentation.

District responsibilities include:

- provide leadership
- hold District team accountable
- review all potential Supplemental Agreements
 - [Contract Modification Request](#) form
- knowledge transfer of the process

2.13 ROLE OF THE RESIDENT ENGINEER (RE)

During the CMAR project development process the role of the RE is similar to a conventional D-B-B project. RE input is crucial to developing the Preconstruction Service contract – responsible for contract administration, reviewing all Cost Models, GMPs, allowances, Assumptions and Clarifications (see [Appendix H](#)), the Construction contract and schedule. Other responsibilities include verifying item quantities for accuracy, reviewing criteria, and providing input for Subcontractor selection.

The RE is the Department's lead individual and main point of contact for the project during construction and will regularly coordinate with the PM throughout the construction phase. As with a conventional D-B-B project, the RE supervises a team of individuals who are responsible for the daily inspection, material quality acceptance, and project documentation requirements at the site of construction. The RE and field personnel interact daily with the CMAR Contractor throughout the construction phase of the project to assure the CMAR Contractor complies with applicable Federal, State, Local and other contractual requirements.

Other examples of involvement are:

- performing first review of all Supplemental Agreement requests submitted via [Contract Modification Request](#) form and providing recommendations regarding the CMAR Contractor's entitlement based on the contract documents.
- reconciling monthly estimate submitted by CMAR Contractor with that of field personnel; approving and processing payment(s) using CPE.
- tracking item quantity details for evaluation of under- and over-runs.
- monitoring and evaluating the CMAR Contractor's schedule on a monthly basis during construction.
- providing written consent to the CMAR Contractor to proceed with use of an Allowance identified in the GMP, or subsequently added to the contract by Supplemental Agreement.

2.14 ROLE OF THE DESIGN FIRM

The project Designer works collaboratively with the CMAR Contractor. There are many similarities between CMAR and D-B-B project delivery methods. The same deliverables are required, with the exception that the Contractor is now engaged and part of the process.

When the Department accepts the GMP and a Notice of Award is issued for the construction phase, there is no change to the Design Consultant's contract. The Designer must complete and submit all deliverables in the Final Design Scope of Work. The Designer has the potential to be working on both design and Post Design for different elements of the project. Issues dealing with schedule slip during design are the primary responsibility of the design firm, who must develop the plan to get back on track.

The Designer also prepares a CPM for design that the CMAR Contractor incorporates into the Preconstruction Services schedule. The Designer provides an estimate that is compared to estimates produced by the Department, the Independent Cost Estimator and the CMAR Contractor (as reflected in the cost model).

Per ADOT's Conflict of Interest Policy, the CMAR Contractor shall not subcontract any portion of the contract to an entity that is, or has been, employed by the Design Consultant in the design of the project.

2.15 ROLE OF THE CMAR CONTRACTOR

The CMAR Contractor's main objective is to interface with the Department and the Designer during the Preconstruction Phase of the project. The CMAR Contractor will be part of the team that reviews the plans for constructability and provides input on the sequence of construction. The CMAR Contractor's technical experience, resources and approach (means and method) will identify potential risks that can influence cost and schedule.

The CMAR Contractor's candid discussion early in the design will allow the development of a clear, concise scope and validate the Department's budget through compilation of a Cost Model (continually updated throughout the Preconstruction Phase until a GMP agreement is reached). The CMAR Contractor will provide a value engineering solution to optimize project schedule, reduce costs, and not impact the quality. The CMAR Contractor's responsibility is to reconcile project quantities and develop a GMP for construction.

Other responsibilities include:

- conducting a site investigation
- preparing a Construction Management Plan (CMP)
- preparing a Critical Path Method (CPM) project schedule for design and construction
- procuring long-lead time items
- permitting, subcontractor preparation and packaging
- verifying design quantities

2.16 ROLE OF FHWA

The guiding document governing the Department's relationship with FHWA is the [Stewardship Agreement](#). Each project is carefully considered by the FHWA for use of the CMAR delivery method. The Department encourages FHWA staff to attend task meetings and also to be a member of the VE Study team, whenever possible.

FHWA approves funding for all Federal-aid CMAR projects (funding approval is given in stages for Preconstruction and Construction Services). FHWA reviews the Department Estimate, the GMP and the construction contracts. Participation also involves reviewing and recommending all [Contract Modification Requests](#) and approving all Supplemental Agreements for Full Oversight.

2.17 ROLE OF ADOT COMMUNICATIONS

The role of ADOT Communications is to inform and involve customers and project stakeholders in transportation planning, development, construction and operations. Project-related issues are identified and communication strategies are developed - working closely with local elected officials, community leaders, the general public and the media - to minimize project impacts and concerns.

2.18 ROLE OF THE BUSINESS ENGAGEMENT AND COMPLIANCE OFFICE (BECO)

The Business Engagement and Compliance Office (BECO) endeavors to facilitate access and equal opportunity for disadvantaged business to participate in federal aid transportation projects. BECO's goal is to promote a diverse contracting workforce while fulfilling federal obligations and requirements. Project specific DBE goals will be developed during the Preconstruction Phase.

SECTION 3 SELECTING THE CMAR CONTRACTOR

3.1 GENERAL

The process for CMAR alternative delivery must be consistent and well-defined. The objectives are

to deliver the best project value to the Department and

to design and construct a project that meets the reduced time and budget expectations of the Department while fulfilling quality requirements.

The CMAR Contractor is selected based on qualifications (as provided in [ARS 28-7366 C.2.](#)). This involves the submission of SOQs from prequalified contractors (joint ventures are permitted) and the development of a short list from all the responsive submittals - which will be at least three firms and up to five firms. The SOQs from the contractors are evaluated and interviews may be conducted with the short list of contractors. The Department will negotiate with the highest qualified contractor from the final list. If the Department is unable to successfully negotiate a contract with the highest qualified firm, then the Department will negotiate with the next highest qualified firm. The CMAR Contractor is selected based on demonstrated competency and qualifications. This section describes each of the key steps in the selection process.

The Department's standard prequalification requirements apply and each contractor must be prequalified with C&S to perform the construction work.

3.2 CMAR ADVERTISEMENT

The CMAR advertisement notifies the highway construction industry of an impending CMAR project. The advertisement summarizes the project and the CMAR selection process and gives instructions on how the Request for SOQ package can be obtained. A Request for SOQ package, including any reference material, is available from Contracts and Specifications Section.

In advertising for a CMAR Contractor, the Department will follow a solicitation process similar to the acquisition of professional services. All CMAR projects advertised are posted on the C&S website under "[Advertised Alternative Delivery Projects](#)".

The advertisement will include a Scope of Work, requirements for prequalification, additional technical qualifications desired, and instructions to how to obtain the Request for SOQ Package. The program amount of the project shall also be included in the advertisement. The selection process schedule is included in the Request for SOQs. This schedule summarizes the submission deadlines for the SOQs and establishes other deadlines, including contractor interview dates and announcement of the final list. All key milestones in the selection process should be listed in the schedule. The maximum number of pages in the SOQs will be listed in the Request for SOQs.

3.3 PRESUBMITTAL CONFERENCE FOR THE STATEMENTS OF QUALIFICATIONS

A presubmittal meeting may be held for all contractors to discuss the scope of the project to clarify the CMAR Contractor selection process, to discuss the CMAR Package and to answer any questions regarding the process.

3.4 REQUEST FOR STATEMENTS OF QUALIFICATIONS

The CMAR Request for SOQs Package includes the selection criteria; design requirements; preconstruction scope of work; project constraints related to traffic, utilities, the environment and right-of-way; and construction requirements. Available information about the project (plans, reports, etc.) is provided as part of the Request for SOQs.

The Request for SOQs typically includes the following:

- a copy of the CMAR solicitation advertisement
- a description of the selection process including the selection process calendar
- SOQ formatting instructions and documentation requirements with associated scoring criteria
- oral interview requirements
- the scope of work for Preconstruction
- the scope of work for Construction services
- a copy of the Designer's scope of work
- the Preconstruction contract agreement (see [Appendix I](#))
- the Construction contract agreement (see [Appendix J](#))

3.5 STATEMENTS OF QUALIFICATIONS REQUIREMENTS

Specific documentation requirements and procedures that each prospective CMAR Contractor must follow are detailed in the Request for SOQs. The submittal requirements for past CMAR projects (see [Appendix E](#)) can be used as a starting point for developing the submittal requirements for an upcoming project. However, each set of requirements is tailored to the particular project - fully describing expected format and content of the oral interview, if one is held.

C&S and the PM will provide guidelines for the general content, evaluation criteria and scoring requirements for the SOQs and the oral interviews. The PM and the ADOT Project Team should tailor each submittal requirement and scoring criteria to reflect the specific needs of each project. The Project Team should establish the required content of each submittal (what the team would like to see) on a section-by-section basis, determine the evaluation criteria to be used (how each section of the proposal will be graded), and then decide on the scoring breakdown for the proposal (the points assigned to each section). Points for specific categories may vary from project to project due to specific characteristics of each project.

A Statement of Qualifications proposal is submitted by a contractor in response to a solicitation and outlines the firm's capability and experience to provide services requested in the solicitation, as described in the SOQ Package.

Information included in the Introductory Letter of the SOQ submittal shall not be considered in the scoring of the proposal. Statements made in the Introductory Letter that the contractor wishes to be considered in the evaluation should also be included in the appropriate section(s) of the SOQ.

CMAR contracts are awarded in accordance with a [Qualification-Based Selection \(QBS\)](#) process. No work-hour estimates or price information shall be submitted by the contractor in proposal responses to Requests for SOQs.

Timely receipt of the SOQ will be determined by the date and time the document is received by C&S, as specified in the Request for SOQ package, until the deadline. Contractors are solely responsible for timely submission of SOQs and are encouraged not to wait until the last minute to submit proposals. All materials submitted in response to the SOQ become the property of the State of Arizona and shall not be returned.

3.6 NON-RESPONSIVE STATEMENT OF QUALIFICATIONS (SOQ) SUBMITTAL

Contractors responding to advertisements must strictly adhere to the format and instructions outlined in each Request for SOQ Package, as the instructions may vary. ADOT shall reject SOQs that materially vary from the format and substantive requirements outlined in the Request for SOQs. Submittals from contractors that are not pre-qualified shall also be rejected. ADOT (ECS in conjunction with C&S) shall also reject proposals that are not received by the method of submission and by the date and time indicated in the SOQ Package. Contractors shall be notified via phone by C&S if the proposal has been rejected, followed by a written email notification.

3.7 PROTESTS OF REQUEST FOR SOQS

Any interested party may protest the terms of the Request for SOQs. The protest must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The protest must include facts supporting the protest, any pertinent contractual provisions, law, rules or regulations, and other legal authorities supporting the protest and requested action. The protest is barred unless it is received by the State Engineer no later than seven calendar days after the cause for the protest becomes reasonably apparent.

Copies of the protest shall be sent by the protester to every CMAR Proposer or responder to the request for Statements of Qualifications. The protester may contact the C&S Section to obtain contact information for CMAR Proposers.

The State Engineer will make the final decision on any protest regarding the solicitation.

3.8 CMAR CONTRACTOR SOQ QUESTIONS AND ANSWERS

During the advertisement process, the Department may receive questions regarding the technical aspects of the project, SOQ formatting, availability of ADOT reports and records, and procedural issues. The Contractor must direct all technical questions in writing to the C&S representative listed in the Request for SOQ. C&S will contact the Technical Managers. The Technical Managers will respond to the C&S representative, who will respond.

Other than provided above, no direct discussions about the project are allowed between ADOT staff (including consultants) and the potential proposers (including subcontractors) once the CMAR Solicitation is advertised.

3.9 SELECTION TEAM

The Selection Team will review and evaluate all responsive SOQs submitted by the prospective CMAR Contractors to determine a final list of firms. Per ARS [28-7366 C.2.](#), the Selection Team shall consist of at least three members and may be either Department employees or outside consultants. At least one of the members shall be a senior management employee of a licensed contractor. Contact the Assistant State Engineer for Construction for guidance regarding contractor selection. At least half the team shall be professionally licensed

engineers or architects. No members can have any interest in the project or an association that can be construed as a conflict of interest with potential contractors, designers or subcontractors.

A list of potential Selection Team members will be nominated and submitted to the State Engineer's Office for approval. Once the Selection Team has been approved, the team shall have a kickoff meeting with ECS to go over the selection process for final listing the proposing contractors. ECS will prepare a "Selection Panel Instructions for Statements of Qualifications" brief and review the selection procedures with the team members during the kickoff meeting. Personnel with intimate knowledge of the project will meet with the Selection Team at this time and provide a project overview to the panel. ECS will thoroughly explain the selection process. ECS must ensure that all team members, as well as applicable [Technical Managers](#), have a complete set of the CMAR Solicitation documents - including addenda, supporting concepts drawings, reports, and studies to properly evaluate each SOQ.

3.10 EVALUATION OF STATEMENTS OF QUALIFICATIONS

The SOQs shall be confidentially evaluated by the selection panel members. Selection panel members, ECS staff or any other ADOT personnel present for any panel meetings and/or deliberations must sign a Confidentiality Statement. Panel members must attest to maintain strict confidentiality and security regarding the content of proposals and proceedings of the evaluation panel meetings before, during and after the evaluation process.

It is essential that the integrity and transparency of the selection process be maintained to:

- ensure that the State is selecting the most qualified CMAR Contractor
- avoid Contractor or public perception of favoritism or partiality in contract awards
- ensure that all submittals are given fair and equal consideration

Therefore, selection panel members must not participate in any evaluation process when there may be actual, potential or perceived conflict of interest (either of an outside business or personal nature) with the CMAR Contractors involved. Selection panel members who believe there is any actual, potential or perceived conflict of interest when serving on a panel shall notify the ECS immediately and be removed from the panel.

All selection panel members shall sign a Panel Member Participation form indicating willingness to attend the panel meetings and participate in all aspects of the selection process, including interviews, as necessary. Failure to attend meetings, interviews or participate in any part of the selection process, without advanced notification, shall result in elimination of that member's scores from the panel evaluation and the selection panel member shall be excluded from any further participation in the selection process. In addition, failure to complete the comment forms to justify scores may also result in elimination of that panel member's scores from the final panel evaluation. ECS and/or other ADOT staff shall attend panel selection meetings to ensure compliance with [ADOT Contract Award and Administration Rules and Procedures](#), but do not participate in scoring. Selection panel members and any non-voting individuals attending panel selection meetings shall also sign the Conflict of Interest/Confidentiality Statement form.

The selection panel team shall have a kickoff meeting with ECS. At that meeting, ECS will provide the selection team instructions, documents for comments and scoring SOQ submittals, review the selection procedures and schedule, and provide all solicitation documents. The PM or key project members may meet with the Selection Team at this time and provide a project overview to the panel.

Each selection panel member shall conduct an independent evaluation of each contractor's SOQ and shall not discuss that evaluation with other selection panel members or other non-selection panel members during the initial phase of the process. While selection panel members will have individual areas of expertise, each member is expected to score each proposal in terms of overall merit and how the proposal addresses the requirements outlined in the Request for SOQ Package.

After each member has reviewed and scored individual SOQs, the scores and comments are submitted to ECS. ECS compiles the scores for the pre-selection meeting. At the pre-selection meeting, the selection team will meet to discuss each proposal. Any selection panel member may elect to amend the score based on the discussion.

Scores are recompiled and the standard deviation is applied. If a panel member's SOQ score exceeds 1.65 times the standard deviation of the mean score (plus or minus) for a contractor, the panel member's score for that contractor is excluded. The standard deviation is not applied until discussion of all contractors has concluded and panel member's scores are final (see [Appendix F](#)).

Selection Team member comments and the total score will be provided to each prospective contractor for debrief. Debriefs cannot occur until after the Preconstruction contract is executed. Contractors are allowed to review the SOQs of the winning firm during debriefing.

3.11 EVALUATION AND SELECTION OF THE CMAR CONTRACTOR

Oral Interviews may be a part of the evaluation process. The length, location of, number of contractors to be interviewed and format of the interview will be detailed in the Request for SOQs. The top ranked contractors may be short-listed and requested to participate in an oral interview process. If an interview is required, all short-listed contractors shall be notified by letter after the proposal review of the date, time, location and format of the interview. Interviews shall be conducted by the same selection panel members who conducted the original SOQ evaluation. Short-listed contractors will be interviewed in random order at a Department office or facility. Each contractor will be given the opportunity to inspect the interview room ahead of time in order to plan their interview more efficiently.

The Selection Team will develop a list of questions about the project for the interview. Firms are asked a series of questions – some that are project specific (asked of all firms) and some that may be based on the particular contractor's SOQ. ECS will compile the questions developed for the interview. Time may be reserved at the end for the Selection Team members' follow-up questions.

After oral interviews the panel members submit scores and comments to ECS. ECS then compiles the scores and the selection panel members meet to discuss each interview. Any panel member may amend their initial score based on the discussion. After concluding the discussion the panel member scores (compiled to two decimal places) are provided to ECS for input into the scoring matrix. If a panel member's SOQ score exceeds 1.65 times the standard deviation of the mean score (above or below the mean) for a contractor, the panel member's SOQ score for that contractor is excluded. At this point the SOQ scores (minus the excluded scores) for both SOQs and oral interviews are compiled.

Each contractor will be ranked by the score and the panel will sign the final list, recommending the top ranked contractor for selection. The State Engineer shall review the rankings and scores and approve the top ranked contractor.

3.12 PROTEST OF CMAR CONTRACTOR SELECTED

Any interested party may protest the final CMAR selection. The protest must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The protest is barred unless it is received by the State Engineer no later than seven calendar days after the announcement of the [Final List](#) by the Department.

Copies of the protest shall be sent by the protester to every CMAR Proposer at the same time the protest is submitted to the State Engineer. The protester may contact C&S to obtain contact information for CMAR Proposers. The State Engineer will make the final decision on any protest regarding the final selection of the highest ranking CMAR Proposer.

3.13 PRECONSTRUCTION SERVICES NEGOTIATIONS

The Department will enter into negotiations with the highest ranking CMAR Proposer from the final list. ECS is responsible for leading the negotiation, in consultation with Construction Group, Audit & Analysis and the PM.

The law is specific that no information may be given out except the names of the firms on the final list. The disclosure follows the approval of the final list by State Engineer and notification of the firms. All information must be obtained through ECS. If the Department is not able to negotiate a satisfactory contract with the highest ranking contractor on the final list, the Department shall formally terminate negotiations. During negotiations, ECS may present the contractor with a Best and Final Offer. The contractor shall have up to ten business days to accept or reject the offer, as indicated in the letter. If the offer is accepted by the contractor, the Department shall move toward final execution of the Preconstruction contract. Non-response to the written “Best and Final” offer after the time indicated in the letter shall be regarded as a rejection of the offer. If the offer is rejected by the contractor, then the Department may enter into negotiations with the next contractor on the final list, in sequence, until agreement is reached or a determination is made to reject all contractors on the final list.

The CMAR contractor’s proposal will be based on the SOQ Scope of Work, for example:

- Site Visits
- VE Study
- Schedule
- Quantities verification, and reconciliation with the Designer
- Survey
- Potholing
- Phase duration
- Number of meetings requiring attendance
- Time to assemble the Cost Model and update
- Constructability reviews
- “Over-the-Shoulder” design input, etc.
- Negotiations of GMP

The CMAR Contractor will be reimbursed as defined in the Request for SOQ. A budget shall be included as part of the contract, including the CMAR Contractor's commercial rates for invoiced expenses and billing rates for personnel involved with this phase. Funding will be provided under the design authorization.

3.14 EXECUTION OF THE PRECONSTRUCTION SERVICES CONTRACT

Following the development of a budget and an agreed upon billing rates for the services to be provided during the Preconstruction Phase, ECS will assemble the final contract. The contract will be reviewed by the PM and Construction Group for accuracy and completeness and transmitted to the CMAR Contractor for signature. Once signed by the CMAR Contractor and the Department, the contract is considered fully executed. A copy of the executed contract, along with a Notice to Proceed (NTP) letter, will be mailed or electronically transmitted to the CMAR Contractor and distributed to appropriate the Department personnel.

NOTE: ADOT has elected to use [specific rates](#).

SECTION 4 PRECONSTRUCTION SERVICES DURING DESIGN

4.1 DESIGN PHASE COOPERATION, COORDINATION, COLLABORATION AND COMMUNICATION

Following completion of negotiations and award of the Preconstruction Contract, an initial coordination meeting is held prior to the start of Preconstruction Services. This coordination meeting should follow the format of a Partnering/Scoping session and fully address issues affecting project administration; implementation of procedures that permit ADOT, the Designer and the CMAR Contractor to perform their respective obligations in the development of the design documents; and ensure effective interaction with the team. The Designer needs to update the CMAR Contractor on the status of the design and review the design schedule and milestones. The design schedule should be officially submitted to the CMAR Contractor for integration into the overall project schedule (generated by the CMAR Contractor).

NOTE: It is also important to stress that key CMAR Project Team members identified in the SOQ shall not be replaced without written approval by the Department. A major component of evaluating and scoring the SOQs is the proposed Project Team and its qualifications.

4.2 VALUE ENGINEERING (VE) STUDY

The CMAR Contractor, Design Consultant and the Department participate in a formal VE Study, led by a Certified Value Specialist (CVS). Immediately after the selection of the CMAR Contractor, the PM will contact the Department's Value and Quality Assurance (VQA) Manager. The [VQA Manager](#) will coordinate with the CMAR Contractor, the Design Consultant and the PM to schedule a VE Study and assist in retaining a CVS to facilitate the study. Results of the study will be documented in a report and sent to the PM by the VQA Manager. The PM is responsible to ensure that the recommendations contained in the report have been reviewed by the design team and become part of the final design when deemed feasible and cost effective. The PM shall provide the VQA Manager a written report, within ten working days, detailing the implementation status of all recommendations. An explanation must be provided for all recommendations not adopted.

4.3 CONSTRUCTION MANAGEMENT PLAN

The CMAR Contractor shall prepare a Construction Management Plan (CMP) and submit it to the PM thirty calendar days after the date of the Notice to Proceed. The PM will review the CMP with the Project Team to ensure it includes:

- project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the project;
- investigations, if any, to be undertaken to ascertain subsurface conditions and physical conditions of existing surface and underground utilities;
- alternate strategies for fast-tracking or phasing the construction;
- a list of possible work segments to be constructed under multiple GMPs, if applicable;
- the number of sub-agreements to be awarded to subcontractors and suppliers for the project construction;
- permitting strategy;
- safety and training programs;

- construction quality control;
- construction security; and
- a matrix summarizing each Project Team member's responsibilities and roles.

The CMAR Contractor is required to update and add detail to the previous version of the CMP to keep it current throughout the Preconstruction Phase to ensure the CMP is ready for implementation at the start of the Construction Phase. The update/revisions shall take into account:

- revisions in drawings and specifications;
- examination of the results of any additional investigatory reports:
 - subsurface conditions
 - drawings of physical conditions of existing surface and subsurface facilities
 - documents depicting underground utilities placement and physical condition (whether obtained by the Department, the Design Consultant or the CMAR Contractor)
- unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right-of-way;
- the status of the procurement of long-lead time equipment and materials;
- funding issues identified by the Department;
- input from the public involvement process.

4.4 PROJECT SCHEDULE

The CMAR Contractor shall prepare, update and maintain a Project Schedule to be used by the Project Team. The CMAR Contractor shall submit a preliminary Project Schedule to the PM no later than 30 days after the date of the Preconstruction Notice to Proceed. The PM will review the schedule with the Project Team to ensure that tasks are deliverable in the time frames shown and reflect modifications if the existing schedule is unattainable.

The Project Schedule shall cover the entire project duration from design through completion of construction. The fundamental purpose of this schedule is to identify, coordinate and record the tasks and activities to be performed by all the Project Team members. The Project Team will use the Project Schedule as a basis for managing and monitoring all members' compliance with the project schedule requirements. Each Project Team member is responsible for compliance with the schedule. The schedule shall be consistent with the most recent Construction Management Plan. It shall be developed using the Critical Path Method (CPM) and presented in graphical and tabular reports agreed upon by the Project Team.

The Project Schedule shall include all tasks and submittals required by each member of the Project Team to identify long lead time items, right-of-way transactions, utility relocation activity, permitting requirements, etc. If phasing is required, the Project Schedule shall indicate milestone dates for the phases. The construction activities in the schedule shall directly correlate with the Cost Model. The construction portion of the schedule shall include resource loading for manpower and cost loading for cash flow.

The CMAR Contractor shall include the services and activities required of the PM, the Design Consultant and the CMAR Contractor. The CMAR Contractor shall incorporate the design schedule supplied by the Design

Consultant and shall coordinate with the Design Consultant to finalize and incorporate design milestones into the Project Schedule.

4.5 DESIGN

During the design process, the CMAR Contractor will assist the Designer “over-the-shoulder”. The contractor will suggest possible alternatives that could reduce costs, improve project quality and/or shorten the schedule. The CMAR Contractor will advise on constructability. At specified milestones, usually concurrent with design reviews, formalized constructability reviews will occur. The Designer and CMAR Contractor will review and discuss potential phasing of the project and make recommendations to ADOT.

In conjunction with the CMAR Contractor’s “over-the-shoulder” assistance during the design, a formal design review process needs to be established. The Department’s representatives to the Design Team should consist of construction and technical representatives from each of the design groups associated with the design (roadside, C&S, traffic, bridge, roadway, and materials). The team may consist of either consultants or Department in-house staff.

As part of this Design Team, the CMAR Contractor will provide constructability comments - feasibility and practicality of any proposed means and methods; selected materials, equipment, and labor; material availability; site improvements; earthwork and foundation considerations; coordination of the drawings and specifications; verification of quantities, etc. (Note: An error in quantities found during construction isn’t an excuse for a Change Order since the contractor checked quantities during design.) The CMAR Contractor should also provide cost effective alternatives. The assigned RE and the District are part of the Design Team and work with the CMAR Contractor on constructability review.

4.6 COST MODEL

The CMAR Contractor prepares a Cost Model in a format agreed upon in advance by the Department and the CMAR Contractor. The first Cost Model is typically prepared within 30 calendar days after the date of the Preconstruction Notice to Proceed; however, the exact period is specified in the Request for SOQs.

During the review period, the Department will compare the CMAR Contractor’s Cost Model with estimates prepared by the Design Consultant, the Independent Reviewer and the Department. These estimates are not to be disclosed to the CMAR Contractor because the estimates are used to evaluate the Cost Model. Once approved by the Department, the Cost Model is continually updated throughout the Preconstruction Phase until a GMP agreement is reached. The Cost Model is the best representation of the project’s construction costs. The Cost Model does not include the CMAR Contractor’s Preconstruction Services Fee, sums due to the Design Consultant, and the cost of land, right-of-way, or other costs which are the responsibility of the Department. The CMAR Contractor is required to state all assumptions used in preparing the Cost Model. The Cost Model may include allowances as agreed to by the Project Team, including additional quantities, work and investigations that the Department may require.

After receipt of the Design Consultant’s documents at each design milestone, the CMAR Contractor will provide a detailed written report to the Project Team reflecting the impact to the Cost Model. The PM, the Design Consultant and the CMAR Contractor shall reconcile any disagreements on the estimate. If the Project Team requires additional updates of the Cost Model beyond that specified, the CMAR Contractor shall provide the requested information in a timely manner.

Each Cost Model should include, at a minimum:

- unit prices and quantity take-offs using the Department's standard pay items;
- details of all allowances and unit price work shown and specified in the detailed design documents;
- all fixed equipment, site improvements, and utility and equipment installations;
- Field Office overhead;
- Home Office overhead;
- bonds, taxes, insurance;
- the CMAR Contractor's fee (self-performed work and subcontractor work are usually a different percentage).

Additional backup documentation will include:

- Material costs, equipment costs, labor costs, hourly labor rates, and total cost. Labor costs in the Cost Model shall include the employee classification, benefits, payroll taxes and other payroll burdens. The total cost for any portion of the work to be performed by subcontractors shall include subcontractor overhead and profit.
- Production rates, transportation and other facilities and services necessary for the proper execution of the work, whether temporary or permanent, and whether or not incorporated or to be incorporated into the work.
- Copies of quotations from subcontractors and suppliers. (The Initial Cost Model is conceptual in nature and probably will not include quotations from subs and vendors. Follow-up Cost Models may or may not include quotations, depending on the scope and financial significance.)
- Memoranda, narratives, consultant's reports and all other information used by the CMAR Contractor to arrive at the Cost Model. The Cost Model must include all assumptions, descriptions and a breakdown of all allowances.

Should the Cost Model accepted by the Department exceed the Department's programmed construction estimate, the Design Team should evaluate alternative means/methods, materials, and/or other design elements that could reduce the estimated construction costs without altering the Department's overall concept. If the Cost Model exceeds the Department's programmed construction estimate, the State Engineer has the authority to approve the increase.

If funds are not available, the Project Team may recommend a reduction in the scope of work to bring the project within the program amount. The State Engineer will provide direction.

The Cost Model being developed during the Design Phase eventually becomes the GMP. This can occur anywhere between Stage III and Final design, when both ADOT and the contractor feel comfortable to agree on a final price of construction.

4.7 COST MODEL AND GMP RECORD DOCUMENTATION CONFIDENTIALITY

The Department's CMAR confidentiality guideline allows the CMAR Contractor to designate information as confidential. Prior to submitting the Cost Model or GMP, the CMAR Contractor shall clearly mark each page of any backup documentation that is to remain confidential. If that information is requested through public record laws, the CMAR Contractor is notified of the request. The entity requesting the information is notified of the Confidentiality Policy.

4.8 GUARANTEED MAXIMUM PRICE PROPOSALS

The CMAR Contractor guarantees to complete the project for the amount of (or less than) the approved GMP. No individual item quantities in the GMP may be exceeded, except as noted in Section 5.5, Measurement and Payment. The CMAR Contractor is responsible for any bid items that exceed the GMP quantities.

C&S will advise the CMAR Contractor of the required format for the GMP Proposal and the due date for submittal to the Department. Any GMP Proposal submitted by the CMAR Contractor shall be based on and consistent with the current Cost Model. It shall include any Assumptions and Clarifications (see [Appendix H](#)) upon which the GMP Proposals are based.

The CMAR Contractor shall include a completed GMP Table (see [Appendix D](#)) and one copy of the GMP Record Documentation with each GMP Proposal. In addition, an updated/revised Project Schedule shall be included with any GMP Proposal. The project schedule should reflect the scope of work shown in the current set of design documents that the GMP Proposal is based on.

Each GMP Proposal shall be accompanied by the same backup documentation listed for the Cost Model submittal. The backup documentation supplied for the final GMP shall become the GMP Record Documentation and will be retained by the Department. The purpose of the GMP documentation is to ensure a complete understanding and proper interpretation of the GMP.

The CMAR Contractor shall submit a non-collusion certification on a form provided by the Department with each GMP Proposal.

4.9 GMP ALLOWANCES

There is a risk associated with the CMAR Contractor establishing maximum prices (for example, where subterranean features cannot be determined in advance, or where alternatives have not been selected by the Department). The CMAR Contractor can propose GMP allowances. The allowances establish the type and amount of risk the Department and CMAR Contractor have assumed in agreeing to the GMP. In addition, the Department (documented by written consent) and the CMAR Contractor will agree upon the type of allowance and the terms and conditions regarding use of the GMP allowance.

When establishing allowances, the CMAR Contractor must provide the Department adequate justification for the allowance. The allowance(s) will be used only for the work that the allowance was negotiated to cover. Each allowance is item specific. Allowance monies are not interchangeable and belong to the Department if not used.

There are three types of allowances:

- **Fixed Allowance:** A fixed allowance establishes the upper limit the Department will pay for the corresponding item of work. For example, if there is a fixed allowance for 1,000 linear feet of saw cutting, the Department will pay the CMAR Contractor up to 1,000 linear feet of saw cutting above the quantity designated in the GMP Item Schedule for saw cutting.
- **Open Allowance:** An open allowance designates that there is no upper quantity limit for the corresponding item of work. The Department will pay for all approved quantity increases for each corresponding item in excess of the GMP Item Schedule. For example, if there is an open allowance for geotextile and the Department directs the CMAR Contractor to place more geotextile than what is shown in the GMP Item Schedule, the Department will pay the CMAR Contractor for the full amount placed.
- **Provisional Allowance:** A provisional allowance is for alternative work. For example, the Department has not completed a JPA with a local government to replace ADOT chain link right-of-way fence. The quantities are known. The decision hasn't been made whether chain link, wrought iron or block will be used. The Cost Model will include an item for chain link right-of-way fence but two provisional allowances are set up, one for each type of replacement. (Another method would be to use the Provisional Allowances as a premium per foot for the selected upgrade.) (see [Appendix H](#))

4.10 MULTIPLE GMPS

The Department may consider the use of multiple GMPS. During the Preconstruction Phase, the Department, the Design Consultant or the CMAR Contractor may propose portions of the work to be constructed under separate GMPS. The Department will only consider proposals for multiple GMPS that meet all the following criteria:

- The implementation of multiple GMPS must be clearly understood to be in the best interest of the Department.
- The segment of work proposed for construction under a separate GMP shall have been cleared by the Department's Environmental, Right-of-Way, and Utility Sections in advance of the start of construction. Additionally, work constructed under a GMP that does not cover the entire project shall not affect adjacent areas that do not have all required clearances.
- The final product of construction under each GMP shall be a stand-alone segment. For example, if a project includes construction of multiple traffic interchanges (TIs), a proposal for a separate GMP could be considered for one of the TIs. The TI would need to be usable to the traveling public upon completion and may be considered for construction under a separate GMP.
- Use of more than one GMP on the project must be demonstrated to save time, reduce inconvenience to the travelling public, or reduce construction costs.
- If work on the project is done under multiple GMPS, each GMP will be a separate construction contract between the Department and the CMAR Contractor. Execution of a construction contract for one GMP does not obligate the Department to have the CMAR Contractor construct any subsequent part of the project.

The Department will not approve a GMP for a portion of the work until the Department has determined that the CMAR Contractor can construct the entire project within budget.

4.11 GMP PROPOSAL REVIEW AND APPROVAL

The CMAR Contractor shall meet with the Project Manager and Design Consultant to review any GMP Proposal and all supporting documentation. All Assumptions and Clarifications should be provided, as well as a description and breakdown of all allowances. In the event the Project Manager or Design Consultant discovers inconsistencies or inaccuracies in the information presented, the CMAR Contractor shall make adjustments as necessary to the GMP Proposal and the accompanying documentation.

The Construction Group may submit the same documents that were used by the CMAR Contractor in developing the GMP to an independent third party (Independent Reviewer).

If the GMP Proposal is greater than the Department's estimate, the Department may require the CMAR Contractor to reconfirm the GMP Proposal. The CMAR Contractor may be requested, or at its own discretion, to submit a revised GMP Proposal for the Department's consideration. (This process is addressed in [Section 4.6](#), Cost Model.)

If agreement is not reached, the Department may elect to not enter into a separate contract with the CMAR Contractor for the Construction Phase.

If the Department opts to bid the project under the normal bid process, the CMAR Contractor will not be allowed to submit a bid.

If the Department elects to terminate the Preconstruction Services contract, or not enter into a Construction contract, or not enter into subsequent GMPs in the event that multiple GMPs are undertaken, the CMAR Contractor has no claim against the Department.

If agreement is reached on a GMP, the State Engineer recommends to the Transportation Board that the GMP be awarded. This recommendation must be on the Board Agenda two weeks prior to the board meeting. Following board action, the Notice of Award is then issued.

NOTE: If the project has multiple GMPs, each GMP must be forwarded to the Transportation Board and separate Notice of Awards are issued for each GMP.

SECTION 5 CONSTRUCTION ADMINISTRATION

5.1 CONSTRUCTION PHASE

During the Construction Phase of the project the goal of the Department, the Design Consultant, and the CMAR Contractor is to construct the project in accordance with the construction documents. The Construction Phase will begin when all of the following have occurred:

1. The CMAR Contractor and the Department agree on a GMP for the entire project, or the first of multiple GMPs for a portion of the construction work, and related matters.
2. The CMAR Contractor and the Department execute a CMAR Construction Contract, including all attachments.
3. The Department issues a written Notice of Award letter for the Construction Contract.

The Design Phase and the Construction Phase are not mutually exclusive in timing. The Construction Phase may begin before all activities of the Preconstruction Services Phase are complete. Whether or not the Construction Phase begins prior to design completion, the CMAR Contractor will remain obligated to complete the Preconstruction Services Contract.

Administering a CMAR project is similar to a D-B-B project. The RE and their staff should review the contract for specific requirements.

5.2 SUPPLEMENTAL AGREEMENTS

In considering any request for additional compensation and/or an extension of time as a result of a contract modification, the RE will consider the fact that this project has been developed using the CMAR project delivery process. As part of this process, the CMAR Contractor has had the opportunity to review the contract documents throughout the Preconstruction Phase and to verify the accuracy and completeness of the plans, specifications, and quantities included in the GMP Record Documentation. If the reasons for the requested modification to the contract could have been reasonably foreseen, given the CMAR Contractor's participation in the Preconstruction Phase, the CMAR Contractor will not be entitled to any compensation and/or an extension of time. If, in the opinion of the RE, the reason for modifications could not have been foreseen and are not provided for with an allowance, a [Contract Modification Request](#) shall be submitted. The RE must follow the process for approval limits and time. The approval of the Assistant State Engineer for Construction is required.

5.3 VALUE ENGINEERING PROPOSALS (VEP)

Acceptance of a Value Engineering proposal during construction is unlikely when using the CMAR project delivery process. Consideration of a VEP may occur if the Department amended the project scope after the GMP. In determining whether to entertain a VEP that results in sharing cost savings between the CMAR Contractor and the Department, the RE will consider the fact that the CMAR Contractor participated in the design effort during the Preconstruction Phase. The CMAR Contractor may not share in any cost savings where the VEP could have reasonably been proposed by the CMAR Contractor during the Preconstruction Phase.

Therefore, an additional condition required in the CMAR Contractor's proposal is a satisfactory explanation why the VEP was not proposed during the Preconstruction Phase. The PM and VQA Manager must concur with the CMAR Contractor's reasoning.

5.4 MAINTENANCE AND PROTECTION OF TRAFFIC (MPT)

The CMAR Contractor is highly involved in development of the project's traffic control plans, phasing and quantity verification.

The CMAR Contractor identifies each traffic control device and unit price but does not specify the quantity. The GMP sets out a total lump sum amount. This method allows the contractor to claim the quantity documented for each traffic control device up to the GMP lump sum amount. This method provides more flexibility for the contractor. Again, if the payment for quantities used is less than the GMP, ADOT retains the difference.

NOTE: Traffic control should be constantly documented on a daily basis, regardless of whether the lump sum has been exceeded.

5.5 MEASUREMENT AND PAYMENT

Standard pay items are established in the GMP, similar to conventional D-B-B projects. However, measurement and payment to the contractor on each item may not exceed the GMP.

Exceptions:

1. Open Allowance items.
2. If the CMAR Contractor determines that the actual quantity of any individual pay item is likely to exceed the quantity in the GMP. The CMAR Contractor discusses options to reconcile the increase with the Department in order to establish whether or not the issue could have been reasonably foreseen during project development/design. The Department will continue to measure and pay the item up to ten percent above the GMP quantity. In the event that the quantity exceeds the GMP quantity, and the CMAR Contractor and the Department have not reconciled the increase, the CMAR Contractor has 60 days to justify the increase. If the increase could have reasonably been foreseen, the Department will not make payment and will rescind any additional payments that have been made.

5.6 CONTRACTOR AND SUBCONTRACTOR RECORDS

Per Standard Specification 107.18, the contractor, subcontractors, and all suppliers shall keep and maintain all books, papers, records, files, accounts, reports, and a copy of the GMP Record Documents with backup data, including electronic data, and all other material relating to the contract and project. The retention period is five years following completion and acceptance of the work. All of the above material must be made available to the Department for auditing, inspection and copying and shall be produced upon request.

The contractor must ensure the above requirements are in each subcontract, purchase order and lease agreement. Also, all subcontracts must contain a clause that subcontractors include the above requirement in any lower-tier subcontract, purchase order or lease agreement.

APPENDIX A. ARIZONA REVISED STATUTE 28-7361

28-7361. Definitions

In this article, unless the context otherwise requires:

1. "Architect services" means those professional architect services that are within the scope of architectural practice as provided in title 32, chapter 1.
2. "Construction-manager-at-risk" means a project delivery method in which:
 - (a) There is a contract for construction services that is separate from the contract for design services, except that instead of a single contract for construction services, the department may elect separate contracts for preconstruction services during the design phase, for construction during the construction phase and for any other construction services.
 - (b) Design services are performed under a separate design services contract, except that as to bridges and other transportation facilities the department may perform with its own employees or force account preliminary design and either:
 - (i) In the case of bridges only, all design services up to final design.
 - (ii) In the case of other transportation facilities, up to twenty per cent of the design work.
 - (c) The contract for construction services may be entered into at the same time as the design services are commenced or at a later time.
 - (d) Design and construction of the project may be either:
 - (i) Sequential with the entire design complete before construction commences.
 - (ii) Concurrent with the design produced in two or more phases and construction of some phases commencing before the entire design is complete.
 - (e) Finance services, maintenance services, operations services, preconstruction services and other related services may be included.
3. "Construction services" means either of the following for construction-manager-at-risk and job-order-contracting project delivery methods:
 - (a) Construction, excluding services, through the construction-manager-at-risk or job-order-contracting project delivery methods.
 - (b) A combination of construction and, as elected by the department, one or more related services, such as finance services, maintenance services, operations services, design services and preconstruction services, as those services are authorized in the definition of construction-manager-at-risk or job-order-contracting.
4. "Contract" means all types of department agreements, regardless of what they are called, for procurements pursuant to this article.
5. "Contractor" means any person who has a contract with the department.
6. "Design-build" means the process of entering into and managing a contract between the department and another party in which the other party agrees to both design and build a highway, a structure, a facility or other items specified in the contract.
7. "Design-builder" means any individual, partnership, joint venture, corporation or other legal entity that is appropriately licensed in this state and that furnishes the necessary design services, in addition to construction of the work, whether by itself or through subcontracts, including subcontracts for architectural and engineering services.
8. "Design services" means architect services, engineer services or landscape architect services.
9. "Emergency" means an immediate threat to public health, welfare or safety caused by flood, earthquake, hurricane, tornado, explosion, fire or other catastrophe such that compliance with normal bidding procedures for repair or reconstruction of transportation facilities would be impracticable or contrary to the public interest.
10. "Engineer services" means those professional engineer services that are within the scope of engineering practice as provided in title 32, chapter 1.
11. "Finance services" means financing for a construction services project.
12. "Job-order-contracting" means a project delivery method in which:
 - (a) The contract is for indefinite quantities of construction and, at the election of the department, may or may not include a guaranteed minimum amount of work.
 - (b) The construction to be performed is specified in job orders issued during the contract.
 - (c) Finance services, maintenance services, operations services, preconstruction services, design services and other related services may be included.
13. "Landscape architect services" means those professional landscape architect services that are within the scope of landscape architectural practice as provided in title 32, chapter 1.

14. "Maintenance services" means routine maintenance, repair and replacement of existing facilities, structures, buildings or real property.

15. "Operations services" means routine operation of existing facilities, structures, buildings or real property.

16. "Person" means any corporation, business, individual, union, committee, club, other organization or group of individuals.

17. "Preconstruction services" means services and other activities during the design phase.

18. "Specific single project" means a project that is constructed at a single location, at a common location or for a common purpose.

19. "Subcontractor" means a person who contracts to perform work or render service to a contractor or to another subcontractor as a part of a contract with the department.

APPENDIX B. ARIZONA REVISED STATUTE 28-7365

28-7365. Design-build; two-phase solicitation

A. If the department determines that the design-build method of project delivery is appropriate, the department shall establish a two-phase procedure for awarding the design-build contract. The department shall limit each solicitation for a design-build contract to a specific single project.

B. During phase one, and before solicitation, the director shall appoint a selection team of at least three persons. At least one-half of the selection team shall be architects or engineers who are registered pursuant to section 32-121. The selection team members may be either department employees or outside consultants. The selection team shall also include at least one person who is a senior management employee of a licensed contractor who is not involved in the project. Any architect or engineer who is serving on the selection team and who is not a department employee shall not be otherwise involved in the project. The department shall prepare documents for a request for qualifications.

C. The request for qualifications shall include all of the following:

1. The minimum qualifications of the design-builder.
2. A scope of work statement and schedule.
3. Documents defining the project requirements.
4. The form of contract to be awarded.
5. The selection criteria for compiling a short list and the number of firms to be included on the short list. At least three but not more than five firms shall be included on the short list.
6. A description of the phase two requirements and subsequent management needed to bring the project to completion.
7. The maximum time allowable for design and construction.
8. The department's estimated cost of design and construction.

D. The selection team shall evaluate the design-build qualifications of responding firms and shall compile a short list of firms in accordance with technical and qualifications-based criteria. The number of firms on the short list shall be the number of firms specified in the request for qualifications, except that, if a smaller number of firms responds to the solicitation or if one or more of the firms on the short list drop out so that only two firms remain on the short list, the selection team may proceed with the selection process with the remaining firms if at least two firms remain or the department may readvertise as the department deems necessary.

E. During phase two, the department shall issue a request for proposals to the design-builders on the short list. The request shall include:

1. The scope of work, including programmatic, performance and technical requirements, conceptual design, specifications and functional and operational elements for the delivery of the completed project, which shall all be prepared by an architect or engineer, as appropriate, who is registered pursuant to section 32-121.
2. A description of the qualifications required of the design-builder and the selection criteria, including the weight or relative order, or both, of each criterion.
3. Copies of the contract documents that the successful proposer will be expected to sign.
4. The maximum time allowable for design and construction.
5. The department's estimated cost of design and construction.
6. The requirement that a proposal be segmented into two parts, a technical proposal and a price proposal. Each proposal shall be in a separately sealed, clearly identified package and shall include the date and time of the submittal deadline. The technical proposal shall include a schedule, schematic design plans and specifications, technical reports, calculations, permit requirements, applicable development fees and other data requested in the request for proposals. The price proposal shall contain all design, construction, engineering, inspection and construction costs of the proposed project.
7. The date, time and location of the public opening of the sealed price proposals.
8. Other information relevant to the project.

F. If stated in the request for proposals, in order to inform each firm whether the firm's concept is responsive to the request for proposals, the department may enter into a separate confidential discussion with each firm on the short list to discuss alternative technical concepts that the firm may propose.

G. The department shall proceed as follows:

1. The selection team shall review the technical proposals and score the technical proposals using the selection criteria in the request for proposals. The technical review team shall then submit a technical proposal score for each design-builder to the department. The technical review team shall reject any proposal it deems to be nonresponsive.

2. The department shall announce the technical proposal score for each design-builder, shall publicly open the sealed price proposals and shall divide each design-builder's price by the score that the selection team has given to it to obtain an adjusted score. The design-builder selected shall be that responsive and responsible design-builder whose adjusted score is the lowest.

3. If a time factor is included with the selection criteria in the request for proposals package, the department may also adjust the bids using a value of the time factor established by the department. The value of the time factor shall be a value per day. The adjustment shall be based on the total time value. The total time value is the design-builder's proposed number of days to complete the project multiplied by the factor. The time adjusted price is the total time value plus the bid amount. This adjustment shall be used for selection purposes only and shall not affect the department's liquidated damages schedule or incentive and disincentive program. An adjusted score shall then be obtained by dividing each design-builder's time adjusted price by the score given by the technical review team. The department shall select the responsive and responsible design-builder whose adjusted score is the lowest.

4. Unless all proposals are rejected, the board shall award the contract to the responsive and responsible design-builder with the lowest adjusted score. The board reserves the right to reject all proposals.

5. The department shall award a stipulated fee equal to two-tenths of one per cent of the department's estimated cost of design and construction to each short list responsible proposer who provides a responsive, but unsuccessful proposal. If the department does not award a contract, all responsive proposers shall receive the stipulated fee. If the department cancels the contract before reviewing the technical proposals, the department shall award each design-builder on the selected short list a stipulated fee equal to two-tenths of one per cent of the department's estimated cost of design and construction. The department shall pay the stipulated fee to each proposer within ninety days after the award of the contract or the decision not to award a contract. In consideration for paying the stipulated fee, the department may use any ideas or information contained in the proposals in connection with any contract awarded for the project, or in connection with a subsequent procurement, without any obligation to pay any additional compensation to the unsuccessful proposers. Notwithstanding the other provisions of this paragraph, an unsuccessful short list proposer may elect to waive the stipulated fee. If an unsuccessful short list proposer elects to waive the stipulated fee, the department may not use ideas and information contained in the proposer's proposal, except that this restriction does not prevent the department from using any idea or information if the idea or information is also included in a proposal of a short list proposer that accepts the stipulated fee.

APPENDIX C. ARIZONA REVISED STATUTE 28-7366

28-7366. Construction-manager-at-risk construction services and job-order-contracting construction services

A. The department may procure the following services pursuant to this section:

1. Construction-manager-at-risk construction services.
2. Job-order-contracting construction services.

B. The department shall provide notice of each procurement of construction services prescribed in this section and shall award contracts on the basis of demonstrated competence and qualifications for the type of construction services pursuant to the procedures prescribed in this section.

C. In the procurement of construction services pursuant to this section:

1. The department shall issue a request for qualifications for each contract and publish notice of the request for qualifications in the same manner as provided in section 28-6923. The request for qualifications shall:

(a) Include the number of persons or firms to be included on the final list. At least three but not more than five persons or firms shall be on the final list.

(b) State the criteria to be used by the selection team to select the person or firm to perform the construction services. The request for qualifications shall also state in a manner determined by the department the relative weight of the selection criteria.

(c) If the department will hold interviews as part of the selection process, state that interviews shall be held and the number of persons or firms to be interviewed, which shall be at least the number of persons or firms to be included in the final list but not more than the number of persons or firms to be included in the final list plus two.

2. For each request for qualifications, the department shall initiate a selection team pursuant to section 28-7365, subsection B. A person who is a member of a selection team shall not be a contractor under the contract or provide construction, construction services, materials or services under the contract. The selection team shall:

(a) Evaluate the statements of qualifications and performance data that are submitted in response to the department's request for qualifications.

(b) If determined by the department and included by the department in the request for qualifications, conduct interviews with the number of persons or firms to be interviewed as stated in the request for qualifications regarding the contract and the relative methods of approach for furnishing the required construction services.

(c) After any interviews or if interviews are not held, in order of preference, based on the criteria and the weighting of criteria established and published by the department and included in the request for qualifications, select a final list for the contract of persons or firms the selection team deems to be the most qualified to provide the construction services and, in the case of a contract that will be negotiated under subsection E of this section, rank the persons or firms on the final list in order of preference. The selection team shall base the selection of the final list and the order of preference on demonstrated competence and qualifications only. The number of persons or firms on the final list shall be the number of persons or firms specified in the request for qualifications, except that:

(i) If a smaller number of responsive and responsible persons or firms respond to the solicitation, the department may have the selection team proceed with the selection process, including interviews and the final list, with the remaining persons or firms if at least two persons or firms remain or the department may readvertise pursuant to this subsection as the department deems necessary or appropriate.

(ii) If only one responsive and responsible person or firm responds to a solicitation for a contract to be negotiated pursuant to subsection E of this section, the department may proceed with only one person or firm in the selection process and may award the contract to a single person or firm if the department determines in writing that the fee negotiated pursuant to subsection E of this section is fair and reasonable and that either other prospective persons or firms had reasonable opportunity to respond or there is not adequate time for a resolicitation.

(iii) If a person or firm on the final list withdraws or is removed from the selection process and the selection team determines that it is in the best interest of the department, the selection team may replace that person or firm with the person or firm that submitted qualifications and that is selected by the selection team as the next most qualified.

(d) Base the selection of the final list and order of preference on the final list on demonstrated competence and qualifications only.

3. The department and the selection team shall not request or consider fees, price, man-hours or any other cost information at any point in the selection process under this subsection or subsection D of this section, including the selection of the persons or firms to be interviewed, the selection of the persons or firms to be on the final list, in determining the order of preference of persons or firms on the final list or for any other purpose in the selection process.

4. For construction-manager-at-risk construction services, the contract under a request for qualifications solicitation is limited to a specific single project.

D. The department shall award a contract for construction services to one of the persons or firms on the final list prepared pursuant to subsection C of this section as provided in subsection E or F of this section, except that, if fewer than the number of persons or firms on the final list respond to the request for proposals pursuant to subsection F of this section but at least two persons or firms on the final list submit responsive proposals, or if one or more of the persons or firms on the final list drop out of the selection process pursuant to subsection E or F of this section:

1. If there are three or more remaining persons or firms, the department shall proceed with the selection process.

2. If there are only two remaining persons or firms, as the department deems necessary and appropriate, the department may proceed with the selection process with the two persons or firms or may terminate the selection process and may readvertise pursuant to subsection C of this section.

3. If there is only one remaining person or firm, the department may award the contract to a single person or firm pursuant to subsection E of this section if the department determines in writing that the fee negotiated pursuant to subsection E of this section is fair and reasonable and that either other prospective persons or firms had reasonable opportunity to respond or there is not adequate time for a resolicitation.

E. For the single contract included in the request for qualifications, the department shall enter into negotiations for the contract with the highest qualified person or firm on the final list for the construction services. The negotiations shall include consideration of compensation and other contract terms that the department determines to be fair and reasonable to the department. In making this decision, the department shall take into account the estimated value, the scope, the complexity and the nature of the construction services to be rendered. If the department is not able to negotiate a satisfactory contract with the highest qualified person or firm on the final list at compensation and on other contract terms the department determines to be fair and reasonable, the department shall formally terminate negotiations with that person or firm. The department may undertake negotiations with the next most qualified person or firm on the final list in sequence until an agreement is reached or a determination is made to reject all persons or firms on the final list. If a contract for construction services is entered into pursuant to this subsection:

1. If the contract is for construction-manager-at-risk construction services and includes preconstruction services by the contractor, the department shall enter into a written contract with the contractor for preconstruction services under which the department shall pay the contractor a fee for preconstruction services in an amount agreed by the department and the contractor, and the department shall not request or obtain a fixed price or a guaranteed maximum price for the construction from the contractor or enter into a construction contract with the contractor until after the department has entered into the written contract for preconstruction services and a preconstruction services fee.

2. Construction shall not commence until the department and contractor agree in writing on either a fixed price that the department will pay for the construction to be commenced or a guaranteed maximum price for the construction to be commenced. The construction to be commenced may be the entire project or may be one or more phased parts of the project.

F. As an alternative to subsection E of this section, the department may award job-order-contracting construction services as follows:

1. The department shall use the selection team that is appointed for the request for qualifications pursuant to subsection C of this section.

2. The department shall issue a request for proposals to the persons or firms on the final list that is developed pursuant to subsection C of this section.

3. For job-order-contracting construction services, the request for proposals shall include:

(a) The department's project schedule and project final design and construction budget or life cycle budget for a procurement that includes maintenance services or operations services.

(b) A statement that the contract will be awarded to the offeror whose proposal receives the highest number of points under a scoring method.

(c) A description of the scoring method, including a list of the factors in the scoring method and the number of points allocated to each factor.

(d) A requirement that each offeror separately submit a technical proposal and a price proposal and that the offeror's entire proposal be responsive to the requirements in the request for proposals.

(e) A statement that in applying the scoring method the selection team will separately evaluate the technical proposal and the price proposal and will evaluate and score the technical proposal before opening the price proposal.

(f) If the department conducts discussions pursuant to paragraph 5 of this subsection, a statement that discussions will be held and a requirement that each offeror submit a preliminary technical proposal before the discussions are held.

4. If the department determines to conduct discussions pursuant to paragraph 5 of this subsection, each offeror shall submit a preliminary technical proposal to the department before those discussions are held.

5. If determined by the department and included by the department in the request for proposals, the selection team shall conduct discussions with all offerors that submit preliminary technical proposals. Discussions shall be for the purpose of clarification to ensure full understanding of, and responsiveness to, the solicitation requirements. The department shall accord fair treatment to offerors with respect to any opportunity for discussion and for clarification by the owner. Revision of preliminary technical proposals shall be permitted after submission of preliminary technical proposals and before award for the purpose of obtaining the best and final proposals. In conducting any discussions, information derived from proposals submitted by competing offerors shall not be disclosed to other competing offerors.

6. After completion of any discussions pursuant to paragraph 5 of this subsection or if no discussions are held, each offeror shall separately submit the offeror's final technical proposal and the offeror's price proposal.

7. Before opening any price proposal, the selection team shall open the final technical proposals, evaluate the final technical proposals and score the final technical proposals using the scoring method in the request for proposals. No other factors or criteria may be used in the evaluation and scoring.

8. After completion of the evaluation and scoring of all final technical proposals, the selection team shall open the price proposals, evaluate the price proposals, score the price proposals and complete the scoring of the entire proposals using the scoring method in the request for proposals. No other factors or criteria may be used in the evaluation and scoring.

9. The department shall award the contract to the responsive and responsible offeror whose proposal receives the highest score under the method of scoring in the request for proposals. No other factors or criteria may be used in the evaluation.

10. The contract file shall contain the basis on which the award is made.

G. Until an award and execution of a contract by the department, only the name of each person or firm on the final list developed pursuant to subsection C of this section may be made available to the public. All other information received by the department in response to the request for qualifications or contained in the proposals is confidential in order to avoid disclosure of the contents that may be prejudicial to competing offerors during the selection process. The department shall open the proposals to public inspection after the contract is awarded and the department has executed the contract. To the extent that the offeror designates and the department concurs, trade secrets and other proprietary data contained in a proposal remain confidential.

H. The department may cancel a request for qualifications or a request for proposals or reject in whole or in part any or all proposals as specified in the solicitation if it is in the best interest of the department. The department shall make the reasons for cancellation or rejection part of the contract file.

I. Notwithstanding any other law:

1. The contractor for job-order-contracting construction services is not required to be registered to perform design services pursuant to title 32, chapter 1 if the person or firm actually performing the design services on behalf of the contractor is appropriately registered.

2. The contractor for construction-manager-at-risk construction services or job-order-contracting construction services shall be licensed to perform construction pursuant to title 32, chapter 10.

3. For each project under a construction-manager-at-risk construction services contract, the licensed contractor performing the contract shall perform, with the contractor's own organization, construction work that amounts to not less than forty per cent of the total contract price for construction. For the purposes of this paragraph, the total contract price for construction does not include the cost of preconstruction services, design services or any other related services or the cost to procure any right-of-way or other cost of condemnation.

4. Each procurement and each request for qualifications pursuant to this section is limited to a single contract for construction-manager-at-risk construction services or job-order-contracting construction services. This restriction does not affect or impair the department's ability to procure multiple contracts for job-order-contracting construction services in a single procurement using a single request for qualifications pursuant to section 28-7367.

5. The department shall not procure any construction services using the construction-manager-at-risk construction services or job-order-contracting construction services method of project delivery after December 31, 2025. For the purposes of this paragraph, the department procures construction services when the department solicits the contract for construction services. If the department solicits a contract for construction services on or before December 31, 2025, the contract may be executed and construction services under the contract may be rendered in whole or in part after December 31, 2025.

J. For job-order-contracting construction services only:

1. The maximum dollar amount of an individual job order shall be one million dollars or such higher or lower amount prescribed by the department. Requirements shall not be artificially divided or fragmented in order to constitute a job order that satisfies this requirement.

2. If the contractor subcontracts or intends to subcontract any of the work under a job order and if the job-order-construction services contract includes descriptions of standard individual tasks, standard unit prices for standard individual tasks and pricing of job orders based on the number of units of standard individual tasks in the job order:

(a) The contractor has a duty to deliver promptly to each subcontractor invited to bid a coefficient to the contractor to do all or part of the work under one or more job orders:

(i) A copy of the descriptions of all standard individual tasks on which the subcontractor is invited to bid.

(ii) A copy of the standard unit prices for the individual tasks on which the subcontractor is invited to bid.

(b) If not previously delivered to the subcontractor, the contractor has a duty to deliver promptly the following to each subcontractor invited to or that has agreed to do any of the work included in any job order:

(i) A copy of the description of each standard individual task that is included in the job order and that the subcontractor is invited to perform.

(ii) The number of units of each standard individual task that is included in the job order and that the subcontractor is invited to perform.

(iii) The standard unit price for each standard individual task that is included in the job order and that the subcontractor is invited to perform.

K. Notwithstanding anything to the contrary in this title, the department shall not enter into a contract as contractor to provide construction-manager-at-risk construction services or job-order-contracting construction services.

L. Each contract for construction-manager-at-risk construction services or job-order-contracting construction services shall contain a description of each separate location at which the construction will be performed and a requirement that the contractor include in each of the contractor subcontracts the same location description. The contractor shall include in each subcontract a description of each separate location at which the construction will be performed.

M. Except as otherwise provided in this section, sections 28-6923 and 28-6924, relating to bid, performance and payment bonds, change orders, progress payments, contract retention, definitions and authority to award contracts, apply to department construction-manager-at-risk and job-order-contracting contracts for transportation facilities pursuant to this article.

APPENDIX D. SAMPLE GMP TABLE

	TOTALS				
Direct Construction Cost (Labor, Materials, Equipment)			\$18,000,000.00		
Allowances - Open (Unsuitable Material & Lead Removal)					\$1,000,000.00
Allowances - Fixed (Geotextile)					\$100,000.00
Allowances - Provisional (EMERALD City Wrought Iron Fence JPA)					\$250,000.00
Allowances Total	\$1,350,000.00				\$1,350,000.00
Cost of Prime Performed Work			\$10,000,000.00	\$1,000,000.00	
Cost of Subcontractor Performed Work			\$8,000,000.00	\$350,000.00	
Direct Construction Cost	\$18,000,000.00		\$18,000,000.00		
Construction Fee on Prime Performed Work @ 6.00 %		6.00%	\$600,000.00	6.00%	\$60,000.00
Construction Fee on Subcontractor Performed Work @ 3.00 %		3.00%	\$240,000.00	3.00%	\$10,500.00
Construction Fee (Composite) @ 4.71 %	\$910,500.00		\$840,000.00		\$70,500.00
Field Overhead			\$856,000.00		\$64,190.00
Home Office Overhead @ 2.50 %		2.50%	\$450,000.00	2.50%	\$33,750.00
Total Overhead	\$1,403,940.00		\$1,306,000.00		\$97,940.00
Gross Receipts Tax					
Emerald City Tax Rate 10 % x 65 %	\$1,408,188.60		\$1,309,490.00		\$98,698.60
Tribe Tax	\$230,726.29	1.00%	\$214,554.90	1.00%	\$16,171.39
			\$21,670,044.90		\$1,633,309.99
GUARANTEED MAXIMUM PRICE (GMP)	\$23,303,354.89				

APPENDIX E. SAMPLE STATEMENT OF QUALIFICATIONS FORMAT

**STATEMENT OF QUALIFICATIONS FORMAT
For
Construction Manager at Risk**

Provided for your use is the format for submission of a Statement of Qualifications (SOQ).

1. One original and seven copies of the Statement of Qualifications shall be submitted to ADOT.
2. There is a total page limit of 20 pages. The proposal may include clear report covers, covers, dividers, table of contents, tables, figures, maps, etc., but these will be counted in the 20 page limit. A page shall be 8 1/2 X 11 inches, blank or printed on one side only. Fold out pages are not allowable. Other documents are also required that are not included in the page count, as detailed below.
3. The SOQ shall have the following format:

MAXIMUM POINTS

FRONT COVER (Optional, but if included will count as a page)

INTRODUCTORY LETTER (Included in page count)

PROPOSAL FORM (Not included in page count)

EVALUATION CRITERIA (Included in page count)

Must include information to support the following criteria:

1. Qualifications of Firm	15
2. Experience of Key Personnel	20
Resumes of Key Personnel (not included in page count)	
3. Project Understanding	25
4. Approach	25
5. Involvement of Subcontractors	15
6. Safety Program *	10
7. Miscellaneous	5

BACK COVER (Optional, but if included will count as a page)

SOQ POINTS
115

TOTALPAGES
20

Oral Interviews

INTERVIEW PTS
50
TOTAL POINTS
165

* OSHA Form 300A and Insurance EMR certification are not included in the page count.

4. Submissions failing to follow the instructions outlined above will be rejected and the contractor notified in writing of the reason for rejection.

The name of the CMAR firms selected to be on the Final List will be available after they are selected. The Statement of Qualifications submitted by those CMAR firms on the Final List may be reviewed only after execution of the contract. Copying will not be permitted.

INTRODUCTORY LETTER (Included in page count)

The introductory letter shall be addressed to:

Arizona Department of Transportation
Contracts and Specifications Section
1651 West Jackson, MD 121F
Phoenix, AZ 85007-3217

The introductory letter shall contain the following items:

- An expression of the firm's interest in being selected for the project.
- A statement confirming that the firm is prequalified with ADOT. Individual contractors, as well as joint ventures and limited liability partnerships or corporations, shall be prequalified.
- A statement confirming the commitment of the key personnel identified in the submittal to the extent necessary to meet ADOT's quality and schedule expectations.
- A statement detailing the legal structure of the firm's, or consortium of firms, project team.

Include the mailing and email address and phone number of the primary contact person for your firm.

No evaluation points are assigned to the Introductory Letter.

PROPOSAL FORM (Not included in page count)

Complete the form, which is provided in the Proposal Package for Prequalified Firms.

EVALUATION CRITERIA

The information that shall be included in the statement of qualifications is outlined as follows:

1. Qualifications of Firm (15 Points) (Included in page count)

- a. Identify at least three comparable projects in which the firm served as a CMAR, CMGC, an Agency Construction Manager during design and/or construction, or a General Contractor.

For each project identified, provide the following:

- 1) Description of the project. (If an ADOT project, include the TRACS number.)
- 2) Role of the firm (specify whether CMAR, CMGC, Agency Construction Manager or General Contractor. If CMAR, CMGC or General Contractor, identify the percent of work self-performed. Also specify services provided during design.
- 3) Initial construction cost and final construction cost; briefly explain any variance.
- 4) Original contract construction duration and actual duration; briefly explain any variance.
- 5) Project owner, contact name, telephone number and address.
- 6) Design Consultant firm and contact name, telephone number and address if the project was a CMAR or CMGC project.
- 7) Reference information (two current names with telephone numbers per project)

- b. Describe in detail your firm's method for allocating management, supervision, labor, material and equipment resources to projects. Are your firm's methods different on CMAR projects, and if so, how?
- c. Identify project stakeholders and describe how your firm will interface with them on this project.
- d. Describe your firm's past experience working with the project stakeholders. If your firm does not have experience with the identified stakeholders, how will you develop working relationships with these entities? Provide examples of how your firm has established and developed similar relationships.
- e. Describe the methods your firm has in place for addressing project issues, contract modifications, and schedule recovery to maintain the completion date.
- f. Briefly describe examples of Constructability Reviews and Value Engineering your firm has provided on recent projects. How will you integrate these experiences into the CMAR process?

2. Experience of Key Personnel to be assigned to this Project (20 Points) (Included in page count)

- a. List all key personnel to be assigned to this project and how, if ever, the key personnel have previously worked together as a team. List at least two comparable projects in which the key personnel have played a primary role. If a project is selected to demonstrate the experience of a key person and that same project is selected to show the work history of the firm for Question 1, then provide just the project name and the role of the key person. For other projects provide the following:
 - 1) Description of project. (If an ADOT project, include the TRACS number.)
 - 2) Role of the person.
 - 3) Initial construction cost and final construction cost; briefly explain any variance.
 - 4) Original contract construction duration and actual duration; briefly explain any variance.
 - 5) Project owner, contact name, telephone number and address.
 - 6) Design Consultant contact name, telephone number and address if the project was a CMAR project.
 - 7) Reference information (two current names with telephone numbers per project)
- b. Explain why the proposed team was assembled and how the team will handle the major issues, components and challenges of this project.
- c. What value does the proposed team bring to the Preconstruction Phase of the project?
- d. Submit individual resumes for each key person. The resumes will not be included in the page count.
- e. Describe in detail what steps your firm will take to ensure that key personnel remain assigned to the project for its duration.

3. Understanding of the project (25 Points) (Included in page count)

- a. Discuss the major components, issues and challenges your team has identified on this project and how it intends to address them.
- b. What risks have you identified on this project? How do you intend to manage these risks?
- c. Discuss your understanding of the construction sequencing and traffic control required for this project. Discuss how they will impact the traveling public, local businesses and residents and describe how you will minimize those impacts and traffic delays.

4. Approach to performing the required services (25 Points) (Included in page count)

- a. Describe your firm's project management approach and team organization both during design and construction services. Describe processes, methods and systems used for planning, scheduling, estimating, and managing construction.
- b. Describe your team's approach to coordinating with the Department, the designer, subcontractors and suppliers during design and construction.
- c. Describe your firm's approach to conformance with the Clean Water Act and the Clean Air Act. Discuss the means and methods the team will use to maintain compliance with the Clean Water Act and the Clean Air Act on this project.
- d. Explain how you will manage construction quality control and subcontractors during the Construction Phase of the contract.

5. Involvement of Subcontractors (15 Points) (Included in page count)

- a. Describe the role subcontractors will play on your team and what benefits will they provide to your team, the Department and the project.
- b. Discuss the firm's utilization of Disadvantaged Business Enterprise (DBE) subcontractors.

6. Safety (10 Points)

- a. Describe the firm's overall approach to safety. **(5 Points)** (Included in page count)
- b. Clearly list your firm's Experience Modifier Rate (EMR) for each of the past five years, (if a joint venture, provide EMRs for each firm). List the type of work included in the EMR **(5 Points)** (Included in page count).

Provide documentation for your firm's safety record on all construction projects for each of the past five years. Documentation should include a copy of your firm's *OSHA Form 300A Summary of Work Related Injuries and Illnesses* along with your insurance *Worker's Compensation Experience Modifier Rate (EMR)* certification. (Form 300A and the EMR certification will not be included in the page count)

An EMR greater than 1.0 will result in zero points for question 6b.

7. Miscellaneous (5 Points) (Included in page count)

- a. Identify any contracts or subcontracts held by the firm or officers of the firm, within the last ten years, which has been terminated. Identify any claims or issues arising from contracts, within the last ten years, which resulted in litigation, or arbitration, or could not be resolved through the owner's escalation level/issue resolution ladder or process. Briefly describe the circumstances and the outcomes.
- b. List all projects, within the last ten years, where Liquidated Damages were assessed for failure to complete the contract within the specified contract time, and explain why they were assessed. If an ADOT project, include the TRACS number.

APPENDIX F. SAMPLE SCORING MATRIX

SAMPLE SCORING CALCULATION FOR ONE FIRM:

Criteria	Max Score	Selection Team Member 1	Selection Team Member 2	Selection Team Member 3	Selection Team Member 4	Selection Team Member 5	Selection Team Member 6	Selection Team Member 7
Qualifications of Firm	15	15	13	14	15	12	13	10
Experience of Key People	20	17	16	12	19	15	17	18
Understanding of Project Approach	25	23	18	22	25	23	24	23
Involvement of Subcontractors	25	18	22	24	23	22	17	20
Firm Approach to Safety	15	9	11	7	13	6	8	6
EMR	5	4	5	3	5	4	2	3
Miscellaneous	5	4	3	5	0	3	5	0
Maximum Possible Score	115	94	92	90	105	87	89	82
Mean Score	91.29							
1.65 X Standard Deviation	11.81							
Mean Plus 1.65 Std Dev	103.1							
Mean Minus 1.65 Std Dev	79.47							
SOQ FINAL SCORE ("OUT" if out of range)		94	92	90	OUT	87	89	82
FIRM'S SOQ SCORE:	89.00							
Interview	50	45	42	35	47	45	45	45
Mean Score	43.43							
1.65 X Standard Deviation	6.59							
Mean Plus 1.65 Std Dev	50.02							
Mean Minus 1.65 Std Dev	36.84							
INTERVIEW FINAL SCORE ("OUT" if out of range)		45	42	OUT	47	45	45	45
FIRM'S INTERVIEW SCORE	44.83							

FIRM'S OVERALL FINAL SCORE = 133.83

Note: Appendices D & F are for example only and stand alone. They are not intended to represent the same project.

APPENDIX G. SAMPLE CONTRACT MODIFICATION REQUEST



**ALTERNATIVE DELIVERY
CONTRACT MODIFICATION REQUEST**

CM@R	<input type="checkbox"/>
Design-Build	<input type="checkbox"/>

Contractor:		Project No.:	TRACS No.:	Page ____ of ____
Project Manager:		Design Firm:	Date:	
Requested Change (What):				
Reason/Justification (Why):				
General Supplemental Agreement Types <i>Choose from dropdown</i> <i>If Other, please explain:</i>		List Technical Managers:		
ADOT Recommendation:				
Concept Recommended	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	Date: __/__/__	
		ADOT Sr./Resident Engineer		
Concept Recommended	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	Date: __/__/__	
		ADOT Asst. District Engineer/District Engineer		
Concept Recommended	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	Date: __/__/__	
		Assistant State Engineer, Construction		
Concept Recommended	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	Eligible for Federal Reimbursement	<input type="checkbox"/> Yes <input type="checkbox"/> No
		FHWA		Date: __/__/__

Any decision to approve the change to contract terms will be within the sole discretion of ADOT and is dependent on the documentation that is submitted and entered into the Supplemental Agreement Tracking System (SATS).

APPENDIX H. SAMPLE ASSUMPTIONS AND CLARIFICATIONS

Assumptions and Clarifications

TRACS No.: _____
Project No.: _____
Contractor: _____

- AR-ACFC paving is currently scheduled to start April 15, 2013, which is based on ADOT standard specs. This is also based on the current construction schedule beginning August 1, 2011.
- Approximately 200,000 CY of waste dirt will be placed at the existing ADOT Maintenance Facility.
- Integrity Testing of Drilled Shafts has not been included and is addressed in the Allowances.
- Removals of hazardous materials by the Contractor are not anticipated and have not been included.
- Epoxy coating of rebar for any structures has not been included.
- Traffic Control Clarification:
 - VMS boards will only be used for the following 2 intersections: XX and YY.
 - No temporary concrete barrier has been included for the Phase 2 mainline.
 - Assume 3 full closures to repair traffic loops on North bound I-17 based on inventory performed January 2nd 2013, mile post XX to YY.
 - Any additional supplemental agreements must include any traffic control costs, if appropriate.
- AR-ACFC will be placed before it is open to traffic in order to avoid temporary striping on PCCP.
- All bonuses for AR-ACFC smoothness, PCCP strength and PCCP thickness will be paid by ADOT and are not part of this cost model.
- No excess excavation (waste dirt) has been hauled off-site. All excavation will be hauled to an on-site embankment.

ADOT Representative:

Name: _____ Date: _____

Contractor Representative:

Name: _____ Date: _____

APPENDIX I. SAMPLE PRECONSTRUCTION CONTRACT AGREEMENT

Arizona Department of Transportation
095 YU 000 H800301D & 095 YU 000 H801701D

CMAR SOQ Package
April 5, 2013

SECTION IX

CMAR

ADOT PRECONSTRUCTION CONTRACT

AGREEMENT

Arizona Department of Transportation
CONTRACTS AND SPECIFICATIONS

Contract Number # _____

Project Description: _____



Agreement Between
The
Arizona Department of Transportation
AND

(Firm Name)

TABLE OF CONTENTS

	PAGE
SECTION 1.0 CONTRACT INFORMATION	1
SECTION 2.0 SCOPE OF WORK	
2.01 CONTRACT SCHEDULE AND COMPLETION DATE	2
2.02 SCOPE OF WORK (APPENDIX A)	2
SECTION 3.0 CMAR'S COMPENSATION	
3.01 CMAR'S COMPENSATION – SPECIFIC RATES	2
3.02 APPROVED COST PROPOSAL SUMMARY (APPENDIX B)	2
SECTION 4.0 UNIFORM TERMS AND CONDITIONS	
4.01 GENERAL COMPLIANCE WITH LAWS	3
4.02 GOVERNING LAW-ARIZONA	3
4.03 MONTHLY PROGRESS AND WORK-HOUR REPORTS	3
4.04 PAYMENT REPORTS/INVOICES	3
4.05 LATE SUBMITTAL OF PAYMENT REPORTS	3
4.06 PROMPT PAY LEGISLATION (A.R.S. §28-411)	4
4.07 CONTRACT MODIFICATIONS	4
4.08 CONTRACT TIME EXTENSIONS	5
4.09 DISPUTE ESCALATION	5
4.10 FORCE MAJEURE	5
4.11 ARBITRATION	5
4.12 LITIGATION	6
4.13 SUSPENSION OF WORK	6
4.14 PROJECT DELAYS, POSTPONEMENTS AND EXTENSIONS	6
4.15 TERMINATION FOR DEFAULT OR CONVENIENCE	6
4.16 CANCELLATION	7

CONTRACTS AND SPECIFICATIONS CONTRACT

TABLE OF CONTENTS

4.17	INSURANCE	7
4.18	INDEMNIFICATION (RESPONSIBILITY FOR CLAIMS AND LIABILITIES)	10
4.19	PERMITS FOR WORK ON ADOT RIGHT OF WAY	10
4.20	ANTI-TRUST VIOLATIONS	10
4.21	IMPROPER EXERCISE OF AUTHORITY	10
4.22	CONFLICTS OF INTEREST	11
4.23	CMAR/CONTRACTOR CONFLICTS OF INTEREST	11
4.24	ORGANIZATION EMPLOYMENT DISCLAIMER	11
4.25	FEDERAL DEBARMENT AND SUSPENSION	11
4.26	SUBCONTRACTS	12
4.27	KEY PERSONNEL	12
4.28	EMPLOYMENT OF PERSONNEL OF PUBLIC AGENCIES	13
4.29	SUCCESSORS AND ASSIGNS	13
4.30	CONTINUING OBLIGATION	13
4.31	NAME CHANGE, MERGER AND ACQUISITIONS	13
4.32	ANTI-LOBBYING	14
4.33	RECORDS RETENTION, MAINTENANCE AND AUDIT	15
4.34	REVIEWS AND INSPECTIONS	15
4.35	NONDISCRIMINATION	15
4.36	AFFIRMATIVE ACTION (FOR FEDERAL CONTRACTS)	17
4.37	PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES - COMPLIANCE AND REPORTING	17
4.38	COUNTING DBE PARTICIPATION	19
4.39	ENVIRONMENTAL PROTECTION	20
4.40	ENERGY CONSERVATION	20

4.41	PUBLICITY AND ENDORSEMENTS	20
4.42	OWNERSHIP OF DATA	20
4.43	PATENTS AND COPYRIGHTS	21
4.44	FRAUD AND FALSE STATEMENTS	21
4.45	FEDERAL IMMIGRATION AND NATIONALITY ACT	21
4.46	SCUTINIZED BUSINESS OPERATIONS	23
4.47	PANDEMIC CONTRACTUAL PERFORMANCE	23
4.48	CONTRACT COMPLETION	24
SECTION 5.0 SIGNATURE PAGE		25
APPENDICIES		
A	SCOPE OF WORK	
B	CMAR PRECONSTRUCTION SERVICES SUPPLEMENTAL CONDITIONS	
C	APPROVED COST PROPOSAL SUMMARY	
D	PART 26 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN DEPARTMENT OF TRANSPORTATION FINANCIAL ASSISTANCE PROGRAMS	

SECTION 1.0 CONTRACT INFORMATION

**STATE OF ARIZONA
ARIZONA DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION SERVICES CONTRACT**

Contract No _____
Effective Date _____
ADOT Project No _____
Federal ID No _____

Compensation Type _____

1. **CONTRACTING PARTIES:** This contract is between the Arizona Department of Transportation (ADOT), also referred to as the DEPARTMENT or ADOT and,

CMAR
Address
City, State, Zip

Referred to as the CMAR

2. **CONTRACT DESCRIPTION:** The Description and Location of the Contract and related project(s) are as follows: _____
3. **PROJECT/CONTRACT PERIOD:** The project/contract will terminate on Date, unless otherwise extended or canceled in accordance with the terms and conditions of this contract.
4. **CONTRACT COST:** The CMAR will be paid a maximum of Contract Amount for costs authorized by this Contract as further described in cost proposal.

RECITALS

1. The STATE desires that _____ be provided for the above location. The trained personnel needed for the CONTRACT and related project(s) are not currently available within its own organization.
2. The CMAR firm, principals, project team, and Subcontractors listed in the CMAR'S Statement of Qualifications (SOQ) are licensed in the State of Arizona are qualified and capable of performing the work required by this CONTRACT in the time allotted.
3. Therefore, pursuant to A.R.S. §28-7366 it is deemed to be in the public interest to enter into this CONTRACT.

The parties below hereto agree to abide by all the provisions of this CONTRACT. IN WITNESS WHEREOF, the parties sign and cause this CONTRACT to be executed.

AGREEMENT

Therefore, in consideration of these premises and of the mutual clauses and agreements herein contained, and the faithful performance thereof, the CMAR and the STATE contract and agree.

SECTION 2.0 SCOPE OF WORK

2.01 CONTRACT SCHEDULE AND COMPLETION DATE

Work on the PRECONSTRUCTION SERVICES CONTRACT is scheduled to commence on _____. Work shall be completed within _____ calendar days from Notice to Proceed (NTP) for an estimated completion date of _____, 20___. The STATE assumes no liability for work performed or costs incurred prior to the beginning date or subsequent to the CONTRACT completion date. Work is deemed complete when the design is 100% complete and accepted, which may be a date after commencement of construction. Time extensions for completing the CONTRACT may be granted by the DEPARTMENT under appropriate circumstances.

2.02 SCOPE OF WORK (APPENDIX A)

SECTION 3.0 CMAR'S COMPENSATION

3.01 CMAR'S COMPENSATION - Specific Rates

- 1) The method of payment for this CONTRACT is Specific Rates of Compensation. Specific Rates of Compensation is defined as agreed upon hourly rates of labor plus reimbursement for other direct costs.
- 2) The STATE shall pay the CONSULTANT in monthly installments based upon Progress and Final Payment Reports submitted by the CONSULTANT in ADOT's format and in accordance with the specific rates price schedule in the CONTRACT.
- 3) The specific Billing Rates constitute compensation for all direct and indirect cost associated with the labor for this CONTRACT, plus profit.
- 4) Direct Expenses shall be separately approved in advance by the STATE. Examples of direct expenses are travel, meals or other mutually agreed-upon expenses of a non-routine nature, which are attributed directly to this CONTRACT.
- 5) Costs shall be identified separately for each project (TRACS). Costs for each category shall not exceed the amounts budgeted for those specific categories during the CONTRACT timeframe without prior written approval by the STATE. The CONSULTANT shall report the cost in the format provided Engineering Consultants Section (ECS) as of the date of the Payment Report.
- 6) The STATE shall not withhold retention on progress payments. However, if satisfactory progress has not been made, the STATE may first retain a maximum of 10% of the current and subsequent billings, or second, the STATE may refuse to make full progress payment(s) of such sums which are considered unnecessary.
- 7) The STATE may, at any time, require an audit of the CONSULTANT'S records. This may also include an examination the records of all Subconsultants involved in project and CONTRACT.
- 8) Specific Rate contracts shall not be subject to audit except on a sample bases to determine the efficiency of ADOT negotiation process for its own internal control purposes.

3.02 APPROVED COST PROPOSAL SUMMARY (APPENDIX C)

SECTION 4.0 UNIFORM TERMS AND CONDITIONS

4.01 GENERAL COMPLIANCE WITH LAWS

The CMAR shall comply with all Federal, State laws and regulations, and local ordinances, as they relate to the performance of work under this CONTRACT.

4.02 GOVERNING LAW - ARIZONA

The interpretation of this CONTRACT and the rights and duties of the parties shall be governed by Arizona law.

4.03 MONTHLY PROGRESS AND WORK-HOUR REPORTS

The CMAR is required to submit monthly Progress Reports with all Payment Reports to the ADOT PM. The form and format to be utilized are provided in the Post-Award Instruction Package. The CMAR, unless notified otherwise, is required to submit a monthly progress report and work-hours report, expended to date on the project by labor category and design elements. The ADOT PM or the _____ may request further breakdown by personnel name and wage classification. Failure to meet this requirement may result in delay in processing the monthly payments to the CMAR.

4.04 PAYMENT REPORTS/INVOICES

The CMAR shall invoice ADOT on or before the end of each month for work performed under this CONTRACT or no later than _____th day of the month. The CMAR shall report its monthly costs on the Payment Report (PR) form provided by ECS. If no work has been performed in any month, the CMAR shall still submit a zero (\$0.00) PR indicating that no work has been performed for that month. The CMAR shall submit PR for reimbursement to ADOT for work performed by its Subcontractors within 30 days of receipt of invoice from the Subcontractor, even though the CMAR may not have performed any work during the preceding month.

A monthly summary of costs billed by category or subcategory shall be included with the monthly PR submitted. The PR shall be formatted to permit comparison of actual to proposed costs and shall be submitted with the required information and supporting documentation based on the CONTRACT compensation type. The PR shall also include a breakdown of costs incurred by each Subcontractor who completed work for the time period requested. The PR shall be submitted for reimbursement to the ADOT PM on forms provided by _____. The PRs must be approved by the ADOT PM and _____.

4.05 LATE SUBMITTAL OF PAYMENT REPORTS

Unless waived by the DEPARTMENT in writing, all PRs for work performed under this CONTRACT shall be submitted within thirty (30) days from date of acceptance of the completed portion of the work performed. The DEPARTMENT, in its sole option, may refuse to pay any late invoices or may deduct a reasonable amount of damages. The CMAR is made aware that late submission of PRs may cause substantial damages to the DEPARTMENT, including but not limited to, difficulty in obtaining or inability to obtain federal reimbursement, budget allocations and inability to verify work and hours. If work performed or costs incurred during the State fiscal year end (June 30) is not invoiced by the following August 31st, the DEPARTMENT shall not pay for work or costs incurred.

Repeated violation of the requirement to submit timely PR in accordance with the terms of this CONTRACT shall result in sanctions including and up to liquidated damages, CONTRACT termination, and removal of the offending party or disqualification of the offending CMAR or Subcontractor from future ADOT projects. ADOT shall not be obligated to pay invoices that are submitted more than sixty (60) calendar days after the end of the State fiscal year in which costs were incurred.

4.06 PROMPT PAY LEGISLATION (A.R.S. §28-411)

In accordance with the Arizona Prompt Payment Law (A.R.S. §28-411), ADOT must issue payments to the CMAR within 21 calendar days after receipt of complete and accurate PR unless proper objection is made under the statute. The law also requires the CMAR to pay their Subcontractors within seven calendar days after receiving payment from ADOT, to the extent of each Subcontractor's contractual interest in the payment, subject to provision of the statute.

Incomplete or incorrect PR shall be returned to the CMAR within seven (7) calendar days of receipt by ADOT. The 21-calendar-day payment timeframe shall begin anew upon receipt of the complete and corrected PR.

The DEPARTMENT shall not withhold retention on progress payments; however, if satisfactory progress has not been made on the project, the DEPARTMENT may first retain a maximum of 10% of the current and subsequent billings. If unsatisfactory progress continues for a second subsequent month, the DEPARTMENT may, at its sole option, refuse to make progress payment(s) of such sums, which the DEPARTMENT considers necessary. This provision shall not limit the DEPARTMENT'S rights to terminate the CONTRACT for default.

The CMAR shall not withhold the Subcontractor's payment if ADOT has paid the full value of services rendered. Failure by the CMAR to invoice ADOT in accordance with the terms of this CONTRACT and/or pay its Subcontractors in accordance with the Arizona Prompt Pay Law is a material breach of the CONTRACT and the CMAR shall be subject to disqualification. ADOT reserves the right to request that CMAR provides proof of payment to its Subcontractors.

Furthermore, the CMAR shall be found to be in breach of the CONTRACT if it executes subcontract agreements with Subcontractors, DBE and non-DBE, which materially change the Prompt Pay requirement. This action may result in termination of the CONTRACT, or any other such remedy as deemed appropriate by the DEPARTMENT.

4.07 CONTRACT MODIFICATIONS

The Contract Modifications (CM), which define and limit the terms of the CONTRACT, such as CMAR compensation, must be approved in writing by the DEPARTMENT, and shall be submitted in the form and format provided by the DEPARTMENT. The CMAR shall be compensated only with prior written authorization by the DEPARTMENT. Any administrative/technical costs associated with the preparation of said modifications are solely the responsibility of the CMAR.

a. BILATERAL MODIFICATIONS

Significant changes in the scope, character, or complexity of the work may be negotiated if it is mutually agreed that such changes are desirable and necessary. CONTRACT changes defining and limiting the work and compensation must be authorized by the DEPARTMENT. Such bilateral modifications shall be made in writing, and it is expressly understood and agreed that no claim for extra work performed or materials furnished shall be made by the CMAR until authorization to proceed is granted, in writing, by the DEPARTMENT.

b. UNILATERAL (CHANGE ORDERS)

The DEPARTMENT may at any time, by written order, and without notice to sureties, if any, make or direct changes within the general scope of this CONTRACT in the services to be performed.

4.08 CONTRACT TIME EXTENSIONS

A CONTRACT Time Extension may be granted as determined by ADOT. A time extension is valid only if approved in writing as a modification to this CONTRACT. Time extensions for projects using Federal-Aid Highway funds over five years after the original CONTRACT completion date must be approved by the Federal Highway Administration (FHWA).

4.09 DISPUTE ESCALATION

The following dispute escalation levels shall be utilized to resolve disputes during the course of this CONTRACT. The following dispute escalation levels shall be utilized in the event the ADOT PM and the CMAR are unable to agree on the scope, level of effort, cost or any other issues related to this CONTRACT. It is the intent of the DEPARTMENT to resolve disputes at the lowest level possible. If agreement cannot be reached at that level, then the matter is escalated to the next higher level of management.

The following table depicts the dispute resolution escalation levels for CONTRACT issues:

Level	ADOT	CMAR	ECS
Level 1	Project Manager/ Resident Engineer	Project Manager	Contract Specialist
Level 2	Project Manager/ Section Manager/ District Engineer	Project Principal/ Project Manager	Contract Manager
Level 3	Group Manager/ Assistant State Engineer/ District Engineer	Project Principal	ECS Assistant Director
Level 4	Deputy State Engineer/ State Engineer	Project Principal	ECS Director

The decision of the State Engineer is final. Failure to agree at any level constitutes escalation to the next level. Failure by the CMAR to utilize the escalation process shall constitute a waiver of any claims for additional compensation or any other relief.

4.10 FORCE MAJEURE

For delays that are beyond the CMAR'S control, such as a force majeure, and upon written request from the CMAR, the DEPARTMENT'S authorized representative shall negotiate an adjustment to the project schedule set forth in the SOQ and Scope of Work of this CONTRACT. A "force majeure event" is an event beyond the CMAR'S reasonable control, including but not limited to, unusually severe weather, fire, floods, acts of God, labor disputes, acts of war or terrorism. The CMAR shall use all reasonable efforts to minimize the duration and consequences or any delay resulting from a force majeure and shall give the DEPARTMENT prompt notice of the occurrence of such an event. It shall be the CMAR'S responsibility to promptly notify, in writing, the ADOT PM and other ADOT representatives if the project cannot be completed as scheduled for any reason. The ADOT PM shall have the authority to adjust the schedule, in writing, within the term of this CONTRACT.

4.11 ARBITRATION

The parties agree to use arbitration, after exhausting applicable administrative reviews, to resolve disputes arising out of this agreement where the sole relief sought are monetary damages of \$500,000 or less, exclusive of interest and costs.

The arbitration shall be submitted under the relevant rules of the American Arbitration Association (AAA) in effect as of the date of the demand for arbitration. The matter disputed shall be submitted to an arbitrator mutually selected by the DEPARTMENT and the CMAR.

4.12 LITIGATION

In the event of litigation between the CMAR and the DEPARTMENT involving this CONTRACT, the laws and decisions of the State of Arizona shall apply and any such litigation shall be commenced and prosecuted in the Maricopa County Superior Court, State of Arizona.

4.13 SUSPENSION OF WORK

Work on this CONTRACT may be suspended by written order at the DEPARTMENT'S sole discretion. The CMAR is not entitled to any compensation when work is suspended.

4.14 PROJECT DELAYS, POSTPONEMENTS AND EXTENSIONS

The CMAR agrees that no charges or claims for damages shall be made against the DEPARTMENT for any delays or hindrances during the progress of this CONTRACT unless delays are caused by the DEPARTMENT. Such delays or hindrances, if any, shall be covered by an extension of time for a reasonable period as mutually agreed upon between the parties. It is agreed and understood, however, that permission to proceed with the CONTRACT after the established completion date, shall not be construed as a waiver by the DEPARTMENT of any of its rights under this CONTRACT.

4.15 TERMINATION FOR DEFAULT OR CONVENIENCE

a. Termination for Default

The DEPARTMENT may terminate this CONTRACT for default under the following circumstances:

1. CMAR'S failure to perform the services as detailed herein and in any modifications to this CONTRACT.
2. CMAR'S failure to complete this CONTRACT within the timeframe specified herein and in any modifications to this CONTRACT.
3. CMAR'S failure to comply with any of the material terms of this CONTRACT.

If the DEPARTMENT contemplates termination under the provisions of Subsections a.1., a.2., or a.3. above, the DEPARTMENT shall issue a written notice of default describing the deficiency. The CMAR shall have five business days to cure such deficiency. In the event the CMAR does not cure such deficiency, the DEPARTMENT may terminate the CONTRACT without further consideration by issuing a Notice of Termination for Default and may recover compensation for damages.

If, after the Notice of Termination for Default has been issued, it is determined that the CMAR was not in default or the termination for default was otherwise improper, the termination shall be deemed to have been a Termination for Convenience.

b. Termination for Convenience

The DEPARTMENT may terminate the CONTRACT for convenience, in whole or in part, when, for any reason, the DEPARTMENT determines that such termination is in its best interest. The CONTRACT termination is effected by notifying the CMAR, in writing, specifying that all or a portion of the CONTRACT is terminated for convenience and the termination effective date. The CMAR shall be compensated only for work satisfactorily completed prior to the termination of the CONTRACT. The CMAR is not entitled to loss or profit. The amount due to the CMAR is determined by ADOT.

In the event of termination for convenience, the DEPARTMENT shall be liable to the CMAR only for CMAR'S work performed prior to termination and only to the extent and as provided in SECTION 3.0 (COMPENSATION clause) of this CONTRACT.

c. The DEPARTMENT'S Right to Proceed with Work

In the event this CONTRACT is terminated, the DEPARTMENT shall have the option of completing the CONTRACT or entering into an agreement with another party to complete services outlined in the CONTRACT.

4.16 CANCELLATION

In accordance with A.R.S. §38-511 (A), the DEPARTMENT may cancel the CONTRACT, without penalty or further obligation, if any person significantly involved in initiating, negotiating, securing, drafting or creating the CONTRACT on behalf of the DEPARTMENT or any of its departments or agencies is, at any time while the CONTRACT or any extension of the CONTRACT is in effect, either (1) an employee of the CMAR in any capacity, or (2) a contractor to the CMAR or an employee or consultant to a Subcontractor with respect to the subject matter of the CONTRACT. The cancellation shall be effective when written notice from the DEPARTMENT is received by all other parties to the CONTRACT unless the notice specifies a later timeframe.

4.17 INSURANCE

The CMAR and all Subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this CONTRACT, are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the CMAR, his agents, representatives, employees or Subcontractors.

The insurance requirements herein are minimum requirements for this CONTRACT and in no way limit the indemnity covenants contained in this CONTRACT. The State of Arizona in no way warrants that the minimum limits contained herein are sufficient to protect the CMAR from liabilities that might arise out of the performance of the work under this CONTRACT by the CMAR, its agents, representatives, employees or Subcontractors, and CMAR is free to purchase additional insurance.

A. MINIMUM SCOPE AND LIMITS OF INSURANCE: CMAR shall provide coverage with limits of liability not less than those stated below.

1. *Commercial General Liability – Occurrence Form*

Policy shall include bodily injury, property damage, personal injury and broad form contractual liability coverage.

- General Aggregate \$2,000,000
- Products – Completed Operations Aggregate \$1,000,000
Products and completed operations coverage shall be maintained for 3 years after completion of design.
- Personal and Advertising Injury \$1,000,000
- Blanket Contractual Liability – Written and Oral \$1,000,000
- Fire Legal Liability \$50,000
- Each Occurrence \$1,000,000

<u>Contract Value</u>	<u>Required Insurance</u>
\$0 to \$5,000,000	\$1,000,000-Each Occurrence / \$2,000,000-Aggregate
\$5,000,001 to \$15,000,000	\$5,000,000-Each Occurrence / \$5,000,000-Aggregate
\$15,000,001 to \$50,000,000	\$5,000,000-Each Occurrence / \$10,000,000-Aggregate
\$50,000,001 & up	\$25,000,000-Each Occurrence / \$25,000,000-Aggregate

The CMAR may purchase an excess or umbrella policy to secure these limits

- a. The CMAR shall be responsible for monitoring the CONTRACT value as it increases and the CMAR shall be responsible for purchasing additional insurance to be in compliance with this CONTRACT should the increased value of the CONTRACT require a higher limit of insurance. The DEPARTMENT reserves the right to request that the CMAR provide proof of increased insurance coverage corresponding to increased contract value.
 - b. The policy shall be endorsed to include the following additional insured language: *"The State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees shall be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of the CMAR"*.
 - c. Policy shall contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CMAR.
- 2. Business Automobile Liability**
 Bodily Injury and Property Damage for any owned, hired, and/or non-owned vehicles used in the performance of this CONTRACT.
 Combined Single Limit (CSL) \$1,000,000
- If work is performed on the active roadway then CMAR or Subcontractor shall provide a minimum of \$5,000,000 Combined Single Limit.
- a. The policy shall be endorsed to include the following additional insured language: *"The State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees shall be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of the CMAR, involving automobiles owned, leased, hired or borrowed by the CMAR"*.
 - b. Policy shall contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CMAR.
- 3. Worker's Compensation and Employers' Liability**
 Each Accident \$ 500,000
 Disease – Each Employee \$500,000
 Disease – Policy Limit \$1,000,000
- a. Policy shall contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CMAR.

- b. This requirement shall not apply to: Separately, EACH CMAR or Subcontractor exempt under A.R.S. §23-901, AND when such CMAR or Subcontractor executes the appropriate waiver (Sole Proprietor/Independent Consultant) form.

6. Valuable Papers Coverage

Valuable papers insurance shall be included in the policy for a minimum of \$25,000 or in a higher amount sufficient to assure the restoration of any document, memoranda, plans, specifications, drawings, media, computer files, data or other information related to the work of the CMAR in the completion of this CONTRACT.

B. ADDITIONAL INSURANCE REQUIREMENTS: The policies shall include, or be endorsed to include, the following provisions:

1. The State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees wherever additional insured status is required. Such additional insured shall be covered to the full limits of liability purchased by the CMAR, even if those limits of liability are in excess of those required by this CONTRACT.
2. The CMAR'S insurance coverage shall be primary insurance with respect to all other available sources.
3. Coverage provided by the CMAR shall not be limited to the liability assumed under the indemnification provisions of this CONTRACT.

C. NOTICE OF CANCELLATION: With the exception of (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this CONTRACT in the insurance policies above shall require (30) days written notice to the State of Arizona. Such notice shall be sent directly to _____ and shall be sent by certified mail, return receipt requested.

D. ACCEPTABILITY OF INSURERS: Insurance is to be placed with duly licensed or approved non-admitted insurers in the State of Arizona with an "A.M. Best" rating of not less than A- VII. The State of Arizona in no way warrants that the above-required minimum insurer rating is sufficient to protect the CMAR from potential insurer insolvency.

E. VERIFICATION OF COVERAGE: CMAR shall furnish the DEPARTMENT (_____) with certificates of insurance (ACORD form or equivalent approved by the State of Arizona) as required by this CONTRACT. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and endorsements are to be received and approved by the DEPARTMENT (_____) before work commences. Each insurance policy required by this CONTRACT must be in effect at or prior to commencement of work under this CONTRACT and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this CONTRACT, or to provide evidence of renewal, is a material breach of CONTRACT.

All certificates required by this CONTRACT shall be sent directly to _____. The Contract number and project description shall be noted on the certificate of insurance. The DEPARTMENT reserves the right to require complete, certified copies of all insurance policies required by this CONTRACT at any time.

F. SUBCONTRACTORS: The CMAR is responsible for insuring and/or verifying that all Subcontractors have current, valid, and collectable certificates of insurance that are consistent with the minimum requirements within the CMAR CONTRACT. This is applicable to all lines of insurance within the CONTRACT. The DEPARTMENT reserves the right to request that the CMAR provide proof that its Subcontractors have required insurance coverage.

G. EXCEPTIONS: Requests for exceptions to insurance requirements for Subcontractor(s) shall be provided in writing to _____ and the ADOT Risk Manager prior to the start of work and will be reviewed for any risks to the DEPARTMENT. No work by the involved Subcontractor shall proceed until ADOT makes a decision regarding the request.

4.18 INDEMNIFICATION (RESPONSIBILITY FOR CLAIMS AND LIABILITIES)

The contractor shall indemnify, defend, and hold harmless the State of Arizona, acting by and through the Arizona Department of Transportation, from any and all claims, demands, suits, actions, proceedings, loss, cost and damages of every kind and description, including any attorneys' fees and/or litigation expenses, which may be brought or made against or incurred by the Department on account of loss of or damage to any property or for injuries to or death of any person, to the extent caused by, arising out of, or contributed to, by reasons of any alleged act, omission, professional error, fault, mistake, or negligence of the contractor, its employees, agents, representatives, or subcontractors, their employees, agents, or representatives in connection with or incident to the performance of the work, or arising out of Workmen's Compensation claims, Unemployment Compensation claims, or Unemployment Disability Compensation claims of employees of the contractor and/or its subcontractors or claims under similar such laws or obligations. The contractor's obligation under this subsection shall not extend to any liability to the extent caused by the negligence of the Department, or its employees, except the obligation does apply to any negligence of the contractor which may be legally imputed to the Department by virtue of its ownership or possession of land.

The contractor shall indemnify, defend, and hold harmless any county or incorporated city, its officers and employees, within the limits of which county or incorporated city work is being performed, all in the same manner and to the same extent as provided above.

4.19 PERMITS FOR WORK IN ADOT RIGHT OF WAY

The CMAR and all Subcontractors shall obtain a permit from ADOT for any and all encroachments into ADOT Right of Way, and shall comply with the obligations of such permit. The CMAR understands and agrees that additional insurance may be required by ADOT for activities within the ADOT Right Of Way that presents exposure to risk not anticipated in this CONTRACT. Contact the appropriate ADOT District Permit Office for more details or visit http://www.azdot.gov/highways/maintpermits/encroachment_permits.asp for more details on how to secure proper permits.

4.20 ANTI-TRUST VIOLATIONS

The CMAR and the DEPARTMENT recognize that in actual economic practice, overcharges resulting from anti-trust violations are in fact borne by Purchaser or ultimate user which in this case, the DEPARTMENT. Therefore, the CMAR, acting as a vendor, hereby assigns to the DEPARTMENT any and all claims for such overcharges.

4.21 IMPROPER EXERCISE OF AUTHORITY

It is further understood and agreed that the CMAR shall not, in any way, exercise any portion of the authority or powers of the DEPARTMENT, and shall not make a CONTRACT or commitment, or in any way represent itself as an agent of the DEPARTMENT beyond the scope of this CONTRACT unless expressly authorized, in writing, by the DEPARTMENT.

4.22 CONFLICTS OF INTEREST

- a. The CMAR shall not engage the services on this CONTRACT of any present or former DEPARTMENT employee who was involved as a decision maker in the selection or approval processes or who negotiated and/or approved billings or CONTRACT modifications for this CONTRACT.
- b. The CMAR agrees that no public or private interest exists and none shall be acquired directly or indirectly which would conflict in any manner with the performance of this CONTRACT.

4.23 CMAR/CONTRACTOR CONFLICTS OF INTEREST

No CONTRACT for the construction of a project shall be awarded to the firm that designed the project, or its subsidiaries, affiliates, parent company or Subcontractors, except with the written approval by the DEPARTMENT. For the purposes of this paragraph, the CMAR is not considered to have designed the project.

4.24 ORGANIZATION EMPLOYMENT DISCLAIMER

- a. The CONTRACT is not intended to constitute, create, give to, or otherwise recognize a joint venture agreement or relationship, partnership, or formal business organization of any kind, and the rights and obligations of the parties shall be only those expressly set forth in the CONTRACT.
- b. The parties agree that no persons supplied by the CMAR in the performance of CMAR obligations under the CONTRACT are considered to be DEPARTMENT employees, and that no rights of State civil service, retirement or personnel rules accrue to such persons. The CMAR shall have total responsibility for all salaries, wages, bonuses, retirement, withholdings, workmen's compensation, occupational disease compensation, unemployment compensation, other employee benefits and all taxes and premiums appurtenant thereto concerning such persons, and shall save and hold the DEPARTMENT harmless with respect thereto.

4.25 FEDERAL DEBARMENT AND SUSPENSION

- a. By signature on this CONTRACT, the CMAR certifies its compliance, and the compliance of its Subconsultants or Subcontractors, present or future, by stating that any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position of authority involving federal funds:
 - 1. Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal Agency;
 - 2. Does not have a proposed debarment pending;
 - 3. Has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal Agency within the past three (3) years; and
 - 4. Has not been indicted, convicted, or had a civil judgment rendered against the firm by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years as specified by Code of Federal Regulations 49 CFR paragraph 29.305(a)
- b. Where the CMAR or its Subcontractor is unable to certify to the statement in Section a.1. above, the CMAR or its Subcontractor shall be declared ineligible to enter into CONTRACT or participate in the project.
- c. Where the CMAR or Subcontractor is unable to certify to any of the statements as listed in Sections a.2., a.3., or a.4. above, the CMAR or its Subcontractor shall submit a written explanation to the

DEPARTMENT. The certification or explanation shall be considered in connection with the DEPARTMENT'S determination whether to enter into CONTRACT.

- d. The CMAR shall provide immediate written notice to the DEPARTMENT if, at any time, the CMAR or its Subcontractor, learn that its Debarment and Suspension certification has become erroneous by reason of changed circumstances.

4.25 SUBLETTING, ASSIGNMENTS AND TRANSFERS

- a. The CMAR team and key personnel were chosen to perform the work on this CONTRACT based on the training and qualifications of its members. Therefore, subletting, assignment or transfer of any work to its Subcontractor(s) and lower-tier Subcontractors, unless approved in writing by the DEPARTMENT prior to performance of work, is expressly prohibited. The dollar amount of work performed by the Subcontractors shall not exceed 49% of the total CONTRACT dollar value unless waived, in writing, by the DEPARTMENT.
- b. The use of Subcontractors shall not relieve the CMAR of any of its duties under this CONTRACT.

4.26 SUBCONTRACTS

The CMAR agrees to execute a written CONTRACT with all Subcontractors for work to be completed under this CONTRACT. The executed CONTRACT shall include Subcontractor's Scope of Work and all the Uniform Terms and Conditions set forth in Section 4.0 of this CONTRACT.

The CMAR shall provide electronic copies of signed subcontract agreements with all Subcontractors to ADOT Civil Rights Office (CRO) by uploading them to the CRO online DBE Contract & Labor Compliance Management System (<https://adot.dbesystem.com>). Subcontract agreements must include all required assurances and required clauses as outlined in Section 4.0 of this CONTRACT. Each agreement and required attachment must be dated and signed by the Subcontractor in order for the subcontract to be considered valid.

The CMAR shall be in breach of this CONTRACT if the CMAR materially modifies the federal regulations and State statutes in its subcontract agreements terms and conditions with its Subcontractors. Deviation from the terms of this CONTRACT may result in termination of the CONTRACT, or any other such remedy as deemed appropriate by the DEPARTMENT.

4.27 KEY PERSONNEL

- a. No substitution or transfer of personnel, specifically identified in the approved Key Personnel list may be made prior written approval by the DEPARTMENT.
- b. Key Personnel are those individuals whose qualifications were highly important in evaluating the overall qualifications of the project team
- c. The Department will review the CMAR'S proposed list of Key Personnel presented during contract negotiations and will approve the list of Key Personnel assigned to the contract. The DEPARTMENT'S decision as to Key Personnel shall be final.
- d. The CMAR shall not change any of the Key Personnel assigned to the contract until it has obtained written approval from the ADOT PM and ECS through an Administration Determination Letter or Contract Modification. The CMAR shall notify the Department in advance of an anticipated change in the Key Personnel no later than 10 calendar days prior to the change, and shall inform the DEPARTMENT of the reasons the change must be made and must certify that the overall intent of the CONTRACT will not be impaired by the change. The advance notice requesting a Key Personnel change must include the name of the Key Personnel, date of departure, the proposed replacement and

his/her credentials/resume. Qualifications of any key personnel proposed in a change must be equal to or greater than the original qualifications of the person being replaced.

The Department shall have the right to approve or reject the proposed successor. The Department will consider any change in key personnel, and at its discretion may decide to terminate the CONTRACT for convenience if, in the DEPARTMENT'S sole discretion, the Department believes that the project team is materially different because of the change. The Department shall make its decision within 30 days of the CMAR'S request to change Key Personnel.

Failure to provide the Department with advanced notification may result in termination of the CONTRACT, award of damages to the Department or loss of prequalification status.

4.28 EMPLOYMENT OF PERSONNEL OF PUBLIC AGENCIES

The CMAR shall not engage the service of any person or persons employed by the DEPARTMENT for work covered by the terms of this CONTRACT.

4.29 SUCCESSORS AND ASSIGNS

The CMAR and all successors, executors, administrators and assigns of the CMAR'S interest in the work or the compensation herein provided shall be bound to the DEPARTMENT to the full legal extent to which the CMAR is bound with respect to each of the terms and agreements of this CONTRACT.

4.30 CONTINUING OBLIGATION

The CMAR agrees that if due to death or any other occurrence it becomes impossible for any principal or employee of the CMAR to render the services required under this CONTRACT, neither the CMAR nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, the DEPARTMENT may terminate this CONTRACT if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect the CMAR'S ability to satisfactorily complete the performance of this CONTRACT, or materially affect the evaluation of the CMAR'S qualifications.

4.31 NAME CHANGE, MERGER AND ACQUISITIONS

- a. In cases where a firm changes its name, acquires, or merges with another company, the firm under CONTRACT with ADOT shall provide ten (10) calendar-days advance notice before the new firm begins work on ADOT CONTRACTS. The firm changing its name or the acquiring firm shall be responsible for fulfilling all obligations, liabilities, terms and conditions of all ADOT CONTRACTS of the acquired firm. The acquiring firm shall provide ECS with the required information to approve the name change, including but not limited to the following:
1. Letter indicating the new name and reason for the change. Letter should also include:
 - Effective date of the change.
 - List of contracts affected by the change (contracts in active and pending closeout status).Statement certifying that firm will assume all obligations and liabilities set forth in the respective agreements for all listed contracts between your new entity and the Arizona Department of Transportation.
 - Statement certifying that no changes have been made in Key Personnel responsible for the contracts. If there is a change in Key Personnel as a result of a merger or acquisition, the CMAR shall submit a separate request to be approved by the DEPARTMENT in accordance with Section 4.34 of the contract.
 2. A copy of Arizona Corporation Commission or home state documentation related to the change.
 3. Updated professional licenses reflecting new company name.
 4. Updated W-9 Form.

- b. If the acquiring firm is approved by ADOT to take over the merged or acquired CONTRACTS, the CONTRACTS shall be modified to include the acquiring firm's name by a Contract Modification.
- c. If a Subcontractor listed in the CONTRACT changes its name, acquires, or merges with another company, the CMAR shall provide ECS with the required information to approve the name change, including but not limited to the following:
 - 1. Letter indicating the new Subcontractor name and reason for the change. The letter must also include:
 - Effective date of the change
 - Statement certifying that the new Subcontractor firm will continue its work under the CONTRACT
 - Statement certifying that no changes has been made in Key Personnel responsible for the subcontract; if there is a change in the Subcontractor Key Personnel approved by the Department during CONTRACT negotiations as a result of a merger or acquisition, the CMAR shall submit a separate request to be approved by the DEPARTMENT in accordance with Section 4.34 of the CONTRACT.
 - 2. A copy of Arizona or home state Corporation Commission documentation related to the change.

4.32 ANTI-LOBBYING

The CMAR certifies, by signing and submitting the SOQ, to the best of his/her knowledge and belief, that:

- a. No federal appropriated funds have been paid or shall be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence any officer or employee of any State or Federal Agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal CONTRACT, the making of any federal grant, the making of any federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal amendment, or modification of any Federal CONTRACT grant, loan, or cooperative agreement.
- b. If any funds other than federally appropriated funds have been paid or shall be paid to any person for influencing or attempting to influence an officer or employee of any Federal Agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with this federal CONTRACT, grant, loan, or cooperative agreement, the undersigned shall complete and submit the "Disclosure of Lobbying Activities" form in accordance with its instructions (<http://www.whitehouse.gov/omb/grants/sfillin.pdf>).
- c. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making and entering into this transaction imposed by Section 1352, Title 31 and U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty or not less than \$10,000 and not more than \$100,000 for each such failure.
- d. The CMAR also agrees, by submitting its SOQ that it shall require that the language of this certification be included in subcontracts with all Subcontractor(s) and lower-tier Subcontractors which exceed \$100,000 and that all such Subcontractors and lower-tier Subcontractors shall certify and disclose accordingly.
- e. The DEPARTMENT shall keep the firm's certification on file as part of its original SOQ. The CMAR shall keep individual certifications from all Subcontractors and lower-tier Subcontractors on file. Certification shall be retained for three (3) years following completion and acceptance of any given project.
- f. Disclosure forms for the CMAR and its Subcontractors and lower-tier Subcontractors shall be submitted to Contracts and Specifications on the date the Statement of Qualifications are due. The

CMAR and each Subcontractor and lower-tier Subcontractor shall file revised disclosure forms at the end of each calendar quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. The Disclosure forms shall be submitted to the FHWA for further review.

4.33 RECORDS RETENTION, MAINTENANCE AND AUDIT

- a. Pursuant to A.R.S. §35-214, the CMAR and its Subcontractor(s) shall keep and maintain all books, papers, records, accounting records, files, accounts, expenditure records, reports, cost proposals with backup data and all other such materials related to the CONTRACT and other related project(s). The CMAR shall make all such materials related to the project(s) available at any reasonable time and place during the term of the CONTRACT and for five (5) years from the date the Initial Closeout Letter is sent to the CMAR after ADOT indicates that work on the CONTRACT has been completed to the satisfaction of the DEPARTMENT (Contract Status Form). All Documents shall be retained for auditing, inspection and copying upon the DEPARTMENT'S or at FHWA's request, or any other authorized representative of the Federal Government.
- b. Pursuant to A.R.S. §35-215, the CMAR and its Subcontractor(s) with intent to defraud, deceive, improperly influence, obstruct or impair an audit being conducted or about to be conducted in relation to any CONTRACT or subcontract with the DEPARTMENT is guilty of a class 5 felony.
- c. In case of an audit and the CMAR has failed to retain records in accordance with the applicable CONTRACT provision, it shall be presumed that the documents would not have supported the CMAR'S position. Therefore, failure to retain such records shall result in the CMAR being required to reimburse ADOT for unsupported costs. The CMAR may also be disqualified per revised ECS Rules Section 2.02 from submitting future SOQ proposals.
- d. Upon completion and final closeout of the CONTRACT, physical/paper or electronic CONTRACT files and any supporting materials shall be maintained in accordance with ADOT and State Record Retention Center Records Retention/Destruction Policy and Schedules.

4.34 REVIEWS AND INSPECTIONS

Representatives from the DEPARTMENT and FHWA are authorized to review and inspect the CONTRACT activities and facilities during the CMAR's and its Subcontractors normal business hours.

4.35 NONDISCRIMINATION

1. During the performance of this CONTRACT, the CMAR, for itself, its Subcontractors, assignees and successors shall:
 - a. Not discriminate on the basis of race, color, national origin, or sex. and shall carry out applicable requirements of 49 CFR Part 26 in the performance of this CONTRACT. Failure by the CMAR to carry out these requirements is a material breach of this CONTRACT, which may result in the termination of this CONTRACT, disqualification from proposing on other CONTRACTS or other remedy as the STATE deems appropriate.
 - b. Comply with Executive Order 99-4, "Prohibition of Discrimination in Employment by Government contractors and Subcontractors," which is hereby included in its entirety by reference and considered a part of this CONTRACT.
 - c. Comply with the provisions of Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in

Department of Labor Regulations (41 CFR Part 60). Said provisions are made applicable by reference and are hereinafter considered a part of this CONTRACT.

- d. Post in conspicuous places available to employees and applicants for employment, the following notice:

“It is the policy of this company not to discriminate against any employee, or applicant for employment, because of race, color, religion, creed, national origin, sex, age, handicapped, or disabled veterans and Vietnam era veterans. Such actions shall include, but are not limited to: employment, upgrading, demotion, transfer, recruitment, or recruitment advertising; laying-off or termination; rates of pay or other compensation; and selection for training, and on-the-job training. Also, it is the policy to insure and maintain a working environment free of harassment, intimidation and coercion.”
 - e. Comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation (hereinafter DOT), 49 CFR Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this CONTRACT.
 - f. Not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of Subcontractors, including procurement of materials and leases of equipment. The CMAR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices.
 - g. In all solicitations either by competitive bidding or negotiations made by the CMAR for work to be performed under a subcontract, including procurement of materials or leases of equipment, notify each potential Subcontractor or supplier of the CMAR’S obligations under this CONTRACT and the Regulations relative to nondiscrimination on the ground of race, color, or national origin.
 - h. Provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the STATE to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a CMAR is in the exclusive possession of another who fails or refuses to furnish this information, the CMAR shall so certify to the STATE as appropriate, and shall set forth what efforts it has made to obtain the information.
2. In the event of the CMAR’S noncompliance with the nondiscrimination provisions of this CONTRACT, the STATE shall impose such CONTRACT sanctions as the STATE or FHWA may determine to be appropriate, including but not limited to:
 - a. Withholding of payments to the CMAR under the CONTRACT until the CMAR complies, and/or;
 - b. Cancellation, termination, or suspension of the CONTRACT, in whole or in part.
 3. The CMAR shall include the provisions of paragraph 1.a. through 1.h. in every subcontract with Subcontractors, DBE and Non-DBE, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto.
 4. The CMAR shall take such action with respect to any Subcontractors or procurement as the STATE or the Federal Aviation Administration (FAA), FHWA and the Federal Transit

Administration (FTA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the CMAR becomes involved in or is threatened with litigation with a Subcontractor or supplier as a result of such direction, the CMAR may request the STATE to enter into such litigation to protect the interests of the STATE, and in addition, the CMAR may request the United States to enter into such litigation to protect the interests of the United States.

4.36 AFFIRMATIVE ACTION (FOR FEDERAL-AID CONTRACTS)

The CONSULTANT shall take the following affirmative action steps with respect to securing supplies, equipment or services under the terms of this CONTRACT:

1. Include qualified firms owned by socially and economically disadvantaged individuals on solicitation lists.
2. Assure that firms owned by socially and economically disadvantaged individuals are solicited whenever they are potential sources.
3. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by firms owned by socially and economically disadvantaged individuals.
4. Where the requirement permits, establish delivery schedules which shall encourage participation by firms owned by socially and economically disadvantaged individuals.
5. Use the services and assistance of ADOT DBE Supportive Services Program, the Small Business Administration, the Office of Minority Business Enterprise of the Department of Commerce and the Community Services Administration as needed.

4.37 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES

1. The DEPARTMENT has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (USDOT), 49 CFR Part 26. ADOT has received federal financial assistance from the USDOT and as a condition of receiving this assistance, ADOT has signed an assurance that it shall comply with 49 CFR Part 26.

It is ADOT'S policy to ensure that DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in federally-funded contracts. It is also ADOT'S policy to:

- a. Ensure nondiscrimination in the award and administration of federally-funded contracts;
- b. Create a level playing field on which DBEs can compete fairly for federally-funded contracts;
- c. Ensure that the DBE program is narrowly tailored in accordance with applicable law;
- d. Ensure that only firms that fully meet 49 CFR Part 26 eligibility requirements are counted as DBEs;
- e. Help remove barriers to the participation of DBEs in federally-funded contracts; and
- f. Assist in the development of firms that can compete successfully in the marketplace.

The Federal regulations require a recipient of federal highway funding to implement an approved DBE Program that consists of establishing a statewide DBE utilization goal that uses race-neutral means to the maximum feasible extent to achieve the goal. Where race-neutral measures prove inadequate to achieve the goal, the STATE is required to use race-conscious measures, such as a DBE participation goal for individual contracts.

The DEPARTMENT has established an overall annual goal for DBE participation on Federal-aid contracts. The DEPARTMENT intends to meet the goal with a combination of race-conscious efforts and race-neutral efforts. Race-conscious participation occurs where the CONSULTANT uses a percentage of DBEs to meet a contract-specified goal. Race-neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses.

The CONSULTANT is required to adhere to the commitment made to utilize certified Disadvantaged Business Enterprises (DBE) as indicated in the firm's Statement of Qualifications (SOQ) or subsequently agreed to by the STATE during negotiations. The STATE, at its discretion on a case by case basis, may waive the above limitations.

ADOT encourages firms to voluntarily utilize DBE firms in this CONTRACT in order to help meet ADOT DBE participation goal on Federal-aid contracts.

2. **COMPLIANCE:**

- a. This CONTRACT is subject to DBE compliance tracking for the CONSULTANT and its Subconsultants. Lower-tier Subconsultants and Vendors are required to provide any requested DBE CONTRACT compliance-related data in hard copy or electronically as determined by the STATE, including written agreements between the CONSULTANT and Subconsultant DBEs. The CONSULTANT shall report the amount earned by and paid to each DBE and Non-DBE Subconsultants working on the project for the preceding month on each monthly Progress Payment Report. The CONSULTANT is responsible for ensuring that the CONSULTANT and all its Subconsultants and lower-tier Subconsultants have completed all requested items and that their contact information is accurate and up-to-date.
- b. The CONSULTANT'S achievement of the DBE commitment is measured by actual payments made to the DBEs. At the completion of the project, the CONSULTANT shall complete and submit a *Certification of Payments to DBE Firms* affidavit for each DBE firm working on the project. This affidavit shall be signed by the CONSULTANT and the relevant DBE Subconsultant and submitted to ECS and CRO.

3. **REPORTING AND SANCTIONS:**

- a. ADOT is required to collect DBE participation data on all Federal-aid projects, whether or not there is a stated DBE goal/commitment on this CONTRACT. Therefore, the CONSULTANT shall report the monthly payments made to all DBE, Non-DBE Subconsultants and Direct Expense Vendors, including all lower-tier Subconsultants, for labor, equipment, and materials. If the CONSULTANT and its Subconsultants do not provide all required DBE usage and payment information with the monthly Progress Payment Reports (PRs) submittals for the preceding month, the STATE shall deduct \$1,000 for each delinquent report, whether from the CONSULTANT or any of its Subconsultants, from the progress payment for the current month, not as a penalty but as liquidated damages. If by the following month, the required DBE payment information for the previous month has still not been provided, the STATE shall deduct an additional \$1,000 for each delinquent report. Such deductions shall continue for each subsequent month that the CONSULTANT or its Subconsultants fail to provide the required payment information.

- b. DBEs shall confirm the payments received from the CONSULTANT through CRO'S DBE Contract & Labor Compliance Management System (DBE System).
- c. After execution of this CONTRACT and before the first Payment Report/Invoice is submitted to ECS, the CONSULTANT is required to log into the CRO'S online DBE System (<https://adot.dbesystem.com>) and enter the name, contact information, and subcontract amounts for all Subconsultants, lower-tier Subconsultants and Direct Expense vendors performing any work on the project to help ADOT track payments to DBE and Non-DBE Subconsultants on the project and to confirm that the scope of services and commitments made via the DBE Intended Participation Affidavits are being met.
- d. All DBE and non-DBE subcontracting activities and payments shall be reported by the CONSULTANT. All DBE subcontracting activities will be counted toward DBE participation. This includes lower-tiers subcontracting activities regardless of whether or not the DBE is under contract with another DBE.
- e. At the completion of the contract, the CONSULTANT shall submit a *Certificate of Payments to DBE Firms* affidavit certifying that all DBEs were paid in full for material and/or work promised and performed under the terms of this CONTRACT.

5. **DBE SUBSTITUTION OR REPLACEMENT:**

- a. The CONSULTANT shall not terminate a DBE Subconsultant listed in the SOQ without the prior written approval by the STATE.
 - b. If a Subconsultant is terminated, or fails to complete its work on this CONTRACT for any reason, the CONSULTANT shall make a good faith effort to find another DBE to perform at the least the same amount of work under the CONTRACT as the DBE that was terminated, to the extent needed to meet the DBE commitment percentage established in this CONTRACT.
6. The DEPARTMENT, at its sole discretion, may terminate the CONTRACT at any time if the DEPARTMENT determines that the CONSULTANT is not satisfactorily meeting the DBE goal/commitment stated in the CONTRACT or is not making satisfactory good faith efforts to meet the goal.

4.48 **COUNTING DBE PARTICIPATION**

In counting the DBE participation, the Department shall apply the rules in 49 CFR §26.55 (see APPENDIX C) as a supplement herein. The firm shall count only the value of the work actually performed by the DBE toward DBE commitments.

- 1. CONTRACTS created to artificially create DBE participation are not acceptable; the arrangement shall be within normal industry practices. The DBE shall perform a commercially useful function.
- 2. Count the entire amount of that portion of a CONTRACT (or other CONTRACT not covered by paragraph (2) of this section) that is performed by the DBE's own forces. Firms shall include the cost of supplies and materials obtained by the DBE for the work on the CONTRACT, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE Subconsultant purchases or leases from the CONSULTANT or its affiliate).
- 3. Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or

insurance specially required for the performance of a DOT-assisted contract, toward DBE goals, provided the fee is determined to be reasonable and not excessive as compared with the fees customarily allowed for similar services.

4. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the lower-tier Subconsultant is itself a DBE. Work that a DBE subcontracts to a non-DBE does not count toward DBE goals.
5. It is presumed that the DBE is not performing a commercially useful function if: (a) a DBE does not perform or exercise responsibility for at least 30 percent (30%) of the total cost of its CONTRACT with its own work force; or (b) the DBE subcontracts a greater portion of the work of a CONTRACT than would be expected on the basis of normal industry practice for the type of work involved.

4.39 ENVIRONMENTAL PROTECTION

The CMAR is required to comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency (EPA) regulations (40 CFR Part 15) which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. Violations shall be reported to the FHWA and to the U.S. EPA Assistant Administrator for Enforcement (EN-329).

4.40 ENERGY CONSERVATION

The CMAR is required to comply with mandatory standards and policies, as applicable, relating to energy efficiency, which is contained in the State Energy Conservation Plan issued by the DEPARTMENT in compliance with the Energy Policy Conservation Act (Public Law. 94-163).

4.41 PUBLICITY AND ENDORSEMENTS

The CMAR must obtain the DEPARTMENT'S approval prior to releasing any publicity regarding the subject matter of this CONTRACT. Publicity includes, but not limited to, notices, informational pamphlets, press releases, research, reports, signs and similar public notices prepared by or for the CMAR or its employees or its Subcontractors. Publicity does not include notices of the CONTRACT award or identification of the project in the SOQ or proposal made to government agencies. The CMAR must not claim that DEPARTMENT endorses its products and services.

4.42 OWNERSHIP OF DATA

- a. The CMAR agrees to maintain (in sufficient detail as shall properly reflect all work done and results achieved in the performance of this CONTRACT) tracings, plans, specifications and maps, basic survey notes and sketches, books, records, reports, research notes, charts, graphs, comments, computations, analyses, recordings, photographs, computer programs and documentation thereof, and other graphic or written data generated in connection with the work required in the CONTRACT; all such information and documentation to be termed "Data" under this CONTRACT.
- b. All Data procured hereunder for the work funded by ADOT shall become the property of ADOT and delivered to ADOT upon request, and shall not be used or released by the CMAR or any other person except with the prior written approval by the DEPARTMENT; provided that the CMAR shall not be required to retain any Data not requested by ADOT within five years from the date of final payment (see *Initial Closeout 4.41.a*) to the CMAR hereunder; and provided further that until such delivery to ADOT, the CMAR agrees to permit ADOT and FHWA representatives to examine and review at reasonable times all Data still in the possession of the CMAR.

- c. All services, information, computer program elements, reports and other deliverables which may be patented or copyrighted and created under this CONTRACT are the property of the DEPARTMENT and shall not be used or released by the CMAR or any other person except with the prior written approval by the DEPARTMENT.

4.43 PATENTS AND COPYRIGHTS

All services, information, computer program elements, reports and other deliverables which might be patented or copyrighted and created under this CONTRACT are the property of the DEPARTMENT and shall not be used or released by the CMAR or any other person except with the prior written approval by the DEPARTMENT.

4.44 FRAUD AND FALSE STATEMENTS

The CMAR understands that, if the project which is the subject of this CONTRACT is financed in whole or in part by federal funds, that if the undersigned, the company that the CMAR represents, or any employee or agent thereof, knowingly makes any false statement, representation, report or claim as to the character, quality, quantity, or cost of material used or to be used, or quantity or quality work performed or to be performed, or makes any false statement or representation of a material fact in any statement, certificate, or report, the CMAR and any company that the CMAR represents may be subject to prosecution under the provision of 18 USC §1001 and §1020.

4.45 FEDERAL IMMIGRATION AND NATIONALITY ACT

a. GENERAL

The CMAR, including all Subcontractors, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the CONTRACT during the duration of the CONTRACT. The DEPARTMENT shall retain the right to perform random audits of CMAR and Subcontractors' records or to inspect papers of any employee thereof to ensure compliance.

The CMAR shall include the provisions of this Section in all its subcontracts. In addition, the CMAR shall require that all Subcontractors comply with the provisions of this Section, monitor such SUBCONTRACTOR compliance, and assist the DEPARTMENT in any compliance verification regarding its Subcontractor(s).

b. COMPLIANCE REQUIREMENTS

The DEPARTMENT retains the legal right to inspect the papers or records of the CMAR and its Subcontractors who works on this CONTRACT to ensure compliance with A.R.S. §41-4401, Government Procurement, E-Verify Requirements.

By submission of an SOQ proposal, the CMAR warrants that the CMAR and all proposed Subcontractor(s) are and shall remain in compliance with:

1. All federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the CONTRACT; and
2. A.R.S. §23-214 (A) which states "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the e-verify program and shall keep a record of the verification for the duration of the employee's employment or at least three years, whichever is longer."

A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the CONTRACT, and the CMAR and its Subcontractor(s) are subject to sanctions specified in Section D below.

Failure to comply with a DEPARTMENT audit process to randomly verify the employment records of CMAR and SUBCONTRACTORS shall be deemed a material breach of the CONTRACT, and the CMAR and SUBCONTRACTORS are subject to sanctions specified in Section D below.

c. **COMPLIANCE VERIFICATION**

The STATE may, at its sole discretion, require evidence of compliance from the CMAR and its Subcontractor(s).

Should the DEPARTMENT request evidence of compliance, the CMAR shall complete and return the Consultant Employment Record Verification Form and Employee Verification Worksheet provided by the DEPARTMENT, no later than 21 days from receipt of the request for such information.

Listing of the compliance verification procedure specified above does not preclude the DEPARTMENT from utilizing other means to determine compliance.

The DEPARTMENT retains the legal right to inspect the papers of any employee who works on the CONTRACT to ensure that the CMAR and its Subcontractor(s) is/are complying with the warranty specified in this Section.

d. **SANCTIONS FOR NONCOMPLIANCE**

For purposes of this paragraph, noncompliance refers to either the CMARS or its Subcontractors' failure to follow the immigration laws or to the CMAR'S failure to provide records when requested. Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of CONTRACT. At a minimum, the DEPARTMENT shall reduce the CMAR'S compensation by \$10,000 for the initial instance of noncompliance by the CMAR or its Subcontractor(s). If the same CMAR or its Subcontractor(s) is in noncompliance within two (2) years from the initial noncompliance, the CMAR'S compensation shall be reduced by a minimum of \$10,000 for each instance of noncompliance. The third instance by the same CMAR or its Subcontractor(s) within a two (2) year period may result in addition to the minimum \$50,000 reduction in compensation, in removal of the offending CMAR or its Subcontractor(s), suspension of work in whole or in part or, in the case of a third violation by the CMAR, termination of the CONTRACT for default. Instances of noncompliance are counted on a firm-wide basis, not on a contract-by-contract basis.

In addition, the DEPARTMENT may declare the CMAR or its Subcontractor(s) who is in noncompliance three times within a two-year period ineligible to perform on any DEPARTMENT CONTRACT for up to one year. For purposes of considering a declaration of ineligibility: (1) noncompliance by a Subcontractor does not count as a violation by the CMAR; and (2) the DEPARTMENT shall count instances of noncompliance on other DEPARTMENT CONTRACTS.

The sanctions described herein are the minimum sanctions. In case of major violations, the DEPARTMENT reserves the right to impose any sanctions including and up to termination and debarment, regardless of the number of instances of non-compliance.

Any delay resulting from compliance verification or a sanction under this subsection is a non-excusable delay. The CMAR is not entitled to any compensation or extension of time for any delays or additional costs resulting from compliance verification or a sanction under this Section.

An example of the minimum sanctions under this subsection is presented in the table below:

Offense by:			Minimum Reduction in Compensation
CMAR	Subcontractor A	Subconsultant B	
First			\$10,000
	First		\$10,000
	Second		\$50,000
		First	\$10,000
	Third		\$50,000*
* May, in addition, result in removal and debarment of the Subconsultant.			

4.46 SCRUTINIZED BUSINESS OPERATIONS

In signing this CONTRACT, the CMAR certifies, (1) pursuant to A.R.S. §35-391, that it does not have scrutinized business operations in Sudan; and (2) pursuant to A.R.S. §35-393, the CMAR does not have scrutinized business operations in Iran.

4.47 PANDEMIC CONTRACTUAL PERFORMANCE

- a. The DEPARTMENT shall require a written plan that illustrates how the CMAR shall perform up to contractual standards in the event of a pandemic. The DEPARTMENT may require a copy of the plan at any time prior to or at post-award phase of the CONTRACT. At a minimum, the pandemic performance plan shall include:
 - 1. Key succession and performance planning if there is a sudden significant decrease in the CMAR'S workforce.
 - 2. Alternative methods to ensure adequate work force.
 - 3. An updated list of the CMAR'S contacts and organizational chart.
- b. In the event of a pandemic, as declared by the Governor of Arizona, U.S. Government or the World Health Organization (WHO), which makes performance of any term under this CONTRACT impossible or impracticable, the DEPARTMENT shall have the following rights:
 - 1. After the official declaration of a pandemic, the DEPARTMENT may temporarily place the CONTRACT(s) on "HOLD," in whole or in part, if the CMAR cannot perform to the standards agreed upon in the initial terms.
 - 2. The DEPARTMENT shall not incur any liability if a pandemic is declared and emergency procurements are authorized by ADOT Director pursuant to §41-2537 of the Arizona Procurement Code (APC).
 - 3. Once the pandemic is officially declared over or the CMAR can demonstrate the ability to perform, the DEPARTMENT, at its sole discretion may reinstate the temporarily voided CONTRACT(s).
- c. The DEPARTMENT, at any time, may request to see a copy of the written plan from the CMAR. The CMAR shall produce the written plan within 72 hours of the request.

4.59 CONTRACT COMPLETION

When technical review establishes that all phases of the CONTRACT have been completed to the satisfaction of the DEPARTMENT, a written concurrence is completed and signed by the ADOT PM and ADOT Group Manager to initiate the CONTRACT closeout phase. The CMAR is notified, in writing, (Initial Closeout Letter) of the final closeout procedure which may include submittal of the final Payment Report, deliverables and the final audit, if applicable, of the CMAR and all Subcontractor's records. The CMAR shall submit all required deliverables as detailed in the CONTRACT.

SECTION 5.0 SIGNATURE PAGE

FOR THE DEPARTMENT

ARIZONA DEPARTMENT OF TRANSPORTATION

_____ By: _____
Date Signature



Print Name

Title

FOR THE CMAR

FIRM NAME

_____ By: _____
Date Signature

Print Name

Title

“By signing this document, the CMAR declares that the CONTRACT was reviewed and to the best of the CMAR’S knowledge and belief, it is true, correct, and approved. Both parties agree that manually or electronically signing and submitting the CONTRACT via a PDF document by email is acceptable and constitutes a binding agreement.”

APPENDIX A

SCOPE OF WORK

Intentionally Left Blank

APPENDIX B

**CMAR PRECONSTRUCTION SERVICES SUPPLEMENTAL
CONDITIONS**

Intentionally Left Blank

APPENDIX C

APPROVED COST PROPOSAL SUMMARY

Intentionally Left Blank

APPENDIX D

TITLE 49 - TRANSPORTATION Subtitle A – Office of the Secretary of Transportation

PART 26 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN DEPARTMENT OF TRANSPORTATION FINANCIAL ASSISTANCE PROGRAMS

[Code of Federal Regulations]; [Title 49, Volume 1]; [Revised as of October 1, 2008]
From the U.S. Government Printing Office via GPO Access; [CITE: 49CFR26.55]; [Page 300-302]

Subpart C Goals, Good Faith Efforts, and Counting

§26.55 - How is DBE participation counted toward goals?

- (a) When a DBE participates in a contract, you count only the value of the work actually performed by the DBE toward DBE goals.
 - (1) Count the entire amount of that portion of a construction contract (or other contract not covered by paragraph (a)(2) of this section) that is performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).
 - (2) Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, toward DBE goals, provided you determine the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.
 - (3) When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.
- (b) When a DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
- (c) Count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract.
 - (1) A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you shall evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.
 - (2) A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, you shall examine similar transactions, particularly those in which DBEs do not participate.
 - (3) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, you must presume that it is not performing a commercially useful function.
 - (4) When a DBE is presumed not to be performing a commercially useful function as provided in paragraph (c)(3) of this section, the DBE may present evidence to rebut this presumption. You

Contract No.:

may determine that the firm is performing a commercially useful function given the type of work involved and normal industry practices.

- (5) Your decisions on commercially useful function matters are subject to review by the concerned operating administration, but are not administratively appealable to DOT.
- (d) Use the following factors in determining whether a DBE trucking company is performing a commercially useful function:
 - (1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
 - (2) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
 - (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
 - (4) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (5) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement. If a recipient chooses this approach, it shall obtain written consent from the appropriate Department Operating Administration.

Example to this paragraph (d)(5): DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. With respect to the other two trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks Firm X receives as a result of the lease with Firm Z.

- (6) For purposes of this paragraph (d), a lease shall indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the DBE.
- (e) Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:
 - (1) (i) If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals.
 - (ii) For purposes of this paragraph (e)(1), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
 - (2) (i) If the materials or supplies are purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals.
 - (ii) For purposes of this section, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

Contract No.:

- (A) To be a regular dealer, the firm shall be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - (B) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph (e)(2)(ii) if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.
 - (C) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph (e)(2).
- (3) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided you determine the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals, however.
- (f) If a firm is not currently certified as a DBE in accordance with the standards of subpart D of this part at the time of the execution of the contract, do not count the firm's participation toward any DBE goals, except as provided for in Sec. 26.87(i).
 - (g) Do not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward your overall goal.
 - (h) Do not count the participation of a DBE subcontractor toward a contractor's final compliance with its DBE obligations on a contract until the amount being counted has actually been paid to the DBE.

[64 FR 5126, Feb. 2, 1999, as amended at 65 FR 68951, Nov. 15, 2000; 68 FR 35554, June 16, 2003]

Contract No.:

SAMPLE – DERIVATION OF COST SUMMARY

Preconstruction Services will be paid for by the hour at a specific rate for each job classification required under the contract. In the event that an hourly rate cannot be determined for a required subcontracted activity, the Department may consider reimbursement based on an invoice from the subcontractor at cost without markup.

The following table represents the format that shall be followed by the contractor in submitting classifications and hourly rates.

Actual classifications and specific rates shall be based on the contractor's staffing and the work required under the Preconstruction Services Contract.

CLASSIFICATION	NAME	SPECIFIC RATE	HOURLY
Cost Estimator (Sr.)	John Doe		\$ xx.xx
Project Principal	Jane Doe		\$ xx.xx
Project Manager	Jack Doe		\$ xx.xx
Technician	Jim Doe		\$ xx.xx

OTHER DIRECT EXPENSES	
Construction Site Office	\$xx.xx per month
Per Diem	Per ADOT Travel Policy
Copies	\$0.05 per sheet
Delivery (package)/Messenger	At cost

Signature _____ Date _____

APPENDIX J. SAMPLE CONSTRUCTION CONTRACT AGREEMENT

Contract No.:

SECTION X
ADOT CONSTRUCTION
CONTRACT AGREEMENT

Page 232 of 235

Contract No.:

CONSTRUCTION MANAGER AT RISK CONSTRUCTION CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this ____ day of _____, 20____. By and between the STATE OF ARIZONA, acting by and through its State Engineer duly authorized by the Director, Arizona Department of Transportation to enter into such agreement, party of the first part, and _____ hereinafter called the Contractor, party of the second part.

WITNESSETH: That the said Contractor, for and in consideration of the sum to be paid him by said State Arizona in the manner and at the time hereinafter provided, and of the other covenants and agreements herein contained, hereby agrees, for itself, heirs, administrators, successors and assigns as follows:

ARTICLE I – SCOPE OF WORK: The Contractor shall perform in a workmanlike and substantial manner and to the satisfaction of the State Engineer, all the work authorized by the STATE under this CONTRACT:

095 YU 000 H800301D
STP-095-A(204)T
International Border to Juan Sanchez Boulevard and
095 YU 000 H801701D
TEA-095-A(203)T
'A' Street to Juan Sanchez Boulevard

and furnish at its own cost and expense all necessary machinery, tools, apparatus, materials and labor to complete the work in the most substantial and workmanlike manner according to the Plans and Specifications therefore on file with the State Engineer and such modifications of the same and other directions that may be made by the State Engineer as provided herein.

ARTICLE II – CONTRACT DOCUMENTS: It is further agreed that the Guaranteed Maximum Price Proposal, Plans, Standard Specifications, Special Provisions, Contract Bond(s) and any and all Supplementary Agreements, and any and all requirements necessary to complete the work in a substantial and acceptable manner, and any and all equipment and progress statements required, are hereby referred to and made a part of this contract, and shall have the same force and effect as though all of the same were fully inserted herein.

ARTICLE III – WARRANTY OF WORKMANLIKE PERFORMANCE: The contractor warrants that the work will be performed and completed in a workmanlike manner.

ARTICLE IV – WARRANTY OF FREEDOM FROM OBLIGATION: The Contractor expressly warrants that he is free from obligation of any other person or persons for services rendered, or supposed to have rendered, in the procurement of this contract. The Contractor further agrees that any breach of the Warranty shall constitute adequate cause for the annulment of the Contract by the State of Arizona and that the State of Arizona may retain to its own use from any sums of money due or become due thereunder, an amount thereof equal to any brokerage, commission, or percentage so paid, or agreed to be paid.

ARTICLE V – TIME OF COMPLETION: The Contractor further covenants and agrees that all of the said materials shall be furnished and delivered and all of the said labor shall be done and performed in every respect to the satisfaction and approval of the State Engineer and that the said work shall be turned over to the State Engineer, complete and ready for use, on or before the specified time as specified in the contract documents. The work shall be free and discharged of all claims and demands whatsoever for, or on account of, any and all labor and materials used or furnished to be used in said work.

It is expressly understood and agreed that in case of failure on the part of the Contractor, for any reason, except with the written consent of the State Engineer, to complete the entire work to the satisfaction of the State Engineer, and within the aforesaid time limit, the part of the first part shall deduct from any money due, or which may become due the Contractor, as liquidated damages, an amount in accordance with the Contract Specifications.

If no money shall be due the Contractor, the State shall have a cause of action to recover against the Contractor in a court of competent jurisdiction, liquidated damages, in accordance with Subsection 108.09 of the Contract Specifications, said deduction to be made, or said sum to be recovered, not as a penalty, but as liquidated damages; provided, however, that upon receipt of written notice from the Contractor, of the existence of causes, as herein provided, over which said Contractor has no control and which must delay the completion of said work or any delay occasioned by the Arizona Department of Transportation, the State Engineer may extend the period hereinbefore specified for the completion of said work in accordance with the Specifications and in such case, the Contractor shall become liable for said liquidated damages for delays commencing from date said extension period shall expire.

Contract No.:

After the date as set up in Contract plus any extension granted, no further payments shall be made the Contractor until all work is completed and accepted by the State Engineer. It is also agreed that the date of completion shall be that upon which the work is accepted by the State Engineer.

ARTICLE VI - MISUNDERSTANDING OR DECEPTION: The party of the second part agrees that it has investigated the site of the work and all parts and appurtenances thereto and hereby waives any right to plead misunderstanding or deception as to location, character of work or materials, estimates or quantities or other conditions surrounding or being a part of the work and understands that the quantities given in the Contract Documents are approximate only, and hereby agrees to accept payment in accordance with the Contract Documents.

ARTICLE VII – CLAIMS FOR EXTRA WORK: It is distinctly understood and agreed that no claim for extra work or materials, not specifically herein provided, done or furnished by the Contractor, will be allowed by the State Engineer, nor shall the Contractor do any work or furnish any materials not covered by these Specifications and Contract, unless such work is ordered in writing by the State Engineer. In no event shall the Contractor incur any liability by reason of any oral direction or instruction that he may be given by the State Engineer, or his authorized representatives. It is the intent of this Article that all orders, directives, instructions not contained in the Plans, Specifications and Special Provisions, pertaining to the work shall be in writing, and the Contractor hereby waives any claims for compensation for work done, or materials furnished in violation thereof.

ARTICLE VIII – PAYMENTS: For and in consideration of the faithful performance of the work herein embraced, as set forth in the Contract Agreement, Specifications, Special Provisions, Guaranteed Maximum Price and all general and detailed Specifications and Plans, which are a part hereof, and in accordance with the directions of and to the satisfaction of the State Engineer or his authorized agents, the said State of Arizona agrees to pay to said Contractor the amount earned, computed from the actual quantities of work performed, and the unit prices named in the contract and Supplementary Agreements made a part thereof, and to make such payments in the manner and at the time provided in the specifications hereto appended.

ARTICLE IX – IT IS EXPRESSLY UNDERSTOOD AND AGREED that no work shall be done nor any obligations incurred under this contract during any fiscal year which are in excess of the fund programmed and budgeted for this project for that fiscal year.

ARTICLE X – THE CONTRACTOR SHALL INDEMNIFY AND SAVE HARMLESS THE STATE, its officers and employees, from all suits, actions or claims of any character brought because of any injuries or damage received or sustained by any person, persons or property on account of the operations of the said contractor or an account of or in consequence of any neglect in safeguarding the work; or for any failure to perform the work in a workmanlike manner; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect or misconduct of said contractor; or because of any claims or amounts recovered from any infringements of patent, trademark or copyright; or from any claims or amounts arising or recovered under the Workmen's Compensation Act or any other law, ordinance, order or decree, except the contractor is not required to indemnify or save harmless the State from liability arising from the negligence of the State.

The contractor shall indemnify and save harmless any county or incorporated city, its officers and employees, within the limits of which county or incorporated city work is being performed, all in the same manner and to the same extent as provided in the above paragraph.

IT IS FURTHER UNDERSTOOD AND AGREED that all work required to be done under this contract in excess of the funds appropriated and budgeted for this project shall not be done nor any obligation incurred therefore until such time as the additional funds are appropriated and the same are budgeted for this project by the Arizona department of Transportation and in that event that parties hereto are bound to continue performance of this contract to the extent permitted by the funds so appropriated and budgeted.

In the event that no funds are appropriated or budgeted for this project for the succeeding fiscal year, then this contract shall be null and void, except as to that portion for which funds have now been appropriated and budgeted, therefore, and no right of action or damages shall accrue to the benefit of the parties hereto as to that portion of the contract that may so become null and void.

All parties are hereby put on notice that this contract (agreement) is subject to cancellation by the Governor pursuant to the Arizona Revised Statutes Section 38-511.

Contract No.:

IT IS ALSO UNDERSTOOD AND AGREED that this contract is subject to the applicable laws of the State of Arizona relating to public contracts and expenditures.

095 YU 000 H800301D
STP-095-A(204)T
International Border to Juan Sanchez Boulevard and
095 YU 000 H801701D
TEA-095-A(203)T
'A' Street to Juan Sanchez Boulevard

Dated: _____

STATE OF ARIZONA

By: _____
Department of Transportation
Party of the First Part

**EVIDENCE OF AUTHORITY TO SIGN THE CONTRACT MUST BE ON FILE WITH THE DEPARTMENT,
OTHERWISE IT MUST BE FURNISHED WITH THE PROPOSAL.**

By: _____
Contractor
Party of the Second Part

Attest: _____
Signature

APPENDIX K. CONTRACT DELIVERY METHODS



CONTRACT DELIVERY METHODS

METHOD OF PROCUREMENT	ORGANIZATION CHART	SELECTION PROCESS	PROS	CONS
<p>DESIGN-BID-BUILD (DBB)</p> <p>Best Suited: New projects that are not schedule sensitive nor subject to potential change.</p> <p>Least Suited: New renovation and/or complex projects that are sequence or schedule sensitive. Projects subject to potential change.</p>		<p>Design Engineer (E) Request for Statements of Qualification (SOQ): Section 28-6922 Brooks Act</p> <p>General Contractor (GC) Competitive Sealed Bid: Section 28-6923</p>	<ul style="list-style-type: none"> Familiar delivery method Defined project scope A+B Bidding allowed 	<ul style="list-style-type: none"> No design phase assistance Longer schedule duration Price not established until bidding is complete More expensive Lack of flexibility for change Adversarial relationship More claims & legal issues
<p>CONSTRUCTION MANAGER AT RISK (CM@R)</p> <p>Best Suited: New, renovation or complex projects that are sequence or schedule sensitive, difficult to define or subject to change. Approached in a team concept.</p> <p>Least Suited: New projects easily defined lacking schedule sensitivity.</p>		<p>Design Engineer (E) Request for Statements of Qualification (SOQ): Section 28-6922 Brooks Act</p> <p>Independent Reviewer (Same as E)</p> <p>Construction Manager At Risk (CM@R) Request for Statements of Qualification (SOQ): Section 28-7366, Para. A, B, C, D, E, G, H Section 28-6923 Section 28-6924 Section 28-7361</p>	<ul style="list-style-type: none"> Qualifications based selection Team concept Common goals & objectives Design phase assistance Faster schedule delivery Less expensive Change flexibility Fewer claims, legal issues Applies to horizontal work with 40% self-performance 	<ul style="list-style-type: none"> Owner must provide project parameters; cost, schedule, quality, etc. Team concepts must be implemented; open communication, trust, commitment, etc. (May be a cultural problem)
<p>DESIGN BUILD (DB)</p> <p>Best Suited: New or renovation projects that are schedule sensitive. Approached in a team concept.</p> <p>Least Suited: Projects that are difficult to define and are less schedule sensitive with participants lacking an understanding of Design Build process.</p>		<p>Design Builder (DB) – ADOT <u>Two Step Qualifications</u> Request for Statements of Qualification (SOQ):</p> <p>Request for Proposal (RFP): Section 28-7363, Para. A, B, C, D, E, F Section 28-7364, Criteria 1, 2, 3, 4, 5 Section 28-7365, Para. A, B, C, D, E, F, G Section 28-6923 Section 28-6924 Section 28-7361</p>	<p>Best value selection</p> <ul style="list-style-type: none"> Qualification Price <ul style="list-style-type: none"> Single point of responsibility for design and construction Team concept Common goals & objectives Faster schedule delivery Fewer claims, legal issues Obligate funds quickly 	<ul style="list-style-type: none"> Owner must provide project parameters; cost, schedule, quality, etc. Loss of check and balance May be more difficult for owner to manage project Team concepts must be implemented; open communication, trust, commitment, etc. (May be a cultural problem) Perception of threat to “in house” staff
<p>JOB ORDER CONTRACTING (JOC)</p> <p>Best Suited: Schedule sensitive, single or multi-trade, repair, alteration, or renovation projects.</p> <p>Least Suited: Simple projects with defined work scope lacking schedule sensitivity.</p>		<p>Job Order Contractor (JOC) <u>One Step Qualifications</u> Request for Statements of Qualification (SOQ): Section 28-7366, Para. A, B, C, D, E, F, G, H Section 28-6923 Section 28-6924</p> <p>Job Order Contractor (JOC) <u>Two Step Qualifications</u> Request for Statements of Qualification (SOQ): Section 28-7366, Para. A, B, C, G, H, I Section 28-6923 Section 28-6924</p> <p>Request for Proposal (RFP): Section 28-7366, Para. F Section 28-7367, Para. A, B, C</p>	<p>Best value selection</p> <ul style="list-style-type: none"> Qualification Price <ul style="list-style-type: none"> Faster schedule delivery Reduced “up-front” time & cost Less expensive Fewer changes Incentive for higher quality Trade subcontractor may perform as J.O.C. 	<ul style="list-style-type: none"> Perception of threat to “in house” staff Requires teamwork to reach potential Need trained owner personnel to best administer contract