TASK ORDER NUMBER SEVEN

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:

Preparation of Design Plans and Contract Documents for
Pavement and Electrical Rehabilitation for the Runway and Taxiway

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 design services will include the following elements of work:

1. Pavement Rehabilitation for Runway 14/32, Parallel Taxiway, and its Connectors
    a. 2" Mill and Overlay (assumed – pending Geotech report)
2. Marking and Striping for Runway 14/32, its Parallel Taxiway, and its Connectors
3. Runway Lighting Rehabilitation (schedule for LED)
4. Remove and Replace Airfield Signage
5. Provision of New Equipment in Electrical Vault
6. Replace Wind-cone and Refurbish Segmented Circle
7. Replace Airport Rotating Beacon Lamp and Refurbish Existing Beacon Tower
8. Remove and Replace Runway 14/32 PAPIs

Element 1 – Project Formulation and Coordination shall include the preparation of work scope, fees, pre-design/scoping meeting with GDOT, client meeting, application for funding assistance, submittal of Form(s) 7460 to FAA, preparation, and coordination of the Categorical Exclusion Checklist per FAA Order 5050.B and 1051.F, and coordination with regulatory agencies, as well as two (2) site visits to observe existing site conditions.

Element 2 – Survey Work shall include field run topographic survey covering an area 150' wide along the entire lengths of Runway 14/32, the parallel taxiway, and its connectors in a 25-foot grid pattern for verification of cross slopes for overlay purposes. The location of items such as the windsock, segmented circle, and electrical vault will be shown per existing drawings available.

Element 3 – Geotechnical Investigation consists of a geotechnical exploration per FAA 150-5320 Airport Pavement Design and Evaluation including boring samples and laboratory tests, etc. This will include obtaining asphalt core samples at 21 locations (6 cores on the runway, 12 on the taxiway, and 3 for the connectors), per the attached sketch. Samples shall be a minimum of 10 feet deep. The core holes will be patched with asphalt upon completion. An evaluation of the existing runway and taxiway pavements shall be made to determine the existing strength. CBR values, PCN values, and a proposed pavement section will be provided.

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, and index of drawings, contacts, and general project information.
2. **General Notes, Legend, Summary of Quantities Sheet** which includes pertinent notes on the project, a legend that displays the various symbols and linework used in the plan set, summary of quantities, specification numbers, description of the item, unit of measure and estimated quantities
3. **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.
4. **Existing Conditions and Demolition Plan** will show all items requiring relocation or removal for construction of the project, including paint obliteration, milling, crack seal, etc.
5. **Runway Plan and Profile** will show the centerline of the runway graded to meet current longitudinal slope standards, reflecting tie-in location, project limits and vertical curves where necessary.
6. **Taxiway Plan and Profile** will show the centerline of the proposed stub taxiway graded to meet current longitudinal slope standards, reflecting tie-in location, project limits and vertical curves where necessary.
7. **Horizontal Control Plan** will provide a geometric layout for the paving limits.
8. **Typical Sections and Paving Details** will delineate the width for the proposed pavement sections, shoulders, and safety areas, as well as reflect the thickness and type of pavement and base.
9. **Cross Sections** will be provided at 50 feet intervals to show the proposed transverse grades along the runway and stub taxiway.
10. **Marking and Striping Layout Plans** will provide a layout of the pavement marking and striping for both the runway and taxiway pavement.
11. **Marking and Striping Details** will be provided to support the layout.
12. **Lighting and Signage Layout Plan** includes the electrical design for Medium Intensity Runway Edge Lighting and signage, as well as the remaining Airfield. (LED)
13. **Lighting and Signage Details** will be provided to support the design.
14. **Windsock Layout Plan and Details** will show the proposed location of the windsock and the segmented circle, and the details will support the layout.
15. **Rotating Beacon Replacement Plan and Details** will show the full replacement of the rotating beacon and refurbishing of existing tower with necessary details to support the design.
16. **PAPI Replacement Plan and Details** will show the proposed location of the PAPI(s) and details to support the layout.
17. **Electrical Vault Rehabilitation Plan** will show the new electrical vault layout, including the proposed regulators to service the airfield.
18. **Electrical Vault Details** will be provided to support the design.
19. **Construction Details** will be provided to support the design.
20. **Erosion and Sediment Control Plan and Details** will include the preparation of an erosion control plan for the preliminary and final phases of the project. The preliminary phase will include the erection of silt fence and inlet protection in relation to the stub taxiway. The final phase will include BMPs required to stabilize the site. The proposed plan does not include full NPDES permitting as it is less than an acre.

This project will have the following Bid Schedules:

- Base Bid
  - Runway rehabilitation
    - Pavement rehabilitation
    - Marking and Signage
  - Runway electrical rehabilitation
    - Replace Runway Lighting (LED)
    - Replace Electrical Vault Equipment
    - Replace Wind-cone and Refurbish Segmented Circle
    - Replace Airport Rotating Beacon Lamp and Refurbish Existing Beacon Tower
    - Remove and Replace Runway 14/32 PAPIs
- Bid Alternate 1
  - Taxiway Rehabilitation
    - Pavement rehabilitation
    - Marking and Signage
    - Taxiway Lighting (LED)
- Bid Alternate 2
  - Removal of existing Taxiway Connectors from Apron to the Runway

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.

Element 7 – Coordination, Review and Comments will be addressed after the 90 percent submittal to GDOT.

Plans and specifications shall be in compliance with the most current FAA ACs (currently FAA AC 150/5300-13B, AC 150/5370-10, and other applicable FAA AC's), and/or the GDOT Standard Specifications Construction of Transportation Systems, 2021 Edition, unless modified by Special Provision. Special Provisions must be approved by the Department.

Deliverables will consist of one (1) set of final electronic plans and specifications to be provided to GDOT and one (1) half sized set printed copy of plans and one (1) hard copy set of specifications provided to the project manager upon completion of the project in addition to a one electronic plan set in MicroStation or AutoCAD format will be provided to GDOT before the construction contract will be initiated.

Section B - Schedule

ENGINEER shall perform the Services and deliver the related Documents (if any) according to the following schedule: 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 $160,848, 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		**$ 16,858**
Lump Sum Fee:	$ 16,779	
Estimated Expenses:	$ 80	
Element 2 – Survey Work		**$ 24,233**
Lump Sum Fee:	$ 23,359	
Estimated Expenses:	$ 875	
Element 3 – GeoTechnical Investigation		**$ 18,953**
Lump Sum Fee:	$18,953	
Estimated Expenses:	$ 0	
Element 4 – Construction Plans		**$ 72,766**
Lump Sum Fee:	$ 72,616	
Estimated Expenses:	$ 150	
Element 5 – Contract Documents		**$ 9,156**
Lump Sum Fee:	$ 9,056	
Estimated Expenses:	$ 100	
Element 6 – Engineer's/Design Report & As-Builts		**$ 12,168**
Lump Sum Fee:	$ 12,168	
Estimated Expenses:	$ 0	
Element 7 – Coordination, Review and Comments		**$ 6,713**
Lump Sum Fee:	$ 6,638	
Estimated Expenses:	$ 75	
	TOTAL FEE	**$160,848**

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 GDOT 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

DAVID PENNINGTON
Mayor

ATTEST:

ENGINEER:

CROY ENGINEERING, LLC

GREGORY D. TEAGUE, P.E.
CEO

ATTEST:

PATRICK T. LENTON, P.E.
Aviation Division Manager

Exhibit "B" Hourly Rate Schedule

Croy Engineering, LLC
GDOT HOURLY RATES

Employee Category	Billing Rate Raw+OH+ Profit+FCCM	Raw Rate	GDOT OH	Raw+OH	Profit	OH+Profit	FCCM
Updated: July 1, 2022			216.47%		10.00%		0.40%
Principal	$246.61	$70.76	$153.17	$223.93	$22.39	$246.33	$0.28
Project Manager	$209.46	$60.10	$130.10	$190.20	$19.02	$209.22	$0.24
Engineer 3	$198.13	$56.85	$123.06	$179.91	$17.99	$197.90	$0.23
Engineer 2	$174.26	$50.00	$108.24	$158.24	$15.82	$174.06	$0.20
Engineer 1	$154.22	$44.25	$95.79	$140.04	$14.00	$154.04	$0.18
Designer 2	$134.04	$38.46	$83.25	$121.71	$12.17	$133.89	$0.15
Designer 1	$124.32	$35.67	$77.21	$112.88	$11.29	$124.17	$0.14
Tech 2	$113.93	$32.69	$70.76	$103.45	$10.35	$113.80	$0.13
Tech 1	$108.60	$31.16	$67.45	$98.61	$9.86	$108.47	$0.12
CADD Operator	$100.55	$28.85	$62.45	$91.30	$9.13	$100.43	$0.12
Admin	$93.37	$26.79	$57.99	$84.78	$8.48	$93.26	$0.11
RLS/Survey Manager	$201.06	$57.69	$124.88	$182.57	$18.26	$200.83	$0.23
Crew (2-Person)	$186.81	$53.60	$116.03	$169.63	$16.96	$186.59	$0.21
Crew (3-Person)	$251.63	$72.20	$156.29	$228.49	$22.85	$251.34	$0.29
Field Rep 3 (Regular Time)	$126.86	$36.40	$78.80	$115.20	$11.52	$126.71	$0.15
Field Rep 3 (Overtime)	$182.83	$52.46	$113.56	$166.02	$16.60	$182.62	$0.21
Field Rep 2 (Regular Time)	$108.14	$31.03	$67.17	$98.20	$9.82	$108.02	$0.12
Field Rep 2 (Overtime)	$155.33	$44.57	$96.48	$141.05	$14.11	$155.16	$0.18
Field Rep 1 (Regular Time)	$103.54	$29.71	$64.31	$94.02	$9.40	$103.43	$0.12
Field Rep 1 (Overtime)	$118.46	$33.99	$73.58	$107.57	$10.76	$118.32	$0.14
Land Acq Admin	$93.37	$26.79	$57.99	$84.78	$8.48	$93.26	$0.11
Land Acq Negot Agent Trainee	$86.78	$24.90	$53.90	$78.80	$7.88	$86.68	$0.10
Land Acq Negot Agent 1	$89.22	$25.60	$55.42	$81.02	$8.10	$89.12	$0.10
Land Acq Negot Agent 2	$110.13	$31.60	$68.40	$100.00	$10.00	$110.00	$0.13
Land Acq Negot Agent 3	$132.40	$37.99	$82.24	$120.23	$12.02	$132.25	$0.15
Land Acq Reloc Agent	$127.56	$36.60	$79.23	$115.83	$11.58	$127.41	$0.15
Land Acq Relo Benefits Pkg	$127.56	$36.60	$79.23	$115.83	$11.58	$127.41	$0.15
Land Acq ROW Mngr	$142.51	$40.89	$88.51	$129.40	$12.94	$142.35	$0.16

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.