ACRP 08-03: Construction Safety and Phasing Plans

Example CSPP

This Example CSPP was developed using the CSPP Template created as part of ACRP Project 08-03. The purpose of this document is to provide an example of what a completed CSPP may look like using the template. This Example CSPP is for a fictious taxiway extension project.





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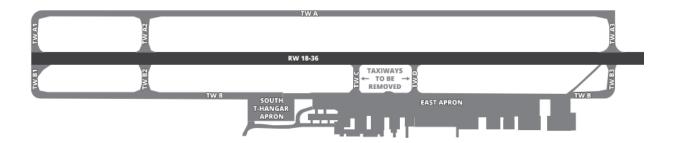
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Executive Summary

This project will construct a taxiway extension to create a full parallel taxiway for Runway 18/36 at XYZ Airport. It will also create two new taxiway connections to the runway while decommissioning two other existing taxiway connections. The project will improve the safety of operations at the airport by significantly reducing runway occupancy time for aircraft landing Runway 36, which will improve safety and increase runway capacity.

The project is segmented into three construction phases. The project will require runway closures, a relocated threshold at the Runway 36 approach end, and multiple taxiway closures over the course of the three phases. During some phases, haul routes will pass through operational aprons and associated taxilanes. Operational impacts to aircraft over the course of the project will include altered taxi routes, a shortened runway (while the threshold is relocated), runway closures, and construction vehicle traffic on taxiways and aprons.

The graphic below is intended solely to provide airfield layout familiarization to the reader of this example CSPP narrative. It is not a phasing drawing and is not intended to represent construction safety phasing drawing best practices. Example CSPP drawings are included as a separate item on the ACRP 08-03 WebResource.



Coordination (Section 205)

- 1.1. <u>Pre-Construction Conference Information and Coordination</u>
 Prior to the start of construction, a pre-construction conference will be held involving the stakeholders and agenda items defined below.
 - I.I.I. Expected attendees: Airport director and assigned airport project manager, Consulting engineer/designer, Contractor, an FAA ADO representative, an FAA ATCT representative, an FAA Technical Operations (TechOps) representative, FAA Office of Airports representative, an FBO representative, and a local pilot group representative.
 - 1.1.2. <u>Agenda Items</u>: Project history, scope and schedule (including phasing), anticipated impacts to airport operations, and safety. Operational safety of the project will be emphasized and will be a standing agenda item in all project related meetings.



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1.2. Contractor Progress Meetings Schedule/Frequency

- 1.2.1. Weekly progress meetings will be held and will include the following invitees: airport representative(s), consulting engineer/designer, contractor, FAA ATCT, and FAA TechOps if work to be discussed includes NAVAIDs or other FAA-owned equipment impacts and/or runway closures.
- 1.2.2. Operational safety will be a standing agenda item to be discussed at each meeting.
- 1.2.3. The project schedule and construction phasing will be discussed and coordinated during each meeting. Project phasing is discussed in more detail in the Phasing Section of this CSPP.

1.3. Regulatory Compliance

1.3.1. The project will comply with all applicable components of the XYZ Airport Certification Manual (ACM), Airport Emergency Plan (AEP), Stormwater Pollution Prevention Plan (SWPPP), Snow and Ice Control Plan, and Airport Security Program (ASP). If construction activities will require changes to any of these documents, advanced notice is required. Specifically, at least 45 days advance notice is required for any changes impacting the ASP to allow sufficient time for the Transportation Security Administration's (TSA) review and approval. Amendments to the ACM, AEP, SWPPP and Snow and Ice Control Plan require at least 30 days advance notice.

1.4. Necessary Actions for Proposed Changes to CSPP (schedule/scope changes)

I.4.I. Procedure

- 1.4.1.1.When a change to the CSPP has been deemed necessary by the Airport, Contractor, or consulting engineer/designer, the details of the proposed change, both in terms of scope and schedule/phasing, will be provided in writing to all three named parties as well as local FAA TechOps and ATCT representatives.
- 1.4.1.2. A meeting will then be held with these parties to further discuss the proposed change and how it will impact the CSPP.
 - 1.4.1.2.1.If proposed change requires a phasing change, the consulting engineer/designer will complete a full review of the CSPP to ensure any ancillary impacts are addressed.
- 1.4.1.3. If the meeting described in 1.4.1.2 results in concurrence to change the CSPP, the Airport and/or consulting engineer/designer will contact the FAA Office of Airport's Program Manager assigned to the airport to discuss the change and provide details of the change in writing. The FAA Program Manager will notify the Airport and/or consulting engineer/designer as to whether the CSPP must be re-submitted to OE/AAA for formal FAA review.
- 1.4.1.4. Once the CSPP change is approved by the FAA, the Airport and/or consulting engineer/designer will ensure that the revised CSPP is properly distributed. Any



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stakeholders listed in Section 1.7 of this document deemed affected by this change will also be notified by at least one of the identified engagement methods listed in Section 1.7.1.

1.5. Parties Needed for FAA ATO Coordination and Circumstances Requiring Coordination

1.5.1. The local ADO, Air Traffic Control Tower, and FAA TechOps office will be involved in both initial and on-going coordination efforts as described in paragraphs 1.1, 1.2, 1.3 and 1.4 of this CSPP.

1.6. Discussion of Formal Agreements (if applicable)

I.6.1. A FAA reimbursable agreement has been established related to the costs associated with FAA equipment shutdowns and flight checking the NAVAIDs impacted by the project.

1.7. Stakeholder Identification and Engagement Methods

The following stakeholders have been identified for this project. The stakeholder register below provides an overview of the stakeholders and engagement methods that will be used. I.7.I. Stakeholder Register

Stakeholder Name	Point(s) of Contact	Stakeholder Type	Engagement Method(s)
Airport Project Manager	Jacob Smith	Airport	Email, group meetings
FBO Aviation	John Smith	FBO	Email, one-on-one meetings
ACRP Airlines	Jane Smith	Airline	Email, group meetings
XYZ Airport Pilot Group	Joe Smith	GA Pilot Group	Group meetings, flyers
XYZ ATCT	Jim Smith	FAA ATCT	Email, one-on-one meetings
XYZ TechOps	Jenny Smith	FAA TechOps	Email, one-on-one meetings
FAA ADO	J acob Smith	FAA ADO	Email, phone, group meetings
TSA FSD	Jeremy Smith	TSA FSD	Email, phone

Phasing (Section 206)

This section provides an overview of the phases of the project.

1.8. Phase Elements

As previously discussed, this project has been segmented into 3 phases. The narrative description of each phase in the sections below corresponds to the construction safety drawings attached to this CSPP as Appendix A.

1.8.1. Phase 1

1.8.1.1. In Phase I, the southern extension of Taxiway B is constructed. This requires the closure of the South T-Hangar Apron. The duration of this phase is six weeks.



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- 1.8.1.2. Key Phase Components
 - 1.8.1.2.1. South T-Hangar Apron barricaded.
 - 1.8.1.2.2. Haul route established through transient tie-down apron.
 - 1.8.1.2.3. Southern Taxiway B extension constructed.
 - 1.8.1.2.4. Taxiways B1 and B2 constructed to edge of RSA.

1.8.2. Phase II

1.8.2.1.In Phase II, Taxiways B1 and B2 are constructed to the edge of the RSA to connect the southern Taxiway B extension to Runway 18/36. This requires the relocation of the Runway 36 threshold by 1,149 feet, the closure of the new Taxiway B southern extension, and closures of Taxiways A1 and A2 on the west side of the runway. The duration of this phase is four weeks.

1.8.2.2. Key Phase Components

1.8.2.2.1. Runway 36 threshold relocated 1,149 feet. The declared distances related to the relocated threshold are shown below.

	<u>TORA</u>	<u>TODA</u>	<u>ASDA</u>	<u>LDA</u>
Runway 18	5,277	5,277	5,277	5,277
Runway 36	5,277	5,277	5,277	5,277

- 1.8.2.2.2.Southern Taxiway B extension barricaded north of South T-Hangar Apron.
- 1.8.2.2.3. Taxiways AI and A2 barricaded.
- 1.8.2.2.4. Haul route established through South T-Hangar Apron and southern Taxiway B extension.
- 1.8.2.2.5. Taxiways B1 and B2 stub connections constructed.

I.8.3. Phase III

- 1.8.3.1.In Phase III, Taxiways C and D are demolished and lighting and signage improvements are made on Taxiway B and Taxiway B3. These activities require Runway 18/36 to be closed during this phase. All taxiway connections (A1, A2, A3, B1, B2, B3, C & D) to the runway are also closed during this phase. The duration of this phase is two weeks.
- 1.8.3.2. Runway 18/36 closed.
- 1.8.3.3. Taxiway B barricaded between Taxiways C and D.
- 1.8.3.4. Taxiways C and D barricaded and demolished.
- 1.8.3.5. Southern Taxiway B extension (including B1 and B2) and Taxiway B3 barricaded.
- 1.8.3.6. Taxiways A1, A2 and A3 barricaded.
- 1.8.3.7. Haul route established through the east apron and transient tie-down apron.

1.9. Construction Safety Drawings – Attached as Appendix A



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Area and Operations Affected by Construction Activity (Section 207)

This section discusses the areas impacted by construction activities and the mitigations that will be implemented.

1.10.Affected Areas

The areas impacted by construction activities are listed below.

1.10.1. Impacted Operational Areas and Components

Operational Requirement	Existing Condition	Phase I	Phase II	Phase III	Ultimate Condition
Runway 18/36	C-II	C-II	C-II (Runway 36 threshold relocated 1,149 feet))	Closed	C-II
Runway 18 Approach Minimums	³¼ Mile	¾ Mile	¾ Mile	NA	¾ Mile
Runway 36 Approach Minimums	¾ Mile	¾ Mile	Visual	NA	¾ Mile
Runway 18 NAVAIDS	PAPI-4, GPS	PAPI-4, GPS	PAPI-4, GPS	NA	PAPI-4, GPS
Runway 36 NAVAIDS	PAPI-4, GPS	PAPI-4, GPS	NA	NA	PAPI-4, GPS
Taxiway A1	Open	Open	Closed	Closed	Open
Taxiway A2	Open	Open	Closed	Closed	Open
Taxiway A3	Open	Open	Open	Closed	Open
Taxiway B	Open	Closed South of South T- Hangar Apron	Closed South of South T- Hangar Apron	Closed between Taxiways C & D	Open
Taxiway B1	NA	NA	NA	Closed	Open
Taxiway B2	NA	NA	NA	Closed	Open
Taxiway B3	Open	Open	Open	Closed	Open
Taxiway C	Open	Open	Open	Closed	Decommissioned
Taxiway D	Open	Open	Open	Closed	Decommissioned

I.II. Mitigation of Affected Areas (as applicable)

Specific mitigations are discussed related to the operational impacts defined in paragraph 1.10.

I.II.I. Aircraft Taxi Routes

I.II.I. Aircraft taxi routes will be impacted throughout this project. Taxi route changes are depicted in the Appendix A construction safety and phasing drawings.

1.11.2. ARFF Access Routes/Detours



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1.11.2.1. ARFF access routes will be maintained through closed taxiways to ensure sufficient airfield access. ARFF routes are shown in the construction safety drawings in Appendix A.

1.11.3. Airport and Airline Support Vehicle Routes/Detours

1.11.3.1. No Airport or Airline Support Vehicle Routes will be impacted by this project.

1.11.4. Approach and Departure Surface Impacts

1.11.4.1. The Approach Surface for Runway 36 and the Departure Surface for Runway 18 will be impacted in Phase II. No new surface penetrations associated with these changes were identified.

1.11.5. Changes to Air Traffic Control Procedures

1.11.5.1. As discussed in 1.11.1, aircraft taxi routes will be impacted throughout the project. In Phase II, GPS approaches to Runway 36 will be unavailable.

1.11.6. <u>Underground Utilities</u>

1.11.6.1. In addition to referencing existing utility diagrams for the XYZ Airport, utility location will take place throughout the project footprint before construction commences and any located utilities will be marked and provided to the consulting engineer/designer. Consultation with FAA TechOps will also be undertaken to understand FAA utility lines that are present in the project footprint. Utilities are discussed in further detail in Section 215 of this document.

1.11.7. Isolation of Construction Areas from Aircraft Operations

1.11.7.1. All construction areas will be delineated with lighted low-profile barricades. Barricades will be interlinked to form a continuous barrier in areas where work is occurring on foot, and barricades will be spaced at a maximum of four feet apart in areas utilized solely by construction vehicles. Exceptions to these barricade requirements will be made for ARFF access via Taxiways A1 and A3, at which a 10 foot gap will be maintained on one side of the barricade line to allow access for ARFF apparatus. Barricades are discussed in further detail in Section 220 of this document.

Navigation Aid Protection (Section 208)

This section describes construction impacts to NAVAIDs, NAVAID protections, and coordination processes.

1.12.Construction Impacts to NAVAIDS

1.12.1. In Phase II, the Runway 36 PAPI and GPS approaches will be unavailable due to the relocation of the runway threshold. In Phase III, all NAVAIDS associated with Runway 18/36 will be unavailable while the runway is closed.



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I.13.Protection of NAVAIDs

- 1.13.1. All NAVAID critical areas relevant to the construction project are depicted on the CSPP drawings attached as Appendix A.
- 1.13.2. Contractors shall work with FAA TechOPS to identify the location of all utility lines associated with NAVAIDs within the construction area to ensure their protection from power interruptions.
- 1.13.3. Construction activity will not take place in the vicinity or in front of either PAPI-4 system without the approval of the Airport and FAA TechOPS.

1.14.FAA ATO Approval and Coordination Process (within critical areas and NAVAID shutdowns)

- 1.14.1. The PAPI-4 systems at XYZ Airport are owned by the FAA. Jenny Smith with the local FAA TechOps office will be the point of contact for all coordination of PAPI shutdowns. Any PAPI shutdowns shall be coordinated at least 7 days prior to the shutdown occurring.
 - 1.14.1.1. All work affecting the PAPI system will be addressed under the reimbursable agreement referenced in paragraph 1.6 of this document. Due to the nature of this project, a flight check will not be required prior to returning the PAPI system to service.
- 1.14.2. Any unanticipated impacts to FAA NAVAIDs shall be reported immediately to the Airport Operations representative, who will notify TechOps and take other actions as required.

Contractor Access (Section 209)

This section discusses the contractor's access to the construction site:

1.15.Specifications/Limits of Access

I.15.1. Part 139 compliance

1.15.1.1. All Contractors will be prohibited from driving unescorted in any active movement area. Airfield access will be limited to closed areas, defined haul routes, and non-movement areas as designated in the construction safety drawings as shown in Appendix A.

1.15.2. Part 1542 Compliance

1.15.2.1. The Contractor will ensure a number of personnel sufficient to maintain the project schedule will be badged by XYZ Airport. For tasks involving a high volume of construction vehicle traffic, the contractor will provide a trained and badged gate guard to control access to the AOA. Gate 3 and Gate 5 will be used for access to the AOA. Only one gate will be used at a time unless traffic congestion or other circumstances require the use of both gates simultaneously. The Contractor will notify the Airport Operations representative via the consulting engineer/designer any time both gates are in use simultaneously.



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1.15.3. Required Training

- 1.15.3.1. Contractors and the consulting engineer/designer staff will be required to complete the airfield familiarization and vehicle operations training prior to commencing work. This training will be provided by the Airport.
- 1.15.3.2. All personnel required to be badged will undergo XYZ Airport badge training as required under Part 1542 and the Airport Security Program.
- 1.15.3.3. The duration of this project will require only a single frequency of each type of training, except if required as discussed in Section 216 of this document.

1.15.4. Vehicle Requirements

1.15.4.1. Any vehicle entering the AOA will be required to have a flag or beacon as prescribed in AC 150/5210-5(current edition). The name or logo of the entity to which each vehicle belongs must be prominently displayed on both sides of the vehicle and be no less than six inches tall. Vehicles will access the AOA via Gate 3 or Gate 5, if necessary. Both gates are automatically activated by badge readers. Any vehicles requiring access to the AOA not operated by trained and badged personnel must be escorted by badged and trained personnel. All vehicles entering or exiting the project site must be inspected for dirt and debris and any such findings must be removed.

1.15.4.2. Access Roads

1.15.4.2.1. Vehicles will access Gate 3 via Airport Road and Gate 5 via Aviation Street as shown in the construction safety drawings in Appendix A.

1.15.4.3. Haul Routes

- 1.15.4.3.1. Phases I & II: Vehicles will enter through Gate 3, through the South T-Hangar Apron, and into the construction area.
- 1.15.4.3.2. Phase III: Vehicles will enter through Gate 5 and proceed along the east apron and transient tie-down apron to access the work areas at Taxiways C, D, and B3.
- 1.15.4.3.3. All haul routes are shown in the CSPP drawings attached as Appendix A. These drawings also depict all required haul route signage to be provided by the contractor.

1.15.5. Parking

- 1.15.5.1. The contractor staging area for all three project phases will be located inside Gate3 as shown in the construction safety drawings in Appendix A.
 - 1.15.5.1.1. No construction equipment shall be parked within 10 feet of the AOA perimeter fence.
- 1.15.5.2. No construction equipment may be parked and left unattended in any runway or taxiway object free area.



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1.15.6. Construction Material Stockpiling

- 1.15.6.1. All material stockpiling will occur adjacent to the construction equipment parking site, clear of the Runway Object Free Area and Transitional Surface, as shown in the CSPP drawings attached as Appendix A. No stockpile shall be greater than 15 feet in height, and no material shall be stockpiled within 10 feet of the AOA perimeter fence.
- 1.15.6.2. Any changes to the identify stockpile locations must be coordinated with the consulting engineer/designer, airport, and FAA. The completion of a FAA Form 7460-1 may be required for any new stockpile locations.

Wildlife Management (Section 210)

The contractor will comply with all applicable provisions of the XYZ Airport Wildlife Hazard Management Plan.

I.16.Trash

1.16.1. All trash receptacles, including dumpsters, must be emptied regularly and remain covered at all times when not in use. All work areas will be kept clean of trash and food scraps at all times.

1.17.Standing Water

1.17.1. The Contractor will ensure that the presence of standing water at the construction site is minimized.

1.18.Tall Grass

1.18.1. The Contractor shall limit any grass growth within active project areas to a length of no greater than 6 inches and adhere to the requirements of Section T-901, Seeding of the contract documents and specifications.

1.19. Fencing and Gates

1.19.1. The Contractor shall immediately report any damage to gates or fences to the Airport Operations representative via the consulting engineer/designer unless there is an emergency situation, in which case the procedure identified in paragraph 1.31 of this document shall be followed. The Contractor will be responsible for repairs to any gates or fences caused by negligence by the Contractor. The Contractor is responsible for ensuring the security of all designated construction gates while in use for the project.

1.20. Disruption of Wildlife Habitat

1.20.1. The Contractor shall immediately notify an Airport Operations representative, via the consulting engineer/designer, of any wildlife sightings. The Contractor shall not feed wildlife.



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1.20.2. The Contract shall immediately notify the consulting engineer/designer of any identified wildlife habitats.

Foreign Object Debris (Section 211)

- 1.21. The Contractor shall ensure that any pavement surfaces utilized by the contractor are kept clean from dirt, mud, and other debris from the Contractor's equipment. Frequent cleaning in the vicinity of Contractor's work areas is required.
- 1.22.If FOD cannot be immediately removed due to size, type or location, the Contractor shall immediately notify the ATCT and the Airport.
- 1.23. The Contractor shall require vehicle operators to check tires prior to traversing active airfield pavement. Any material tracked onto an active airfield pavement by construction equipment shall be immediately removed. If the area requiring cleaning is a Movement Area, the Contractor shall contact the Airport Operations representative and receive an escort or surface closure before proceeding with cleaning the area.
- 1.24. Identification and removal of FOD shall be a key consideration in all inspections as discussed in Section 214 of this document.

Hazardous Material Management (Section 212)

- 1.25. The Contractor must be adequately prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks from vehicles operated on airport property.
- 1.26. Special care must also be taken when handling or transporting hazardous materials on airport property.
- 1.27.The contractor shall notify the consulting engineer/designer immediately after any hazardous material spill and begin containment and clean-up efforts immediately. The consulting engineer/designer shall notify the Airport Operations representative of the spill.
- 1.28.Management of hazardous wastes must strictly follow the most current stringent Federal, State and local regulations governing treatment, storage, and disposal. The contractor shall be responsible for containment, clean-up and mitigation of a hazardous material spill. See FAA AC 150/5320-15 for further instruction.
- 1.29.In addition to the vehicle requirements set out in paragraph 1.15.4.1 of this document, vehicles carrying hazardous materials must be labelled in accordance with all applicable Federal and State regulations.



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Notification of Construction Activities (Section 213)

A full list of points of contact will be provided as part of the SPCD document produced by the Contractor in consultation with the consulting engineer/designer and Airport. However, some key points of contact are included in this section.

1.30. Procedure for Airport Coordination for NOTAMs

- 1.30.1. All NOTAMs will be issued in accordance with the CSPP. If NOTAMs are needed that will impact airport operations but are not identified in the CSPP, the CSPP change process identified in paragraph 1.4 must be undertaken prior to the issuance of these NOTAMs.
 - 1.30.1.1. The Consulting engineer/designer will notify the Airport Operations representative when NOTAM issuance or cancellation is required in accordance with project phasing.
 - 1.30.1.2. The Airport Operations representative will execute the NOTAM process per their internal procedure and will notify the consulting engineer/designer when this process is complete.
 - 1.30.1.3. The Contractor, under direction from the consulting engineer/designer, will be responsible for ensuring all applicable actions are taken on the airfield to correspond with the NOTAM changes (installation of lighted Xs, movement of barricades, etc) as outlined in Sections 218-221 of this document.



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1.30.2. Involved Parties 24/7 Points of Contact

Entity/Role	Contact	Phone Number	Notes
Emergency	Emergency Dispatch	911	All life-threatening emergencies (including ARFF)
Airport Operations	Airport Operations Representative (24/7 on-duty)	(555) 555-5555	Non life-threatening issues requiring immediate airport assistance or notification
Consulting engineer/designer	Joan Smith	(777) 777-7777	All issues requiring notification or coordination
FAA TechOps	Direct Line	(111) 111-1111	Primary contact for issues requiring immediate assistance
FAA TechOps	Jenny Smith	(222) 222-2222	Project/secondary contact (after-hours emergencies)
FAA ATCT Manager On-Duty	Direct Line	(333) 333-3333	ATC issues requiring immediate assistance
ATCT Manager	Jim Smith	(444) 444-4444	Project/secondary contact (after-hours emergencies)

1.31. Emergency Notification Procedures

- 1.31.1.The Contractor shall immediately report any emergencies requiring medical, fire fighting or police response immediately by calling 911. As soon as it is safe to do so, the Contractor will also report the emergency to the consulting engineer/designer (if not already on site), who will immediately notify the Airport Operations representative. The Airport Operations representative will take the actions necessary to preserve public safety and Parts 139 and 1542 compliance.
- 1.31.2. The Contractor shall immediately report any hazardous conditions on airport movement areas by contacting the Airport Operations representative. As soon as it is safe to do so, the Contractor will also report the condition to the consulting engineer/designer, if not already on site. The Airport Operations representative will take the actions necessary to preserve public safety and Parts 139 and 1542 compliance, including notification to airport users and the ATCT as required by the circumstances.
- 1.31.3. The Contractor shall report all non-emergency circumstances requiring Airport or public safety assistance to the consulting engineer/designer, who will immediately notify the Airport Operations representative.



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1.32.ARFF Coordination

- 1.32.1. Any planned disruption of water lines, hydrants or ARFF access routes, or any nonemergency HAZMAT issues, shall be coordinated with XYZ Airport ARFF personnel via the Airport project manager.
- 1.32.2. In the event of an unplanned disruption of any of the items listed in paragraph 1.32.1, the Contractor shall immediately notify the Airport Operations representative via the consulting engineer/designer. The Airport Operations representative will take any actions necessary to preserve public safety and Part 139 compliance.

1.33.FAA Notification

1.33.1. Parts 77 and 157 compliance

1.33.1.1. The Contractor shall ensure, via the consulting engineer/designer, that all construction equipment over 15-ft in height has been air spaced prior to using such equipment on site. This process must be completed using the FAA OE/AAA system and must be submitting a minimum of 45 working days in advance. The consulting engineer/designer will notify both the Contractor and Airport project manager of all FAA determinations resulting from this process.

1.33.2. FAA Reimbursable Agreements

1.33.2.1. A reimbursable agreement between the Airport and FAA TechOps will be put in place to address FAA equipment shutdowns and flight checks.

Inspection Requirements (Section 214)

This section provides and overview of the inspection requirements associated with the project.

1.34. <u>Daily Inspections</u>

1.34.1. The Contractor shall perform no less than daily safety inspections to verify all construction operations are in conformance with the CSPP. A checklist for performing these inspections will be provided in the SPCD. Any discrepancies that cannot be immediately resolved by the Contractor must be immediately reported to the consulting engineer/designer, who will then immediately notify the Airport Operations representative. The Airport Operations representative will determine necessary actions to maintain compliance and ensure public safety.

1.35. Continuous Surveillance Inspections

1.35.1. The Airport Operations representative will conduct ongoing, random inspections of the project area and will report any concerns to the consulting engineer/designer.



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Special Inspections

1.35.2. The Contractor shall conduct a special inspection of all project areas prior to reopening them to operational use. This includes both haul routes and project work areas. The Contractor will use the same checklist noted in paragraph 1.34.1 to complete these inspections. The Airport Operations representative will also conduct a special inspection of all areas before they are reopened to operational use. The Airport Operations representative shall have the authority to deny reopening of these areas if Part 139 compliance discrepancies are identified.

1.36.Final Inspections

1.36.1. At the completion of each phase of the project, the Contractor, consulting engineer/designer, airport project manager (or designee), and FAA shall perform a final safety inspection to verify conformance with the plans, specifications and Part 139 requirements.

Underground Utilities (Section 215)

- 1.37. Underground utilities exist within and adjacent to the limits of construction. The approximate location of utilities shown in the plans was based on historical records. Utilities that have been located include XYZ Water Company, BT&T Telecommunications, and TBD Electrical. 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 companies involved to make arrangements for the location of the utilities on the ground. The Contractor shall contact FAA TechOPS to establish utility line locations associated with all NAVAIDs. The contractor shall maintain all utility location markings at the project site until they are no longer necessary.
- 1.38. Under 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 1-800-888-8888. 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, to include FAA TechOps as well as the one-call system.

Penalties (Section 216)

This section describes penalties for non-compliance with this CSPP.

1.39. Failure of the Contractor (including employees) or any subcontractors (including employees) to comply with airport instructions, or any of the other requirements of the airport while operating on airport property, shall be subject to the following:



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1.39.1. Driving and Pedestrian Violations in the AOA

- 1.39.1.1. First Offense Written warning and violator must retake the training discussed in paragraph 1.15.3.1 of this document.
- 1.39.1.2. Second 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 fine or penalties imposed on the airport as a result of the incident will be assessed to the Contractor.
- 1.39.1.3. Third and Subsequent Offenses The Contractor shall receive a fine of \$5,000.00, and the vehicle operator will receive a loss of driving privileges on the airport. If the violations are pedestrian in nature, the violator shall be removed from the project. In addition, any fine or penalties imposed on the airport as a result of the incident will be assessed to the contractor.

1.39.2. Security Violations

- 1.39.2.1. First Offense (Strike One) The violating badgeholder must retake the Airport's security training as discussed in paragraph 1.15.3.2 of this document. In addition, any fine or penalties imposed on the airport as a result of the incident will be assessed to the Contractor.
- 1.39.2.2. Second Offense (Strike Two) The Contractor shall receive a fine of \$1,000.00, and the violating badgeholder will have their badge suspended for 7 days. The violating badgeholder will must retake the Airport's security training as discussed in paragraph1.15.3.2. In addition, any fine or penalties imposed on the airport as a result of the incident will be assessed to the Contractor.
- 1.39.2.3. Third and Subsequent Offenses The Contractor shall receive a fine of \$5,000.00, and the violating badgeholder will have their badge revoked and be removed from the project. In addition, any fine or penalties imposed on the airport as a result of the incident will be assessed to the Contractor.

Special Conditions (Section 217)

This section discusses special conditions related to construction operations.

1.40. Snow Removal

1.40.1. If snow removal operations become necessary within or adjacent to the project footprint, the Airport Operations representative will coordinate with the Contractor via the consulting engineer/designer to determine any impacts to the project or snow removal operations. In all cases, snow removal operations will take priority over project work, and the Airport Operations representative may dictate project work stoppage if needed to achieve safe and effective snow removal operations. These actions will be taken in accordance with the XYZ Airport Snow and Ice Control Plan.



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1.41. Low Visibility

1.41.1. If airport visibility drops below one mile, the Airport Operations representative will inspect the project site and determine the visibility of project delineations and whether project work can safely continue. The Airport Operations representative may dictate increased project delineation (additional light barricades, etc) or project work stoppage in order to preserve safety.

1.42. Aircraft Emergency

1.42.1. In the event of an aircraft emergency on or arriving at XYZ Airport, the Airport Operations representative will direct evacuation of all or part of the project site if the nature of the emergency may impact the project site. This direction will be made by phone to the on-site consulting engineer/designer or in person, if possible. If required, project personnel will adhere to the evacuation procedure defined in the project SPCD. In some situations, Contractor personnel may need to self-evacuate if circumstances pose an immediate safety risk.

Runway and Taxiway Visual Aids (Section 218)

All airport markings, lighting, signs, and visual aids 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 damage or displacement by prop wash, jet blast, wingtip vortices, or other wind currents. A detailed signage, lighting and marking plan is provided for each phase of this project in Appendix A.

1.43. Markings

- 1.43.1. All temporary or permanent runway and taxiway markings shall conform to the requirements of the most recent edition of FAA AC 150/5340-1.
- 1.43.2. Partially Closed Runways/Temporarily Relocated Threshold The Contractor shall be responsible for furnishing, installing, and maintaining temporary marking and lighting for the relocated runway threshold. See details on construction safety drawings for partially closed runway details.
- 1.43.3. Temporarily Closed Taxiways The Contractor shall be responsible for furnishing, installing, and maintaining taxiway closure markers (e.g. yellow X's) at the entrance to the closed taxiway from the adjacent runway. When applicable, 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 object free areas. See details on construction safety drawings for closed taxiway marker and low-profile aircraft barricade details.



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1.44.Lighting and Visual NAVAIDs

- 1.44.1. All temporary lighting for runway and taxiway systems shall conform to the requirements of the most recent edition of FAA AC 150/5340-30, AC 150/5345-50 and AC 150/5345-53. The contractor shall be responsible for disconnecting isolation transformers associated with any runway or taxiway light fixtures that are being disconnected. Additional detail regarding changes to airport lighting during this project will be discussed in the SPCD and on the construction safety drawings.
- 1.44.2. Lighted Xs will be placed at each end of the runway during all periods of runway closure as specified in FAA AC 150/5370-2 and AC 150/5345-55. The Contractor will be responsible for the safe storage, placement, removal, and maintenance of this equipment during the life of the project. See details on construction safety drawings for closed lighted X details.

1.45.Signage

- 1.45.1. Changes to existing signage as well as temporary signage shall comply with the guidance set forth in FAA ACs 150/5370-2, 150/5345-44, 150/5345-53, and 150/5340-18.
- 1.45.2. Specific methods use to cover and/or deactivate signage will be discussed in the SPCD and on the construction safety drawings.

Access Routes - Marking and Signage (Section 219)

This section discusses the marking and signage utilized for contractor access routes.

1.46. Haul Route Demarcation

- 1.46.1. 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 and shall comply with all applicable provisions of FAA AC 150/5340-18 and MUTCD specifications.
- 1.46.2. Signage for the Phase I & II haul route shall be a different color than the signage for the Phase III haul route to prevent inadvertent use of the prior haul route. See details on construction safety drawings for access route details.

Hazard Marking, Lighting and Signage (Section 220)

Hazard marking and lighting prevents pilots from entering areas closed to aircraft and prevents contractor personnel from entering areas open to aircraft. An on-call contact for the contractor shall be provided in the SPCD in the event that emergency lighting or barricade repairs are required.



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1.47. Barricades

1.47.1. The contractor shall furnish, install, and maintain low-profile, highly reflective barricades (no greater than 18 inches high) 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. All red lights shall meet the luminance requirements of the State Highway Department. The spacing of barricades shall be such that a breach is physically prevented barring a deliberate act. If barricades are intended to prevent pedestrian access, then they shall be linked. See details on construction safety drawings for low-profile aircraft barricade detail and locations.

1.48. Work Lights

1.48.1. Positioning of work lighting during night work will be coordinated with the ATCT and the airport project manager to ensure that airport and ATCT operations are not impacted. The agreed-upon work lighting positioning shall be described in detail in the SPCD.

1.49. Night Work

- 1.49.1. Due to frequent fog in the vicinity of XYZ Airport, work shall be stopped and the project site shall be cleared of personnel and equipment to the extent practicable any time visibility drops below one mile during hours of darkness.
- 1.49.2. Any open trenches, excavations, or manholes must be barricaded or covered at night.

1.50.Equipment

1.50.1. Only small construction equipment that poses low risk to aircraft and can withstand typical winds, prop wash, and jet blast may remain in areas adjacent active movement areas (outside the object free areas) when a project work site is not active. This equipment will be specified in the SPCD.

Protection of Runway and Taxiway Safety Areas, Zones and Surfaces (Section 221)

This section discusses the protection of protected surfaces associated with runways and taxiways. The locations of all protected surfaces are shown on the Construction Safety Phasing Drawings attached as Appendix A.

1.51. Runway Safety Areas (RSA)

1.51.1. No work shall be permitted within an active RSA. The Contractor shall ensure adequate distance or other protection from jet blast and prop wash, 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. Adjustments to the RSA dimensions will be coordinated with the airport project manager and FAA ADO and ATCT. When working in areas adjacent to the RSA, the



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Contractor shall place orange construction fence along the edge of the RSA to allow contractor personnel to easily identify its location.

1.52.Runway Object Free Areas (ROFA)

1.52.1. No material shall be stockpiled inside the limits of the active ROFA unless properly air spaced and approved through the appropriate FAA airports regional or district office. No equipment may be left within the ROFA when the construction site is not active.

1.53. Taxiway Safety Areas (TSA)

1.53.1. No work shall be permitted within an active TSA. 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. Adjustments to the TSA dimensions will be coordinated with the airport project manager and FAA ADO and ATCT.

1.54. Taxiway Object Free Areas (TOFA)

1.54.1. No construction shall be permitted inside an active TOFA. When working in areas adjacent to an active TOFA, the Contractor shall place orange construction fence along the edge of the TOFA to allow contractor personnel to easily identify its location.

1.55. Obstacle Free Zone (OFZ)

1.55.1. 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 and depicted in the construction safety drawings.

I.56.Approach/Departure Surfaces

1.56.1. All contractor personnel, materials, and equipment shall remain clear of the applicable threshold siting surfaces as defined in Chapter 3 of FAA AC 150/5300-13.

Other Limitations on Construction (Section 222)

1.57.Prohibitions

- 1.57.1. The use of tall equipment (i.e. cranes, concrete pumps) shall not be permitted unless approved by the consulting engineer/designer and an aeronautical study, completed by the FAA, has identified that the equipment will not present a hazard to air navigation. The submittal for this coordination shall take place at least 45 days prior to anticipated use.
- 1.57.2. 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 consulting engineer/designer.
- 1.57.3. 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.



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1.58.Limitations

1.58.1. Contractor shall comply with County Ordinance 1358 with regard to truck idling.



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Appendix A - Construction Safety Phasing Drawings

(Not included as part of this Example CSPP Narrative)