

DESIGN PROFESSIONAL SERVICES

AMENDMENT NO. THREE

PROJECT NO. 62150453 – STORM WATER DEVELOPMENT/MASTER PLAN PHASE II AVIATION DEPARTMENT

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and CDM Smith, Inc. (Design Professional). The parties amend the Agreement entered into on December 21, 2015, as follows:

Sec. 1. Sections Amended. The Agreement is amended as follows:

A. Sec. 2.A, Scope of Services, part B, is revised by adding the following subsections:

Task 9 - Project Management, Coordination, and QA/QC

DESIGN PROFESSIONAL will ensure coordination for the duration of the SDMP developed between KCI, DESIGN PROFESSIONAL and sub consultants.

- a. Project Coordination and Project Management Plan: DESIGN PROFESSIONAL has developed a Project Management Plan (PMP) that outlines how the project will be managed from initiation to completion. The PMP includes project schedule and Quality Assurance/Quality Control (QA/QC) plan. The PMP will be updated to support the additional tasks as described below. DESIGN PROFESSIONAL Project Manager (PM) shall be responsible for coordinating all activities with KCI's Contract Manager (CM). The PM is the primary point of contact for DESIGN PROFESSIONAL and the CM is the primary point of contact for KCI. The PM shall be responsible for directing and coordinating the activities of DESIGN PROFESSIONAL and all sub consultants.
- b. Quality Assurance/Quality Control: DESIGN PROFESSIONAL has developed a Quality Assurance/Quality Control (QA/QC) Plan that documents a quality control program within its organization and to be used by the sub consultants. This document is a "living" document that will further describe the scope of services, identify the task and sub-task responsibilities of team members, and define the formats for all memos, reports, graphics, mapping, and other operational procedures for the project. It identifies procedures of the review of methodology, technical material, technical output, and project deliverables by the project team, project manager, and meetings with an independent technical review team (to be comprised of DESIGN PROFESSIONAL staff not working on the project on a regular basis and therefore able to provide independent assessments).

DESIGN PROFESSIONAL shall review all work to assure that the work is in accordance with KCI and FAA requirements and that the work is completed in a timely and efficient manner. To this end, DESIGN PROFESSIONAL shall provide KCI, upon request, a copy of the quality control "review copy" of the major submittals showing the comments, corrections and changes made prior to delivering it to KCI for review.

- c. Team Meetings: DESIGN PROFESSIONAL will conduct meetings with the key members of the team, as necessary, to review and discuss the progress of assigned project tasks, project needs, and any issues. Meetings will consist of three meetings with KCI core team including CM and subconsultants; up to five internal core team meetings via conference call; and two technical review team meetings.
- d. Progress Reports/Invoicing: DESIGN PROFESSIONAL shall prepare and electronically submit monthly progress reports detailing the progress or completion of tasks, sub-tasks, work products, and deliverables during the preceding month. Submission of the progress report will occur prior to the submission of the monthly invoice and will also be submitted with the monthly invoice. Monthly, the PM shall submit one prime invoice that includes all sub consultant invoices to the CM. The PM shall review and validate all information in the prime invoice, before the invoice is submitted to CM. The CM will review and process the payment of invoices. Submittals will be digital (PDF).

Task 9 Meetings/Deliverables:

- a. One Kick-off meeting at KCI.
- b. Two (2) meetings with the technical review team.
- c. Up to three (3) Coordination Meetings with sub consultants and CM.
- d. Up to five (5) meetings with key members of the team to review and discuss the progress of relevant tasks.

Task 11 - Data Collection, Inventory and Condition Assessment

Based on the objectives of the project, DESIGN PROFESSIONAL will define the KCI Stormwater System with the primary focus on the data needed to support the SDMP and the future development projects for the KCI. The work under this Task is to map, inventory, and perform a condition assessment of the existing stormwater features at KCI. This work was completed for the Landside-Developed Region and Overhaul Base in Phase 1. In Phase 2, field survey and condition assessment will be completed for the apron and deicing management areas of the AOA in a similar manner. As defined for the purposes of this scope, stormwater features are defined as collection features (curb inlets, area inlets, manholes), conveyance (pipe, culverts, ditches, and open channels), and storage facilities (identified detention and retention). The inventory will include existing stormwater features that have been developed for airport operations or commercial activities. The entire KCI property will not be covered by the inventory (e.g., the taxiways and runways, as well as areas of KCI property currently used for farming).

Task 11 has also been expanded to include the incorporation of the new terminal layout and associated pavement, as well as the potential future development ultimate facilities layer for both KCI and MKC.

- e. Update GIS Geodatabase of Stormwater Features. DESIGN PROFESSIONAL will update the FINAL version of the Phase 1 Storm Water GIS geodatabase with the airside storm drainage system and airside and landside storm drainage system components

incorporated as part of the new terminal, which is currently under construction.

- f. Incorporate Ultimate Facilities into Phase 1 GIS Geodatabase. DESIGN PROFESSIONAL will update the Phase 1 GIS geodatabase with an ultimate facilities layer that shows potential future development for KCI and MKC. This will also include the new terminal layout and associated pavement.
- g. Incorporate Airports GIS (AGIS) Data into Phase 1 GIS Geodatabase. DESIGN PROFESSIONAL will incorporate the FAA AGIS data that was collected from 2011 to 2014 into the database. DESIGN PROFESSIONAL will download the survey from the FAA's Airport Data and Information Portal (ADIP) and format it for use in the KCI Phase 1 GIS geodatabase. AGIS data included safety critical items (runways, safety areas, obstacles, etc..) and non-safety critical items (buildings, airport boundary, aprons, etc..). The data will be added as a series of new layers with customized symbology and labeling for clarity. No data editing will be included as part of this task.

Task 11 Meetings/Deliverables:

- a. Two (2) Phase 2 GIS database coordination meetings (1 hour).
- b. Two (2) Phase 2 GIS database meetings (2 hours) to walk through changes and updates.
- c. Comprehensive updated Phase 2 GIS database and metadata which documents the development of the database and the source of the data.

Task 13A – Pavement Asset Management

KCI and MKC

The purpose of this task is to collect, organize and incorporate recent pavement assessment information at KCI and MKC, which includes:

- a. Pavement condition index (PCI) data from HNTB for KCI in 2021.
- b. PCI from MoDOT for MKC in 2021-2022.

KCAD will deliver this data to the DESIGN PROFESSIONAL for incorporation into the Phase 1 GIS database. DESIGN PROFESSIONAL will meet with KCAD to determine level of effort and provide suggestions for pavement data inclusion within the Phase 1 database using professional opinion and previous experience. DESIGN PROFESSIONAL will be responsible for incorporating this data into the GIS geodatabase as well as providing a procedure for keeping pavement assessment data in the database current into the future.

Task 13A KCI Meetings/Deliverables:

- a. Two (2) coordination meetings with KCI.
- b. Updated GIS database incorporating KCI pavement assessment data.
- c. Procedure for keeping KCI pavement data current in the database.

Task 13A MKC Meetings/Deliverables:

- a. Two (2) coordination meetings with KCI.
- b. Updated GIS database incorporating KCI pavement assessment data.

- c. Procedure for keeping KCI pavement data current in the database.

Task 15 – Additional Coordination Meetings

This scope includes additional meetings with KCI as needed throughout this Phase.

Task 17 - Development of KCI and MKC Web-based GIS Application for All Updated Information

The purpose of this task is to create a web-based/user-friendly interface for sharing GIS data with Facilities Management (FM) and Operation Safety Section (OPS) at both KCI and MKC. DESIGN PROFESSIONAL will meet with City of Kansas City GIS staff to determine current GIS licensing available to KCAD staff to use for this data and coordinate setup of an ArcGIS Online group for KCAD with City staff.

DESIGN PROFESSIONAL will meet with KCAD staff to determine which data from the complete GIS geodatabase (including the updated information from Tasks 11 and 13) should be published for KCAD and airport staff use. DESIGN PROFESSIONAL will assist KCAD user setup and permissions for accessing and using the data.

Task 17 Meetings/Deliverables:

- a. One (1) meeting (2 hours) with Kansas City GIS group to determine licensing setup.
- b. One (1) meeting (2 hours) with KCAD to determine which data to publish to the web application.
- c. Web-based GIS application.
- d. On-site demonstration (4 hours) and training for KCAD staff.

Task 18 - On-call Maintenance Services GIS and Other

The purpose of this task is to provide on-going GIS services to KCAD as needed for three years into the future following the finalization of the GIS database and web-based GIS application. GIS services shall include additional on-site training, as-built data updates, and troubleshooting. On-call services will be initiated by KCAD staff and agreed upon by all parties prior to completion of additional tasks. The level of effort is assumed to be, on average, an hour per week over three years.

DESIGN PROFESSIONAL was the original designer of a 20-inch deicing pipe that was damaged on the UPS construction site in November 2021. This task includes field coordination and design updates for this 20-inch deicing pipe.

Task 19 - Evaluate Bird Head Pond and Berlin Reservoir for Available Flood Control Storage (Figure T19.1)

Due to the on-going construction of the new terminal, KCAD has requested that the DESIGN PROFESSIONAL collect bathymetric survey data of the Berlin Reservoir and Bird Head Pond downstream to determine the current level of sedimentation and impacts to flood control storage.

Figure T19.1. Bird Head Pond and Berlin Reservoir



This task will include the following data collection:

- a. Verify/establish horizontal and vertical control. Coordinates based on the Missouri State Plane Coordinate System of 1983, NAVD88.
- b. Bathymetric survey of Bird Head Pond and Berlin Reservoir (Figure T19.1), locate water's edge, top of reservoir bank and adjacent reservoir drainage structures.

Bathymetric data collected for Berlin Reservoir will be compared to the best available data, which was a bathymetric study conducted in 2007 by Burns and McDonnell and utilized in the Phase 1 PCSWMM modeling. Because the PCSWMM modeling is not being updated at this time to reflect the new terminal, incorporating this bathymetric survey into the Phase 1 model will not be an accurate representation of the system. However, it will provide KCAD information on how storage has been impacted over the past 14 years, which may lead to remedial action.

Assumptions/limitations regarding survey data collection:

- a. Field conditions beyond the DESIGN PROFESSIONAL control may limit collection of this information.
- b. Additional work requested by KCI that is outside of that stated within this scope will be billed on an hourly basis.

Task 19 Meetings/Deliverables:

- a. One (1) meeting (1 hours) prior to collection of bathymetric survey data to ensure DESIGN PROFESSIONAL understanding of requested data.

- b. One (1) meeting (2 hours) to discuss results of the bathymetric study and changes in storage at Berlin Reservoir since the previous study (2007).
- c. Bathymetric survey data of Bird Head Pond and Berlin Reservoir including survey base map, standard text file, electronic topographic survey files including DTM in LandXML and 0.5 feet interval contours in AutoCAD format.

Task 20: Phase 2 Documentation

The Phase 2 scope has changed significantly from what was originally discussed. For this reason, the DESIGN PROFESSIONAL will summarize the items that have been completed since the completion of the Phase 1 Report (February 2017). The Phase 2 documentation will include:

- a. (Task 11) Update Phase 1 GIS database with new terminal stormwater features, ultimate facilities, new terminal layout and pavement and 2011-2014 AGIS data.
- b. (Task 12) Park Air Express pond evaluation and parking lot design.
- c. (Task 13) Pavement asset management data inclusion into Phase 1 GIS database.
- d. (Task 16) Glycol retention facility condition analysis, reliability & operational improvements.
- e. (Task 17) Development of KCI and MKC web-based GIS application.
- f. (Task 19) Bird Head Pond and Berlin Reservoir available flood control storage.

Task 20 Meetings/Deliverables:

- a. Electronic copy Phase 2 Documentation.
- b. One (1) meeting (2 hour) to discuss any required additions or revisions.

Task 21 - South Terminal Apron Improvements for New Terminal

DESIGN PROFESSIONAL will re-design the south terminal apron to remove and replace existing concrete apron, which was originally scheduled to remain in place, as shown in Figure T21.1. The re-designed/re-constructed south terminal apron shall match, at the perimeter, the proposed concrete apron grades constructed as part of the terminal apron construction program and the interior pavement shall be constructed to match existing pavement grades.

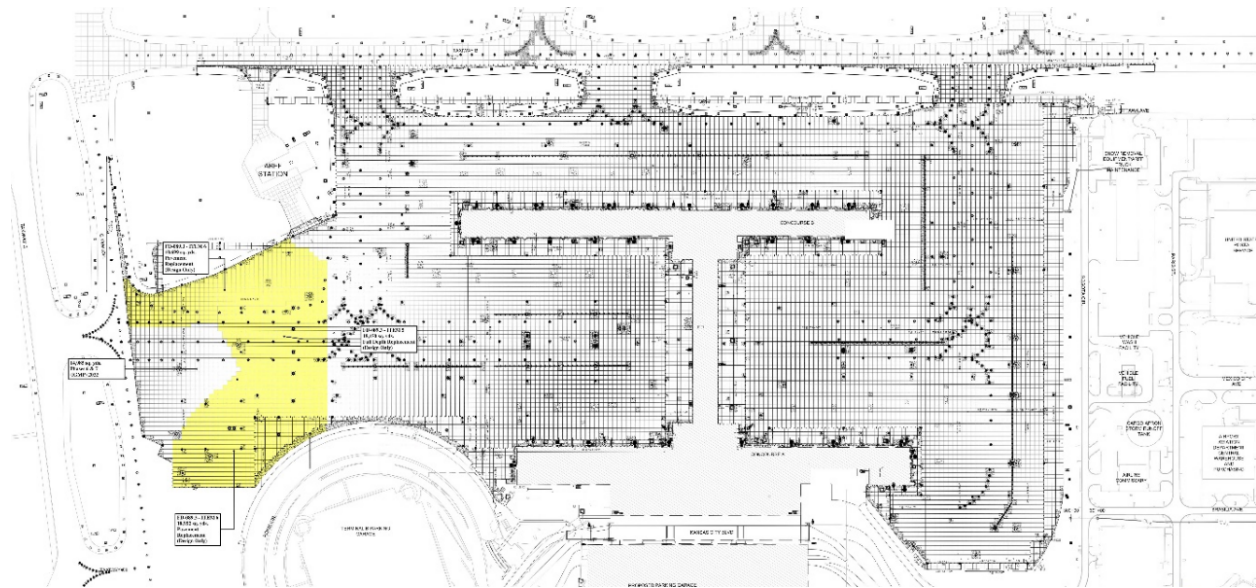


Figure T21.1. South Terminal Apron Improvements for New KCI Terminal.

The detailed scope of services for Task 21 can be found in attached Exhibit A. The scope generally includes:

- a. Project Administration.
- b. Design Services (90% Final Design and 100% for bid).
- c. Bidding Services.
- d. Construction Administration.
- e. On-site Resident Project Representative.
- f. Materials Testing.
- g. Project Closeout.

B. Sec. 4. – Compensation and Reimbursables, Part A is amended as follows:

- A. The maximum amount that City shall pay Design Professional under this Agreement is \$2,489,439.99 as follows.
 1. \$317,894.00 for the services performed by Design Professional under the Agreement – Storm Water Development Master Plan Study.
 2. \$640,602.38 for the services performed by Design Professional under Amendment One – Design Services for Storm Water Development Master Plan Study.
 3. \$591,527.14 for the services performed by Design Professional under Amendment Two– Design Services for Storm Water Development Master Plan.
 4. \$939,416.47 for the services performed by Design Professional under this Amendment Three – Design Services for Storm Water Development Master Plan.

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

Director of Finance

Date

Exhibit A

SOUTH TERMINAL APRON IMPROVEMENTS SCOPE OF SERVICES

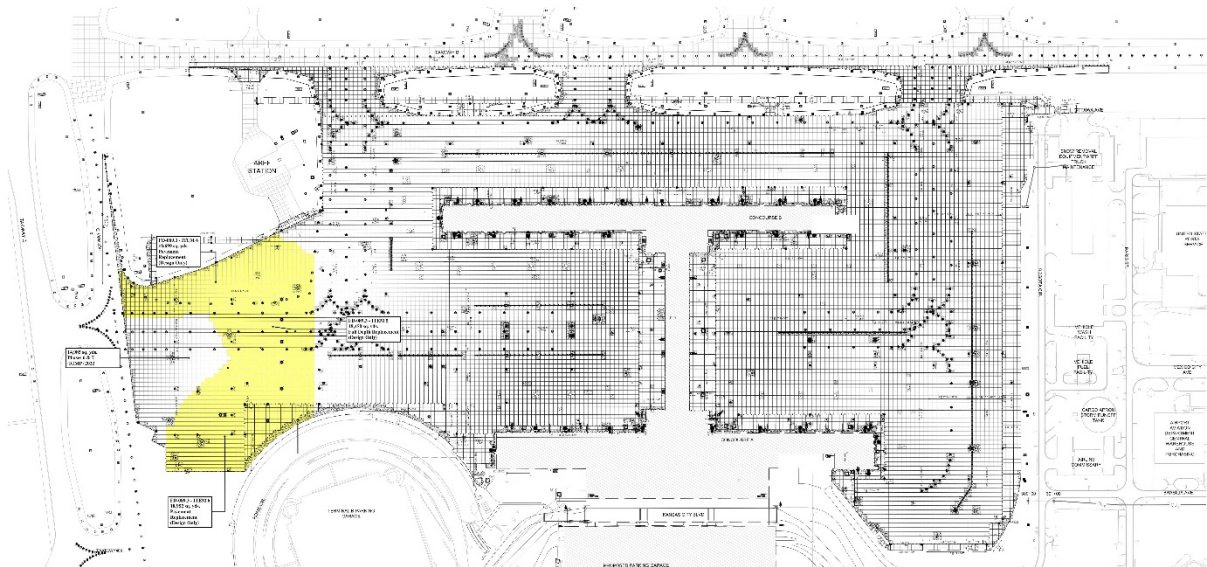


SCOPE OF SERVICES

Generally, the Scope of Services includes the following professional services for improvements to the South Apron for the New Terminal at the Kansas City International Airport. Improvements will consist primarily of the re-design of the south terminal apron to remove and replace existing concrete apron, originally scheduled to remain in place, as highlighted in **Exhibit 1**. The existing apron to be reconstructed as part of this project shall match, at the perimeter, the proposed concrete apron grades to be constructed as part of the terminal apron construction program and the interior pavement shall be constructed to match existing pavement grades.

- Project Administration
- Design Services
 - 90% Final Design
 - 100% Issued for Bid
- Bidding Services
- Construction Administration Services
- On-Site Resident Project Representative Services
- Materials Testing Services
- Project Closeout Services

Exhibit 1. Project Limits



1. PROJECT ADMINISTRATION

- 1.1. Garver will serve as the Owner's representative for the project and furnish consultation and advice to the Owner during the performance of this service. Garver will attend conferences alone or with Owner's representatives, local officials, state and federal agencies, and others regarding the scope of the proposed project, its general design, functions, and impacts.
- 1.2. Garver will prepare monthly invoices.



1.3. Garver will have three personnel complete the Kansas City Aviation Department badging process.

2. SURVEYING SERVICES

2.1. Design Surveys. Garver will utilize survey data provided during the KCI Single Terminal and Parking Garage Construction project.

2.2. No additional survey data is anticipated

3. GEOTECHNICAL SERVICES

3.1. Garver will collect twelve (12) cores within the Project Limits to determine depth of concrete, stabilized base(s) and aggregate base(s).

3.2. No additional geotechnical data is anticipated.

4. DESIGN SERVICES

4.1. General: Garver will prepare detailed construction drawings, specifications, instructions to bidders, and general provisions and special provisions, all based on guides furnished to Garver by the Owner and FAA, or internally developed by Garver. Contract Documents (Plans, Specifications, and Estimates) will be prepared for award of one (1) construction contract. These designs shall conform to the standards of practice ordinarily used by members of Garver's profession practicing under similar conditions and shall be submitted to the Owner from which approval must be obtained.

4.1.1. Construction Drawings

- 4.1.1.1. Create Cover Sheet
- 4.1.1.2. Create Abbreviation and Index of Sheets
- 4.1.1.3. Create Summary of Quantities
- 4.1.1.4. Create General Notes
- 4.1.1.5. Create General Airport Site Plan
- 4.1.1.6. Update Safety and Phasing Plan Notes
- 4.1.1.7. Update Safety and Phasing Plans
- 4.1.1.8. Update Safety and Phasing Details
- 4.1.1.9. Create Survey Control Plan
- 4.1.1.10. Update Pavement Geometric Plan
- 4.1.1.11. Update Typical Sections
- 4.1.1.12. Update Demolition Plan
- 4.1.1.13. Update Grading and Drainage Plan
- 4.1.1.14. Update Erosion Control Plan
- 4.1.1.15. Update Grading and Drainage Details
- 4.1.1.16. Update Joint Layout Plan
- 4.1.1.17. Update Joint Elevation Plan
- 4.1.1.18. Update Joint Details
- 4.1.1.19. Create Pavement Marking Plans

4.1.2. Project Manual

- 4.1.2.1. Volume 1
 - 4.1.2.1.1. Introductory Information
 - 4.1.2.1.2. Bidding Requirements



- 4.1.2.1.3. Contracting Requirements
- 4.1.2.1.4. Division 1-General Requirements
- 4.1.2.2. Volume 2
 - 4.1.2.2.1. Mobilization
 - 4.1.2.2.2. Maintenance of Traffic
 - 4.1.2.2.3. Surface Preparation
 - 4.1.2.2.4. Erosion Control
 - 4.1.2.2.5. Earthwork
 - 4.1.2.2.6. Aggregate Base Course
 - 4.1.2.2.7. Cement Treated Base
 - 4.1.2.2.8. Portland Cement Concrete Pavements
 - 4.1.2.2.9. Compression Joint Seals for Concrete Pavements
 - 4.1.2.2.10. Structural Portland Cement Concrete
 - 4.1.2.2.11. Geotextile Fabric
 - 4.1.2.2.12. Pavement Marking
 - 4.1.2.2.13. Seeding
 - 4.1.2.2.14. Sodding
 - 4.1.2.2.15. Mulching
 - 4.1.2.2.16. Geotechnical Report
 - 4.1.2.2.17. Construction Safety and Phasing Plan
 - 4.1.2.2.18. Advisory Circulars

4.2. Owner / Agency Coordination: Garver's project manager and/or design team will coordinate with the Owner as necessary to coordinate design decisions, site visits, document procurement, or other design needs.

4.2.1. Kickoff Meeting: Conduct kickoff meeting to conform coordination with New KCI Single Terminal Construction Program.

4.2.2. Preliminary Design Review Meeting: Conduct meeting to confirm contractor collaboration is properly addressed in proposed Contract Documents prior to bidding.

4.3. Quality Control

4.3.1. Garver will develop a project specific quality control plan. The quality control plan will include the project background and scope, stakeholder contact information, project team and roles, design criteria, project schedule, and quality control procedures.

4.3.2. Garver will complete a quality control review prior to any design submission to Owner and/or FAA. QC reviews will be completed by a senior construction observer and project manager. Weekly internal progress meetings will be held during all design phases to ensure adequate quality control throughout the design phases.

4.4. Environmental Coordination

4.4.1. Garver will develop a Stormwater Pollution Prevention Plan (SWPPP), including erosion control plans and details. Upon Owner review, the SWPPP and NOI shall be submitted to the Missouri Department of Natural Resources for review. Garver will incorporate comments from the review agency.



4.4.2. Garver will not coordinate and complete documentation for submission to FAA to receive environmental clearance for the project. Any necessary documentation shall be prepared by Owner.

4.5. Airspace Analysis: No additional airspace analyses will be prepared by Garver.

4.6. Construction Safety and Phasing Plan

4.6.1. Garver will modify the previously approved construction safety and phasing plan (CSPP) for the New KCI Single Terminal Construction Program to incorporate the work identified in Exhibit 1.

4.6.2. Garver will develop a preliminary CSPP for the Owner's review prior to submission to the FAA. After incorporating Owner comments, the CSPP will be submitted to FAA for review through the OE/AAA website.

4.7. Existing Conditions Review

4.7.1. Record Document Review: Garver will review record document data from the vicinity of the construction site to evaluate existing conditions. Record document data may include record drawings, record surveys, utility maps, GIS data, and previous design reports.

4.7.2. Site Visits: Garver's civil engineers will perform up to two (2) site visits to the project site to review existing conditions and evaluate survey and record document data.

4.8. Pavement Design: The pavement design for the project consists of four components.

4.8.1. For aircraft rated concrete beyond the object free area of the triple taxilanes north of Taxiway D: Removing the existing concrete pavement surface layer and replacing it with a proposed concrete pavement surface layer of equal depth.

4.8.2. For the aircraft rated pavement within the object free area of the triple taxilanes north of Taxiway D: full depth reconstruction of the pavement to match the existing surface elevations. This area shall be reconstructed to match the aircraft rated concrete pavement section designed as part of the New KCI Single Terminal Construction Program.

4.8.3. Light duty pavement section: In the RON parking positions where aircraft loads will not be possible, the existing concrete pavement will be removed and replaced with concrete pavement to the depth defined in the light duty pavement section in the New KCI Single Terminal Construction Program.

4.8.4. Shoulders: concrete shoulders shall be incorporated on the west side of existing Taxiway L and shall correspond to the concrete shoulder design developed as part of the New KCI Single Terminal Construction Program.

4.8.5. For concrete pavement design, Garver will design joint patterns and jointing details.

4.9. Geometric Design: Garver will provide geometric design in accordance with FAA AC 150/5300-13 (latest edition) or other local standards.

4.10. Modeling: Garver will develop preliminary vertical models based on the requirements of FAA AC 150/5300-13 (latest edition) to match the existing surface elevations within the proposed area shown in Exhibit 1 and to match the proposed terminal apron elevations being constructed during the New KCI Single Terminal Program.



4.11. Grading and Drainage: Grading and drainage design shall be completed in accordance with FAA AC 150/5300-13 (Airport Design), FAA AC 150-5320-5 (Airport Drainage Design), and applicable local drainage codes. The grading shall match the existing pavement and trench drain elevations within the project limits.

4.12. Airfield Electrical

4.12.1. Airfield Lighting and Signage: All airfield lighting and signage shall be constructed as part of the new KCI Single Terminal Construction Program.

4.13. Airfield Pavement Marking

4.13.1. Airfield Pavement Marking: All airfield pavement markings within the project limits shall be constructed as part of the new KCI Single Terminal Construction Program.

4.14. Utility Design and Coordination: It is expected that the following utilities will require protection, coordination with the New KCI Single Terminal Construction Program, or minor modification as part of the project. Garver will coordinate with the Owner and applicable utility owners for utility relocation design. In addition to the utilities listed below, Garver will also design infrastructure for future utility extensions.

- Existing Terminal B apron and Taxiway L storm sewer collection system
- New KCI Single Terminal Construction proposed storm sewer collection system
- Existing Terminal B apron glycol collection system
- New KCI Single Terminal Construction proposed glycol collection system
- New KCI Single Terminal Construction proposed airfield electrical system

4.15. Plan Set Development

The following matrix details the plan drawings to be included in each design submittal.

Plan Set	90% Final	100% Issued for Bid
Cover Sheet	X	X
Sheet Index	X	X
General Notes	X	X
Project Layout Plan	X	X
Survey Control Plan	X	X
Construction Safety Plans	X	X
Construction Safety Details	X	X
Erosion Control Plans	X	X
Erosion Control Details	X	X
Demolition Plans	X	X
Demolition Details	X	X
Drainage Plans	X	X
Drainage Details	X	X



Typical Sections	X	X
Paving Plans	X	X
Paving Details	X	X
Grading Plans	X	X
Grading Details	X	X
Joint Layout Plans	X	X
Joint Details	X	X
Elevation Plans	X	X

4.16. Specifications and Contract Documents

4.16.1. Technical Specifications: Detailed specifications shall be developed using FAA "Standards for Specifying Construction for Airports" AC 150/5370-10 (latest edition) or other appropriate standards approved for use by the FAA and the New KCI Single Terminal Construction Program technical specifications. Additional supplementary specifications will be developed for project requirements not covered by FAA AC150/5370-10 or when state or local standards are approved by the FAA.

4.16.2. Construction Contract Documents: Garver will develop construction contract documents based on Owner provided template. A specimen copy of the General Provisions and applicable prevailing wage rates will be obtained by Garver from the FAA and/or Department of Labor as appropriate for incorporation into the specifications for the proposed project. Final construction contract documents will be submitted to the Owner for final review and approval.

4.17. Engineer's Report: Not applicable

4.18. Quantities and Engineer's Opinion of Probable Cost: Garver will develop detailed quantities in PDF format for use in construction cost estimating for each design phase. Quantities will be completed by pay item. Upon the completion of quantity development, Garver will review previous cost data and market conditions and complete an Engineer's Opinion of Probable Cost.

4.19. Design Services Submission and Meeting Summary: The following design submittal phases shall be included in the fee summary. A summary of each design phase and the associated review meetings is included below.

4.19.1. 90% Final Design

4.19.1.1. Garver will develop 90% final design plans, specifications, and engineer's report and submit these to the Owner for review. It is anticipated that the Owner will review the design submission within two weeks.

4.19.1.2. At the completion of the Owner review period, Garver will meet with the Owner to review the 90% final design plans, specifications, and engineer's report and to receive Owner comments and direction.



- 4.19.2. 100% Issued for Bid (IFB): Garver will develop 100% IFB plans and specifications and submit these to the Owner for review. It is anticipated that the Owner will review the IFB submission within two weeks.

5. BIDDING SERVICES

- 5.1. Bidding. Garver will assist the Owner in advertising for and obtaining bids or negotiating proposals for one prime contract for construction, materials, equipment and services; and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend a pre-bid conference. The Owner will pay advertising costs outside of this contract.
- 5.2. Garver will issue addenda as appropriate to interpret, clarify or expand the Bidding Documents. Garver will consult with and advise the Owner as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor(s) (herein called "Contractor(s)") for those portions of the work as to which such acceptability is required by the Bidding Documents. Garver will consult with the Owner concerning the acceptability of substitute materials and equipment proposed by Contractor(s) when substitution prior to the award of contracts is allowed by the Bidding Documents.
- 5.3. Garver will attend the bid opening, prepare a bid tabulation, and assist the Owner in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment, and services. Garver will assist the Owner in the execution of all contract documents and furnish a sufficient number of executed documents for the Owner and Contractor.

6. CONSTRUCTION ADMINISTRATION SERVICES

- 6.1. During the construction phase of work, Garver will accomplish the tasks below.
- 6.2. Issued for Construction (IFC) Documents
 - 6.2.1. Garver will compile bid addendums and any other necessary plan changes due to post-bid project updates and/or funding changes into a final Issued for Construction (IFC) set of plans and specifications.
- 6.3. Construction Management Plan
 - 6.3.1. Garver will prepare a "Construction Management Plan" to be submitted to the Federal Aviation Administration (FAA) for approval. At a minimum, the plan shall list key construction personnel, qualifications of construction management personnel, and materials quality assurance information. The plan will be reviewed by the FAA project manager and must be approved along with the final plans and specifications for construction.
- 6.4. Submittals
 - 6.4.1. Garver will evaluate and respond to construction material submittals and shop drawings. Corrections or comments made by Garver on the shop drawings during this review will not relieve Contractor from compliance with requirements of the drawings and specifications. The check will be for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor will be responsible for confirming and correlating all quantities



and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner. Garver's review shall not constitute approval of safety precautions or constitute approval of construction means, methods, techniques, sequences, procedures, or assembly of various components. When certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, either directly or implied for a complete and workable system, Garver shall be entitled to rely upon such submittal or implied certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents.

6.5. Notice to Proceed & Preconstruction Meeting

6.5.1. Garver will issue a Notice to Proceed letter to the Contractor and attend preconstruction meeting. Garver will provide meeting minutes for submission to all parties at the conclusion of the meeting.

6.6. Progress Meetings

6.6.1. As a minimum, Garver's Project Manager, Project Engineer, and Resident Project Representative (RPR) will attend weekly progress meetings with the Owner and Contractor. It is expected that 30 meetings will be held on-site. To the extent possible, progress meetings and visits to the site of the work should be scheduled to coincide with each new phase of construction, scheduled FAA inspections, and other times when Garver's presence is desirable. Garver's project engineer or his qualified representative will be available at all times work is in progress for telephone contact by the RPR. Garver's project engineer shall direct, supervise, advise, and counsel the Resident Project Representative and construction observation personnel in the accomplishment of Garver's duties. Garver will prepare for and attend any utility pre-construction meetings as required.

6.7. Owner Coordination

6.7.1. Garver will consult with and advise the Owner during the construction period. Garver will submit, when requested by the Owner, written reports to the Owner on the progress of the construction including any problem areas that have developed or are anticipated to develop. In addition, Garver shall supply to Owner such periodic reports and information as may be required by the FAA, including FAA Form 5370-1, Construction Progress and Inspection Report, or equivalent form to the Owner on a weekly basis.

6.8. RFIs

6.8.1. Garver will issue instructions to the Contractor on behalf of the Owner and issue necessary clarifications (respond to RFIs) regarding the construction contract documents.

6.9. Progress Payments

6.9.1. Garver will prepare Contractor's progress payment requests based on the actual quantities of contract items completed and accepted and will make a recommendation to the Owner regarding payment. Garver's recommendation for payment shall not be a representation that Garver has made exhaustive or continuous inspections to (1) check the quality or exact quantities of the Work; (2) to review billings from Subcontractors and



material suppliers to substantiate the Contractor's right to payment; or (3) to ascertain how the Contractor has used money previously paid to the Contractor.

6.10. Payroll Reviews

6.10.1. Garver will assist the Owner in the observation of the Contractor's operations for proper classification of workers, review of the Contractor's payroll as necessary to determine compliance with Davis Bacon requirements, and conduct contractor employee interviews to determine compliance with Davis Bacon requirements. Garver will keep the Contractor's payroll records on file demonstrating compliance with the Davis Bacon requirements. In addition, Garver will monitor the contractor's posting of the required EEO notice and provide general oversight of any obvious instance of a segregated workplace. Garver will submit Contractor's certified payroll records to Owner at the completion of the project.

6.11. M/WBE Compliance

6.11.1. Garver will assist the Owner in the review of the Contractor's compliance with the M/WBE goals established during bidding including preparing the monthly M/WBE payment log.

6.12. Record Drawings

6.12.1. Garver will maintain a set of working drawings and provide information for preparation of record drawings of the completed project. This information will be incorporated into final record drawings completed as part of Closeout Services and final record drawings will be provided to the Owner after project completion.

6.13. Change Orders

6.13.1. When authorized by the Owner, Garver will prepare change orders or supplemental agreements for changes in the work from that originally provided for in the construction contract documents. If redesign or substantial engineering or surveying is required in the preparation of these change order documents, the Owner will pay Garver an additional fee to be agreed upon by the Owner and Garver.

6.14. Final Inspection

6.14.1. Garver will participate in a pre-final walkthrough with the Owner. Garver will also participate in a final project inspection with the Owner and Contractor, prepare a punch list, review final project closeout documents, and submit the final pay request.

7. ON-SITE RESIDENT PROJECT REPRESENTATIVE SERVICES

7.1. Garver will provide full-time Resident Project Representative (RPR) services for the anticipated 100-calendar-day construction contract performance time. The proposed fee is based on approximately 50 hours per week during the construction contract performance time for the RPR, plus an additional one (1) week for weather and other delays beyond the Contractor's control. If the construction time extends beyond the time established in this agreement or if the Owner wishes to increase the time or frequency of the observation, the Owner will pay Garver an additional fee agreed to by the Owner and Garver. All RPR personnel shall have the appropriate experience and qualifications.



7.2. During the construction period, Garver's RPR will provide or accomplish the following:

- Consult with and advise the Owner during the construction period. Garver will submit, when requested by the Owner, written reports to the Owner on the progress of the construction including any problem areas that have developed or are anticipated to develop. In addition, Garver shall supply to the Owner such periodic reports and information as may be required by the FAA
- As necessary, conduct safety meetings with the Contractor.
- Coordinate with the firm providing construction materials quality assurance testing. Coordinate with this firm to ensure that all material tests required for construction are scheduled and accomplished in a manner that will not delay the Contractor unnecessarily and will meet specification requirements as to location and frequency.
- Perform intermediate inspections in advance of the final inspection.
- Maintain a file of quantities incorporated into the work, test reports, certifications, shop drawings and submittals, and other appropriate information.
- In accordance with FAA AC 150/5370-12A, maintain a project diary which will contain information pertinent to each site visit.
- Administer the "Construction Management Plan" prepared by Garver.
- Monitor the contractor's conformance to the approved construction safety and phasing plan.
- Prepare a Construction Materials Quality Control Summary. At a minimum, the summary shall include a list of all tests performed showing the date, location, pass or fail, results of retests, and whether the test is eligible or ineligible under the A.I.P. program. The Summary will include a certification that all testing was completed in accordance with the "Construction Management Plan."

7.3. In performing construction observation services, Garver will endeavor to protect the Owner against defects and deficiencies in the work of the Contractor(s); but Garver does not guarantee the performance of the Contractor(s), nor is Garver responsible for the actual supervision of construction operations. Garver does not guarantee the performance of the contracts by the Contractors nor assume any duty to supervise safety procedures followed by any Contractor or subcontractor or their respective employees or by any other person at the job site. However, if at any time during construction Garver observes that the Contractor's work does not comply with the construction contract documents, Garver will notify the Contractor of such non-compliance and instruct him to correct the deficiency and/or stop work, as appropriate for the situation. Garver will also record the observance, the discussion, and the actions taken. If the Contractor continues without satisfactory corrective action, Garver will notify the Owner immediately, so that appropriate action under the Owner's contract with the Contractor can be taken.

8. MATERIALS TESTING SERVICES

8.1. Through a Subconsultant, Garver shall provide the quality assurance testing for the project as required by the Plans and Specifications in accordance with FAA and the Owner's requirements.

9. PROJECT CLOSEOUT SERVICES

9.1. At the conclusion of construction, Garver will assist the Owner with project closeout by providing a final project report which will include all necessary documents required for FAA grant closeout. Closeout documentation will be provided within 30 days of the final payment



to the Contractor. Garver will also update the airport's ALD to show the completed project as "existing" and coordinate the submission of the updated ALD through OE/AAA.

10. PROJECT DELIVERABLES

10.1. The following deliverables will be submitted to the parties identified below. Unless otherwise noted below, all deliverables shall be electronic.

- 90% Final Design Plans, Specifications, and Report to the Owner.
- 100% Issued for Bid Plans, Specifications, and Report to the Owner.
- Issued for Construction Plans and Specifications to the Owner and Contractor.
 - Three hard copies to the Contractor
 - One copy to the Owner
- Construction Management Plan to the Owner
- Approved submittals to the Contractor and Owner.
- Record Plans and Specifications to the Owner.
 - One hard copy to the Owner.
- Other electronic files as requested.

11. ADDITIONAL SERVICES

11.1. The following items are not included under this agreement but will be considered as additional services to be added under Amendment if requested by the Owner.

- Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- Deliverables beyond those listed herein.
- Pavement Design beyond that furnished in the Contract.
- Design of any utility relocation.
- Engineering, architectural, or other professional services beyond those listed herein.
- Retaining walls or other significant structural design.
- Airfield pavement marking design.
- Airfield lighting design.
- Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
- Coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.
- Services after construction, such as warranty follow-up, operations support, and Part 139 inspection support.

12. SCHEDULE

12.1. Garver shall begin work under this Agreement within ten (10) days of execution of this Agreement and shall complete the work in accordance with the schedule below:

Design Phase	Calendar Days
90% Final Design	42 Days from Receipt of Notice to Proceed
100% Issued for Bid	14 Days from Receipt of 90% Final Design Comments