TASK ORDER NUMBER SIX

This Task Order is made as of this ____ day of _____, 2022, under the terms and conditions established in the MASTER AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES (the Agreement), between CITY OF DALTON (OWNER) and CROY ENGINEERING, LLC (ENGINEER). This Task Order is made for the following purpose, consistent with the Project defined in the Agreement:

Professional Services for
Apron Pavement Rehabilitation – Phase II

Section A - Scope of Services

The Engineering Design Services will consist of project formulation, preparation of construction drawings and specifications necessary to complete the project, the support services required to complete the design, and coordination with the Georgia Department of Transportation, Aviation Programs. The design services for the project at Dalton Municipal Airport are based on the findings of the GDOT provided July 2019 Pavement Management Report and will include the following elements of work:

Element 1 – Project Formulation and Coordination shall include;

1. The preparation of work scope and fees
2. A pre-design/scoping meeting with GDOT & the Sponsor
3. Preparing and assisting with the application for funding assistance
4. Preparation and submittal of Form 7460 to GDOT & FAA,
5. Coordination with regulatory agencies
6. Attend one (1) site visit to observe existing site conditions

Element 2 – Survey will consist of:

1. Field Data Collection will include the field time for a survey crew to locate and conduct a field run topographic survey of the existing apron and surrounding area. The scope of work shall include the following:
    - Begin site reconnaissance to determine survey limits and identify features to be located and take photos of the site as needed.
    - Establish survey control.
    - Identify storm drains or sewer drains in the survey limits to be located, prepare sketches, obtain invert, and pipe size & type information and direction of flow.
    - Begin field topographic survey, this is to be done on a 25' grid.
    - See Exhibit A for specific details of survey requirements.
    - Locate swales, ditches, storm and sewer structures and drains.
    - Locate power poles, guy anchors, guy poles, utility poles, wires, power boxes, and pads.
    - Locate visible water meters, gas meters, valves, hydrants, sprinkler heads.
    - Locate paint markings and stripes, aircraft tie downs, light poles and ground lights, EOP, etc.
    - Upon completion of field work analyze field survey data and notes.
    - Draft and prepare final topographic survey.

Element 3 – Geotechnical Evaluation will be performed by a sub-consultant to Croy and includes a geotechnical exploration in general accordance with FAA 150-5320-6F Airport Pavement Design and Evaluation and shall consists of predesign subsurface investigations for borings and soil samples in the existing apron and taxilane areas. It is anticipated that standard penetration test (SPT) data will be sufficient to evaluate soil strength and load carrying capability. Therefore, no Heavy Weight Reflectometer (HWD) testing will be performed. Please reference the sub-consultant proposal as attached. The scope consists of:

1. Conducting a visual reconnaissance of the site to observe the existing pavement conditions and look for indications of areas of geotechnical concern.
2. Hiring a private utility location company to locate utilities in the areas of the borings.
3. Coring the pavement at five (5) locations in the approximate locations shown in Exhibit B.
4. Drilling five (5) SPT borings at the cored location for depths of 10 feet or auger refusal, whichever occurs first.
5. Obtain three (2) bulk samples from auger cuttings. A bulk sample will be taken from each of the three areas shown on the boring plan (Exhibit B).
6. Run two (2) Proctor tests.
7. Run one (1) California Bearing Ratio (CBR) test.
8. Run in situ density tests on the Shelby tube samples and compare to our Proctor results in order to determine a relative percent compaction of the fill soils.
9. Run 5 grain size tests
10. Run 5 Atterberg limits tests.
11. Analyze the pavement cores for distresses.
12. Analyzing the field and laboratory data obtained.
13. Provide a written geotechnical report outlining the subconsultants findings, conclusions, and recommendations. This will include a pavement repair and design recommendations.

Element 4 – Construction Plans will consist of:

1. **Cover Sheet** listing the name of the airport, description of the project, vicinity and location maps, & project number.
2. **Summary of Quantities Sheets** listing the name pay item number, specification number, name of each pay item, unit of measure and estimated quantities determined during the design phase.
3. **General Notes** listing the overall project notes and any otherwise pertinent information to the project or project site as a whole.
4. **Project Layout and Construction Safety Phasing Plan** including a sketch of the airport, existing property lines, the airport operation area, contractor access route and staging area, and general project safety relative to the airport during construction.
5. **Existing Conditions and Demolition Plan** will show existing conditions provided by the surveys illustrating the current condition of the project site. These plans will also show the areas and items that are to be removed, relocated, cleared, etc. for the development of the project site.

6. **Grading Plans and Details** consists of the utilization of the topographic survey in refining the existing grading plan for the proposed apron rehabilitation, including the following:
    a. Analysis and evaluation of existing apron slopes to ensure current FAA compliance.
    b. Analysis and evaluation of areas to be removed and reconstructed.
    c. Analysis and evaluation of areas to be milled and overlaid/reconstructed.
    d. Analysis and evaluation of areas to receive crack seal and overlay
7. **Stormwater Plans and Details** Analysis and evaluation of the existing stormwater pipe underneath apron. Pipe will be visually inspected by camera to determine its condition. If replacement of the existing storm pipe is needed, project site will be analyzed for stormwater runoff and confirm size of pipe needed for replacement.
8. **Proposed Drainage Schedule** will show the breakdown of the stormwater system, identifying key information, components, and materials.
9. **Typical Sections** will delineate the width and typical makeup for the various sections of pavement included in the project.
10. **Paving and Jointing Plans and Details** will provide a layout of the paving for the rehabilitation or reconstruction including any joints with existing pavement to remain. The details for the pavement and joints will be included as support for the design.
11. **Pavement Marking and Striping Plans and Details** will provide a layout of the pavement marking and striping for the airfield and landside pavements and the details will support the layout.
12. **Construction Details** will be provided to support the design

Element 5 – Contract Documents (booklet) including the advertisement for bids, instructions to bidders, bid documents, contract documents, bid bond, performance bond, payment bond, and Federal Aviation Administration (FAA) and/or Georgia Department of Transportation (GDOT) specifications to include Special Provisions to published specifications. This element shall include preparation of an engineering cost estimate for the project.

Element 6 – Engineers/Design Report shall include a detailed description of the project construction, design calculations, and discussion of rational for design decisions for the maintenance and reconstruction repairs for the various areas of the project design.

Element 7 – Coordination, Review, and Comments will be addressed throughout the duration of the project through team, client, and agency coordination and meetings. GDOT comments will be addressed after the 60% and 90% submittals to GDOT.

The design will be completed within Sixty (60) business days from the Notice to Proceed.

This project will be designed in accordance with the provisions of the Federal Aviation Administration (FAA) Advisory Circular 150/5300-13A, dated 2/26/2014. All construction details will conform to FAA Specifications and indicate published specification reference. GDOT Specifications will be used in absence of FAA Specifications with approval by agency.

Deliverables will consist of one (1) set of electronic Plans and Specifications to GDOT for review and comment prior to the bidding phase, one (1) set of the final plans and specifications, one (1) electronic copy of the final plan set in PDF format, and one (1) electronic copy of the plan set in

AutoCAD format will be provided to GDOT for the final submittal. The 7460 and CSPP documents will be submitted to GDOT for review prior to initial submittal to FAA.

Element 8 - Bid Phase Services shall include preparation of advertisement for bids, response to contractor questions during the bidding process, receipt of bids at a scheduled bid opening, preparation of the bid tabulation, and recommendation of award to the lowest responsive bidder.

Element 9 – Construction Administration Services shall include the following:

1. Engineering Services to include review of contractor submittals for acceptance of materials.
2. Attend and conduct Pre-Construction Meeting
3. Two (2) periodic site visits to observe the progress and inspect the quality of the executed work.
4. Provide response to Contractor questions and/or "requests for information"
5. Conformance to federal requirements (as delineated in the contract documents) including:
   a. Review and approval of weekly payroll for contractors and sub-contractors.
   b. Review and approval of employee wage rates and interviews.
   c. Review of DBE submittals and forwarding to the State.
6. Contractor submitted pay application review and recommendation for processing.
7. Final Inspection shall include one (1) site visit to determine if the project was satisfactorily constructed in accordance with the plans and specifications.
8. One (1) follow up site visit to the Final Inspection to review any corrective work items included on the punch list and preparation of a Final Inspection Report.
9. Close-Out Documentation
   a. Review and approval of pay requests and invoicing
   b. File project records (materials testing results, daily reports, etc.)

Element 10 – Construction Inspection/Observation Services shall include the following:

1. Full-time daily observation and reporting for 45 calendar days base bid.
2. Hotels for 5 nights/week for a total of 6.5 weeks for Inspector, plus per diem for 37 days.
3. Time and expenses for attendance at pre-construction meeting, final inspection and follow up site visit for punch list items.

Element 11 – Record Drawings and Final Engineer's Report shall include the following:

1. Preparation of record drawings showing the as-built conditions utilizing data to be supplied by the contractor.
2. Preparation of a Final Engineer's Report detailing the construction activity upon project completion.

Project Scope Exclusions

- ALP Update Services
- Sediment and Erosion Control Design Services
- Electrical Design Services
- Preparation and submittal of a CatEx.
  - GDOT will produce the CatEx for this project.

- Monthly update report(s) to the GDOT Project Manager identifying the aspects of the project that have been accomplished or focus on during the preceding month.
- Environment Services
- This proposal does not include the following items: easement exhibit plats, , Boundary survey or ties to property lines, engineering work, ALTA Survey, recording the survey, Boundary line Disputes, preparation of legal descriptions, dividing property, court costs stemming from a boundary dispute, additional field work due to lack of evidence, re-staking of any features originally placed on the ground by our crews, fees associated with accessing property, easements not of record or underground utility locations, any efforts associated with rezoning the property, environmental Phase 1 considerations, Croy personnel will not perform any Subsurface Utility Engineering Level A or B utility locations.
- Review of existing conceptual design from previous consultant.

Section B - Schedule

ENGINEER shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Project Initial Coordination Meeting	NTP Date
Survey Work to Begin	NTP Date + 5 Days
GDOT 60% Plan Set Submittal	NTP Date + 20 Days
GDOT 60% Review Comments Returned	NTP Date + 30 Days
GDOT 90% Plan Set Submittal	NTP Date + 40 Days
GDOT 90 % Review Comments Returned	NTP Date + 50 Days
100% Plan Set Submittal with Responses to GDOT Comments	NTP Date + 60 Days

Work shall begin within ten (10) days of the notice to proceed. A signed copy of this Task Order will serve as ENGINEER's notice to proceed.

Section C - Compensation

1. In return for the performance of the foregoing obligations, OWNER shall pay to ENGINEER the amount of $157,181, payable according to the following terms:

a. Invoicing will be submitted monthly for work completed to-date.
b. A lump sum fee applies for each task as follows, and shall be billed based upon percentage of work completed to-date. Expenses for services such as mileage, document reproduction, permit application fees, shipping costs, etc. are not included in the lump sum fee, and shall be billed separately as a reimbursable expense. The lump sum fee and estimated budgets for expenses are as follows:

Element 1 – Project Formulation ..... **$ 6,739**
Lump Sum Fee: $ 6,552
Estimated Expenses: $ 187

Element 2 – Survey Work		**$ 6,562**
Lump Sum Fee:	$ 6,321	
Estimated Expenses:	$ 241	
Element 3 – Geo-Technical Investigation		**$ 14,389**
Lump Sum Fee:	$14,389	
Estimated Expenses:	$ 0	
Element 4 – Construction Plans		**$ 29,670**
Lump Sum Fee:	$29,470	
Estimated Expenses:	$ 200	
Element 5 – Contract Documents		**$ 6,540**
Lump Sum Fee:	$ 6,465	
Estimated Expenses:	$ 75	
Element 6 – Engineer's/Design Report & As-Builts		**$ 4,486**
Lump Sum Fee:	$ 4,411	
Estimated Expenses:	$ 75	
Element 7 – Coordination, Review and Comments		**$ 4,015**
Lump Sum Fee:	$ 3,940	
Estimated Expenses:	$ 75	
Element 8 – Bid Services		**$ 7,482**
Lump Sum Fee:	$ 7,482	
Estimated Expenses:	$ 200	
Element 9 – Construction Administration Services		**$ 24,682**
Lump Sum Fee:	$ 23,832	
Estimated Expenses:	$ 850	
Element 10 – Construction Inspection Services		**$ 52,617**
Lump Sum Fee:	$ 47,668	
Estimated Expenses:	$ 4,949	
	TOTAL FEE	**$157,181**

2. Compensation for Additional Services (if any) shall be paid by OWNER to ENGINEER according to the following terms: Compensation for additional services shall be paid by the OWNER to the ENGINEER per the Croy Engineering Standard Hourly Rate Schedule attached to this Proposal.

Section D - Owner's Responsibilities

OWNER shall perform and/or provide the following in a timely manner so as not to delay the Services of ENGINEER. Unless otherwise provided in this Task Order, OWNER shall bear all costs incident to compliance with the following:

N/A

Section E - Other Provisions

The parties agree to the following provisions with respect to this specific Task Order:

N/A

IN WITNESS WHEREOF the parties hereto have made and executed this Task Order.

OWNER:

CITY OF DALTON

ANDREW WIERSMA
Airport Manager

ATTEST:

ENGINEER:

CROY ENGINEERING, LLC

GREGORY D. TEAGUE, P.E.
President

ATTEST:

PATRICK T. LENTON, P.E.
Director of Professional Services

Exhibit "B" Hourly Rate Schedule

Croy Engineering, LLC
STANDARD HOURLY RATES

Principal	**$234.31**
Project Manager	**$199.02**
Engineer 3	**$188.25**
Engineer 2	**$165.57**
Engineer 1	**$146.53**
Designer 2	**$127.36**
Designer 1	**$118.12**
Tech 2	**$108.25**
Tech 1	**$103.18**
CADD Operator	**$95.53**
Admin	**$88.71**
Field Rep 3	**$120.53**
Field Rep 2	**$102.75**
Field Rep 1	**$98.38**
RLS/Survey Manager	**$191.03**
Crew (2-Person)	**$177.49**
Crew (3-Person)	**$239.08**

Please note that expenses such as mileage, document reproduction, permit application fees, shipping costs, etc. are not included in the fees above, and shall be billed separately as a reimbursable expense.