ITEM SS-100 CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

DESCRIPTION

100-1.1 This item includes notes in reference to construction safety and phasing for the project. This item shall be used in conjunction with all Construction Safety Drawings and Construction Safety and Phasing Notes in the plans.

100-1.2 This project consists of the realignment of Taxiway D between Taxiway E and Taxiway B at the south end of the airfield. Additional components include correction to surface painted hold signs on Taxiway B, Taxiway C, and Taxiway J and repairs to Runway 13 and Runway 18 lighted windcones.

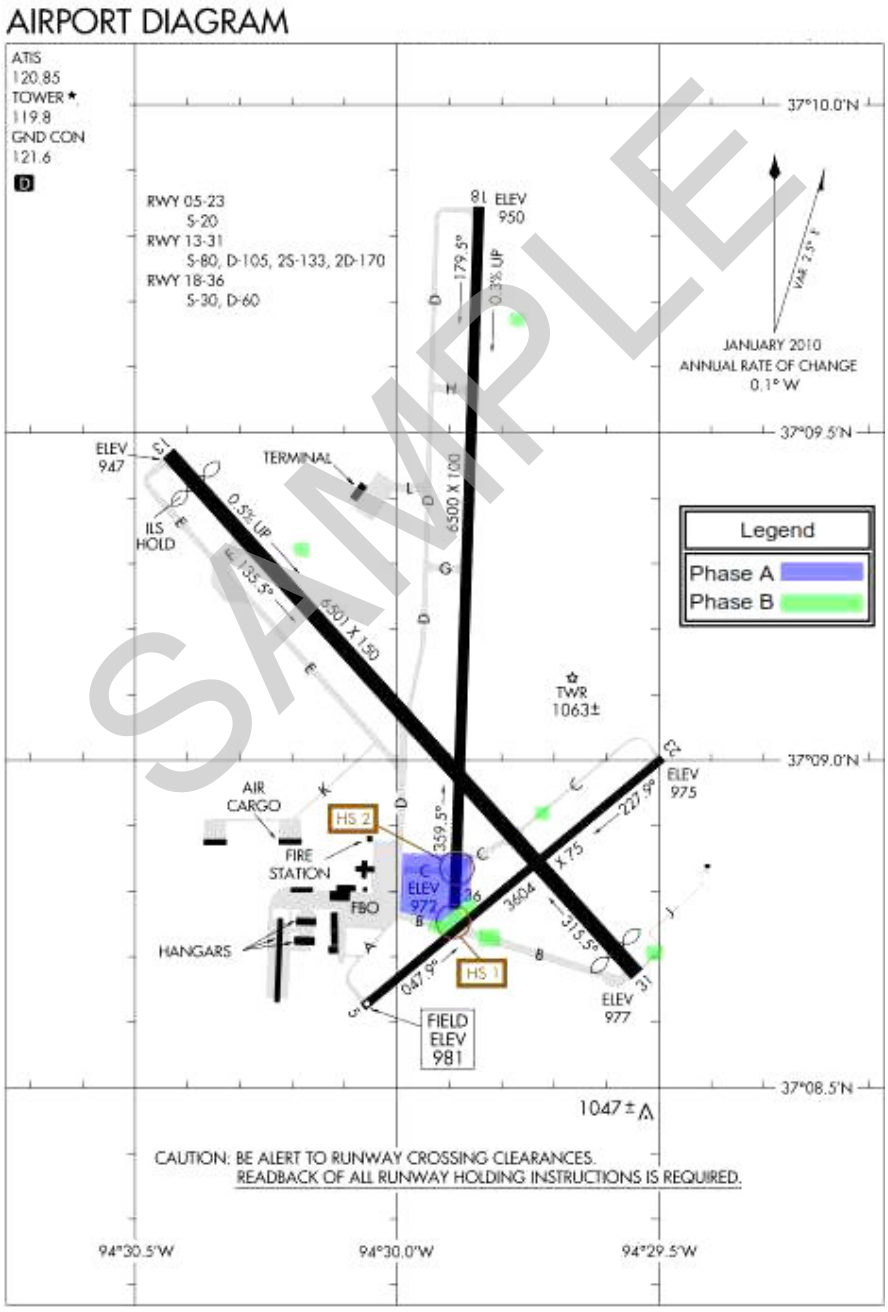

Figure 1: Airport Facility Diagram

CONSTRUCTION SAFETY AND PHASING NOTES

100-2.1 COORDINATION

A. Contractor progress meetings - The owner, engineer and contractor will hold progress meetings on a coordinated schedule during construction. Operational safety will be a standing agenda item in such meetings.

B. Scope or schedule changes - The owner and/or engineer will call such coordination conferences as may seem expedient to him for the purpose of assuring coordination of the work covered by this contract and/or scope or schedule changes. The contractor shall attend all such conferences.

C. FAA ATO Coordination - Coordination with the FAA ATO for the required work near FAA facilities for this project has been completed. The FAA ATO contact for this project is: (555) 555-5555 (office), (555) 555-5555 (mobile)

D. The airport operations supervisor: (555) 555-5555.

E. Pre-design Meeting

i. As opposed to relocating the Runway 36 threshold, Runway 18-36 will be closed during Phase 1A construction.

ii. To maintain access to Runway 13-31 during construction, Taxiway B will remain open during Phase 1A construction, provided a flagger is used to manage aircraft movement in close proximity to the construction area.

iii. Ground-based runway closure markers will be utilized for runway closures.

iv. The former FBO apron at the south end of the airfield will be used as a staging area for Phase 1A construction. Runway 5-23 will be closed during times of high construction traffic. Flaggers will be placed at locations shown on the construction safety drawings

v. The Contractor will perform a comprehensive airspacing of the Phase 1A construction project and will coordinate the locations of the airspacing points with the Federal Aviation Administration prior to submission to Obstruction Evaluation/Airport Airspace Analysis (OE/AAA).

100-2.2 PHASING: During performance of this project, the airport runways, taxiways, and aircraft parking aprons shall remain in use by aircraft to the maximum extent possible. The project shall be phased to reduce operational impacts at the airport.

A. Phase elements - If necessary for a given phase, each phase of the construction safety drawings shall detail the areas closed to aircraft operations, estimated duration of closures, taxi routes, ARFF access routes, construction staging areas, construction access and haul routes, NAVAID impacts, lighting and marking changes, available runway length, declared distances, hazard marking and lighting, and required lead time for NOTAMs.

B. Safety drawings - See sheet G-106 through G-107 for construction safety drawings.

100-2.3 AREAS OF OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY

A. Identification of affected areas - See "airfield areas of operation affected by construction" table and construction safety drawings for airfield areas of operations affected by construction.

B. Mitigation efforts - See table on CSPP plan sheets and construction safety drawings for mitigation efforts of operations affected by construction.

100-2.4 PROTECTION OF NAVIGATION AIDS (NAVAIDS): The contractor must not conduct any construction activity within navigational aid restricted areas without prior approval from the local FAA airway facilities sector representative. Navigational aids include instrument landing system components and very high-frequency omni-directional range airport surveillance radar. Such restricted areas are depicted on construction plans.

100-2.5 CONTRACTOR ACCESS

A. Location of stockpiled materials - The contractor shall install a temporary fence around his construction staging area to separate his batch plant, material stockpile, equipment storage, and parking areas from the public. No personal vehicles of contractor's employees will be allowed inside the secured area of the airport. All material deliveries shall be received in the staging area reserved by the contractor. No delivery trucks will be allowed access to a secured area of the airport beyond this staging area. Stockpiled materials and equipment are not permitted within the active runway safety area and object free zone. The contractor shall receive approval from the engineer and FAA air spacing office prior to locating stockpiles or equipment within the object free area, safety area, or object free zone. No stockpile shall be greater than 25-ft in height.

B. Vehicle and pedestrian operations - See the construction safety drawings for construction site parking, equipment storage areas, and access and haul routes. Vehicular traffic shall always yield to aircraft traffic.

When any vehicle, other than one that has prior approval from the airport operator, must travel over any portion of an aircraft movement area, it will be escorted and properly identified. To operate in those areas during daylight hours, the vehicle must have a flag or beacon attached to it. Any vehicle operating on the movement areas during hours of darkness or reduced visibility must be equipped with a flashing dome-type light, the color of which is in accordance with local or state codes.

All construction vehicles shall be clearly identified for control purposes by prominently displaying the company name on each side of the vehicle. The identification symbols should be a minimum 8-inch block-type characters of a contrasting color and easy to read. They may be applied either by using tape or a water-soluble paint to facilitate removal. Magnetic signs are also acceptable. In addition, vehicles must display identification media, as specified in the approved security plan.

All vehicle operators having access to the movement area must be familiar with airport procedures for the operation of ground vehicles and the consequences of noncompliance or be escorted by someone who is.

Personnel entering the secured area must be in possession of and display a valid airport identification badge at all times or must be escorted by a person with a valid airport identification badge. Any person who is escorting individuals must be in direct control of the escorted individuals at all times. Any person who has been issued a badge, but is not in possession of the badge, may not enter the secured area of the airport. Airport identification badges may be obtained at the location during regular scheduled times for issuance of badges. There is a $10.00 charge for issuance of the badge. Any badges that are lost will be subject to a $50.00 charge and all badges must be returned to the airport upon completion of the project unless directed otherwise by the airport. Any fine, including any and all associated costs, assessed the airport for failure to maintain security of the airport which are a result of the negligence of the prime contractor, any of his subcontractors, or any supply/delivery personnel, will be assessed to the prime contractor and shall be deducted from any monies due him.

Vehicular traffic located in or crossing an active movement area must have a working two-way radio in contact with the control tower or be escorted by a person in radio contact with the tower. The driver, through personal observation, should confirm that no aircraft is approaching the vehicle position. Construction personnel may operate in a movement area without two-way radio communication provided a NOTAM is issued closing the area and the area is properly marked to prevent incursions. Two-way radio communications are required between contractors and the airport traffic control tower (ATCT) (CTAF frequency: 119.80/Tower Ground frequency: 121.60). Continuous monitoring is required.

C. Control of Gates - The contractor shall be responsible for maintaining the security of the access gates by keeping the access gate locked or guarded at all times. Should the contractor fail, at any time, to keep the access gate locked or guarded, there shall be a fine of $1,000.00 assessed to the contractor plus any files levied against the airport for the contractor's actions, for each occurrence that the contractor fails to maintain the security of the access gate. All fines assessed to the contractor shall be deducted from any monies due to him/her.

100-2.6 WILDLIFE MANAGEMENT: If applicable, the contractor shall review and adhere to the contents of the airport operator's wildlife hazard management plan. The contractor shall also review AC 150/5200-33, hazardous wildlife attractants on or near airports, and certalert 98-05, grasses attractive to hazardous wildlife (www.faa.gov). The contractor shall carefully control and continuously remove waste or loose materials that might attract wildlife. Contractor personnel must be aware of and avoid construction activities that can create wildlife hazards on airports. The contractor shall mitigate the following items.

A. Trash - The contractor shall perform trash clean-up on a daily basis.

B. Standing water - The contractor provide temporary drainage during construction to avoid standing water.

C. Tall grass and seeds - The contractor shall adhere to the requirements of section t-901, seeding of the contract documents and specifications.

D. Poorly maintained fencing and gates - The contractor shall immediately report any damage to gates or fences. The contractor will be responsible for repairs to any gates or fences caused by negligence by the contractor.

E. Disruption of existing wildlife habitat - The contractor shall notify the airport immediately of any wildlife sightings.

100-2.7 FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

The contractor shall insure that the pavement surfaces are kept clean from dirt, mud, and other debris from the contractor's equipment. Frequent clean up in the vicinity of contractor's work areas is required. See AC 150/1510-24, foreign object debris (FOD) management (www.faa.gov) for further instruction.

100-2.8 HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

If any construction vehicle or equipment is operated within airport property, the contractor must be adequately prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. Special care must also be taken when handling or transporting hazardous materials on airport property. See AC 150/5320-15, management of airport industrial waste (www.faa.gov), for further instruction.

100-2.9 NOTIFICATION OF CONSTRUCTION ACTIVITIES

A. List of responsible representatives - A point of contact list will be completed as part of ITEM SS-101 Safety Plan Compliance Document (SPCD) and will be delivered to all parties prior to construction.

B. Notices to airmen (NOTAM) - Before beginning any construction activity, the contractor must, through the airport operator, give notice using the NOTAM system of proposed location, time, and date of commencement of construction. Upon completion of work and return of all such areas to standard conditions, the contractor must, through the airport operator, verify the cancellation of all notices issued via the NOTAM system.

C. Emergency notification procedures - In the event of an emergency, the contractor shall call 911, then notify the engineer and airport manager.

D. Coordination with ARFF personnel - Any deactivation of water lines or hydrants, rerouting of access routes, or use of hazardous materials on the airfield shall be coordinated and approved by the airport's ARFF personnel prior to execution of such activities.

E. Notification to the FAA - The contractor shall ensure, through the engineer, that all construction equipment is air spaced through the appropriate FAA regional or district office prior to using such equipment on site.

F. Shutdown of any NAVAID (airport or FAA owned) shall be coordinated with the FAA ATO 45 days prior to the proposed shutdown.

100-2.10 INSPECTION REQUIREMENTS

A. Daily inspections - The contractor shall perform daily safety inspections to insure all construction operations are in conformance with the construction safety and phasing plan (CSPP).

B. Final inspections - Prior to opening any portion of the airport to traffic, the contractor, engineer, and airport operator shall perform a safety inspection of the area to be opened to traffic to insure conformance with the CSPP and FAA standards.

100-2.11 UNDERGROUND UTILITIES: Underground utilities exist within and adjacent to the limits of construction. An attempt has been made to locate these utilities on the plans. However, all existing utilities may not be shown and the actual locations of the utilities may vary from the locations shown. Prior to beginning any type of excavation, the contractor shall contact the utilities involved and make arrangements for the location of the utilities on the ground. The contractor shall maintain the utility location markings until they are no longer necessary.

State law, the underground facilities damage prevention act, requires two working days advance notification through the one-call system center before excavating using mechanized equipment or explosives (except in the case of an emergency). The one-call system phone number is 1-800-555-5555. The contractor is advised that there is a severe penalty for not making this call. Not all utility companies are members of the state one-call system; therefore, the contractor is advised to contact all non- member utilities as well as the one-call system.

100-2.12 PENALTIES: Failure of the contractor (including employees) or any of his subcontractors (including employees) to comply with ATCT instructions, the airport safety plan, or any of the other requirements of the airport while operating on airport property, shall be subject to the following:

A. First offense - The contractor shall receive a fine of $1,000.00, and the vehicle operator will receive a loss of driving privileges on the airport. In addition, any fines or penalties imposed on the airport as a result of the incident will be assessed to the contractor.

B. Second offense - The contractor shall receive a fine of $5,000.00 to be deducted from any monies due him, and the vehicle operator will receive a loss of driving privileges on the airport. In addition, any fine or penalties imposed on the airport as a result of the incident will be assessed to the contractor.

C. Third offense - Work will be suspended. The contractor (including employees) and any of his subcontractors (including employees) who will operate ground vehicles on the airport shall successfully complete, for a second time, formalized airport safety training, to be conducted by airport staff. When the contractor's employees have completed airport safety training to the satisfaction of the owner, work may continue at the discretion of the owner.

100-2.13 SPECIAL CONDITIONS: Work inside the Taxiway B object free area shall be completed under the following conditions:

A. Barricades shall be placed along all taxiway edges where the entire width of the taxiway safety area is not smoothly graded. Smoothly graded is defined as having no abrupt changes in grade of over 3-in.

B. A flagger shall be located within 200-ft of any construction taking place inside the object free area.

C. Upon a taxiing aircraft utilizing Taxiway B, the flagger shall verify that no equipment or materials are located within the object free area. If any equipment or materials are located within the object free area, these should be removed immediately prior to the aircraft taxiing past the construction area.

D. If the contractor cannot remove the equipment or materials from the object free area within one minute of a taxiing aircraft approaching, the contractor shall be responsible for employing an aviation trained wing walker. In such cases where the wing walker is used, the contractor shall provide 5-ft wing tip clearance for the aircraft utilizing the taxiway.

E. Wing walkers shall be trained personnel to assist in the navigation of aircraft and shall be able to demonstrate proficiency prior to being utilized in this capacity.

F. A flagger may serve as a wing walker only if they meet the requirements of a wing walker.

100-2.14 RUNWAY AND TAXIWAY VISUAL AIDS

A. General - All airport markings, lighting, signs, and visual NAVAIDs that are in operation must be clear from all obstructions. All temporary markings, signs, lights, or other visual aids must be secured in place to prevent prop wash, jet blast, wing vortices, or other wind currents.

B. Markings - All temporary or permanent runway and taxiway visual aids shall conform to the requirements of the most recent edition of FAA AC 150/5340-1 (www.faa.gov). Markings for this project include the following:

i. Temporarily Closed Runways - The contractor shall be responsible for furnishing, installing, and maintaining runway closure markers on top of the runway designation markers. See details on construction safety drawings for closed runway marker detail.

ii. Temporarily Closed Taxiways – The contractor shall be responsible for furnishing, installing, and maintaining taxiway closure markers at the entrance to the closed taxiway from the adjacent runway. The taxiway closure markers shall be installed inside the runway safety area. The contractor shall also furnish and install low profile barricades at the entrance to the closed taxiway from an adjacent taxiway. Barricades shall be installed outside all active taxiway safety areas. See details on construction safety drawings for closed taxiway marker and low-profile aircraft barricade details.

C. Signs - The contractor shall install all signs in accordance with the most recent edition of FAA AC 150/5345-44 and 150/5340-18. Any sign that is not performing its normal function must be covered or removed to prevent misleading pilots.

100-2.15 MARKING AND SIGNS FOR ACCESS ROUTES: The contractor shall be responsible for supplying and installing all necessary markings and signage for all access routes to and from the site to be used by contractor personnel, subcontractor personnel, or delivery operations. All signage in the air operations area shall be frangibly mounted.

100-2.16 HAZARD MARKING AND LIGHTING

A. Purpose - Hazard marking and lighting prevents pilots from entering areas closed to aircraft and prevents contractor personnel from entering areas open to aircraft.

B. Equipment - The contractor shall furnish, install, and maintain low-profile barricades in hazardous areas inside movement areas. Barricades shall restrict access and make hazards obvious to aircraft, personnel, and vehicles. During periods of low visibility and at night, barricades shall be equipped with red flashing or steady burning lights. The spacing of barricades shall be such that a breach is physically prevented barring a deliberate act. If barricades are intended to prevent pedestrians, then they shall be linked. See details on construction safety drawings for low-profile aircraft barricade detail. .

C. Marking critical areas – The contractor shall mark all critical areas near the project limits (OFZ, OFA, etc.) with stakes to provide workers with visual limits of operations. See sheets G-106 and G-107 Construction Safety Drawings and Airfield Areas Affected by Construction table for critical area dimensions.

100-2.17 PROTECTION OF SAFETY AREAS, OBJECT FREE AREAS, OBJECT FREE ZONES, AND APPROACH/DEPARTURE SURFACES:

A. Runway safety areas (RSA) - No work shall be permitted within an active runway safety area. If required, adjustments to the RSA dimensions through restricted operations shall be coordinated with the FAA airports regional or district office prior to construction. The contractor shall insure adequate distance protection for blast projection, as needed. All open trenches or excavations within the limits of the RSA shall be back filled or covered prior to opening the runway to operations. In addition, erosion control measures shall be provided in the RSA to prevent ruts, humps, or depressions inside the limits of the RSA.

B. Runway object free areas (ROFA) - No material shall be stockpiled inside the limits of the active ROFA unless approved by air spacing through the appropriate FAA airports regional or district office.

C. Taxiway safety areas (TSA) - No work shall be permitted within an active TSA. If required, adjustments to the taxiway TSA dimensions through restricted operations shall be coordinated with the FAA airports regional or district office prior to construction. All open trenches or excavations within the limits of the TSA shall be back filled or covered prior to opening the taxiway to operations. In addition, erosion control measures shall be provided in the TSA to prevent ruts, humps, or depressions inside the limits of the TSA.

D. Taxiway object free areas (TOFA) - No construction shall be permitted inside an active TOFA unless the taxiway has been restricted to operations requiring a TOFA equal to that of the TOFA available. If required, construction may be permitted inside the TOFA if the taxiway centerline markings are offset with centerline reflectors or lighting, or appropriate NOTAMs are issued. Construction may also be permitted inside the TOFA if a five foot wing tip clearance is maintained for all construction equipment and vehicles. In this scenario, flaggers and wing walkers must be used to direct traffic through the construction site.

E. Obstacle free zone (OFZ) - No personnel, material, or equipment shall penetrate the OFZ while the runway is open to operations. The dimensions of the OFZ are as defined in FAA AC 150/5300-13 (www.faa.gov).

F. Approach/departure surfaces - All contractor personnel, materials, and equipment shall remain

clear of the applicable threshold siting surfaces as defined in appendix 2, "runway end siting requirements" of FAA AC 150/5300-13 (www.faa.gov). Construction activities that require penetration into the threshold siting surface shall be accomplish through displacing or partially closing the runway. Such construction activities shall require coordination with the FAA airports regional or district office.

100-2.18 OTHER LIMITATIONS ON CONSTRUCTION

A. Prohibitions - The use of tall equipment (i.e. Cranes, concrete pumps) shall not be permitted unless approved by the engineer.

Open flame welding and torch cutting operations are not permitted unless adequate fire safety precautions are provided and these operations are authorized by the airport operator and the engineer.

Electrical blasting caps shall not be permitted within 1,000-ft of the airport property. Flare pots are not permitted within the air operations area.

B. Restrictions - Use this area to discuss special conditions such as day/night operations, seasonal restrictions, area restrictions, etc.

MEASUREMENT AND PAYMENT

100-3.1 Adherence to the requirements of the CSPP will not be measured for separate payment.

END OF ITEM SS-100