

SPECIAL PROVISIONS TO THE CMAR CONTRACT

SECTION 10

GENERAL

10.01 OWNER

Wherever the word Owner, Sponsor, or Municipality appears in these specifications it shall be construed to mean the PHOENIX-MESA GATEWAY AIRPORT AUTHORITY, a joint powers airport authority authorized by the State of Arizona. The Owner's contact is:

Mr. Bob Draper, P.E. – Architecting and Facilities Director

Phoenix-Mesa Gateway Airport Authority

5835 South Sossaman Road

Mesa, Arizona 85212-0919

Phone: 480.988.7705

Facsimile: 480.988.2315

10.02 ARCHITECT

10.02.01 The Architectural Consultant for design of this project is:

Name

Address

City,ST Zip

Phone:

Facsimile:

10.03 LOCATION OF THE WORK

Phoenix-Mesa Gateway Airport is owned and operated by Phoenix-Mesa Gateway Airport Authority. The work is located in Mesa, Arizona, between **Sossaman Road and Ellsworth Road. Pecos Road lies to the south and Ray Road/Loop 202 lies to the north.**

10.04 GENERAL DESCRIPTION OF THE WORK AND CONTRACT SCHEDULE

Gateway Aviation Services Building Remodel project may be funded by Passenger Facility Charges (PFC's) and the Authority. The sponsor of this project is the Authority.

The intent of the *Gateway Aviation Services Building Remodel* project is **insert description**

10.05 SPECIFICATIONS AND CONTRACT DOCUMENTS

The following documents, labeled as:

Gateway Aviation Services Building Remodel

Authority Project No. 954

Authority Solicitation No. 2018-024-RFQ

10.06 SCHEDULE OF DRAWINGS

All construction plans sheets bearing an approval and date of approval are hereby made a part of the Contract, Contract Documents, and Specifications by reference.

10.07 RFI SUBMITTAL PROCESS

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the CMAR shall submit a Request for Information (RFI) to the Architect. Such request shall clearly state the CMAR's question or concern, reference the specification or plan sheet in question and state the date the request is submitted and the date by which the CMAR must have an answer in order not to delay CMAR operations. CMAR shall submit an RFI as soon as possible after having discovered need for additional information or clarification. The Architect shall provide such further explanations as may be necessary and the CMAR shall conform to them as part of the contract. In the event of any doubt or question arising respecting the true meaning of these specifications, the Special Provisions or the plans, reference shall be made to the Architect, whose decision thereon shall be final.

END SECTION 10

SECTION 20

CONTRACT ITEMS

20.01 LICENSING

It is the responsibility of the offeror to determine whether the offeror has the appropriate contracting licenses to perform the work. The Owner will make the award, if any, to the most qualified offeror who has the proper licenses. The offeror is required to have the licenses at the time of bidding. Licensing information is available from the Arizona Registrar of CMARs.

20.02 ERRORS AND OMISSIONS

Minor errors or omissions in the Proposal Form, Plans, or Specifications shall not relieve the CMAR from fulfilling the general intent of the Contract or from completing any item or items called for in the Plans, Specifications, or Proposal Form.

20.03 UNIFORM STANDARDS FOR PUBLIC WORKS CONSTRUCTION

The Maricopa Association of Governments Standard Details and Specifications that are not altered or modified by the plans or project specifications contained herein shall apply to this project even though the CMAR's attention is not specifically drawn to such provisions. In the event of any conflict between the contract documents for this project and these Standard Specifications, the Contract Documents for this project shall prevail.

20.04 PERMITS

It is the responsibility of the CMAR to acquire and pay for all necessary permits as required for work performed at Phoenix-Mesa Gateway Airport. The CMAR is responsible for the cost of, but not limited to, grading permits, federal clean water act, air quality permits, water meters, water and sewer taps, fire lines and taps, and all water bills on the project until the project is finally accepted. This provision does not constitute an assumption by the Phoenix-Mesa Gateway Airport Authority of an obligation of any kind for violation of said permit or notice requirements. The cost of all required permits shall be included as non-pay items.

20.05 TAXES

Each offeror and the CMAR shall thoroughly familiarize himself with all laws, ordinances, regulations and rules required for the payment of taxes, and each Offeror and the CMAR are

responsible for checking with the State of Arizona and the Maricopa County on items that may be exempt and the steps which should be taken to obtain such exemption. Each offeror shall include the current approved City of Mesa sales tax and State of Arizona sales tax for the work that is included in the GMP. See Additional tax requirements under Article 3.7 of the General Conditions.

20.06 ACCESS TO DOCUMENTS, RECORDS, ETC

Phoenix-Mesa Gateway Airport Authority, or any of their duly authorized representatives shall be allowed access to any books, documents, papers, and records of the CMAR which are directly pertinent to the project for the purpose of making audit, examinations, excerpts, and transcriptions.

20.07 CONSTRUCTION COST INFORMATION

The CMAR shall furnish any and all cost information requested by the Architect. The Phoenix-Mesa Gateway Airport Authority or any of their authorized representatives shall be allowed access to any books, documents, papers and records of the CMAR that are directly pertinent to this Project for the purpose of making audit, examination, excerpts and transcriptions.

20.08 FINAL PAYMENT

Upon satisfactory completion of all items called for in the Contract and in accordance with the approved plans and specifications, the CMAR shall furnish to the Architect, a CMAR's Affidavit Regarding the Settlement of Claims;, an original Affidavit acknowledging that all Subcontractors, Material Suppliers, Payrolls, Bills for Materials and Equipment, and other indebtedness connected with the work have been paid or are otherwise satisfied, an original Certificate evidencing that Insurance required by Section 11.2 of the *General Conditions* to the CMAR Contract is currently in effect and will not be canceled or allowed to expire until at least 30-days prior written notice has been given to the Owner, a written statement that the CMAR knows of no reason that the insurance will not cover the period required by Section 11.2 of the *General Conditions* to the CMAR Contract, a written consent of the Surety to Final Payment, Record Drawings with a certification that the drawings are accurate and complete, five (5) sets of Operation and Maintenance manuals, indexed and bound, containing manufacturer's warranties, instructions for maintenance and operation of each item of equipment and apparatus, an original, with notary signature, Full and Final Release and Waiver on Liens from the CMAR and for each Subcontractor and Material Supplier, that documents that they have been paid in full, Certificate of Completion, Written 1-year

Warranty, due at final completion, and other required documentation as provided for in Article 9.9 of the *General Conditions* to the CMAR Contract. The CMAR shall also be required to furnish the Owner with sworn affidavits attesting that all Subcontractors, employees, materials suppliers, mechanics, etc. have been paid in full, for all debts incurred by the CMAR for work on this Contract. Upon receipt of the above clearances, and as listed elsewhere in these Contract Documents, the CMAR will receive full payment for the entire amount of his Contract, less previous progress payments as provided for in the General Provisions of these specifications.

20.09 LIEN RELEASE

The CMAR shall submit monthly to the Architect, a lien release which documents that all subcontractors and material supplies have been paid for the previous months' work. No payment for the current month will be made until the CMAR has provided all lien releases for the previous month.

20.10 CLEAN WATER ACT

This project shall comply with all requirements and conditions for water quality standards and air quality regulations.

20.11 CONDITIONS FOR WATER QUALITY CERTIFICATION

No disposal of construction or demolition wastes, wastewater, contaminated water or any other potential pollutant will be authorized.

Runoff and seepage from runways, taxiways, roadways, embankments, or other alterations of the natural environment must not cause a violation of Water Quality Standards for Navigable Waters, A.A.C. Title 18, Chapter 11, Article 1.

All off-site material sources for the project must have valid and current permits under the Federal Clean Water Act, Sections 402 (NPDES) and 404 (Dredge and Fill) and the State Aquifer Protection Program, where necessary. Facilities and activities not covered by individual permits under these programs are not exempt from the duty to comply with water quality standards, and will be subject to compliance action, including possible closure by ADEQ if violation is documented. Other permits pertaining to air quality may be required for material sources and are the responsibility of the applicant or his agent(s).

Water for dust suppression shall not contain contaminants that could violate ADEQ water quality standards for surface waters or aquifers.

Practices to avoid or minimize damage to floodplain ecosystems, including riparian zones and wetlands, should be considered during project planning, construction and operation, consistent with the Final Report and Recommendations of the Governor's Riparian Habitat Task Force of October, 1990 and Executive Order 89-16.

Pollution from the operation of equipment in the construction area must be immediately removed from and properly disposed. Spills must be cleaned up and properly disposed of. Erosion control and/or other bank protection features should be used to minimize soil loss where appropriate.

Debris (such as soil, silt, sand, rubbish, cement, asphalt, oil or petroleum products, organic materials, tires, or batteries) derived from construction or demolition activities must not be deposited at any site where it may be washed into a watercourse.

20.12 CONDITIONS FOR AIR QUALITY CERTIFICATION

Portable sources of air pollution such as rock, sand, gravel, and asphaltic concrete plants are required to receive Installation and Operating Permits from the Office of Air Quality in order to operate in Arizona. Air quality certification is conditional upon all regulated sources obtaining and complying with air quality permitting requirements and applicable state air quality rules.

The applicant must provide a copy of these Air and Water Quality Certification Conditions to all subcontractors. The applicant must also post a copy of the conditions in a weather resistant location at the construction site where the workers may observe it.

20.13 PAY ITEMS

All pay items relating to the work indicated in these contract documents are listed in the bid proposal sheet. The CMAR shall include all necessary costs to complete this project within these items. Any work necessary to complete the project as represented in the Plans and Specifications that is not specifically noted as a pay item on the bid proposal sheet shall be considered incidental to the project and no separate payment will be made.

END SECTION 20

SECTION 30

PRECONSTRUCTION CONFERENCE AND SUBMITTALS

30.01 PRECONSTRUCTION CONFERENCE

The CMAR's project superintendent, the Construction Administration Resident Architect & Inspector, an FAA representative (if needed), the Architect and Phoenix-Mesa Gateway Airport Authority staff shall attend a pre-construction conference, conducted by the Project Manager to discuss the following subjects.

30.01.1 GENERAL INTEREST AND SAFETY ITEMS

1. The scope of the project and the sequence and timing of all operations. Submission of CMAR's construction schedule and barricade plan.
2. Relationship of the resident Architect to the sponsor with emphasis on the authority of the resident Architect to act in the sponsor's behalf.
3. Advise that the Owner has the authority to suspend operations, wholly or in part, when safety violations or nonconformance to the contract specifications are noted.
4. Relationship between ADOT Aeronautics, the FAA, and the Sponsor.
5. Identification of the CMAR's superintendent and a discussion of his/her authority and responsibilities.
6. Designation of sponsor representative responsible for notifying the Flight Service Station serving the airport of the proposed start and completion dates of construction or any circumstances requiring a NOTAM.
7. Scheduling of work and the need to perform certain items at various stages of the project, including operational safety problems that might arise because of the proposed work.
8. Discuss the notice to proceed date.
9. Operational Safety on Airports during construction, including the responsibility for marking and lighting of closed and hazardous areas, (see FAA Advisory Circulars 150/5370-2 (latest version) and 150/5340-1, *Operational Safety on Airports During Construction and Standards for Airport Marking*, (latest version) for detailed information).
10. Security requirements.
11. All responsible parties must be alert to the following hazard-producing situations that may develop during the construction period.

- a. Open trenches and settlement of backfill adjacent to pavement.
- b. Pavement "drop offs" or "lips" at pavement tie-in areas.
- c. The obliteration, inadvertent relocation or disturbance of the marking and/or lighting of displaced threshold and marking of closed runways or taxiways.
- d. Damage to existing in-use pavement lighting, marking or NAVAIDS by construction forces.
- e. Spillage from vehicles on active airport pavement.
- f. Temporary stockpiling of material for an extended period of time.
- g. CMAR vehicular traffic through restricted critical areas of NAVAID facilities and the airport operating area.
- h. Dust control and environmental factors, such as burning, waste disposal, etc.
- i. Maintenance of sanitary facilities on the project site.

30.01.2 CONSTRUCTION ITEMS

1. The general requirements of quality control and testing to be discussed. It should be clearly understood who will do the testing, what is to be tested, when it is to be tested, and the location and number of tests.
2. Discussion of Test Reports. Each report should, as a minimum, contain the following information.
 - a. Test performed.
 - b. Applicable standard.
 - c. Test location.
 - d. Test result.
 - e. Action taken for failing tests.

A copy of all test reports shall be furnished to the resident Architect in a timely manner. Failing test results should be reported to the resident Architect immediately. the Owner is not obligated to financially participate in construction that does not meet contract plans and specifications.

3. Emphasize the Role of the Project Manager. Duties include the following:
 - a. Ensure all required testing is performed.

- b. Ensure tests are performed at the frequency stated in the specifications. If not stated in the specifications make sure an adequate number of tests are taken to document an acceptable level.
 - c. Review test results for conformance to specifications.
 - d. Inform the CMAR of deficiencies so that corrections can be made and retests performed prior to covering any substandard work with additional material.
 - e. Maintain record of quantity of materials used on the project.
 - f. Maintain copies of test reports on file.
 - g. Maintain a diary. Contents of a diary should include:
 - (1) Weather conditions and temperature.
 - (2) Work in progress and location.
 - (3) Equipment in use - types and numbers.
 - (4) Size of work force including supervision.
 - (5) Hours worked per day for CMAR or subcontractors.
 - (6) Materials delivered.
 - (7) Any instructions to the CMAR.
 - (8) Principal visitors.
 - h. Maintain set of working drawings that can be used to prepare "as-constructed" drawings. Record drawings to be furnished by the CMAR.
4. Discussion of periodic construction report, *Construction Progress and Inspection Report* (FAA Form 5370-1).
5. Change orders, time extensions, periodic cost estimates, and liquidated damages.

30.01.3 LABOR REQUIREMENTS.

Labor requirements including items such as minimum wage rates, employee classification and payrolls, and review of payrolls.

30.01.5 ENVIRONMENTAL.

Comply with applicable federal, state, and local, air and water quality standards during construction and any environmental mitigation actions resulting from the environmental coordination process.

30.01.6 ARCHAEOLOGICAL AREAS.

Comply with applicable federal, state, and local preservation standards in archaeological areas during construction. If during construction the CMAR discovers what may be an archaeological site, a suspected human burial site, or the remains of any ancient structure and/or artifacts, the CMAR shall immediately cease performance of services in said areas and promptly notify Owner of the location of such sites. The CMAR is directed to Article 13.15 in the *General Conditions* for further information

30.02 CONSTRUCTION SCHEDULE

The CMAR shall submit to the Architect for review, its proposed construction schedule within ten (10) calendar days from the date of award of the contract, see Article 3.11 of the *General Conditions* to the *CMAR Contract*. The contract time is based on the CMAR working seven (7) days per week except for Holidays. There will be no work without written authorization from the Owner, with the exception to vacuum sweeping to clean up of foreign object debris, as described in the following:

- a. The night shift prior to Thanksgiving Day;
 - b. All day on Thanksgiving Day;
 - c. The night shift on Thanksgiving Day;
 - d. All day on the day after Thanksgiving Day
 - e. The night shift the day after Thanksgiving Day
 - f. The night shift on Christmas Eve;
 - g. All day on Christmas Day;
 - h. The night shift on Christmas Day;
 - i. The night shift on New Year's Eve;
 - j. All day on New Year's Day;
 - k. The night shift on New Year's Day.
1. Arrange schedule to indicate required sequencing of work as outlined below and in the Contract Documents, and to indicate time allowances for submittals, inspections, and similar time margins.
 2. Schedule shall reflect CMAR's modifications and suggested revisions to work sequencing indicated in the Contract Documents. The Owner reserves the right to approve or disapprove such modifications or revisions.

3. Review and recognition of this schedule shall not relieve the CMAR of responsibility for scheduling of the work and maintaining progress in accordance with the Contract Documents. Schedule shall be submitted and reviewed for comment by Architect and Owner for conformance to Critical Milestone Completion Dates and overall project completion time criteria. Lack of this information shall be cause for rejection of schedule. Partial payment requests will not be processed without a revised CPM schedule.
4. In addition to the construction related work items, the following shall be included:
 - Critical submittal dates related to each activity or prepare separate coordinated listing of critical submittal dates.
 - Sequences of work within each activity that involves purchase lead-time, mock-ups, testing, or similar phases, as well as installation.
 - The CPM Construction Schedule shall relate to the entire project to the extent required by the Contract Documents and shall provide for expeditious and practicable execution of the work.
5. The following items define the term "activities" as it pertains to the Trades in the CMAR's CPM network:
 - Each activity shall be a unit of work that requires an amount of time for its performance.
 - Each activity shall be a logically separate part of the work, defined by an observable start and an observable finish.
 - To establish the scope of an activity for CPM purposes, Trade CMAR shall form a single activity from the largest grouping of related operations which permit a continuous and measurable flow of work and which can proceed without affecting or being affected by work of another Trade CMAR.
 - The scope of an activity shall be small enough to permit a reasonable appraisal of its status or as directed by the Architect.
 - Activities of other contractors or other subcontractors that must be completed prior to the start of the Trade subcontractors work or portion of work shall be included in the Trade subcontractors schedule as milestones and identified with a designation approved by the CMAR.
6. The following information shall be furnished on the network diagram for each activity in the Trade CMAR's schedule:
 - Description of the activity.
 - Duration of the activity in days.
 - Who will be performing the activity (CMAR, supplier or subcontractor company name)
 - Each activity shall be identified with early/late start, early/late finish, and total float.

30.03 SHOP DRAWINGS AND SUBMITTALS

Refer to Article 3.13 of the *General Conditions* to the CMAR Contract for other requirements for shop drawings, product data and samples. Shop drawings and submittals shall be furnished by the CMAR and shall include such details as may be required to control the work adequately and are not included in the contract documents.

The CMAR shall furnish an adequate number of copies of shop drawings and submittals to allow the Architect to retain four (4) copies allowing two (2) weeks for review. The Architect will review all shop drawings and submittals for general compliance with the contract documents and no responsibility is assumed for correctness of dimensions or details. The Architect will indicate his action taken in response to the submittal or shop drawing by affixing a review stamp and indicating the action as follows:

"No Exceptions Taken", which means reviewed for construction, fabrication or manufacturer, subject to the provision that the work shall be in accordance with the requirements of the contract documents. Final acceptance of the work shall be contingent upon such compliance.

"Make Corrections Noted", which means unless otherwise noted on the drawings reviewed for constructing, fabrication or manufacture, subject to the provision that the work shall be carried out in compliance with all annotations or corrections indicated and in accordance with the requirements of the contract documents. Final acceptance of the work shall be contingent upon such compliance.

"Amend and Resubmit", which means the review as noted is valid, and a corrected submittal is required.

"Rejected", which means that deviations from the requirements of the contract exists in the submittal such that no work based on such drawings or submittal shall be constructed, fabricated, or manufactured. The CMAR shall revise the drawing in compliance with the Architect's annotations and pursuant to all requirements of the contract and shall resubmit the drawing or submittal to the Architect for another review.

The CMAR shall submit for review, a proposed schedule of submittals, shop drawings, working drawings, supplemental drawings, product data and samples as necessary to control the work adequately. A partial, example list of submittals has been made for reference and the list may not be complete and may be revised from time to time as the project progresses, as follows:

1. Operation and Maintenance Manuals.
2. Names and Resumes of Superintendent and Staff.
3. CMAR's Construction Schedule due 10 calendar days after the Notice of Award.

4. Updated CMAR's Construction Schedule (due with each monthly progress payment application).
5. A Submittal Schedule (due 10 calendar days after the Notice of Award, and due monthly).
6. Material Status Report (due monthly).
7. Manpower Schedule (due monthly).
8. Record Drawings.
9. A Schedule of Values.*
10. CMAR's Emergency Name and Phone Number List (FAA Project Requirements)*
11. A List designating those portions of the work to be performed by SubCMAR's and the CMARs own forces.
12. A List of SubCMARs, List of SubCMARs/Material Suppliers with an Experience Statement (
13. A Lien Release documenting that all SubCMARs and Material Suppliers have been paid for the previous months work, monthly submission required.
14. Written Safety Program for the work.
15. Copy of all Subcontracts, including Material Suppliers.
16. Duplicate Original Certified Payroll Reports and Statement of Compliance, with sworn affidavits from the CMAR (submitted weekly).
17. A List of Proposed Construction Equipment (FAA Project Requirement)*
18. Construction Cost Information, as requested by the Architect.
19. Three (3) week look ahead Project Schedule at Weekly Construction Meetings.
20. CMAR Certification that the Initial Verification of the Control Points established are acceptable.
21. CMAR Certification of Calculations and Measurements to fully support the derivation of all Monthly Pay Quantities.
22. A Barricade Plan and Traffic Control Plan. *
23. Shop Drawings for all Temporary Taxiway Signs.
24. A Construction Safety and Phasing Plan Compliance Document. *
25. CMAR's Quality Control Plan, to be submitted 5-days prior to the pre-construction conference.
26. CMAR's Quality Control Records, including Daily Inspection Reports and Daily Test Reports, to be submitted daily.
27. National Pollutant Discharge Elimination System Site Construction Permittee Inspection Checklist

28. Storm Water Pollution Prevention Plan Notice of Termination.
29. A Letter of Certification stating that all Dowel Bars used meet the requirements of the Contract Documents.
30. A Certified Copy of the test reports for the Preformed Joint Sealer, and the Preformed Joint Sealer Lubricant (If Applicable).
31. CMAR's Affidavit Regarding Settlement of Claims.
32. Submit an original Affidavit acknowledging that all SubCMARs, Material Suppliers, Payrolls, Bills for Materials and Equipment, and other indebtedness connected with the work have been paid or otherwise satisfied.
33. An original Certificate evidencing that Insurance required by the General Conditions to the CMAR Contract is currently in effect and will not be canceled or allowed to expire until at least 30-days prior written notice has been given to the Owner.
34. A written statement that the CMAR knows of no reason that the insurance will not cover the period required by the General Conditions to the CMAR Contract.
35. A written consent of the Surety to Final Payment.
36. Record Drawings with a certification that the drawings are accurate and complete.
37. Five (5) sets of Operation and Maintenance manuals, index and bound, containing manufacturer's warranties, instructions for maintenance and operation of each item of equipment and apparatus.
38. An original, with notary signature, Full and Final Release and Waiver on Liens from the CMAR and for each SubCMAR and Material Supplier, that documents that they have been paid in full.
39. Certificate of Completion.
40. Written 1-year Warrantee, due at final completion.
41. ADD AS NEEDED

*Indicates the submittal is due at the pre-construction conference.

Each submittal shall be numbered sequentially and shall be submitted in accordance with the above schedule, as amended from time to time, so as to cause no delay in the work schedule. The CMAR shall certify each submittal and shop drawing by providing an original letter (on CMAR's letterhead) to the Architect that he has reviewed and approved the submittal and that it conforms to the requirements of the contract documents. If this original certification is not included, the submittal and/or shop drawing will be returned without action. At the time of each submittal, the CMAR shall define and delineate in writing, separate from the certification, any deviations from the contract documents. If the Architect accepts this

deviation, he will authorize the deviation by issuing a change order or if the deviation is minor by endorsement to the letter.

The Architect's review will be only for general conformance with the design concept of the work and for compliance with the information contained in the contract documents. The review of a specified item, as such, will not indicate review of the assembly or in which the item functions. Review by the Architect will not relieve the CMAR from responsibility for any errors or omissions in the submittals or shop drawings nor from his responsibility for complying with the Contract Documents. The only exception is deviations accepted in accordance with the preceding paragraph.

END SECTION 30

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SECTION 40

CONTROL OF WORK

40.01 DAMAGE TO EXISTING PROPERTY

CMAR will be held responsible for any damage to existing structures, work, materials, or equipment because of his operations and shall repair or replace any damaged structures, work, materials, or equipment to the satisfaction of, and at no additional cost to the Owner.

CMAR shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection. CMAR shall be responsible for all damage to street, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, fences, or other public or private property, which may be caused by transporting equipment, materials, or men to or from the work. CMAR shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

40.02 STORAGE OF MATERIALS AND EQUIPMENT

Equipment and stockpiled materials may be stored in areas on the project site provided they are kept below a maximum height of 8 feet and not within any safety areas or Part 77 surfaces. Airport Operations shall approve all areas of storage.

40.03 ACCESS ROADS

The CMAR shall establish and maintain permanent and temporary access roads to various parts of the site as required in the drawings or as required to complete the Project. Unless otherwise noted on the plans or approved by the Authority, temporary roads or vehicular traffic will not be permitted within the designated archaeologically sensitive areas. Such roads shall be available for the use of all others performing work or furnishing services in connection with the Project. In addition, they must be out of the areas of the project that are open to aviation traffic. Approval of the Architect is required for all desired locations. **The CMAR is required to inspect and videotape all existing areas of work, access and haul roads anticipated to be used by the CMAR prior to the start of construction, with the accompany of the Owner or Resident Architect.** The CMAR will be required to maintain all access and haul routes used during the course of the work during construction and return them to their original condition at the completion of construction.

40.04 FENCES

The CMAR shall maintain all existing fences and gates affected by the work until completion of the work. Fences and gates that interfere with construction operations shall not be relocated or dismantled until written permission is obtained from the Owner, and the period the fence may be left relocated or dismantled as has been agreed upon. On completion of the work, the CMAR shall restore all fences, at their own expense, to their original or to a better condition and to their original location or as indicated on the drawings.

40.05 PARKING

The CMAR shall provide and maintain suitable parking areas for the use of all construction workers and others performing work or furnishing services in connection with the project, as required to avoid any need for parking personal vehicles where they may interfere with public traffic, Owner's operations, or construction activities. The CMAR's parking area will be located at the staging area upon approval of Airport Operations for security access. Vehicles with access into the Airport property require insurance as described in Article 11 of the *GENERAL CONDITIONS*.

40.06 DUST CONTROL

The CMAR shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant. Dusty materials in piles or in transit shall be covered to prevent blowing. Suitable dust screens shall protect existing or new machinery, motors, instrument panels or similar equipment. Proper ventilation shall be included with dust screens. County Dust permits are required and are a non-pay-item.

40.07 DRAINAGE PROVISIONS

The CMAR shall provide for the drainage of storm water and such water as may be applied or discharged on the site in performance of the work. Drainage facilities shall be adequate to prevent damage to the work, the site, and adjacent property. Existing drainage channels and conduits shall be cleaned, enlarged or supplemented as necessary to carry all increased runoff attributable to CMAR's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect Owner's facilities and the work, and to direct water to drainage channels or conduits. See Technical Specification P-156 for additional requirements.

40.08 EROSION CONTROL

CMAR shall prevent erosion of soil on the site and adjacent property resulting from his construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection. Work shall be scheduled to expose areas subject to erosion of the shortest possible time. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. See Technical Specification P-156 for additional requirements.

40.09 POLLUTION CONTROL

CMAR shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris and other substances resulting from construction activities. No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris or other substance will be permitted to enter sanitary sewers and reasonable measures will be taken to prevent such materials from entering any drain or watercourse. See Technical Specification P-156 for additional requirements.

40.10 EXCESS MATERIAL

Unsuitable material, broken asphaltic concrete, construction debris, and broken Portland cement concrete resulting from the construction shall be removed from the project and disposed of at an offsite location (landfill) by the CMAR at the CMAR's expense.

40.11 CONSTRUCTION DEBRIS

The CMAR shall use his own forces and equipment to dispose of site refuse or construction debris at an offsite location (landfill).

40.12 CLEAN-UP

The CMAR shall upon completion of the work remove all temporary construction facilities, debris, and unused materials provided for in the work, and restore the site of the work and public right-of-way in a neat and clean condition.

40.13 WEEKLY PROGRESS MEETINGS

The Architect will conduct weekly Progress Meetings at regularly scheduled times convenient for all parties involved. A three (3) week look-ahead schedule will be developed by the

CMAR prior to the start of the meeting and will be discussed by the CMAR during a portion of the agenda. Additionally, discussions will address administrative and technical issues of concern, determining resolutions and development of deadlines for resolution within allowable time frames.

As may be required by the Architect, in addition to representatives of the Phoenix-Mesa Gateway Airport Authority and the CMAR, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities may be represented at these meetings by individuals directly involved with the Contract and authorized to conclude matters relating to progress.

During the weekly construction meeting, there will be review and corrections (if any) and approve the meeting minutes of the previous progress meeting prepared by the Architect. The meeting minutes may be tape recorded and will document issues of significance including submittals, schedules, quality control, issues encountered, and the assignment of responsibilities for future action. Other items of significance that could affect progress may be discussed, and the meeting will include topics for discussion as appropriate to the current status of the project, including:

Review progress since the last meeting. Determine where each activity is in relation to the CMAR's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

Review the present and future needs of each entity present, including such items as:

1. Work Schedule and Hours of Work
2. Quality and Work Standards
3. Access and Limitation
4. Submittal Status
5. Requests for Information
6. Non-Compliance Notices
7. Status on Certified Payroll Reports
8. Change Orders and/or Extra Work
9. Housekeeping

The Architect may tape record the meeting and the Architect will distribute a copy to the Owner and CMAR. The CMAR shall be responsible to distribute the meeting minutes to subcontractors, suppliers, and others affected by decisions or actions resulting from each meeting.

40.14 CONSTRUCTION SURVEYING LAYOUT

Reference this section with *General Provisions* Section 50-06.

The CMAR shall set all construction stakes establishing lines, grades, and elevations to include necessary utilities and appurtenances and shall be responsible for their conformance with plans and specifications. The Architect will establish or designate (within the plan sheets) a control line or benchmark of known location and elevation for use as a reference. The CMAR shall furnish all materials, personnel and equipment necessary to perform all surveying, staking and verification of the accuracy of all existing control points, which have been provided by the Architect and/or Phoenix-Mesa Gateway Airport Authority. Included in this work shall be all calculations required for the satisfactory completion of the project in conformance with the plans and specifications. The work shall include establishing and marking "Record Drawings" coordinates and elevations on survey monuments and other designated locations. The work shall be done under the direction of a registered land surveyor employed by the CMAR. All survey crew chiefs shall be either a registered Civil Architect, a registered Land Surveyor, an Architect-in-Training, or a NICET Level III (or a higher NICET level) certified technician.

Materials and equipment shall include, but shall not necessarily be limited to, vehicles for transporting personnel and equipment, properly adjusted and accurate survey equipment, straightedges, stakes, flagging and all other devices necessary for checking, marking, establishing and maintaining lines, grades and layout to perform the work called for in the contract. The CMAR shall furnish a sufficient quantity of competent personnel to perform the survey work and layout.

The CMAR shall not employ nor engage the services of any person or persons in the employ of the Architect or the Phoenix-Mesa Gateway Airport Authority for the performance of any work as described herein.

a. Field Books. The CMAR shall furnish and use bound field books for recording survey data and field notes. These books shall be available for inspection by the Architect at any

time and shall become property of the Owner upon completion of the work.

b. Initial Verification. Prior to setting any construction stakes the CMAR shall first verify the accuracy of the control points established by the Architect. If errors are discovered during this verification process, and the control points do not agree with the geometry shown in the plans, the CMAR shall immediately notify the Architect in writing, explaining the issue in detail. The Architect will advise the CMAR within five (5) working days of any corrective actions, which may be deemed necessary. Secondly, upon completion of this verification process, the CMAR's registered Land Surveyor shall certify in writing, that all control points established by the Architect are acceptable and adequate to allow the CMAR's construction staking to meet the accuracy requirements of the specifications.

c. General Description. After the CMAR's registered surveyor has submitted his written certification verifying the accuracy of the control points established by the Architect, the CMAR shall set all stakes including, but not necessarily limited to: centerline stakes, offset stakes, reference point stakes, slope stakes, pavement lines, curb lines and grade stakes, stakes for sewers and waterlines, airfield drainage, pipe, underdrains, clearing, survey monuments, blue tops for subgrade, base and pavement courses, paint striping layouts, supplemental bench marks and permanent as-built elevation marks, as-built survey elevations of concrete pavement (all joints, corners of each panel) and asphalt base under concrete pavements at each concrete paving joint intersection, and the as-built elevations prior to placing the base course shall be obtained as well as all other horizontal or vertical controls necessary for complete and accurate layout of the construction work, and submitted to the Architect.

d. Preservation. The CMAR shall exercise care in the preservation of stakes, references and benchmarks and shall reset them when any are damaged, lost, displaced or removed. Station and offset reference stakes shall be installed and maintained at all times on each side of the Taxiway and on each side of all connecting Taxiways at 100-foot intervals.

e. Discrepancies. Any discrepancies in the grade, alignment, quantities, locations or dimensions detected by the CMAR shall immediately be brought to the attention of the Architect. Changes to the project plans will not be allowed without the written approval of the Architect.

f. Random Inspections. The Architect reserves the right to make inspections and random checks of any portion of the staking and layout work. If, in the Architect's opinion, the work is not being performed in a manner that will assure proper controls and accuracy, he may order any or all of the staking and layout work re-done, or he can order further staking to supplement the original work, both of which would be at no additional cost to the William Gateway Airport Authority.

g. Special Staking Requirements. Utility adjustments and Taxiway signs are a part of the Contract; therefore, the CMAR shall perform all layout work and set all control points, stakes and reference necessary for carrying out all such adjustments.

h. Monthly Pay Quantities. Measurement of all pay quantities will be the responsibility of the Architect. However, the CMAR shall furnish the Architect for each pay period, a certified set of calculations and measurements to fully support the derivation of all pay quantities.

i. Additional Work. If additional staking and layout are required as the result of additional work ordered by the Architect, such work will be paid at the respective predetermined unit prices specified herein. The amount per hour for a two (2) person or three (3) person survey party, a survey manager and a registered land surveyor includes the cost of all work necessary to complete the extra work, including the CMAR's overhead, profit, bond, insurance and sales tax and extended general condition costs.

j. Measurement. Reference General Provisions Section 50-06 for measurement and payment.

40.15 SAMPLING AND TESTING

The Owner shall employ the official testing laboratory for acceptance testing. The CMAR shall employ the laboratory for quality control testing or plant calibration and it shall not be the same laboratory as the one employed by the Owner. The quality control measures by the CMAR shall be sufficient to produce materials of acceptable quality. The CMAR is required to provide and maintain a Quality Control Program, along with all the personnel, equipment, supplies and facilities necessary to obtain samples, perform tests, and otherwise assure the quality of the product(s). The Architect may require the CMAR's technician to perform testing of samples to demonstrate an acceptable level of performance.

The CMAR shall utilize a statistical based procedure of random sampling that provides that all material being produced will have an equal chance of being selected for sampling and testing. The CMAR shall sample and test any material that appears inconsistent with similar material being sampled unless such material is voluntarily removed and replaced or corrected by the CMAR. All sampling shall be in accordance with standard AASHTO or ASTM procedures.

The CMAR is directed to General Provisions Section 50.06 for additional information, requirements, measurement and payment for Construction Survey and Staking.

40.16 RECORD DRAWINGS

The CMAR shall keep one or more copy of all specifications, plans (24x36 in size), any addenda issued during the bidding process, any modifications to the plans and contract documents during construction (i.e. ESI, RFI, etc.), working drawings and shop drawings at the site, and in good order. One set of 24x36 plans shall be continually annotated by the CMAR to show all changes made during the construction process as they occurred. Additionally, these plans shall be verified by a licensed land surveyor.

The Architect and/or Project Manager will review the completeness of the Record Drawings on a monthly basis prior to and as a condition of approval of the monthly progress payments.

Upon completion of the project and prior to submittal of the final application for payment, a single, complete, all-inclusive, annotated full set of plans showing all “As-Built” work together with any annotated working and Shop Drawings, RFI’s, ESI’s, and Change Orders of relevance shall be delivered to the Architect for the Owner’s record. At a minimum, the CMAR shall provide as-built elevations for each design grade that is shown on the plans. The CMAR shall provide stations and offsets for each handhole, manhole, light can/base, catch basin or other similar structure on the annotated set of record drawings. The “As-Built” set of plans must be sealed by a registered Arizona Surveyor.

END SECTION 40

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SECTION 50

UTILITIES AND EXISTING FACILITIES

50.01 GENERAL

This item shall govern the field location of all underground existing utilities in areas to be improved, to avoid conflicts with proposed surface or underground improvement. Work under this section shall include, but not be limited to, the investigation and locating of all underground facilities. Underground facilities means any item that is buried or placed below ground for use in connection with the storage or conveyance of water, sewage, electronic, telephone or telegraphic communications, electric energy, oil, gas or other substances, and shall include, but not be limited to pipes, sewers, conduits, cables, valves, lines, wires, manholes, attachments and those portions of poles and their attachments below ground, including electrical and communication ducts, airfield lighting and control cables, fiber optic lines, storm drains, electrical and telephone lines. The CMAR shall employ a private utility location service to locate the existing Owner and non-Owner utilities prior to starting the work. The CMAR shall blue stake and pot hole and use prudent care when excavating and locating said utilities.

The CMAR shall, after October 1, 1988, comply with the State requirements regarding excavation and underground utilities per A.R.S., Chapter 2, Article 6.3. and other pertinent Sections of the Blue Stake Law. The Airport is not a member, but has distribution systems for gas, electrical, water, and sewer on the site. The CMAR shall be responsible for locating all Owner and non-Owner utilities.

The CMAR's attention is directed to the following Arizona Revised Statutes:

a. ARS 40-360.22. Excavations, determining location of underground facilities; providing information. This statute requires that no person shall begin excavation before the location and marking are complete or the excavator is notified that marking is unnecessary and requires that upon notification, the Owner of the facility shall respond as promptly as practical, but in no event later than two (2) working days. This section is not applicable to an excavation made during an emergency that involves danger to life, health or property if reasonable precautions are taken to protect underground facilities.

b. ARS 40-360.23. Making excavations in careful, prudent manner; liability for negligence. This statute states that obtaining information as required does not excuse any

person making any excavation from doing so in a careful and prudent manner no shall it excuse such persons from liability for any damage or injury resulting from his negligence.

c. **ARS 40-360.28.** Civil penalty; liability. If the Owner or operator fails to locate, or incorrectly locates the underground facility, pursuant to this article, the Owner or operator becomes liable for resulting damages, costs and expenses to the injured party.

50.02 EXISTING UTILITIES

The CMAR is hereby advised that the location of all utilities, as shown on the Plans, may not be complete nor exact and the CMAR shall satisfy himself as to the exact location of the utilities. The CMAR shall be responsible for any damage done to public or private property and shall be repaired at the CMAR's expense.

Location of any underground telephone lines may be field verified by calling the Blue Stake Center telephone number "Arizona 811". The CMAR is required by Blue Stake Center to call at least two (2) working days before digging. The CMAR shall locate all utilities that Blue Stake will not locate.

The following utilities companies may serve the Phoenix-Mesa Gateway Airport directly or can provide services as requested.

TABLE – Utility Companies for Existing Utilities and Flood Plain Information.

Utility	Description
Water	City of Mesa
Electrical	Salt River Project
Airport	Authority (Communications & Special Systems)
Telephone	Century Link and Cox (Telephone and Data)

Sanitary	City of Mesa
Drainage	Maricopa Flood Control District, (East Maricopa and Powerline Floodway)
Flood Plain	The project is within the 500-year flood plain.

The CMAR is to protect all existing facilities during construction. The CMAR shall notify the appropriate Utility Company or agency of any construction that may affect their facilities.

50.03 WATER FOR CONSTRUCTION PURPOSES

The CMAR, at their own expense, shall obtain and provide all water required for and in connection with the work to be performed. The CMAR shall remove all temporary waterlines installed by him, after completion of the work, if directed to do so by the Architect.

It is the CMAR's responsibility to identify the water source, its compatibility, storage, and costs for all water requirements for this project. The CMAR must submit a water source and its intended use to the Architect for approval. No direct payment will be made for construction water. The cost thereof shall be included in other items for which direct payment is made.

50.04 ELECTRICAL POWER

All power for lighting, operation of CMAR's plant or equipment, or for any other use as may be required in the execution of the work to be performed under the provision of these Contract Documents shall be provided by the CMAR at their expense. The CMAR shall remove all temporary electrical facilities installed by him, after completion of the work, if ordered to do so by the Architect.

50.05 TELEPHONE SERVICE

The CMAR shall make all necessary arrangements with the telephone utility for telephones in his offices at the site and separate telephones, fax, high-speed internet, and a direct service line in the office of the Architect, and shall pay all monthly charges therefore including long distance calls from the office of the Architect. All CMARs and others performing work or

furnishing services at the site shall be permitted to use the CMAR's telephone without charge for calls pertaining to the work.

50.06 SANITARY FACILITIES

CMAR shall furnish temporary sanitary facilities at the site, as provided herein, at their own expense, for the needs of all construction workers and other performing work or furnishing services on the Project. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 men. CMAR shall enforce the use of such sanitary facilities by all personnel at the site.

END SECTION 50

DRAFT

SECTION 60

OPERATIONS, SAFETY AND SECURITY

The CMAR shall reference the Construction Safety and Phasing Plan for a comprehensive report of the safety procedures and requirements on this project.

60.01 DEFINITIONS

- a. **Air Carrier Aircraft** - An aircraft with a seating capacity of more than 30 passengers that is being operated by an air carrier.
- b. **Air Carrier Operation** - The takeoff and landing of an air carrier aircraft and includes the period of time from 15 minutes before and until 15 minutes after the takeoff or landing.
- c. **Air Operations Area (AOA)** - Air operations area, paved or unpaved, is any area of the airport used for or intended for landing, takeoff, or surface maneuvering of aircraft including its associated runway, taxiway, or apron.
- d. **Airfield Operations Specialist** – The Authority employee who monitors activities within the Airport Restricted Areas. Operations Specialists ensure a safe and secure operating environment is maintained on the airfield.
- e. **Airport Marking Aids** - Marking used on runway and taxiway surfaces to identify a specific runway, a runway threshold, a centerline, a hold line, etc. A runway should be marked in accordance with its present usage such as: visual, non-precision instrument, precision instrument.
- f. **Construction** - The presence and movement of construction-related personnel, equipment, and materials in any location that could infringe upon the movement of aircraft.
- g. **Escort** - person authorized by the Authority to accompany CMAR personnel within the Airport Restricted Area. The escort shall accompany or monitor the activities of

an individual(s) in a manner sufficient to take responsive action in a sized area approved by the Architect. A proper escort is defined as maintaining visual monitoring, within reasonable voice range and being able to react to the actions of those under escort.

- h. **FAA** - The Federal Aviation Administration, a branch of the U.S. Department of Transportation that regulates aviation and airport safety and certification.
- i. **FDC** – Fire Department Connection.
- j. **FOD** - Foreign Object Debris/Damage, meaning any object that is potentially hazardous to aircraft.
- k. **General Aviation** - That portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of public convenience and necessity from a Civil Aeronautics Board and Large aircraft commercial operators.
- l. **Haul Route** - A specified path created for vehicles to maneuver within the Airport Restricted Area to/from a work site. Haul routes are subject to the approval of the Architect in accordance with the contract documents.
- m. **Instrument Landing System (ILS)** – An electronic visual approach guidance system used by aircraft during landing operations.
- n. **Movement Area** - The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas (reference 14 CFR part 139).
- o. **Navigational Aid (NAVAID)** - An apparatus generally located within the AOA, serving as a guide to aircraft.
- p. **Obstruction** - Any object/obstacle exceeding the obstruction standards specified by 14 CFR part 77, subpart C.
- q. **Object Free Area (OFA)** - An area on the ground centered on the runway, taxiway, or taxilane centerline provided to enhance safety of aircraft operations by having the

area free of objects except for those objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes (see AC 150/5300-13, *Airport Design*, for additional guidance on OFA standards and wingtip clearance criteria).

- r. **Obstacle Free Zone (OFZ)** - The airspace below 150 feet (45m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway and for missed approaches (refer to AC 150/5300-13 for guidance on OFZs).
- s. **Precision Approach Path Indicator (PAPI)** - An airport lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity red and white focused light beams which indicate to the pilot that he/she is "on path" if he sees red/white, "above path" if white/white, and "below path" if red/red.
- t. **Restricted Area** – Areas that do not allow access to the general public. These are limited access areas that the Executive Director, the FAA, or commercial aviation business owners have elected to restrict for purposes of security or safety. It is enclosed by a perimeter fence and includes but is not limited to the AOA, perimeter roadways, haul routes, CMAR security gate and worksite.
- u. **Runway** - A defined rectangular area on a land airport prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees; e.g., Runway 12 and Runway 30.
- v. **Runway End Identifier Lights (REIL)** - Two synchronized flashing lights, one on each side of the runway threshold, which provides rapid and positive identification of the approach end of a particular runway.
- w. **Runway Lights/Runway Edge Lights** - Lights having a prescribed angle of emission used to define the lateral limits of a runway. Runway lights are uniformly spaced and the intensity may be controlled or preset.
- x. **Runway Safety Area (RSA)** - A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway, in accordance with AC 150/5300-13.

- y. **Safety Area** - A designated area abutting the edges of a runway or taxiway intended to reduce the risk of damage to an aircraft inadvertently leaving the runway or taxiway.
- z. **Taxi** - The movement of an airplane under its own power on the surface of an airport.
- aa. **Taxiway** - A defined surface used by aircraft for transition/movement to and from aircraft parking areas/aprons to runways.
- bb. **Taxiway Lights/Taxiway Edge Lights** - Lights having a prescribed angle of emission used to define the lateral limits of a taxiway and are blue in color.
- cc. **Threshold Lights** - Fixed green lights arranged symmetrically left and right of the runway centerline, identifying the runway threshold.
- dd. **TSA** – The Transportation Security Administration, a branch of the U.S. Department of Homeland Security that oversees aviation security.
- ee. **Visual Flight Rules (VFR)** - Rules that govern the procedures for conducting flight under visual conditions. The term "VFR" is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements.
- ff. **Worksite** - Area in which work under contract is being performed, generally starting at the CMAR on-site trailer. Airport ID badges must be displayed within the worksite at all times.

60.02 AIRPORT SECURITY REQUIREMENTS

This project will be constructed both inside and outside of the sterile area of the Terminal (each side of the TSA checkpoint).

The airport is operated in strict compliance with Transportation Security Administration (TSA) and Federal Aviation Regulations (FAR), which prohibit unauthorized persons or vehicles in the Air Operations Area (AOA). Equipment and workmen will be restricted to the work area defined on the plans. Any violation by

CMAR's personnel or subcontractors' personnel will subject the CMAR to penalties imposed by the TSA or the Authority.

The CMAR will assume all fines against the Authority assessed to them by the TSA for the CMAR's security violations. Typical fines are ten thousand dollars (\$10,000.00) or more per incident.

The CMAR shall be responsible for the protection of the construction site, and all work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons. Security measures shall include such additional security fencing, barricades, lighting, and other measures as the CMAR may deem necessary to protect the site.

The CMAR's responsibilities for work areas are as follows:

1. The CMAR shall be held responsible for controlling his employees, subcontractors, and their employees with regard to traffic and personnel movements.
2. The CMAR shall rebuild, repair, restore, and make good at his own expense all injuries or damages to any portion of the work occasioned by his use of these facilities before completion and acceptance of his work.
3. The CMAR shall submit to the Architect in writing a detailed work plan for each construction phase. The work plan shall include, but not be limited to, temporary electrical facilities, installation sequence of underground electrical and storm sewer systems, paving sequence, and installation sequence of electrical items. **This plan shall be submitted 14 calendar days prior to the start of each construction phase.** No work within the construction phase may commence until the phase work plan is approved.
4. The following language shall be used in all solicitations, Contracts and subcontracts requiring the distribution of security badges to CMAR, subcontractor or material supplier employees:
 - a. **AIRPORT ACCESS BADGES** - All CMAR and/or subcontractor personnel performing work in accordance with this Contract shall obtain and properly display a Phoenix-Mesa Gateway Airport (IWA) airport security badge. The CMAR shall submit a Security Badge Application form to the Authority security office for each employee requiring unescorted access, along with the current fee for each badge. The fee must be paid for with cash or check. The Security Badge Application form and instructions are available via the Internet at www.gatewayairport.com.

A Company Principal of the CMAR must obtain and submit a “Company Security Media Authorization” form, which is to be submitted to the Authority Badging Office. The Company Security Media Authorization will identify those individuals employed by the CMAR who are authorized to approve and sign a Security Badge Application for other employees of the CMAR. The Company Security Media Authorization form and instructions are available via the Internet at www.gatewayairport.com

1. All CMAR and subcontractor personnel that are to be issued an Airport Identification Badge are required to attend and successfully complete a training class before being issued an identification badge. Fees for the security badge include attendance for the necessary training classes. Attendance at the security classes and issuance of the security badge may take 2 hours per person.

The types of training required will be determined by the scope and location of the work involved. All personnel that will receive Airport badges shall attend the security training. Additionally, personnel operating vehicles or equipment within the Restricted Area of the airport will attend Airport Driver training, all personnel working near active movement areas will attend the Operational Safety on Airports training and any personnel acting as a Gate Guard/Crossing Guard will attend the Gate Guard/Crossing Guard training.

2. Additional information, including a “Frequently Asked Questions” is available via the Internet at www.gatewayairport.com or by contacting the Authority Badging Office at 480.988.7520 or via email to badgingoffice@gatewayairport.com

The Badging Office is located at 6263 S. Taxiway Circle, Mesa AZ 85212.

3. The CMAR should allow thirty (30) business days lead time for employee badges to be issued.
4. The CMAR shall immediately notify Airport Operations/Badging Office of any CMAR personnel whose employment status has changed.
5. The CMAR shall be responsible for retrieving all security badges and keys and return them to the Badging Office. A fee will be charged for each badge that is damaged, lost or not returned.

6. The Authority Badging Office will require the following from each badge applicant before a security badge is issued:

Security Badge Application - All employees are required to complete a security badge application form. The security badge application is available via the Internet at www.gatewayairport.com.

CMAR-Provided Escorts - The job superintendent and assistant superintendent will be responsible for escorting their non-badged employees, visitors, vendors, subcontractors and material suppliers while on the job site, assuring that no breaches of the Airport security program occur.

Company Security Media Authorization - A Principal of the CMAR is required to complete and submit to the Authority Badging Office this form, which identifies authorized signatories for the CMAR.

For current badging hours or any other questions pertaining to badging, please call the Badging Office at 480.988.7522.

Airport security badges are issued by the Authority Airport Operations and will be required when working within the Restricted Area. It is recommended that Superintendents, Foremen, Supervisors, or Leads be issued an airport security badge who then can provide the required escort for their work crew.

- Airport ID badges issued by the Airport are property of the Airport and must be surrendered upon the request of any Airport personnel.
- No person shall loan or provide airport ID badges to anyone other than to whom the badge was issued.
- Airport ID badges must be properly displayed on the outermost garment, above the waist, at all times while within the Restricted Area.
- Airport ID badges shall not be mutilated or altered from its original form in any way, nor shall any such media be reproduced or copied in such a manner as to degrade the security of the ID system.
- Airport ID badges are non-transferable.

- Damaged badges will be subject to a replacement fee.
- Contractors are required to wear the armband that accompanies the badge.
- The CMAR shall be assessed a fee for each lost/unreturned badge.
- The CMAR must immediately report to the Badging Office any lost badge or any employee who quits or is terminated, and the employee's badge must be returned to the Authority.

b. Access Control

Any time access is required within the Restricted Areas the CMAR shall be responsible for assuring that no breaches of airport security occur. Restricted areas are fenced and must remain fenced at all times. The gates will remain closed and locked or a guard will be provided at the CMAR's expense. The CMAR will furnish the guard with a roster of his personnel and ensure that each individual has adequate identification. The duplicate keys for each lock will be turned over to the airport authorities.

- No person shall enter the CMAR worksite without authorization. Any person found within the worksite without proper identification as describe herein shall be considered unauthorized and shall be removed from the worksite.
- All persons authorized access to the worksite shall display a valid Airport ID badge issued by the Authority or be under authorized escort.
- Persons authorized to provide escorts include the Authority staff and designated CMAR supervisors. The number of personnel being escorted shall not exceed ten (10) non-badged personnel; this includes vendors, subcontractors, visitors and part-time workers. Equipment Operators are not allowed to provide escort while operating equipment. **Failure to provide an escort can result in loss of escort privileges, fines, revocation of the security badge, or all three.**

c. Challenge Procedures

All personnel are responsible for challenging and reporting anyone in their work areas not displaying an Airport ID badge. Personnel shall contact Airport Operations and/or Mesa Police Department and detain person(s) if safe to do so.

60.03 AIRPORT SAFETY REQUIREMENTS

a. Operating Construction Vehicles on the Airport

No vehicle shall enter the CMAR worksite unless the following conditions are met:

- The driver is authorized to access the worksite (in possession of valid security badge with a driver endorsement).
- The driver possesses a valid driver's license.
- The vehicle is properly marked with the company name.
- Vehicle is marked with beacon or checkered flag or under escort.
- Transient haul truck drivers are not required to obtain an Airport ID badge but are required to check in with the CMAR security guard.
- All equipment operators are required to be badged when working within the Airport Restricted Area.

b. Prohibited Vehicles

The use of motorcycles, bicycles, two-wheeled motor scooters and privately owned vehicles within the worksite is strictly prohibited.

c. Vehicle Condition

Vehicles must be in good mechanical condition with operational lights, horn, brakes, and clear visibility from the driver's seat. Trailers and semi-trailers must be equipped with proper brakes so that when disengaged from a towing vehicle, neither aircraft engine blast nor wind will cause them to become free rolling.

d. Compliance

All traffic within the Airport Restricted Area and/or CMAR worksite must comply with any lawful order, signal or direction of any Airport employee. When such traffic is controlled by signs or pavement markings, such symbols shall be obeyed, unless otherwise directed by an officer or agent of the Airport Authority.

e. Night or Low Visibility Operations

All vehicle headlights, taillights, and running or clearance lights shall be in operational condition. Headlights shall be used at all times.

f. Construction Vehicle and Equipment Markings

All construction equipment and vehicles shall have flashing amber lights, mounted at the highest point, during the nighttime and a 3' x 3' orange and white checkered flag or a flashing amber beacon during the daytime. All vehicles and equipment on the construction site shall have company designations visibly displayed. No personal vehicles will be allowed in the work area. All construction vehicles and equipment must have the company name and/or logo and vehicle number at least four (4) inches in height on each side of the vehicle.

g. Operation of Vehicles

No vehicle shall operate within the Airport Restricted Area:

- Unless operated by an individual in possession of a valid Airport Identification Badge with a driver's endorsement or, under the direct escort of someone who is.
- In a careless or negligent manner.
- With disregard of the rights and safety of others.
- At a speed or in a way which endangers persons or property.
- While the driver is under the influence of drugs or alcohol.
- If such vehicle is loaded or maintained as to endanger persons or property.

h. Speed Limits

The speed limit on the perimeter roads is 25 miles per hour. The speed limit on the haul route is 15 miles per hour.

i. Vehicle Accidents

Each operator of a motor vehicle involved in an accident on the airport that results in damage to property or personal injury shall first contact 9-1-1 and then report it fully to the Airport Operations Department as soon as possible after the accident. The report must include the name and address of the person reporting. Copies of reports taken by City of Mesa are acceptable for incidents that occur in the public areas of the airport.

j. Hearing Protection

CMAR personnel working on or adjacent to the AOA are encouraged to wear hearing protection.

k. Worker Injuries

In the event of a serious injury requiring medical attention call **911**. If called from a cell phone, tell the emergency operator to connect to the City of Mesa Emergency Dispatch, otherwise the call will be routed to Maricopa County Dispatch and that will delay emergency response. All injuries must also be reported to Airport Operations as soon as possible.

l. After Hours Contacts

The CMAR shall submit to the Architect a list of personnel who can be contacted 24 hours a day, seven (7) days a week and can respond in a reasonable time frame regarding any possible emergency on the work site. The list must include names, job title and phone numbers.

m. Daily Site Inspections

Prior to the CMAR leaving the worksite for the day, an inspection of the site shall be completed. All discrepancies noted in the inspection must be corrected to the satisfaction of the Architect prior to the CMAR leaving the worksite.

n. Deliveries

All deliveries for the CMAR shall be received by the CMAR. Deliveries will not be accepted by anyone other than the CMAR. The Authority nor its authorized representatives will not accept or be responsible for deliveries.

o. Haul Routes

- The majority of the haul route is in the City of Mesa Public Right-of-Way and CMAR shall abide by City of Mesa Traffic regulations. CMAR shall maintain access in the vicinity of the haul routes to provide access to the parking lot and the Authority vehicles.
- Placards will be issued to transient haul trucks (i.e. concrete) upon entry into the Restricted Area by the gate guard.

p. Cranes or Mobilized Equipment

All activities involving cranes or mobilized vehicles exceeding 20 feet in height on or near the AOA require 48-hour advance coordination with Airport Operations. The following information is required:

- Location of equipment
- Maximum extendable height
- Duration of use
- Daily hours of operation
- Whether or not the crane can be lowered when not in use

Equipment must be lowered to its stowed height when not in use or as otherwise directed. The **highest point** of each piece of equipment shall be marked by a 3' x 3' orange and white checkered flag. At night and during periods of low visibility, the highest point of the crane must be marked by a red obstruction light. Crews must be prepared to remove equipment promptly if so directed.

The CMAR is advised that it may take up to 12 weeks to obtain an airspace determination for construction equipment (such as a concrete batch plant if he elects to use one), and he must submit information required for inclusion into the FAA 7460 airspace evaluation submittal as soon as feasible after Notice of Award in order to not delay the project schedule. This review should be included in the CMAR's schedule.

q. Staging & Storage Area

All CMAR materials, equipment and supplies shall be within the CMAR's designated staging & storage area. All staging & storage areas shall be marked, debris boxes covered and area kept neat and clean of debris.

For equipment that must remain in the work area, the following conditions must be met:

- Be marked with lighted barricades around the equipment perimeter with a spacing of no more than 10 feet.
- Be coordinated at least 48 hours in advance with the Architect.
- The highest point of the equipment marked and lit with a red flashing/steady burning omni-directional obstruction light.

r. Barricades & Lighting

The perimeters of the actual work areas, all uneven surfaces, mounds and excavations shall be adequately barricaded in accordance with the plans and contract documents including but not limited to vertical panel barricades, low level barricades and/or Type II barricades and lighted with omni-directional flashing red lights to prevent intrusion by taxiing aircraft, equipment, personnel and vehicles.

The CMAR shall provide and maintain all low-profile and vertical panel barricades and LED omni-directional lights, night and day. The lights for the low-level barricades shall be capable to be "screwed in" to the barricade. Low-profile barricades shall be orange and white in color and shall be a minimum of eight (6) feet in length and approximately ten (10) inches in height. All cones and other marking devices must be lighted or equipped with reflectors during periods of darkness as directed by Airport Operations.

All barricades, lights, flags and cones must be maintained and kept in proper working order by the CMAR day and night. All burned out lights must be replaced immediately. Barricades, lights, flags and cones must remain upright at all times.

The low-profile barricades must always be filled with water. In situations of adverse weather, the placement of sandbags on barricades may also be required. The CMAR must also keep an adequate supply of extra barricades and lights on site for replacement. Escorts for barricade maintenance must be provided by the CMAR or coordinated in advance with Airport Operations.

Only red, battery powered or approved solar powered, lights are acceptable at the airport.

s. Trenches and Excavations

CMARs shall close trenches located within active safety areas at the end of each workday. No open trenches or excavations will be allowed within the following active safety areas without prior coordination and approval with the Architect:

- Open trenches not to exceed 500 feet in length at any one time.
- Spoils from excavations are to be placed closest to the trench.
- Spoils length not to exceed 500 feet in length at any one time.
- Spoil height is not to exceed 4 feet or any height that would cause a visual obstruction.

- Spoils not returned to the trench or removed from the worksite are to be properly marked with lighted barricades with a spacing of no more than 10' or that to properly delineate the trench.

t. Stockpiled Material

Stockpiled materials are allowed only within the CMAR's designated staging & storage areas.

u. CMAR Security Guards

The following procedures are for CMAR security guards controlling CMAR access gates into the Restricted Areas. CMAR is also responsible to:

- Use primary radio or back-up telephone equipment to contact Airport Operations and the CMAR Foreman of any security violation or threat to airport safety. Report any failure of radio or back-up equipment immediately.
- Assure that all authorized CMAR employees or suppliers use designated haul route and staging areas.
- Monitor the Restricted Area access gate at all times and NEVER leave a gate open, unsecured or unattended.

v. Deliveries

Delivery trucks must be properly escorted in order to proceed into any controlled area of the airport. The gate guard shall log down the date, driver name, and company. Advise the driver to wait at the gate until the escort arrives.

w. Haul Trucks

Transient haul truck drivers are required to check in with the CMAR security guard. The driver shall be issued an orange/white checkered flag to be mounted on the highest point of the truck; and shall be returned to the security guard upon check out. Advise the driver to remain on the marked haul route and follow the appropriate signs to the intended work area. At no time shall a driver unfamiliar with the worksite be allowed to deviate from the marked haul route.

x. Weapons

No person, except a peace officer, authorized air carrier employee, airport employee or a member of an armed force of the United States on official duty, shall carry any weapon, explosive, or inflammable material on or about his person, openly or

concealed, in the Restricted Area of the airport without the written permission of the Airport Director, Deputy Director or Director of Operations and Maintenance. A weapon includes all those listed in Section 13-301, Arizona Revised Statutes. No person shall furnish, give, sell, or trade a weapon on airport property.

y. CMAR Responsibilities

- The CMAR must maintain and provide to the Architect a log detailing the contract number, the airfield access point used, and all authorized and anticipated subcontractors and suppliers that will be requiring entry.
- The CMAR must furnish guards with a sufficient number of flags for transient vehicles such as concrete or asphalt trucks entering the Restricted Area.
- The CMAR must furnish guards a means of securing the access point should the guard have to leave the area in an emergency.

z. Construction Flagmen

Construction flagmen will be required at any crossings of taxiways by construction equipment.

60.04 MEASUREMENT AND PAYMENT

Measurement for Airfield Safety and Security shall be per lump sum and shall include full compensation for furnishing all labor, materials, checkered flags, warning lights, silt fence, traffic signs, airfield radios, crossing guards, escorts, power vacuum sweepers, furnishing and maintaining all barricades and lights day and night, vehicle and equipment markings, security badges and training for all construction personnel, tools, equipment, flagmen, cell phones, SPCD acceptable to Airport Operations, installation and removal of temporary pavement markings and all other incidentals required to safely control traffic and provide the proper security for the Airport as identified in the phasing plans.

60.05 SCHEDULE OF FINES (AS APPLICABLE TO THIS PROJECT)

Due to both the safety and security precautions necessary at the airport, failure of the CMAR and subcontractors to adhere to the prescribed requirements/regulations has consequences that may jeopardize the health, welfare and lives of the customers and employees at the airport, as well as the CMAR's own employees. Therefore, if the CMAR is found to be in non-compliance with the security, airfield badging/licensing and airfield safety requirements by either the Owner's personnel or the Architect or his representatives, the Owner may issue Notice of Violation (NOV). The CMAR may appeal the NOV, however appeals must be made

in writing, and within four (4) calendar days of the offending incident, to the Authority Project Representative. The appeal shall state, in sufficient detail, why the NOV/circumstances is unwarranted. A final and binding decision on the appeal will be made by Airport Operations within ten (10) working days of receipt of the appeal, the CMAR will then be notified of this decision in writing. No further appeals to the specific NOV will be considered/accepted. Subsequent fines and/or requirements, if any, will be applied in accordance with the Schedule of Fines table (on the next page), and the applicable amount will be withheld from the CMAR's monthly payment application following the date of the violation. The CMAR shall be held financially responsible for all NOV's issued to their subcontractors, lower tier subcontractors, or material suppliers associated with this Contract.

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DESCRIPTION OF FINES:	1ST OFFENSE	2ND OFFENSE	3RD OFFENSE
Parking in unauthorized areas.	\$1,000	\$2,500	\$5,000
Not having proper and current Airport Security Badge or not properly displaying Airport Security Badge.	\$1,000	\$5,000	\$15,000
Unauthorized access to AOA by construction personnel or access through construction gate by unauthorized personnel.	\$1,000	\$5,000	\$15,000
Failure to Escort / be Escorted.	\$1,000	\$5,000	\$15,000
Failure to secure an access gate / door when not in use, or failure to wait for an automated gate / door to close.	\$5,000	\$10,000	\$15,000
Operating a vehicle or mobile construction equipment without a current Ramp Driver's permit.	\$1,000	\$5,000	\$15,000
Failure to stop at a designated Stop, or exceeding the maximum speed limit, or deviating from designated service roadway or haul routes.	\$2,500	\$5,000	\$15,000
Failure to yield to airside personnel or vehicles.	\$1,000	\$5,000	\$15,000
Failure to yield to an aircraft and/or causing an aircraft to deviate from intended course.	\$5,000	\$10,000	\$15,000
No logo on vehicle or logo is not correct in name and dimension.	\$1,000	\$5,000	\$15,000
Runway incursion.	\$15,000	\$20,000	\$25,000
Runway/Taxiway deviation of an active taxiway, or apron.	\$10,000	\$15,000	\$20,000

Safety violation, such as insufficient barricades, or no flags or amber beacons on vehicle or equipment. Or no red obstruction lighting on cement silo, batch plants, cranes or other equipment with significant height.	\$5,000	\$10,000	\$15,000
Non-compliance with the Authority's lock-out tag-out procedures.	\$5,000	\$10,000	\$15,000
Failure to backfill open trenches within time specified.	\$5,000	\$10,000	\$15,000
Failure to provide lighted barricades.	\$5,000	\$10,000	\$15,000
Failure to provide functional temporary edge lighting.	\$5,000	\$10,000	\$15,000
All other NOV not listed in this Table 1.	\$1,000	\$5,000	\$15,000

END SECTION 60

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