

## **AGREEMENT FOR PROFESSIONAL PLANNING SERVICES**

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, in the year of 2018 between the Owner (herein referred to as SPONSOR),

City of Charlotte

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and the Planning Consultant (herein referred to as the CONSULTANT),

Prein & Newhof

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for the following PROJECT:

Fitch H. Beach Airport \ City of Charlotte – ALP Update

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WHEREAS, the SPONSOR proposes to have professional planning services performed for the above described project;

AND WHEREAS, the SPONSOR has caused a review to make of the qualifications of the CONSULTANT and is satisfied the CONSULTANT is competent and qualified;

AND WHEREAS, the CONSULTANT is willing and able to accomplish the services provided and set forth hereafter in this Agreement;

AND WHEREAS, the SPONSOR shall compensate the CONSULTANT, in accordance with the Terms and Conditions of this Agreement.

NOW THEREFORE, in consideration of the covenants and agreements to be performed by the respective parties hereto, IT IS AGREED by and between the SPONSOR and the CONSULTANT as follows:

### **Article 1 – Description of Work to be Done**

#### **Element 1.1 – CONSULTANT Services**

Services to be furnished by the CONSULTANT to the SPONSOR together with the obligations of the SPONSOR or SPONSOR's Agent (Michigan Department of Transportation, Airport's Division - hereafter referred to as AERO) to furnish certain information and data that shall consist of the elements described in Attachment "A", Scope of Work, dated March 7, 2018, attached hereto and made a part hereof.

#### **Element 1.2 – Subconsultant Services**

Any services to be provided by subconsultants shall be provided for in a subconsultant agreement that shall meet the written approval of the SPONSOR. Costs of subconsultant services shall be included in Element 3.1 - Fee.

## **Article 2 – Time of Beginning and Completion**

### **Element 2.1 – Time for Beginning**

Upon acceptance of this Agreement by both the SPONSOR and the CONSULTANT, the CONSULTANT shall have **ten** calendar days from the date of notification to proceed in which to organize and actually commence work.

### **Element 2.2 – Time for Completion**

The estimated time for the CONSULTANT to complete the work in Article 1 of this agreement, ready for submission of final report and drawings to the SPONSOR for final SPONSOR's approval is 365 calendar days from the date the CONSULTANT actually starts work. This time frame does not include estimated time for FAA or AERO airspace review. The planned work schedule is attached as Attachment "B". The CONSULTANT shall report his progress to the SPONSOR with monthly progress reports to keep the SPONSOR informed of progress and any adjustments to the estimated time schedule which may be necessary. Changes in time for completion shall be in accordance with Element 4.4.

## **Article 3 – Payment**

### **Element 3.1 – Fee**

The SPONSOR agrees to pay the CONSULTANT as full compensation for services rendered as set forth in this Agreement as follows:

A firm fixed fee of one hundred fifty-five thousand dollars (\$155,000.00) shall be paid to the CONSULTANT for services reflected in Attachment "A", Scope of Work. A breakdown of the cost is included in Attachment "C". Any additional services will be negotiated on a project basis as separate contract amendments to this agreement.

The fee described above shall be considered payment in full by the SPONSOR to the CONSULTANT for all services rendered except as hereinafter provided under Article 4 - Element 4.3 - Changes in Work and Element 4.4 - Delays and Extensions.

### **Element 3.2 – Progress Payments**

Progress payments for completed work shall be based on a percentage completed basis. All charges for services shall be due and payable upon receipt of an invoice by the SPONSOR.

The CONSULTANT will submit periodic invoices for services rendered. Each invoice will be based upon the proportion of the total service actually completed at the time of billing. The final invoice will be a minimum of 10% of the total contract amount. Payment on this invoice will be retained by AERO until all Contract requirements have been completed. The SPONSOR will make prompt payments in response to the CONSULTANT's periodic statements.

The CONSULTANT agrees to pay each subconsultant for the satisfactory completion of work associated with the subcontract no later than ten (10) calendar days from the receipt of each payment the CONSULTANT receives from the State of Michigan or SPONSOR. The CONSULTANT agrees further to return retainage payments to each subconsultant within ten (10) calendar days after the subconsultant's work is satisfactorily completed. Any delay or postponement of payment from these time frames may occur only upon receipt of written approval from the SPONSOR or

AERO. These requirements are also applicable to all sub-tier subconsultants and will be made a part of all subconsultant agreements.

This prompt payment provision is a requirement of 49 CFR, Part 26, as amended, and does not confer third-party beneficiary right or other direct right to a subconsultant against the SPONSOR or the State of Michigan. This provision applies to both Disadvantaged Business Enterprise (DBE) and non-DBE subconsultants.

The CONSULTANT further agrees that it will comply with 49 CFR, Part 26, as amended, and will report any and all DBE subconsultant payments to AERO semi-annually in the format set forth in Attachment "G", dated June 1, 2001, attached hereto and made a part hereof, or any other format acceptable to the SPONSOR or AERO.

At the end of the State of Michigan fiscal year, the CONSULTANT will submit estimated payment amounts for both the CONSULTANT and contractors working on projects the CONSULTANT is supervising. These amounts will be submitted to the State of Michigan to establish a payable account.

#### **Article 4 – Miscellaneous Provisions**

##### **Element 4.1 – Design Standards**

The CONSULTANT shall follow insofar as applicable and reasonable and as approved by the SPONSOR, current design standards set forth by the SPONSOR, the SPONSOR's Agent and other participating governmental agencies in effect at the time the work herein provided is started. In the event design standards change after the CONSULTANT has completed that portion of the work to which a particular standard may apply, and in the event the CONSULTANT is required by the SPONSOR to make revisions to completed work to meet revised standards and certification requirements, the CONSULTANT shall be entitled to additional compensation as provided under Element 4.3 - Changes in Work.

##### **Element 4.2 – Ownership of Documents**

Documents prepared or obtained by the CONSULTANT, such as reports, exhibits, photographs, slides, computer files, tracings, plans, maps, sketches, and drawings as provided under the terms of this Agreement shall be the property of the SPONSOR. Completed original documents as provided under the terms of this Contract will be submitted in final form, and will be delivered to and become the property of the SPONSOR. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data will remain in the possession of the CONSULTANT as instruments of service but will be made available, upon request, to the SPONSOR without restriction or limitation on their use.

In the event any of the above documents are revised by the SPONSOR, the nameplates of the CONSULTANT will be removed and the SPONSOR will assume full responsibility for the reuse of these documents.

##### **Element 4.3 – Changes in Work**

By mutual acceptance of both the SPONSOR and the CONSULTANT, changes in work from that work herein provided, including changes in original design standards and changes in previously completed final plans may be accomplished by amendment to this Agreement. The amendment shall describe the change in work, any adjustment in fixed fee, work, schedule and/or payment schedule,

herein. Each amendment must be signed and dated by both the SPONSOR and the CONSULTANT prior to doing the work.

#### **Element 4.4 – Delays and Extensions**

Changes in the estimated time schedule as may be required by the SPONSOR or the CONSULTANT shall be in writing, setting forth the reason for delay or extension, and the estimated time adjustment necessary or as provided in Element 4.3 - Changes in Work.

#### **Element 4.5 – Insurance and Liability**

The CONSULTANT will maintain worker's compensation and public liability insurance as required by law and shall, upon request, show proof of compliance with this requirement.

#### **Element 4.6 – General Compliance With Laws**

Unless otherwise specified, this Agreement shall be governed by the laws of the principal address of the SPONSOR. The CONSULTANT agrees to comply with all Federal, State and Local laws, rules and regulation applicable to the work.

#### **Element 4.7 – Subletting, Assignment and Transfer**

The SPONSOR and the CONSULTANT each binds himself, his partners, successors, assignees and legal representatives to the other party to this Agreement and to the Partners, successors, assignees, and legal representatives of such other party with respect to all covenants of this Agreement. Neither the SPONSOR nor the CONSULTANT shall assign, sublet, or transfer his interest in this Agreement without the written consent of the other.

#### **Element 4.8 – CONSULTANT's Endorsement**

The CONSULTANT shall seal and sign the final plans furnished to the SPONSOR.

#### **Element 4.9 – Disputes**

All disputes concerning a question of fact in connection with work not disposed of by agreement between the SPONSOR and the CONSULTANT shall be settled through standard court actions.

#### **Element 4.10 – Responsibility for Claims and Liability**

The CONSULTANT shall save harmless the SPONSOR, SPONSOR's Agent, AERO, FAA, or other governmental agencies from all claims and liability due to negligence of the CONSULTANT or its subconsultants.

#### **Element 4.11 - Assignment of Antitrust Rights**

With regard to claims based on goods or services that were used to meet the CONSULTANT's obligation to the SPONSOR or AERO under this Agreement, the CONSULTANT hereby irrevocably assigns its right to pursue any claims for relief or causes of action for damages sustained by the State of Michigan or the MDOT due to any violation of 15 USC, Sections 1 - 15, and/or 1984 PA 274, MCL 445.771 - .788, excluding Section 4a, to the State of Michigan or MDOT.

The CONSULTANT will require any subcontractors to irrevocably assign their rights to pursue any claims for relief or causes of action for damages sustained by the State of Michigan or the MDOT with regard to claims based on goods or services that were used to meet the CONSULTANT's obligation to the MDOT under this Agreement due to any violation of 15 USC, Sections 1 - 15 and/or 1984 PA 274, MCL 445.771 - .788, excluding Section 4a, to the State of Michigan or MDOT as a third-party beneficiary.

The CONSULTANT will notify the SPONSOR if it becomes aware that an antitrust violation with regard to claims based on goods or services that were used to meet the CONSULTANT's obligation to the SPONSOR or AERO under this Agreement may have occurred or is threatened to occur. The CONSULTANT will also notify the SPONSOR or AERO if it becomes aware of any persons intent to commence, or of commencement of, an antitrust action with regard to claims based on goods or services that were used to meet the CONSULTANT's obligation to the SPONSOR or AERO under this Agreement.

**Element 4.12 – Prohibition of Discrimination in State Contracts**

The CONSULTANT hereby agrees to comply with the requirements of Attachment "D", attached hereto and made a part hereof.

**Element 4.13 – Additional Provisions**

Not applicable

**Element 4.14 – Non-Construction Requirements / Federal Required Clauses**

The CONSULTANT hereby agrees to comply with the requirement of the Non-construction requirements of Attachment "E", attached hereto and made a part hereof.  
IN WITNESS WHEREOF, the parties hereto have fixed their hand this day and date first written.

ACCEPTED BY THE SPONSOR

Witness: \_\_\_\_\_

City of Charlotte

SPONSOR

111 E. Lawrence Avenue  
Street Address

Charlotte, MI 48813  
City, State & Zip Code

\_\_\_\_\_  
Date

\_\_\_\_\_  
BY: Authorized Representative

ACCEPTED BY THE CONSULTANT

Witness: \_\_\_\_\_



Prein&Newhof  
CONSULTANT

3355 Evergreen Drive, NE  
Street Address

Grand Rapids, MI 49525  
City, State & Zip Code

05/02/18

\_\_\_\_\_  
Date

\_\_\_\_\_  
BY: Authorized Representative



***INCLUDE THIS PAGE IN ALL CONTRACTS!!***

Consultants are advised to use the following attachment schedule. Any additional clauses or requirements should be included in Attachment F. The preceding is the base contract; no changes may be made to the wordage or numbering without the written approval of the Michigan Department of Transportation - Airports Division.

**SCHEDULE OF ATTACHMENTS**

Attachment A	Scope of Work/Services
Attachment B	Work Schedule
Attachment C	Cost Breakdown
Attachment D	Prohibition of Discrimination in State Contracts
Attachment E	Non Construction Requirement Clauses
Attachment F	Additional Provisions
Attachment G	Prime CONSULTANT Statement of DBE Subconsultant Payments

## ATTACHMENT "A"

**Scope of Work/Services**  
**ALP UPDATE**  
**FITCH H. BEACH AIRPORT – CHARLOTTE, MI**  
**March 7, 2018**

### **Scope of Work**

Professional services fees are based upon the following:

#### **Task 2 – Aerial Survey**

1. Subconsultant will perform airport survey in accordance with AC 5300-17C & 18B Change 1 per the attached scope of work. Project will provide safety critical data via AGIS portal. No eALP will be developed.

#### **Task 3 – Inventory (ALP Report Chapter)**

1. Consultant will obtain applicable wetland and wildlife maps in order to identify environmental considerations.
2. Consultant will obtain current wind data.
3. Consultant will obtain based aircraft list and airport operations (Flight Aware) for past 2 years.
4. Consultant will provide runway pavement PCN based upon aircraft using airport.
5. Consultant will use existing FAA TAF and MASP forecasts.
6. Consultant will review existing leases provided by Sponsor and provide recommendations.

#### **Task 4 – Alternatives Development (ALP Report Chapter)**

1. Consultant will develop up to three (3) alternatives, each describing airport terminal area access, fuel farm, and terminal area development, and identify the preferred alternative in the ALP.
2. Consultant will review "no-build" and existing runway extension alternatives for Sponsor consideration, and identify the preferred alternative in the ALP.

#### **Task 5 – FAA ARP SOP 2.0 - Airport Layout Plan**

1. Consultant will develop ALP Narrative Report and Airport Capital Improvement Program.
2. Consultant will develop the following twelve (12) sheets based FAA standards effective the date of the contract, and as noted below. Should applicable advisory circulars be revised during the ALP Update process, Consultant will inform Sponsor of any Scope of Work changes requiring contract modifications.
  - a. Title Sheet
  - b. Data Sheet
  - c. Existing Airport Layout Plan
  - d. Future Airport Layout Plan
  - e. Terminal Area Plan
  - f. Airport Airspace Drawing
  - g. Inner Portion of Approach Surface including Departure Surface (4 Runway Ends)
  - h. Airport Land Use Drawing
  - i. Airport Property Map (transfer of existing Exhibit A information per ARP SOP 3.0 scope of work except where noted in the Exclusions section.)



3. Consultant will develop DRAFT ALP for Sponsor and MDOT Aero review and comment. Consultant will attend comment review meeting at MDOT Aero.
4. Consultant will develop FINAL DRAFT ALP, incorporating draft comments, for FAA Airspace Review.
5. Consultant will obtain signatures on approved ALP, and distribute 5 copies [Sponsor(2), MDOT Aero, FAA, Consultant]

### **Exclusions**

The following items are currently excluded, but can be added by contract amendment:

- Supplemental alternative analyses
- Deed\parcel description review, title work, property surveys, grant research, revised boundary description

## ATTACHMENT “B”

### Schedule

Professional services will be completed based upon the following milestones:

Task 2 – Leaf on (aerial survey) conditions + AGIS portal (estimated completion July 2018)

Task 3 – NTP + 60 days

Task 4 – Task 2 data + 45 days

Task 5.1, 5.2, 5.3 – Task 4 completion + 60 days

Task 5.4 – Receipt of comments + 30 days

Task 5.5 – Receipt of signatures + 14 days

**ATTACHMENT "C"**  
**ESTIMATED MAN HOUR ASSIGNMENTS AND COSTS**

P&N No: 2170688

**Fitch H Beach Airport**  
**Charlotte, Michigan**  
Project No. B-26-0018-2217  
Contract No. FM-23-02-MP  
Master Plan - Planning Services

	SR. AIRPORT CONSULTANT	SR PROJECT MANAGER I	SR PROJECT MANAGER I (2)	AIRPORT PLANNER	ENGINEER	TOTAL	EXPENSES	AMOUNT PERSONNEL	TOTAL AMOUNT BY TASK
TASK II Survey		8				8	\$ 62,200.00	\$ 348.00	\$ 63,251.63
TASK III Inventory	32	8	4	40	20	104	\$ -	\$ 3,985.00	\$ 12,500.39
TASK IV Alternatives	8	24	48	60	48	188	\$ -	\$ 6,682.00	\$ 20,960.50
TASK V ALP	8	80	120	80	240	528	\$ 2,285.90	\$ 17,840.00	\$ 58,247.48
TASK VI							\$ -	\$ -	\$ -
TASK VII							\$ -	\$ -	\$ -
TASK VIII							\$ -	\$ -	\$ -
TASK IX							\$ -	\$ -	\$ -
TASK X							\$ -	\$ -	\$ -
TASK XI							\$ -	\$ -	\$ -
<b>TOTALS -</b>	<b>48</b>	<b>120</b>	<b>172</b>	<b>180</b>	<b>308</b>	<b>828</b>	<b>\$ 64,485.90</b>	<b>\$ 28,855.00</b>	<b>\$ 155,000.00</b>
HOURLY RATES	\$ 50.00	\$ 43.50	\$ 40.50	\$ 33.50	\$ 26.75		\$ -		
AMOUNT PERSONNEL	\$ 2,400.00	\$ 5,220.00	\$ 6,966.00	\$ 6,030.00	\$ 8,239.00		\$ 28,855.00		
OVERHEAD	\$ 4,382.40	\$ 9,531.72	\$ 12,719.92	\$ 11,010.78	\$ 15,044.41		\$ 52,689.23		
PROFIT 11%	\$ 746.06	\$ 1,622.69	\$ 2,165.45	\$ 1,874.49	\$ 2,561.18		\$ 8,969.87		
TOTAL PERSONNEL CHARGES	\$ 7,528.46	\$ 16,374.41	\$ 21,851.37	\$ 18,915.27	\$ 25,844.59		\$ 90,514.10		
							<b>TOTAL CONTRACT = \$ 155,000.00</b>		

  

	ITEM I	ITEM II	ITEM III	ITEM IV	ITEM V	ITEM VI	ITEM VII	ITEM VIII	ITEM IX	ITEM X	ITEM XI
<b>OUT OF POCKET EXPENSES</b>											
COMMERCIAL CARRIER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Total Expenses
VEHICLE MILES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MILES X \$0.565	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PER DIEM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PER DIEM X \$130	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SURVEY MATERIALS & SUPPLIES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PLOTTING AND REPRODUCTION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub: Quantum Spatial	\$ 62,200.00	\$ -	\$ -	\$ -	\$ 2,285.90	\$ -	\$ -	\$ -	\$ -	\$ -	2,285.90
<b>TOTAL</b>	\$ -	\$ 62,200.00	\$ -	\$ -	\$ 2,285.90	\$ -	\$ -	\$ -	\$ -	\$ -	62,200.00
											\$ 64,485.90

**ATTACHMENT D**  
**PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS**

In connection with the performance of work under this contract; the Contractor agrees as follows:

1. In accordance with Act No. 453, Public Acts of 1976, the Contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, or marital status. Further, in accordance with Act No. 220, Public Acts of 1976 as amended by Act No. 478, Public Acts of 1980, the Contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of a handicap that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants will be regarded as a material breach of this contract.
2. The Contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, will contain a covenant the same as hereinbefore set forth in Section 1 of this Appendix.
3. The Contractor will take affirmative action to insure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status or a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action will include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.
5. The Contractor or his collective bargaining representative will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the Contractor's commitments under this appendix.
6. The Contractor will comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect prior to the taking of bids for any individual state project.
7. The Contractor will furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission, said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor as well as the Contractor himself, and said Contractor will permit access to his books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain compliance with this contract and relevant with rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Civil Rights Commission finds, after a hearing held pursuant to its rules,

that a contractor has not complied with the contractual obligations under this Contract, the Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the Administrative Board of the State of Michigan, which Administrative Board may order the cancellation of the contract found to have been violated, and/or declare the Contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the contractor complies with said order of the Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the Contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency will be notified of such possible remedy and will be given the option by the Civil Rights Commission to participate in such proceedings.

9. The Contractor will include, or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or purchase order that said provisions will be binding upon each subcontractor or seller.

March 1998

## **Attachment E**

### **PROFESSIONAL SERVICES CONTRACTS**

#### **ACCESS TO RECORDS AND REPORTS**

**2 CFR § 200.333 / 2 CFR § 200.336 / FAA Order 5100.38**

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the sponsor, the Federal Aviation Administration, and the Comptroller General of the United States or any of their duly authorized representatives, access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

#### **GENERAL CIVIL RIGHTS PROVISIONS**

**49 USC § 47123**

#### ***SPONSOR CONTRACTS***

The contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractor and subtier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

#### ***SPONSOR LEASE AGREEMENTS AND TRANSFER AGREEMENTS***

The tenant/concessionaire/lessee and its transferee agree to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport through the Airport Improvement Program.

In cases where Federal assistance provides, or is in the form of personal property; real property or interest therein; structures or improvements thereon, this provision obligates the party or any transferee for the longer of the following periods:

(a) The period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or

(b) The period during which the airport sponsor or any transferee retains ownership or possession of the property.

**CIVIL RIGHTS - TITLE VI SOLICITATION NOTICE:**  
**49 USC § 47123 / FAA ORDER 1400.11**

The Sponsor, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

**TITLE VI CONTRACTS- COMPLIANCE WITH NONDISCRIMINATION  
REQUIREMENTS**  
**49 USC § 47123 / FAA ORDER 1400.11**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

## **TITLE VI - LIST OF PERTINENT NONDISCRIMINATION ACTS AND AUTHORITIES**

### **49 USC § 47123 / FAA ORDER 1400.11**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);



- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

## **DISADVANTAGED BUSINESS ENTERPRISES**

### **49 CFR PART 26**

**Contract Assurance (§ 26.13)** - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

**Prompt Payment (§26.29)** - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than ten days from the receipt of each payment the prime contractor receives from Michigan Department of Transportation or the Sponsor. The prime contractor agrees further to return retainage payments to each

subcontractor within ten days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Michigan Department of Transportation or the Sponsor. This clause applies to both DBE and non-DBE subcontractors.

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the sponsor to practice nondiscrimination based on race, color, sex or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

### **ENERGY CONSERVATION REQUIREMENTS 2 CFR § 200, APPENDIX II(H)**

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201*et seq*).

### **FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE) 29 U.S.C. § 201, ET SEQ**

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

The consultant has full responsibility to monitor compliance to the referenced statute or regulation. The consultant must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division

### **OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 20 CFR PART 1910**

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

### **RIGHTS TO INVENTIONS**

## **2 CFR 200, APPENDIX II(F) / 37 CFR 401**

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within in the 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental or research work.

### **TRADE RESTRICTION CERTIFICATION 49 USC 50104 / 49 CFR PART 30**

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror -

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R.);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S.T.R; and
- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- (1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or

- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- (3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by U.S.T.R., unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

#### **VETERAN'S PREFERENCE 49 USC 47112(c)**

In the employment of labor (excluding executive, administrative, and supervisory positions), the contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

#### **SEISMIC SAFETY 49 CFR PART 41**

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard which provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a "certification of compliance" that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

**TEXTING WHEN DRIVING  
EXECUTIVE ORDER 13513 / DOT ORDER 3902.10**

For contracts exceeding \$3,500.

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), the FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 and involve driving a motor vehicle in performance of work activities associated with the project.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to  
ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
41 CFR PART 60-4 / EXECUTIVE ORDER 11246**

For all contracts containing construction work in excess of \$10,000:

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

**Timetables**

***Goals for female participation in each trade:*** 6.9%

***Goals for minority participation for each trade:***  
(Vol. 45 Federal Register pg. 65984 10/3/80)

Geographical Area (By Counties)	Goals (Percent)
Lapeer, Livingston, Macomb, Oakland, St. Clair, Wayne	17.7
Sanilac	16.7
Saginaw	14.3

Genesee, Shiawassee	12.6
Muskegon, Oceana	9.7
Monroe	8.8
Washtenaw	8.5
Lenawee	7.3
Barry, Calhoun	7.2
Berrien, Cass, St. Joseph	6.2
Kalamazoo, VanBuren	5.9
Clinton, Eaton, Ingham, Ionia	5.5
Branch, Hillsdale	5.5
Alcona, Alpena, Arenac, Cheboygan, Chippewa, Clare, Crawford, Gladwin, Gratiot, Huron, Iosco, Isabella, Luce, Mackinac, Midland, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Tuscola	5.2
Kent, Ottawa	5.2
Jackson	5.1
Allegan, Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Newaygo, Osceola, Wexford	4.9
Bay	2.2
Gogebic, Ontonagon	1.2
Alger, Baraga, Delta, Dickinson, Houghton, Iron, Keweenaw, Marquette, Menominee, Schoolcraft	1.0

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is the Owner/SPONSOR as identified on page one of this contract.

#### **EQUAL OPPORTUNITY CONTRACT CLAUSE**

#### **2 CFR 200, APPENDIX II(C) / 41 CFR § 60-1.4 / 41 CFR § 60-4.3 / EXECUTIVE ORDER 11246**

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identify or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under

this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY  
CONSTRUCTION CONTRACT SPECIFICATIONS  
2 CFR 200, APPENDIX II(C) / 41 CFR § 60-1.4 / 41 CFR § 60-4.3 / EXECUTIVE ORDER  
11246**

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;



d. "Minority" includes:

(1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);

(2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);

(3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.
- c. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and

apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.

- f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and

cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

#### **PROHIBITION of SEGREGATED FACILITIES 41 CFR 60**

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

**PROCUREMENT OF RECOVERED MATERIALS**  
**2 CFR 200.322 / 40 CFR PART 247**

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,
- b) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at  
[www.epa.gov/epawaste/conservation/tools/cpg/products/](http://www.epa.gov/epawaste/conservation/tools/cpg/products/).

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

**TERMINATION OF CONTRACT**  
**2 CFR 200 APPENDIX II(B) / FAA ADVISORY CIRCULAR 150/5370-10, SECTION 80-09**

For all contracts and subcontracts in excess of \$10,000:

***FOR CONVENIENCE***

The Owner may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Owner, the Contractor must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

### ***TERMINATION FOR DEFAULT***

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party [7] days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

- a. Termination by Owner:** The Owner may terminate this Agreement in whole or in part, for the failure of the Consultant to:
  - 1. Perform the services within the time specified in this contract or by Owner approved extension;
  - 2. Make adequate progress so as to endanger satisfactory performance of the Project;
  - 3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

If, after finalization of the termination action, the Owner determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Owner issued the termination for the convenience of the Owner.

**b. Termination by Consultant:** The Consultant may terminate this Agreement in whole or in part, if the Owner:

1. Defaults on its obligations under this Agreement;
2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

Upon receipt of a notice of termination from the Consultant, Owner agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If Owner and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Owner's breach of the contract.

In the event of termination due to Owner breach, the Engineer is entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. Owner agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.



**CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT  
2 CFR PART 180 (SUBPART C) / 2 CFR PART 1200 / DOT ORDER 4200.5**

For contracts of \$25,000 or greater:

***BIDDER OR OFFEROR CERTIFICATION***

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

***CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT***

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>
2. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract

If the FAA later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

**CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS  
2 CFR § 200, APPENDIX II(E)**

For contracts exceeding \$100,000 and employs laborers, mechanics, watchmen and guards. This includes members of survey crews and expletory drilling operations.

**1. Overtime Requirements.**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; Liability for Unpaid Wages; Liquidated Damages.**

In the event of any violation of the clause set forth in paragraph (1) of this clause, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set

forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

### 3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this clause.

### 4. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

## **LOBBYING AND INFLUENCING FEDERAL EMPLOYEES 31 U.S.C. § 1352 – BYRD ANTI-LOBBYING AMENDMENT / 2 CFR PART 200, APPENDIX II(J) / 49 CFR PART 20, APPENDIX A**

For contracts exceeding \$100,000.

The bidder or offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

#### **BREACH OF CONTRACT TERMS 2 CFR § 200 Appendix II(A)**

For all contracts in excess of \$150,000:

Any violation or breach of terms of this contract on the part of the contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Consultant written notice that describes the nature of the breach and corrective actions the Consultant must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Consultant must correct the breach. Owner may proceed with termination of the contract if the Consultant fails to correct the breach by deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

#### **CLEAN AIR AND WATER POLLUTION CONTROL 2 CFR § 200, APPENDIX II(G)**

Contractors and subcontractors agree for all contracts in excess of \$150,000:

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

**ATTACHMENT F  
ADDITIONAL PROVISIONS**



Attachment G

Prime CONSULTANT Statement of DBE Sub-CONSULTANT Payments

Information required in accordance with 49 CFR §26.37 to monitor progress of the prime CONSULTANT in meeting contractual obligations to DBEs.

PRIME CONSULTANT:		<input type="checkbox"/> CHECK IF PRIME IS MDOT-DBE CERTIFIED		AUTHORIZATION NO.		CONTRACT NO.		
BILLING PERIOD:		Check if Final Payment <input type="checkbox"/>		JOB NO.				
CERTIFIED DBE SUBCONSULTANT	SERVICES WORK PERFORMED	TOTAL CONTRACT AMOUNT	CUMULATIVE DOLLAR VALUE OF SERVICES COMPLETED	DEDUCTIONS	ACTUAL AMOUNT PAID TO DATE	ACTUAL AMOUNT PAID DURING THIS REPORTING PERIOD	DBE AUTHORIZED SIGNATURE (Final Payment Report Only)	DATE

As the authorized representative of the above prime CONSULTANT, I state that, to the best of my knowledge, this information is true and accurate.

PRIME CONSULTANT'S AUTHORIZED REPRESENTATIVE (SIGNATURE)	TITLE	DATE
----------------------------------------------------------	-------	------

FOR MDOT USE ONLY
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COMMENTS:

CONTRACT ADMINISTRATOR (SIGNATURE)

DATE

SPECIAL NOTE: "Prime CONSULTANT or Authorized Representative" refers to recipients of federal funds as defined at 49 Code of Federal Regulations Part 26.

## **INSTRUCTIONS**

### **PRIME CONSULTANT OR AUTHORIZED REPRESENTATIVE:**

This statement reports the actual dollar amounts of the project cost earned by and paid to DBE subCONSULTANTS. Complete and submit to the Contract Administrator with each billing and within 20 days of receipt of final payment. Some forms may be blank if no payment was made since the previous billing.

For "Contract No., Authorization No.," and "Job No." as appropriate, use the numbers assigned by MDOT.

For "Period Covered," report the calendar days covered by the billing.

For "Services Work Performed" report the main service performed by the subCONSULTANT during the reporting period.

For "Total Contract Amount" report the total amount of the contract between the prime CONSULTANT and the subCONSULTANT.

For "Cumulative Dollar Value of Services Completed" report the total amount the subCONSULTANT has earned since beginning this project.

For "Deductions," report deductions made by the prime CONSULTANT to the subCONSULTANT's "Cumulative Dollar Value of Services Completed" for retainage, bond or other fees, materials, services or equipment provided to the subCONSULTANT according to mutual, prior agreement (documentation of such agreement may be required by MDOT).

For "Actual Amount Paid to Date," report cumulative actual payments made to the subCONSULTANT for services completed.

For "Actual Amount Paid During this Reporting Period" report actual payments made to the subcontractor for services during this reporting period.

Provide "DBE Authorized Signature" for final payment only.

Be sure to sign, title and date this statement.

### **MDOT CONTRACT ADMINISTRATOR:**

Complete "Comments" if necessary, sign, date and forward to the Office of Business Development within seven (7) days of receipt.

MDOT Office of Business Development  
P.O. Box 30050  
Lansing, Michigan 48909  
Questions about this form? call Toll-free, 1-866-DBE-1264



January 2, 2018

Mr. Bob Nelesen, PE, MBA  
Prein & Newhof  
1220 Airport Access  
Traverse City, MI 49686

Project: Aeronautical Obstruction Survey – Fitch H Beach Airport (FPK)

Dear Mr. Nelesen,

This summary of work describes our understanding of the scope of work and services required for a Airport Layout Plan and aeronautical obstruction survey at the Fitch H Beach Airport (FPK) located in Charlotte, MI. The project will be done in compliance with AGIS policies and will include an airport airspace analysis for vertically-guided operations for EXISTING Runway 3/21 and non-vertically guided operations for EXISTING Runway 15/33. The Advisory Circulars identified below detail the data collection requirements and accuracies for the project and the verification process by the Federal Aviation Administration (FAA) and the National Geodetic Survey (NGS).

- AC 150/5300-16A "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey"
- AC 150/5300-17C "Standards for Using Remote Sensing Technologies in Airport Surveys"
- AC 150/5300-18C "Survey and Data Standards for Submission of Aeronautical Data Using Airports GIS"

## Summary of Work

We understand that the purpose of this project is to accomplish an FAA Airport Airspace Analysis Survey for all surfaces defined in FAA Advisory Circular 150/5300 - 18B: Section 2.7.1.1 Runways with vertical guidance and Section 2.7.1.3. "Runways without Vertical Guidance" (inclusive of paragraphs 2.7.1.3. through 2.7.1.3.4.).

In addition, we will provide FAR Part 77 Surface obstruction data for Runway 3/21. Prein & Newhof will be required to provide a spreadsheet identifying the applicable dimensions and slopes for FAR Part 77 Surfaces.

For this project, we will acquire new vertical stereo digital imagery at a physical image scale of 1"= 4,328' of the obstruction surface areas and 1"= 1,122' of the airport property (including easements and approaches – see exhibit below). The aerial imagery will cover all of the NVG, VG, and Part 77 Airspace Analysis surfaces using a Ultracam Eagle Aerial Digital Mapping System, or comparable, during leaf-on conditions.

From the 1"= 4,328' imagery, we will produce the following:

- Limited landmark feature planimetric mapping
- Color digital orthophotos with a 1.0' pixel resolution
- Identification and mapping of obstruction obstacles for all of the NVG, VG, and Part 77 surfaces

From the 1"= 1,122' imagery, we will produce the following:

- 100 scale mapping with 2' contours of the existing and future airport property (375 acres)
- Identification and mapping of obstruction obstacles for the NVGPS, VGRPS, VGPCS & VGPS surfaces





Quantum Spatial will be responsible for preparation and submittal of the Statement of Work (SOW), Survey and Quality Control Plan, Imagery Acquisition Plan, and Imagery Acquisition Report and all associated data files as required for submission to the FAA AGIS online database. CMT will provide QSI with survey documents required for the Image Delivery. QSI will provide data relating to our effort for CMT to prepare the Final Report.

## Quality Standards

The project has been designed to conform to the National Map Accuracy Standards for 1"=100' scale planimetric feature collection, two foot contours and six and twelve inch orthophoto production. In addition, we insure that the photogrammetric mapping will meet all FAA and NGS standards. We will exercise reasonable care and will conform to the standards of practice ordinarily used by the photogrammetric profession.

## Project Area

The project area encompasses all of Fitch H Beach Airport (FPK) inclusive of the obstruction surfaces as defined in AC 150/5300-18B.

## Control Surveying

The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. Quantum Spatial will process the ABGPS data using COR stations and reference it to the project control datums:

Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the MI State Plane Coordinate System, South Zone in US survey feet.

Vertical: North American Vertical Datum of 1988 (NAVD 88)

QSI will complete all of the remaining on-site ground control surveys, including:

- Geodetic control validation of the existing airport PACS and SACS stations or establish temporary airport control according to the guidelines established in AC 150/5300-16A
- Establishing all necessary photo-identifiable ground control and FAA mandated check-points required to validate the ABGPS and IMU control. Quantum Spatial will provide information on the specific locations of the required control and check points.
- Collection of all the airport runway end positions
- Collection of vertical profiles for all runways
- Collection of the position, elevation, and where required the appropriate navigational aid perpendicular point of all electronic and visual navigational aids (NAVAIDS) located on the airport and associated with any current instrument approach servicing the airport
- *Full field-collected attribution of all airport features (INCLUDED)*
- All other tasks, not specifically listed above, as outlined in FAA AC-18B, Table 2-1 "Survey Requirements Matrix for *Airport Layout Plan*."
- **Data upload and Final Survey Report**

## Photogrammetric Mapping

We will collect the features normally shown on 1"=100' scale mapping within the mapping limits identified in the RFP (see exhibit).

We will build a digital terrain model (DTM) by collecting masspoints and breaklines. These DTM elements will be used to construct a triangulated irregular network (TIN) surface from which 2' contours will be



interpolated. Contours will be dashed in areas where the ground is obscured by trees, dense brush, deep shadows or other obstructing features. Dashed contours indicate a lower level of accuracy. Additional field surveys should be performed in areas of dashed contours prior to design. All contours will be continuous polylines. The final data will be delivered in ESRI Shapefile format.

## **Orthophoto Mapping**

We will use the control solution and imagery to generate a Digital Elevation Model (DEM) of the VG and NVG surfaces. The imagery will be processed into color digital orthophotos using the aforementioned DEM to rectify the images. Orthophotos for the entire project area will be developed with a 1.0' pixel resolution and for the airport property, with a 0.5' pixel resolution. Orthos will be delivered in a GeoTIFF file format.

## **18B Obstruction Surveys**

The Obstructions Surfaces to be uploaded to the AGIS database will satisfy the requirements of AC 150/5300-18B:

- 2.7.1.2 Analysis of EXISTING Runway 3/21 with Vertically Guided Operations  
(Surfaces include the VGRPS, VGPCS, VGAS, VGPS, VGATS, VGHS and VGCS)
- 2.7.1.3 Analysis of EXISTING Runway 15/33 without Vertically Guided Operations  
(Surfaces include the NVGPS, NVGAS, NVGTS and NVGHS)

The specific types and quantities of obstructions for each surface are outlined and clearly defined for the particular surface in each circular section. Any obstructions that meet the requirement of the circular, but are of a nature that elevations at the highest point of the obstruction are virtually impossible to read through photogrammetric methods (cell tower, electrical tower, etc.), will be identified and relayed to the surveyor to initiate field surveyed elevations for the obstruction.

The obstruction delivery will include the limited landmark planimetric feature collection.

The final data will be uploaded in AGIS in ESRI Shapefile format.

## **Other Obstruction Surveys**

Other obstructions to be provided directly to Prein & Newhof include:

- Part 77 Analysis of Runway 3/21
- PAPI OCS of Runway 3/21

## **Production Schedule**

We will work with you to finalize a mutually agreeable schedule for the project after FAA Control Plan approvals. We will make a reasonable effort to maintain the agreed-upon schedule. However, should the project be interrupted by technical problems beyond our control, including control deficiencies or map file re-deliveries rescheduling may become necessary.

## **Deliverables**

Quantum Spatial will submit all data collected and associated required deliverable in the formats specified in the appropriate advisory circulars to the FAA Office of Airports, Airports Surveying-GIS Program. All data submissions to the FAA will be through the program's web site at <http://airports-gis.faa.gov>.

The AC 150/5300-17C project data deliveries that will not be submitted through the web site will be delivered on external hard drives or DVDs.



The 18B deliverables that will be uploaded to the AGIS website include:

- Statement of Work, Imagery Plan and Survey and Quality Control Plan
- Image Delivery
- Color digital orthophotos
- Digital limited landmark detail outside the airport
- Obstruction survey data for **EXISTING** Runways 3/21 and 15/33
- Planimetric data and two foot contours to 18B specs (Shapefile format)
- Photogrammetrically derived and surveyed attributes in defined format
- Surveyed ends and profile for each runway
- NAVAID data
- FGDC compliant metadata
- Final Report

We will deliver the following items to Prein & Newhof:

- Topologically structured Planimetric data and two foot contours in Civil 3D format (375 acres)
- Color digital orthophotos with a 1.0' pixel resolution in GeoTIFF (project area)
- Color digital orthophotos with a 0.5' pixel resolution in GeoTIFF (airport property)
- 2 color enlargements (30"x40") covering the airport and surrounding area (mounted/laminated/framed)
- Part 77 obstruction survey data for Runway 3/21 in Microstation/Excel/CSV file format
- PAPI OCS data for Runway 3/21

All digital files will be delivered on external hard drive or CD/DVD.

## Cost and Payment Terms

Compensation for the a will be provided as a lump sum cost of U.S. \$62,200.00

Cost Break Down is as follows

Image Acquisition and Mapping - \$38,700.00

Ground Survey - \$16,500.00

Field Attribution - \$7,000.00

## Client Responsibilities

The successful and timely completion of this project is dependent upon a number of elements and work tasks, some of which involve participation by Prein & Newhof. You will be responsible for designating a representative for the project who will have the authority to transmit instructions, receive information, and make timely decisions with respect to the services provided by Quantum Spatial.

## Quantum Spatial Representative

Jill Mahoney, Project Manager and Marlin Zook, Technical Manager, will represent us during the performance of the services to be provided under this agreement. Each has the authority to transmit and receive instructions and make decisions with respect to the services. Each is authorized to commit the necessary resources towards completing the services described herein.

We look forward to working with you and your staff to complete this project in a timely and cost effective manner. Should you have any questions, please call our office at (920) 912-6263 or email me at the address shown below.



Sincerely,

Quantum Spatial, Inc.

A handwritten signature in black ink, appearing to read 'R Vander Meer', with a long horizontal flourish extending to the right.

Robert Vander Meer  
Vice President  
rvandermeer@quantumspatial.com



Fitch H Beach Airport (FPK)  
Runway 3/21 - VG Airspace Analysis Surfaces





Fitch H Beach Airport (FPK)  
Runway 15/33 - NVG Airspace Analysis Surfaces

















