SERVICES AGREEMENT

THIS SERVICES AGREEMENT ("Agreement") is made as of this _____ day of _____, 2017 ("Effective Date"), by and between Pinellas County, a political subdivision of the State of Florida ("County"), and Environmental Science Associates, (ESA), 4200 West Cypress St. Suite 450 Tampa, FL 33607 ("Contractor") (individually, "Party," collectively, "Parties").

WITNESSETH:

WHEREAS, the County requested proposals pursuant to <u>167-0062-P (JJ)</u> ("RFP") for <u>Airport Master Plan</u> services; and

WHEREAS, based upon the County's assessment of Contractor's proposal, the County selected the Contractor to provide the Services as defined herein; and

WHEREAS, Contractor represents that it has the experience and expertise to perform the Services as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above recitals, the mutual covenants, agreements, terms and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby mutually acknowledged, the Parties agree as follows:

1. Definitions.

- **A.** "Agreement" means this Agreement, including all Exhibits and Attachments, which are expressly incorporated herein by reference, and any amendments thereto.
- **B.** "County Confidential Information" means any County information deemed confidential and/or exempt from Section 119.07, Florida Statutes, and Section 24(a), Article 1 of the Florida Constitution, or other applicable law, including, but not limited to, data or information <u>provided by the St. Pete -Clearwater International Airport (PIE)</u>, and any other information designated in writing by the County as County Confidential Information.
- C. "Contractor Confidential Information" means any Contractor information that is designated as confidential and/or exempt by Florida's public records law, including information that constitutes a trade secret pursuant to Chapter 688, Florida Statutes, and is designated in this Agreement or in writing as a trade secret by Contractor (unless otherwise determined to be a public record by applicable Florida law). Notwithstanding the foregoing, Contractor Confidential Information does not include information that: (i) becomes public other than as a result of a disclosure by the County in breach of the Agreement; (ii) becomes available to the County on a non-confidential basis from a source other than Contractor, which is not prohibited from disclosing such information by obligation to Contractor; (iii) is known by the County prior to its receipt from Contractor without any obligation or confidentiality with respect thereto; or (iv) is developed by the County independently of any disclosures made by Contractor.
- **D.** "Contractor Personnel" means all employees of Contractor, and all employees of subcontractors of Contractor, including, but not limited to temporary and/or leased employees, who are providing the Services at any time during the project term.

- E. "Services" means the work, duties and obligations to be carried out and performed safely by Contractor under this Agreement, as described throughout this Agreement and as specifically described in Exhibit A ("Statement of Work") attached hereto and incorporated herein by reference. As used in this Agreement, Services shall include any component task, subtask, service, or function inherent, necessary, or a customary part of the Services, but not specifically described in this Agreement, and shall include the provision of all standard day-to-day administrative, overhead, and internal expenses, including costs of bonds and insurance as required herein, labor, materials, equipment, safety equipment, products, office supplies, consumables, tools, postage, computer hardware/software, telephone charges, copier usage, fax charges, travel, lodging, and per diem and all other costs required to perform Services except as otherwise specifically provided in this Agreement.
- 2. <u>Conditions Precedent.</u> This Agreement, and the Parties' rights and obligations herein, are contingent upon and subject to the Contractor securing and/or providing the performance security, if required in Section 3, and the insurance coverage(s) required in Section 13, within <u>ten (10)</u> days of the Effective Date. No Services shall be performed by the Contractor and the County shall not incur any obligations of any type until Contractor satisfies these conditions. Unless waived in writing by the County, in the event the Contractor fails to satisfy the conditions precedent within the time required herein, the Agreement shall be deemed not to have been entered into and shall be null and void.

3. Services.

- **A. Services**. The County retains Contractor, and Contractor agrees to provide the Services. All Services shall be performed to the satisfaction of the County, and shall be subject to the provisions and terms contained herein and the Exhibits attached hereto. The Contractor is also advised that this Services Agreement is subject to the approval of the Federal Aviation Administration (FAA) and the Florida Department of Transportation (FDOT) and the Contract Provisions as shown in Attachment B and Attachment C are applicable to this Agreement.
- **B.** Services Requiring Prior Approval. Contractor shall not commence work on any Services requiring prior written authorization in the Statement of Work without approval from the <u>Airport Director</u>.
- **C.** Additional Services. From the Effective Date and for the duration of the project, the County may elect to have Contractor perform Services that are not specifically described in the Statement of Work attached hereto but are related to the Services ("Additional Services"), in which event Contractor shall perform such Additional Services for a negotiated fee based on the assignment.. Contractor shall commence performing the applicable Additional Services promptly upon receipt of written approval as provided herein.
- **D.** De-scoping of Services. The County reserves the right, in its sole discretion, to de-scope Services upon written notification to the Contractor by the County. Upon issuance and receipt of the notification, the Contractor and the County shall enter into a written amendment reducing the appropriate Services Fee for the impacted Services by a sum equal to the amount associated with the de-scoped Services as defined in the payment schedule in this Agreement, if applicable, or as determined by mutual written consent of both Parties based upon the scope of work performed prior to issuance of notification.
- **E.** Independent Contractor Status and Compliance with the Immigration Reform and Control Act. Contractor is and shall remain an independent contractor and is neither agent, employee, partner, nor joint venturer of County. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986 located at 8 U.S.C. 1324, et seq, and regulations relating thereto, as either may be amended from time to time. Failure to comply with the above provisions shall be considered a material breach of the Agreement.
- **F.** Non-Exclusive Services. This is a non-exclusive Agreement. During the term of this Agreement, and any extensions thereof, the County reserves the right to contract for another provider for similar services as it determines necessary in its sole discretion.
- **G. Project Monitoring**. During the term of the Agreement, Contractor shall cooperate with the County, either directly or through its representatives, in monitoring Contractor's progress and performance of this Agreement.

4. Term of Agreement.

- **A. Initial Term**. The term of this Agreement shall commence on the Effective Date; and shall remain in full force and for 720 calendar days, or until termination of the Agreement, whichever occurs first.
- **B. Term Extension**. The Parties may extend the term of this Agreement for $\underline{\text{two}}$ (2) additional $\underline{\text{six}}$ (6) month period(s) pursuant to the same terms, conditions, and pricing set forth in the Agreement by mutually executing an amendment to this Agreement, as provided herein.

5. Compensation and Method of Payment.

- **A.** Services Fee. As total compensation for the Services, the County shall pay the Contractor the sums as provided in this Section 5 ("Services Fee"), pursuant to the terms and conditions as provided in this Agreement. It is acknowledged and agreed by Contractor that this compensation constitutes a limitation upon County's obligation to compensate Contractor for such Services required by this Agreement, but does not constitute a limitation upon Contractor's obligation to perform all of the Services required by this Agreement. In no event will the Services Fee paid exceed the not-to-exceed sums set out in subsections 5.B. and C., unless the Parties agree to increase this sum by written amendment as authorized in Section 21 of the Agreement.
- **B.** The County agrees to pay the Contractor the not-to-exceed sum of \$1,801,650.00, for Services completed and accepted as provided in Section 15 herein if applicable. Invoices may be submitted monthly and will be based on the progress or percent complete of the major task elements included in the Statement of Work (Attachment A).
- **C. Additional Services.** The County shall pay the Contractor a negotiated fee based on the additional assignment(s) authorized by the County. The total of these assignments will not exceed a total sum of \$100,000.00. All man hours are billed per the established and agreed hourly rates. The hourly rates are fully loaded and include all labor, overhead, expenses and profit of any nature including travel within the Tampa Bay Metropolitan Statistical area. Travel outside of that area will be reimbursed in accordance with Section 112.061 F.S.
- **D. Travel Expenses.** The Services Fee includes all travel, lodging and per diem expenses incurred by Contractor in performing the Services.
- **E. Taxes.** Contractor acknowledges that the County is not subject to any state or federal sales, use, transportation and certain excise taxes.
- **F. Payments**. Contractor shall submit invoices for payments due as provided herein and authorized reimbursable expenses incurred with such documentation as required by County. Invoices shall be submitted to the designated person as set out in Section 18 herein;

For time and materials Services, all Contractor Personnel shall maintain logs of time worked, and each invoice shall state the date and number of hours worked for Services authorized to be billed on a time and materials basis. All payments shall be made in accordance with the requirements of Section 218.70 et seq., Florida Statutes, "The Local Government Prompt Payment Act." The County may dispute any payments invoiced by Contractor in accordance with the County's Invoice Payments Dispute Resolution Process established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

6. Personnel.

A. Qualified Personnel. Contractor agrees that each person performing Services in connection with this Agreement shall have the qualifications and shall fulfill the requirements set forth in this Agreement.

B. Approval and Replacement of Personnel. The County shall have the right to approve all Contractor Personnel assigned to provide the Services, which approval shall not be unreasonably withheld. Prior to commencing the Services, the Contractor shall provide at least ten (10) days written notice of the names and qualifications of the Contractor Personnel assigned to perform Services pursuant to the Agreement. Thereafter, during the term of this Agreement, the Contractor shall promptly and as required by the County provide written notice of the names and qualifications of any additional Contractor Personnel assigned to perform Services. The County, on a reasonable basis, shall have the right to require the removal and replacement of any of the Contractor Personnel performing Services, at any time during the term of the Agreement. The County will notify Contractor in writing in the event the County requires such action. Contractor shall accomplish any such removal within forty-eight (48) hours after receipt of notice from the County and shall promptly replace such person with another person, acceptable to the County, with sufficient knowledge and expertise to perform the Services assigned to such individual in accordance with this Agreement. In situations where individual Contractor Personnel are prohibited by applicable law from providing Services, removal and replacement of such Contractor Personnel shall be immediate and not subject to such forty-eight (48) hour replacement timeframe and the provisions of Section 7. A.1. shall apply if minimum required staffing is not maintained.

7. Termination.

A. Contractor Default Provisions and Remedies of County.

- 1. <u>Events of Default.</u> Any of the following shall constitute a "Contractor Event of Default" hereunder: (i) Contractor fails to maintain the staffing necessary to perform the Services as required in the Agreement, fails to perform the Services as specified in the Agreement, or fails to complete the Services within the completion dates as specified in the Agreement; (ii) Contractor breaches Section 9 (Confidential Information); (iii) Contractor fails to gain acceptance of a deliverable per Section 15, if applicable, for two (2) consecutive iterations; or (iv) Contractor fails to perform or observe any of the other material provisions of this Agreement.
- 2. <u>Cure Provisions.</u> Upon the occurrence of a Contractor Event of Default as set out above, the County shall provide written notice of such Contractor Event of Default to Contractor ("Notice to Cure"), and Contractor shall have thirty (30) calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the Contractor Event of Default described in the written notice.
- 3. <u>Termination for Cause by the County.</u> In the event that Contractor fails to cure a Contractor Event of Default as authorized herein, or upon the occurrence of a Contractor Event of Default as specified in Section 7.A.1.(iii), the County may terminate this Agreement in whole or in part, effective upon receipt by Contractor of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the County.

B. County Default Provisions and Remedies of Contractor.

- 1. <u>Events of Default.</u> Any of the following shall constitute a "County Event of Default" hereunder: (i) the County fails to make timely undisputed payments as described in this Agreement; (ii) the County breaches Section 9 (Confidential Information); or (iii) the County fails to perform any of the other material provisions of this Agreement.
- 2. <u>Cure Provisions.</u> Upon the occurrence of a County Event of Default as set out above, Contractor shall provide written notice of such County Event of Default to the County ("Notice to Cure"), and the County shall have thirty (30) calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the County Event of Default described in the written notice.
- 3. <u>Termination for Cause by Contractor.</u> In the event the County fails to cure a County Event of Default as authorized herein, Contractor may terminate this Agreement in whole or in part effective on receipt by the County of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the Contractor.

- **C. Termination for Convenience.** Notwithstanding any other provision herein, the County may terminate this Agreement, without cause, by giving thirty (30) days advance written notice to the Contractor of its election to terminate this Agreement pursuant to this provision.
- **8.** <u>Time is of the Essence.</u> Time is of the essence with respect to all provisions of this Agreement that specify a time for performance, including the Services as described in Exhibits attached hereto; provided, however, that the foregoing shall not be construed to limit a Party's cure period allowed in the Agreement.

9. Confidential Information and Public Records.

- **A. County Confidential Information.** Contractor shall not disclose to any third party County Confidential Information that Contractor, through its Contractor Personnel, has access to or has received from the County pursuant to its performance of Services pursuant to the Agreement, unless approved in writing by the County Contract Manager. All such County Confidential Information will be held in trust and confidence from the date of disclosure by the County, and discussions involving such County Confidential Information shall be limited to Contractor Personnel as is necessary to complete the Services.
- **B.** Contractor Confidential Information. All Contractor Confidential Information received by the County from Contractor will be held in trust and confidence from the date of disclosure by Contractor and discussions involving such Contractor Confidential Information shall be limited to the members of the County's staff and the County's subcontractors who require such information in the performance of this Agreement. The County acknowledges and agrees to respect the copyrights, registrations, trade secrets and other proprietary rights of Contractor in the Contractor Confidential Information during and after the term of the Agreement and shall at all times maintain the confidentiality of the Contractor Confidential Information provided to the County, subject to federal law and the laws of the State of Florida related to public records disclosure. Contractor shall be solely responsible for taking any and all action it deems necessary to protect its Contractor Confidential Information except as provided herein. Contractor acknowledges that the County is subject to public records legislation, including but not limited to Chapter 119, Florida Statutes, and the Florida Rules of Judicial Administration, and that any of the County's obligations under this Section may be superseded by its obligations under any requirements of said laws.
- C. Public Records. Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement.

If the contractor has questions regarding the application of Chapter 119, Florida Statutes, to the Contractor's duty to provide public records relating to this contract, contact the Pinellas County Board of County Commissioners, Purchasing Department, Operations Manager custodian of public records at 727-464-3311, purchase@pinellascounty.org, Pinellas County Government, Purchasing Department, Operations Manager, 400 S. Ft. Harrison Ave, 6th Floor, Clearwater, FL 33756.

10. <u>Audit.</u> Contractor shall retain all records relating to this Agreement for a period of at least three (3) years after final payment is made. All records shall be kept in such a way as will permit their inspection pursuant to Chapter 119, Florida Statutes. In addition, County reserves the right to examine and/or audit such records.

11. Compliance with Laws.

Contractor shall comply with all applicable federal, state, county and local laws, ordinances, rules and regulations in the performance of its obligations under this Agreement, including the procurement of permits and certificates where required, and including but not limited to laws related to Workers Compensation, Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Minority Business Enterprise (MBE), occupational safety and health and the environment, equal employment opportunity, privacy of medical records and information, as applicable. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

12. Public Entities Crimes

Contractor is directed to the Florida Public Entities Crime Act, Section 287.133, Florida Statutes, as well as Florida Statute 287.135 regarding Scrutinized Companies, and represents to County that Contractor is qualified to transact business with public entities in Florida, and to enter into and fully perform this Agreement subject to the provisions state therein. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

13. Liability and Insurance.

- **A.** Insurance. Contractor shall comply with the insurance requirements set out in Exhibit \underline{B} , attached hereto and incorporated herein by reference.
- B. Indemnification. Contractor agrees to indemnify, pay the cost of defense, including attorney's fees, and hold harmless the County, its officers, employees and agents from all damages, suits, actions or claims, including reasonable attorney's fees incurred by the County, of any character brought on account of any injuries or damages received or sustained by any person, persons, or property, or in any way relating to or arising from the Agreement; or on account of any act or omission, neglect or misconduct of Contractor; or by, or on account of, any claim or amounts recovered under the Workers' Compensation Law or of any other laws, regulations, ordinance, order or decree; or arising from or by reason of any actual or claimed trademark, patent or copyright infringement or litigation based thereon; except only such injury or damage as shall have been occasioned by the sole negligence of the County.
- C. Liability. Neither the County nor Contractor shall make any express or implied agreements, guaranties or representations, or incur any debt, in the name of or on behalf of the other Party. Neither the County nor Contractor shall be obligated by or have any liability under any agreements or representations made by the other that are not expressly authorized hereunder. The County shall have no liability or obligation for any damages to any person or property directly or indirectly arising out of the operation by Contractor of its business, whether caused by Contractor's negligence or willful action or failure to act.
- D. Contractor's Taxes. The County will have no liability for any sales, service, value added, use, excise, gross receipts, property, workers' compensation, unemployment compensation, withholding or other taxes, whether levied upon Contractor or Contractor's assets, or upon the County in connection with Services performed or business conducted by Contractor. Payment of all such taxes and liabilities shall be the responsibility of Contractor.

- 14. County's Funding. The Agreement is not a general obligation of the County. It is understood that neither this Agreement nor any representation by any County employee or officer creates any obligation to appropriate or make monies available for the purpose of the Agreement beyond the fiscal year in which this Agreement is executed. No liability shall be incurred by the County, or any department, beyond the monies budgeted and available for this purpose. If funds are not appropriated by the County for any or all of this Agreement, the County shall not be obligated to pay any sums provided pursuant to this Agreement beyond the portion for which funds are appropriated. The County agrees to promptly notify Contractor in writing of such failure of appropriation, and upon receipt of such notice, this Agreement, and all rights and obligations contained herein, shall terminate without liability or penalty to the County.
- **15.** Acceptance of Services. For all Services deliverables that require County acceptance as provided in the Statement of Work, the County, through the <u>Airport Director</u> or designee, will have ten (10) calendar days to review the deliverable(s) after receipt or completion of same by Contractor, and either accept or reject the deliverable(s) by written notice to <u>Contractor</u>. If a deliverable is rejected, the written notice from the County will specify any required changes, deficiencies, and/or additions necessary. Contractor shall then have seven (7) calendar days to revise the deliverable(s) to resubmit and/or complete the deliverable(s) for review and approval by the County, who will then have seven (7) calendar days to review and approve, or reject the deliverable(s); provided however, that Contractor shall not be responsible for any delays in the overall project schedule that result from the County's failure to timely approve or reject deliverable(s) as provided herein. Upon final acceptance of the deliverable(s), the County will accept the deliverable(s) in writing.

16. Subcontracting/Assignment.

- **A. Subcontracting.** Contractor is fully responsible for completion of the Services required by this Agreement and for completion of all subcontractor work, if authorized as provided herein. Contractor shall not subcontract any work under this Agreement to any subcontractor other than the subcontractors specified in the proposal and previously approved by the County, without the prior written consent of the County, which shall be determined by the County in its sole discretion.
- **B.** Assignment. This Agreement, and all rights or obligations hereunder, shall not be assigned, transferred, or delegated in whole or in part, including by acquisition of assets, merger, consolidation, dissolution, operation of law, change in effective control of the Contractor, or any other assignment, transfer, or delegation of rights or obligations, without the prior written consent of the County. The Contractor shall provide written notice to the County within fifteen (15) calendar days of any action or occurrence assigning the Agreement or any rights or obligations hereunder as described in this section. In the event the County does not consent to the assignment, as determined in its sole discretion, the purported assignment in violation of this section shall be null and void, and the County may elect to terminate this Agreement by providing written notice of its election to terminate pursuant to this provision upon fifteen (15) days notice to Contractor.
- **17. Survival.** The following provisions shall survive the expiration or termination of the Term of this Agreement: 7, 9, 10, 13 20, 23, and any other which by their nature would survive termination.

18. Notices. All notices, authorizations, and requests in connection with this Agreement shall be deemed given on the day they are: (1) deposited in the U.S. mail, postage prepaid, certified or registered, return receipt requested; or (2) sent by air express courier (e.g., Federal Express, Airborne, etc.), charges prepaid, return receipt requested; or (iii) sent via email and addressed as set forth below, which designated person(s) may be amended by either Party by giving written notice to the other Party:

For County:

Attn: Thomas R. Jewsbury St. Pete-Clearwater International Airport 14700 Terminal Blvd. Ste 221 Clearwater, FL 33762

with a copy to:
Purchasing Director
Pinellas County Purchasing Department
400 South Fort Harrison Avenue
Clearwater, FL 33756

For Contractor:

Attn: Mike Arnold ESA 4200 West Cypress Street, Suite 450 Tampa, FL 33607

19. Conflict of Interest.

- **A.** The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of the Services required hereunder, and that no person having any such interest shall be employed by Contractor during the agreement term and any extensions.
- **B.** The Contractor shall promptly notify the County in writing of any business association, interest, or other circumstance which constitutes a conflict of interest as provided herein. If the Contractor is in doubt as to whether a prospective business association, interest, or other circumstance constitutes a conflict of interest, the Contract may identify the prospective business association, interest or circumstance, the nature of work that the Contractor may undertake and request an opinion as to whether the business association, interest or circumstance constitutes a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion within (10) calendar days of receipt of notification by the Contractor, which shall be binding on the Contractor.
- **20.** Right to Ownership. All work created, originated and/or prepared by Contractor in performing Services pursuant to the Agreement, including the Airport Master Plan document and other documentation or improvements related thereto, to the extent that such work, products, documentation, materials or information are described in or required by the Services (collectively, the "Work Product") shall be County's property when completed and accepted, if acceptance is required in this Agreement, and the County has made payment of the sums due therefore. The ideas, concepts, know-how or techniques developed during the course of this Agreement by the Contractor or jointly by Contractor and the County may be used by the County without obligation of notice or accounting to the Contractor. Any data, information or other materials furnished by the County for use by Contractor under this Agreement shall remain the sole property of the County.
- 21. Amendment. This Agreement may be amended by mutual written agreement of the Parties hereto.
- **22.** <u>Severability.</u> The terms and conditions of this Agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void, such determination shall not affect the validity or legality of the remaining terms and conditions, and notwithstanding any such determination, this Agreement shall continue in full force and effect unless the particular clause, term, or condition held to be illegal or void renders the balance of the Agreement impossible to perform.

- 23. Applicable Law and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflicts of laws). The Parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the state or federal (if permitted by law and a Party elects to file an action in federal court) courts located in or for Pinellas County, Florida. This choice of venue is intended by the Parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the Parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this section. Each Party waives any right it may have to assert the doctrine of forum non conveniens or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this section.
- **24.** <u>Waiver.</u> No waiver by either Party of any breach or violation of any covenant, term, condition, or provision of this Agreement or of the provisions of any ordinance or law, shall be construed to waive any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same.
- **25.** <u>Due Authority.</u> Each Party to this Agreement represents and warrants that: (i) it has the full right and authority and has obtained all necessary approvals to enter into this Agreement; (ii) each person executing this Agreement on behalf of the Party is authorized to do so; (iii) this Agreement constitutes a valid and legally binding obligation of the Party, enforceable in accordance with its terms.
- **26.** <u>No Third Party Beneficiary.</u> The Parties hereto acknowledge and agree that there are no third party beneficiaries to this Agreement. Persons or entities not a party to this Agreement may not claim any benefit from this Agreement or as third party beneficiaries hereto.
- **27.** Entire Agreement. This Agreement constitutes the entire Agreement between the Parties and supersedes all prior negotiations, representations or agreements either oral or written.

(Signature Page Follows)

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first written.

PINELLAS COUNTY, FLORIDA	Environmental Science Associates	
By and through its	<u>Corporation</u>	
Board of County Commissioners	Name of Firm	
	By:	
Ву	Signature	
	Albert Cuisinot	
	Print Name	
	SVP-CFO; Secretary	
ATTEST:	Title	
Ken Burke,		
Clerk of the Circuit Court		
By:		
Deputy Clerk		

APPROVED AS TO FORM

Office of the County Attorney

By:

EXHIBIT A

STATEMENT OF WORK

As provided in Attachment A.

INSURANCE REQUIREMENTS

INSURANCE:

- a) Proposal submittals should include, the Proposers current Certificate(s) of Insurance in accordance with the insurance requirements listed below. If Proposer does not currently meet insurance requirements, proposer/bidder/quoter shall also include verification from their broker or agent that any required insurance not provided at that time of submittal will be in place within 10 days after award recommendation.
- b) Within 10 days of contract award and prior to commencement of work, Proposer shall email certificate that is compliant with the insurance requirements to CertsOnly-Portland@ebix.com. If certificate received with proposal was a compliant certificate no further action may be necessary. It is imperative that proposer include the unique identifier, which will be supplied by the County's Purchasing Department. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). A copy of the endorsement(s) referenced in paragraph 3.(d) for Additional Insured shall be attached to the certificate(s) referenced in this paragraph.
- c) No work shall commence at any project site unless and until the required Certificate(s) of Insurance are received and approved by the County. Approval by the County of any Certificate(s) of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate(s) of Insurance is in compliance with the requirements of the Agreement. County reserves the right to require a certified copy of the entire insurance policy, including endorsement(s), at any time during the RFP and/or contract period.
- d) All policies providing liability coverage(s), other than professional liability and workers compensation policies, obtained by the Proposer and any subcontractors to meet the requirements of the Agreement shall be endorsed to include Pinellas County Board of County Commissioners as an Additional Insured.
- e) If any insurance provided pursuant to the Agreement expires prior to the completion of the Work, renewal Certificate(s) of Insurance and endorsement(s) shall be furnished by the Proposer to the County at least thirty (30) days prior to the expiration date.
 - (1) Proposer shall also notify County within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Proposer from its insurer. Notice shall be given by certified mail to: Pinellas County, c/o Ebix BPO, PO Box 257, Portland, MI, 48875-0257; be sure to include your organization's unique identifier, which will be provided upon notice of award. Nothing contained herein shall absolve Proposer of this requirement to provide notice.
 - (2) Should the Proposer, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement, or at its sole discretion may purchase such coverages necessary for the protection of the County and charge the Proposer for such purchase or offset the cost against amounts due to proposer for services completed. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance shall in no way be construed to be a waiver of any of its rights under the Agreement.
- f) The County reserves the right, but not the duty, to review and request a copy of the Contractor's most recent annual report or audited financial statement when a self-insured retention (SIR) or deductible exceeds \$50,000.
- g) If subcontracting is allowed under this RFP, the Prime Proposer shall obtain and maintain, at all times during its performance of the Agreement, insurance of the types and in the amounts set forth; and require

INSURANCE REQUIREMENTS

any subcontractors to obtain and maintain, at all times during its performance of the Agreement, insurance limits as it may apply to the portion of the Work performed by the subcontractor; but in no event will the insurance limits be less than \$500,000 for Workers' Compensation/Employers' Liability, and \$1,000,000 for General Liability and Auto Liability if required below.

- (1) All subcontracts between Proposer and its subcontractors shall be in writing and may be subject to the County's prior written approval. Further, all subcontracts shall (1) require each subcontractor to be bound to Proposer to the same extent Proposer is bound to the County by the terms of the Contract Documents, as those terms may apply to the portion of the Work to be performed by the subcontractor; (2) provide for the assignment of the subcontracts from Proposer to the County at the election of Owner upon termination of the Contract; (3) provide that County will be an additional indemnified party of the subcontract; (4) provide that the County will be an additional insurance policies required to be provided by the subcontractor except workers compensation and professional liability; (5) provide waiver of subrogation in favor of the County and other insurance terms and/or conditions as outlined below; (6) assign all warranties directly to the County; and (7) identify the County as an intended third-party beneficiary of the subcontract. Proposer shall make available to each proposed subcontractor, prior to the execution of the subcontract, copies of the Contract Documents to which the subcontractor will be bound by this Section C and identify to the subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract Documents.
- h) Each insurance policy and/or certificate shall include the following terms and/or conditions:
 - (1) The Named Insured on the Certificate of Insurance and insurance policy must match the entity's name that responded to the solicitation and/or is signing the agreement with the County. If Proposer is a Joint Venture per Section A. titled Joint Venture of this RFP, Certificate of Insurance and Named Insured must show Joint Venture Legal Entity name and the Joint Venture must comply with the requirements of Section C with regard to limits, terms and conditions, including completed operations coverage.
 - (2) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of Contractor.
 - (3) The term "County" or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.
 - (4) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County or any such future coverage, or to County's Self-Insured Retentions of whatever nature.
 - (5) All policies shall be written on a primary, non-contributory basis.
 - (6) Any Certificate(s) of Insurance evidencing coverage provided by a leasing company for either workers compensation or commercial general liability shall have a list of covered employees certified by the leasing company attached to the Certificate(s) of Insurance. The County shall have the right, but not the obligation to determine that the Proposer is only using employees named on such list to perform work for the County. Should employees not named be utilized by Proposer, the County, at its option may stop work without penalty to the County until proof of coverage or removal of the employee by the contractor occurs, or alternatively find the Proposer to be in default and take such other protective measures as necessary.
 - (7) Insurance policies, other than Professional Liability, shall include waivers of subrogation in favor of Pinellas County from both the Proposer and subcontractor(s).

INSURANCE REQUIREMENTS

- i) The minimum insurance requirements and limits for this Agreement, which shall remain in effect throughout its duration and for two (2) years beyond final acceptance for projects with a Completed Operations exposure, are as follows:
 - (1) Workers' Compensation Insurance

Limit	Florida Statutory

Employers' Liability Limits

Per Employee	\$ 500,000
Per Employee Disease	\$ 500,000
Policy Limit Disease	\$ 500,000

(2) <u>Commercial General Liability Insurance</u> including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations, and Personal Injury. Policy cannot contain any exclusions for work performed or Products/Completed Operations at airports and/or airfields.

Limits

Combined Single Limit Per Occurrence	\$ 1,000,000
Products/Completed Operations Aggregate	\$ 2,000,000
Personal Injury and Advertising Injury	\$ 1,000,000
General Aggregate	\$ 2,000,000

(3) <u>Business Automobile or Trucker's/Garage Liability Insurance</u> covering owned, hired, and non-owned vehicles. If the Proposer does not own any vehicles, then evidence of Hired and Non-owned coverage is sufficient. Coverage shall be on an "occurrence" basis, such insurance to include coverage for loading and unloading hazards, unless Proposer can show that this coverage exists under the Commercial General Liability policy.

Limit

Combined Single Limit Per Accident \$1,000,000

(4) <u>Excess or Umbrella Liability Insurance</u> excess of the primary coverage required, in paragraphs (1), (2), and (3) above:

Limits

Each Occurrence \$ 2,000,000 General Aggregate \$ 2,000,000

INSURANCE REQUIREMENTS

(5) <u>Professional Liability (Errors and Omissions) Insurance</u> with at least minimum limits as follows. If "claims made" coverage is provided, "tail coverage" extending three (3) years beyond completion and acceptance of the project with proof of "tail coverage" to be submitted with the invoice for final payment. In lieu of "tail coverage", Proposer may submit annually to the County, for a three (3) year period, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than commencement date of this contract.

Limits

Each Occurrence or Claim \$5,000,000 General Aggregate \$5,000,000

For acceptance of Professional Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Professional Liability and other coverage combined.

Property Insurance Proposer will be responsible for all damage to its own property, equipment and/or materials.

EXHIBIT C

PAYMENT SCHEDULE

As provided in Attachment A.

EXHIBIT D

PAYMENT/INVOICES

PAYMENT/INVOICES:

SUPPLIER shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 et. seq. Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

Finance Division Accounts Payable Pinellas County Board of County Commissioners P. O. Box 2438 Clearwater, FL 33757

Each invoice shall include, at a minimum, the Supplier's name, contact information and the standard purchase order number. In order to expedite payment, it is recommended the Supplier also include the information shown in below. The County may dispute any payments invoiced by SUPPLIER in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

INVOICE INFORMATION:

Supplier Information Company name, mailing address, phone number, contact name and email address as provided on the PO

Remit To Billing address to which you are requesting payment be sent

Invoice Date Creation date of the invoice **Invoice Number** Company tracking number

Shipping Address Address where goods and/or services were delivered

contact person

Ordering Department Name of ordering department, including name and phone number of

PO Number Standard purchase order number

Ship Date Date the goods/services were sent/provided

Quantity of goods or services billed Quantity

Description Description of services or goods delivered

Unit Price Unit price for the quantity of goods/services delivered

Line Total Amount due by line item

Invoice Total Sum of all of the line totals for the invoice

Pinellas County offers a credit card payment process (ePayables) through Bank of America. Pinellas County does not charge vendors to participate in the program; however, there may be a charge by the company that processes your credit card transactions. For more information please visit Pinellas County purchasing website at www.pinellascounty.org/purchase.

EXHIBIT E

DISPUTE RESOLUTION FOR PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS IN MATTERS OF INVOICE PAYMENTS:

Payment of invoices for work performed for Pinellas County Board of County Commissioners (County) is made, by standard, in arrears in accordance with Section 218.70, et. seq., Florida Statutes, the Local Government Prompt Payment Act.

If a dispute should arise as a result of non-payment of a payment request or invoice the following Dispute Resolution process shall apply:

- A. Pinellas County shall notify a vendor in writing within ten (10) days after receipt of an improper invoice, that the invoice is improper. The notice should indicate what steps the vendor should undertake to correct the invoice and resubmit a proper invoice to the County. The steps taken by the vendor shall be that of initially contacting the requesting department to validate their invoice and receive a sign off from that entity that would indicate that the invoice in question is in keeping with the terms and conditions of the agreement. Once sign off is obtained, the vendor should then resubmit the invoice as a "Corrected Invoice" to the requesting department which will initiate the payment timeline.
 - 1.) Requesting department for this purpose is defined as the County department for whom the work is performed.
 - 2.) Proper invoice for this purpose is defined as an invoice submitted for work performed that meets prior agreed upon terms or conditions to the satisfaction of Pinellas County.
- B. Should a dispute result between the vendor and the County about payment of a payment request or an invoice then the vendor should submit their dissatisfaction in writing to the Requesting Department. Each Requesting Department shall assign a representative who shall act as a "Dispute Manager" to resolve the issue at departmental level.
- C. The Dispute Manager shall first initiate procedures to investigate the dispute and document the steps taken to resolve the issue in accordance with section 218.76 Florida Statutes. Such procedures shall be commenced no later than forty-five (45) days after the date on which the payment request or invoice was received by Pinellas County, and shall not extend beyond sixty (60) days after the date on which the payment request or invoice was received by Pinellas County.
- D. The Dispute Manager should investigate and ascertain that the work, for which the payment request or invoice has been submitted, was performed to Pinellas County's satisfaction and duly accepted by the Proper Authority. Proper Authority for this purpose is defined as the Pinellas County representative who is designated as the approving authority for the work performed in the contractual document. The Dispute Manager shall perform the required investigation and arrive at a solution before or at the sixty (60) days timeframe for resolution of the dispute, per section 218.76, Florida Statutes. The County Administrator or his or her designee shall be the final arbiter in resolving the issue before it becomes a legal matter. The County Administrator or his or her designee will issue their decision in writing.
- E. Pinellas County Dispute Resolution Procedures shall not be subject to Chapter 120 of the Florida Statutes. The procedures shall also, per section 218.76, Florida Statutes, not be intended as an administrative proceeding which would prohibit a court from ruling again on any action resulting from the dispute.

EXHIBIT E

DISPUTE RESOLUTION FOR PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS IN MATTERS OF INVOICE PAYMENTS:

- F. Should the dispute be resolved in the County's favor interest charges begin to accrue fifteen (15) days after the final decision made by the County. Should the dispute be resolved in the vendor's favor the County shall pay interest as of the original date the payment was due.
- G. For any legal action to recover any fees due because of the application of sections 218.70 et. seq., Florida Statutes, an award shall be made to cover court costs and reasonable attorney fees, including those fees incurred as a result of an appeal, to the prevailing party If it is found that the non-prevailing party held back any payment that was the reason for the dispute without having any reasonable lawful basis or fact to dispute the prevailing party's claim to those amounts.

STATEMENT OF WORK – AIRPORT MASTER PLAN

St. Pete-Clearwater International

Background

Environmental Science Associates (ESA) in association with their subconsultants (ESA Team) will prepare a new master plan (project/study) for the St. Pete-Clearwater International Airport. This study will be conducted in accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B Airport Master Plans and Florida Department of Transportation (FDOT) 2016 Guidebook for Airport Master Planning. The objective of this statement of work is to prepare a comprehensive master plan document with a process that will obtain approval from Pinellas County, the FAA, and FDOT. For the purposes of this statement of work, Airport Management is considered the client as the airport is an independent department of the Pinellas County and the official sponsor of the airport.

Since the previous 2004 study is out of date and no longer reflects the current conditions at the airport, this master plan effort will be a "from scratch" effort as defined by FDOT in their guidance. The primary goal of the master plan will be to create a 20-year development program that will maintain a safe, efficient, economical, and environmentally acceptable airport facility for the Tampa Bay community. By achieving this goal, the document will provide the guidance to satisfy the aviation demand in a financially feasible and responsible manner, while at the same time addressing the aviation, environmental, and socioeconomic issues of the community. In support of this goal, the following objectives will be attained:

- Ensure orderly development: consider short term needs and long term plans;
- Maximize level of service to passengers while maintaining low operating costs;
- Serve increasing number of passenger in a phased and cost effective manner;
- Provide for the growth of air cargo and general aviation;
- Diversify airport revenue stream and increase regional economic impact;
- Ensure compliance with latest FAA design criteria, grant assurances, and policies;
- Refine land development strategy;
- Integrate sustainability and resiliency concepts to ensure long term viability;
- Provide flexibility to allow the airport to respond to changes in the aviation industry;
- Meet FAA Airport Geographic Information System (AGIS) mandate;
- Create a new Airport Layout Plan (ALP) drawing set;
- Capitalize on airport branding; and
- Secure broad community buy-in for the future airport development program.

These goals and objectives will be further vetted during the initial project tasks to serve as guiding principles throughout the development of the study.

1

Task 1: Project Initiation

Task 1.1 Study Design and Planning Charrette

The ESA Team will initiate the project by and organizing and leading scoping discussions to refine the study design. The ESA Team will document the goals and objectives and overarching theme, as well as guiding principles of the study. It's anticipated that this task will largely focus on compliance with current FAA standards as well as detailing a development (or redevelopment) strategy for the major areas, facilities, and functions of the airport.

To facilitate this, a strategic Planning Charrette will be held with key ESA Team and Airport Management staff to refine the study goals and objectives and overall strategy of the long term development program. This Planning Charrette will also serve to generally identify and discuss the airport's strengths, weaknesses, opportunities, and threats (SWOT). By conducting this general SWOT analysis early, the proper focus and vetting of development strategies can be integrated throughout the study to ensure the best final plan. A half day will be budgeted for a representative from each of the seven ESA Team member firms for the Planning Charrette.

<u>Product(s)</u>: Detailed statement of work and project costs, pre-meeting coordination, and scheduling. One (1) half day Planning Charrette. Documentation detailing the goals, objectives, and guiding principles of the study, as well as the general SWOT analysis, all suitable for incorporating in the initial chapter of the first working paper.

Task 1.2 Project Kick-off Meetings

The success of any project is predicated on the entire Project Team (ESA Team, Airport Management, FAA, and FDOT) working together and maintaining open lines of communication. The ESA Team will facilitate a Project Team Kick-off Meeting involving key members from the ESA Team, Airport Management, FAA, FDOT, airport traffic control tower (ATCT) management, and Pinellas County representative(s), as well as other key stakeholders identified during the Planning Charrette. At the Project Team Kick-off Meeting, study goals will be reviewed, the schedule discussed, and the communication protocols established. Members of the Project Team will be identified for participation in the overall stakeholder coordination and public outreach elements of the study (described further in Task 9).

A Public Project Kick-off Meeting will be advertised and held to disseminate information related to the overall master plan study. The format will be an open house style utilizing a combination of stations with presentation boards, a PowerPoint presentation, handout materials, and/or comment forms. The goal will be to provide details on the need for a new airport master plan, the required planning process, project goals/objectives, and timeline of the study.

<u>Assumption(s)</u>: The airport will provide the space for both meetings and advertisement for the public meeting with support from the ESA Team for the format. An effort will be made to coordinate the Public Project Kick-off Meeting with, or as part of, another airport or community event to increase both public outreach and participation.

<u>Product(s)</u>: The ESA Team will prepare the Team Project Kick-off Meeting agenda, handouts, etc. and document the agreed upon project goals, communication protocols, and Project Team members identified during the meeting. For the Public Project Kick-off Meeting, the ESA Team will provide up to ten (10)

large presentation board exhibits outlining information as appropriate, as well as the handouts, sign-in sheets, and comment forms needed. Up to five (5) members of the ESA Team will be available for the Public Project Kick-off Meeting.

Task 1.3 Tenant and User Interviews

At the onset of the study, interviews will be scheduled with major tenants and users of the airport. These one-on-one meetings will be conducted over three (3) different days to initiate a dialogue that will continue throughout the project to facilitate development of different study elements. Tenants and users will include the passenger airlines, air cargo operators, military, federal agencies, airport concessions, commercial ground handlers, fixed base operators (FBO), parking/rental car companies, general aviation aircraft operators, etc.

Task 1.4 Aerial Mapping and Airports Geographic Information System (AGIS)

Since the Airports Geographic Information System (AGIS) data collection process is a long lead time item, it will begin as early as possible in the project. ESA will contract with and manage an aerial surveyor to provide the airport survey, mapping, and data files compliant with the FAA's AGIS requirements. This effort will be conducted in accordance with FAA ACs 150/5300-16A, -17C, and -18B, with further guidance from the FAA Southern Region and the Office of Airports Safety and Standards in Washington, D.C.

Due to the types of existing instrument approaches, the AGIS effort will follow the standards for a Vertically Guided Runway survey from FAA AC 150/5300-18B (specifically the Table 2-1 requirements for an ALP) and will be focused around performing three main tasks:

1.4.1 Vertically Guided Approach Obstruction Analysis

An Obstruction Analysis of both existing Runways 18/36 and 4/22 based on FAA AC 150/5300-18B *Vertically Guided Approach Obstruction Identification Surfaces* will be conducted. This includes:

- Initiate and complete the AGIS project process on the AGIS web portal as an Instrument Procedure Development survey.
 - o Develop scope of work and plans as required.
- Since the airport does possess existing Primary and Secondary Airport Control Stations (PACS/SACS), they will be recovered and utilized as the basis of control in accordance with FAA AC 150/5300-16A.
- Establish photogrammetric control and collect stereo imagery covering the surface area defined by the Vertically Guided Runway standards.
 - o Estimated 20 control points and 5 check points.
 - o Collect imagery at a 0.5 foot ground-sample distance, flight layout will be provided.
 - o Collected with leaf-on conditions.
- Geo-referencing of aerial photography.
- Runway critical point survey on all usable runways.
- Runway profile survey on all usable runways.
- Inventory of navigational aids associated to the airport (within 10 nautical miles of airport reference point) including the associated perpendicular points.

3

• Obstruction analysis for objects penetrating the Vertically Guided surfaces.

- The ESA Team will request existing obstruction data for the airport from the FAA for review with the Obstruction Identification Surfaces (OIS).
- If information is not available, a collection of objects penetrating the OIS will be collected using the density selection criteria.
- Development of new ortho-photography of entire project area.
 - o Pixel resolution of 0.5 feet over entire project area.
- The VGA Imaginary Surfaces shall show 50 foot interval contours which are labeled.
- Collect major landmark features within imagery coverage.
- Population of the digital files with calculable and required attributes.

<u>Product(s)</u>: Develop AGIS compliant data files containing the safety critical data required to achieve instrument approach procedure development. Develop the final Imagery Acquisition Report and Project Report for AGIS.

1.4.2 Analysis of Features within Obstruction Identification Surfaces

An Obstruction Analysis for the features within 12.5 feet of the 14 Code of Federal Regulations (CFR) Part 77 Safe, Efficient, Use, and Preservation of the Navigable Airspace, Precision Instrument Runway OIS for the existing Runway 18/36 approaches (truncated to 20,000 feet in length) and the Non-Precision Type "C" OIS for the existing Runway 4/22 Visual "B" approaches will be conducted. This includes:

- Obstruction analysis for surface penetrations and features within 12.5 feet of the CFR Part 77 surfaces.
 - o All features which penetrate these surface lowered 12.5 feet are to be collected.
 - O Ground elevations will be provided for any object within 12.5 feet of the specified CFR Part 77 surfaces. Exact accuracy of the ground positions may vary depending upon the visibility of the ground within the aerial imagery. Where major elevation breaks are not present, it is anticipated that the 200 foot grid will be used to calculate the majority of ground elevations.
- Areas of tree canopy that penetrate the specified OIS lowered 12.5 feet shall be contoured at 5 foot contour intervals. Individual trees extending significantly above the tree canopy shall not be contoured but will have a spot elevation on top.
 - o The outline of the limits of the tree canopy penetrating the OIS lowered 12.5 feet is to be identified.
- Areas of terrain that penetrate the specified OIS lowered 12.5 feet shall be contoured at 2 foot contour intervals.
- Obstruction accuracies will meet the National Map Accuracy standards for 1"=800' scale photography.
- Spot elevations on a 200 foot grid inside the specified CFR Part 77 Approach Surfaces.
 - o This grid will not be provided in obscured areas or areas over water.
 - Areas of ground penetration will be captured at a 100 foot grid interval.
 - o The outline of the limits of the ground penetrating the OIS lowered 12.5 feet shall be identified.
- All railroad and road centerlines will have a spot elevations where they cross the extended runway centerline and the exterior limits of the OIS.
- Top height for all buildings on airfield property shall be provided.
- The CFR Part 77 surfaces shall show 50 foot interval contours which are labeled.

<u>Product(s)</u>: Develop and deliver a Microsoft Excel file containing information on all obstacles that were collected within 12.5 feet of the OIS. This spreadsheet will contain northing, easting, elevation, penetration depth, station, and offset information. Develop and deliver an AutoCAD file containing information on all obstacles that were collected within 12.5 feet of the OIS.

1.4.3 Planimetric and Topographic Mapping

This task will utilize the imagery collected for airspace analysis in Tasks 1.4.1 and 1.4.2 for development of planimetric and topographic mapping. This will include:

- Develop mapping features to generate 1"=100' scale mapping at 2 foot contour intervals.
 - Existing LiDAR has been flown over the airport and this LiDAR will be utilized to assist in generating the 2 foot contours.
- Mapping will include features required for standard ALP base mapping as part of AGIS.
- Attributes that are required or calculable will be populated and submitted to AGIS as an Existing Data project.

<u>Assumption(s)</u>: Airport Management will provide the movement area escort(s) required for the portion of the surveys on the Security Identification Display Area (SIDA) of the airport.

<u>Product(s)</u>: The ESA Team will submit all data collected and the associated deliverables in the formats specified in the appropriate ACs to the FAA's 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.

Task 2: Existing Conditions

This task will evaluate and document the baseline conditions for all physical features and the operational characteristics of the airport. The identification of the size, condition, use, etc. of the various airport facilities forms the foundation for subsequent efforts and analyses of the study.

Task 2.1 Airport and Surrounding Area Inventory

To the extent possible, the ESA Team will assess the condition of the airport facilities and surrounding features using existing airport records, drawings, studies, and reports. It is assumed the airport will provide any existing digital plans since no field surveying will be conducted outside of the AGIS geodetic control and property boundary surveys.

2.1.1 Airfield Facilities and Surrounding Airspace

- Runways (length, width, condition, strength, features, etc.)
- Taxiways (length, width, condition, strength, features, etc.)
- Lighting, Marking, and Signage (type, condition, etc.)
- Navigational and Visual Approach Aids (FAA and airport owned)
- Instrument Approach Procedures (arrival and departure)
- Air Traffic Management, Airspace, and Obstructions (for airport and surrounding region)

2.1.2 Airside Facilities

- Aircraft Parking Aprons (size, condition, strength, etc.)
- Aircraft Storage Hangars (size, facilities, condition, etc.)

• Aviation Related Tenants (military, FBOs, businesses, corporate flight department, air taxi, charter, flight training, private owners, etc.)

2.1.3 Support Facilities

- Airport Traffic Control Tower (facilities, operations, procedures, etc.)
- Airport Administration Space (size, facilities, condition, etc.)
- Airport Maintenance Facilities (size, equipment, condition, location, etc.)
- Aircraft Rescue and Fire Fighting (size, equipment, condition, location, etc.)
- Aviation Fuel Storage and Dispensing Systems (size, equipment, condition, location, etc.)
- Airfield Electrical Vault (size, location, equipment, condition, etc.)

2.1.4 Airport, Community, and Surrounding Area Features

- Non-Aviation Related Uses (on-airport facilities)
- Landside Access and Parking (outside of passenger terminal area)
- Environmental Data (various to support tasks of environmental analyses)
- Utilities (general information on water and sanitary sewer services available)
- Surrounding Land Use and Zoning (on- and off-airport property)
- Socioeconomic Data (obtain historic data and future projections for population, income, employment rates, types of employment, housing starts, etc. from Woods & Poole Economics, Inc.)

2.1.5 Airport Data

- Meteorological Data (historic wind, temperature, and cloud ceiling data)
- Operational Data (various to support tasks of aviation forecasts in addition to the official airport and ATCT records, this effort will also obtain the most recent 12 months of FlightAware data).

<u>Product(s)</u>: Two (2) full day site visits of the airport property will be conducted to support this effort. Documentation detailing the existing airport facility conditions suitable for incorporating as part of a detailed chapter in the first working paper.

Task 2.2 Passenger Terminal Facilities

A detailed assessment of the capacity and potential issues associated with the existing passenger terminal facilities will be conducted. This task will analyze the current functionality and ability to improve/expand the existing passenger terminal components. In doing so, the ESA Team will conduct a building conditions assessment. Existing airport records, drawings, and reports on key site utilities, architectural elements, structural elements, mechanical systems, electrical equipment, plumbing, systems, airside infrastructure, and utilities will be reviewed. These facilities will be identified and evaluated by type, equipment, and capacities. This information will be utilized to create a comprehensive Terminal Building Assessment Report and provide a basis for determining capacity and projecting future needs for proposed development options during the master plan alternatives and eventual Terminal Program Definition Study. Key elements include:

2.2.1 Major Functional Areas

The major functional area components of the passenger terminal area will be inventoried in detail. This effort will include all passenger terminal facilities from the curbside to the aircraft parking apron area. At a minimum, these will include, but not be limited to:

- Aircraft Parking Positions, Contact Gates, and Remain Overnight (RON) Space
- Circulation Areas
- Passenger Check-In/Bag Drop
- Airline Support Offices/Space
- Concessions
- Passenger Security Screening
- Airline Holdrooms and Boarding Gates
- Baggage Claim
- Inbound Baggage
- Outbound Baggage
- Explosives Detection System (EDS) Baggage Screening
- Federal Inspection Services (FIS) and US Customs and Border Protection (CBP) Facilities
- Ground Service Equipment Circulation and Storage
- Airport/Tenant Office Space
- Wayfinding

The ESA Team will compile the above information in an area by area and room by room space program in both tabular and graphic formats. Data to be documented includes area/room functions, leasing information, number/types of equipment, and approximate square footage.

2.2.2 Structural Systems

A comprehensive review of the existing structural systems will be conducted to understand their condition and capacity. Condition assessments of floor and roof framing elements, columns, visible foundations and slabs, wall systems, overhead objects support structures, ancillary structural support elements, main wind force resisting system framing, and any other necessary sub elements of the structure will be conducted during the site investigation. Following the condition assessments, a thorough evaluation of the existing building documentation will be completed to determine capacities and feasibility of renovation. Consideration will be taken during investigation to determine optimal locations for expansion and modification. Operations and maintenance staff will be consulted as to specific locations of problem areas. An overall understanding and description of the existing building structural systems will be noted in the Terminal Building Assessment Report as well as areas of concern and all recommendations pertaining to the above investigations.

2.2.3 Mechanical, Electrical, and Plumbing Equipment

A review of the existing plans and documentation will be undertaken to understand the cooling design, chiller plant setup, chilled water distribution system, air handling units age and configurations, ductwork layout and pressure classification, duct insulation types, heating methods and capacities, emergency management systems, domestic water heating equipment, restroom configurations and fixtures, locations and types of grease traps, storm system design and routing, fire riser locations and types, sprinkler head type, electrical distribution layout and electrical room locations, emergency power system, lighting devices and associated controls, and fire alarm system. The existing systems will be assessed on site to

review equipment physical condition, age, and accessibility. Information provided by facilities and maintenance staff regarding system operation and known issues. Equipment end of life, availability of replacement parts, criticality of operation, and current maintenance practices will also be considered.

2.2.4 Airside Civil and Utilities Infrastructure

A comprehensive review of the existing structural airside pavement and utilities infrastructure will be conducted to understand their condition and capacity. It is understood that the airport has recently completed airside pavement, utilities, and other infrastructure improvements in the general area where future terminal reconfigurations and/or expansion could occur. This task will document those projects as well as the areas that have not been improved.

<u>Assumption(s)</u>: An inventory of existing building elements, systems, and site utilities for the terminal area will be prepared based on existing data obtained from Airport Management, site visits, and desktop research. The team will refer to any existing inventories of reports and drawings that cover known airport data resources as a point of beginning for the identification of resources. Additional information will be obtained from other terminal area design and construction projects completed within the last 10 years. Airport Management will provide any existing AutoCAD drawings, digital mapping, or previous studies related to the passenger terminal facilities.

<u>Product(s)</u>: Two (2) full day site visits of the airport property will be conducted to support this effort. Documentation detailing the existing passenger terminal facility conditions suitable for incorporating as a part of the existing conditions chapter of the first working paper, as well as a separate Terminal Building Assessment Report of the passenger terminal facilities.

Task 2.3 Passenger Terminal Access, Circulation, and Automobile Parking

The landside access, circulation, and parking facilities associated with the passenger terminal area will be inventoried. The parking and access roadway inventory will be based on data summarized in the *Parking Garage Study, Airport Landside and Parking Lot Improvements for St. Pete-Clearwater International Airport* by Cardno dated November 16, 2016. No additional field verification of the parking and access roadways will be completed. This effort will include the additional tasks of collecting critical vehicle and pedestrian activity counts/observations at the terminal curbfront to properly understand the utilization and/or limitation of these facilities.

2.3.1 Terminal Access Roadway

While the focus of the planning effort is on the roadway system directly fronting the terminal facilities at the airport, it is of importance to take into consideration the terminal access roadways feeding the curbfront of the terminal complex. The ESA Team will inventory the following terminal access roadways using the *Airport Landside and Parking Lot Improvement* design drawings completed by Cardno dated May 2017:

- Airport Parkway Drive
- Intersection of Roosevelt Boulevard (SR 686) and Airport Parkway Drive

The inventory will consist of number of lanes, posted speed limits, weaving locations, and distances. No field verification will be completed.

2.3.2 Terminal Curbfront

The ESA Team will inventory the following terminal roadways and curbfronts:

- Ticketing A
- Ticketing B
- Baggage Claim
- Deliveries
- Ground Transportation Area for Taxi/Shuttle/Limos

The inventory will consist of curbfront designations (loading/unloading areas for each vehicle type: transit, shuttle, taxi, etc.), curbfront lengths by designation, number of lanes, lane widths, and posted speed limits. The inventory will also include the identification and collection of data on weaving areas and weaving distances and anticipated conflict areas. Any available existing data will be supplemented by one (1), nine (9) hour site visit to validate the curbfront inventory collected and to collect an appropriate photographic inventory of conditions observed. The observations will concur in conjunction with the Task 1.3 meetings.

2.3.3 Automobile Parking

The ESA Team will inventory the following five airport parking facilities:

- Short-Term Parking
- Long-Term Parking
- Remote Economy Parking
- Cell Phone Lot
- Employee Parking

The parking inventory for the public parking will be based on the data summarized in the *Parking Garage Study, Airport Landside and Parking Lot Improvements for St. Pete-Clearwater International Airport* by Cardno dated November 16, 2016 and the *Airport Landside and Parking Lot Improvement* design drawings completed by Cardno dated May 2017. The parking inventory will consist of the location, product types, and number of parking spaces.

The employee parking information will also be requested from the airport including:

- Overnight and peak employee vehicle accumulation during a typical busy average day of the peak month by parking location.
- Volume of employee entry and exit vehicles by location during a typical busy day (the same day
 as the overnight and peak accumulation counts); entry and exit volumes provided in 15 minute
 increments is preferred.
- Number of parking permits issued and fees paid.

No field verification will be completed.

2.3.4 Rental Cars

A summary of the existing rental car facilities, both on- and off-site will be developed. The summary will include general operational characteristics, size, and access for the following, organized by each company:

- Booths (if applicable)
- Ready/Return Spaces in the Lot
- Storage/Quick Turnaround Facilities

Any available existing data will be supplemented by one (1), four (4) hour site visit to validate the rental car parking and related facilities to their operation.

2.3.5 Counts and Observations

The purpose of the vehicle traffic counts and observations is to document the current vehicular and pedestrian traffic at designated airport locations. In advance of any vehicle counts or operational observations, the ESA Team will prepare a data collection plan describing the survey logistics (dates and required staff) and the survey forms.

<u>Vehicle Counts</u> - A series of two (2), separate vehicle count efforts will be conducted. The first will be automatic traffic recorder counts at up to three (3) terminal entry/exit locations for seven (7), consecutive 24 hour days. It is anticipated that these will consist of the following locations:

- Curbfront Approach
- Airport Entry
- Airport Exit

The seven day counts will be used to identify the peaking throughout the week. Following the review of the seven day counts, a second series of traffic counts will be conducted for two (2) consecutive 24 hour days at the following locations:

- Terminal Entry
- Inner Curbfront Lanes
- Outer Curbfront Lanes
- Entry to Ground Transportation Area for Taxi/Shuttle/Limos
- Exit from Ground Transportation Area for Taxi/Shuttle/Limos
- Terminal Exit

The counts at the above six (6) locations will be repeated after the completion of the *Airport Landside* and *Parking Lot Improvement* project.

<u>Curbfront Observations</u> - Based on the seven day counts, the peak hour of arrivals and peak hour of departures will be identified. Curbfront observations will be completed during a two (2) hour period associated with the peak hour of arrivals, and a two (2) hour period associated with the peak hour of departures. The curbfront observations will occur during one (1) day and will coincide with the two day traffic counts described above.

The curbfront observations will consist of vehicle classification counts, dwell time observations by mode, vehicle occupancy (i.e. people getting into and out of vehicles), accumulation (people waiting), and loading/unloading information for the following vehicle types: private autos, buses (transit, charter), taxis, shared ride, limos, shuttles, and commercial vehicles (hotel shuttles, etc.), service vehicles, and police/enforcement vehicles. Any enforcement or observed congestion will be noted during the data collection effort.

<u>Pedestrian Counts</u> - The ESA Team will also conduct bi-directional pedestrian counts in 15 minute intervals at up to three (3) locations outside of the terminal during the arrivals and departures peak. The time period of the pedestrian observations will coincide with the curbfront observations described above.

Data to be collected includes general flow patterns, accumulation at five minute intervals, bidirectional counts, and observed congestion/conflict areas. In addition to the bi-directional pedestrian counts, general observations on luggage per person will be recorded and documented.

<u>Assumption(s)</u>: Airport Management will provide any existing AutoCAD drawings, digital mapping, or previous studies related to the landside operations and facilities of the passenger terminal.

<u>Product(s)</u>: The passenger terminal access, circulation, and automobile parking data collected will be documented in a format suitable for incorporating as part of the existing conditions chapter in the first working paper.

Task 2.4 Commercial Passenger Market Data

The airport's commercial passenger service levels and trends, for both domestic and international air carriers, will be documented. In addition to the passenger enplanement activity, this effort will utilize any data collected and/or acquired by the airport for their air service development efforts. It is understood that the existing airport data includes information defining the airport's service area; passenger origin and destination information; and previous passenger and/or public opinion surveys. The ESA Team will organize and document this passenger activity and any associated trends for use in the different projections of passenger enplanements.

<u>Assumption(s):</u> No new third party data will be collected for this effort. The existing passenger market data and/or results from any previous air service surveys will be provided by Airport Management. No new passenger surveys will be conducted.

<u>Product(s):</u> Documentation detailing the historic passenger service levels and trends will be included as a supporting document to the aviation activity forecasts in the first working paper.

Task 3: Aviation Forecasts

Task 3.1 Evaluation of Historic and Previous Forecasts

At the onset of the aviation activity forecasts, an evaluation of the historic activity since the last airport master plan will be conducted. Additionally, for comparison purposes, existing forecasts for the airport will be documented and evaluated. At a minimum this will include the projections from the 2004 Airport Master Plan Update, FDOT's most current Florida Aviation System Plan 2025; and the FAA's current

Terminal Area Forecast (TAF). Industry trends will also be documented from various sources such as the FAA's most recent Aerospace Forecasts, Transportation Research Board (TRB) publications, industry groups, etc.

<u>Product(s):</u> Documentation detailing historic activity and previous forecasts will be incorporated as part of an aviation forecast chapter in the first working paper.

Task 3.2 Baseline Forecast Preparation

Upon completion and analysis of the aforementioned inventory tasks and historic projections, aviation demand forecasts will be developed. In addition to typical industry standards and formulas (regression analysis, market share analysis, simple annual growth, etc.), the ESA Team will temper the forecasts by reviewing the overall economic activity in Pinellas County and the surrounding Tampa Bay area.

The ESA Team will conduct an overall socioeconomic evaluation of the region to include an identification and examination of the driving factors for the growth of aviation activity in the airport's service area. This will incorporate any pertinent data that has been previously collected by local entities including Visit St. Petersburg Clearwater; Pinellas County Economic Development, City of St. Petersburg Economic Development Division, City of Clearwater Economic Development Department, Tampa Bay Regional Planning Council (TBRPC), area chambers of commerce, area universities, and others. The goal will be to determine the potential for and extent of shifts in aviation demand for the Tampa Bay area. The ESA Team will utilize this data to assist in their identification of potential changes in existing domestic and international passenger traffic patterns for the airport, as well as other commercial and general aviation activity.

Baseline forecasts will be developed utilizing historic aviation activity data (local as well as regional and national), industry trends, and socioeconomic factors. The baseline forecasts will be representative of and support the continuation of the existing usage patterns of the airport. The ESA Team will develop forecasts for the 5, 10, and 20-year planning periods. These forecasts will be used to interpolate annual forecasts as needed. Output from this task will include:

- Projections of Passenger Enplanements (for both domestic and international air carriers)
- Passenger Service Activity Forecasts (utilizing industry trends, potential commercial aircraft fleet mix, and expected passenger boarding load factors)
- Total Based Aircraft (utilizing existing airport data and industry trends)
- Based Aircraft Fleet Mix (by specific aircraft categories)
- General Aviation Activity Forecasts (total operations as well as itinerant and local splits)
- Military Operations and Fleet Mix
- Total Annual Operations
- Peaking Characteristics (peak month, average day of the peak month, and peak hour of the average day - for commercial passenger enplanements and operations, as well as for overall operations)
- Categories of Operations (total local versus total itinerant, instrument activity, day/night splits, and overall aircraft operational fleet mix)
- Critical Aircraft (documentation of the existing and expected future critical aircraft)

<u>Product(s)</u>: Documentation detailing the final baseline activity projections will be incorporated as part of an aviation forecast chapter in the first working paper.

Task 3.3 Alternate Forecast Scenarios

Additionally, up to two (2) scenario based projections will be developed based on "what-if" situations and information obtained in the master plan analyses up to this point in the study process. These scenarios will represent significant deviations (either increases or decreases) to the baseline forecasts that could occur during the course of the 20-year planning period.

This effort will explore how the current commercial passenger and air cargo airline trends could create potential circumstances that would impact the activity at the airport. Example scenarios would include an analysis of the potential activity associated with one or more of the following scenarios:

- Entrance of a new, regularly scheduled passenger air carrier airline.
- Expanded domestic and/or international charter operations and enplanements.
- Significant increase in an air cargo or another commercial aircraft operator.

The "what-if" situations may also look at a significant increase in general aviation traffic not included as part of the baseline forecast. Triggering events for such a scenario might be the anticipation of a new large airport tenant, the entrance of a significant airport user, or the substantial increase in activity conducted by an existing or popular use such as fractional aircraft operators.

<u>Product(s)</u>: Documentation detailing the alternate forecast scenarios will be incorporated as part of an aviation forecast chapter in the first working paper.

Task 3.4 Baseline Forecast Review Coordination

The final selected baseline forecasts will be compared to the most recent FAA TAF to determine if they are within the FAA's range for consistency (within 10 percent of the TAF in the 5-year period and 15 percent of the TAF in the 10-year period). The ESA Team will coordinate the formal review of the selected forecasts with the FAA, as well as FDOT, and incorporate any comments as appropriate. This will include one (1) meeting with both the FAA's Orlando Airports District Office (ADO) and FDOT staffs attending.

<u>Product(s):</u> Draft agency transmittal letters and a final approved baseline forecast incorporating any FAA and FDOT comments.

Task 4: Facility Assessment and Requirements

Task 4.1 Airfield Demand Capacity Analysis

The ESA Team will use the methods detailed in FAA's AC 150/5060-5 Airport Capacity and Delay to calculate the airfield capacity of the current runway and taxiway systems under different operating flows and meteorological conditions. A runway and taxiway flow analysis will also be conducted to identify potential existing airfield conflict areas, choke points, and hot spots. Four (4) figures will be developed (in coordination with ATCT management) to reflect traffic flows and ground movements when each runway end is active. The new FAA taxiway design guidance will also be applied relative to the existing

airfield and any potential areas of concern will be identified, including facilities such as holding position lines and run-up areas.

<u>Product(s)</u>: Airfield capacity estimates/calculations, four (4) airfield flow analyses/diagrams, and documentation of facility needs for capacity/safety enhancement will be incorporated as part of the facility requirements chapter in the second working paper. No simulation will be conducted as part of this task.

Task 4.2 Airfield Facility Requirements

The ESA Team will apply the airfield standards and methodologies of both FAA AC 150/5300-13A, Airport Design and AC 150/5325-4B Runway Length Requirements for Airport Design to determine the adequacy of the airfield's runway length, width, and strength, and supporting taxiway systems. This will be based on the existing and future critical aircraft for each runway. All applicable runway and taxiway design standards, protective imaginary surfaces, and setbacks will be reviewed for compliance, given the existing and future critical aircraft.

Based on the previous tasks and potential forecast scenarios, the airfield access and associated setbacks required to access the future airside parcels of the Airco site will be defined. This will primarily identify the type and size of taxiways needed to provide the proper access to the runway system. In defining the requirements, different critical aircraft categories will be included to evaluate potential aviation related development options for the Airco site under Task 6.

In addition, an analysis will be conducted on the potential impacts and/or limitations the current airfield system has on both the existing and future operational aircraft fleet mixes. The intent is to quantify and document to the extent possible, any operational constraints that result as a direct result of the physical and operational characteristics of the airport.

<u>Product(s)</u>: Airfield facility needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.3 Navigational Aids, Metroplex, and TERPS Analyses

The ESA Team will coordinate with the FAA on potential navigational aid and changing airspace issues intended to improve the utility of the airport, while at the same time minimizing potential impacts. Any potential changes to the published instrument approach and departure procedures, as well as any other planned navigational aid improvements will be documented and evaluated. Additionally, this task will include a review of the recommended airspace changes related to the FAA's South Central Florida Metroplex that are available within the timeline of the study.

As part of this task, an FAA Order 8260.3C *United States Standard for Terminal Instrument Procedures* (*TERPS*) analysis will be conducted. Whether or not there are any changes to the airport's existing navigational aids or airspace during the course of the planning period, the TERPS analysis is needed to define critical airspace limitations which can impact the viability of proposed airfield development alternatives. The analyses associated with this effort are not included as part of the AGIS effort and would include the following elements:

<u>TERPS Surface Updates</u> - The minimum TERPS surfaces to be updated for the airport are listed below. These surfaces will be constructed as prescribed in FAA Orders 8260.3C, 8260.36, and 8260.54A.

For both ends of Runway 18/36:

- Precision Approach (ILS CAT I) Final Segment
- Precision Approach (ILS CAT I) Missed Approach Area Section I
- Localizer Final
- RNAV (GPS) LNAV Final Section 1
- RNAV (GPS) LNAV Missed Approach
- RNAV (GPS) VNAV Final Section 1
- RNAV (GPS) VNAV Missed Approach
- RNAV (GPS) LPV Final Section 1
- RNAV (GPS) LPV Missed Approach

For Runway 18:

- Precision Approach (ILS SA CAT I) Missed Approach Area Section I
- Precision Approach (ILS CAT II) Missed Approach Area Section I

For both ends of Runway 18/36 and Runway 4/22:

- RNAV (GPS) "A" LNAV Final Section 1
- IFR Departure Area (Zones 1, 2 & 3)
- Circling Area (Category A, B, C & D)

Others:

- Non-Precision VOR Final Section I (for Runway 36 and Runway 4)
- IFR Departure Area (Zones 1, 2 & 3) Non-Standard (for Runway 36 and Runway 22)

Once these surfaces are constructed and reviewed, they will be incorporated into the upgraded iALP/3DAAP to allow Airport Management staff the full use of all obstruction routines available within the program.

One Engine Inoperative (OEI) Surface Development – For this element, contact with tenant airlines currently utilizing the airport will be made to obtain the information necessary to map the carriers' Obstacle Accountability Areas (OAA) for all runway ends. Each responding airline's OAA will be modeled three-dimensionally for mapping and analysis purposes. Comparison to the models to understand mapped points collected through the new data collection efforts and obstacle data obtained from FAA and NGS will be mapped and coordinated with each airline to ensure accurate depiction and location of the individual OAAs and representative OEI surfaces.

From the individual surfaces developed, a composite map depicting the lowest surface will be developed. This surface will represent the airspace that airlines apply and hope to be protected for by the local governing agency to be cleared of obstructions so that they can maximize the lift capacity of

their fleets. All necessary graphics and digital data will be generated to depict the critical surfaces and controlling obstacles for each runway's operations. The final digital surface will be transferred to the FAA's internal OE/AAA analysis tool for obstruction analysis.

Obstruction Analysis – Once the AGIS obstruction data collected in Task 1 is mapped, it will be utilized with the TERPS and OEI surfaces developed under this task and included into the iALP. Analytical reports, AutoCAD and Google three-dimensional graphics will be developed for discussions with Airport Management. Any penetrations to the various surfaces that need to be mitigated will be discussed prior to FAA submittal. In addition, understandable and useful graphics will be provided to Airport Management to facilitate any obstruction clearing required.

<u>Product(s)</u>: Requirements for navigational aids and airspace will be incorporated as a part of the facility requirements chapter in the second working paper. In addition to populating the iALP with the AGIS data from Task 1, the following will be provided to/for Airport Management:

- iALP Web-Based TERPS Data Files
- 3DAAP AutoCAD Wireframe Drawings
- 3DAAP OAA/OEI AutoCAD Surface Drawings
- iALP Web-Based OAA/OEI Data Files
- Analytical Reports of Any Penetrations to Any Surfaces
- AutoCAD 3D Graphics of Penetrations
- Google 3D Data Files of Penetrations

Task 4.4 Airside Facility Requirements

Air cargo, general aviation, and other airside facilities will be evaluated to determine sufficiency including:

- Air Cargo and Airline Belly Freight
- General Aviation Terminal Facilities
- Conventional and Maintenance Hangars
- T-hangars
- Based Aircraft and Transient Aircraft Apron and Tie-down Space
- FBO Facilities
- Airport Support Facilities
 - o Airport Traffic Control Tower (including line of sight considerations)
 - o Aircraft Rescue and Fire Fighting (ARFF)
 - o Airport Maintenance Facilities
 - o Aviation Fuel Storage and Dispensing Systems

<u>Product(s):</u> Airside facility requirements will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.5 Requirements for Passenger Terminal Facilities

The ESA Team will identify the demand for the different functional areas of the commercial passenger terminal using FAA, Airport Cooperative Research Program (ACRP), and other industry standards based

on projected planning activity levels (PAL) triggers derived from the selected baseline activity forecasts. Passenger terminal facility requirements will be developed for up to four (4) different PAL triggers.

The demand for the various facilities will be compared to the current capacity of the terminal component to determine facility requirements at each PAL. Planning criteria will be based on the average day of the peak month level of demand and aircraft gate utilization. The functional areas to be considered would include, but not limited to:

- Number, Size and Configuration of Aircraft Parking Positions, Contact Gates, and RON space
- Circulation Areas
- Passenger Check-In/Bag Drop
- Airline Support Offices/Space
- Concessions
- Passenger Security Screening
- Airline Holdrooms and Boarding Gates
- Baggage Claim
- Inbound Baggage
- Outbound Baggage
- EDS Baggage Screening
- FIS and CBP Facilities
- Ground Service Equipment Circulation and Storage
- Airport/Tenant Office Space
- Wayfinding

Based on the passenger terminal area demand/capacity assessment, facility requirements to meet future PALs will be defined. The ESA Team will develop these requirements for up to four (4) PAL triggers that are consistent with the selected forecast. Facility needs will be defined in terms of the various categories identified above with future space requirements (if any) or number of devices needed. This assessment will also identify issues associated with the configuration and any functional concerns related to component uses within the terminal and terminal area.

<u>Product(s)</u>: Detailed passenger terminal needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.6 Terminal Access, Circulation, and Automobile Parking

A spreadsheet model will be applied to evaluate curbfront demands using the methodology documented in the Airport Cooperative Research Program (ACRP) 40 report, *Airport Curbside and Terminal Area Roadway Operations*. Specifically the Quick Analysis Tool for Airport Roadways (QATAR) macroscopic spreadsheet analysis tool will be utilized. For the baseline QATAR model, the arrivals peak hour and the departures peak hour will be modeled for a total of two (2) QATAR analyses.

Using the results of the baseline model the demand/capacity and level of service (LOS) for the existing conditions and three (3) forecast scenarios will be identified. These include:

<u>Roadway and Curbfront LOS</u> - The demand/capacity and resulting LOS will be calculated for the terminal area roadways and the curbfronts for the arrivals and departure peak hour. The QATAR

models will be used to evaluate the arrivals peak hour and the departures peak hour for each forecast year for a total of six (6) QATAR analyses. The roadway demand/capacity results will be presented on a link-by-link basis. Roadway capacity will vary based on number of roadway lanes and characteristics of terminal roadway segment using airport specific capacity assumptions. The LOS of the existing roadway system will be calculated as a function of roadway demand.

<u>Parking Requirements</u> – Parking requirements identified in *Parking Garage Study, Airport Landside and Parking Lot Improvements for St. Pete-Clearwater International Airport* by Cardno dated November 16, 2016 will be used for the baseline requirements. Future public parking demands will be prepared for three (3) forecast periods based on the selected baseline activity forecasts. Future employee parking demands will be increased in proportion to the expected annual increase in overall airport activity, assumed to be represented by the average growth in annual originating airline passenger activity and annual aircraft operations. Off-airport public parking demand will not be estimated.

The parking requirements will be compared with available parking spaces and estimated deficiencies (or surplus) in available spaces will be identified. Requirements will be presented in a tabular format that will identify where parking demand is expected to exceed the supply of parking and the anticipated deficiency on a facility-by-facility basis. The public parking and employee parking facilities inventoried will be assessed. It is assumed the existing market share allocation between facilities will be assumed remain consistent during the forecast years.

<u>Rental Car Requirements</u> - This element will compare capacity and future demand to identify the requirements for rental car facilities at the airport for booths, ready/return spaces, storage/quick turnaround facilities, remote storage/maintenance, and access/traffic patterns for jockey trips.

<u>Product(s)</u>: Detailed terminal access, circulation, and automobile parking needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.7 Landside Facility Requirements

Landside facilities to be evaluated include the need to provide improved ground access and automobile parking to existing facilities as well as to any new development areas on the airport. While this includes the non-aviation related uses, as well as the aviation related, particular emphasis will be placed on the needs for the development of the Airco site. General requirements on the size and configuration of new access roads into the Airco site as well as other new airport facilities will be defined.

<u>Product(s)</u>: Landside facility requirements will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 5: Environmental Analyses

Task 5.1 Natural Resources and Environmental Overview

In general, the environmental analyses serve to assist in selecting preferred development alternatives which minimize potential environmental impacts. It also serves to point out potential areas of concern through the use of a threshold analysis, i.e., identifying which aspects of the preferred development plan might exceed industry standards for no significant impact. Development that exceeds these thresholds

may require mitigation or a more comprehensive evaluation of alternatives. The ESA Team will review each area of potential concern so Airport Management is made aware of: 1) the level of potential impact, 2) whether further environmental study is required prior to implementation, and 3) whether the proposed improvements will comply with applicable state and federal laws.

The environmental documentation will follow the guidance provided in FAA's Order 5050.4B *Environmental Handbook* and FAA Order 1050.1E *Environmental Impacts: Policies and Procedures*. The first step for this will be to establish a baseline assessment of the current airport environmental condition. To establish this baseline, the following areas within the entire airport property boundary will be reviewed:

- Air Quality
- Prime and Unique Farmlands
- Vegetative, Wildlife, and Endangered Species
- Water Resources (water quality including surface and ground water)
- Wetlands and Biotic Communities
- Section 4(f) and Other Environmentally Sensitive Public Lands
- Historic and Archaeological Sites
- Energy Supply and Natural Resource Use
- Known Contamination (per Airport Management records)
- Construction Impacts, Drainage, and Hydrology

This effort is primarily based on existing information. No wetland mapping or detailed field investigation is included in this task. Once the baseline condition is established, lists of probable impacts that could result from any proposed development will be prepared and quantified. Those impacts that could require further study will be identified.

<u>Product(s):</u> The various analyses will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Task 5.2 Noise Modeling

As part of the environmental overview, the ESA Team will prepare an assessment of the potential noise impacts that would result from the activity levels and fleet mix from the final approved baseline aviation forecasts. The ESA Team will prepare the new noise contour maps, using the Aviation Environmental Design Tool (AEDT) for both the base year (existing airfield conditions) and a future year using the approved aviation forecasts. The single future year modeled (5, 10, or 20 year horizon) will be determined during the course of the study. The contours will be depicted on land use base maps with a supporting table that indicates the acreage of each land use type that is impacted by the 65, 70, and 75 DNL noise levels. This effort will not constitute a CFR Part 150 noise study.

The AEDT software will also be utilized to evaluate up to two (2) additional future scenarios based on potential operational or physical changes proposed as part of the analyses of alternatives for airport development. These scenarios would be compared to the base year contours to evaluate potential impacts associated with the alternatives proposed.

<u>Product(s):</u> The noise analyses will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Task 5.3 Sustainability

Some sustainability elements will be incorporated into the new master plan study. While these are identified as individual tasks, they will be incorporated throughout the project. For the purposes of this scope, sustainability is defined as a holistic approach to managing an airport to ensure the integrity of the Economic viability, Operational efficiency, Natural resource conservation and Social responsibility (EONS) of the airport (Source: Airports Council International – North America, or ACI-NA). The following tasks follow the general sustainability planning guidance currently in development by the FDOT Aviation and Spaceports Office. They will focus on County-owned and operated aviation-related facilities and operations at the airport.

5.3.1 Sustainability Baseline Assessment

The goal of the baseline assessment is to understand the activities and existing levels of resource consumption at the airport to identify opportunities for improvements. Based on readily available information and data currently collected by Airport Management and the ESA Team, a sustainability baseline assessment will be conducted for the sustainability categories identified by the ESA Team to highlight areas for improvement. The baseline data collection process is critical to understanding where enhancements could be considered, and will be conducted alongside the primary master plan inventory task to enhance the efficiency of the data collection process. The various baseline data collection categories could include:

- Airport Facilities (in support of Infrastructure Resiliency Planning task)
- Noise and Land Use
- Water Consumption and Water Quality
- Energy
- Surface Transportation
- Natural Resource Management
- Waste Management and Recycling (in support of Solid Waste Recycling task)
- Socioeconomic and Community

The airport is located in an area that is in attainment for all criteria pollutants defined by the U.S. Environmental Protection Agency (EPA). Therefore, an Air Quality and Greenhouse Gas (GHG) Emissions Inventory will not be conducted; however, existing air quality and GHG emissions reduction strategies will be documented in the baseline assessment.

It is assumed that a total of seven (7) categories will be addressed in the sustainability baseline assessment. The categories will be determined in collaboration with Airport Management, based on specific conditions at the airport.

The ESA Team will provide access to a web based data collection site accessible to all team members to assist in data collection and the sustainability baseline assessment. The on-site data collection will include meetings with key Airport Management staff as well as site visits.

The ESA Team will provide sustainability-related survey questions for inclusion in an internet-based survey to airport users and tenants. The results will be compiled and summarized in the assessment. The baseline assessment will also include a review of energy sources and rates of consumption.

As part of the data collection process the ESA Team will identify existing sustainability initiatives currently implemented at the airport, determine rates of resource consumption (i.e. energy use, water consumption), identify trends in management of resources, and highlight areas for improvement or focus in the Sustainability Plan.

<u>Assumption(s)</u>: One (1) data collection meeting at the airport with two team members (held concurrently with sustainability vision session meeting described in Task 5.3.2) will be conducted.

<u>Product(s):</u> A draft Sustainability Baseline Assessment technical memorandum for review and a final Sustainability Baseline Assessment technical memorandum that will be integrated into the master plan report.

5.3.2 Develop Sustainability Goals and Objectives / Alternatives Screening Criteria

The ESA Team will prepare a draft Sustainability Vision Statement for the airport for consideration by Airport Management. This vision statement will define the high-level vision of the airport.

Based on the Sustainability Vision Statement and the findings of the Sustainability Baseline Assessment, the ESA Team will prepare draft goals and objectives to be discussed and further refined with Airport Management staff and the master plan working group. The goals will be more general in nature and relate to the sustainability categories of importance, as determined in Task 5.3.1. The objectives will be more specific statements guiding how the goals will be achieved. The ESA Team will use the ACI-NA recommended goals and objectives as a starting point for the draft goals and objectives, customized to the airport's specific conditions.

The master plan development alternatives screening criteria that take sustainability goals and objectives into account will be identified to assist in the sustainability evaluation of alternative development concepts. This task will also provide a summary of sustainable project elements to consider for the preferred development alternative during the planning process, with the intent of providing guidance for the airport to integrate sustainability into the overall development program.

<u>Assumption(s)</u>: One (1) visioning meeting will be held concurrently with the data collection meeting (Task 5.3.1) at the airport with two (2) team members.

<u>Product(s)</u>: Sustainability Vision Statement and a memorandum documenting the airport's sustainability vision, goals, and objectives after coordination with Airport Management; a memorandum detailing sustainability alternatives screening criteria, and a memorandum detailing the recommended sustainable project elements that could be incorporated into the preferred development program, as well as the overall master plan report.

Task 5.4 Solid Waste Recycling (Waste Audit)

Consistent with the FAA Modernization and Reform Act of 2012 (FMRA) and Program Guidance Letter (PGL) 12-08, a solid waste recycling review will be conducted for the airport. As per PGL 12-08, this will include the following elements:

- 1. A Waste Audit:
- 2. the feasibility of solid waste recycling at the airport;
- 3. minimizing the generation of solid waste at the airport;
- 4. operation and maintenance requirements;
- 5. the review of waste management contracts; and
- 6. the potential for cost savings or the generation of revenue.

A thorough Waste Audit is a significant investment of time and resources, but it is essential to prioritize waste reduction efforts. The audit will be conducted over three (3) days, during which solid wastes from all sources, landside and airside, will be visually inspected, photographed, and logged. If possible, this will include materials that may be removed from aircraft by food service caterers and disposed (or recycled) at their facilities. Volumes will be estimated during observations.

To address feasibility, the existing providers of recycling services in Airport Management and their ability to provide recycling or waste reduction services for targeted materials will be assessed. This will include both traditional recycling such as cans/bottles/paper, and more innovative approaches such as "food rescue" that could provide food products to needy people when those foods are close to their expiration date.

Based on information gathered during the Waste Audit, for each operational area, one to three opportunities for waste minimization will be identified. General cost factors (e.g. high, medium, or low) associated with the implementation of each measure in each setting will also be reviewed. These descriptions are intended to guide future detailed cost analyses as implementation decisions are being made.

The ESA Team will review the airport's agreements with service providers that remove waste and recyclables from the facilities. This includes contracts that apply to catering service companies, if they also remove discarded materials from the site. If such contracts or purchase orders exist between other airport occupants and service providers, the ESA Team will attempt to review those as well. Any local, state or federal laws or regulations that could constrain the delivery of waste and recycling services to the airport will also be reviewed. This includes state or local "flow control" laws as well as requirements for sterilizing wastes that originate outside the US.

<u>Product(s):</u> The solid waste recycling analysis will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Task 5.5 Infrastructure Resiliency Planning

The ESA Team will develop an infrastructure resiliency plan that considers the airport's location relative to Tampa Bay and is consistent with airport resiliency planning guidance¹ and Pinellas County resiliency planning efforts.

5.5.1 **Vulnerability Assessment**

A complete hard infrastructure vulnerability assessment will be a necessary first step to resiliency planning at the airport. The ESA Team will document the airport infrastructure's exposure, sensitivity, adaptive capacity, as well as criticality of assets/systems to aid in prioritization of adaptation measures. The ESA Team will also consider the broader context within which the airport operates, including changing trends and demographics that are likely to influence exposure, sensitivity, adaptive capacity, and criticality in the near-term and future.

The ESA Team will collect existing data on projected climate impacts for the airport region to identify those climate stressors most likely to disrupt airport operations, cause infrastructure to fail, and/or otherwise negatively impact workers or passengers. Data will include recent efforts by Pinellas County

The ESA Team will then identify the infrastructure that are currently or will be impacted by the local climate stressors identified. In coordination with Airport Management and other stakeholders as relevant, the team will assess the exposure, sensitivity, adaptive capacity, and criticality of the operations and infrastructure.

Assumption(s): As part of this task, the ESA Team will conduct an on-site workshop to highlight potential impacts; further discuss and ground-truth sensitivities and adaptive capacities; and to identify opportunities to reduce vulnerabilities and enhance resiliency. The resiliency assessment will primarily be based on existing structure or as-built data as provided by the airport; the survey and information obtained as part of the AGIS element of this study; and the existing LiDAR data available for Pinellas County,

Product(s): A vulnerability assessment report summarizing projected climate impacts and airport vulnerabilities, including a matrix reflecting the vulnerability ranking to inform highest priority vulnerabilities to be addressed will be incorporated as part of, or an appendix to, the comprehensive environmental overview chapter in the third working paper.

5.5.2 **Resiliency Planning**

Once the vulnerability of the infrastructure is well understood, the ESA Team will guide Airport Management in determining the objectives of its resiliency program. Further, it will identify high-level recommendations that Airport Management may want to prioritize to build resilience and reduce its vulnerabilities. The airport may consider incorporating these recommendations and associated action areas in a future climate adaptation or resiliency plan. Potential adaptation and resiliency strategies may include policy recommendations, enhancements to disaster response procedures, damage assessment

TRB 147 Report Climate Change Adaptation Planning: Risk Assessment for Airports (http://www.trb.org/Publications/Blurbs/173554.aspx) and TRB ACRP Synthesis 33 - Airport Climate Adaptation and Resilience (http://www.trb.org/Publications/Blurbs/167238.aspx).

procedures, and building/site design guidelines, including, but not limited to weatherization, design for stormwater management, elevation of structures, flood barriers, treatments, and material selection.

Strategies will be developed based on best practices from other airports and agencies, ACRP tools and guidance, as well as coordination with Pinellas County's Natural Resources Division to ensure needs of the airport and all stakeholders are met, implementation is feasible, and both technical and financial resources can be identified. This phase will also identify key stakeholders for continued engagement in the airport's resiliency planning as well as target audiences for communications of the airport's vulnerabilities and responses.

Product(s): A draft and final version of a Resiliency Plan technical memorandum will be incorporated as part of, or an appendix to, the comprehensive environmental overview chapter in the third working paper.

Task 5.6 Stormwater Management Plan Update

The ESA Team will take into account the existing and proposed projects recommended in the master plan over the next 20 years in order to update the 2011 Stormwater Management Plan. A primary goal of this effort will be to identify the feasibly and options that exist to reduce the number of stormwater ponds on the airfield.

5.6.1 Data Collection and Data Verification

The ESA Team will review all airport stormwater permits and summarize the permit obligations of each project. General basins, flow paths, and outfalls will be identified through these previous stormwater permits and field observation. Field surveys will be performed, as needed, to collect channel cross section data, pond volumetric data, and pipe parameters. This data, in addition to the available LiDAR data, will form the basis for the airport wide stormwater model.

5.6.2 Design Methodology

The ESA Team will compile and verify the data collected in the previous task with additional field observation as necessary. Airside areas, landside areas, drainage basins, and potential pond locations will be identified during this task. A design methodology summary will be prepared during this task. A preapplication meeting with the Southwest Florida Water Management District (SWFWMD) will be held to alert them to the project and to confirm the design methodology that will be used for the Stormwater Management Plan Update. A debriefing meeting will be held with the airport at the end of this task to confirm the appropriateness of pond locations and outline the plan of action for subsequent tasks.

5.6.3 Schematic Design

An airport wide hydrologic and hydraulic computer model will be prepared during this task utilizing and revising previous airport models. From this baseline, future development models will be prepared and regional pond locations will be confirmed for proper hydraulic performance. The report for the Stormwater Management Plan Update will be prepared during this task. It will detail the current hydrologic, hydraulic, permitting, and environmental conditions of the airport and plan for the next 20 years of development. The report will be broken into development phases based on the likely sequence of development and provide a matching sequence of stormwater facility expansion. Following a status meeting with the airport, a Conceptual Environmental Resource Permit (CERP) application will be prepared and submitted to SWFWMD for review.

5.6.4 Final Schematic Design

Responses to SWFWMD's comments on the application will be completed under this task. The computer model and the Stormwater Management Plan Update will be finalized based on responses to SWFWMD's comments. A final SWFWMD submittal will be completed with the resolved permit documents. Once the CERP is approved, all documents and models will be provided to the airport.

<u>Assumption(s)</u>: The Stormwater Management Plan Update will primarily be based on the available LiDAR data but may also benefit from the AGIS data element of this study. No additional survey is included for this task.

<u>Product(s)</u>: A Stormwater Management Plan Update will be produced in a format that can also be utilized for various elements of the comprehensive environmental overview chapter in the third working paper, as well as portions of the alternatives analyses of Task 6.

Task 6: Alternatives for Airport Development

The alternatives analysis provides the framework for making decisions regarding future airport development options. Information from previous tasks will be utilized to conduct the different evaluations under this task.

Task 6.1 Constraints Analysis

An analysis will be conducted of the operational, physical, and environmental constraints of the airfield prior to defining any airport alternatives. This effort will identify factors that could impact project feasibility, the community, the environment, or long-term viability of the airport. The constraints for consideration include (but not limited to) the design standards, required protective imaginary surfaces, and setbacks associated with the existing airfield, as well as other features which may affect development options, including wetland boundaries, flood zones, and areas optioned to existing airport tenants. The various constraining elements will be summarized in text format and reflected on a single detailed figure of the airport and immediate surrounding area.

<u>Product(s):</u> Facility constraints and the resulting detailed figure will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.2 Initial Development Options

The ESA Team will create and analyze initial development options that follow the standard criteria contained in FAA AC 150/5070-6B *Airport Master Plans* and FDOT's 2016 Guidebook for Airport Master Planning. This will include up to three (3) initial development options for each of the following major categories:

- Airfield Improvements (changes is runway endpoints, taxiway configurations, removal of surfaces, and/or new movement areas)
- Commercial Aviation Facilities (to include footprint of future facilities such as air cargo, maintenance, etc.; aircraft parking and movement areas; airside access and landside access; and automobile parking areas)
- General Aviation Facilities (to include options for potential FBO facilities, general aviation terminal(s), aircraft parking areas, airside access, automobile parking areas, and landside access)

- Other Aviation Related Support Facilities (to include potential new, expanded, or relocated sites for facilities such as fuel storage, airfield electrical vault, etc.)
- Non-Aviation Related Uses

The following are typical evaluation criteria that the ESA Team will apply to the development of suitable options/alternatives:

- Adherence to FAA/FDOT standards;
- Consistency with study goals and objectives;
- Non-interference with operational and safety requirements;
- Optimal use of existing facilities, utilities, and topography;
- Efficiency in ground access;
- Flexibility to accommodate changes in demand and facility expansion;
- Provides the most benefit for the costs involved;
- Least impacts to the social and physical environments (sustainability); and
- Provides the best revenue-generating potential while meeting the intended demand.

The ESA Team will prepare a matrix analysis to determine the best option(s) for each major category. This matrix will contain screening criteria similar to those described above in order to compare the different options presented.

<u>Product(s)</u>: A ranking of the initial options will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.3 Alternatives for Future Passenger Terminal Facilities

The ESA Team will develop up to three (3) alternatives for the future development of the passenger terminal facilities based on the facility requirements established in preceding tasks. Terminal alternatives will be coordinated with alternatives developed for facilities such as parking or roadway access, as well as any others identified, and will accommodate the demand under each activity level. Terminal alternatives will be developed based on facility requirements, environmental considerations, engineering factors, operational efficiency, costs, and overall feasibility for implementation.

The efficiency and effectiveness of the terminal alternatives will be evaluated using PathPlanner. Up to three (3) alternatives for the future development of the passenger terminal facilities will be developed in prior tasks. VHB's task will be to evaluate the efficiency and effectiveness of the terminal alternatives using PathPlanner (now called Transoft AviPlan). This simulation tool will be applied to each of the preliminary alternatives to establish the most efficient interface with the existing/proposed airfield movement areas based on the critical aircraft only to be using each of the gate stands; and overall interaction with aircraft on nearby taxiways in terms of aircraft push-backs and overall ramp maneuvering safety.

Terminal alternatives will also be analyzed to determine their potential for creating or being affected by the required ATCT line of sight as well as the CFR Part 77 and TERPS surfaces for both the existing and future airfield configurations. Based on the findings, an evaluation matrix will be developed using criteria, similar to that described in Task 6.2, in order to select a preferred alternative.

<u>Product(s):</u> A ranking of the improvement alternatives for the passenger terminal facilities will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.4 Terminal Access, Circulation, and Automobile Parking Alternatives

Improvements will be identified to address the facility constraints previously identified. These improvements will be evaluated separately for each mode and user, to include an assessment of the potential impacts to other competing modes/users. The alternatives will incorporate the following:

- Merge, weave, and entry point improvements.
- Curbfront operational improvements.
- Improved recirculation.
- Modified transit/shuttle boarding locations.
- Access/circulation modifications for parking, rental car, and garages.
- Parking space allocation changes.
- Changes to parking management system or real-time parking information (i.e. smart phone apps).
- Parking garage wayfinding for pedestrians and vehicles.
- Pedestrian improvements.
- Improved wayfinding on approach roadways.
- Rental car facility configuration enhancements.

Up to three (3) consolidated development concepts incorporating the solutions will be developed. The selected improvement concept will be further assessed using the QATAR model again to evaluate the ability to accommodate expected arrival and departure peaks. A total of six (6) QATAR analyses using the three (3) forecast horizons will be made. The model will be based on the passenger characteristics from the existing conditions model with certain operational adjustments to address the recommended scenario and associated assumptions. The resulting demand/capacity information will be utilized to make any improvements or refinements identified.

<u>Product(s):</u> The results of concept evaluations and model assessment of the selected improvements will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.5 Recommended Development Alternatives

The ESA Team will work with the Airport Management, FAA, and FDOT to further evaluate the best options selected for each of the major development alternatives described above. During this process, elements of the different initial development options may be combined to create a modified or improved development alternative for each major category and the passenger terminal facilities included in the previous tasks. This provides the opportunity to incorporate some or all of the best features in order to develop the final alternative, which would be subject to the same evaluation criteria utilized for the initial options. This process will also make any adjustments necessary to ensure the preferred alternatives for each major category do not impact each other.

<u>Product(s):</u> The final recommended airport development alternatives will be incorporated as a chapter of the third working paper.

Task 7: Airport Layout Plan Drawing Set

Task 7.1 Airport Layout Plan Set Preparation

The ESA Team will prepare an Airport Layout Plan (ALP) drawing set in accordance with FAA guidelines per the requirements outlined in AC 150/5070-6B Airport Master Plans and consistent with the checklist provided in FAA ARP SOP 2.00 Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs). The ALP drawing set will rely upon the data collected in the airport mapping/AGIS task and at a minimum will include the following sheets:

7.1.1 Title Sheet

To include the airport location map, vicinity map, index of drawings, approval blocks, date, etc.

7.1.2 Airport Data Sheet

To include the recent 10-year wind rose, airport data table, runway data table, taxiway data table, modifications to standards approval table, declared distance table, and legend.

7.1.3 Airport Layout Plan Drawing

A drawing depicting every existing facility and the future improvements of the 20-year planning horizon. To include various details such as dimensions, imaginary surfaces (safety and critical), topography, etc. This may ultimately include two sheets, one which only includes existing facilities and the other which reflects both existing and future facilities of a traditional ALP.

7.1.4 Terminal Area Drawings (2 sheets)

Drawing sheets depicting a larger scale drawing of the existing and proposed development including building data table, commercial terminal facilities, general aviation terminal facilities, hangars, aircraft parking, landside access, automobile parking, rental car facilities, security fencing/gates, and other key features. Individual sheets will be prepared for the southwest (passenger terminal area) and southeast (Airco site) portions of the airfield.

7.1.5 Airport Airspace Drawings (3 sheets)

Drawings depicting the future CFR Part 77 Safe, Efficient, Use, and Preservation of the Navigable Airspace surfaces including ultimate plan view, existing profile view, future profile view, and obstruction data tables. The primary sheet and then two additional sheets to fully depict the precision instrument approach surfaces to each end of Runway 18/36.

7.1.6 Inner Portion of the Approach Surface Drawings (3 sheets)

Two of the drawing sheets will depict the existing and future plans and profiles of the inner portion of the runway approach surfaces along with surface penetrations, out to the points 100 feet above the established runway end elevations. These drawings will also depict the Threshold Siting and Glideslope Qualification Surfaces as required. A third sheet will be prepared to depict both the centerline profiles and Runway Safety Areas of both runways.

7.1.7 Runway Departure Surface Drawing

Drawing sheets depicting the instrument departure surface plan and profile views and obstruction data tables. Limited to one (1) sheet since there are only instrument departure procedures established off each end of Runway 18/36.

7.1.8 Land Use Drawings (2 sheets)

Drawings depicting the on-airport and off-airport land uses with features to include the updated noise contours (both base year and future scenario selected), safety areas/zones, property line, jurisdiction boundaries, and other details as required.

7.1.9 Airport Property Map (3 sheets)

Drawing sheets depicting all existing and any future airport lands with the appropriate airport features depicted. These drawings will rely upon information from the Exhibit "A" Property Inventory Map described in a subsequent task. As per the FAA ARP SOP 2.00 ALP Checklist for property maps, this will be a slightly abbreviated version of the full Exhibit "A" Property Map. However, depending on complexity of the property mapping, it may be appropriate to just include entire the Exhibit "A" as part of the ALP drawing set.

<u>Product(s):</u> An ALP drawing set created in AutoCAD using the AGIS data for the base file. A chapter, which describes each of the ALP drawing sheets, will also be prepared for inclusion in the fourth working paper.

Task 7.2 Airport Layout Plan Review Coordination

The ESA Team will coordinate the review of the ALP drawing set with the FAA and FDOT and incorporate comments as appropriate. This will include one (1) meeting with both the FAA's Orlando ADO and FDOT staffs attending.

<u>Product(s):</u> Draft agency transmittal letters and a final approved ALP drawing set incorporating any FAA and FDOT comments.

Task 7.3 Exhibit "A" Property Inventory Map

The ESA Team will develop a new Exhibit "A" Property Inventory Map in accordance with FAA ARP SOP 3.00 Standard Operating Procedures (SOP) for FAA Review of Exhibit 'A' Airport Property Inventory Maps. The development of this document will be based on a new boundary (metes and bounds) survey and a full records/title search of the entire airport property. Upon completion, the ESA Team will coordinate the review and approval of the new Exhibit "A" drawings with the airport's attorney, FAA, and FDOT.

The following steps will be undertaken to support the full boundary survey and title search for the airport property:

- Establish horizontal and vertical control sufficient to accomplish the survey.
- Perform boundary survey of airport property to include the recovery or replacement of boundary monuments for the most exterior perimeter of the airport property.
- Stake location of Mean High Water Line.

- Upon completion of the field boundary survey, prepare a signed/certified Survey Map and report for the same.
- Complete a full title search for airport owned parcels.
- Prepare a complete Exhibit "A" Property Inventory Map in both hardcopy and digital formats.

Qualifications of the survey include:

- 1. Rule of Law: The boundary survey will be certified to parties specified by the airport and shall be in compliance with the "Standards of Practice for Land Surveying in the State of Florida," pursuant to Rule 5J-17 of the Florida Administrative Code. The Surveyor will make every effort to comply with the requirements set forth by the airport, but where requirements by others conflict with the Florida Administrative Code, the Rule of Law shall prevail.
- 2. Building Setbacks and Zoning: Building setback lines will not be located upon the Survey Map unless said setback lines are provided by the airport.
- 3. Surface Improvements, excluded: As this survey is limited to the purposes of a boundary survey, the location or mapping of any surface improvements within the airport property are not included. In this case, surface improvements will include, but not necessarily be limited to navigational aids, structures, buildings, hardscape surfaces, utilities and other fixtures as may be laid out and in use (the location of these will be obtained as part of the AGIS mapping task).
- 4. Subsurface Improvements, excluded: The location of subsurface improvements, including, but without limitation to buried utility lines, foundations, or other non-visible fixtures are not included.
- 5. Mean High Water Line: With respect to the Survey of the Mean High Water Line, if an elevation is provided by the Florida Department of Environmental Protection, that elevation will be applied to this survey. However, the determination of the Mean High Water Line as defined under Chapter 177, Florida Statutes is not a part of this engagement.
- 6. Title Search Review: Although the Pinellas County Property Appraiser's Office records will be reviewed to determine the airport location, the ESA Team will engage the services of a title company to provide a full Title Search Report indicating deeds and encumbrances as may appear.
- 7. Elevations excluded: The acquisition of spot elevations, soundings, contouring or other forms of vertical measurement are not included (these will be captured as part of the AGIS mapping task).
- 8. Timing: All control surveys will be conducted in daylight hours.

<u>Assumption(s)</u>: Airport Management will provide the necessary historic FAA grant numbers and/or Passenger Facility Charge (PFC) project numbers related to the acquisition of any airport parcels. Airport Management will also provide the movement area escort(s) required for the portion of the survey which may lie within the Security Identification Display Area (SIDA) of the airport.

<u>Product(s)</u>: A complete signed and certified boundary Survey Map and report of the existing airport property. A full records and title search for the existing airport property limits. Three (3) signed and certified Exhibit "A" Airport Property Inventory Map drawing sets. All supporting surveys, drawings, and files will also be provided in a digital format (AutoCAD and PDF).

Task 8: Recommended Development Program

While the following tasks are listed in a sequential order, they may be conducted simultaneously or at different times than presented to assess the different elements necessary to generate the final 20-year development program.

Task 8.1 Inventory of Financial Information

The ESA Team will gather information which affects the financial management of the airport's development program and confirm the structure, constraints, requirements, and opportunities to implement the next 20-year capital improvement program (CIP). The primary purpose is to gain an understanding of the legal documents and agreements which affect the financial management of the airport. As such this will include interviews with key Airport Management staff to gain an understanding of the airport's objectives and preferences for financing the CIP. The data gathering will include:

- Historic, detailed (account-by-account) financial statements and audit reports for the past three years.
- Detailed year-to-date financial statements for the current year with budget remaining amounts.
- Most recent capital budget (internal as well as CIP submitted to the FAA and FDOT).
- Official statements and loan agreements for any outstanding debt issues.
- Ordinances, resolutions, administrative rules, regulations, and policies establishing the airport and affecting its financial management.
- Airline agreements.
- Ground transportation agreements.
- Restaurant, lounge, gift shop, and specialty retail concession agreements.
- FBO agreements, large hangar leases, typical T-hangar leases by size, improved ground leases, unimproved ground leases, cargo facility leases, and other general aviation agreements.
- Other airport lease, concession, use, and privilege agreements.
- FAA, Transportation Security Administration (TSA), state, and local grant records.
- PFC quarterly reports for the most recently submitted report and the same report submitted one year earlier.
- Historic funding sources for the CIP.

<u>Product(s)</u>: Inventory of the airport's general financial information for inclusion in the recommended development program chapter of the fourth working paper.

Task 8.2 Preliminary Financial Analysis

The ESA Team will prepare a Preliminary Financial Analysis for the CIP. This preliminary evaluation includes considering the airport's overall capability to fund capital development and finance airport operations. The analysis identifies potential funding sources, including debt that may be practical alternatives for financing capital development projects. Key steps of this include:

- Review updated financial and legal information gathered during the Inventory of Financial Information task related to financial condition, airport policies, administrative regulations, grant status and airport user agreements which affect the financial management of the airport and which will affect the financial reasonableness of implementing the CIP.
- Review the aviation forecast and alternative capital development concepts. Review preliminary
 development costs and schedules for the CIP alternatives to consider possible revisions in the
 development scope and timing.
- Develop summary level financial projections of funding sources, funding requirements, and other
 information to provide a basis for assessing preliminary financial plans of the CIP alternatives.
 Revenue and capital funding projections will be compared with operating and maintenance
 (O&M) expense and capital expenditure projections to identify a balanced approach for
 developing and funding the program.
- Conduct workshop sessions with airport officials to review and discuss the preliminary financing schedules. Resolve funding shortfalls identified in the capital program alternatives by revising the CIP schedule, CIP scope, and/or capital funding sources. Identify funding preferences, potential debt requirements, and other funding resources that the airport may want to utilize.

<u>Product(s)</u>: Financing schedules summarizing the Preliminary Financial Analysis which indicates whether the potential sources of funding will be reasonably available in the amounts and time frame required to support the scope and schedule of the alternative development concepts. This documentation will be included in the recommended development program chapter of the fourth working paper.

Task 8.3 Financial Implementation Plan Development

The ESA Team will prepare a detailed financial plan for implementation of the selected master plan CIP alternative. The Financial Implementation Plan resulting from this task will present reasonable guidelines, on a preliminary basis, for matching projected financial resources with financial needs. Airline rates and charges and costs per enplaned passenger resulting from the capital program will be calculated at a summary level using the airport's current methodology and airline lease agreements for determining user fees. Potential revenue enhancement opportunities for non-airline revenues will be identified. Key steps of this include:

- Develop projection of O&M expenses by reviewing historic O&M expenses to identify trends
 and anticipated increases/decreases. Review the potential effect of the selected CIP on projected
 O&M expenses. Interview Airport Management to develop appropriate O&M projection
 assumptions and to identify other anticipated changes.
- Develop projection of non-airline operating revenues by reviewing historic non-airline revenues (including concessions, parking, car rentals, general aviation, FBO activities, fuel flowage, hangar leases, commercial/industrial and other leases) to determine trends for future projections. Interview Airport Management to develop appropriate non-airline revenue assumptions.
- Develop projection of capital improvement expenditures by reviewing the selected CIP project list with construction cost estimates, escalation rates, and scheduling of expenditures to determine

the annual need for capital funding. Interview Airport Management to develop appropriate projection assumptions.

- Determine funding sources for the financial plan and develop projection for financing the CIP by reviewing the summary of potential funding sources developed in the Preliminary Financial Analysis task (including federal and state grants, PFCs, economic development funds, debt funding, net revenues, bank financing, other sources) with Airport Management and determine sources to be used for financing the program. Develop a projection of capital financing based on the annual amount and availability of funds. Interview Airport Management to develop appropriate projection assumptions.
- Develop a summary level projection of airline rates and charges. Interview Airport Management to develop appropriate projection assumptions.
- Evaluate the reasonableness of projected airline rates and charges and cost per enplaned passenger by calculating the cost per enplaned passenger resulting from the financial projection. Compare the projected airline rates and charges and the cost per enplaned passenger with that of other airports of similar size and operation.

<u>Product(s)</u>: Detailed Financial Implementation Plan for inclusion in the recommended development program chapter of the fourth working paper.

Task 8.4 Cost Estimates

The ESA Team will assign costs to each project (both horizontal and vertical construction) in the recommended development program. This consists of refining any probable cost estimates prepared in earlier tasks by adding significant detail for the construction costs, as well as any associated engineering, inspection, administrative, or contingency costs.

<u>Product(s)</u>: Individual spreadsheets for each project reflecting the detailed items considered to develop the individual project cost estimates (materials, quantities, unit costs, etc.).

Task 8.5 Development Program

The ESA Team will provide recommendations for development in the form of preferred phases of improvements. In addition to the financial evaluations and cost estimates described above, key elements of this effort include refining the proposed development schedule. The ESA Team will refine the proposed project phasing based on final input from the Airport Management, the FAA, and FDOT, as well as by applying such technical realities such as design time, FAA and FDOT grant administration, project scheduling, construction permitting, construction time, and others. A final comparison will also be made based on the estimated costs to implement the recommended development plan (including associated phasing plans) with the availability of funds from the various financial sources and the financial feasibility identified.

<u>Product(s)</u>: The completion of the recommended development program chapter of the fourth working paper. This will include a 20-year CIP that can be utilized to update the airport's Joint Automated Capital Improvement Program (JACIP).

Task 9: Stakeholder Coordination and Public Outreach

Task 9.1 Airport Management Coordination

This task includes five (5) meetings/briefings to the Airport Management by ESA's Project Manager and relevant task leaders based on the agenda topics. At a minimum, the last meeting/briefing will be conducted with the Pinellas County Board of County Commissioners. The ESA Team will provide any necessary meeting materials such as a PowerPoint presentation or handouts to update the Airport Management staff on the various sections and progress of the study. The ESA Team will also include a monthly status report (paragraph summary) based on the progress reports included with each monthly invoice (see Task 11).

In addition, ESA's Project Manager will set up a bi-weekly call with the airport's project manager to review project activity and status, throughout the course of the study. Participation in the bi-weekly call is limited to two or three people from both the ESA Team and Airport Management, as the goal is to provide a brief project update.

Task 9.2 Ongoing Working Group Meetings

To ensure that the master plan moves forward smoothly, the ESA Team will schedule and participate in working group meetings with the Project Team. During the meetings, the working group will identify and resolve potential issues, while reviewing progress against the project schedule. Periodic conference calls will also be held with key Airport Management staff and ESA Team members as needed to resolve issues that may arise either prior to or subsequent to working group meetings.

The ESA Team will manage the working group meeting coordination, scheduling, agendas, handouts, and notes. Attendance and active participation in the working group meetings by ESA's Project Manager and relevant task leaders will be based on the agenda topics. A total of six (6) half day working group meetings have been included in this task.

Task 9.3 Agency Coordination

9.3.1 St. Pete-Clearwater International Airport Traffic Control Tower

This task includes one (1) meeting/briefing with the airport's FAA ATCT personnel to collect information and/or brief ATCT management on key issues. Two (2) follow-up conference calls will also take place throughout the project as required to obtain needed information and input. The ESA Team will provide any necessary meeting materials such as a PowerPoint presentation or handouts.

9.3.2 FAA Orlando Airport District Office (ADO)

This task includes one (1) meeting/briefing with the FAA Orlando ADO by ESA's Project Manager and relevant task leaders based on the agenda topics. Two (2) follow-up conference calls will also take place throughout the project as required to obtain needed information and guidance. The ESA Team will provide any necessary meeting materials such as a PowerPoint presentation or handouts.

9.3.3 FDOT District 7 Office

This task includes one (1) meeting/briefing with the FDOT District 7 staff by ESA's Project Manager and relevant task leaders based on the agenda topics. Two (2) follow-up conference calls will also take place throughout the project as required to obtain needed information and guidance. The ESA Team will

provide any necessary meeting materials such as a PowerPoint presentation or handouts to update FDOT on the status and results of the master plan.

Task 9.4 Public Outreach

9.4.1 Project Website

A website dedicated to the project will be developed to facilitate public participation in the study. This site will create a simple portal to exchange study documents and ideas, in addition to conveying information related to meetings, presentations, and/or workshops in a timely fashion. This site will also serve as a public repository for the dissemination of the study working papers. The ESA Team will create, host, and maintain the project website throughout the duration of the study as well as for a period of up to one year after the study has been completed.

9.4.2 Public Workshop #1

An advertised, informal public workshop will be held shortly after the first working paper is publicly made available. At the workshop, the ESA Team will be responsible for discussing (on a one-on-one basis) with those in attendance the master plan process, the goals and objective of the study, operational background data, work to date, and the project schedule. The ESA Team will provide up to twenty (20) large presentation board exhibits outlining information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshops. Up to six (6) members of the ESA Team will be available for the public workshop.

9.4.3 Public Workshop #2

A second advertised, informal public workshop will be held upon completion of the third working paper. At the workshop, the ESA Team will be responsible for discussing (on a one-on-one basis) with those in attendance, the airport's needs over the 20-year planning horizon, and the development options considered, along with the preferred alternative. The ESA Team will provide up to twenty (20) large presentation board exhibits outlining information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshops. Up to six (6) members of the ESA Team will be available for the public workshop.

9.4.4 Public Comment Management

Public comments will be collected and managed throughout the master plan process. This information will be incorporated into a summary comment matrix format. No formal responses to public comments will be developed. However, a frequently asked question (FAQ) sheet will be prepared along with responses for key themes suitable for posting on the master plan project website. This FAQ sheet will be updated throughout the project, but overall effort for this task is limited to the budget allocated.

<u>Assumption(s)</u>: The airport will provide the space for all management briefings, working group meetings, and public workshops. The airport will provide the advertisement for the public workshops with support from the ESA Team for the format.

<u>Product(s)</u>: The ESA Team will provide the materials required for the different briefings, meetings, and public workshops. The ESA Team will also establish a conference call-in number and/or web conference site for Airport Management to use during this project, including for the bi-weekly call participants.

Task 10: Report Preparation

Task 10.1 Working Paper Development

In recognition of the need for timely and continuous sharing of documentation, interim working papers will be prepared that will guide the master plan development. The working papers will become the basis for the chapters and appendices of the final report. As the draft working papers are prepared, the ESA Team will provide electronic copies (in a PDF format) to Airport Management for their initial review. After, each will be submitted to FAA and FDOT for their review.

A total of four (4) working papers will be provided during the course of the project:

Working Paper #1	Introduction, Existing Conditions, and Aviation Forecasts
Working Paper #2	Facility Assessment and Requirements
Working Paper #3	Environmental Analyses and Alternatives for Airport Development
Working Paper #4	Airport Layout Plans and Recommended Development Program

Airport Management will be responsible for the internal distribution of the draft working papers. Comments received will be reviewed and incorporated as appropriate into the comprehensive draft report.

Task 10.2 Draft Master Plan Report and ALP Drawing Set

A comprehensive Draft Master Plan Report will be prepared that incorporates all comments from the four working papers. The Draft Master Plan Report will initially be provided to Airport Management for review before being submitted to FAA and FDOT for their review. The draft report preparation will also include up to five (5) full size Draft ALP Drawing Sets for airport and agency review.

Task 10.3 Final Master Plan Report and ALP Drawing Set

Comments on the draft report and drawing set will be utilized to create the final project deliverables. Up to fifteen (15) hard copies of the Final Master Plan Report and ten (10) full size Final ALP Drawing Sets will be provided to Airport Management. An additional fifteen (15) digital copies (in a PDF format) of the final airport master plan files will also be provided.

It should be noted that FDOT's portion of the study's funding is based on the key deliverables defined in the tasks above. As such, FDOT's portion of the various invoices will only be eligible for payment after the corresponding key deliverables have been reviewed and accepted by Airport Management, FAA, and FDOT (both the District 7 and Aviation and Spaceports Offices).

Task 11: Project Administration

Task 11.1 Project Management

The master plan project will be actively managed to ensure the project stays on track. These efforts may include, but are not limited to tracking project milestones and updating the project schedule, reviewing subconsultant invoices, preparing monthly invoices, and monthly progress reports.

Task 11.2 Quality Assurance and Control

ESA's Quality Assurance/Quality Control (QA/QC) process will be applied to all work products; making sure documents, data, and coordination between team members adhere to ESA's rigorous standards. This

includes review of project elements by staff not connected to the project to ensure that the work products are straight forward and easy to understand by the general public.

Task 11.3 Project Close Out

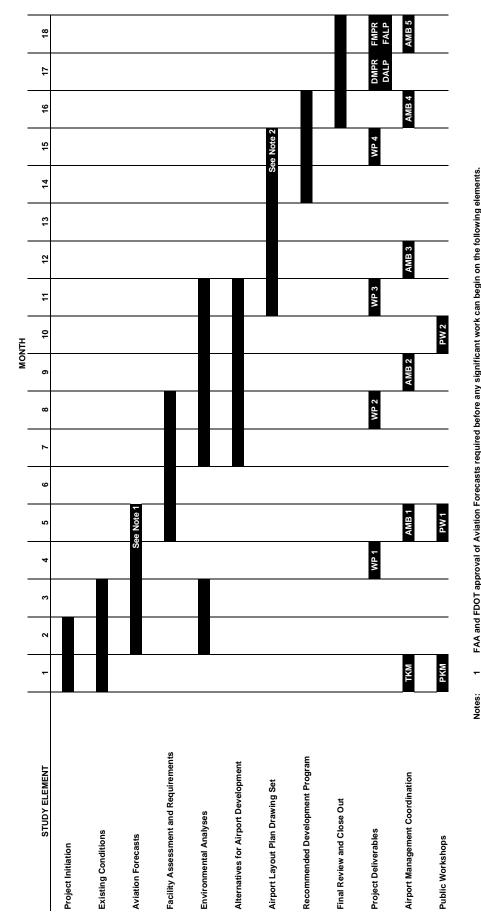
To ensure that all of the project files are properly transferred to the airport, ESA will schedule and lead a project close out meeting with key Airport Management staff. ESA will prepare and circulate a project close out list and will incorporate the Airport Management's additions prior to the meeting. To the greatest extent possible, all of the project files will be transferred to Airport Management prior to the close out meeting. During the meeting, the close out list will be reviewed and delivered items will be checked off. A schedule will be established for delivering any remaining project files to the Airport Management.

Task 11.4 Expenses

This subtask has been included to provide a line item in the related fee estimate for the costs associated with conducting the airport master plan study. These are primarily related to the required printing and travel. Details pertaining to the various expenses are included on the individual ESA Team member fee spreadsheets.

July 11, 2017

St. Pete-Clearwater International Airport Master Plan



FAA and FDOT approval of Aviation Forecasts required before any significant work can begin on the following elements. FAA and FDOT approval of Airport Layout Plan drawings required before Recommended Development Program can be completed.

Airport Management Briefing (at a minimum the last meeting will be conducted with the Pinellas County Board of County Commissioners)

Final Airport Layout Plans **Draft Master Plan Report** Final Master Plan Report Public Kick-off Meeting AMB DALP DMPR FALP

Draft Airport Layout Plans

Public Workshop Team Kick-off Meeting Working Paper FMPR PKM TKM WP

St. Pete-Clearwater International Airport Master Plan

	Task Number / Description	Cost
1	Project Initiation	\$ 63,446
	1.4 Aerial Mapping and AGIS	\$ 135,607
2	Existing Conditions	\$ 163,761
3	Aviation Forecasts	\$ 44,520
4	Facility Assessment and Requirements	\$ 165,023
5	Environmental Analyses (includes Sustainability and Resiliency Planning)	\$ 150,790
	5.6 Stormwater Management Plan Update	\$ 162,947
6	Alternatives for Airport Development	\$ 139,304
7	Airport Layout Plan Drawing Set	\$ 81,120
	7.3 Exhibit "A" Property Inventory Map	\$ 120,873
8	Recommended Development Program	\$ 135,726
9	Stakeholder Coordination and Public Outreach	\$ 137,421
10	Report Preparation	\$ 169,528
11	Project Administration	\$ 131,584
	Project Total	\$ 1,801,650

ESA TEAM MEMBER ROLES BY TASK

St. Pete-Clearwater International Airport Master Plan

	Labor Category	ESA	C&S	AID	VHB	L&H	н кна	PTI	Woolpert		Labor Price		
Task #	Task Name/Description											Task#	Subtotals
	Project Initiation											Task 1	\$ 199,053
1.1	Study Design and Planning Charrette \$	6,910	\$ 4,560				\$ 4,798				\$ 16,268	1.1	,
1.2	Project Kick-off Meetings \$	10,860	\$ 8,520								\$ 19,380	1.2	
1.3	Tenant and User Interviews \$	15,320	\$ 6,560				\$ 5,918				\$ 27,798	1.3	
1.4	Aerial Mapping and Airports Geographic Information System (AGIS) \$	7,800							\$ 127,807		\$ 135,607	1.4	
1.4.1	Vertically Guided Approach Obstruction Analysis										\$ -	1.4.1	
1.4.2	Analysis of Features within Obstruction Identification Surfaces										\$ -	1.4.2	
1.4.3	Planimetric and Topographic Mapping										\$ -	1.4.3	
Task 2	Existing Conditions				1							Task 2	\$ 163,761
2.1	Airport and Surrounding Area Inventory \$	16,800									\$ 16,800	2.1	
2.1.1	Airfield Facilities and Surrounding Airspace										\$ -	2.1.1	
2.1.2	Airside Facilities Support Facilities										\$ - \$ -	2.1.2	
2.1.3	Airport, Community, and Surrounding Area Features										\$ -	2.1.4	
2.1.4	Airport, Community, and Surrounding Area readures Airport Data										\$ -	2.1.5	
2.1.3	Passenger Terminal Facilities \$	12,220									\$ 12,220	2.1.3	
2.2.1	Major Functional Areas	12,220	\$ 28,080								\$ 28,080	2.2.1	
2.2.2	Structural Systems		\$ 12,220								\$ 12,220	2.2.2	
2.2.3	Mechanical, Electrical, and Plumbing Equipment		\$ 20,580								\$ 20,580	2.2.3	
2.2.4	Airside Civil and Utilities Infrastructure		\$ 18,880								\$ 18,880	2.2.4	
2.3	Passenger Terminal Access, Circulation, and Automobile Parking \$	6,140	, ,,,,,,								\$ 6,140	2.3	
2.3.1	Terminal Access Roadway	-, -					\$ 4,103				\$ 4,103	2.3.1	
2.3.2	Terminal Curbfront						\$ 11,134				\$ 11,134	2.3.2	
2.3.3	Automobile Parking						\$ 4,103				\$ 4,103	2.3.3	
2.3.4	Rental Cars						\$ 3,858				\$ 3,858	2.3.4	
2.3.5	Counts and Observations						\$ 19,313				\$ 19,313	2.3.5	
2.4	Commercial Passenger Market Data \$	6,330									\$ 6,330	2.4	
Task 3	Aviation Forecasts											Task 3	\$ 44,520
3.1	Evaluation of Historic and Previous Forecasts \$	- /									\$ 6,520	3.1	
3.2	Baseline Forecast Preparation \$,									\$ 19,140	3.2	
3.3	Alternative Forecast Scenarios \$,									\$ 11,700	3.3	
3.4	Baseline Forecast Review Coordination \$	7,160									\$ 7,160	3.4	
Task 4	Facility Assessment and Requirements				1							Task 4	\$ 165,023
4.1	Airfield Demand Capacity Analysis \$,									\$ 11,180	4.1	
4.2	Airfield Facility Requirements \$,		\$ 10,364				A 00.000			\$ 25,044	4.2	
4.3	Navigational Aids, Metroplex, and TERPS Analysis \$ Airside Facility Requirements \$							\$ 36,690			\$ 43,750 \$ 11,400	4.3	
4.4	Requirements for Passenger Terminal Facilities \$		\$ 22,080								\$ 27,430	4.5	
4.6	Terminal Access, Circulation, and Automobile Parking \$	-,	Ψ 22,000				\$ 35,439				\$ 40,179	4.6	
4.7	Landside Facility Requirements \$						ψ 33,433				\$ 6,040	4.7	
Task 5	Environmental Analyses	0,010									ψ 0,010	Task 5	\$ 313,737
5.1	Natural Resources and Environmental Overview \$	8,680									\$ 8,680	5.1	Ψ 0.0,7.0.
5.2	Noise Modeling \$										\$ 21,140	5.2	
5.3	Sustainability \$	4,620									\$ 4,620	5.3	
5.3.1	Sustainability Baseline Assessment				\$ 16	,000					\$ 16,000	5.3.1	
5.3.2	Develop Sustainability Goals and Objectives / Alternative Screening Criteria				\$,120					\$ 7,120	5.3.2	
5.4	Solid Waste Recycling (Waste Audit) \$, , , , , , , , , , , , , , , , , , , ,									\$ 33,740	5.4	
5.5	Infrastructure Resiliency Planning \$	4,860									\$ 4,860	5.5	
5.5.1	Vulnerability Assessment				· ·	,600					\$ 23,600	5.5.1	
5.5.2	Resiliency Planning			\$ 9,630	\$ 2	,400					\$ 31,030	5.5.2	
5.6	Stormwater Management Plan Update \$	3,680									\$ 3,680	5.6	
5.6.1	Data Collection and Data Verification			\$ 23,750							\$ 23,750	5.6.1	
5.6.2	Design Methodology			\$ 34,562							\$ 34,562	5.6.2	
5.6.3 5.6.4	Schematic Design Final Schematic Design			\$ 81,437 \$ 19,518							\$ 81,437 \$ 19,518	5.6.3 5.6.4	
	Alternatives for Airport Development			Ψ 19,518							ψ 19,518	5.6.4 Task 6	\$ 139.304
6.1	Constraints Analysis \$	15,680									\$ 15,680	6.1	\$ 139,304
6.2	Initial Development Options \$										\$ 22,900	6.2	
6.3	Alternatives for Future Passenger Terminal Facilities \$		\$ 30,000		\$,470					\$ 55,530	6.3	
6.4	Terminal Access, Circulation, and Automobile Parking Alternatives \$						\$ 12,789				\$ 22,529	6.4	
6.5	Recommended Development Alternatives \$						\$ 8,565				\$ 22,665	6.5	
Task 7	Airport Layout Plan Drawing Set											Task 7	\$ 201,993
7.1	Airport Layout Plan Set Preparation \$	14,830									\$ 14,830	7.1	,
-													

7.1.1	Title Sheet		\$ 4.910							\$	4.910	7.1.1		
7.1.2	Airport Data Sheet		\$ 4,910							\$	4,910	7.1.2		
7.1.3	Airport Layout Plan		\$ 5,930							\$	5,930	7.1.3		
7.1.4	Terminal Area Drawings (2 sheets)		\$ 5,930							\$	5,930	7.1.4		
7.1.5	Airport Airspace Drawings (3 sheets)		\$ 5,930							\$	5,930	7.1.5		
7.1.6	Inner Portion of the Approach Surface Drawings (3 sheets)		\$ 5,930							\$	5,930	7.1.6		
7.1.7	Runway Departure Surface Drawing	J	\$ 5,930							\$	5,930	7.1.7		
7.1.8	Land Use Drawings (2 sheets)		\$ 5,930							\$	5,930	7.1.8		
7.1.9	Airport Property Map (3 sheets)		\$ 5,930							\$	5,930	7.1.9		
7.2	Airport Layout Plan Review Coordination	\$ 5,440	\$ 9,520							\$	14,960	7.2		
7.3	Exhibit "A" Property Inventory Map	\$ 3,980		\$ 116,893						\$	120,873	7.3		
Task 8	i ë											Task 8	\$	135,726
8.1	Inventory of Financial Information	\$ 2,340				\$ 9,76				\$	12,100	8.1		
8.2	Preliminary Financial Analysis	\$ 2,340				\$ 23,18				\$	25,520	8.2		
8.3	Financial Implementation Plan Development	\$ 3,020				\$ 34,16	0			\$	37,180	8.3		
8.4	Cost Estimates	\$ 1,320	.,							\$	27,056	8.4		
8.5	Development Program	\$ 10,420	\$ 23,450							\$	33,870	8.5		
Task 9	Stakeholder Coordination and Public Outreach										<u> </u>	Task 9	\$	137,421
9.1	Airport Management Coordination	\$ 14,780	· ·				\$ 10,57	1		\$	33,591	9.1		
9.2	Ongoing Working Group Meetings	\$ 17,060	\$ 10,400							\$	27,460	9.2		
9.3	Agency Coordination									\$	-	9.3		
9.3.1	St. Pete-Clearwater International Airport Traffic Control Tower	· · · · · · · · · · · · · · · · · · ·								\$	2,520	9.3.1		
9.3.2	FAA Orlando Airports District Office (ADO)									\$	6,300	9.3.2		
9.3.3	FDOT District 7 Office	\$ 3,740	\$ 1,040							\$	4,780	9.3.3		
9.4	Public Outreach									\$	-	9.4		
9.4.1	Project Website									\$	28,200	9.4.1		
9.4.2	Public Workshop #1									\$	13,180	9.4.2		
9.4.3	Public Workshop #2									\$	15,180	9.4.3		
9.4.4	Public Comment Management	\$ 6,210								\$	6,210	9.4.4		
	Report Preparation	1.	1.				1.					Task 10	\$	169,528
10.1	Working Paper Development (4 total)	\$ 36,720					\$ 31,06	8		\$	114,588	10.1		
10.2	Draft Master Plan Report and ALP Drawing Set	\$ 19,840								\$	32,000	10.2		
10.3	Final Master Plan Report and ALP Drawing Set	\$ 10,780	\$ 12,160							\$	22,940	10.3	_	
	Project Administration						1.	- 1				Task 11	\$	131,584
11.1	Project Management	\$ 37,800					\$ 8,91	9		\$	46,719	11.1		
11.2	Quality Assurance and Control	\$ 14,520								\$	14,520	11.2		
11.3	Project Close Out	\$ 6,760								\$	6,760	11.3		
11.4	Expenses	\$ 14,600	\$ 8,400	\$ 21,000	\$ 3,120	\$ 3,65	0 \$ 12,81	5		\$	63,585	11.4		
													•	1 001 050
	Total Costs	\$ 625,230	\$ 359,530	\$ 327,540	\$ 80,710	\$ 70,75) \$ 173,39	3 \$ 36,690	\$ 127,807	\$	1,801,650		\$	1,801,650

Pinellas County DBE Target

Actual % DBE

9.8%

PROJECT TOTAL \$ 1,801,650

St. Pete-Clearwater International Airport Master Plan

II Senior Director Associate II Associate Associate II Associate Associate II Subtotal Total Hours Labor Price		Labor Category	Senior Direc	etor	Senior Managing	Senior Managing	Managing	Managing	Senior	Senior								
Second column		5 7	II	Senior Director							Associate III	Associate II	Associate I	Subtotal	Total Hours	Labor Price		
1	Task #	·	\$ 24	40 \$ 225	\$ 185	\$ 170	\$ 155	\$ 145	\$ 140	\$ 130	\$ 120	\$ 110	\$ 95					
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Control Cont	-	°							1									
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1	Task 3	Aviation Forecasts															Task 3 \$	44,520
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Minor Mino									4			0						
Column C	Task 6	Alternatives for Airport Development															Task 6 \$	78,480
Column	6.1	Constraints Analysis	4			16			24									
Example Control Cont	-																	
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6.1			2	8					4				12	\$ 3,980	26	\$ 3,980		
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Face																		
5.5 Development Program 1.5				4									8					
Task	8.4	Cost Estimates		2		4							2	\$ 1,320	8	\$ 1,320		
3.1 Arycot Management Coordination 10 40 40 40 40 40 40 40		· ·		12		20			20				16	\$ 10,420	68	\$ 10,420		
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9.3.1 St. Pero-Clearwater International Apport Traific Control Tower 9.3.2 FAA Offande Airpoins Desirict Office A 9.4 S 9.2.2 S 9.3.200 9.3.3 FAA Offande Airpoins Desirict Office A 9.4 S 9.4 S 9.7.40 S 9.4 S 9.			12	40					10				12	Ψ 17,000	00	Ψ 17,000		
9.1 Public Outrach 4 4 4 4 4 4 4 4 4				4		4			4				4	\$ 2,520	16	\$ 2,520		
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9.4.1 Public Workshop #1 6 16 20			4	4					8				8	\$ 3,740	24	\$ 3,740		
9.4.2 Public Workshop #1 6 16 20				40							160			\$ 28.200	200	\$ 29.200		
9.4.3 Public Workshop #2 6 16 16 20 1 16 20 20 20 20 20 20 20 20 20 20 20 20 20			6			20					100		28					
9.4.4 Public Comment Management 1 6 16 16 16 16 16 17 16 17 18 10																		
10.1 Working Paper Development 10.2 Draft Master Plan Report and ALP Drawing Set 10.3 Final Master Plan Report and ALP Drawing Set 10.4 B 16 S 19,840 11.0 S 19,840 11.0 S 19,840 11.0 S 19,840 11.1 Project Administration 11.1 Project Management 11.2 Quality Assurance and Control 11.3 Project Close Out 11.4 Expenses (see Attachment A) 11.4 Expenses (see Attachment A) 11.5 Project Close 11.6 S 16,800 11.7 Total Labor Costs 11.9 Poject Close 11.1 Project Close 11.1 Pro		·																
10.2 Draft Master Plan Report and ALP Drawing Set 4 8 12 24																	Task 10 \$	67,340
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11.2 Quality Assurance and Control 11.3 Project Close Out 11.4 Expenses (see Attachment A) 11.5 Project Close 11.4 Expenses (see Attachment A) 11.5 Project Close 11.6 Expenses (see Attachment A) 11.7 Project Close 11.8 Expenses (see Attachment A) 11.9 Project Close 11.0 Project Close 11.1 Expenses (see Attachment A) 11.1 Expenses (see Attachment A) 11.2 Quality Assurance and Control 11.3 Project Close Out 11.4 Expenses (see Attachment A) 11.5 Expenses (see Attachment A) 11.6 Expenses (see Attachment A) 11.7 Project Close 11.8 Expenses (see Attachment A) 11.8 Expenses (see Attachment A) 11.9 Project Close 11.1 Expenses (see Attachment A) 11.1 Expenses (see Attachment A) 11.2 Expenses (see Attachment A) 11.3 Project Close 11.4 Expenses (see Attachment A) 11.5 Expenses (see Attachment A) 11.6 S 6,760 11			24	96		48							24	\$ 37,800	192	\$ 37,800	. ασκ. ι ι ψ	. 0,000
11.4 Expenses (see Attachment A)	11.2		4	24	40								8		76	\$ 14,520		
Total Hours 194 770 108 818 624 - 160 368 892 3934 3,934 Task Total Labor Costs \$46,560 \$173,250 \$19,980 \$139,060 \$- \$ - \$87,360 \$- \$19,200 \$40,480 \$84,740 \$610,630 \$625,230 Check \$			4	16		4							16	\$ 6,760	40			
Total Labor Costs \$ 46,560 \$ 173,250 \$ 19,980 \$ 139,060 \$ - \$ - \$ 19,200 \$ 40,480 \$ 84,740 \$ 610,630 \$ 625,230 Check \$ 625,230 Percent of Effort - Labor Hours Only 4.9% 19.6% 2.7% 20.8% 0.0% 15.9% 0.0% 4.1% 9.4% 22.7% 100.0% 100.0% 100.0% 100.0% 100.0% 1.1% 7.7% 0.0% 0.0% 4.8% 0.0% 1.1% 2.2% 4.7% 0.0% 34.7% <td>11.4</td> <td>Expenses (see Attachment A)</td> <td></td> <td>\$ 14,600</td> <td></td> <td></td>	11.4	Expenses (see Attachment A)														\$ 14,600		
Total Labor Costs \$ 46,560 \$ 173,250 \$ 19,980 \$ 139,060 \$ - \$ - \$ 19,200 \$ 40,480 \$ 84,740 \$ 610,630 \$ 625,230 Check \$ 625,230 Percent of Effort - Labor Hours Only 4.9% 19.6% 2.7% 20.8% 0.0% 15.9% 0.0% 4.1% 9.4% 22.7% 100.0% 100.0% 100.0% 100.0% 100.0% 1.1% 7.7% 0.0% 4.8% 0.0% 1.1% 2.2% 4.7% 0.0% 34.7% <td>Total Hauss</td> <td>1</td> <td>11</td> <td>94 770</td> <td>100</td> <td>010</td> <td></td> <td></td> <td>624</td> <td></td> <td>160</td> <td>269</td> <td>902</td> <td>2024</td> <td>3 024</td> <td></td> <td>Took</td> <td></td>	Total Hauss	1	11	94 770	100	010			624		160	269	902	2024	3 024		Took	
Percent of Effort - Labor Hours Only 4.9% 19.6% 2.7% 20.8% 0.0% 0.0% 15.9% 0.0% 4.1% 9.4% 22.7% 100.0% 100.0% Percent of Effort - Total Project Cost 2.6% 9.6% 1.1% 7.7% 0.0% 0.0% 4.8% 0.0% 1.1% 2.2% 4.7% 100.0% 34.7%								\$ -		\$ -						\$ 625.230		625 230
Percent of Effort - Total Project Cost 2.6% 9.6% 1.1% 7.7% 0.0% 0.0% 4.8% 0.0% 1.1% 2.2% 4.7% 34.7%																,	o ψ	0,-00
ESA Labor Cost \$ 625,230										0.0%	1.1%					34.7%		
														ESA Labor Cost		\$ 625,230		

Subconsultant Costs \$ 1,176,420 (see Attachment B and individual fee spreadsheets)

PROJECT TOTAL \$ 1,801,650

ATTACHMENT A - ESA NON-LABOR EXPENSE SUMMARY St. Pete-Clearwater International Airport Master Plan July 11, 2017

Reimbursable Expenses

Total Reimbursable Expenses	\$ 14,600
0% Fee on Reimbursable Expenses	\$ -
Subtotal Reimbursable Expenses	\$ 14,600
<u>-</u>	\$ -
-	\$ -
Website Domain	\$ 350
Other Travel Related	\$ -
Airfare	\$ -
Lodging	\$ -
Vehicle Rental	\$ -
Mileage	\$ -
Postage and Deliveries	\$ -
Presentation Boards	\$ 1,750
Printing/Reproduction	\$ 10,500
Project Supplies	\$ 2,000

St. Pete-Clearwater International Airport Master Plan

									Subconsultant	Costs						
													Subtotal			Total
		Sul	bconsultant 1	Subconsultant 2	Subconsultant 3		Subconsultant 4	Subc	onsultant 5	Subconsultant 6	Subconsultant 7	Subconsultant		Fee @	1	Subconsultant
	Task Number / Description		C&S	AID	VHB		L&H		KHA	PTI	Woolpert	Cost		0%		Project Cost
	Insert Budget By Task															
1	Project Initiation	\$	19,640					\$	10,716			\$	30,356	\$	- \$	30,356
1.4	Aerial Mapping and AGIS										\$ 127,807	\$	127,807	\$	- \$	127,807
2	Existing Conditions	\$	79,760					\$	42,511			\$	122,271	\$	- \$	122,271
												\$	-	\$	- \$	-
3	Aviation Forecasts	\$	-									\$	-	\$	- \$	-
												\$	-	\$	- \$	-
4	Facility Assessment and Requirements	\$	22,080	\$ 10,364				\$	35,439	\$ 36,690		\$	104,573	\$	- \$	104,573
												\$		\$	- \$	
5	Environmental Analyses	\$	-	\$ 9,630	\$	68,120						\$	77,750	\$	- \$	77,750
5.6	Stormwater Management Plan Update			\$ 159,267								\$	159,267	\$	- \$	159,267
6	Alternatives for Airport Development	\$	30,000		\$	9,470		\$	21,354			\$	60,824	\$	- \$	60,824
-		_										\$	-	\$	- \$	-
7	Airport Layout Plan Drawing Set	\$	60,850	A 440.000								\$	60,850		- \$	60,850
7.3	Exhibit "A" Property Inventory Map	•	00.000	\$ 116,893			Φ 07.400					\$	116,893	\$	- \$	116,893
8	Recommended Development Program	\$	38,800	\$ 10,386			\$ 67,100					\$	116,286	\$	- \$	116,286
9		•	28.880					•	10.571			φ	39.451	\$	- 5	39.451
9	Stakeholder Coordination and Public Outreach	\$	28,880					>	10,571			\$	39,451	\$	- 5	39,451
10	Report Preparation	\$	71,120					•	31,068			\$	102,188	Ф	- \$	102,188
10	Neport Freparation	Ф	71,120					φ	31,008			Ф	102,100	ψ ¢	- ¢	102,100
11	Project Administration	\$	8,400	\$ 21.000	\$	3.120	\$ 3.650	\$	21.734			φ	57.904	ψ \$	- \$	57,904
H''	r roject Administration	Ψ	0,400	Ψ 21,000	Ψ	3,120	Ψ 5,050	φ	21,134			ψ ψ	51,504	\$	- \$	57,904
\vdash												\$	-	φ	- \$	
-	Subconsultant Total	\$	359,530	\$ 327,540	\$	80,710	\$ 70,750	\$	173,393	\$ 36,690	\$ 127.807	\$	1,176,420	\$	- \$	1,176,420
<u> </u>	Subconsultant Total	Ψ	339,330	φ 321,340	Ψ	00,710	φ 10,130	Ψ	173,393	ψ 30,090	ψ 121,001	Ψ	1,170,420	ψ	- Þ	1,170,420

Pinellas County DBE Target Actual % DBE

9.8% 18.2%

Subconsultant 1 – C&S Scope and Fee Estimate

SCHEDULE A-1



SCOPE OF WORK

Project Title: Airport Master Plan

Sponsor: St. Pete-Clearwater International Airport
Airport Name: St. Pete-Clearwater International Airport

Services Provided: Terminal Planning, AGIS support, ALP documentation

Project Description:

C&S is pleased to participate in the Master Plan Update effort for St-Pete International Airport as a part of the ESA team. C&S will lead all terminal planning and Airport Layout Plan efforts, and support ESA in other tasks. Below is a description of scope of services for C&S's tasks.

Task 1 Project Initiation

C&S will support services to the ESA during the initial project kickoff and engagement. This includes attending and participating in the design/planning charrette, project kickoff meetings, and tenant/user interviews. For the most efficient use of time, it is anticipated that meetings will be consolidated as much as possible.

<u>Product(s):</u> One (1) full-day design and planning charrette; C&S will have a maximum of (3) participants. One (1) full-day project kickoff meeting; C&S will have a maximum of (5) participants. Two (2) full-day tenant interview meetings; C*S will have a maximum of (2) participants. There is no formal, written documentation as a part of this scope.

Task 2.2 Passenger Terminal Facilities

The major functional area components of the passenger terminal area will be inventoried in detail. This effort will include all passenger terminal facilities from the curbside to the aircraft parking apron area. At a minimum, these will include, but not limited to:

- Aircraft Parking Positions, Contact Gates, and Remain Overnight (RON) Space
- Circulation Areas
- Passenger Check-In/Bag Drop
- Airline Support Offices/Space
- Concessions
- Passenger Security Screening
- Airline Holdrooms and Boarding Gates
- Baggage Claim
- Inbound Baggage
- Outbound Baggage
- Explosives Detection System (EDS) Baggage Screening
- Federal Inspection Services (FIS) and US Customs and Border Protection (CBP) Facilities
- Ground Service Equipment Circulation and Storage
- Airport/Tenant Office Space

Wayfinding

C&S will compile the above information in an area by area and room by room space program in both tabular and graphic formats. Data to be documented includes area/room functions, leasing information, number/types of equipment, and approximate square footage.

The team will conduct a building conditions assessment. Existing airport records, drawings, and reports on key backbone site utilities, architectural elements, structural elements, and mechanical, electrical, and plumbing (MEP) systems will be reviewed. This task will identify architectural, structural, MEP, and site utilities facilities and equipment by type and by capacities. This information will be utilized to create a comprehensive Building Conditions Assessment and provide a basis for determining capacity and projecting future needs for proposed development options during the master plan alternatives and eventual Terminal Program Definition Study. Key elements include:

- Structural Systems Evaluation comprehensive review of existing structural systems to understand their condition and capacity. Condition assessments of floor and roof framing elements, columns, visible foundations and slabs, wall systems, overhead objects support structures, ancillary structural support elements, main wind force resisting system framing, and any other necessary sub elements of the structure will be conducted during the site investigation. Following the condition assessments, a thorough evaluation of the existing building documentation will be completed to determine capacities and feasibility of renovation. Consideration will be taken during investigation to determine optimal locations for expansion and modification. Operations and maintenance staff will be consulted as to specific locations of problem areas. An overall understanding and description of the existing building structural systems will be noted in the Building Assessment Report as well as areas of concern and all recommendations pertaining to the above scope of services.
- MEP Systems Evaluation Review existing plans and documentation to understand cooling design, chiller plant setup, chilled water distribution system, air handling unit age and configurations, ductwork layout and pressure classification, duct insulation types, heating methods and capacities, EMS, domestic water heating equipment, restroom configurations and fixtures, locations and types of grease traps, storm system design and routing, fire riser locations and types, sprinkler head type, electrical distribution layout and electrical room locations, emergency power system, lighting devices and associated controls, and fire alarm system. The existing systems will be assessed on site to review equipment physical condition, age, and accessibility. Information provided by facilities and maintenance staff regarding system operation and known issues. Equipment end of life, availability of replacement parts, criticality of operation, and current maintenance practices will be considered.
- Airside Civil and Utilities Infrastructure Evaluation comprehensive review of existing structural
 airside pavement and utilities infrastructure to understand their condition and capacity. It is
 understood that the Airport has recently completed airside pavement, utilities and other infrastructure
 improvements in the general area where terminal reconfiguration and expansion would occur. This
 task with document all improvements. If existing documents received from the Airport are not
 adequate for Project Definition, this will be revisited during that phase.

An inventory of existing building elements, systems, and site utilities for the terminal area will be prepared based on existing data obtained from Airport Management, the site visit, and desktop research. The team will refer to any existing inventories of reports and drawings that cover known airport data resources as a point of beginning for the identification of resources. Additional information will be obtained from other terminal area design and construction projects completed within the last 10 years.

Assumption(s): Airport Management will provide any existing AutoCAD drawings, digital mapping, or

previous studies related to the passenger terminal facilities.

<u>Product(s)</u>: Two (2) full day site visits of the airport property will be conducted to support this effort. Documentation detailing the existing passenger terminal facility conditions suitable for incorporating as a part of the existing conditions chapter of the first working paper, as well as a separate Building Assessment Report of the passenger terminal facilities.

Task 4.5 Requirements for Passenger Terminal Facilities

C&S will identify the demand for the different functional areas of the commercial passenger terminal using FAA, Airport Cooperative Research Program (ACRP), and other industry standards based on projected planning activity levels (PAL) derived from the selected baseline activity forecasts. Passenger terminal facility requirements will be developed for up to four (4) different PALs.

The demand for the various facilities will be compared to the current capacity of the terminal component to determine facility requirements at each PAL. Planning criteria will be based on the average day of the peak month level of demand and aircraft gate utilization. The functional areas to be considered would include, but not limited to:

- Number, Size and Configuration of Aircraft Parking Positions, Contact Gates, and RON space
- Circulation Areas
- Passenger Check-In/Bag Drop
- Airline Support Offices/Space
- Concessions
- Passenger Security Screening
- Airline Holdrooms and Boarding Gates
- Baggage Claim
- Inbound Baggage
- Outbound Baggage
- EDS Baggage Screening
- FIS and CBP Facilities
- Ground Service Equipment Circulation and Storage
- Airport/Tenant Office Space

Based on the passenger terminal area demand/capacity assessment, facility requirements to meet future PALs will be defined. C&S will develop these requirements for up to four (4) PALs that are consistent with the selected forecast. Facility needs will be defined in terms of the various categories identified above with future space requirements (if any) or number of devices needed. This assessment will also identify issues associated with the configuration and any functional concerns related to component uses within the terminal and terminal area.

<u>Product(s)</u>: Detailed passenger terminal needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 6.3 Alternatives for Future Passenger Terminal Facilities

C&S will develop up to five (5) alternatives for the future development of the passenger terminal facilities based on the facility requirements established in preceding tasks. Terminal alternatives will be coordinated with alternatives developed for facilities such as parking or roadway access, as well as any others identified, and will accommodate the demand under each activity level. Terminal alternatives will

be developed based on facility requirements, environmental considerations, engineering factors, operational efficiency, costs, and overall feasibility for implementation.

The efficiency and effectiveness of the terminal alternatives will be evaluated using PathPlanner. This simulation tool will be applied to each of the preliminary alternatives to establish the most efficient interface with the existing/proposed airfield movement areas; existing/proposed aircraft parking positions; and overall interaction with other commercial, military, and general aviation operations on the airfield. Terminal alternatives will also be analyzed to determine their potential for creating or being affected by the required ATCT line of sight as well as the CFR Part 77 and TERPS surfaces for both the existing and future airfield configurations. Based on the findings, an evaluation matrix will be developed using criteria, similar to that described in Task 6.2, in order to select a preferred alternative.

<u>Product(s)</u>: A ranking of the improvement alternatives for the passenger terminal facilities will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 7.1 Airport Layout Plan Set Preparation

The ESA Team will prepare an Airport Layout Plan (ALP) drawing set in accordance with FAA guidelines per the requirements outlined in AC 150/5070-6B *Airport Master Plans* and consistent with the checklist provided in FAA ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans* (ALPs). The ALP drawing set will rely upon the data collected in the airport mapping/AGIS task and at a minimum will include the following sheets:

7.1.1

TITLE SHEET

To include the airport location map, vicinity map, index of drawings, approval blocks, date, etc.

7.1.2

AIRPORT DATA SHEET

To include the recent 10-year wind rose, airport data table, runway data table, taxiway data table, modifications to standards approval table, declared distance table, and legend.

7.1.3

AIRPORT LAYOUT PLAN DRAWING

A drawing depicting every existing facility and the future improvements of the 20-year planning horizon. To include various details such as dimensions, imaginary surfaces (safety and critical), topography, etc.

7.1.4

TERMINAL AREA DRAWINGS (2 SHEETS)

Drawing sheets depicting a larger scale drawing of the existing and proposed development including building data table, commercial terminal facilities, general aviation terminal facilities, hangars, aircraft parking, landside access, automobile parking, rental car facilities, security fencing/gates, and other key features. Individual sheets will be prepared for the southwest (passenger terminal area) and southeast (Airco site) portions of the airfield.

7.1.5

AIRPORT AIRSPACE DRAWINGS (3 SHEETS)

Drawings depicting the future CFR Part 77 Safe, Efficient, Use, and Preservation of the Navigable Airspace surfaces including ultimate plan view, existing profile view, future profile view, and obstruction data tables. The primary sheet and then two additional sheets to fully depict the precision instrument approach surfaces to each end of Runway 18/36.

7.1.6

INNER PORTION OF THE APPROACH SURFACE DRAWINGS (3 SHEETS)

Two of the drawing sheets will depict the existing and future plans and profiles of the inner portion of the runway approach surfaces along with surface penetrations, out to the points 100 feet above the established runway end elevations. These drawings will also depict the Threshold Siting and Glideslope Qualification Surfaces as required. A third sheet will be prepared to depict both the centerline profiles and Runway Safety Areas of both runways.

7.1.7

RUNWAY DEPARTURE SURFACE DRAWING

Drawing sheets depicting the instrument departure surface plan and profile views and obstruction data tables. Limited to one (1) sheet since there are only instrument departure procedures established off each end of Runway 18/36.

7.1.8

LAND USE DRAWINGS (2 SHEETS)

Drawings depicting the on-airport and off-airport land uses with features to include the updated noise contours (both base year and future scenario selected), safety areas/zones, property line, jurisdiction boundaries, and other details as required.

7.1.9

AIRPORT PROPERTY MAP (3 SHEETS)

Drawing sheets depicting all existing and any future airport lands with the appropriate airport features depicted. These drawings will rely upon information from the Exhibit "A" Property Inventory Map described in a subsequent task. As per the FAA ARP SOP 2.00 ALP Checklist for property maps, this will be a slightly abbreviated version of the full Exhibit "A" Property Map. However, depending on complexity of the property mapping, it may be appropriate to just include entire the Exhibit "A" as part of the ALP drawing set.

<u>Product(s)</u>: An ALP drawing set created in AutoCAD using the AGIS data for the base file. A chapter, which describes each of the ALP drawing sheets, will also be prepared for inclusion in the fourth working paper.

Task 8.4 Cost Estimates and Development program

C&S will provide support services to the ESA team for the cost estimating and recommended development program task. C&S will provide the following:

- Develop drawings, project descriptions, and area calculations for each terminal, concourse, and adjacent apron component of the recommended development program.
- Cost estimates for terminal and concourse development. This will be a unit per square foot cost plus any specialty items such as boarding bridges, etc. Landside, civil, and other flat work cost estimates will be produced by others.
- Provide inputs and recommendation on phasing strategy for the overall terminal area development, including phasing sketches, project descriptions, and estimated length of construction for each element of the program at the appropriate PAL.

<u>Product(s):</u> C&S will provide support materials only including sketches, area tables, construction schedules, etc. Formal documentation will be the sole responsibility of ESA.

Task 9 Stakeholder Coordination and Public Outreach

C&S will provide support services to the ESA team for the Stakeholder Coordination and Public Outreach. C&S will provide the following:

- One C&S participant will attend and participate in up to six (6) meetings/briefings with airport management. C&S will provide support materials for presentations.
- One C&S participant will attend and participate in ongoing Working Groups Meetings, six (6) onsite and (8) conference calls. C&S will provide support materials for presentations.
- Coordination with local FAA district office and FDOT district office. C&S will only participate on conference calls, no in-person meetings.
- One C&S participant will attend and participate in two (2) Public Workshops. Another C&S participant will only participate in one (1) Public Workshop. C&S will provide support materials for presentations.
- Working Group Meetings and Public Workshops will be scheduled with Airport Management briefings to reduce the number of trips.

<u>Product(s)</u>: C&S will attend and participate in stakeholder coordination and public outreach as described above. C&S will provide support materials for all presentations.

Task 10 Report Preparation

C&S will provide support services to the ESA team in developing the following working papers and reports:

- Working Paper #1 Introductions, Existing Conditions, and Aviation Forecasts
 - o Terminal only, including the more in-depth terminal building conditions assessment
- Working Paper #2 Demand/Capacity and Facility Requirements
 - o Terminal only
- Working Paper #3 Environmental Analyses and Alternatives for Airport Development
 - o Terminal only
- Working Paper #4 Airport Layout Plans and Development Program
 - Terminal and ALP
- Draft Master Plan Report
 - o Terminal and ALP
- Final Master Plan Report
 - o Terminal and ALP

<u>Product(s)</u>: C&S will provide support materials only including written sections and drawings. C&S will respond to one (1) round of comments from the client for each working paper/report listed above. C&S will not be responsible for final formatting of any of the working papers.

Project team

The Project Manager for C&S is Scott Tumolo. Other key participants on the project are Marc Champigny – Aviation Planner, Doug Saunders – Airside Civil Engineer, Kerrick Stegmeier – Structural Engineer, Matt McQuinn – Mechanical Electrical Plumbing Engineer, and Mike LaMontagne – Architect. There will be other support staff involved to be determined at the time of the project.

Contract Fee

The contract fee for the above scope of services is \$359,530, including expenses, to be paid in a lump sum amount. Invoices will be submitted on a monthly basis at the direction of the ESA team.

We appreciate the opportunity and look forward to working with you on this important project.

END OF SCHEDULE A

	Labor Category	Termina	Apposint	Manasina	Senior	Bro's et	Manasina	Dreines	Managing	Managing	Senior	Droinet		3D	Senior Marketing				
		Planning Manager	Associate Principal	Managing Planner	Project Planner	Project Planner	Managing Architect	Project Architect	Engineer (civil)	Engineer (MEP)	Project Engineer	Project Engineer		Visualization		Labor Price			
Task #	Task Name/Description Project Initiation	\$ 260	\$ 250	\$ 170	\$ 150	\$ 120	\$ 160	\$ 115	\$ 200	\$ 155	\$ 140	\$ 135	\$ 85	\$ 100	\$ 130		Task #	s	19,640
1.1	Study Design and Planning Charrette	8			8		8				•				24		1.1	•	
1.2	Project Kick-off Meetings Tenant and User Interviews	8 16			8 16		8		8	8	8				48		1.2		
1.4	Aerial Mapping and Airports Geographic Information System (AGIS) Vertically Guided Approach Obstruction Analysis															\$ -	1.4		
1.4.1	Analysis of Features within Obstruction Identification Surfaces															\$ -	1.4.1		
1.4.3	Planimetric and Topographic Mapping		L													\$ - \$ -	1.4.3 Task 2	s	79.760
2.1	Existing Conditions Airport and Surrounding Area Inventory														-	\$ -	2.1	\$	79,760
2.1.1	Airfield Facilities and Surrounding Airspace Airside Facilities														-	\$ -	2.1.1		
2.1.3	Support Facilities															\$ -	2.1.3		
2.1.4	Airport, Community, and Surrounding Area Features Airport Data															\$ -	2.1.4		
2.2	Passenger Terminal Facilities															\$ -	2.2		
2.2.1	Site visit and thorough walk-thru Major functional area data collection	8			8 16		8 16		8	8	8		16		48				
2.2.2	Room by room space program verification	12			32		16						8		68				
	Structural systems evaluation MEPI equipment evaluation	2			2		8			48	48 48	32	40		100				
	Airside civil and utilities infrastructure evaluation	2			2		•		32	40	40	40	20		96				
	Wayfinding evaluation	8			8		8								24	\$ 4,560 \$ -			
2.3	Passenger Terminal Access, Circulation, and Automobile Parking															\$ -	2.3		
2.3.1	Terminal Access Roadway															\$ -	2.3.1 2.3.2		
2.3.2	Terminal Curbfront Automobile Parking															\$ -	2.3.2		
2.3.4	Rental Cars															\$ -	2.3.4		
2.3.5	Counts and Observations Commercial Passenger Market Data															\$ -	2.3.5 2.4		
Task 3	Aviation Forecasts																Task 3	\$	-
3.1	Evaluation of Historic and Previous Forecasts Baseline Forecast Preparation															\$ -	3.1		
3.3	Alternative Forecast Scenarios														-	\$ -	3.3		
3.4 Task 4	Baseline Forecast Review Coordination Facility Assessment and Requirements															\$ -	3.4 Task 4	s	22.080
4.1	Airfield Demand Capacity Analysis															\$ -	4.1	•	,
4.2	Airfield Facility Requirements Navigational Aids, Metroplex, and TERPS Analysis															\$ - \$ -	4.2		
4.4	Airside Facility Requirements															\$ -	4.4		
4.5 4.6	Requirements for Passenger Terminal Facilities Terminal Access, Circulation, and Automobile Parking	24			80		24								128	\$ 22,080	4.5 4.6		
4.7	Landside Facility Requirements															\$ -	4.7		
Task 5 5.1	Environmental Analyses Natural Resources and Environmental Overview		1				1	1	1				1			s -	Task 5 5.1	\$	•
5.1	Noise Modeling															\$ -	5.1		
5.3 5.3.1	Sustainability Sustainability Baseline Assessment															\$ -	5.3 5.3.1		
5.3.2	Develop Sustainability Goals and Objectives / Alternative Screening Criteria															\$ -	5.3.2		
5.4 5.5	Solid Waste Recycling (Waste Audit) Infrastructure Resiliency Planning															\$ - \$ -	5.4 5.5		
5.5.1	Vulnerability Assessment															\$ -	5.5.1		
5.5.2 5.6	Resiliency Planning															\$ -	5.5.2 5.6		
5.6.1	Stormwater Management Plan Update Data Collection and Data Verification															\$ -	5.6.1		
5.6.2	Design Methodology															\$ -	5.6.2		
5.6.3 5.6.4	Schematic Design Final Schematic Design															\$ - \$ -	5.6.3 5.6.4		
	Alternatives for Airport Development								1								Task 6	\$	30,000
6.1	Constraints Analysis Initial Development Options															\$ - \$ -	6.1 6.2		
6.3	Alternatives for Future Passenger Terminal Facilities Terminal Access. Circulation, and Automobile Parking Alternatives	24			80		24		16	16	16				176	\$ 30,000	6.3		
6.4	Recommended Development Alternatives															\$ -	6.4		
Task 7	Airport Layout Plan Drawing Set																Task 7	\$	60,850
7.1.1	Airport Layout Plan Set Preparation Title Sheet		1	2		36									39	\$ - \$ 4,910	7.1 7.1.1		
7.1.2	Airport Data Sheet		1	2		36									39		7.1.2		
7.1.3 7.1.4	Airport Layout Plan Terminal Area Drawings (2 sheets)		1	8		36 36									45 45		7.1.3 7.1.4		
7.1.5	Airport Airspace Drawings (3 sheets)		1	8		36									45		7.1.5		
7.1.6 7.1.7	Inner Portion of the Approach Surface Drawings (3 sheets Runway Departure Surface Drawing	9	1	8		36 36									45 45		7.1.6 7.1.7		
7.1.8	Land Use Drawings (2 sheets)		1	8		36									45	\$ 5,930	7.1.8		
7.1.9 7.2	Airport Property Map (3 sheets) Airport Layout Plan Review Coordination		1 8	8 16		36 40									45	\$ 5,930 \$ 9,520	7.1.9 7.2		
7.3	Exhibit "A" Property Inventory Map															\$ -	7.3		
8.1	Recommended Development Program Inventory of Financial Information															\$ -	Task 8 8.1	\$	38,800
8.2	Preliminary Financial Analysis															\$ -	8.2		
8.3 8.4	Financial Implementation Plan Development Cost Estimates (terminal and vertical)	8			24		20	10	8	8	8		16		102	\$ - \$ 15.350	8.3		
8.5	Recommended Development Program (Terminal and apron)	8			32		16	16	16	16	16		50		170	\$ 23,450	8.4		
	Stakeholder Coordination and Public Outreach Airport Management Coordination	24	8												32	\$ 8.240	Task 9 9.1	\$	28,880
9.2	Ongoing Working Group Meetings	40													40	\$ 10,400	9.2		
9.3 9.3.1	Agency Coordination St. Pete-Clearwater International Airport Traffic Control Towe		<u> </u>									1			-	\$ -	9.3		
9.3.2	St. Pete-Clearwater International Airport Traffic Control Towe FAA Orlando Airports District Office (ADO)		8												12	\$ 3,040	9.3.1 9.3.2		
9.3.3	FDOT District 7 Office	4														\$ 1,040	9.3.3 9.4		
9.4.1	Public Outreach Project Website															\$ - \$ -	9.4		
9.4.2	Public Workshop #1															\$ 2,080	9.4.2		
9.4.3 9.4.4	Public Workshop #2 Public Comment Management		8													\$ 4,080	9.4.3 9.4.4		
Task 10	Report Preparation	1		1				1									Task 10	\$	71,120
10.1	Working Paper Development (4 total) Inventory and Building Conditions Assessment	12			36	8	24		16	16	16				128	\$ - \$ 21,240	10.1		
	Demand/Capacity	12			36										48	\$ 8,520			
—	Environmental Analyses and Alternatives for Airport Development Development Program	12 12			36 36							1			48				
	Draft Master Plan Report and ALP Drawing Set	12			20	16	8		8	8					72	\$ 12,160	10.2		
	Final Master Plan Report and ALP Drawing Set Project Administration	12	<u> </u>		20	16	8		8	8		\vdash			72	\$ 12,160	10.3 Task 11		
11.1	Project Management														-	\$ -	11.1	\$	-
11.2	Quality Assurance and Control Plan														-	\$ - \$ -	11.2 11.3		
	Project Close Out Expenses															,	11.3		
	Florida travel from Orlando office (6 trips)															\$ 2,400			
Total Ho	Non-Florida travel from Syracuse or San Francisco (6 trips) JITS	298	41	76	502	404	204	26	120	136					- 1,807	\$ 6,000			
Total Lal			\$ 10,250											\$ -	\$ -	\$ 359,530		\$	351,130

PROJECT TOTAL \$ 359,530

Subconsultant 2 – AID Scope and Fee Estimate



STORMWATER MASTER PLAN AND PROPERTY MAP (EXHIBIT "A") ST. PETE-CLEARWATER INTERNATIONAL AIRPORT

Scope of Services

AID (Consultant) is part of ESA's design team for the Airport Master Plan update at St. Pete-Clearwater International Airport. The following tasks will be performed by the Consultant:

Stormwater Master Plan (Task A) - The Consultant will provide professional services for the preparation of a Stormwater Master Plan (SWMP) for ESA's design team at the St. Pete-Clearwater International Airport. The Airport has identified several developments on the 2016 Airport Layout Plan that could take place in the next 20 years, including expanded apron, new parking garage, new T-hangars, aviation/commercial development, and miscellaneous other projects. This SWMP will provide a plan for stormwater management over this timeframe and identify potential locations for stormwater management facilities serving the developments. The plan will focus on providing regional ponds, which are typically the most efficient solution in terms of cost and land usage for the upcoming developments. In addition, any existing stormwater concerns of the Airport or tenants will be addressed in the plan. Ultimately, the SWMP will be the basis of a Conceptual Environmental Resource Permit (CERP) from the Southwest Florida Water Management District (SWFWMD). This CERP will provide clear stormwater management guidelines for future developers and help to streamline the permitting process of individual developments. The plan will be divided into landside and airside developments due to the differing stormwater requirements. Additionally, a stormwater routing model will be prepared that can aid both the Airport and developers in understanding the flow paths, intensities, and volumes of stormwater at the Airport. The SWMP will also identify the environmental concerns and limits to development at the Airport.

Cost Estimation (Task B) - In addition to the SWMP, cost estimating services will be provided by the Consultant in support of the Airport Master Plan. The cost estimating services will cover all future horizontal civil work identified on the Master Plan, including: landside/airside pavement, ponds, utilities, etc.

Exhibit "A" Data Collection (Task C) - The Consultant will provide documentation for the preparation of a new Exhibit "A" Property Inventory Map. It is understood that some recent survey and parcel information is available; however, a complete digital survey or title search has not been conducted. The Consultant will analyze the existing information and provide a new boundary survey and title search to the design team for the preparation of the Exhibit "A".



Facility Requirements (Task D) – The Consultant will assist the design team in the preparation of the Facility Requirements section of the Airport Master Plan. This task consists of the sufficiency evaluation of airfield elements (runways, taxiways, aprons, etc.) based on the Airfield Demand Capacity Analysis. Airfield infrastructure element needs will also be quantified.

Resiliency Plan (Task E) – The Consultant will assist the design team in the preparation of the Infrastructure Resiliency Planning. This will include evaluation of infrastructure exposure, sensitivity, adaptive capacity and criticality of assets at the Airport. Recommendations to reduce vulnerability and build resiliency will be provided to airport management for their consideration.



Figure 1 - St. Pete-Clearwater International Airport



TASK A1: SWMP - Program Verification

The Consultant will review all Airport stormwater permits and summarize the permit obligations of each project. General basins, flow paths, and outfalls will be identified through these previous stormwater permits and field observation. Field surveys will be performed, as needed, to collect channel cross section data, pond volumetric data, and pipe parameters. This data in addition to publicly available LiDAR data will form the basis for the Airport-wide Stormwater Model. Additional meetings can be scheduled to discuss existing drainage concerns with the Airport and tenants.

TASK A2: SWMP - Design Methodology

The Consultant will compile and verify the data collected in the previous task with additional field observation as necessary. Airside/Landside areas, drainage basins and potential pond locations will be identified during this task. A design methodology summary will be prepared during this task. A pre-application meeting with SWFWMD will be held to alert them to the project and to confirm the design methodology that will be used for this SWMP. A debriefing meeting will be held with the Airport at the end of this Task to confirm the appropriateness of pond locations and outline the plan of action for subsequent tasks.

TASK A3: SWMP - Schematic Design

An Airport-wide hydrologic and hydraulic computer model will be prepared during this task utilizing and revising previous Airport models. From this baseline, future development models will be prepared and regional pond locations will be confirmed for proper hydraulic performance. The report for the Stormwater Master Plan will be prepared during this task. It will detail the current hydrologic, hydraulic, permitting, and environmental condition of the Airport and plan for the next 20 years of development. The report will be broken into development phases based on the likely sequence of development and provide a matching sequence of stormwater facility expansion. Following a status meeting with the Airport, a CERP application will be prepared and submitted to SWFWMD for review.

TASK A4: SWMP - Final Schematic Design

Responses to SWFWMD's comments on the application will be completed under this task. The computer model and the SWMP will be finalized based on responses to SWFWMD's comments. A final SWFWMD submittal will be completed with the resolved permit documents. Once the CERP is approved, all documents and models will be provided to the Airport.

TASK B: Cost Estimation

The Master Plan design team will identify future developments and improvements. The Consultant will provide conceptual level cost estimation for all horizontal civil items. This



excluding buildings and parking garages, but includes all pavement, utilities, and stormwater infrastructure beyond the buildings.

TASK C: Exhibit "A" - Data Collection

This task consists of the preparation of a new FAA Exhibit "A" Property Inventory Map reflecting all of the property owned by the Airport. The map of survey will meet the requirements of FAA ARP SOP 3.00 Standard Operating Procedures (SOP) for FAA review of Exhibit "A" Airport Property Inventory Maps. The survey datum will be Florida State Plane NAD 83/2011 adjustment meeting the requirements of Circular 18B.

TASK D: Facility Requirements

This task consists of the sufficiency evaluation of airfield elements (runways, taxiways, aprons, etc.) based on the Airfield Demand Capacity Analysis. Runway/taxiway flow analysis will be performed in order to identify conflict areas or choke points in the current airfield layout. Alternative layouts designed to improve these problem spots will be provided as part of this task.

TASK E: Resiliency Plan

This task will include evaluation of infrastructure exposure, sensitivity, adaptive capacity, and criticality of assets at the Airport. Recommendations to reduce vulnerability and build resiliency will be provided to airport management for their consideration. These recommendations may include enhancements to disaster response procedures, damage assessment procedures, and building/site design guidelines (weatherization, flood management, structure elevations, etc.).

Project Schedule

All work required to be performed by the Consultant shall be completed as shown below. The calendar days shown do not include Airport, County or SWFWMD review time. The main tasks need not be performed in the order shown.

Task Number	Calendar Days
A1	90
A2	60
A3	90
A4	60
В	60
С	90
D	90
Е	90

American Infrastructure Development, Inc. Labor Detail by Task St. Pete-Clearwater International Airport Master Plan

	Labor Catagory	Project	Project	Senior		Senior										
	Labor Category	Principal	Manager	Engineer	Engineer	Designer	Designer	Clerical	Title	Title	Title	Title	Total Hours	Labor Price		
Task #	Task Name/Description Project Initiation	\$ 192	\$ 180	\$ 159	\$ 125	\$ 96	\$ 79	\$ 59	\$ 1	\$ 1	\$ 1	\$ 1			Task #	Subtotals \$ -
1.1	Study Design and Planning Charrette												-	s -	1.1	y -
1.2	Project Kick-off Meetings												-	\$ -	1.2	
1.3	Tenant and User Interviews Aerial Mapping and Airports Geographic Information System (AGIS)													\$ - \$ -	1.3	
1.4.1	Vertically Guided Approach Obstruction Analys	s											-	\$ -	1.4.1	
1.4.2	Analysis of Features within Obstruction Identification Surface Planimetric and Topographic Mappin	s												\$ - \$ -	1.4.2	
Task 2	Existing Conditions	¥												5 -	Task 2	s -
2.1	Airport and Surrounding Area Inventory													\$ -	2.1	•
2.1.1	Airfield Facilities and Surrounding Airspac Airside Facilities	e												\$ - \$ -	2.1.1	
2.1.2	Support Facilities													\$ -	2.1.3	
2.1.4	Airport, Community, and Surrounding Area Feature	s											-	\$ -	2.1.4	
2.1.5	Airport Data Passenger Terminal Facilities													\$ - \$ -	2.1.5	
2.2	Passenger Terminal Pacinities Passenger Terminal Access, Circulation, and Automobile Parking													\$ -	2.2	
2.3.1	Terminal Access Roadwa													\$ -	2.3.1	
2.3.2	Terminal Curbfron													\$ - \$ -	2.3.2	
2.3.3	Automobile Parking Rental Cars													\$ -	2.3.3	
2.3.5	Counts and Observation:													\$ -	2.3.5	
2.4	Commercial Passenger Market Data												-	\$ -	2.4	_
3.1	Aviation Forecasts Evaluation of Historic and Previous Forecasts													s -	7ask 3 3.1	\$ -
3.2	Baseline Forecast Preparation													\$ -	3.2	
3.3	Alternative Forecast Scenarios													\$ -	3.3	
3.4 Task 4	Baseline Forecast Review Coordination Facility Assessment and Requirements													\$ -	3.4 Task 4	\$ 10,364
4.1	Airfield Demand Capacity Analysis													s -	4.1	ψ 10,30 4
4.2	Airfield Facility Requirements		8		24		72	4					108		4.2	
4.3 4.4	Navigational Aids, Metroplex, and TERPS Analysis Airside Facility Requirements												-	\$ - \$ -	4.3	
4.4	Requirements for Passenger Terminal Facilities												- :	\$ -	4.4	
4.6	Terminal Access, Circulation, and Automobile Parking													\$ -	4.6	
4.7 Task 5	Landside Facility Requirements Environmental Analyses												-	s -	4.7 Task 5	\$ 168,897
5.1	Natural Resources and Environmental Overview													\$ -	5.1	\$ 168,897
5.2	Noise Modeling													\$ -	5.2	
5.3	Sustainability Sustainability Baseline Assessment													\$ -	5.3	
5.3.1 5.3.2	Develop Sustainability Goals and Objectives / Alternative Screening Criteria												-	\$ - \$ -	5.3.1 5.3.2	
5.4	Solid Waste Recycling (Waste Audit)													S -	5.4	
5.5	Infrastructure Resiliency Planning													\$ -	5.5	
5.5.1 5.5.2	Vulnerability Assessmen Resiliency Planning		10	30	15		15						70	\$ 9,630	5.5.1 5.5.2	
5.6	Stormwater Management Plan Update		10	30	10		13						-	\$ -	5.6	
5.6.1	Data Collection and Data Verification	n			190								190		5.6.1	
5.6.2 5.6.3	Design Methodolog Schematic Design	4		16 16	250 625								270 645		5.6.2 5.6.3	
5.6.4	Final Schematic Design			10	150								154		5.6.4	
Task 6	Alternatives for Airport Development														Task 6	\$ -
6.1	Constraints Analysis													\$ - \$ -	6.1 6.2	
6.2	Initial Development Options Alternatives for Future Passenger Terminal Facilities													\$ -	6.3	
6.4	Terminal Access, Circulation, and Automobile Parking Alternatives													\$ -	6.4	
6.5	Recommended Development Alternatives													\$ -	6.5	
7.1	Airport Layout Plan Drawing Set Airport Layout Plan Set Preparation													s -	7.1	\$ 116,893
7.1.1	Title Shee													\$ -	7.1.1	
7.1.2	Airport Data Shee													\$ -	7.1.2	
7.1.3 7.1.4	Airport Layout Plar Terminal Area Drawings (2 sheets												-	\$ - \$ -	7.1.3 7.1.4	
7.1.5	Airport Airspace Drawings (3 sheets													\$ -	7.1.5	
7.1.6	Inner Portion of the Approach Surface Drawings (3 sheet)												\$ -	7.1.6	
7.1.7 7.1.8	Runway Departure Surface Drawin Land Use Drawings (2 sheets												1	\$ - \$ -	7.1.7 7.1.8	
7.1.9	Airport Property Map (3 sheets													\$ -	7.1.9	
7.2	Airport Layout Plan Review Coordination													\$.	7.2	
7.3 Task 8	Exhibit "A" Property Inventory Map Recommended Development Program												_	\$ 116,893	7.3 Task 8	\$ 10,386
8.1	Inventory of Financial Information													s -	8.1	ψ 10,300
8.2	Preliminary Financial Analysis													s -	8.2	
8.3 8.4	Financial Implementation Plan Development Cost Estimates			14	40		40						94	\$ - \$ 10,386	8.3 8.4	
8.5	Development Program			14	-10		70							\$ 10,386	8.5	
Task 9	Stakeholder Coordination and Public Outreach														Task 9	\$ -
9.1	Airport Management Coordination Ongoing Working Group Meetings													\$ - \$ -	9.1 9.2	
9.2	Agency Coordination													\$ -	9.2	
9.3.1	St. Pete-Clearwater International Airport Traffic Control Tow	er											-	\$ -	9.3.1	
9.3.2	FAA Orlando Airports District Office (ADO													\$ -	9.3.2	
9.3.3	FDOT District 7 Office Public Outreach													\$ - \$ -	9.3.3 9.4	
9.4.1	Project Website												-	\$ -	9.4.1	
9.4.2	Public Workshop #1													\$ -	9.4.2	
9.4.3 9.4.4	Public Workshop #2 Public Comment Managemer													\$ - \$ -	9.4.3 9.4.4	
	Report Preparation												· ·	-	Task 10	\$ -
10.1	Working Paper Development (4 total)													s -	10.1	
10.2	Draft Master Plan Report and ALP Drawing Set Final Master Plan Report and ALP Drawing Set													\$ - \$ -	10.2	
	Project Administration														10.3 Task 11	\$ 21,000
11.1	Project Management													\$ -	11.1	
11.2	Quality Assurance and Control													\$ -	11.2	
11.3	Project Close Out Expenses (see below)												1	\$ 21,000	11.3 11.4	
Total Ho		12	18		1,294		127		-	-	-	-	1,531			¢ 227 E40
rotal La	por Costs	⇒ ∠,3U4	پ 3,240 ت	⇒ 1∠,U84	\$ 161,750	- ¢	\$ 10,033	\$ 236	φ -	\$ -	\$ -	\$ -	1	\$ 327,540		\$ 327,540

SUBCONSULTANT TOTAL \$ 327,540

Expenses		
	Task 5.6 - Stormwater Management Plan Update	
	Conceptual Permit Fee	\$ 3,000
	Supplemental Survey (ponds, infrastructure, etc.)	\$ 18,000

Subconsultant 3 – VHB Scope and Fee Estimate



July 12, 2017

Ref: 83678.16

Douglas J. DiCarlo 4200 West Cypress Street, Suite 450 Tampa, FL 33607

Re: VHB Scope of Work and Fee for St. Petersburg-Clearwater International Airport Master Plan

Mr. DiCarlo,

VHB is pleased to provide ESA with a scope of work and fee estimate (enclosed) to support development of the St. Petersburg-Clearwater International Airport (PIE) Master Plan. This scope and fee includes the following Master Plan services:

- Sustainability Planning
- **Resiliency Planning**
- Terminal Planning support

Please contact me if you have any questions. We look forward to partnering with ESA on this exciting project.

Sincerely,

Vanasse Hangen Brustlin, Inc.

Fin Bonset

Manager of Airport Planning fbonset@vhb.com

Engineers | Scientists | Planners | Designers



Task 5.3 Sustainability

Sustainability considerations will be incorporated into the new master plan as an integral element of the project. Although identified as an individual task in this scope of services, this task will be incorporated throughout the project. For the purposes of this scope, sustainability is defined as a holistic approach to managing an airport to ensure the integrity of the Economic viability, Operational efficiency, Natural resource conservation and Social responsibility (EONS) of the airport (Source: Airports Council International – North America, or ACI-NA). This task follows the general sustainability planning guidance currently in development by the FDOT Aviation and Spaceports Office. This task will focus on County-owned and operated, aviation-related facilities and operations at PIE.

5.3.1 Sustainability Baseline Assessment

The goal of the baseline assessment is to understand the activities and existing levels of resource consumption at the airport to identify opportunities for improvements. Based on readily available information and data currently collected by airport management and the ESA Team, a sustainability baseline assessment will be conducted for the sustainability categories identified by the ESA Team to highlight areas for improvement. The baseline data collection process is a critical first step in understanding where enhancements could be considered, and will be conducted alongside the master plan inventory tasks to enhance the efficiency of the data collection process. The various baseline data collection categories could include:

- Airport Facilities (In Support of Infrastructure Resiliency Planning Task)
- Noise and Land Use
- · Water Consumption and Water Quality
- Energy
- Surface Transportation
- Natural Resource Management
- Waste Management and Recycling (In Support of Solid Waste Recycling Task [ESA-led task])
- Socioeconomic and Community

The airport is located in an area that is in attainment for all criteria pollutants defined by the U.S. Environmental Protection Agency (EPA). Therefore, an Air Quality and Greenhouse Gas (GHG) Emissions Inventory will not be conducted; however, existing air quality and GHG emissions reduction strategies will be documented in the baseline assessment.

For the purposes of the scope, it is assumed that a total of seven categories will be addressed in the sustainability baseline assessment. The categories will be determined in collaboration with airport management, based on specific conditions at the airport.

The ESA Team will provide access to a web based data collection site accessible to all team members to assist in data collection and the sustainability baseline assessment. The on-site data collection will include meetings with key airport management staff as well as site visits.

The team will provide sustainability-related survey questions for inclusion in an internet-based survey to airport users and tenants. The results will be compiled and summarized in the assessment. The baseline assessment will also include a review of energy sources and rates of consumption.



As part of the data collection process the team will identify existing sustainability initiatives currently implemented at the airport, determine rates of resource consumption (i.e. energy use, water consumption), identify trends in management of resources, and highlight areas for improvement or focus in the Sustainability Plan.

Meeting: One data collection meeting at the airport with two VHB staff (held concurrently with sustainability vision session meeting described in Task 5.4.2).

Products: Draft Sustainability Baseline Assessment technical memorandum for review and a final Sustainability Baseline Assessment technical memorandum that will be integrated into the final technical report.

5.3.2 Develop Sustainability Goals and Objectives / Alternatives Screening Criteria

The ESA Team will prepare a draft Sustainability Vision/Mission Statement for the airport for consideration by airport management. The Vision/Mission Statement will guide the rest of the sustainability planning process by defining the high-level vision of the airport.

Based on the Sustainability Vision Statement and the findings of the sustainability baseline assessment, the ESA Team will prepare draft goals and objectives to be discussed and further refined with airport management staff and the master plan working group. The goals will be more general in nature and relate to the sustainability categories of importance, as determined in Task 5.4.1. The objectives will be more specific statements guiding how the goals will be achieved. The ESA Team will use the ACI-NA recommended goals and objectives as a starting point for the draft goals and objectives, customized to the airport's specific conditions.

Master Plan development alternatives screening criteria that take sustainability goals and objectives into account will be identified to assist in the sustainability evaluation of alternative development concepts. This task will also provide a summary of sustainable project elements to consider for the preferred development alternative during the planning process, with the intent of providing guidance for the airport to integrate sustainability into the development program.

Meeting: One visioning session held concurrently with the data collection meeting (Task 5.4.1) at the airport with two VHB staff.

Product: A memorandum documenting the airport's sustainability vision, goals and objectives after coordination with airport staff; a memorandum detailing sustainability alternatives screening criteria, and a memorandum detailing the recommended sustainable project elements that could be incorporated into the preferred development program.

Task 5.5 Infrastructure Resiliency Planning

The ESA Team will develop an infrastructure resiliency plan that considers the Airport's location relative to Tampa Bay and is consistent with airport resiliency planning guidance¹ and Pinellas County resiliency planning efforts.

¹ TRB ACRP Report 147 - Climate Change Adaptation Planning: Risk Assessment for Airports (http://www.trb.org/Publications/Blurbs/173554.aspx) and TRB ACRP Synthesis 33 - Airport Climate Adaptation and Resilience (http://www.trb.org/Publications/Blurbs/167238.aspx).



5.5.1 Vulnerability Assessment

A complete hard infrastructure vulnerability assessment will be a necessary first step to resiliency planning at the airport. The ESA Team will document the airport infrastructure's exposure, sensitivity, adaptive capacity, as well as criticality of assets/systems to aid in prioritization of adaptation measures. The ESA Team will also consider the broader context within which the airport operates, including changing trends and demographics that are likely to influence exposure, sensitivity, adaptive capacity, and criticality in the near-term and future.

The ESA Team will collect existing data on projected climate impacts for the airport region to identify those climate stressors most likely to disrupt airport operations, cause infrastructure to fail, and/or otherwise negatively impact workers or passengers. Data will include recent efforts by Pinellas County

The ESA Team will then identify the infrastructure that are currently or will be impacted by the local climate stressors identified. In coordination with airport staff and other stakeholders as relevant, the team will assess the exposure, sensitivity, adaptive capacity, and criticality of the operations and infrastructure. VHB will conduct a workshop on site to highlight potential impacts, further discuss and ground-truth sensitivities and adaptive capacities, and to identify opportunities to reduce vulnerabilities and enhance resiliency.

Meeting: One workshop with airport staff to discuss vulnerability assessment findings.

Products: Vulnerability assessment report summarizing projected climate impacts and airport vulnerabilities, including a matrix reflecting the vulnerability ranking to inform highest priority vulnerabilities to be addressed.

5.5.2 Resiliency Planning

Once the vulnerability of the infrastructure is well understood, the ESA Team will guide airport management in determining the objectives of its resiliency program. Further, it will identify high-level recommendations that airport management may want to prioritize to build resilience and reduce its vulnerabilities. The airport may consider incorporating these recommendations and associated action areas in a future climate adaptation or resiliency plan. Potential adaptation and resiliency strategies may include policy recommendations, enhancements to disaster response procedures, damage assessment procedures, and building/site design guidelines, including, but not limited to weatherization, design for stormwater management, elevation of structures, flood barriers, treatments, and material selection. Strategies will be developed based on best practices from other airports and agencies, ACRP tools and guidance, as well as coordination with Pinellas County's Natural Resources Division to ensure needs of the airport and all stakeholders are met, implementation is feasible, and both technical and financial resources can be identified. This phase will also identify key stakeholders for continued engagement in the airport's resiliency planning as well as target audiences for communications of the airport's vulnerabilities and responses.

Product: One draft and one final version of a Resiliency Plan Technical Memorandum for incorporating as an appendix to the final technical report.



Task 6.3 Alternatives for Future Passenger Terminal Facilities

Up to three (3) alternatives for the future development of the passenger terminal facilities will be developed in prior tasks. VHB's task will be to evaluate the efficiency and effectiveness of the terminal alternatives using PathPlanner (now called Transoft AviPlan). This simulation tool will be applied to each of the preliminary alternatives to establish the most efficient interface with the existing/proposed airfield movement areas based on the critical aircraft only to be using each of the gate stands; and overall interaction with aircraft on nearby taxiways in terms of aircraft push-backs and overall ramp maneuvering safety.

Product: Simulation files of the three terminal area alternatives will be created and utilized to refine the layout of the individual options. The results of these analyses will be documented as part of the airport development alternatives including supporting figures as needed to illustrate the results.

St. Pete-	Clearwater International Airport Master Plan							v		and V.							
	إ	B. Lacy	F. Bonset	3. Siwinski	J. Eveland	M. Kubilins	K. Hewitt	V. Vishnawanatha	R. Wilson		Field tech		,		, ,		
	Labor Category	Principal 2	Principal 1	Foob Brof 10	Took Brof 17	Took Brof 16	Took Brof 12	Tech Prof 10	Took Brof 7	Took Prof 6	Field Tech		Total Hours	Labor Price			
Task#		\$ 250										\$ 1		Labor Price	Task#	s	iubtotals
Task 1	Project Initiation														Task 1	\$	
1.1	Study Design and Planning Charrette Project Kick-off Meetings												-	\$ -	1.1		
1.3	Tenant and User Interviews													\$ -	1.3		
1.4.1	Aerial Mapping and Airports Geographic Information System (AGIS) Vertically Guided Approach Obstruction Analysis												-	S -	1.4		
1.4.2	Analysis of Features within Obstruction Identification Surfaces													\$ -	1.4.2		
1.4.3 Task 2	Planimetric and Topographic Mapping Existing Conditions												-	\$ -	1.4.3 Task 2	\$	_
2.1	Airport and Surrounding Area Inventory												-	\$ -	2.1		
2.1.1	Airfield Facilities and Surrounding Airspace Airside Facilities												-	\$ - \$ -	2.1.1 2.1.2		
2.1.3	Support Facilities												-	\$ -	2.1.3		
2.1.4	Airport, Community, and Surrounding Area Features Airport Data												-	S -	2.1.4 2.1.5		
2.2	Passenger Terminal Facilities Passenger Terminal Access, Circulation, and Automobile Parking													s -	2.2		
2.3	Passenger Terminal Access, Circulation, and Automobile Parking Terminal Access Roadway													S -	2.3		
2.3.2	Terminal Curbfront												-	\$ -	2.3.2		
2.3.3	Automobile Parking Rental Cars													S -	2.3.3		
2.3.5	Counts and Observations													\$ -	2.3.5		
2.4 Task 3	Commercial Passenger Market Data Aviation Forecasts												-	\$ -	2.4 Task 3	\$	
3.1	Evaluation of Historic and Previous Forecasts													s -	3.1		
	Baseline Forecast Preparation Alternative Forecast Scenarios													\$ -	3.2		
3.4	Baseline Forecast Review Coordination													\$ -	3.4		
	Facility Assessment and Requirements Airfield Demand Capacity Analysis												-1	\$ -	4.1	\$	-
4.2	Airfield Facility Requirements													\$ -	4.2		
	Navigational Aids, Metroplex, and TERPS Analysis Airside Facility Requirements												-	\$ -	4.3		
4.5	Requirements for Passenger Terminal Facilities													\$ -	4.5		
4.6	Terminal Access, Circulation, and Automobile Parking Landside Facility Requirements												-	\$ -	4.6		
Task 5	Environmental Analyses		·											•	Task 5	\$	68,120
5.1 5.2	Natural Resources and Environmental Overview Noise Modeling												-	\$ -	5.1 5.2		
5.3	Sustainability													\$ -	5.3		
5.3.1 5.3.2	Sustainability Baseline Assessment Develop Sustainability Goals and Objectives / Alternative Screening Criteria		8	40 12			24 8			40 16			104 44	\$ 16,000 \$ 7,120	5.3.1 5.3.2		
5.4	Solid Waste Recycling (Waste Audit)		0	12			0			10			-	\$ -	5.4		
5.5 5.5.1	Infrastructure Resiliency Planning Vulnerability Assessment	4	4	24	40		32			40			144	\$ - \$ 23.600	5.5 5.5.1		
5.5.2	Resiliency Planning	4	4	34	24		24			40			130	\$ 23,600	5.5.2		
5.6 5.6.1	Stormwater Management Plan Update Data Collection and Data Verification												-	\$ -	5.6 5.6.1		
5.6.2	Design Methodology													\$ -	5.6.2		
5.6.3 5.6.4	Schematic Design Final Schematic Design													\$ -	5.6.3 5.6.4		
Task 6	Alternatives for Airport Development													<u> </u>	Task 6	\$	9,470
	Constraints Analysis													\$ -	6.1		
	Initial Development Options Alternatives for Future Passenger Terminal Facilities		40							3			43				
	Terminal Access, Circulation, and Automobile Parking Alternatives Recommended Development Alternatives													\$ -	6.4		
Task 7	Airport Layout Plan Drawing Set												- 1	-	Task 7	\$	
7.1 7.1.1	Airport Layout Plan Set Preparation Title Sheet													\$ -	7.1 7.1.1		
7.1.2	Airport Data Sheet												-	\$ -	7.1.2		
7.1.3 7.1.4	Airport Layout Plan													\$ -	7.1.3 7.1.4		
7.1.4	Terminal Area Drawings (2 sheets) Airport Airspace Drawings (3 sheets)												-	\$ -	7.1.5		
7.1.6	Inner Portion of the Approach Surface Drawings (3 sheets)													\$ - \$ -	7.1.6		
7.1.7 7.1.8	Runway Departure Surface Drawing Land Use Drawings (2 sheets)													\$ -	7.1.7 7.1.8		
7.1.9	Airport Property Map (3 sheets)													s -	7.1.9		
	Airport Layout Plan Review Coordination Exhibit "A" Property Inventory Map													\$ -	7.2 7.3		
Task 8	Recommended Development Program													•	Task 8	\$	-
	Inventory of Financial Information Preliminary Financial Analysis												-	\$ -	8.1 8.2		
8.3	Financial Implementation Plan Development													\$ -	8.3		
8.4 8.5	Cost Estimates Development Program													\$ -	8.4 8.5		
	Stakeholder Coordination and Public Outreach														Task 9	\$	-
	Airport Management Coordination Ongoing Working Group Meetings													S -	9.1		
9.3	Agency Coordination												-	\$ -	9.3		
9.3.1 9.3.2	St. Pete-Clearwater International Airport Traffic Control Tower FAA Orlando Airports District Office (ADO)													\$ -	9.3.1 9.3.2		
9.3.3	FDOT District 7 Office													\$ -	9.3.3		
9.4 9.4.1	Public Outreach Project Website													S -	9.4 9.4.1		
9.4.2	Public Workshop #1												-	\$ -	9.4.2		
9.4.3 9.4.4	Public Workshop #2 Public Comment Management													\$ -	9.4.3 9.4.4		
Task 10	Report Preparation														Task 10	\$	-
	Working Paper Development (4 total) Draft Master Plan Report and ALP Drawing Set													\$ -	10.1		
10.3	Final Master Plan Report and ALP Drawing Set													\$ -	10.3		
Task 11	Project Administration Project Management													s -	Task 11 11.1	\$	3,120
11.2	Quality Assurance and Control													\$ -	11.2		
11.3	Project Close Out Expenses (see below)													\$ - \$ 3,120	11.3 11.4		
														y 3,120	11.4		
Total Hou Total Lab	or Costs	\$ 2,000	56 \$ 12 880	110 \$ 24 200	\$ 12,800	-	\$8 \$ 13,200		\$ -	139 \$ 12,510	\$ -		465	\$ 80,710		e	80,710
TOTAL LAD	VI VVata	Ψ 4,000	ψ 12,00U	₩ Z4,ZUU	₹ 12,000	φ -	002,000 ب	Ψ -	- پ	. p 1∠,510		- ب		₩ 0U,/1U		Þ	00,710

SUBCONSULTANT TOTAL \$ 80,710

July 11, 2017

Task 5.3, Sustainability Planning		
Non-local travel	\$	700
Task 5.5, Resiliency Planning		
Non-local travel	\$	700
Report production/local travel	\$	100
Task 6.3, Terminal Planning		
Non-local travel	\$	1,400
Report production/local travel	s	220

Total Expenses \$ 3,120

Subconsultant 4 – L&H Scope and Fee Estimate



June 10, 2017

Douglas J. DiCarlo Aviation Program Manager ESA 4200 West Cypress Street, Suite 450 Tampa, FL 33607 31 Blue Heron Drive Greenwood Village, Colorado 80121 (303) 773-6761 • Fax (303) 773-6709

Dear Mr. DiCarlo:

Thank you for the opportunity to conduct a Financial Implementation Analysis as part of Master Plan services ESA is providing for the St. Pete-Clearwater International Airport (PIE). This letter presents the objective, approach, time frame and fee estimate that we propose for providing these services.

The objective of the Financial Implementation Analysis is to provide a reasonable basis for matching the amounts and timing of estimated capital costs with projected capital funding sources. This analysis will evaluate the financial feasibility of implementing the capital program while maintaining prudent financial conditions for Airport operations. Our detailed approach for this project is provided in the attachment to this letter. Our schedule for conducting this project will depend on completion of other components of the overall Master Plan project. After the recommended CIP is preliminarily approved by the Airport, the time frame for completing the Financial Implementation Analysis is anticipated to be six to ten weeks.

Our estimated fees and expenses for completing the project are provided as follows:

•	Inventory of Financial Information	\$ 9,760
•	Preliminary Financial Analysis	23,180
•	Financial Plan Development	34,160
	Total Fees	\$67,100
	Travel expenses (2 trips)	3,400
	Other out-of-pocket expenses	<u>250</u>
	Total Fee and Expense Estimate	<u>\$70,750</u>

Should you have any questions or need additional clarification of any element of our proposal, please contact us to discuss them further.

Very truly,

Stephen B. Horton

Stephe Horton

	Labor Category	Financial Principal	Financial Manager	Total Hours	Labor Price				
Task#	Task Name/Description	\$ 315		Total Hours	Labor Frice		Task #	s	Subtotals
Task 1	Project Initiation				•		Task 1	\$	-
1.1	Study Design and Planning Charrette Project Kick-off Meetings			-	\$ - \$ -		1.1	ł	
1.3	Tenant and User Interviews			-	\$ -		1.3	İ	
1.4	Aerial Mapping and Airports Geographic Information System (AGIS)			-	\$ -		1.4	į	
1.4.1	Vertically Guided Approach Obstruction Analysis Analysis of Features within Obstruction Identification Surface	<u> </u>			\$ - \$ -		1.4.1	}	
1.4.3	Planimetric and Topographic Mapping				\$ -		1.4.3	İ	
Task 2	Existing Conditions						Task 2	\$	-
2.1.1	Airport and Surrounding Area Inventory Airfield Facilities and Surrounding Airspace			-	\$ - \$ -		2.1	ł	
2.1.2	Airisid Facilities and Surfounding Airspace	,			\$ -		2.1.2	t	
2.1.3	Support Facilities				\$ -		2.1.3	1	
2.1.4	Airport, Community, and Surrounding Area Feature Airport Data	S			\$ - \$ -		2.1.4		
2.1.3	Passenger Terminal Facilities				\$ -		2.1.3	ŧ	
2.3	Passenger Terminal Access, Circulation, and Automobile Parking			-	\$ -		2.3	ĺ	
2.3.1	Terminal Access Roadway			-	\$ -		2.3.1		
2.3.2	Terminal Curbfront Automobile Parking				\$ - \$ -		2.3.2	ł	
2.3.4	Rental Cars				\$ -		2.3.4	t	
2.3.5	Counts and Observations				\$ -		2.3.5	İ	
2.4 Task 3	Commercial Passenger Market Data Aviation Forecasts			-	\$ -		2.4 Task 3	s	
3.1	Evaluation of Historic and Previous Forecasts				\$ -		3.1	, ,	
3.2	Baseline Forecast Preparation				\$ -		3.2		
3.3	Alternative Forecast Scenarios			-	\$ -		3.3	1	
3.4 Task 4	Baseline Forecast Review Coordination Facility Assessment and Requirements			_	\$ -		3.4 Task 4	s	
4.1	Airfield Demand Capacity Analysis			-	\$ -		4.1	,	
4.2	Airfield Facility Requirements			-	\$ -		4.2	1	
4.3	Navigational Aids, Metroplex, and TERPS Analysis			-	\$ -	igspace I	4.3	 	
4.4 4.5	Airside Facility Requirements Requirements for Passenger Terminal Facilities				\$ - \$ -	+	4.4	ł	
4.6	Terminal Access, Circulation, and Automobile Parking				\$ -	<u></u>	4.6	1	
4.7	Landside Facility Requirements				\$ -		4.7	1	
Task 5 5.1	Environmental Analyses Natural Resources and Environmental Overview				\$ -		Task 5 5.1	\$	-
5.2	Noise Modeling				\$ -		5.2	ŧ	
5.3	Sustainability			-	\$ -		5.3	•	
5.3.1	Sustainability Baseline Assessment			-	\$ -		5.3.1		
5.3.2 5.4	Develop Sustainability Goals and Objectives / Alternative Screening Criteria Solid Waste Recycling (Waste Audit)			-	\$ - \$ -		5.3.2 5.4	ł	
5.5	Infrastructure Resiliency Planning				\$ -		5.5	ŧ	
5.5.1	Vulnerability Assessment			-	\$ -		5.5.1	ĺ	
5.5.2	Resiliency Planning			-	\$ -		5.5.2		
5.6 5.6.1	Stormwater Management Plan Update Data Collection and Data Verification	<u> </u>			\$ - \$ -		5.6 5.6.1	}	
5.6.2	Design Methodology			-	\$ -		5.6.2	İ	
5.6.3	Schematic Design				\$ -		5.6.3	1	
5.6.4 Task 6	Final Schematic Design Alternatives for Airport Development			-	\$ -		5.6.4 Task 6	s	
6.1	Constraints Analysis				\$ -		6.1	, ,	
6.2	Initial Development Options			-	\$ -		6.2	ĺ	
6.3	Alternatives for Future Passenger Terminal Facilities			-	\$ -		6.3	ļ	
6.4	Terminal Access, Circulation, and Automobile Parking Alternatives Recommended Development Alternatives			-	\$ - \$ -		6.4	ł	
Task 7	Airport Layout Plan Drawing Set				•		Task 7	\$	
7.1	Airport Layout Plan Set Preparation			-	\$ -		7.1		
7.1.1 7.1.2	Title Sheet Airport Data Sheet				\$ - \$ -		7.1.1 7.1.2	ļ	
7.1.2	Airport Data Sheet Airport Layout Plan			-	\$ -		7.1.2	ł	
7.1.4	Terminal Area Drawings (2 sheets)		-	\$ -		7.1.4	ĺ	
7.1.5	Airport Airspace Drawings (3 sheets)		-	\$ -		7.1.5	ļ	
7.1.6 7.1.7	Inner Portion of the Approach Surface Drawings (3 sheets Runway Departure Surface Drawing)			\$ - \$ -	1	7.1.6 7.1.7	ł	
7.1.8	Land Use Drawings (2 sheets				\$ -	<u></u>	7.1.8	1	
7.1.9	Airport Property Map (3 sheets			-	\$ -		7.1.9	<u> </u>	
7.2	Airport Layout Plan Review Coordination Exhibit "A" Property Inventory Map			-	\$ -		7.2 7.3	ł	
Task 8	Recommended Development Program				•		Task 8	\$	67,100
8.1	Inventory of Financial Information	14.24	27.76	42	\$ 9,760		8.1	[,
8.2	Preliminary Financial Analysis	36.48	61.52	98	\$ 23,180		8.2	1	
8.3 8.4	Financial Implementation Plan Development Cost Estimates	60.48	79.52	140	\$ 34,160 \$ -	+	8.3 8.4	ł	
8.5	Development Program			-	\$ -		8.5		
Task 9	Stakeholder Coordination and Public Outreach						Task 9	\$	-
9.1	Airport Management Coordination Ongoing Working Group Meetings			-	\$ -	+	9.1	1	
9.2	Ongoing Working Group Meetings Agency Coordination				\$ - \$ -	+	9.2	t	
9.3.1	St. Pete-Clearwater International Airport Traffic Control Tow	er		-	\$ -		9.3.1	1	
9.3.2	FAA Orlando Airports District Office (ADO			-	\$ -	$oldsymbol{\sqcup}$	9.3.2	1	
9.3.3 9.4	FDOT District 7 Office Public Outreach			-	\$ - \$ -	+-	9.3.3	+	
9.4.1	Project Website				\$ -	+	9.4.1	t	
9.4.2	Public Workshop #1			-	\$ -		9.4.2	1	
9.4.3	Public Workshop #2				\$ -	\vdash	9.4.3	1	
9.4.4 Task 10	Public Comment Managemen Report Preparation				\$ -		9.4.4 Task 10	\$	_
10.1	Working Paper Development (4 total)			-	\$ -		10.1	1	-
10.2	Draft Master Plan Report and ALP Drawing Set				\$ -		10.2	1	
10.3 Task 11	Final Master Plan Report and ALP Drawing Set Project Administration			-	\$ -		10.3 Task 11		3.650
11.1	Project Management				\$ -		11.1	\$	3,000
	Quality Assurance and Control			-	\$ -		11.2	1	
11.2					\$ -	1 7	11.3	1	
11.3	Project Close Out					-		T	
	Project Close Out Expenses (see below)			-	\$ 3,650		11.4	Ī	
11.3	Expenses (see below)	111	169	280					

	SUBCONSULTANT TOTAL	\$	70,750
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Subconsultant 5 – KHA Scope and Fee Estimate



July 11, 2017

Douglas J. DiCarlo Aviation Program Manager ESA 4200 West Cypress Street, Suite 450 Tampa, FL 33607

Re: Task Work Order, Terminal Master Plan – Landside Support

Dear Doug:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to Environmental Science Associates Corporation ("ESA" or "Client") for providing landside planning for the terminal access and curbfront roadways in support of the Terminal Area Master Plan for St. Pete-Clearwater International Airport ("Airport" or "PIE").

Project Understanding

This work authorization scope outlines the efforts associated with review of existing landside facilities and access to the terminal area of St. Pete-Clearwater International Airport (Airport). The study area to be addressed by the planning effort consists of the following areas:

- Terminal area curbfronts
- Terminal access roadway
- Short-Term Parking Lot
- Long-Term Parking Lot
- Economy Parking Lot
- Employee Parking Lot
- Rental Car Facilities and Parking

The study will focus on documenting the existing landside conditions, assessing terminal and access roadways, and parking areas to identify congestion points, and develop improvements to mitigate the identified congestion points. Several site visits are mentioned throughout the scope of the project. Efforts will be made to consolidate site visits to the extent feasible to maximize efficiency.

Scope of Services

The Consultant will provide the services specifically set forth below. The scope below identifies the applicable Master Plan Task Numbers. Kimley-Horn is not involved in all tasks, as such the task numbers below are not chronological, but are consistent with the overall tasks proposed by ESA.



Inventory

KICK-OFF MEETING (MASTER PLAN TASK 1.1)

The Consultant will conduct an initial kick-off meeting with key Airport representatives to collect background data, base mapping, and operational activity in the study area. During the kick-off meeting, the Consultant will present the proposed traffic count locations to be conducted in Master Plan Task 2.3.5 for Airport review and approval. The Consultant will also present the data collection plan and proposed staffing plan. An agenda and meeting notes will be provided by the Consultant. Up to two (2) Consultant staff will attend the three (3) hour kick-off meeting.

TENNANT AND USER INTERVIEWS (MASTER PLAN TASK 1.3)

The Consultant, working through the Airport Project Manager, will also meet in up to four (4), one (1) hour meetings (to be scheduled during the same day) with key stakeholders to discuss current operational characteristics, available data, and issues associated with their specific activities. The study analysis in following tasks will be based on the information provided by the stakeholders. Data on vehicle mix, daily and/or monthly delivery schedules, and staffing levels throughout the week and timing of shift changes for terminal related functions will be requested from the existing users. Up to two (2) Consultant staff members will attend the stakeholder meetings. Anticipated Stakeholders consist of:

- Airport Staff: Planning, Operations, Ground Transportation, Parking
- Pinellas County Sherriff's Office
- Transportation Security Administration (TSA)
- Rental Car Agency Representatives
- Commercial Vehicle/Ground Transportation Providers:
 - Taxis
 - Shared Ride
 - Limousine/Private Car Service Providers
 - Shuttle Operators: off-airport parking, hotel/motel
- Parking Management Company Representatives

An agenda and meeting notes will be provided by the Consultant to the Airport Project Manager. In addition, a summary stakeholder list will be developed including the stakeholder's names, agency, role and responsibility, address, phone number, and email address.

TERMINAL ACCESS ROADWAY INVENTORY (MASTER PLAN TASK 2.3.1)

While the focus of the planning effort is on the roadway system directly fronting the terminal facilities at the Airport, it is of importance to take into consideration the terminal access roadways feeding the curbfront of the terminal complex. The Consultant will inventory the following terminal access roadways to the Airport using the Airport Landside and Parking Lot Improvement design drawings completed by Cardno dated May 2017:



- Airport Parkway Drive
- Intersection of Roosevelt Boulevard (SR 686) and Airport Parkway Drive

The inventory will consist of number of lanes, posted speed limits, weaving locations, and distances. The summary of the inventory will be in Master Plan Task 10.1 Inventory Memorandum. No field verification will be completed.

The Consultant will also review applicable studies or project related documents critical to the planning effort provided by the Airport and Stakeholders in Master Plan Task 1.3 to identify pertinent information for use in the Landside Analysis. Additional documents can be assessed as an additional service. Information is anticipated to consist of the following:

- Studies and analysis completed by Cardno related to the Airport and Landside Parking Alternatives
- FDOT studies/design drawings for the planned improvement projects along Roosevelt Boulevard (S.R. 686) associated with the Gateway Project
- Airport design/space standards
- Passenger survey

TERMINAL CURBFRONT INVENTORY (MASTER PLAN TASK 2.3.2)

Curbfront Inventory

The Consultant will inventory the following terminal roadways and curbfronts using CADD files, digital mapping, and aerial photography provided by the Airport:

- Ticketing "A"
- Ticketing "B"
- Baggage Claim
- Deliveries
- Ground Transportation Area for Taxi/Shuttle/Limos

The inventory will consist of curbfront designations (loading/unloading areas for each vehicle type: transit, shuttle, taxi, etc.), curbfront lengths by designation, number of lanes, lane widths, and posted speed limits. The inventory will also include the identification and collection of data on weaving areas and weaving distances and anticipated conflict areas. The summary of the inventory will be completed in Task 10.1 Inventory Memorandum.

The Airport provided data will be supplemented by one (1), nine (9)-hour site visit to validate the curbfront inventory collected from CADD files, digital mapping and aerial photography provided by the Airport and to collect an appropriate photographic inventory of conditions observed. The site visit for this task will be consolidated with the meetings in Master Plan Task 1.3.

Transit Inventory

The Consultant will inventory the existing, on-airport public transit available at the Airport. The on-airport stop locations for the transit providers will be inventoried. In addition, the routes, schedules, and headways for the transit services will be summarized. Transit boarding and alighting data will be



collected during the operational observations. A summary of the transit inventory will be included in Master Plan Task 10.1 Inventory Memorandum.

Passenger Inventory

As a part of Master Plan Task 1.3, any available passenger survey information will be requested and used as the basis for the passenger inventory. If the Airport has initiated a new survey effort it will be included, as available, for use in this effort. The available passenger surveys will be reviewed to determine if any of the following information has to be surveyed by others:

- Passenger time of arrival, time distribution for arriving and departing passengers with respect to flight time
- Average travel party size (people traveling together)
- Mode of arrival/departure to and from the airport (personal vehicle, shuttle, taxi, limo, etc.)
- Luggage/baggage per person
- Arrival/departure route (i.e. directional distribution)
- Parking location

Employee information to be requested from the Airport during Master Plan Task 1.3 will include:

- List of on-airport terminal area tenants (e.g., cargo, FAA, other) within the study area. For
 each tenant, the number of employees (total and by shift), number of parking spaces on each
 site, and parking passes issued will be requested will be requested.
- Parking location and mode of arrival/departure for employees

Provided passenger and employee information will be summarized in Master Plan Task 10.1 Inventory Memorandum. No new employee data collection (i.e. employee surveys) or passenger data collection (i.e. passenger surveys) are included in the planning effort.

PARKING INVENTORY (MASTER PLAN TASK 2.3.3)

The Consultant will inventory the following five (5) airport parking facilities:

- Short-Term Parking
- Long-Term Parking
- Remote Economy Parking
- Employee Parking
- Cell Phone Lot

The parking inventory will be based on the data summarized in the *Parking Garage Study, Airport Landside and Parking Lot Improvements for St. Pete-Clearwater International Airport* by Cardno dated November 16, 2016 and the *Airport Landside and Parking Lot Improvement* design drawings completed by Cardno dated May 2017.

The employee parking information will also be requested from the Airport including:

 Overnight and peak employee vehicle accumulation during a typical busy peak month average day by parking location



- Volume of employee entry and exit vehicles by location during a typical busy day (the same day as the overnight and peak accumulation counts); entry and exit volumes provided in 15minute increments is preferred
- Number of parking permits issued and fees paid

No field verification will be completed. A summary of the parking inventory will be included in Master Plan Task 10.1 Inventory Memorandum. The parking inventory will consist of the location, product types, and number of parking spaces.

RENTAL CAR INVENTORY (MASTER PLAN TASK 2.3.4)

A summary of the existing rental car facilities, both on- and off-site will be developed. The summary will include general operational characteristics, size, and access for the following, organized by each company:

- Terminal space (counters)
- Booths (if applicable)
- Ready/return spaces in the lot
- Storage/Quick Turn Around (QTA) facilities

The Airport provided data will be supplemented by one (1), four (4)-hour site visit to validate the parking related inventory collected from CADD files, digital mapping and aerial photography provided by the Airport. The site visits will be consolidated to the extent feasible to maximize efficiency.

The summary of the rental car inventory will be in Master Plan Task 10.1 Inventory Memorandum.

VEHICLE COUNTS AND OBSERVATIONS (MASTER PLAN TASK 2.3.5)

The purpose of the traffic counts and observations is to document the current vehicular and pedestrian traffic at designated Airport locations. In advance of any vehicle counts or operational observations, the Consultant will prepare a data collection plan describing the survey logistics (dates and required staff) and the survey forms.

Traffic Counts

A series of two (2), separate vehicle count efforts will be conducted. The first will be automatic traffic recorder (ATR) counts at up to three (3) terminal entry/exit locations for seven (7), consecutive 24-hour days. It is anticipated that these will consist of the following locations:

- Curbfront Approach
- Airport Entry
- Airport Exit

The seven-day counts will be used to identify the peaking throughout the week. Following the review of the seven-day counts, a second series of traffic counts will be conducted for two (2) consecutive 24-hour days at the following locations:



- Terminal Entry
- Inner Curbfront Lanes
- Outer Curbfront Lanes
- Entry to Ground Transportation Area for Taxi/Shuttle/Limos
- Exit from Ground Transportation Area for Taxi/Shuttle/Limos
- Terminal Exit

The counts at the above six (6) locations will be repeated after the completion of the *Airport Landside* and *Parking Lot Improvement* project. A tabular summary of the vehicle counts and turning movement counts will be provided in Master Plan Task 10.1 Inventory Memorandum. The tabular summary will also be provided in EXCEL format.

Curbfront Observations

Based on the seven-day counts, the peak hour of arrivals and peak hour of departures will be identified. Curbfront observation will be completed during a two (2)-hour period associated with the peak hour of arrivals, and a two (2)-hour period associated with the peak hour of departures. The curbfront observations will occur during one (1) day and will coincide with the two-day traffic counts identified above.

The curbfront observations will consist of vehicle classification counts, dwell time observations by mode, vehicle occupancy (i.e. people getting into and out of vehicles), accumulation (people waiting), and loading/unloading information for the following vehicle types: private autos, buses (transit, charter), taxis, shared ride, limos, shuttles, and commercial vehicles (hotel shuttles, etc.), service vehicles, and police/enforcement vehicles. Any enforcement or observed congestion will be noted during the data collection effort.

A summary of the curbfront observations will be provided in Master Plan Task 10.1 Inventory Memorandum.

Pedestrian Observations

The Consultant will conduct bi-directional pedestrian counts in 15-minute intervals at up to three (3) locations outside of the terminals during the arrivals and departures peak. The time period of the pedestrian observations will coincide with the curbfront observations described above.

Data to be collected includes general flow patterns, accumulation at five (5)-minute intervals, bidirectional counts, and observed congestion/conflict areas. In addition to the bi-directional pedestrian counts, general observations on luggage per person will be recorded and documented.

A summary of the pedestrian observations will be provided in Master Plan Task 10.1 Inventory Memorandum.



Facility Requirements and Demand/Capacity Analysis

TERMINAL ACCESS, CIRCULATION, AND PARKING REQUIREMENTS (MASTER PLAN TASK 4.6)

Baseline QATAR Model

As an option to the microscopic simulation identified below, traditional spreadsheet models based on Airport Cooperative Research Program (ACRP) can be used. If the spreadsheet option is selected, the curbfront demands will be evaluated using methodology documented in ACRP 40: Airport Curbside and Terminal Area Roadway Operations, specifically the Quick Analysis Tool for Airport Roadways (QATAR) macroscopic spreadsheet analysis tool. The curbfront capacity for the curbfronts, as well as the terminal roadways within the study are will be evaluated using ACRP methodology. For the baseline QATAR model, the arrivals peak hour and the departures peak hour will be modeled for a total of two (2) QATAR analyses.

Multi-modal Simulation Modeling (Optional)

As an optional service using the data collected in the inventory tasks, a multi-modal simulation model will be developed to evaluate the existing operational conditions at the Airport. The Consultant will create the multi-modal simulation model using the Advanced Land Transportation Performance Simulation (ALPS) to model the terminal roadways, curbfronts, parking, and rental-car facilities.

The Airport will provide an electronic CAD drawing for use as background in the modeling effort. The Consultant will request from the Airport an electronic, gated version of the flight schedule corresponding to the day of the operational observations. The Consultant will prepare and submit a memorandum summarizing the key microsimulation model inputs and assumptions. This Input Data and Assumptions (IDA) Memorandum will summarize the inputs received through the inventory tasks and become the basis of the model development effort. The IDA memorandum will also outline the recommended comparative measures of effectiveness (MOEs). Five (5) copies of the Draft IDA (including an electronic PDF version) will be provided to the Airport. The Consultant will incorporate one (1) set of combined comments on the IDA Memorandum for inclusion in the final document.

Based on the approved IDA, the Consultant will develop an ALPS microsimulation model of the existing terminal area roadway, parking, and curbfront roadway areas as shown in the attached model coverage area graphic.

The baseline model will be calibrated for two (2) peak hours, the peak hour of arrivals and the peak hour of departures, using the traffic counts and other information collected as a part of the inventory tasks. The model will be validated when the model output approximates (within approximately 10%) of the actual traffic volumes using the study area roadway system during the peak hours analyzed. Once calibrated, the Consultant will present the calibrated model to Airport staff for additional review and validation. The Consultant will conduct a presentation to the Airport and a following presentation for stakeholders to discuss the modeling effort and the results obtained from this effort. The model will be updated to reflect the applicable comments made by the Airport and stakeholders during the presentation.



This baseline model will be used to generate the forecasts and again during the alternatives analysis to evaluate the alternatives.

Requirements and Level of Service

Using the baseline model, the user constraints by mode will be identified. The Demand/Capacity and level of service (LOS) for the existing conditions and three (3) forecast scenarios will be identified.

Roadway and Curbfront LOS

The demand/capacity and resulting LOS will be calculated for the terminal area roadways and the curbfronts for the arrivals and departure peak hour. The QATAR model will be used to evaluate the arrivals peak hour and the departures peak hour for each forecast year for a total of six (6) QATAR analyses. The roadway demand/capacity results will be presented on a link-by-link basis. Roadway capacity will vary based on number of roadway lanes and characteristics of terminal roadway segment using airport-specific capacity assumptions. The LOS of the existing roadway system will be calculated as a function of roadway demand.

The demand/capacity requirements and LOS will be summarized and documented in Master Plan Task 10.1.

Parking Requirements

Parking requirements identified in *Parking Garage Study, Airport Landside and Parking Lot Improvements for St. Pete-Clearwater International Airport* by Cardno dated November 16, 2016 will be used as the baseline requirements. Future public parking demands will be prepared for three (3) forecast period based on the activity forecasts reviewed in the inventory tasks. Future employee parking demands will be increased in proportion to the expected annual increase in overall airport activity, assumed to be represented by the average growth in annual originating airline passenger activity and annual aircraft operations. Off-airport public parking demand will not be estimated.

The parking requirements will be compared with available parking spaces and estimated deficiencies (or surplus) in available spaces will be identified. Requirements will be presented in a tabular format that will identify where parking demand is expected to exceed the supply of parking and the anticipated deficiency on a facility-by-facility basis. The public parking and employee parking facilities inventoried in Master Plan Task 2.3.3 will be assessed. It is assumed the existing market share allocation between facilities will be assumed remain consistent during the forecast years.

The public parking and employee parking demand/capacity requirements will be summarized and documented in Master Plan Task 10.1.

Rental Car Requirements

This task will compare capacity and future demand and identify future requirements for rental car facilities at the airport for terminal counters, booths, ready/return spaces, QTA facilities, remote storage/maintenance, and access and traffic patterns for jockey trips. The requirements will be summarized and documented in Master Plan Task 10.1.



Alternatives Analysis

DEVELOPMENT OF ALTERNATIVES (MASTER PLAN TASK 6.4)

Based on the findings from the LOS evaluation, improvements will be identified to address the facility constraints. The improvements will be evaluated for each mode and user separately and the impacts to other competing modes/users will be assessed.

Recommendations may be made with respect to the following areas:

- Merge, weave, and entry point improvements
- Curbfront operational improvements
- Improved recirculation
- Modified transit/shuttle boarding/alighting locations
- Access/circulation modifications for parking, rental car, garages
- Parking space allocation changes
- Changes to Parking Management System or real-time parking information (i.e. smart phone apps)
- Parking garage wayfinding for pedestrians and vehicles
- Pedestrian improvements
- Improved wayfinding on approach roadways
- Rental Car Facility configuration enhancements

Up to three (3) consolidated development concepts incorporating the solutions will be developed. The location and use characteristics of each alternative, along with any underlying assumptions and affiliated requirements will be described in narrative, graphic, and tabular format as appropriate. Schematic concept drawings will be developed in CADD format.

RECOMMENDED IMPROVEMENT CONCEPT (MASTER PLAN TASK 6.5)

The recommended improvement concept selected in Master Plan Task 6.4 will be assessed. The QATAR model developed during Master Plan Task 4.6 will be used to evaluate recommended improvement concept for the arrivals peak hour and the departures peak hour for each forecast year for a total of six (6) QATAR analyses. The model will be assessed for the three (3) forecast scenarios using the forecast/flight schedule provided by others. The model will be based on the passenger characteristics from the existing conditions model with certain operational adjustments to address the recommended scenario and assumptions associated with this effort will be coordinated with the Airport. Updated demand/capacity information will be provided documenting the anticipated improvements and, if necessary, refinements to recommendations.



Documentation and Management

AIRPORT MANAGEMENT PRESENTATIONS (MASTER PLAN TASK 9.1)

The three (3) development concepts from Master Plan Task 6.4 will be presented to the Airport and discussed in one (1) meeting. During the Consultant presentation meeting to the Airport the benefits/constraints of each alternative will be summarized. Based on the benefits/constraints assessment, one concept will be selected as the recommended concept by the Airport.

WORKING PAPERS (MASTER PLAN TASK 10.1)

Inventory Working Paper

The data collected in the inventory tasks will be summarized in Working Paper #1. ESA will provide a Word template for the working paper and Kimley-Horn will insert limited sections specific to their completed tasks. The Kimley-Horn input will consist of a summary of the traffic counts in tabular format, diagrams depicting traffic flows and operations, parking and rental inventories, and a summary description of findings.

ESA will complete final formatting and prepare all bound copies and consolidated electronic copies of the documents, both draft and final. One (1) call will be held to discuss Airport comments on the draft document. ESA will support in the development of graphics as needed.

Landside Requirements Working Paper

The demand/capacity and LOS assessment in Master Plan Task 4.6 will be summarized in Working Paper #2. ESA will provide a Word template for the working paper and Kimley-Horn will insert limited sections specific to their completed tasks. The Kimley-Horn input will consist of a summary of the demand/capacity and LOS tabular format and include a summary description of findings.

ESA will complete final formatting and prepare all bound copies and consolidated electronic copies of the documents, both draft and final. One (1) call will be held to discuss Airport comments on the draft document. ESA will support in the development of graphics as needed.

Alternatives Working Paper

The alternatives analyses and recommendations of the project will be summarized in Working Paper #3. ESA will provide a Word template for the working paper and Kimley-Horn will insert limited sections specific to their completed tasks. The Kimley-Horn input will consist of the landside alternatives and the recommended improvement including the anticipated benefits and operational improvements that could be expected.

ESA will complete final formatting and prepare all bound copies and consolidated electronic copies of the documents, both draft and final. One (1) call will be held to discuss Airport comment on the draft document. ESA will support in the development of graphics as needed.



PROJECT MANAGEMENT (MASTER PLAN TASK 11.1)

In addition to the stakeholder meetings, up to six (6) monthly status calls will be held with the Airport Project Manager or the Consultant team.

Additional Services

Any services not specifically provided for in the above scope will be billed as additional services under a separate task work authorization. Additional services we can provide include, but are not limited to, the following:

- Additional meetings or presentations beyond those noted in the tasks above
- Additional Development Concepts beyond those listed in the tasks above
- Additional traffic counts or field observation beyond those listed in the tasks above
- Additional parking analysis or updated evaluation of baseline requirements
- Design of proposed improvements
- Preparation of NEPA level environmental overviews, assessments, or Categorical Exclusions
- Detailed inventory of road signage
- Additional field verifications
- Additional simulation scenarios or visualizations beyond those listed in the tasks above
- Parking occupancy/utilization observations
- Optional ALPS Multi-modal Simulation Model

Information Provided By Client

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives. The Client shall provide all information requested by Kimley-Horn during the project, including but not limited to the following:

- Passenger Surveys
- Existing Landside Reports
- FDOT studies/design drawings for Planned Improvement Projects along Roosevelt Boulevard (S.R. 686)
- Parking facilities layout drawings
- Parking entry/exit data by garage and lane in 15-minute intervals
- Parking occupancy information
- Airport Design Criteria/Space Standards
- Air passenger forecasts
- Cargo forecasts
- Employee forecasts
- CADD files, digital mapping, and aerial photography of study area roadways

			ESA Task	k Budgei	ESA Task Budget Summary	ary								
		Nd	30	4/4		Nos.		/Sub-Total						
Task Number Task Name	Task Name	Š			DUJ		\(\rangle \rangle \)	Hours	ٽ 	Labor	Expense	ise	Subtotal	_
		\$ 275	\$ 221	\$ 211	\$ 137	\$136	\$87							
1.1	Study Design and Planning Charrette	7	13	0	0	0	0	20	\$	4,798	\$	220	\$ 5,3	5,348
1.3	Tenant and User Interviews	0	12	0	61	0	0	34	\$	5,918		37	\$ 5,918	118
2.3.1	Terminal Access Roadway	0	3	3	21	0	0	27	\$	4,103	\$	28	\$ 4,131	131
2.3.2	Terminal Curbfront	0	15	2	54	0	0	71	\$	11,134	\$ 1,3	320	\$ 12,454	154
2.3.3	Automobile Parking	0	3	3	21	0	0	27	\$	4,103	\$	28	\$ 4,131	131
2.3.4	Rental Cars	7	0	4	18	0	0	24	\$	3,858		37	\$ 3,858	358
2.3.5	Counts and Observations	0	13	0	120	0	0	133	\$	19,313	\$ 9,735		\$ 29,048	948
7 /	Requirements Terminal Access, Circulation,							727	¥	25 420			¢ 25.420	130
4.0	Parking	7	20	10	197	0	0	234		70,400		•		+24
7 7	Alternatives Terminal Access, Circulation,							37	6	12 700		9	17.76	0
6.0	Parking	18	6	6	1	18	0	00		12,109		•	(12,109)	60,
6.5	Recommended Alternative	6	4	0	38	0	0	51	\$	8,565		37	\$ 8,565	999
9.1	Airport Management Presentations	70	13	2	6	4	0	48	\$	10,571	1,1	1,155 \$	\$ 11,726	726
10.1	Working Paper #1	4	8	0	09	0	0	72	\$	11,088	-		\$ 11,088	88(
	Working Paper #2	4	8	0	20	0	0	62	\$	9,718	- \$	37	\$ 9,718	718
	Working Paper #3	4	8	0	20	4	0	99	\$	10,262	- \$		\$ 10,262	:62
11.1	Project Management	0	18	0	24	0	16	61	\$	8,919		37	\$ 8,919	119
	TOTALS							964	\$ 1	160,578	\$ 12,815		\$ 173,393	393

Revised 6/12/17 Expanded Detail 6/29/17 Revised 7/11/17

	\$ 275	St. 1811 St. 1820 St. 1810 St.	P6 P5 P3 D8 B1	1 1 2 \$ 550	. \$ 0	. \$ 0	1 1 1 3 \$ 825	. \$ 0	1 1 2 \$ 550	. \$ 0	. \$. \$ 0	. \$ 0	2 1 3 \$ 825	. \$ 0	. \$ 0	3 3 2 2 0 0 10 2,750	
Expenses - Iravel/Trip Summary	Cost per Trip (Mileage/Meals/Car)	Number of Trips by Task	Task # Task Description	1 Stakeholder Meetings	2 Review of Studies	3 Review of Forecasts	4 Landside Inventory	5 Vehicle Counts	6 Operational Observations	7 Inventory Memorandum	8.1 Baseline Model (QATAR Model)	9 Requirements and LOS	10 Requirements Memorandum	11 Development of Alternatives	12 Recommended Improvement	13 Alternatives Memorandum	Subtotal (Trips)	

611															
SIN SIN SIN SIN SIN SIN SIN SIN SIN SIN			55				52	i.			i.			1	110
C			↔				↔	↔			↔			\$	\$
Traffic COUNTS						\$ 8,800									008'8 \$
HOtel					495		330					330			1,155
					\$		↔					\$			\$
Expenses - Other	Task Description	Stakeholder Meetings	Review of Studies	Review of Forecasts	Landside Inventory	Vehicle Counts	Operational Observations	Inventory Memorandum	Baseline Model (QATAR Model)	Requirements and LOS	Requirements Memorandum	Development of Alternatives	Recommended Improvement	Alternatives Memorandum	Subtotal (Cost)
	Task#	-	2	3	4	2	9	7	8.1	6	10	11	12	13	

Subconsultant 6 – PTI Scope and Fee Estimate

Task 1 - iALP/3DAAP TERPS Surface Updates

The iALP/3DAAP TERPS surfaces to be updated and/or added for PIE are listed below. All surfaces will be constructed as prescribed in FAA Order 8260.3B Change 21, FAA Order 8260.36 and 8260.54a. The precision approach criteria will use FAA Order 8260.36, which is presently being used by the FAA for obstruction evaluation.

The following are the surfaces that will be developed.

<u>PIE</u>

- A. Precision Approach (ILS CAT I) Final Segment
 - 1. RWY 36
 - 2. RWY 18
- B. Precision Approach (ILS CAT I) Missed Approach Area Section I
 - 1. RWY 36
 - 2. RWY 18
- C. Precision Approach (ILS SA CAT I) Missed Approach Area Section I1. RWY 18
- D. Precision Approach (ILS CAT II) Missed Approach Area Section I
 1. RWY 18
- E. Localizer Final
 - 1. RWY 36
 - 2. RWY 18
- F. RNAV (GPS) LNAV Final Section 1
 - 1. RWY 36
 - 2. RWY 18
- G. RNAV (GPS) LNAV Missed Approach
 - 1. RWY 36
 - 2. RWY 18
- H. RNAV (GPS) VNAV Final Section 1
 - 1. RWY 36
 - 2. RWY 18
- I. RNAV (GPS) VNAV Missed Approach
 - 1. RWY 36
 - 2. RWY 18
- J. RNAV (GPS) LPV Final Section 1
 - 1. RWY 36
 - 2. RWY 18
- K. RNAV (GPS) LPV Missed Approach
 - 1. RWY 36

- 2. RWY 18
- L. RNAV (GPS) "A" LNAV Final Section 1
- M. Non-Precision VOR Final Section I
 - 1. RWY 04
 - 2. RWY 36
- N. IFR Departure Area (Zones 1, 2 & 3)
 - 1. RWY 04
 - 2. RWY 36
 - 3. RWY 18
 - 4. RWY 22
- O. IFR Departure Area (Zones 1, 2 & 3) Non-Standard
 - 1. RWY 22
 - 2. RWY 36
- P. Circling Area (Category A, B, C & D)
- Q. TSS
- R. Visibility

Once these surfaces are constructed and reviewed, they will be incorporated into the upgraded iALP/3DAAP to allow PIE staff the full use of all obstruction routines available within the program.

DELIVERABLES

- * iALP Web-Based TERPS Data Files
- * 3DAAP AutoCAD Wireframe Drawings

Task 2 - One Engine Inoperative (OEI) Surface Development

Within this task contact with current tenant airlines that utilize PIE will be made to obtain the information necessary to map the carriers' obstacle accountability areas (OAA) for all runway ends. Each responding airline's OAA will be modeled three-dimensionally for mapping and analysis purposes. Comparison to the models to understand mapped points collected through the new data collection efforts and obstacle data obtained from FAA and NGS will be mapped and coordinated with each airline to ensure accurate depiction and location of the individual OAAs and representative OEI surfaces. From all the individual surfaces developed, a composite map depicting the lowest surface will be developed. This surface will represent the airspace that airlines apply and hope to be protected for by the local governing agency to be cleared of obstructions so that they can maximize the lift capacity of their fleets. All necessary graphics and digital data will be generated to depict the critical surfaces and controlling obstacles for each runway's operations. The final digital surface will be transferred to the FAA's internal OE/AAA analysis tool for obstruction analysis.

DELIVERABLES

- * 3DAAP OAA/OEI AutoCAD Surface Drawings
- * iALP Web-Based OAA/OEI Data Files

Task 3 – Obstruction Analysis Airports GIS

On top of the Airports GIS obstruction data collected, other sources of data that will be reviewed are the National Flight Data Center's (NFDC) National Airspace System Resources (NASR) data (FAA's main source of airport data to include facility, runway, etc..), NGS's Digital Obstruction File (DOF), Obstruction Chart (OC), OE/AAA proposed development both on and off airport, any new facility data and plans from any master planning data. Once the new obstruction points have been mapped by the data collection firm as per FAA Advisory Circulars (AC) 150/5300-16, 17b and 18b, these points will be utilized to process penetrations to FAR Part 77, TERPS and OEI surfaces developed from the above tasks and included into the iALP. Analytical reports, AutoCAD and Google three-dimensional graphics will be developed for discussions with PIE. Any penetrations to the TERPS and Part 77 surfaces that need to be mitigated will be discussed with the PIE prior to FAA submittal. Final understandable and useful graphics will be provided to the PIE for use in obstruction clearing along with a maintainable database within the iALP. In addition the Part 77.19 penetration will be developed and utilized for the ALP airspace sheets development.

Included within this tasks will be the incorporation of collected Airports GIS data in the iALP.

DELIVERABLES

- * Analytical Reports of Any Penetrations to Any Surfaces
- * AutoCAD 3D Graphics of Penetrations
- * Google 3D Data Files of Penetrations
- * Population of iALP Obstruction and Airports GIS Database

	Labor Category	Project	Senior	Computer						
Task #	Task Name/Description	Manager \$ 158	Specialist \$ 138	Design 79	Total Hours	Labor Price		Task #		Subtotals
Task 1	Project Initiation	\$ 130	3 130	13				Task 1	\$	-
1.1	Study Design and Planning Charrette				-	\$ - \$ -		1.1		
1.2	Project Kick-off Meetings Tenant and User Interviews				-	\$ - \$ -		1.2		
1.4	Aerial Mapping and Airports Geographic Information System (AGIS)				-	\$ -		1.4		
1.4.1	Vertically Guided Approach Obstruction Analysis Analysis of Features within Obstruction Identification Surface				-	\$ -		1.4.1		
1.4.3	Planimetric and Topographic Mapping	•			-	\$ -		1.4.3		
Task 2	Existing Conditions							Task 2	\$	-
2.1	Airport and Surrounding Area Inventory Airfield Facilities and Surrounding Airspace				-	\$ - \$ -		2.1.1		
2.1.2	Airside Facilities				-	\$ -		2.1.2		
2.1.3	Support Facilities				-	\$ -		2.1.3		
2.1.4 2.1.5	Airport, Community, and Surrounding Area Features Airport Data				-	\$ -		2.1.4		
2.2	Passenger Terminal Facilities				-	\$ -		2.2		
2.3	Passenger Terminal Access, Circulation, and Automobile Parking				-	\$ -		2.3		
2.3.1	Terminal Access Roadway Terminal Curbfront					\$ - \$ -		2.3.1		
2.3.3	Automobile Parking				-	\$ -		2.3.3		
2.3.4	Rental Cars Counts and Observations				-	\$ - \$ -		2.3.4		
2.3.5	Commercial Passenger Market Data				-	\$ -		2.3.5		
Task 3	Aviation Forecasts							Task 3	\$	-
3.1	Evaluation of Historic and Previous Forecasts				-	\$ -		3.1		
3.2	Baseline Forecast Preparation Alternative Forecast Scenarios				-	\$ - \$ -		3.2		
3.4	Baseline Forecast Review Coordination				-	\$ -		3.4		
Task 4	Facility Assessment and Requirements							Task 4	\$	36,690
4.1	Airfield Demand Capacity Analysis Airfield Facility Requirements				-	\$ - \$ -		4.1 4.2		
4.3	Navigational Aids, Metroplex, and TERPS Analysis		168	170	338	\$ 36,690		4.3		
4.4	Airside Facility Requirements				-	s -		4.4		
4.5 4.6	Requirements for Passenger Terminal Facilities Terminal Access, Circulation, and Automobile Parking				-	\$ - \$ -		4.5 4.6		
4.7	Landside Facility Requirements				-	\$ -		4.7		
Task 5	Environmental Analyses			1		•		Task 5	\$	-
5.1	Natural Resources and Environmental Overview Noise Modeling				-	\$ - \$ -		5.1		
5.3	Sustainability				-	\$ -		5.3		
5.3.1 5.3.2	Sustainability Baseline Assessment				-	\$ - \$ -		5.3.1 5.3.2		
5.3.2	Develop Sustainability Goals and Objectives / Alternative Screening Criteria Solid Waste Recycling (Waste Audit)				-	\$ -		5.3.2		
5.5	Infrastructure Resiliency Planning				-	\$ -		5.5		
5.5.1 5.5.2	Vulnerability Assessment Resiliency Planning				-	\$ -		5.5.1 5.5.2		
5.6	Stormwater Management Plan Update				-	\$ -		5.6		
5.6.1	Data Collection and Data Verification				-	\$ -		5.6.1		
5.6.2 5.6.3	Design Methodology Schematic Design				-	\$ - \$ -		5.6.2 5.6.3		
5.6.4	Final Schematic Design				-	\$ -		5.6.4		
Task 6	Alternatives for Airport Development							Task 6	\$	-
6.1	Constraints Analysis Initial Development Options				-	\$ - \$ -		6.1		
6.3	Alternatives for Future Passenger Terminal Facilities				-	\$ -		6.3		
6.4	Terminal Access, Circulation, and Automobile Parking Alternatives				-	\$ -		6.4		
6.5 Task 7	Recommended Development Alternatives Airport Layout Plan Drawing Set				-	\$ -		6.5 Task 7	s	
7.1	Airport Layout Plan Set Preparation				-	\$ -	-	7.1	Ť	
7.1.1	Title Sheet				-	\$ -		7.1.1		
7.1.2 7.1.3	Airport Data Sheet Airport Layout Plan				-	\$ - \$ -		7.1.2 7.1.3		
7.1.4	Terminal Area Drawings (2 sheets)				-	\$ -		7.1.4		
7.1.5	Airport Airspace Drawings (3 sheets)				-	\$ -		7.1.5		
7.1.6 7.1.7	Inner Portion of the Approach Surface Drawings (3 sheets; Runway Departure Surface Drawing				-	\$ - \$ -	-	7.1.6 7.1.7		
7.1.7	Land Use Drawings (2 sheets)				-	\$ -		7.1.8		
7.1.9	Airport Property Map (3 sheets)				-	\$ -	LΠ	7.1.9		
7.2	Airport Layout Plan Review Coordination Exhibit "A" Property Inventory Map				-	\$ - \$ -		7.2 7.3		
Task 8	Recommended Development Program							Task 8	\$	-
8.1 8.2	Inventory of Financial Information Preliminary Financial Analysis				-	\$ -		8.1 8.2		
8.2	Financial Implementation Plan Development				-	\$ -		8.3		
8.4	Cost Estimates				-	\$ -		8.4		
8.5 Task 9	Development Program Stakeholder Coordination and Public Outreach				-	\$ -		8.5 Task 9	_	
9.1	Airport Management Coordination				-	\$ -		9.1	\$	-
9.2	Ongoing Working Group Meetings				-	\$ -		9.2		
9.3 9.3.1	Agency Coordination St. Pete-Clearwater International Airport Traffic Control Towe				-	\$ - \$ -	-1	9.3 9.3.1		
9.3.1	St. Pete-Clearwater International Airport Traffic Control Towe FAA Orlando Airports District Office (ADO)				-	\$ -		9.3.1		
9.3.3	FDOT District 7 Office				-	\$ -		9.3.3		
9.4	Public Outreach Project Website				-	\$ - \$ -		9.4 9.4.1		
9.4.1	Project Website Public Workshop #1				-	\$ -		9.4.1		
9.4.3	Public Workshop #2				-	\$ -		9.4.3		
9.4.4 Task 10	Public Comment Management				-	\$ -		9.4.4 Task 10		
10.1	Report Preparation Working Paper Development (4 total)				-	\$ -		10.1	\$	-
10.2	Draft Master Plan Report and ALP Drawing Set					\$ -		10.2		
10.3 Task 11	Final Master Plan Report and ALP Drawing Set Project Administration					s -		10.3 Task 11	e	
11.1	Project Administration Project Management					\$ -		11.1	\$	-
11.2	Quality Assurance and Control				-	\$ -		11.2		
11.3	Project Close Out Expenses				-	\$ - \$ -		11.3 11.4	-	
Total Hou		-	168		338		ij			20.000
Total Lab	IUI CUSIS	\$ -	\$ 23,260	\$ 13,430	İ	\$ 36,690			\$	36,690

Subconsultant 7 – Woolpert Scope and Fee Estimate



May 9, 2017

Douglas J. DiCarlo Aviation Program Manager ESA 4200 West Cypress Street, Suite 450 Tampa, FL 33607

RE: Proposal: Aerial Photography and Surveying Services at St. Pete-Clearwater International Airport (PIE)

Dear Mr. DiCarlo:

We appreciate the opportunity to provide a proposal for supporting ESA with geospatial services at the St. Pete-Clearwater International Airport (PIE) in Saint Petersburg-Clearwater, FL. The fee and bulleted list of scope functions is understood to be completed in accordance with the FAA Advisory Circulars 150/5300-16A, -17C, and -18B, change 1, with further guidance from the FAA Southern Region (ASO) and the Office of Airports Safety and Standards (AAS) in Washington, D.C.

Project Understanding

Woolpert understands that this project will follow the standards for a Vertically Guided Runway survey from AC 150/5300-18B, specifically Table 2-1 requirements for an Airport Layout Plan (ALP) as shown in Attachment "B". The project will be focused around performing three main tasks:

- Obstruction analysis for AC 150/5300-18B, Vertically Guided Approach Obstruction Identification Surfaces as shown in Attachment "A" for Existing Runways 04/22 & 18/36.
- Obstruction analysis for features within 12.5' of the FAR Part 77, Non-Precision Type "C" Obstruction Identification Surfaces for Existing Approach 04, Visual "B" Obstruction Identification Surfaces for Existing Approach 22 & Precision Instrument Runway (PIR) Obstruction Identification Surfaces truncated to 20,000' feet in length for Existing Approaches 18/36.
- 3) Planimetric/Topographic mapping of Mapping Limits as shown in Attachment "C"

Task 01 - Obstruction analysis for AC 150/5300-18B, Vertically Guided Approach Obstruction Identification Surfaces as shown in Attachment "A" for Existing Runways 04/22 & 18/36.

 Initiate and complete the AGIS Project process on the AGIS web portal as an Instrument Procedure Development survey

> Woolpert, Inc. 4454 Idea Center Boulevard Dayton, OH 45430-1500 937.461.5660

- Develop SOW and plans as required
- PIE does possess existing Primary and Secondary Airport Control Stations (PACS/SACS). The PACS/SACS will be recovered and utilized as the basis of control in accordance with AC-16A.
- Establish photogrammetric control and collect stereo imagery covering the surface area defined by the Vertically Guided Runway standards
 - Estimated 20 control points and 5 check points
 - Collect imagery at a 0.5' ground-sample distance, flight layout will be provided
 - Imagery Limits can be found in Attachment "A"
 - Collected with leaf-on conditions
- Geo-referencing of aerial photography
- Runway critical point survey on all usable runways
- Runway profile survey on all usable runways
- Navigational aid inventory for NAVAIDs associated to the airport (within 10 NM of ARP) including the associated perpendicular points
- Obstruction analysis for objects penetrating the Vertically Guided surfaces
 - Woolpert will request existing obstruction data for PIE from the FAA for review of the OIS.
 - If information is not available, a collection of objects penetrating the OIS will be collected using the density selection criteria.
- Development of new ortho-photography of entire project area
 - Pixel resolution of 0.5-feet over entire project area
- The VGA Imaginary Surfaces shall show 50 foot interval contours which are labeled
- Collect major landmark features within imagery coverage
- Population of calculable and required attributes
- Develop an AGIS compliant data file containing the safety critical data required to achieve instrument approach procedure development
- Develop the final reports to AGIS
 - Imagery Acquisition Report
 - Final Project Report

Task 02 - Obstruction analysis for features within 12.5' of the FAR Part 77, Non-Precision Type "C" Obstruction Identification Surfaces for Existing Approach 04, Visual "B" Obstruction Identification Surfaces for Existing Approach 22 & Precision Instrument Runway (PIR) Obstruction Identification Surfaces truncated to 20,000' feet in length for Existing Approaches 18/36.

- Obstruction analysis for surface penetrations and features within 12.5 feet of the FAR Part 77 surfaces
 - All features which penetrate these surface lowered 12.5 feet are to be collected.
 - Ground elevations will be provided for any object within 12.5 feet of the specified FAR Part 77 surface. Exact accuracy of the ground positions may vary depending upon the visibility of the ground within the aerial imagery. Where major elevation breaks are not present, it is anticipated that the 200' grid will be used to calculate the majority of ground elevations.
- Areas of tree canopy that penetrate the specified OIS surface lowered 12.5 feet shall be contoured at 5 foot contour intervals. Individual trees extending significantly above the tree canopy shall not be contoured but will have a spot elevation on top
 - The outline of the limits of the tree canopy penetrating the OIS surface lowered 12.5 feet is to be identified
- Areas of terrain that penetrate the specified OIS surface lowered 12.5 feet shall be contoured at 2 foot contour intervals.
- Obstruction accuracies will meet the National Map Accuracy standards for 1"=800' scale photography
- Spot elevations on a 200' grid inside the specified Part 77 approach surfaces
 - This grid will not be provided in obscured areas or areas over water
 - Areas of ground penetration will be captured at a 100 foot grid interval
 - The outline of the limits of the ground penetrating the OIS surface lowered
 12.5 feet is to be identified
- All railroad and road centerlines will have a spot elevation where they cross the extended runway centerline and the exterior limits of the OIS surfaces.
- Top height for all buildings on airfield property shall be provided.
- The Part 77 Imaginary Surfaces shall show 50 foot interval contours which are labeled
- Develop and deliver to ESA Companies a Microsoft Excel file containing information to all Obstacles that were collected within 12.5 feet of the Obstruction Identification Surfaces

- This spreadsheet will contain Northing, Easting, Elevation, Penetration Depth, Station, and Offset information
- Develop and deliver to ESA Companies an AutoCAD file containing information to all Obstacles that were collected within 12 feet of the Obstruction Identification Surfaces

Task 03 - Planimetric/Topographic mapping of Mapping Limits as shown in Attachment "C"

- Utilize imagery collected for airspace analysis in Tasks 01 & 02 for development of planimetric and topographic mapping.
- Develop mapping features to generate 1"=100' scale mapping at 2' contour intervals.
 - o Existing LiDAR has been flown over the airport and this LiDAR will be utilized to assist in generating 2' contours.
- Mapping will include features required for standard Airport Layout Plan (ALP) base mapping as shown in Attachment "D".
- Attributes that are required or calculable will be populated and submitted to AGIS as an Existing Data project.
- The Airport Layout Column in Table 2-1 of AC 150/5300-18B has a few items that are not traditionally a part of the airport base mapping. It is anticipated that ESA will address these items and that these items are not a part of Woolpert's scope:
 - Determine if the runway has an associated clearway
 - Determine all Land Use to 65 DNL contour
 - Identify and document wetlands or environmentally sensitive areas

Fee Estimate Breakdown

The survey fee estimate has been separated into individual breakdowns for each task.

	Fee Estimate
Task 01: AC-18B Obstruction Analysis	\$63,234
Task 02: FAR Part 77 Obstruction Analysis	\$18,731
Task 03: Planimetric/Topographic Mapping	\$45,842
Project Total =	\$127,807

Woolpert estimates the entire project to take 6 months (contingent on ability to capture leafon imagery) from the official notice-to-proceed to the date of delivery to the final data file and report to the Airports GIS website. The proposed fee estimates are valid for ninety (90) days from proposal date.

Please don't hesitate to contact me to discuss any comments or questions you may have (937.531.1631).

Sincerely,

Woolpert, Inc. Eric Risner, PS

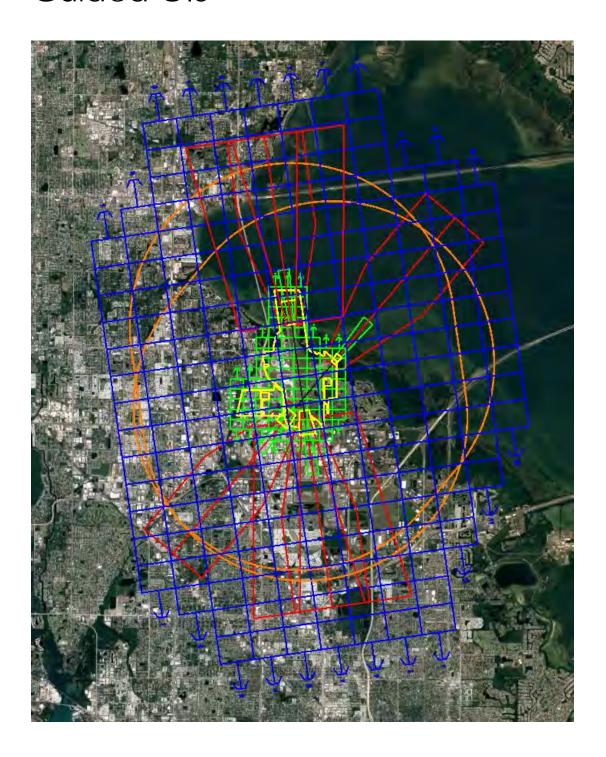
Aviation Project Manager

Woolpert, Inc.

Thomas E. Mackie, PS Aviation Project Director

Vice President

Attachment A: AC-18B Vertically Guided OIS



Attachment B: Survey Requirements

This table is designed for use in two ways. First, it defines in a general fashion the task required to meet a specific objective. Each task listed is generalized and the process to complete it many contain many other pieces. Users should refer to the text of the referenced AC to ensure that all the required subtasks are completed. The second way to use this matrix is as a checklist to ensure all the required data is collected either before leaving the field or submitting the data to the FAA.

Intended End Use of the Data >	AC Reference	Airport Layou Plan (ALP)
Required Tasks 🔻		
Provide a Survey and Quality Control Plan	150/5300-16/17/18	
Establish or validate Airport Geodetic Control	150/5300-16	
Perform, document and report the tie to National Spatial Reference System (NSRS)	150/5300-16	•
Survey runway end(s)/threshold(s)	150/5300-18	
Monument runway end(s)/threshold(s)	150/5300-18	
Document runway end(s)/threshold location(s)	150/5300-18	
Identify and survey any displaced threshold(s)	150/5300-18	
Monument displaced threshold(s)	150/5300-18	•1
Document displaced threshold(s) location	150/5300-18	
Determine or validate runway length	150/5300-18	
Determine or validate runway width	150/5300-18	•
Determine runway profile using 50 foot stations	150/5300-18	•1
Determine runway profile using 10 foot stations	150/5300-18	•2
Determine the touchdown zone elevation (TDZE)	150/5300-18	
Determine and document the intersection point of all specially	150/5300-18	
prepared hard surface (SPHS) runways	150/5500 10	20
Determine and document the horizontal extents of any Stopways	150/5300-18	•
Determine any Stopway profiles	150/5300-18	•
Determine if the runway has an associated clearway	150/5300-18	
Survey clearway to determine objects penetrating the slope	150/5300-18	•
Determine and document the taxiway intersection to threshold distance	150/5300-18	•
Determine runway true azimuth	150/5300-18	
Determine or validate and document the position of navigational aids	150/5300-18	•
Determine or validate and document the position of runway abeam points of navigational aids	150/5300-18	
Determine potential navigational aid screening objects	150/5300-18	
Collect and document VOR receiver checkpoint location and associated data	150/5300-18	
Perform or validate and document an airport airspace analysis	150/5300-18	•
Collect and document helicopter touchdown lift off area (TLOF)	150/5300-18	100
Collect and document helicopter final approach and takeoff area (FATO)	150/5300-18	
Collect or validate and document airport planimetric data	150/5300-18	•
Determine or validate the elevation of the Air Traffic Control Tower Cab Floor (if one is on the airport)	150/5300-18	•
Perform or validate a topographic survey	150/5300-18	•
Collect and document runway and taxiway lighting	150/5300-18	•
Collect and document parking stand coordinates	150/5300-18	
Collect cultural and natural features of landmark value	150/5300-18	•
Determine elevation of roadways at the intersecting point of the Runway Protection Zone (RPZ) or the runway centerline extended	150/5300-18	•
Determine all Land Use to 65 DNL contour	150/5300-18	
Document features requiring digital photographs	150/5300-18	
Document features requiring digital photographs Document features requiring sketches	150/5300-18	
Collect position and type of runway markings	150/5300-18	
Collect position and type taxiway markings	150/5300-18	•
Locate, collect, and document photo ID points	150/5300-17	
Identify collect, and document wetlands or environmentally sensitive areas	150/5300-17	- •
Collect imagery	150/5300-17	
Provide a final Project Report	150/5300-16/18	

¹ All 14 CFR Part 139 airports require 10 foot stations. At all other airports the distance between stations is between 10 and 50 feet to meet local requirements

Attachment C: Mapping Limits



Attachment D: ALP Feature List

	Sur-Areas				a de la composition		
Safe	ety Critical	X On Airport	X Off Airport	Nor	n-Safety Critical	X On Airport	Off Airport
1	AirportControlPoints	X	X	1	AircraftGateStand	X	
2	CoordinateGridArea	X	X	2	AircraftNonMovementArea	X	
3	MarkingArea (Runway only)	X		3	AirfieldLight	X	
4	MarkingLine (Runway only)	X		4	AirfieldSign	X	
5	Navaidequipment	X	X	5	Apron	X	
6	Obstacle	X	X	6	ArrestingGear	X	
7	ObstructionArea	X	X	7	Bridge	X	X
8	ObstructionIDSurface	X	X	8	Building	X	X
9	Runway	X		9	DrivewayArea	X	
10	RunwayBlastPad	X		10	DrivewayCenterline	X	Г
11	RunwayCenterline	X		11	ElevationContour	X	X
12	RunwayElement	X		12	Fence	X	
13	RunwayEnd	X		13	Gate	X	Г
14	RunwayHelipadDesignSurfaces	X	X	14	ImageArea	X	X
15	RunwayIntersection	X			LandmarkSegment	X	X
16	RunwayLabel	X		16	MarkingArea (Off Runway)	X	
17	RunwayLAHSO	X		17	MarkingLine (Off Runway)	X	
18	TouchDownLiftOff	X		18	MovementArea	X	Г
				19	ParkingLot	X	X
				20	PassengerLoadingBridge	X	
				21	RailroadCenterline	X	X
				22	RailroadYard	X	X
				23	RoadCenterline	X	X
				24	RoadPoint	X	X
				25	RoadSegment	X	X
				26	RunwayArrestingArea	X	
				27	Shoreline	X	X
				28	Shoulder	X	
				29	State	X	X
				30	TankSite	X	
				31	TaxiwayElement	X	
				-	Taxiwayholdingposition	X	Г
					TaxiwayIntersection	X	
				-	Tower	X	X
				35		X	X

Attachment B – Federal Aviation Administration Contract Provisions



Required Contract Provisions for Airport Improvement Program and for Obligated Sponsors

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RECORD OF CHANGES

No.	Date	Item	Change
1	1/29/2016	Entire Document	Re-structured document to enhance user understanding of use and applicability; added suggested provisions for "Termination for Cause", "Recovered Materials", "Seismic Safety".
2	6/10/2016	Table 1	Item 10, Distracted Driving: Updated "Dollar Threshold" to \$3,500 to reflect current micro-purchase threshold.
2	6/10/2016	A2, Affirmative Action	Update the reference to the Department of Labor online document to be "Participation Goals for Minority and Females"
2	6/10/2016	A12, Disadvantaged	A12.3: Changed Title to "Required Provisions"
		Business Enterprise	A12.3.1: Corrected starting timeframe for submitting written confirmation from "Owner Notice of Award" to "bid opening"
			A12.3.1: Provided two sets of last paragraphs to reflect change (7 days to 5 days) that occurs on December 31, 2016.
			A12.3.2: Moved Race/Gender Neutral language up and renamed heading to reflect text is solicitation language.
			A12.3.3: Moved and renamed contract clause information and clarified it is for prime contract covered by a DBE program.

REQUIREMENTS

1. Required Contract Provisions

Federal laws and regulations require that recipients of federal assistance (Sponsors) include specific contract provisions in certain contracts, requests for proposals, or invitations to bid.

Certain provisions must be included in all sponsor contracts, regardless of **whether or not** the contracts are federally-funded. This requirement was established when a sponsor accepted the Airport Improvement Program (AIP) grant assurances.

To maintain eligibility of their procurement actions, a sponsor must incorporate applicable contract provisions in all federally-assisted procurement and contract documents, including all subcontracts. For purposes of determining requirements for contract provisions, the term *contract* includes subcontracts.

2. Sponsor Requirements

In general, the sponsor must:

- 1) Incorporate applicable contract provisions in each contract funded under AIP;
 - a. Except as noted herein, a sponsor must physically incorporate the text of the provision within the procurement documents.
 - b. Where specifically noted, sponsors may incorporate select provisions by reference provided the sponsor indicates that the reference has the same force and effect as if given in full text.
- 2) Require the contractor (including all subcontractors) to insert these contract provisions in each lower tier contracts (e.g. subcontract or sub-agreement);
- 3) Require the contractor (or subcontractor) to incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services;
- 4) Require that the prime contractor be responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor or service provider;
- 5) Verify that any required local or State provision does not conflict with, or alter a Federal law or regulation.

3. Incorporation of Provisions

The statutes and regulations that establish the requirements for contract provisions do not always specify language the sponsor must use to address the requirement. Appendix A of this guide provides information on when a provision or clause has mandatory language that a sponsor must apply. Refer to the subheading *Applicability* for each provision.

Whenever a clause or provision has mandatory text, the sponsor must incorporate the text of the provision without change. The only exception to this restriction is for those instances within the provision text that require the sponsor to insert appropriate information such as name or value. To align with the sponsor's standard contract language, the word "Owner" may also be replaced with "Airport

Authority" or their standard method of referring to the sponsor in contracts. Any modification beyond what is specifically permitted is not permitted and may invalidate the clause.

For those provisions that do not have required language, this guidance provides model language acceptable to the FAA in meeting the intent and purpose of the law or regulation. Some sponsors may already have standard procurement language that is equivalent to those Federal provisions that do not have explicit mandatory language. In these cases, sponsors may use their existing standard procurement provision language provided the text meets the intent and purpose of the Federal law or regulation.

Contract clause language must be made available to bidders. The Sponsor does this by including the required language in Requests for Bids, Notices to Bidders, or in the contract.

4. Requests for Bids (Advertisement) and Notice to Bidders

The sponsor may incorporate certain provisions *by reference* in the Request for Bids (the Advertisement) rather than including the entire text of the provision in the Request or Notice to Bidders. The sponsor must incorporate the full text of these provisions within any contract that originates from the procurement action. The provisions that can be incorporated by reference in the Request or Notice are:

- 1) Buy American Preference
- 2) Foreign Trade Restriction
- 3) Davis Bacon
- 4) Affirmative Action
- 5) Government-wide Debarment and Suspension
- 6) Government-wide Requirements for Drug-free Workplace

5. Requirements For All Contracts Entered into by Obligated Sponsors.

A sponsor's acceptance of previous grant assurances obligates them to include certain notifications in all contracts and procurement actions they undertake regardless of funding source. Contracts and agreements fully funded by the sponsor must incorporate those select provisions.

6. Failure to Comply with Provisions

Sponsor failure to incorporate required provisions will jeopardize AIP eligibility of the sponsor's project. Contractor failure to comply with the terms of these contract provisions may be sufficient grounds to:

- 1) Withhold progress payments or final payment;
- 2) Terminate the contract for cause;
- 3) Seek suspension/debarment; or
- 4) Take other action determined to be appropriate by the sponsor or the FAA.

7. Applicability Matrix for Contract Provisions

<u>Table 1</u> summarizes the applicability of contract provisions based upon the type of contract or agreement. The dollar threshold represents the value at which, when equal to or exceeded, the sponsor must incorporate the provision in their contract or agreement. Supplemental information addressing applicability and use for each provision is located in Appendix A.

Meaning of cell values

- REQD a provision the sponsor must incorporate in their procurement action.
- Limited –a provision with limited applicability depending on circumstances of the procurement.
- n/a a provision that is not applicable for that procurement type.

Table 1 – Applicability of Provisions

		Dollar	Professional			Property	Non-AIP
	Provision	Threshold	Services	Construction	Equipment	(Land)	Contracts
a.	Access to Records and Reports	\$ 0	REQD	REQD	REQD	REQD	n/a
b.	Buy American Preferences	\$ 0	Limited	REQD	REQD	Limited	n/a
<u> </u>	(1) <u>Buy American Statement</u>	\$ 0	Limited	REQD	REQD	Limited	n/a
	(2) Buy American – Total Facility	\$0	Limited	REQD	REQD	Limited	n/a
	(3) Buy American – Manufactured	\$ 0	Limited	REQD	REQD	Limited	n/a
	<u>Product</u>						
c.	<u>Civil Rights – General</u>	\$0	REQD	REQD	REQD	REQD	REQD
d.	<u>Civil Rights - Title VI Assurances</u>	\$0	REQD	REQD	REQD	REQD	REQD
	(1) Notice - Solicitation	\$ 0	REQD	REQD	REQD	REQD	REQD
	(2) <u>Clause - Contracts</u>	\$0	REQD	REQD	REQD	REQD	REQD
	(3) <u>Clause – Transfer of U.S. Property</u>	\$0	n/a	n/a	n/a	REQD	REQD
	(4) Clause – Transfer of Real	\$0	n/a	n/a	n/a	REQD	REQD
	<u>Property</u>						
	(5) <u>Clause - Construct/Use/Access to</u>	\$0	n/a	n/a	n/a	REQD	REQD
	Real Property						
	(6) <u>List – Pertinent Authorities</u>	\$0	REQD	REQD	REQD	REQD	REQD
e.	<u>Disadvantaged Business Enterprise</u>	\$ 0	REQD	REQD	REQD	REQD	n/a
f.	Energy Conservation Requirements	\$0	REQD	REQD	REQD	REQD	n/a
g.	<u>Federal Fair Labor Standards Act</u>	\$0	REQD	REQD	REQD	REQD	REQD
h.	Occupational Safety and Health Act	\$ 0	REQD	REQD	REQD	REQD	REQD
i.	Rights to Inventions	\$0	Limited	Limited	Limited	n/a	n/a
j.	<u>Trade Restriction Certification</u>	\$0	REQD	REQD	REQD	REQD	n/a
k.	<u>Veteran's Preference</u>	\$0	REQD	REQD	REQD	REQD	n/a
<u>l.</u>	Seismic Safety	\$0	Limited	Limited	n/a	n/a	n/a
m.	Copeland Anti-Kickback	\$ 2,000	Limited	REQD	Limited	Limited	n/a
n.	<u>Davis Bacon Requirements</u>	\$ 2,000	Limited	REQD	Limited	Limited	n/a
o.	Distracted Driving	\$3,500	REQD	REQD	REQD	REQD	n/a
p.	Affirmative Action Requirement	\$10,000	Limited	REQD	Limited	Limited	n/a
q.	Equal Employment Opportunity	\$10,000	Limited	REQD	Limited	Limited	n/a
	(1) EEO Contract Clause	\$10,000	Limited	REQD	Limited	Limited	n/a
	(2) EEO Specification	\$10,000	Limited	REQD	Limited	Limited	n/a
r.	<u>Prohibition of Segregated Facilities</u>	\$10,000	Limited	REQD	Limited	Limited	n/a
s.	Recovered Materials	\$10,000	Limited	REQD	REQD	Limited	n/a
t.	<u>Termination of Contract</u>	\$10,000	REQD	REQD	REQD	REQD	n/a
u.	Debarment and Suspension	\$25,000	REQD	REQD	REQD	Limited	n/a
٧.	Contract Work Hours and Safety	\$100,000	Limited	REQD	Limited	Limited	n/a
	<u>Standards</u>						
w.	Lobbying Federal Employees	\$ 100,000	REQD	REQD	REQD	REQD	n/a
х.	Breach of Contract	\$150,000	REQD	REQD	REQD	REQD	n/a
	Clean Air/Water Pollution Control	\$150,000	REQD	REQD	REQD	REQD	n/a

APPENDIX A - CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.1 SOURCE

2 CFR § 200.333

2 CFR § 200.336

FAA Order 5100.38

A1.2 APPLICABILITY

2 CFR § 200.333 requires a sponsor to retain records pertinent to a Federal award for a period of three years from submission of final closure documents. 2 CFR § 200.336 establishes that sponsors must provide Federal entities the right to access records pertinent to the Federal award. FAA policy extends these requirements to the sponsor's contracts and subcontracts of AIP funded projects.

Contract Types – The sponsor must include this provision in all contracts and subcontracts of AIP funded projects.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200.

A1.3 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

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.

A2 AFFIRMATIVE ACTION REQUIREMENT

A2.1 SOURCE

41 CFR part 60-4

Executive Order 11246

A2.2 APPLICABILITY

Minority Participation. Sponsors are required to set goals for minority participation in AIP funded projects. The goals for minority participation depend on Economic Area (EA) and Standard Metropolitan Statistical Area (SMSA) as established in Volume 45 of the Federal Register dated 10/3/80. Page 65984 contains a table of all EAs and SMSAs and the associated minority participation goals.

To find the goals for minority participation, a sponsor must either refer to the Federal Register Notice or to the Department of Labor online document, "<u>Participation Goals for Minorities and Females</u>". EA's and SMSA's cross state boundaries so a sponsor may have to refer to entries for adjacent states to find their project location.

A sponsor must insert the applicable percentage minority goal. Sponsor must not simply insert a reference to the Federal Register Notice.

Female Participation. Executive Order 11246 has set a goal of 6.9% nationally for female participation for all construction contractors. This value does not change per county or state.

Contract Types -

Construction: The sponsor must incorporate this notice in all solicitations for bids or requests for proposals for AIP funded construction work contracts and subcontracts that exceed \$10,000. Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

Equipment: The sponsor must incorporate this notice in any equipment project exceeding \$10,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. firefighting and snow removal vehicles)

Professional Services: The sponsor must incorporate this notice in any professional service agreement if the professional service agreement includes construction work (as defined above) that exceed \$10,000. Examples include installation of noise monitoring systems.

Property/Land: The sponsor must incorporate this notice in any agreement associated with land acquisition if the agreement includes construction work (defined above) that exceeds \$10,000. Examples include demolition of structures or installation of boundary fencing.

Use of Provision – The sponsor must incorporate the text of this provision without modification. The sponsor must incorporate the established minority participation goal and the covered area by geographic name within the provision text.

A2.3 CONTRACT CLAUSE

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

- 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 minority participation for each trade: [sponsor must insert established goal]

Goals for female participation in each trade: 6.9%

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 [sponsor must insert state, county, and city].

A3 BREACH OF CONTRACT TERMS

A3.1 SOURCE

2 CFR § 200 Appendix II(A)

A3.2 APPLICABILITY

This provision requires sponsors to incorporate administrative, contractual or legal remedies if contractors violate or breach contract terms. The sponsor must also include appropriate sanctions and penalties.

Contract Types – This provision is required for all contracts that exceed the simplified acquisition threshold as stated in 2 CFR Part 200, Appendix II (A). This threshold is occasionally adjusted for inflation, and is now equal to \$150,000.

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200. Select either "contractor" or "consultant" as applicable.

A3.3 CONTRACT CLAUSE

BREACH OF CONTRACT TERMS

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 [Contractor | Consultant] written notice that describes the nature of the breach and corrective actions the [Contractor | 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 [Contractor | Consultant] must correct the breach. Owner may proceed with termination of the contract if the [Contractor | 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.

A4 BUY AMERICAN PREFERENCE

A4.1 SOURCE

Title 49 USC § 50101

A4.2 APPLICABILITY

The Buy-American Preference requirement in 49 USC § 50101 requires that all steel and manufactured goods used on AIP projects be produced in the United States. The statute gives the FAA the ability to issue a waiver to a sponsor to use non-domestic material on the AIP funded project. The sponsor may request that the FAA issue a waiver from the Buy American Preference requirements if the FAA finds that:

- 1) Applying the provision is not in the public interest;
- 2) The steel or manufactured goods are not available in sufficient quantity or quality in the United States;
- 3) The cost of components and subcomponents produced in the United States is more than 60 percent of the total components of a facility or equipment, and final assembly has taken place in the United States. Items that have an FAA standard specification item number (such as specific airport lighting equipment) are considered the equipment.
- 4) Applying this provision would increase the cost of the overall project by more than 25 percent.

Timing of Waiver Requests. The sponsor must submit Type 1 or Type 2 waiver requests *before* issuing a solicitation for bids or a request for proposal for a project.

The sponsor must submit Type 3 or Type 4 waiver requests *prior* to executing the contract. The FAA will generally not consider waiver requests after execution of the contract except where extraordinary only if extenuating circumstances exist. The FAA cannot review incomplete waiver requests or requests that the Sponsor has not reviewed for adequacy. Sponsor must assess the adequacy of the waiver request before forwarding the request to the FAA.

Buy American Conformance List. The FAA Office of Airports maintains a listing of equipment that has received National waivers from the Buy American Preference requirements or that fully meet the Buy American requirements. This Buy American Conformance List is available online at www.faa.gov/airports/aip/buy american/. Products listed on the Buy American Conformance list do not require a project specific Buy American Preference requirement waiver from the FAA.

Facility Waiver Requests. For construction of a facility, the sponsor may submit the waiver request after bid opening, but prior to contract execution. Examples of facility construction include terminal buildings, terminal renovation, and snow removal equipment buildings.

Contract Types -

Construction and Equipment - The sponsor must meet the Buy American Preference requirements of 49 USC § 50101 for all AIP funded projects that require steel or manufactured goods. The Buy America requirements flow down from the sponsor to first tier contractors, who

are responsible for ensuring that lower tier contractors and subcontractors are also in compliance.

Note: the Buy American Preference does not apply to equipment a contractor uses as a tool of their trade and does not remain as part of the project.

Professional Services – Professional service agreements (PSA) do not normally result in a deliverable that meets the definition of a manufactured product. However, the emergence of different project delivery methods has created situations where task deliverables may include a manufactured product. If a PSA includes providing a manufactured good as part of the contract, the sponsor must include the Buy American Preference provision in the agreement.

Property – Most land transactions do not involve acquiring a manufactured product. However, under certain circumstances, a property acquisition project could result in the installation of a manufactured product. For example, the installation of property fencing, gates, doors and locks, etc. represent manufactured products acquired under the AIP funded project that must meet the Buy American Preference.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully comply with 49 USC § 50101.

There are two types of Buy American certifications. The sponsor must incorporate the appropriate "Certificate of Buy America Compliance" in the solicitation:

- Projects for a facility (Buildings such as Terminal, SRE, ARFF, etc.) Insert the Certificate of Compliance Based on Total Facility
- Projects for non-facility development (non-building construction projects such as runway or roadway construction; or equipment acquisition projects) – Insert the Certificate of Compliance Based on Equipment and Materials Used on the Project.

A4.3 CONTRACT CLAUSE

A4.3.1 Buy American Preference Statement

BUY AMERICAN PREFERENCE

The contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the FAA has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A4.3.2 Certificate of Buy American Compliance – Total Facility

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC \S 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (\checkmark) or the letter "X".

	Bidder or offeror hereby	certifies that it will comply	with 49 USC, 50101 by
_	Didder of offeror field	certifies that it will compr	y with 47 CBC. 30101 by

- a) Only installing steel and manufactured products produced in the United States; or
- b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- 1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing US domestic products.
- 3. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- ☐ The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
 - 1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 - 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
 - 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
 - 4. To furnish US domestic product for any waiver request that the FAA rejects.
 - 5. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver - The cost of components and subcomponents produced in the United States is more that 60% of the cost of all components and subcomponents of the "facility". The required documentation for a type 3 waiver is:

a) Listing of all manufactured products that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and

- products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety)
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Signature	
Company Nama	 Title	
Company Name	Title	

A4.3.3 Certificate of Buy American Compliance – Manufactured Product

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC \S 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (\checkmark) or the letter "X".

	Bidder or	offeror	hereby	certifies	that it	will	comply	with 4	49 USC	§ 50101	bv:
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- a) Only installing steel and manufactured products produced in the United States, or;
- b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing, or;
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- 1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing US domestic product
- 3. To furnish US domestic product for any waiver request that the FAA rejects
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- ☐ The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
 - 1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 - 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
 - 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
 - 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver - The cost of the item components and subcomponents produced in the United States is more that 60% of the cost of all components and subcomponents of the "item". The required documentation for a type 3 waiver is:

a) Listing of all product components and subcomponents that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American

- Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Title

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Required	Contact Provisions
AIP Gran	ts and Obligated Sponsors

Company Name

A5 CIVIL RIGHTS - GENERAL

A5.1 SOURCE

49 USC § 47123

A5.2 APPLICABILITY

Note: This provision is in addition to the Civil Rights – Title VI provisions.

Contract Types – The General Civil Rights Provisions found in 49 USC § 47123, derived from the Airport and Airway Improvement Act of 1982, Section 520, apply to all sponsor contracts regardless of funding source.

Use of Provision – There are two versions of this provision. One applies to sponsor contracts and the other applies to sponsor lease agreements and transfer agreements. The sponsor must incorporate the text of the appropriate provision without modification.

A5.3 CONTRACT CLAUSE

A5.3.1 Sponsor Contracts

GENERAL CIVIL RIGHTS PROVISIONS

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.

A5.3.2 Sponsor Lease Agreements and Transfer Agreements

GENERAL CIVIL RIGHTS PROVISIONS

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.

A6 CIVIL RIGHTS - TITLE VI ASSURANCE

A6.1 SOURCE

49 USC § 47123

FAA Order 1400.11

A6.2 APPLICABILITY

Title VI of the Civil Rights Act of 1964, as amended, (Title VI) prohibits discrimination on the grounds of race, color, or national origin under any program or activity receiving Federal financial assistance. Sponsors must include appropriate clauses from the Standard DOT Title VI Assurances in all contracts and solicitations.

The clauses are as follows:

A6.2.1 Applicability of Title VI Solicitation Notice

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
Title VI Solicitation Notice	 All solicitations for bids, requests for proposals work, or material subject to the nondiscrimination acts and regulations made in connection with Airport Improvement Program grants; and All proposals for negotiated agreements regardless of funding source. 	A6.3.1
Title VI Clauses for Compliance with Nondiscrimination Requirements	Every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities	A6.3.2
Title VI Required Clause for Property Interests Transferred from the United States	As a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.	A6.3.3

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
Title VI Required Clause for Transfer of Real Property Acquired or Improved Under the Activity, Facility or Program	As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under the activity, facility, or program	A6.3.4
Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program	As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program	A6.3.5
Title VI List Of Pertinent Nondiscrimination Acts And Authorities	Insert this list in every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities	A6.3.6

A6.3 CONTRACT CLAUSE

A6.3.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

The (Name of 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.

A6.3.2 Title VI Clauses for Compliance with Nondiscrimination Requirements

Compliance with Nondiscrimination Requirements

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:

- 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:
 - 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.

A6.3.3 Title VI Clauses for Deeds Transferring United States Property

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of the Airport Improvement Program grant assurances.

NOW, THEREFORE, the Federal Aviation Administration as authorized by law and upon the condition that the (*Title of Sponsor*) will accept title to the lands and maintain the project constructed thereon in accordance with (*Name of Appropriate Legislative Authority*), for the (Airport Improvement Program or other program for which land is transferred), and the policies and procedures prescribed by the Federal Aviation Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the (*Title of Sponsor*) all the right, title and interest of the U.S. Department of Transportation/Federal Aviation Administration in and to said lands described in (*Exhibit A attached hereto or other exhibit describing the transferred property*) and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto (*Title of Sponsor*) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the (*Title of Sponsor*), its successors and assigns.

The (*Title of Sponsor*), in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the (*Title of Sponsor*) will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of

Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the Federal Aviation Administration and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

A6.3.4 Title VI Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the (*Title of Sponsor*) pursuant to the provisions of the Airport Improvement Program grant assurances.

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
 - 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a Federal Aviation Administration activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Nondiscrimination Acts and Regulations listed in the Pertinent List of Nondiscrimination Authorities (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, (*Title of Sponsor*) will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
- C. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the (*Title of Sponsor*) will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the (*Title of Sponsor*) and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

A6.3.5 Title VI Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by (*Title of Sponsor*) pursuant to the provisions of the Airport Improvement Program grant assurances.

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the List of discrimination Acts And Authorities.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above nondiscrimination covenants, (*Title of Sponsor*) will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above nondiscrimination covenants, (*Title of Sponsor*) will there upon revert to and vest in and become the absolute property of (*Title of Sponsor*) and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

A6.3.6 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Title VI List of Pertinent Nondiscrimination Acts and Authorities

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, subrecipients 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).

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 SOURCE

2 CFR § 200, Appendix II(G)

A7.2 APPLICABILITY

Contract Types – This provision is required for all contracts and lower tier contracts that exceed \$150,000.

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR §200.

A7.3 CONTRACT CLAUSE

CLEAN AIR AND WATER POLLUTION CONTROL

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.

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 SOURCE

2 CFR § 200, Appendix II(E)

A8.2 APPLICABILITY

Contract Workhours and Safety Standards Act Requirements, (CWHSSA) requires contractors and subcontractors on covered contracts to pay laborers and mechanics employed in the performance of the contracts one and one-half times their basic rate of pay for all hours worked over 40 in a workweek. CWHSSA prohibits unsanitary, hazardous, or dangerous working conditions on federally assisted projects. The Wage and Hour Division (WHD) within the U.S. Department of Labor (DOL) enforces the compensation requirements of this Act, while DOL's Occupational Safety and Health Administration (OSHA) enforces the safety and health requirements

Contract Types -

Construction - This provision applies to all contracts and lower tier contracts that exceed \$100,000, and employ laborers, mechanics, watchmen and guards.

Equipment - This provision applies to any equipment project exceeding \$100,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles)

Professional Services - This provision applies to professional service agreements that exceed \$100,000 and employs laborers, mechanics, watchmen and guards. This includes members of survey crews and exploratory drilling operations.

Property – While most land transactions do not involve employment of laborers, mechanics, watchmen and guards, under certain circumstances, a property acquisition project could require such employment. Examples include the installation of property fencing or testing for environmental contamination

Use of Provision – Sponsors must incorporate this text without modification.

A8.3 CONTRACT CLAUSE

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

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.

A9 COPELAND "ANTI-KICKBACK" ACT

A9.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Parts 3 & 5

A9.2 APPLICABILITY and PURPOSE

The Copeland (Anti-Kickback) Act (18 U.S.C. 874 and 40 U.S.C. 3145) makes it unlawful to induce by force, intimidation, threat of dismissal from employment, or by any other manner, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled under a contract of employment. The Copeland Act also requires each contractor and subcontractor to furnish weekly a statement of compliance with respect to the wages paid each employee during the preceding week.

Contract Types -

Construction – This provision applies to all construction contracts and subcontracts financed under the AIP program that exceeds \$2,000.

Equipment – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP program that exceeds \$ 2, 000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles)

Professional Services - The emergence of different project delivery methods has created situations where Professional Service Agreements (PSA) includes tasks that meet the definition of construction, alteration or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration or repair and it exceeds \$2,000, the PSA must incorporate the Copeland Anti-kickback provision.

Property - Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the Copeland Anti-Kickback provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding \$2,000.

Use of Provision – 29 CFR Part 5 establishes specific language a sponsor must use in construction contracts. The sponsor may not make any modification to the standard language. A/E firms that employ laborers and mechanics on a task that meets the definition of construction, alteration or repair are acting as a contractor. The sponsor may not substitute the term "contractor" for "consultant" in such instances.

A9.3 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

A10 DAVIS-BACON REQUIREMENTS

A10.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Part 5

A10.2 APPLICABILITY

The Davis-Bacon Act ensures that laborers and mechanics employed under the contract receive pay no less than the locally prevailing wages and fringe benefits as determined by the Department of Labor.

Contract Types -

Construction - Incorporate into all construction contracts and subcontracts that exceed \$2,000 and include funding from the AIP program.

Equipment – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP program that exceeds \$ 2, 000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles)

Professional Services - The emergence of different project delivery methods has created situations where Professional Service Agreements (PSA) includes tasks that meet the definition of construction, alteration or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration or repair and it exceeds \$2,000, the PSA must incorporate this clause.

Property - Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding \$2,000.

Fencing Projects - Fencing projects that exceed \$2,000 must include this provision.

Use of Provision – 29 CFR Part 5 establishes specific language a sponsor must use. The sponsor may not make any modification to the standard language. A/E firms that employ laborers and mechanics on a task that meets the definition of construction, alteration or repair are acting as a contractor. The sponsor may not substitute the term "contractor" for "consultant" in such instances.

A10.3 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

- 1. Minimum Wages
- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any

account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall

refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2 Withholding.

The Federal Aviation Administration or the sponsor 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 the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is

enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i) and that such information is correct and complete;
- (2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- 4. Apprentices and Trainees.
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an

apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- 5. Compliance with Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance With Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

- 10. Certification of Eligibility.
- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

A11 DEBARMENT AND SUSPENSION

A11.1 SOURCE

2 CFR part 180 (Subpart C)

2 CFR part 1200

DOT Order 4200.5

A11.2 APPLICABILITY

The sponsor must verify that the firm or individual that it is entering into a contract with are not presently suspended, excluded or debarred by any Federal department or agency from participating in federally-assisted projects. The sponsor accomplishes this by: (1) checking the System for Award Management (SAM.gov) to verify that the firm or individual is not listed in SAM.gov as being suspended, debarred or excluded, (2) collecting a certification from the firm or individual that they are not suspended, debarred or excluded, and (3) incorporating a clause in the contract that requires lower tier contracts to verify that no suspended, debarred or excluded firm or individual are included in the project.

Contract Types – This requirement applies to *covered transactions*, which are defined in 2 CFR part 180. AIP funded contracts are non-procurement transactions, as defined by §180.970. Covered transactions include any AIP-funded contract, regardless of tier, that is awarded by a contractor, subcontractor, supplier, consultant, or its agent or representative in any transaction, if the amount of the contract is expected to equal or exceed \$25,000. This includes contracts associated with land acquisition projects.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR part 180. For professional service agreements, sponsor may substitute bidder/offeror with consultant.

A11.3 CONTRACT CLAUSE

A11.3.1 Bidder or Offeror Certification

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

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.

A11.3.2 Lower Tier Contract Certification

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.

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 SOURCE

49 CFR part 26

A12.2 APPLICABILITY and PURPOSE

A sponsor that anticipates awarding \$250,000 or more in AIP funded prime contracts in a federal fiscal year must have an approved Disadvantaged Business Enterprise (DBE) program on file with the FAA Office of Civil Rights (§26.21). The approved DBE program will identify a 3-year overall program goal that the sponsor bases on the availability of ready, willing and able DBEs relative to all businesses ready, willing and able to participate on the project (§26.45).

Contract Types – Sponsors with a DBE program on file with the FAA must include the three following provisions, if applicable:

Clause in all solicitations for proposals for which a contract goal has been established.

Clause in each prime contract

Clause in solicitations that are obtaining DBE participation through race/gender neutral means.

Use of Provision -

- 1. Solicitations with a DBE Project Goal 49 CFR §26.53 requires a sponsor's solicitation to address what a contractor must submit on proposed DBE participation. This language is not required for projects where DBE participation is by race-gender neutral means.
 - The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements.
 - The sponsor may require the contractor's submittal on proposed DBE participation either with the bid or within a specified timeframe after bidding.
- 2. Contracts Covered by DBE Program Sponsors must incorporate this language if they have a DBE program on file with the FAA. This includes projects where DBE participation is obtained through race-gender neutral means (i.e. no project goal). Sections §26.13 and §26.29 establish mandatory language for contractor assurance and prompt payment. The sponsor must not modify the language.
- 3. The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements for a sponsor that is not applying a project specific contract goal but is covered by a DBE program on file with the FAA.
- 4. Sponsors that do not have a DBE program on file with the FAA are not required to include DBE provisions and clauses.

A12.3 REQUIRED PROVISIONS

A12.3.1 Solicitation Language (Solicitations that include a Project Goal)

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with their proposal on the forms provided herein:

- (1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- (2) A description of the work that each DBE firm will perform;
- (3) The dollar amount of the participation of each DBE firm listed under (1)
- (4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal;
- (5) If Bidder or Offeror cannot meet the advertised project DBE goal; evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR Part 26.

[Note: Contract bid dates on or prior to December 31, 2016, use the following language]

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in their commitment. This Bidder or Offeror must submit the DBE's written confirmation of participation ["within 7 days after bid opening or "with the proposal documents as a condition of bid responsiveness"]

[Note: Contract bid dates after December 31, 2016, use the following language]

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in their commitment. This Bidder or Offeror must submit the DBE's written confirmation of participation ["within 5 days after bid opening or "with the proposal documents as a condition of bid responsiveness"]

A12.3.2 Solicitation Language (Race/Gender Neutral Means)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the [Insert Name of Owner] 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.

A12.3.3 Prime Contracts (Projects covered by DBE Program)

DISADVANTAGED BUSINESS ENTERPRISES

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 {specify number} days from the receipt of each payment the prime contractor receives from {Name of recipient}. The prime contractor agrees further to return retainage payments to each subcontractor within {specify the same number as above} 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 {Name of Recipient}. This clause applies to both DBE and non-DBE subcontractors.

A13 DISTRACTED DRIVING

A13.1 SOURCE

Executive Order 13513

DOT Order 3902.10

A13.2 APPLICABILITY

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.

Contract Types – Sponsors must insert this provision in all AIP funded contracts that exceed the micropurchase threshold of 2 CFR §200.67 (currently set at \$3,500).

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements. .

A13.3 CONTRACT CLAUSE

TEXTING WHEN DRIVING

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.

A14 ENERGY CONSERVATION REQUIREMENTS

A14.1 SOURCE

2 CFR § 200, Appendix II(H)

A14.2 APPLICABILITY

The Energy Conservation Requirements found in 2 CFR § 200 Appendix II(H) requires this provision on energy efficiency.

Contract Types – The sponsor must include this provision in all AIP funded contracts and lower-tier contracts.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements. Sponsor may substitute "contractor and subcontractor" with "consultant and sub-consultant" for professional service agreements.

A14.3 CONTRACT CLAUSE

ENERGY CONSERVATION REQUIREMENTS

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. 6201et seq).

A15 EQUAL EMPLOYEMENT OPPORTUNITY (E.E.O.)

A15.1 SOURCE

2 CFR 200, Appendix II(C)

41 CFR § 60-1.4

41 CFR § 60-4.3

Executive Order 11246

A15.2 APPLICABILITY

The purpose of this provision is to provide equal opportunity for all persons, without regard to race, color, religion, sex, or national origin who are employed or seeking employment with contractors performing under a federally assisted construction contract. There are two provisions – a construction clause and a specification clause.

The equal opportunity contract clause must be included in any contract or subcontract when the amount exceeds \$10,000. Once the equal opportunity clause is determined to be applicable, the contract or subcontract must include the clause for the remainder of the year, regardless of the amount or the contract.

Contract Types -

Construction – The sponsor must incorporate contract and specification language in all construction contracts and subcontracts as required above.

Equipment - The sponsor must incorporate contract and specification language into all equipment contracts as required above that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles)

Professional Services - The sponsor must include contract and specification language into all professional service agreements as required above. Property – The sponsor must include contract and specification language into all land acquisition projects that include work that qualifies as construction work as defined by 41 CFR part 60 as required above. An example is installation of boundary fencing.

Use of Provision – 41 CFR § 60-1.4 provides the mandatory contract language. 41 CFR § 60-4.3 provides the mandatory specification language. The sponsor must incorporate these clauses without modification.

A15.3 MANDATORY CONTRACT CLAUSE

A15.3.1 E.E.O. Contract Clause

EQUAL OPPORTUNITY CLAUSE

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.

A15.3.2 EEO Specification

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

- 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.

- d. 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 a 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.

- 1. 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).

A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A16.1 SOURCE

29 U.S.C. § 201, et seq

A16.2 APPLICABILITY

The United States Department of Labor (DOL) Wage and Hour Division administers the Fair Labor Standards Act (FLSA). This act prescribes federal standards for basic minimum wage, overtime pay, record keeping and child labor standards.

Contract Types – Per the Department of Labor, all employees of certain enterprises having workers engaged in interstate commerce, producing goods for interstate commerce, or handling, selling, or otherwise working on goods or materials that have been moved in or produced for such commerce by any person, are covered by the FLSA.

All consultants, sub-consultants, contractors and subcontractors employed under this federally assisted project must comply with the FLSA.

Professional Services – 29 CFR § 213 exempts employees in a bona fide executive, administrative or professional capacity. Because professional firms employ individuals that are not covered by this exemption, the sponsor's agreement with a professional services firm must include the FLSA provision.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 29 U.S.C. § 201. The sponsor must select *contractor* or *consultant*, as appropriate for the contract.

A16.3 CONTRACT CLAUSE

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

A17 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A17.1 SOURCE

31 U.S.C. § 1352 - Byrd Anti-Lobbying Amendment

2 CFR part 200, Appendix II(J)

49 CFR part 20, Appendix A

A17.2 APPLICABILITY

Consultants and contractors that apply or bid for an award of \$100,000 or more must certify that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or another award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

Contract Types – The sponsor must incorporate this provision into all contracts exceeding \$100,000.

Use of Provision – Appendix A to 49 CFR Part 20 prescribes language the sponsor must use. The sponsor must incorporate this provision without modification.

A17.3 CONTRACT CLAUSE

CERTIFICATION REGARDING LOBBYING

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.

A18 PROHIBITION of SEGREGATED FACILITIES

A18.1 SOURCE

41 CFR § 60

A18.2 APPLICABILITY

The contractor must comply with the requirements of the E.E.O. clause by ensuring that facilities they provide for employees are free of segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin. This clause must be included in all contracts that include the equal opportunity clause, regardless of the amount of the contract.

Contract Types – AIP sponsors must incorporate the Prohibition of Segregated Facilities clause in any contract containing the Equal Employment Opportunity clause of 41 CFR §60.1. This obligation flows down to subcontract and sub-tier purchase orders containing the Equal Employment Opportunity clause.

Construction - Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

Equipment – On site installation of equipment such as airfield lighting control equipment meets the definition of construction and thus this provision would apply. This provision does not apply to equipment projects involving manufacture of the item at a vendor's manufacturing plant. An example would be the manufacture of a SRE or ARFF vehicle.

Professional Services - Professional services that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include the installation of noise monitoring equipment.

Property/Land - Land acquisition contracts that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include demolition of structures or installation of boundary fencing.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 41 CFR § 60.

A18.3 CONTRACT CLAUSE

PROHIBITION of SEGREGATED FACILITIES

- (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.

A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A19.1 SOURCE

20 CFR part 1910

A19.2 APPLICABILITY

Contract Types – All contracts and subcontracts must comply with the Occupational Safety and Health Act of 1970 (OSH). The United States Department of Labor Occupational Safety & Health Administration (OSHA) oversees the workplace health and safety standards wage provisions from OSH.

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 20 CFR part 1910.

A19.3 CONTRACT CLAUSE

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.

A20 PROCUREMENT OF RECOVERED MATERIALS

A20.1 SOURCE

2 CFR § 200.322

40 CFR part 247

A20.2 APPLICABILITY

Sponsors of AIP funded development and equipment projects must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. Section 6002 emphasizes maximizing energy and resource recovery through use of affirmative procurement actions for recovered materials identified in the EPA guidelines.

The requirements of § 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

Contract Types – This provision applies to any contracts that include procurement of products where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000.

Construction and Equipment – Include this provision in all construction and equipment projects

Professional Services and Property – Include this provision if the agreement includes

procurement of a product that exceeds \$10,000

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR § 200.

A20.3 CONTRACT CLAUSE

Procurement of Recovered Materials

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/conserve/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.

A21 RIGHT TO INVENTIONS

A21.1 SOURCE

2 CFR § 200, Appendix II(F)

37 CFR §401

A21.2 APPLICABILITY

Contract Types – This provision applies to all contracts and subcontracts with small business firms or nonprofit organizations that includes performance of *experimental*, *developmental*, or research work. This clause is not applicable to construction, equipment or professional service contracts unless the contract includes *experimental*, *developmental* or research work.

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

A21.3 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

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.

A22 SEISMIC SAFETY

A22.1 SOURCE

49 CFR part 41

A22.2 APPLICABILITY

Contract Types – This provision applies to construction of new buildings and additions to existing buildings financed in whole or in part through the Airport Improvement Program.

Professional Services and Construction – Sponsor must incorporate this clause in any contract involved in the construction of new buildings or structural addition to existing buildings.

Equipment – Sponsor must include this provision if the project involves construction or structural addition to a building such as an electrical vault project.

Land – This provision will not typically apply to a property/land project.

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 CFR part 41.

A22.3 CONTRACT CLAUSE

A22.3.1 Professional Service Agreements for Design

Seismic Safety

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.

A22.3.2 Construction Contracts

Seismic Safety

The contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A23 TERMINATION OF CONTRACT

A23.1 SOURCE

2 CFR § 200 Appendix II(B)

FAA Advisory Circular 150/5370-10, Section 80-09

A23.2 APPLICABILITY

Contract Types – All contracts and subcontracts in excess of \$10,000 must address *termination for cause* and *termination for convenience* by the sponsor. The provision must address the manner (i.e. notice, opportunity to cure, and effective date) by which the sponsor's contract will be affected and the basis for settlement (i.e. incurred expenses, completed work, profit, etc.).

Use of Provision -

Termination for Default - Section 80-09 of FAA Advisory Circular 150/5370-10 establishes standard language for Termination for Default under a construction contract. The sponsor must not make any changes to this standard language.

Termination for Convenience – The sponsor must include a clause for termination for convenience. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

Equipment, Professional Services and Property – The sponsor may use their established clause language provided that it adequately addresses the intent of Appendix II(B) to Part 200, which addresses termination for fault and for convenience.

A23.3 CONTRACT CLAUSE

A23.3.1 Termination for Convenience

Termination for Convenience (Construction & Equipment Contracts)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

- 1. Contractor must immediately discontinue work as specified in the written notice.
- 2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
- 3. Discontinue orders for materials and services except as directed by the written notice.
- 4. Deliver to the owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work and as directed in the written notice.
- 5. Complete performance of the work not terminated by the notice.

6. Take action as directed by the owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- a) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
- b) documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- c) reasonable and substantiated claims, costs and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
- d) reasonable and substantiated expenses to the contractor directly attributable to Owner's termination action Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

Termination for Convenience (Professional Services)

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.

A23.3.2 Termination for Default

Termination for Default (Construction)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights and remedies associated with Owner termination of this contract due default of the Contractor.

Termination for Default (Equipment)

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

- 1. Fails to commence the Work under the Contract within the time specified in the Notice- to-Proceed;
- 2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms:

- 3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
- 4. Fails to comply with material provisions of the Contract;
- 5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements;
- 6. Becomes insolvent or declares bankruptcy;

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

Termination for Default (Professional Services)

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.

A24 TRADE RESTRICTION CERTIFICATION

A24.1 SOURCE

49 USC § 50104

49 CFR part 30

A24.2 APPLICABILITY

Unless waived by the Secretary of Transportation, sponsors may not use AIP funds on a product or service from a foreign country included in the current list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R)

Contract Types – The trade restriction certification and clause applies to all AIP funded projects.

Use of Provision – 49 CFR part 30 prescribes the language for this model clause. The sponsor must include this certification language in all contracts and subcontracts without modification.

A24.3 CONTRACT CLAUSE

TRADE RESTRICTION CERTIFICATION

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.

A25 VETERAN'S PREFERENCE

A25.1 SOURCE

49 USC § 47112(c)

A25.2 APPLICABILITY

Contract Types – This provision applies to all AIP funded projects that involve labor to carry out the project. This preference, which excludes executive, administrative and supervisory positions, applies to covered veterans (as defined under §47112(c)) only when they are readily available and qualified to accomplish the work required by the project.

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 U.S.C. § 47112.

A25.3 CONTRACT CLAUSE

VETERAN'S PREFERENCE

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.

Attachment C – Florida Department of Transportation Contract Provisions

Florida Department of Transportation Funding

This project is being funded in part by a Grant from the Florida Department of Transportation (FDOT). The contractor must abide by the following contract provisions:

Equal Employment Opportunity: In connection with the carrying out of this Project, the contractor shall not discriminate against any employee or applicant for employment because of race, age, creed, color, 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, age, creed, color, sex, 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 shall insert the foregoing provision modified only to show the particular contractual relationship in all its subcontracts in connection with the development or operation of the Project, except subcontracts for the standard commercial supplies or raw materials, and shall require all such subcontractors to insert a similar provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials. When the Project involves installation, construction, demolition, removal, site improvement, or similar work, the Contractor shall post, in conspicuous places available to employees and applicants for employment for Project work, notices to be provided by the Department setting forth the provisions of the nondiscrimination clause.

Title VI - Civil Rights Act of 1964: The Contractor will comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 USC 2000d, et. seq), the Regulations of the Federal Department of Transportation issued thereunder, and the assurance by the Contractor pursuant thereto.

Title VIII - Civil Rights Act of 1968: The Contractor will comply with all the requirements imposed by Title VIII of the Civil Rights Act of 1968, (42 USC 3601, et seq.,) which among other things, prohibits discrimination in housing on the basis of race, color, national origin, creed, sex and age.

Americans with Disabilities Act of 1990 (ADA): The Contractor will comply with all the requirements imposed by the ADA (42 USC 12012. et. Seq.) the regulations of the federal government issued thereunder, and the assurance by the Contractor pursuant thereto.

Disadvantaged Business Enterprise (DBE) Policy and Obligation:

DBE Policy: It is the policy of the FDOT Grant that Disadvantaged Business Enterprises (DBE) as defined in 49 CFR Part 26, as amended, shall have the equal opportunity to participate in the performance of contracts financed in whole or in part with FDOT funds. The DBE requirements of 49 CFR Part 26, as amended, apply to this contract.

DBE Obligation: The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26, as amended, have the equal opportunity to participate in the performance of this contract. In this regard, the contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26, as amended, to ensure that the Disadvantaged Business Enterprises have the maximum opportunity to compete for and perform this contract. The contractor and their subcontractors shall not discriminate on the basis of race, color, national origin or sex in the award and performance of this contract.

The contractor shall not discriminate on the basis of race color national origin or sex in the award and performance of any DOT assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26 The contractor shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT assisted contracts The airport's DBE program goal as required by 49 CFR part 26 and as approved by DOT is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this contract. Upon notification to the contractor of its failure to carry out its approved program the County may impose sanctions as provided for under part 26 and may in appropriate cases refer the matter for enforcement under 18USC1001 and/or the Program Fraud Civil Remedies Act of 1986 (31USC3801 et seq.)

E-Verify

The contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Vendor/Contractor during the term of the contract; and

Shall expressly require any subcontractors performing work or providing services pursuant to this contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term