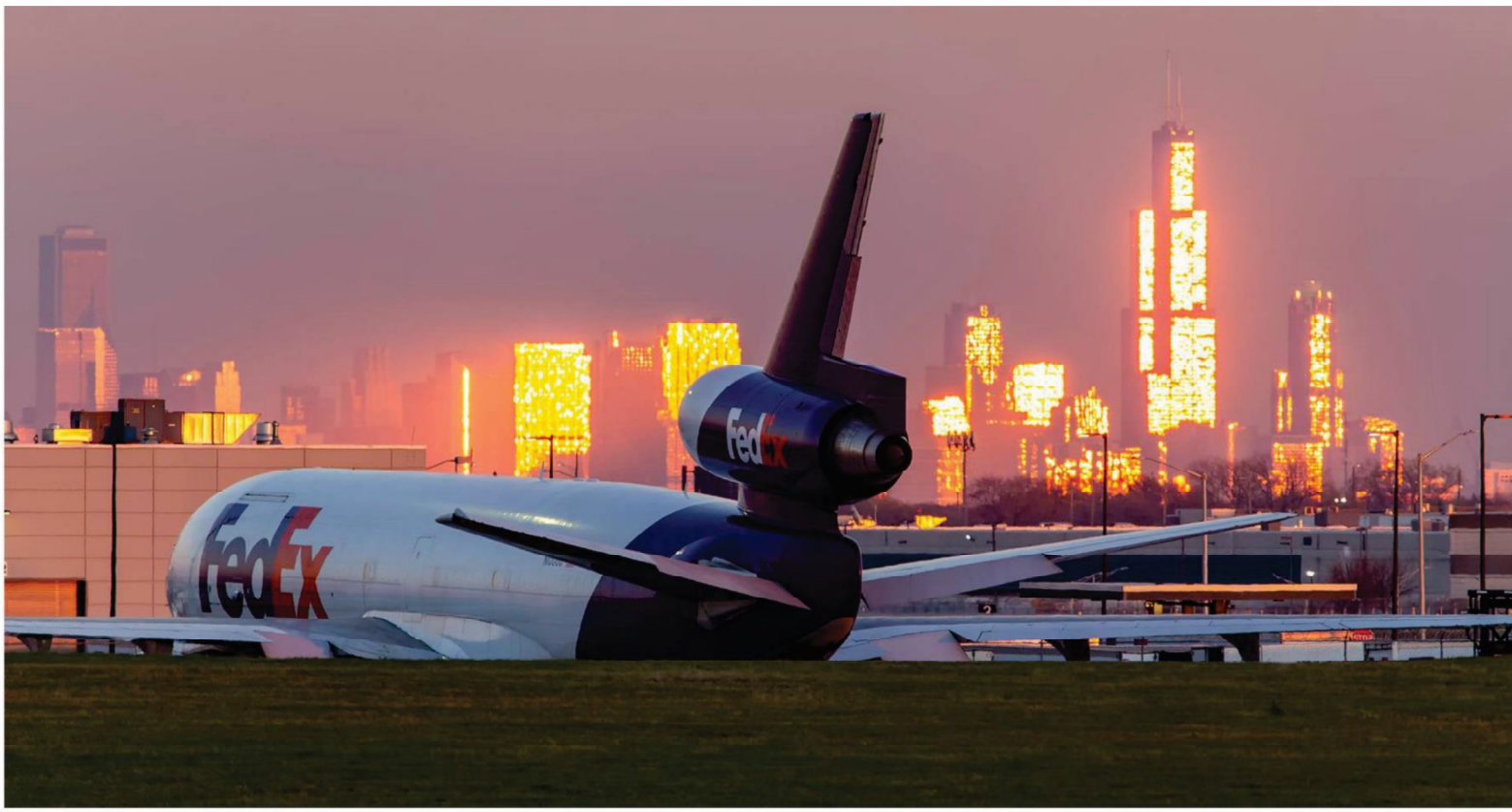
O'HARE
2021
International Airport

Construction Safety Phasing Plan

O'Hare International Airport
Rehabilitation of Taxiway "Y"
Project # H6237.21-00



O'HARE 21
THE FUTURE OF O'HARE

Volume 1

Table of Contents

NOTE: For ease of review, all information contained within the CSPP that is highlighted directly relates to information, construction and operational issues for the Taxiway “Y” Rehabilitation construction project.

All O’Hare International Airport Construction Safety Phasing Plans will be divided into 2 Volumes.

<u>Volume 1:</u> Will include all specific information related to the project including scope of work, phasing, work areas and operational impacts.
<u>Volume 2:</u> Will include all general O'Hare International Airport, FAA Advisory Circulars and Federal Aviation Regulations rules and procedures. All construction limitations and issues are addressed in this volume.

A. <u>PURPOSE:</u>

The prime responsibility for safety and FAR Part 139 compliance for airfield construction projects lie with the airport owner/operator. Aviation safety is the prime consideration at airports especially during construction. Our primary goal is to provide the highest possible level of safety, security and efficiency to all the airport users; from the airlines and tenants to the construction contractors and ultimately the traveling public.

To ensure this highest level of safety is maintained a Construction Safety Phasing Plan (CSPP) has been developed specifically for the **Taxiway "Y" Rehabilitation** construction project. The purpose of the CSPP is to identify all construction activities that will occur within the Airport Operations Area (AOA) of the airfield and define how each construction area will comply with the requirements of FAR Part 139 and all applicable FAA rules and regulations.

The CSPP is a standalone document written to correspond with the safety and security set forth in FAA Advisory Circular 150/5370-2G, FAR Part 139 and the City of Chicago, O'Hare International Airport's safety and security requirements and all local codes, requirements and procedures. The CSPP is to be reviewed by all personnel involved in the project, from airport operations and management, construction management, design teams, the selected contractor and all their sub-contractors on the project.

The CSPP written for **Taxiway "Y" Rehabilitation** construction project is an airport operational document that describes the impacts to Airfield Operations Area (AOA) including both Movement Areas (MA) and Non-movement Areas (NMA). This document does not cover and is not to be used in lieu of construction documents, drawings and specifications. The CSPP describes generalized work areas of the project and how construction activities will impact aircraft and airline operations on the airfield. The CSPP covers the actions and responsibilities of design, construction, inspection, project contractors and airport personnel.

Prior to the start of the project, the contractor will be required to prepare and submit a "Safety Plan Compliance Document" (SPCD). Within the content of the SPCD, the contractor will include a statement that they have read and understand the CSPP and indicate how they will comply with

all the requirements and safety procedures detailed within it. Any information not discussed in the original CSPP or ANY changes to the constructability of the project MUST be outlined in the SPCD and submitted to the airport and FAA for review. The SPCD must be submitted to and approved by the airport prior to the start of any work.

In the event the contractor's activities are found to be in non-compliance with the requirements of the CSPP or SPCD, the airport's representatives will direct the contractor in writing to immediately stop all operations of that particular work until such time as all deficiencies are mitigated and/or corrected to the satisfaction of the airport.

The CSPP and SPCD will be available at all times on the jobsite. It is the responsibility of the contractor to ensure all construction personnel are familiar with the safety procedures and regulations of the airport.

NOTE:
This CSPP complies with the recently revised AC 150-5370-2G Operational Safety on Airports During Construction dated 12/13/17. It follows the revised Chapter headings. In previous safety phasing plans, O'Hare has submitted reference to using, 'working within the taxiway object free area' as "221.d Operations". Under the revised AC, TOFA impacts are described in chapter 2.22.4. The reference to 221.d has been included in all project contract drawings and approved by CDA Operations. For construction purposes the term 221.d will continue to be used for any work activity within the TOFA ensuring compliance with all new AC chapter criteria.

B. SCOPE:

a. Project Description:

Taxiway "Y" Rehabilitation construction project will mill and overlay the pavement of Taxiway "Y" (3" overlay) as well as repaving of Taxiways "Y1", "Y2", "Y3" and "Y4" from the hold bar locations of Runway 4R-22L (Limits of Runway 4R-22L Paving Rehabilitation Project) onto the "Y" Taxiway. Additionally, deep crack repair on the taxiway pavements and expand the fillet at the intersection of "Y" and "Y3" Taxiways to comply with current FAA requirements and provide the required turning radius for TDG V aircraft exiting the runway. (See Fig 1.)

Figure 1

The Taxiway "Y" Rehabilitation project consists of four work areas that includes but is not limited to the following construction activities:

- Demolition of existing Taxiway "Y3" fillet shoulder
- Expansion of Taxiway "Y3" fillet
- Taxiway pavement mill and overlay
- Deep crack repair
- Restore and regrade infield drainage
- Topsoil and seed placement
- Repainting of all taxiway pavement and shoulder markings
- Remove and replace Taxiway edge lights
- Remove and replace Taxiway centerline lights
- Replace existing in-pavement weather sensors
- Removal and replacement of circuit cables
- Adjust existing in-pavement ALSF lights
- Adjust existing in-pavement runway status lights

b. **Project Phasing and Details**:
This project is divided into 4 individual work areas. The contractor is to review all required restrictions and milestones associated with each work area as applicable. (See Fig. 2)

Figure 2

C. PLAN REQUIREMENTS:

a. *Design meetings* – Throughout the design process of this project, several working group meetings were held to discuss engineering and design parameters, as well as environmental and airfield impacts due to construction. Participants to the pre-design meetings and project design reviews included, but were not limited to:

Project designers
Program Management representatives
Construction Management (CM) representatives
O'Hare International Airport Airfield Operations
Airline and Cargo representatives
FAA Airport District Office (ADO) and Airports Division

b. *Pre-bid Conference* – The construction manager representative along with the Chicago Department of Aviation shall conduct a pre-bid conference to help clarify and explain construction methods, procedures, quality issues and safety requirements of the contract. The pre-bid conference will be held in spring 2021. The following entities spoke at the pre-bid conference:

Project designers
Construction Management representatives
O'Hare International Airport Airfield Operations
Airline and Cargo representatives
FAA ADO and Airports Division

The meeting will be held prior to the opening bid date to allow all potential bidders an opportunity to receive a briefing on the scope of the project and allow for any questions they might have in regard to the contract drawings and specifications that are issued for bid.

A significant topic of the pre-bid conference introduced the requirements of AC 150/5370-2G and the contractor's requirements of completing and submitting a Safety Plan Compliance Document for review and approval.

This meeting will be held prior to the bid opening date and is not mandatory for contractors intending to bid on this project. CDA and FAA will be invited.

c. *Pre-construction Conference* – Upon award of the contract, the OMP along with the Chicago Department of Aviation shall hold a pre-construction conference with the successful bidder to discuss deliverables due for the project. The pre-construction conference will be held prior to the issuance of the notice to proceed. Participants to the pre-construction meeting will include, but not limited to:

- Engineers and designers
- Construction Management (owner's representatives)
- Chicago Department of Aviation
- Federal Aviation Administration
  - ADO
  - ATCT
  - Airports
  - Tech Ops
  - Quality Control and Assurance laboratory representatives
- Contractor and subcontractors
- All affected airport users
- Airline/cargo representatives
- Federal, State and Local agencies involved or affected by proposed construction.

The project construction management team will prepare an agenda prior to the pre-construction meeting. Subject matter will include but is not limited to:

- Project Information.
- Contract Details and Compliance
- Contractor Management Team – duties and responsibilities
- Insurance compliance and requirements

Submittals and Permits.
Project Schedule
Safety, Security
CSPP and SPCD review and compliance
FAR Part 139 and Advisory Circular Compliance
ID Badging
Airside Construction Coordination
Utility protection and coordination

d. *Contractor Progress Meetings* – Will be held as required for the project and will discuss any airfield operational safety issues that may arise as well as design, constructability, quality, and coordination issues.

e. *Contract Change Orders* – Changes to the contact as related to scope of work or duration of the project will be addressed at the weekly round table meeting where any potential changes, additions or deletions to the contract are reviewed with CDA. Any changes that affect the CSPP or SPCD will immediately be revised or added to the existing CSPP and/or SPCD and forwarded to CDA and FAA for review and approval.

f. *CDA, Airline and FAA Coordination Meetings* – Coordination meetings are held to discuss all construction activities on the airfield and to coordinate any airfield impacts with all airport users. Invited to each meeting is the CDA, program management, construction designs, construction management, FAA ATC, FAA ADO, FAA Airports, Airlines and/or representatives and when applicable airfield contractors.

Short Term Operational Phasing (STOP) Meeting held every Monday (except holidays) at 8:00am at the City Operations Atrium conference room. All short-term construction issues (within 30 days) that will affect the airfield are discussed and coordinated.

g. Contract Dates – (Approximate Dates)

i. Pre-bid Conference: Spring 0f 2021
ii. Award: Spring of 2021
iii. Start of Construction: Summer of 2021
iv. Project Completion: Winter 2021

D. AIRFIELD IMPACTS:

The Taxiway Y Rehabilitation project will have moderate impacts over the course of the project. Construction will impact Runways 4R-22L, 10L-28R, 10C-28C, 10R-28L and multiple airfield taxiways. Taxiways "Y", "Y1", "Y2", "Y3" and "Y4" will require nightly closures for approximately 6 months as well as extended closures of both the "Y" and "Y4" Taxiways (not concurrently) for no more than 7 days to complete reconstruction of Runway 28C in-pavement ALSF light cans. Taxiway "Y3" and "Y" intersection will also require a 30-day extended closure to complete all construction for the widening of the taxiway fillet.

Work areas and specific construction activities mainly will occur on Taxiway "Y" and transition taxiways. Any closures not identified in the contract documents that will be requested by the contractor will require a minimum 7-day notice to be coordinated with the airport community for short term closures (under 24 hours), any extended closures (over 24 hours) will require a minimum 14-day notice to coordinate.

This project will have impacts to runway 10L-28R, 10C-28C and 10R-28L due to the required repaving operations and repair to the ALSF lighting infrastructure for Runway 10C on "Y" and "Y4" Taxiways that fall inside the localizer critical area. Both runways 10L-28R and 10C-28C will be closed on various nights for other construction projects. The RE and Contractor should allow a minimum 2 weeks for coordination at the STOP Meeting to request closures of either runway. Work within the 28R glide slope, 10L or 10C localizer critical on the "Y" and "Y4" Taxiways will not be permitted when arriving those runways. (See Fig. 3)

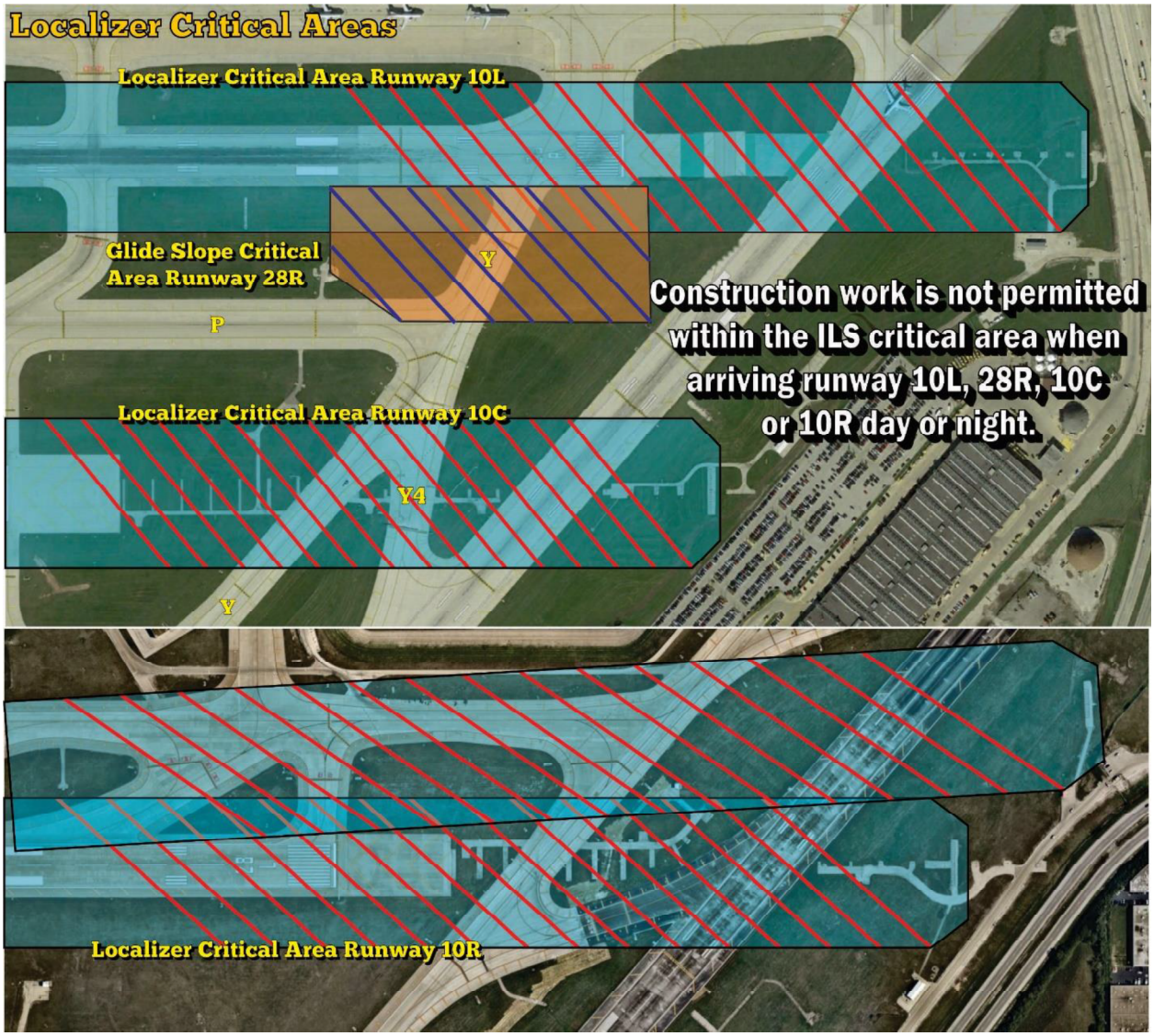


Figure 3

AOA Closures are NOT guaranteed! There are several other construction projects with both short and extended closures of AOA pavements (runways and taxiways) that may prevent certain taxiways or runways from being closed. It is recommended the contractor begin coordination of closures through pre-activity meetings a minimum 2 weeks prior to work beginning. Included in the pre-activity meeting should be the contractor, CCA, CDA, OPS, Airline representatives and FAA ATC.

At the time of the writing of the CSPP, it is impossible to identify all future airfield conditions and taxi routes. Over the course of this and other projects several taxiways will be commissioned and decommissioned and others re-designated. As these occur, airfield closures may need to be adjusted or relocated to accommodate airfield configurations. All coordination will take place at the weekly STOP meeting with the airport community.

E. <u>CSPP GENERAL INFORMATION:</u>

This CSPP considers the various scenarios that may be encountered during the construction of this project. Unforeseen situations or changes or additions to the scope of work may arise that are not specifically addressed in this plan. All changes or added work will be addressed on a case-by-case basis with CDA Operations and the airport community as they arise. These changes may or may not warrant a revision to the approved CSPP.

Construction phasing and activities for this project will be coordinated with CDA Operations, local ATC and all airport users to provide the least disruption to the daily operations of the airport. The work areas established in the contract drawings and specifications have been incorporated into the CSPP. The following sections provide details regarding the airfield operational issues specific to the project as related to the following topics: ***Phase Description, Phase Duration and Locations, Areas Closed to Aircraft Operations, Required AOA Closures, Barricades Plans, FAR Part 139 Impacts, Taxi Routes, ARFF Routes, Construction Staging Areas, Construction Access and Haul Routes, Impacts to NAVAIDS, Airfield Signage, Lighting, and Marking, Available Runway Length, Required Hazard Marking and Lighting and Lead Times for Required Notifications. (Only topics relevant to the project will be discussed, if a topic is not applicable it will not be covered).***

A draft CSPP was sent out for review and comments on February 23, 2021 to; CDA Operations, FAA control tower, airline representatives, CARE and project designers. Comments for the CSPP are due no later than close of business March 2, 2021. If requested, a CSPP review meeting will be scheduled with CDA, airline representatives and the FAA ATC. If a meeting is not required, all received comments will be included into the finalized CSPP document and submitted to the FAA for review and approval. Attached as Appendix “C” of this document is the required Safety Risk Management Analysis FAA Form 5200.8 SAS-1 to be completed by the FAA.

Aspects of this project will be constructed and phased to comply with all FAR Part 139, Part 77 and applicable FAA 150 series Advisory Circulars which are detailed within the CSPP (current at the time of writing).

All graphics within the CSPP are for visual reference only and are not to scale. Graphics were obtained using Nearmaps, Google Earth and the most recent O'Hare International Airport aerial photographs.

2.6 Phasing – Taxiway Y Rehabilitation

Overall Project Phasing:

This is a single phased with four individual work areas. Elements of the various phases of work, as shown on the construction phasing plans, must be constructed in accordance with the schedule outlined in the contract documents. The "Duration" shown in each work area is the maximum time allowed for completion. Furthermore, each work area must be completed within the allotted calendar days from the issuance of the NTP.

Work areas described below depict portions of the project which may have limitations on start dates or restrictions, including milestones. The contractor must reference these areas in relation to the sequencing shown in the operational conditions of the contract drawings.

The following provides a description of the Taxiway Y Rehabilitation project broken down by work area. Work areas may identify limitations on start date or duration but are otherwise intended to be part of the overall staging as presented in the contract drawings with the ultimate requirement of meeting the work area milestone dates. Individual milestones for specific work, if indicated on the plans, must also be met.

Construction Dates and Milestones:

The approximate construction start date for the project will be Summer of 2021 with project substantial completion Winter 2021.

Construction Milestones for the project include:

1. **Substantial Completion** – Completion of all work in work areas on or before Winter 2021.

IMPORTANT NOTE FOR AIRFIELD COORDINATION:

Several work areas for this construcation project overlap and will likely occur simultaneously. The Contractor MUST be diligent and accurate to communicate all required closures and work areas weekly at the STOP meeting. The contractor MUST be aware of all restrictions regarding closures for runways and taxiways for all project work aras.

General phasing notes for taxiway closure restrictions:

1. Runway 10C-28C and Runway 10L-28R cannot be closed simultaneously.
2. Taxiways “Y1” and “Y2” can not be closed simultaneously.
3. A portion of work area 3 is inside the runway 28R Glide Slope critical area.
4. Taxiways “Y4” and “Y” cannot be closed simultaneoulsy .
5. Work Area 2 and 4 cannot be closed simultaneoulsy .
6. Any shut down to FAA NAVAIDS must be cooridnated with the airport community 30 days in advance when the work is to occur and also at the weekly STOP meeting prior to actual work.

Work Area 1

Work Area Description and Scope of Work:

Work Area 1 will consist of mill and overlay of Taxiway Y from Taxiway Y1 to the extended RSA of Runway 10C-28C as well as the areas of Taxiways "Y1", "Y2" and "Y3" that are located outside the RSA of Runway 4R-22L. Also included in Work Area 1 is the full depth demolition and re-construction of the "Y3" taxiway fillet, Installation of the widened taxiway "Y3" Fillet, partial depth crack repairs, removal, and installation of in-pavement ALSF lights and covers, removal and installation of Taxiway centerline lights. Prior to beginning work in Work Area 1, the closures of Runway 4R-22L, Runway 10R-28L and Taxiways "Y1", "Y2" and "Y3" must be coordinated with STOP. (See Fig. 4)

Figure 4

Required AOA Closures and Durations:

Work Area 1 will require short term nightly closures of the following Runways and Taxiways, extended work hours may be possible depending on wind conditions:

Short Term AOA Closures (Night) (Exact closure times and durations to be coordinated with airport community at weekly STOP meeting:

Runway 4R-22L closed (as needed).
Runway 10R-28L closed.
"Y" Taxiway closed between "Y1" and the RSA of Runway 10C-28C.
"Y1" Taxiway closed.
"Y2" Taxiway closed.
"Y3" Taxiway closed.

"W" Taxiway closed between Taxiways "W5" and "Y".
"GG" Taxiway closed between Taxiways "JJ" and "Y".
"RR" Taxiway closed between Taxiways "GG" and "Y."

Extended and Day Time AOA Closures:

"Y3" Taxiway closed between Runway 4R-22L and Taxiway "Y" for a duration no longer than 30 days.

NOTE: At the completion of the workday the "Y" Taxiway between Taxiways "W" and "GG" must be reopened to air traffic. ONLY Taxiway "Y3" will be closed for 30 days.

Extended and daytime closures of Taxiways "Y", "Y1", "Y2", "Y3", Runway 4R-22L and Runway 10R-28L may be possible, however multiple factors (Weather conditions, wind direction, traffic flow, coordination with other O'Hare projects etc.) need to be considered by the airport community at the weekly STOP meeting. Advanced coordination with CDA Operations at the STOP meeting will be required. ***Note, daytime work is NOT guaranteed***! Requests for any daytime work must be presented and approved at the weekly STOP meeting.

Barricade and AOA Closure Plans:

The following identifies the closures and barricade set up for Work Area 1. (See Fig. 5)

Figure 5

Extended closure and barricade set up for Y3" Extended closure (See Fig. 6)

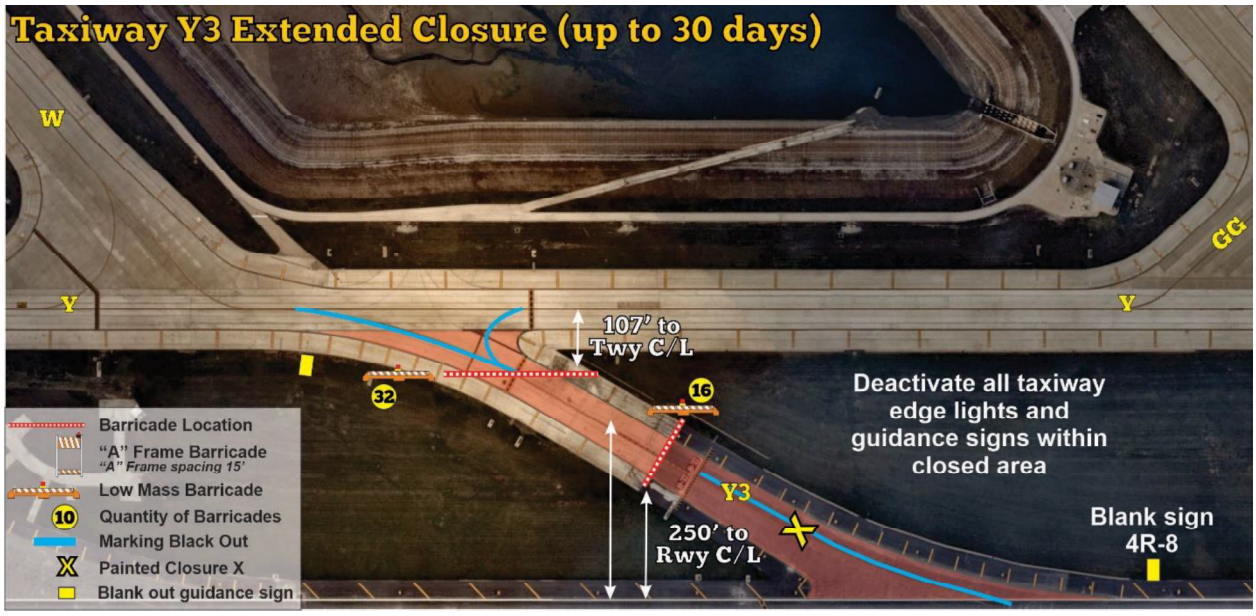


Figure 6

FAR Part 139 Issues:

The extended closure of the "Y3" Taxiway will require the deactivation of all edge lights within the closed area as well as the blank out of guidance signs within or leading into the closed area from the "Y" Taxiway or Runway 4R-22L.

Repaving/construction operations on Taxiway "Y" between taxiways "Y1" and "W" will require a closure of Runway 10R-28L to allow vehicle haul route through the RSA of the runway. (See Fig. 7)

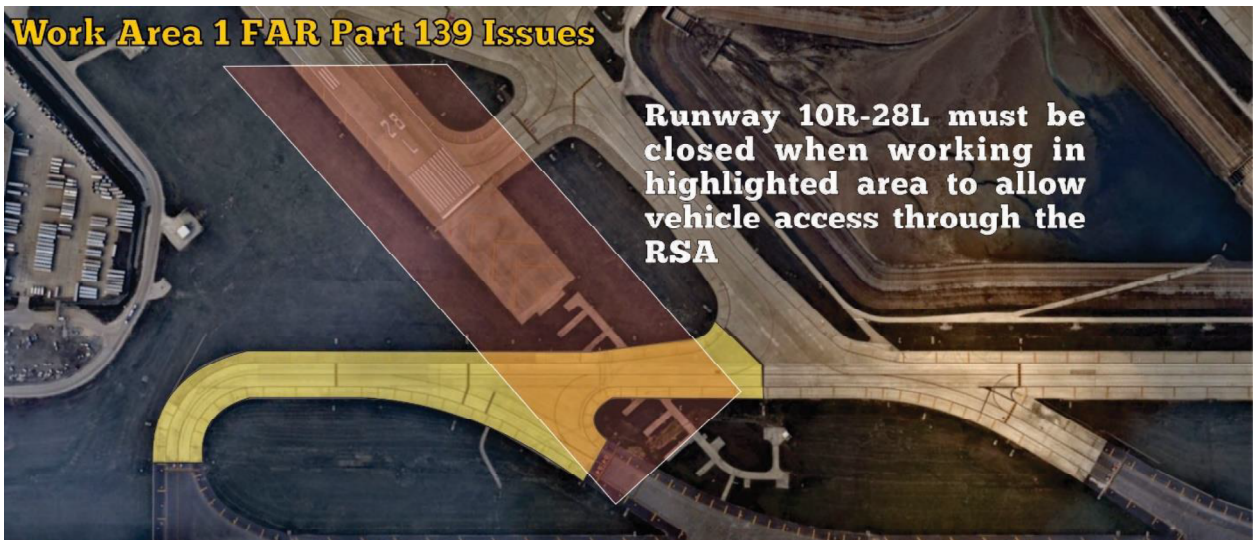


Figure 7

Work Area 2

Work Area Description and Scope of Work:

Work Area 2 will consist of mill and overlays of Taxiway "Y" and "Y4" within the extended RSA of Runway 10C-28C. Also included in Work Area 2 is partial depth crack repairs, removal and installation of Taxiway centerline lights and in-pavement weather sensor and complete full depth repairs (and concrete pavement repair) to the in-surface ALSF light base cans for Runway 28C which will require extended closures of Taxiways "Y" and "Y4" (not simultaneously). Prior to beginning work in Work Area 2, the closures of Runway 4R-22L, Runway 10R-28L, Runway 10C-28C and Taxiway "Y4" must be coordinated with STOP. (See Fig. 8)

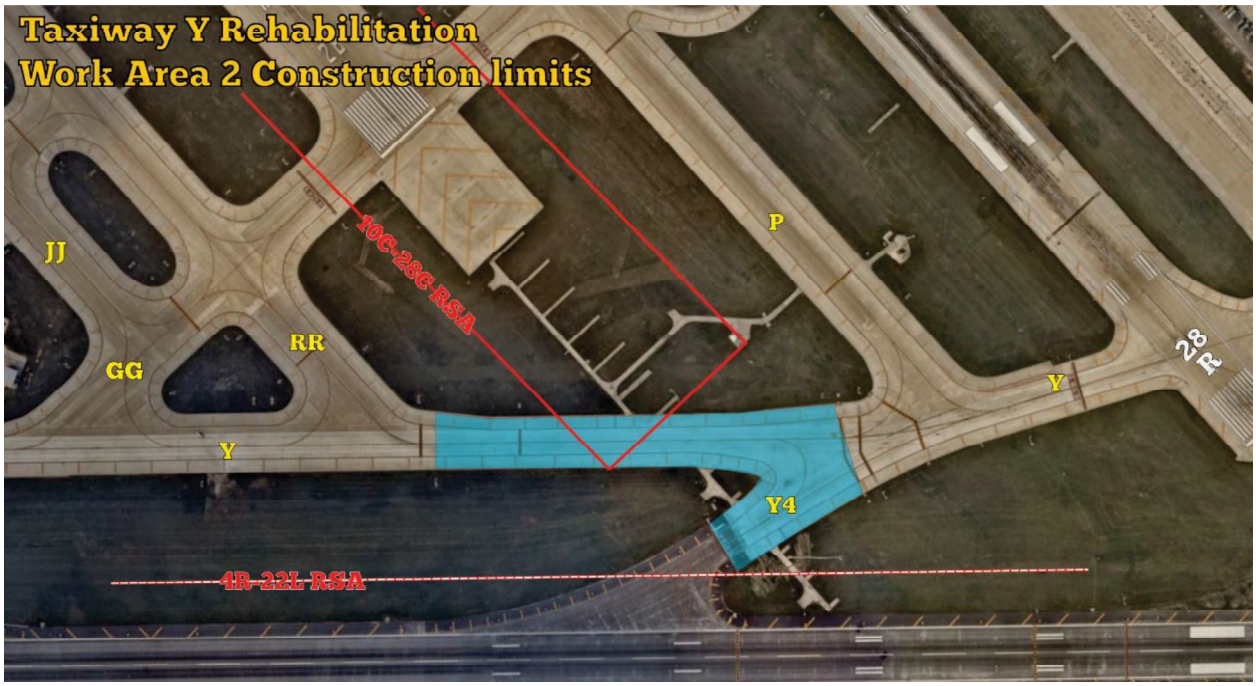


Figure 8

Required AOA Closures and Durations:

Work Area 2 will require short term nightly closures of the following Runways and Taxiways:

Short Term AOA Closures (Night) (Exact closure times to be coordinated with STOP):

Runway 4R-22L closed
Runway 10R-28L closed
Runway 10C-28C closed
"Y" Taxiway closed between Taxiways "GG" and "P"
"RR" Taxiway closed between Taxiways "GG" and "Y"
"Y4" Taxiway closed

Extended and Day Time AOA Closures:

"Y" Taxiway closed between Taxiway "Y4" and "GG"
"RR" Taxiway closed between Taxiways "GG" and "Y"
"Y4" Taxiway closed

Note: The extended closures of Taxiways "Y" and "Y4" cannot occur simultaneously. During the extended closure of Taxiway "Y", Taxiways "Y4", "P" and "Y" North of "P" must remain open.

Extended and daytime closures of Runway 4R-22L may be possible, however multiple factors (Weather conditions, wind direction, traffic flow, coordination with other O'Hare projects etc.) need to be considered by the Commissioner and STOP committee. Advanced coordination with CDA Operations at the STOP meeting will be required. Note that daytime work will only be allowed provided the deciding factors are favorable and approved by the Commissioner and STOP committee.

Barricade and AOA Closure Plans:

The following identify the closure plans and barricade set up to complete the work within Work Area 2 (See Fig. 9)

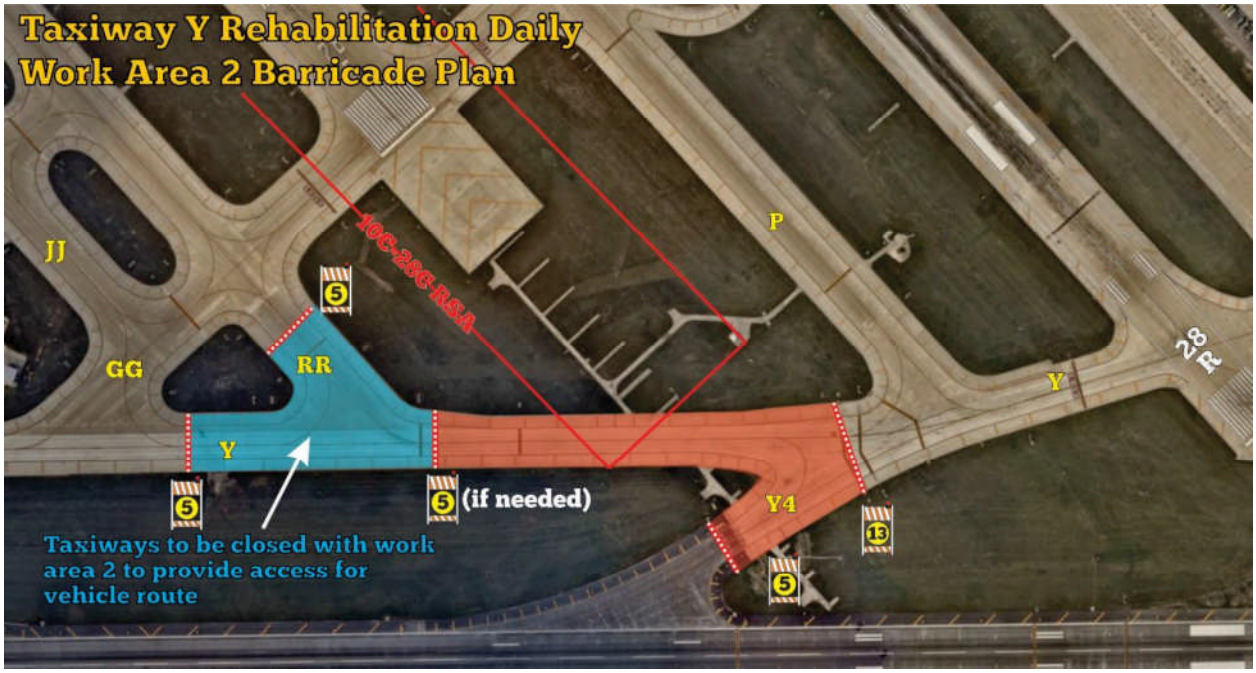


Figure 9

Extended closure and barricade set up for "Y" Extended closure (See Fig. 10)

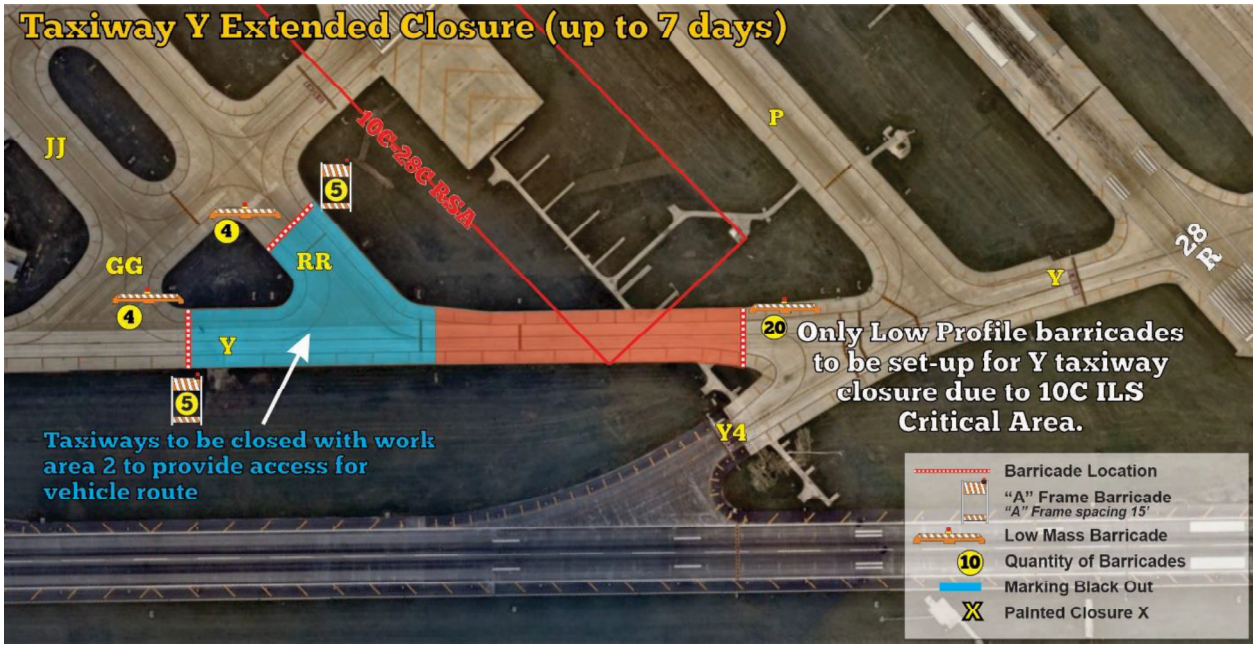


Figure 10

Extended closure and barricade set up for "Y4" Extended closure. (See Fig. 11)

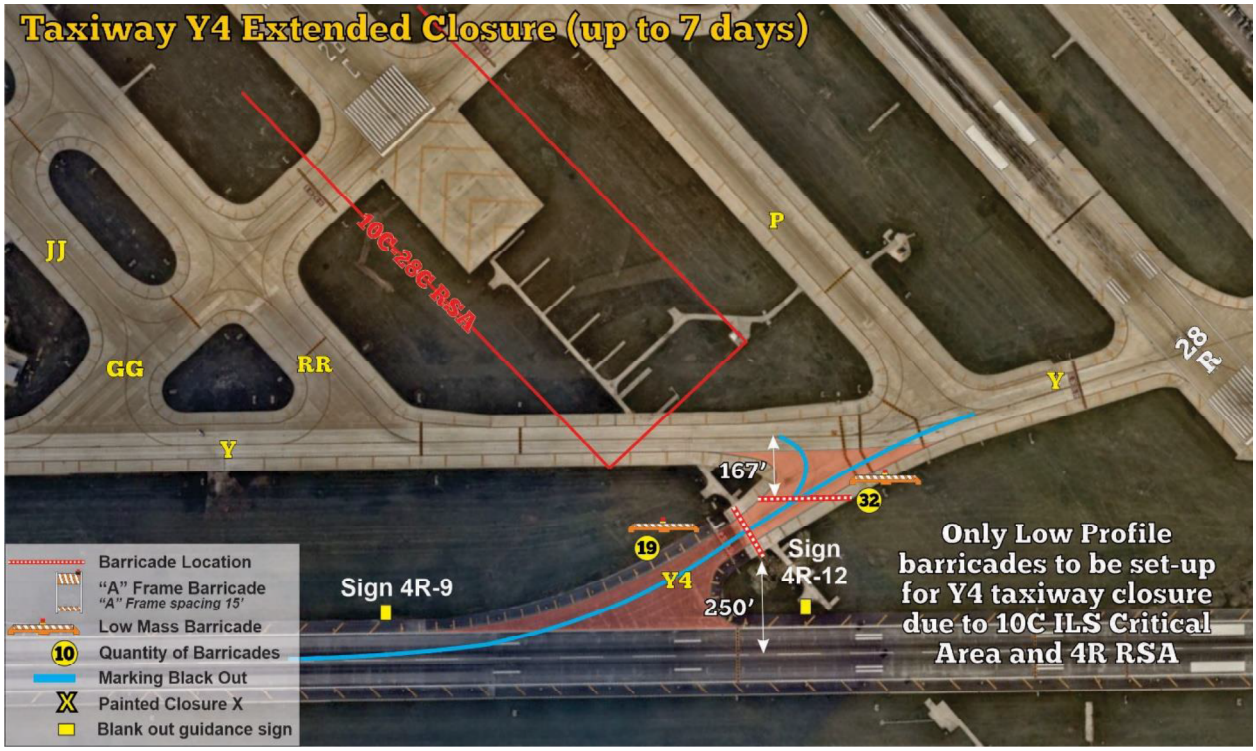


Figure 11

FAR Part 139 Issues:

There are no anticipated FAR Part 139 issues for this work area.

Work Area 3

Work Area Description and Scope of Work:

Work Area 3 will consist of mill and overlay of the "Y" Taxiway between taxiway "Y4" and the ROFA Limits of Runway 28R (paving through the "P" Taxiway intersection). Also included in Work Area 3 are removal and installation of RWSL lights and covers, partial depth crack repairs and removal and installation of taxiway centerline lights. Prior to beginning work in Work Area 3, the closures of Runway 4R-22L and Runway 10R-28L must be coordinated with STOP. (See Fig. 12)

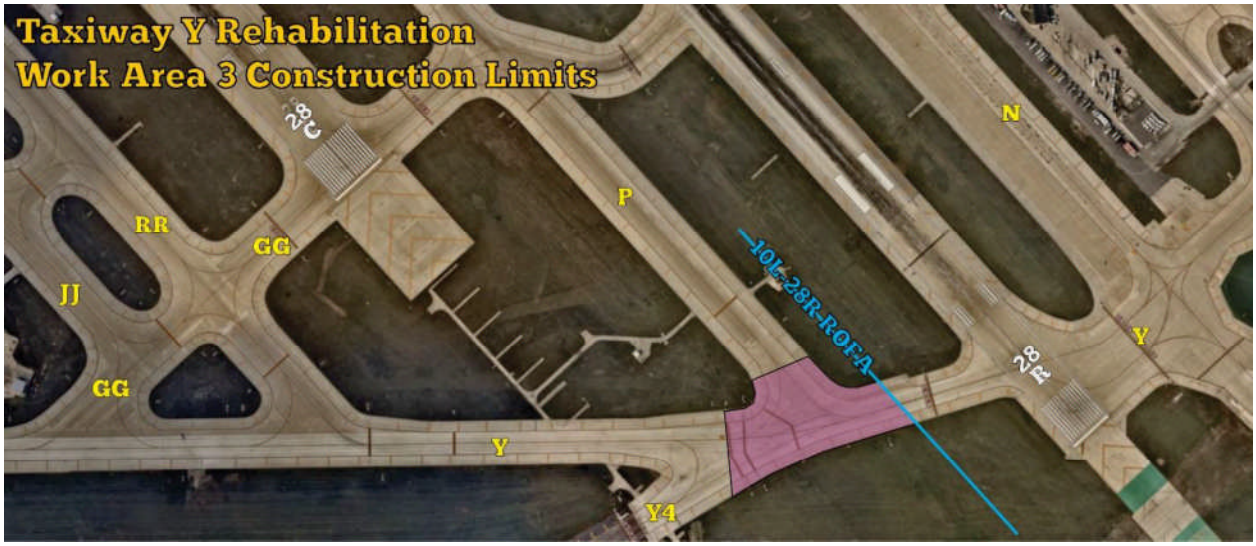


Figure 12

Required AOA Closures and Durations:

Work Area 3 will require short term nightly closures of the following Runways and Taxiways:

Short Term AOA Closures (Night) (Exact closure times to be coordinated with STOP):

Runway 4R-22L closed
"Y" Taxiway closed between Taxiway "RR" and Runway 10L-28R
"P" Taxiway closed between Taxiways "GG" and "Y".
Taxiway "Y4" closed

Extended and Day Time AOA Closures:

Extended and daytime closures of this area will not be permitted due to taxi requirements on the "P" Taxiway. Work area 3 can only be closed in the overnight hours.

Barricade and AOA Closure Plans:

The following identify the closure plans and barricade set up to complete the work within Work Area 3 (See Fig. 13)

Figure 13

FAR Part 139 Issues:

Portions of work area 3 (milling and paving) are located within the glide slope critical area for runway 28R. Construction vehicles and/or activities are NOT permitted within the ILS critical area when ATC is arriving runway 28R. The glide slope must be turned off when working in the area.

The contractor must coordinate the start of work that will affect the 28R glide slope at least 30 days in advance. At the completion of the work night this area must be restored so the glide slope can be returned to service for daytime operations. (See Fig. 14)

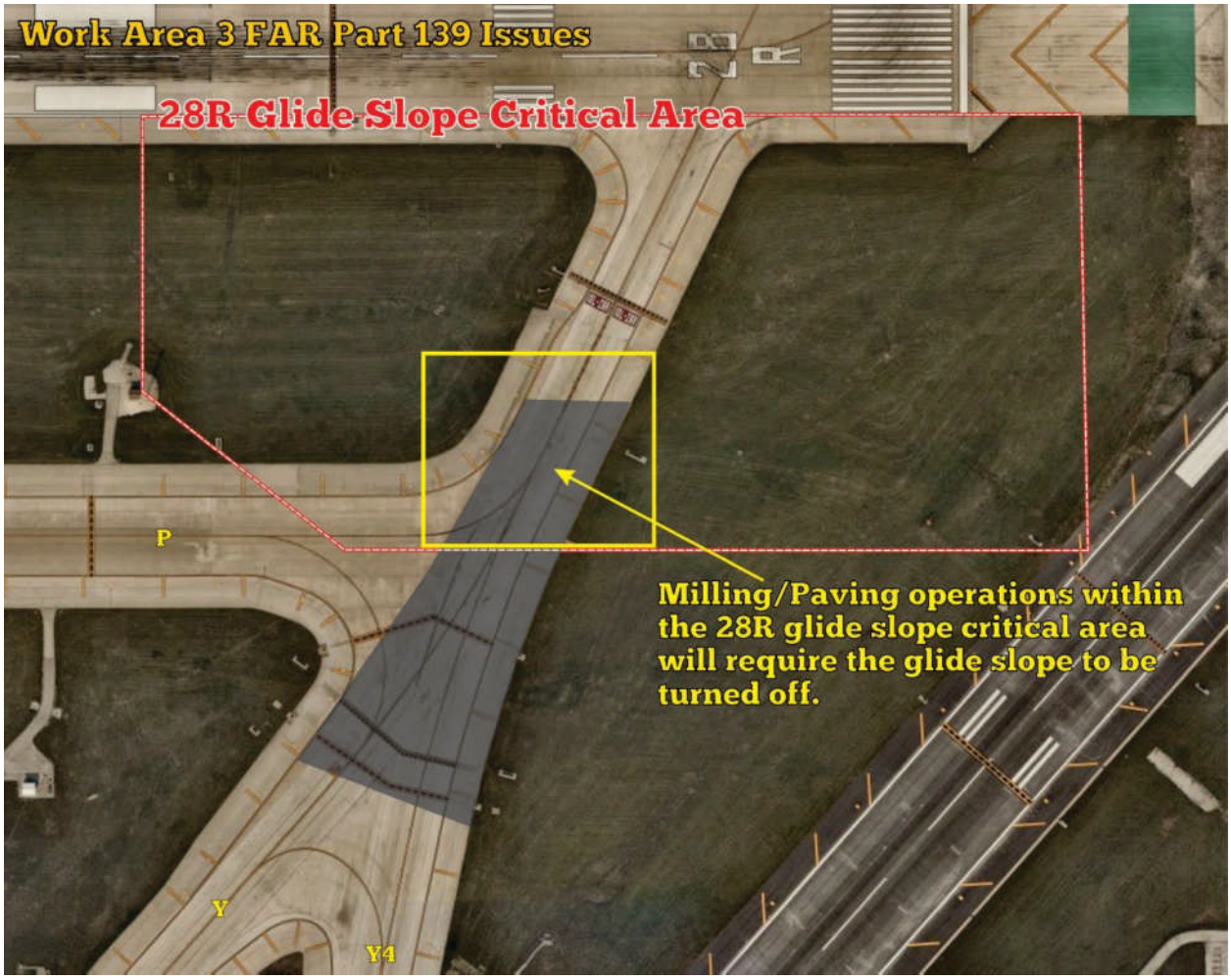


Figure 14

Work Area 4

Work Area Description and Scope of Work:

Work Area 4 will consist of mill and overlay of Taxiway "Y" within the ROFA of Runway 10L-28R. Also included in Work Area 4 are removal and installation of RWSL lights and covers, partial depth crack repairs and removal and installation of Taxiway centerline lights. Prior to beginning work in Work Area 4, the closures of Runway 4R-22L and Runway 10L-28R must be coordinated with STOP. (See Fig. 15)

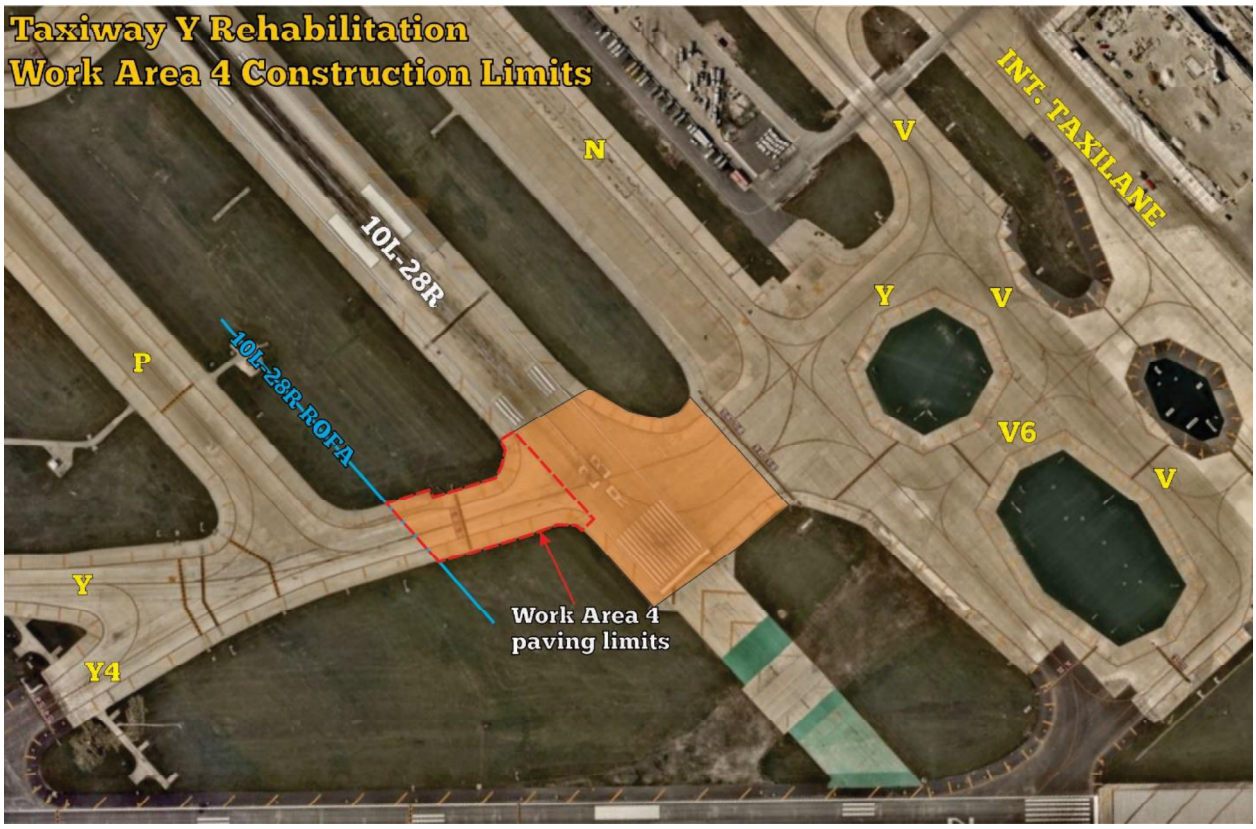


Figure 15

Required AOA Closures and Durations:

Work Area 4 will require short term nightly closures of the following Runways and Taxiways:

Short Term AOA Closures (Night) (Exact closure times to be coordinated with STOP):

Runway 4R-22L closed (as needed)
Runway 10L-28R closed
"Y" Taxiway closed between Taxiways "P" and Taxiway "N"

Extended and Day Time AOA Closures:

Extended and daytime closures of this area will not be permitted due to taxi requirements on the "Y" Taxiway and runway 10L-28R. Work area 4 can only be closed in the overnight hours.

Barricade and AOA Closure Plans:

The following identify the closure plans and barricade set up to complete the work within Work Area 4 (See Fig. 16)

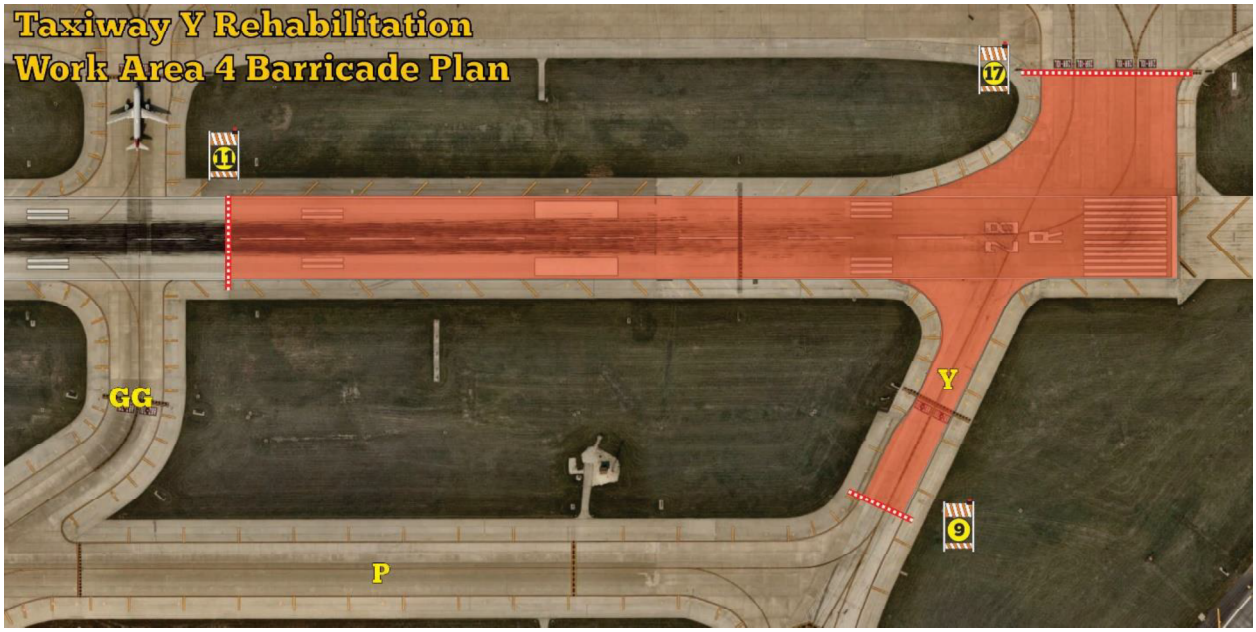


Figure 16

FAR Part 139 Issues:

Similar to work area 3. Work area 4 has a portion of construction within the 28R glide slope critical area and a portion inside the 28R RSA. While work outside the RSA can be completed while the runway is open, the glide slope antenna must be turned off. The contractor must start initial coordination at least 30 days in advance of any ILS impacts and additional coordinate this work at the weekly STOP meeting. (See Fig. 17)

Figure 17

The following topics apply to all work areas of the project:

Taxi Routes:

It is not anticipated that this project will have any taxi route impacts to the airfield. Various Taxiways will be closed as needed on a short term and extended basis; extended closures of taxiways will be coordinated at the weekly STOP meeting with the airport community. With required AOA closures for this project, taxi routes to and from south cargo area will always be maintained.

ARFF Access Roads:

The ARFF access road located just South of the South Basin parallel to Taxiway "W" is identified as a haul route for this project. The contractor must coordinate with CDA Operations and CFD at least 14 days in advance of using the haul road to insure there will be no impact to CFD and to ensure they are familiar with all restrictions and/or limitations of using the road. This road is a designated ARFF route specifically for Runway 4R-22L. When Runway 4R-22L is open, the contractor may be permitted to use the road, however, no vehicles are permitted to stage, park, or stop on this road. The following haul road is intended while surrounding taxiways will be closed for nighttime construction operations. During daytime hours while "Y" is open the contractor CANNOT use this haul route for access unless coordinated with CDA Operations, and additional flaggers are set-up. (See Fig. 18)

Figure 18

Construction Staging Areas:

At the time of writing the CSPP the contractor staging area for this project will be located landside West of guard post 5 on the North side of South Access Rd. An area may be available for staging of equipment on the East/West snow road. The contractor must confirm with CDA Ops if this area will be available due to construction operations for the demolition of the re-fueling area. (See Fig. 19)

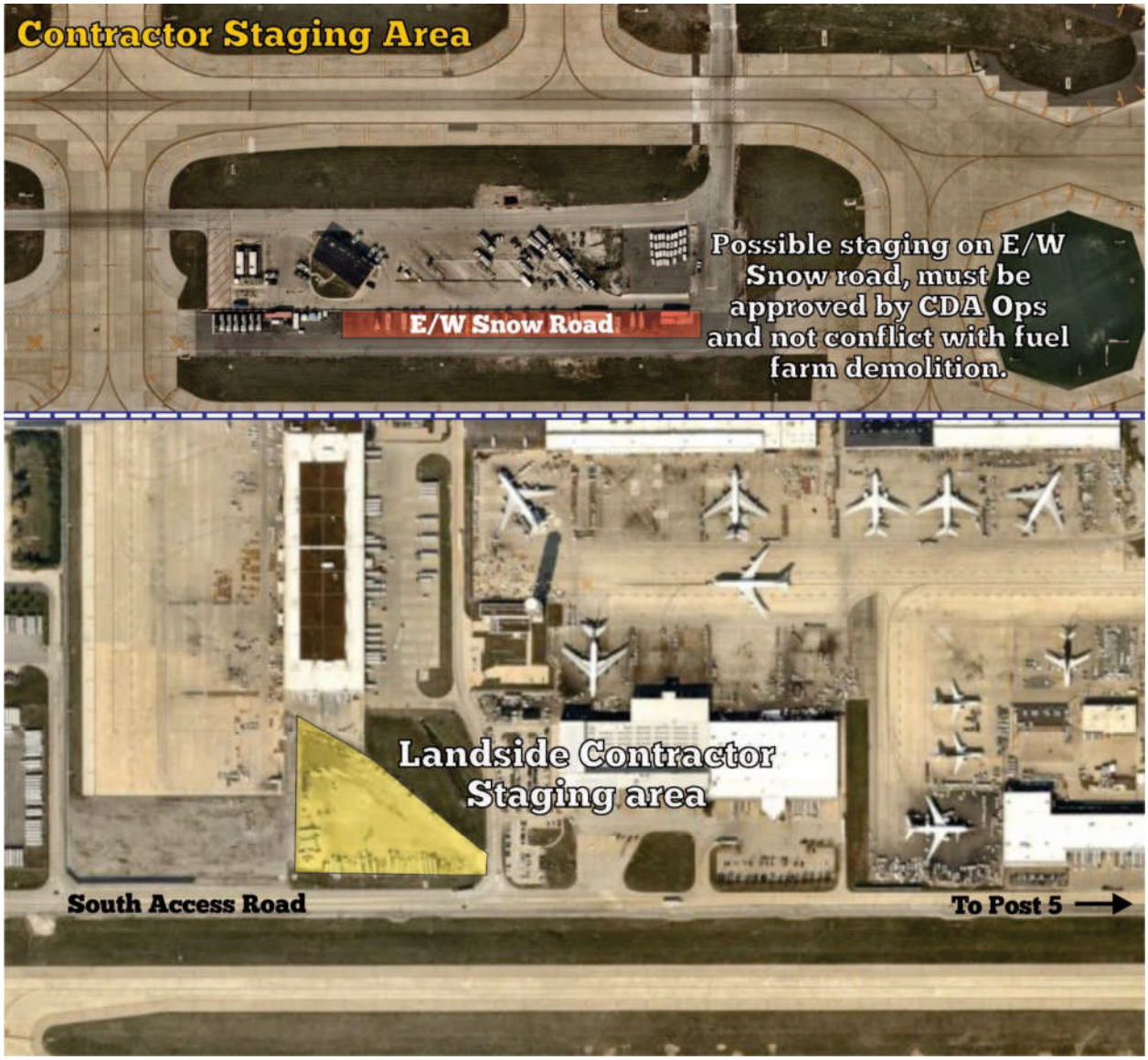


Figure 19

Staging of materials and equipment will NOT be permitted within the individual work areas. The contractor is to be aware of the limited area airside to store or stage material, equipment or stockpiles as several surrounding taxiways will be open to air traffic. All staging of materials and equipment must be reviewed and approved by CDA Operations with accurate details regarding location of a staging area and what is to be stored in the area. Any staging of material, equipment and stockpiles must be approved by CDA Operations and have an approved 7460 airspace study.

Material and equipment cannot be staged on closed pavements (extended closures) unless reviewed and approved by CDA Operations.

Construction Access and Haul Routes:

This project will utilize the existing airfield service roads to access the various work areas. The contractor is not permitted on any AOA movement areas unless under coordinated CDA escorts.

Construction sweepers shall be required for each work area to ensure all haul routes or airport service roads remain clean and minimize potential FOD hazards. All contractor flaggers are required to attend an O'Hare International Airport certified flagger training class, prior to starting any flagging duties and MUST have portable radios for each location.

The contractor will be required to provide enough sweepers as needed to keep all airport service roads and haul routes that cross active taxiways clean from construction material and/or debris generated from their project.

Work Areas 2, 3 and 4 will require vehicles to drive through the 10C Localizer critical area on the "Y" Taxiway. This haul route will be permitted UNLESS the airport is operating in IFR conditions (ceiling less than 800' and/or less than 2 miles visibility). In these ILS critical conditions, the ILS systems for runway 10C MUST be protected.

In IFR conditions with ceiling less than 800' and/or visibility less than 2 miles, construction vehicles will NOT be permitted to use the "Y" Taxiway for a haul route for to access work areas 2, 3 and 4. The contractor must coordinate these work areas and haul routes at the weekly STOP Meeting to ensure construction operations are not shut down due to miscommunications. (See. Fig. 20)

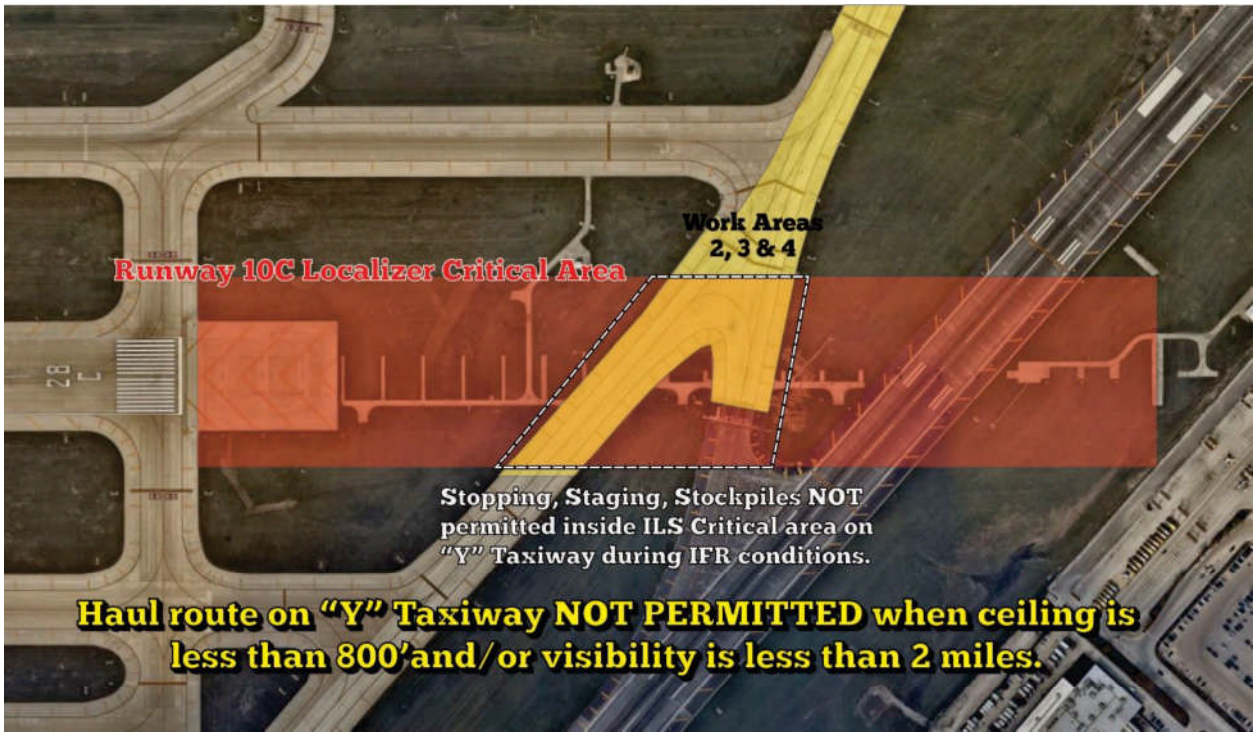


Figure 20

Impacts to NAVAIDS

This project requires construction activities within several NAVAID critical areas in all work areas. Construction work in Work Area 1, 2 and 4 will affect the following NAVAID systems/facilities:

1. Runway 28L ALSF Lighting
2. Runway 28C ALSF Lighting
3. Runway 10C Localizer critical area
4. Runway 28R Glide Slope critical area.

Construction activities in Work Areas 1, 2, and 4 must be reviewed with CDA Ops and FAA Tech Ops to determine when the work can occur. Activities that will impact the runway or NAVAIDS will be required to be completed at night when the runways and/or NAVAIDS can be closed or shut down.

Lighting and Marking Changes

This project will include minor lighting and marking changes for extended taxiway closures and the realignment of the Taxiway "Y3" fillet. Each phase of work is detailed in the construction documents on what changes are required. All work will be coordinated with CDA Operations and the airport community at STOP. Operational logistics graphics will be developed (as required) for each significant airfield change and will be approved by CDA Operations before work is started.

Opening and closing of taxiways will require extensive coordination between the contractor and airport community. The contractor MUST notify CDA Operations a minimum 2 weeks prior to opening or closing taxiways.

Available Runway Length

Runway Lengths will not be impacted by this project.

Declared Distances

Declared distances will not be required.

Required Hazard Marking and Lighting

This project will be required to adhere to new requirements of FAA Advisory Circular 150-5370-2G "Operational Safety on Airports During Construction".

"A" Frame Barricades:

1. Barricades are a minimum 24" wide by 36" tall
2. Barricades will have two ballast stabilizing tubes on opposite sides
3. Barricades will have at least one, 360° red omni directional light.
4. Stabilizing panels and tubes must have reflective material
5. "A" frame barricades must be constructed to withstand the everyday effects of wind and jet blast.

Low Profile Barricades:

1. Barricades are to be low mass, low profile (less than 18"), minimum 96" in length and constructed of plastic.

2. Barricades must be interlocking with reflective material
3. Low profile barricades must hold a minimum 25 gallons of water
4. Low profile barricades must have 1 red omni directional light centered on the barricade or 2 red lights offset from center. A single off-center light is not acceptable.
5. Barricades that are used through winter conditions must be filled with a fluid or material that will not freeze and become solid. Sand or antifreeze are acceptable.

The contractor is responsible to maintain all barricades for the duration of the project and repair or replace any that become damaged. (See Fig. 21)

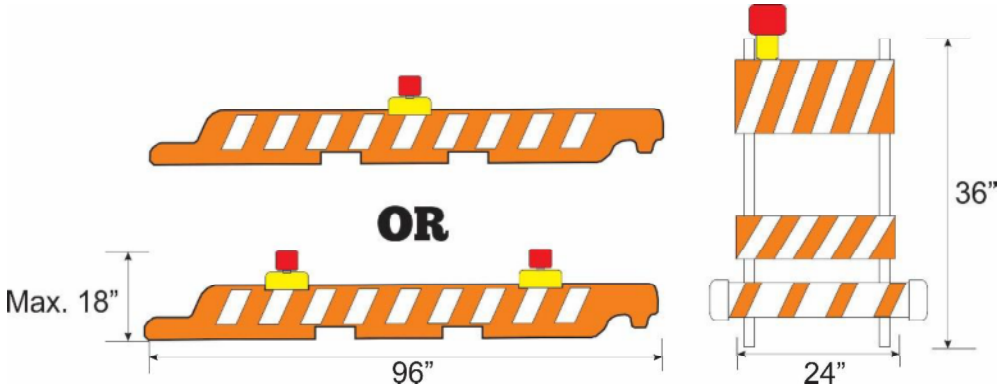


Figure 21

Work Zone Lighting for Nighttime Construction

The majority of construction associated with this project will occur during nighttime hours. Any work locations on Runways, Taxiways, within the extended RSAs of a Runway or within the TOFA of open/active taxiways will need to occur at night when the Runway/Taxiway can be closed. However, closures and hazards will exist 24 hours a day. All barricades to close off taxiways and runways must have red 360° omni directional lighting. The contractor will be responsible to inspect barricades and lights on a daily basis and repair as needed. Repairs to barricades including battery replacement is incidental to the contract. All open excavations must be protected with low profile barricades with red lights.

Lead Times for Required Notifications

Not applicable to this project.

FAA 7460 Airspace Study

An FAA 7460 airspace analysis study will be submitted for this project. The maximum "general construction" height for equipment on this project is 25' for the entire project limits.

The contractor is to review all areas within the contract drawings where cranes or equipment over 25' in height will be used. Once the FAA 7460 determination letter is received it will be reviewed with the contractor to identify all impacts to aircraft operations. If the contractor identifies any areas within the scope of this project where cranes or equipment will be required taller than 25' and not identified in the contract documents, the contractor should submit a question during the procurement question period with location and required equipment height.

Re-evaluation of an FAA 7460 airspace application will take approximately 60 to 90 days to complete. Any changes to crane heights and locations must be submitted to CARE and CDA immediately after award to the successful contractor.

Any cranes with IFR Impacts must be coordinated at the weekly STOP meeting.

CRANES AND/OR EQUIPMENT OVER 25' WILL NOT BE PERMITED TO BE USED ON THIS PROJECT WITHOUT AN APPROVED AND REVIEWED 7460 POINT ANALYSIS.

2.7 - Areas and Operations Affected by Construction Activities

O'Hare International Airport runways, taxiways, taxilanes and terminals will be open and available for use during the duration of this project. The intent of the CSPP is to identify as best possible any construction activities that may affect the availability and use of these areas throughout the project, detail any potential impact to the airport and identify mitigation of effects to ensure the continued safety for all users of the airport.

a. Identification of affected areas -
    1. ***Closing or partial closing of runways, taxiways or aprons*** – This project will require short term nightly and extended closing of various Taxiways, Runway 4R-22L, Runway 10L-28R, Runway 10C-28C and Runway 10L-28R. The contractor must request all Runway and Taxiway closures to the CDA Operations and airport community a minimum 2 weeks before they are needed. All closures must be coordinated at the weekly STOP coordination meeting.

    2. ***Closing of ARFF access routes*** – ARFF routes will not be closed during this project and will always be maintained.

3. ***Closing access routes used by airport or airline support vehicles*** – Airport and airline access roads will not be affected or closed from this project. If it is identified that any roadway detours, closures or changes are required, they must be coordinated through the weekly STOP Meeting with the airport community and CDA Users Forms submitted. Roadways cannot be closed or detoured without the approval of the Commissioner and CDA Operations. Airport roadways must be maintained throughout the project.

4. ***Interruption of utilities*** – *A*irfield utilities will be constructed, re-routed and demolished within the scope of the project. CDA and FAA have strict requirements on locating utilities and notification procedures if a utility is hit.

5. ***Approach/departure surface affected by heights of objects*** – A 7460 airspace study will be submitted to identify any potential Part 77 issues. The contractor will receive the FAA determination for this project once received by Commissioner. Any additional crane points that need to be evaluated will require a 60-90 day

6. ***Construction areas*** – Refer to section 2.6 for specific construction work areas and details.

b. Mitigation of Effects – The CSPP has established specific procedures necessary to maintain the safety and efficiency of all airport operations during all construction activities of this project.

All coordination for airfield work and the scheduling of required CDA escorts will be discussed at the weekly STOP meeting and coordinated daily with CDA Operations.

1. ***Temporary changes to runway and/or taxiway operations*** – this project will require short term and extended closing of various taxiways and short-term nightly closures 4R-22L, Runway 10L-28R, Runway 10C-28C and 10R-28L. Notice to Airmen (NOTAMS) will be coordinated through CDA Operations and issued as required for the duration of a closure. Upon completion of work on a daily AOA closure, the contractor shall notify CDA Operations to be cleared from the airfield. Once Operations has inspected the area(s) and approval has been granted, the contractor may pick up barricades.

   All airfield closures for construction will be coordinated with CDA, FAA and airlines through the weekly STOP meeting. All entities will be made aware of any

operational impacts to the airfield. All daily airfield pavement closures will be coordinated with airport operations, appropriate NOTAMS issued and placement of barricades with red lights to delineate all closed areas. Critical and extended closures must be coordinated with the airport community a minimum 2 weeks prior to the start of work.

2. ***Detours for ARFF and other airport vehicles*** – ARFF routes are not anticipated to be affected by this project.

3. ***Maintenance of essential utilities*** - Uninterrupted service of all airfield utilities is of the utmost importance in the safe operation of the airport. Where required the contractor will request a locate of all underground utilities. See section 2.15 for detailed procedures for utility locates and construction activities around or adjacent to utilities. ALL CDA, FAA, and common utilities MUST be located and exposed prior to beginning ANY excavations.

4. ***Temporary changes to air traffic control procedures*** – Temporary changes to air traffic control procedures are not anticipated for this project.

Appendix A – Construction Safety Phasing Plan Checklist

Coordination	Reference	Addressed			Remarks
GENERAL CONSIDERATIONS					
Requirements for pre-design, pre-bid, and pre-construction conferences to introduce the subject of airport operational safety during construction are specified.	205	☒ Yes	☐ No	☐ N/A	
Operational safety is a standing agenda item for the construction progress meetings.	205	☒ Yes	☐ No	☐ N/A	
Scheduling of the construction phases is properly addressed.	206	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY					
Drawings showing affected areas are included.	207.a	☒ Yes	☐ No	☐ N/A	
Closed or partially closed runways, taxiways, and aprons are depicted on drawings.	207.a (1)	☒ Yes	☐ No	☐ N/A	
Access routes used by ARFF vehicles affected by the project are addressed.	207.a (2)	☒ Yes	☐ No	☐ N/A	
Access routes used by airport and airline support vehicles affected by the project are addressed.	207.a (3)	☒ Yes	☐ No	☐ N/A	
Underground utilities, including water supplies for fire fighting and drainage.	207.a (4)	☒ Yes	☐ No	☐ N/A	
Approach/departure surfaces affected by heights of temporary objects are addressed.	207.a (5)	☒ Yes	☐ No	☐ N/A	
Construction areas, storage areas, and access routes near runways, taxiways, aprons or helipads are properly depicted on drawings.	207.a	☒ Yes	☐ No	☐ N/A	

Temporary changes to taxi operations are addressed.	207.b (1)	☒ Yes	☐ No	☐ N/A	
Detours for ARFF and other airport vehicles are identified.	207.b (2)	☐ Yes	☐ No	☒ N/A	
Maintenance of essential utilities and underground infrastructure is addressed.	207.b (3)	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
NAVAIDS					
Critical areas for NAVAIDS are depicted on drawings.	208	☒ Yes	☐ No	☐ N/A	
Effects of construction activity on the performance of NAVAIDs, including unanticipated power outages, are addressed.	208	☒ Yes	☐ No	☐ N/A	
Protection of NAVAID facilities is addressed.	208	☒ Yes	☐ No	☐ N/A	
The required distance and direction from each NAVAID to any construction activity is depicted on drawings.	208	☒ Yes	☐ No	☐ N/A	
Procedures for coordination with FAA ATO/Technical Operations, including identification of points of contact, are included	208, 213.a, 213.e (3)(a) 218.a	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
CONTRACTOR ACCESS					
The CSPP addresses areas to which contractor will have access and how the areas will be accessed.	209	☒ Yes	☐ No	☐ N/A	
The application of 49CFR Part 1542 Airport Security, where appropriate is addressed.	209	☒ Yes	☐ No	☐ N/A	

The location of stockpiled construction materials is depicted on drawings.	209.a	☒ Yes	☐ No	☐ N/A	
The requirement for stockpiles in the ROFA to be approved by FAA is included.	209.a	☐ Yes	☐ No	☒ N/A	
Requirements for proper stockpiling of materials are included.	209.a	☒ Yes	☐ No	☐ N/A	
Construction site parking is addressed.	209.b (1)	☒ Yes	☐ No	☐ N/A	
Construction equipment parking is addressed.	209.b (2)	☒ Yes	☐ No	☐ N/A	
Access and haul roads are addressed.	209.b (3)	☒ Yes	☐ No	☐ N/A	
A requirement for marking and lighting of vehicles to comply with AC150/5210-5, Painting, Marking and Lighting of Vehicles Used on an Airport, is included.	209.b (4)	☒ Yes	☐ No	☐ N/A	
Proper vehicle operations, including requirements for escorts, are described.	209.b (5) 209.b (6)	☒ Yes	☐ No	☐ N/A	
Training requirements for vehicle drivers are addressed.	209.b (7)	☒ Yes	☐ No	☐ N/A	
Two way radio communications procedures are described.	209.b (9)	☐ Yes	☐ No	☒ N/A	
Maintenance of the second area of the airport is addressed.	209.b (10)	☐ Yes	☐ No	☒ N/A	

Coordination	Reference	Addressed			Remarks
WILDLIFE MANAGEMENT					
The airport operator's wildlife management procedures are addressed.	210	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
FOREIGN OBJECT DEBRIS MANAGEMENT					
The airport operator's FOD management procedures are addressed.	211	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
HAZARDOUS MATERIALS MANAGEMENT					
The airport operator's hazardous materials management procedures are addressed.	212	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
NOTIFICATION OF CONSTRUCTION ACTIVITIES					
Procedures for the immediate notification of airport user and local FAA of any conditions adversely affecting the operational safety of the airport are detailed.	213	☒ Yes	☐ No	☐ N/A	
Maintenance of a list by the airport operator of the responsible representatives/points of contact for all involved parties	213.a	☒ Yes	☐ No	☐ N/A	
A list of local ATO/Technical Operations personnel is included.	213.a	☐ Yes	☐ No	☒ N/A	
A list of authorized representatives to the OCC is included.	213.b	☐ Yes	☐ No	☒ N/A	
Procedures for coordinating, issuing, maintaining and cancelling by the airport by the airport operator of NOTAM's about airport conditions resulting from construction are included.	208, 213.b, 218.b (4)(1)	☒ Yes	☐ No	☐ N/A	

Provision of information on closed or hazardous conditions on airport movement areas by the operator to the OCC is specified.	213.b	☒ Yes	☐ No	☐ N/A	
Emergency notification procedures for medical, firefighting, and police are addressed.	213.c	☒ Yes	☐ No	☐ N/A	
Coordination with ARFF personnel for non-emergency issues is addressed.	213.d	☒ Yes	☐ No	☐ N/A	
Notification to the FAA under 14CR parts 77 and 157 is addressed.	213.e	☒ Yes	☐ No	☐ N/A	
Reimbursable agreements for flight checks and/or design and construction for FAA owned NAVAIDS are addressed.	213.e (3)(b)	☐ Yes	☒ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
INSPECTION REQUIREMENTS					
Daily inspection by both the airport operator and contractor are specified.	214.a	☒ Yes	☐ No	☐ N/A	
Final inspections at certificated airports are specified when required.	214.a	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
UNDERGROUND UTILITIES					
Procedures for protecting existing underground facilities in excavation area are described.	215	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
PENALTIES					
Penalty provisions for noncompliance with airport rules and regulations and the safety plans are detailed.	216	☒ Yes	☐ No	☐ N/A	
Coordination	**Reference**	**Addressed**			**Remarks**

SPECIAL CONDITIONS					
Any special conditions that affect the operation of the airport or require the activation of any special procedures are addressed.	217	☒ Yes	☐ No	☐ N/A	
Coordination	**Reference**	**Addressed**			**Remarks**
RUNWAY AND TAXIWAY VISUAL AIDS – MARKING, LIGHTING, SIGNS & VISUAL NAVAIDS					
The proper securing of temporary airport markings, lighting, signs, and visual NAVAIDS is addressed.	218.a	☒ Yes	☐ No	☐ N/A	
Frangibility of airport markings, lighting, signs and visual NAVAIDS is specified.	218.a, 218.c, 219, 220.b (4)	☐ Yes	☐ No	☒ N/A	
The requirement for markings to be in compliance with AC 150/5340-1, Standards for airport Markings is specified.	218.b	☒ Yes	☐ No	☐ N/A	
The requirement for lighting to confirm to AC 150/5340-30, design, and Installation Details for Airport Visual Aids , AC 150/5345-50, Specification for Portable Runway and Taxiway Lights, and AC 1505345-53 airport Lighting certification Program is specified.	218.b (1)(f)	☒ Yes	☐ No	☒ N/A	
The use of a lighted “X” is specified where appropriate.	218.b (1)(b) 218.b(3)	☐ Yes	☐ No	☒ N/A	
The requirement for signs to conform to AC 150/5345-44. Specifications for Runway and Taxiway signs, AV 50/5340-18, Standards for Airport Sign Systems, and AC 150/5345-53, Airport Lighting Certification program is specified.	218.c	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
MARKINGS AND SIGNS FOR ACCESS ROUTES					
The CSPP specifies that pavement markings and signs intended for construction personnel should conform to AC 150/5340-18 and, to the extent practicable, with MUTCD and/or State highway specifications.	219	☒ Yes	☐ No	☐ N/A	

Coordination	**Reference**	**Addressed**			**Remarks**
HAZARD MARKING AND LIGHTING					
Prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles are specified.	220.a	☒ Yes	☐ No	☐ N/A	
Hazard marking and lighting are specified to identify open manholes, small areas under repair, stockpiled material and waste areas.	220.a	☒ Yes	☐ No	☐ N/A	
The CSPP considers less obvious construction related hazards.	220.a	☒ Yes	☐ No	☐ N/A	
Equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast is specified.	220.b (1)	☒ Yes	☐ No	☐ N/A	
The spacing of barricades is specified such a breach is physically preventing barring a deliberate act.	220.b (1)	☒ Yes	☐ No	☐ N/A	
Red lights meeting the luminance requirements of the State Highway Department are specified.	220.b (2)	☒ Yes	☐ No	☐ N/A	
Barricades, temporary markers, and other objects placed and left in area adjacent to any open runway, taxi lane or apron are specified to be as low as possible to the ground and no more than 18 in. high.	220.b (4)	☒ Yes	☐ No	☐ N/A	
Barricades marked with diagonal, alternating orange and white stripes are specified to indicate construction locations in which no part of aircraft may enter.	220.b (4)	☒ Yes	☐ No	☐ N/A	
Highly reflective barriers with lights are specified to barricade taxiways leading to closed runways.	220.b (5)	☒ Yes	☐ No	☐ N/A	
Markings for temporary closures are specified.	220.b (5)	☒ Yes	☐ No	☐ N/A	

The provision of a contractor's representative on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades is specified.	220.b (7)	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS					
The CSPP clearly states that no construction may occur within a safety area while the associated runway or taxiway Is open for aircraft operations.	221.a(1) 221.c(1)	☒ Yes	☐ No	☐ N/A	
The CSPP specifies that the airport operator coordinates the adjustment of RSA or TSA dimensions with the ATCT and appropriate FAA regional or district Office and issues a local NOTAM.	221.a(2) 221.c(2)	☒ Yes	☐ No	☐ N/A	
Procedures for ensuring adequate distance for protection from blasting operations, if required by operational considerations, are detailed.	221.c(3)	☒ Yes	☐ No	☐ N/A	
The CSPP specifies that open trenches or excavations are not permitted within a safety area while associated runway or taxiway is open.	221.a(4)	☒ Yes	☐ No	☐ N/A	
Appropriate covering of excavations in the RSA or TSA that cannot be backfilled before associated runway or taxiway is open is detailed.	221.a(4)	☒ Yes	☐ No	☐ N/A	
The CSPP includes provisions for prominent marking of open trenches and excavations at the construction site.	221.a(4)	☒ Yes	☐ No	☐ N/A	
Grading and soil erosion control to maintain RSA/TSA standards are addressed.	221.c(5)	☒ Yes	☐ No	☐ N/A	
The CSPP specifies that equipment is to be removed from the ROFA when not in use.	221.b	☒ Yes	☐ No	☐ N/A	
The CSPP clearly states that no construction may occur within the taxiway safety area while the taxi way is open for aircraft operations.	221.c	☒ Yes	☐ No	☐ N/A	

Appropriate details are specified for any construction work to be accomplished in a taxiway object free area.	221.d	☒ Yes	☐ No	☐ N/A	
Measures to ensure that personnel, material and/or equipment do not penetrate the OFZ or threshold sitting surfaces while the runway is open for aircraft operations are included.	221.e	☒ Yes	☐ No	☐ N/A	
Provisions for protection or runway approach/departure areas and clearways are included.	221.f	☒ Yes	☐ No	☐ N/A	

Coordination	Reference	Addressed			Remarks
OTHER LIMITATIONS ON CONSTRUCTION					
The CSPP prohibits the use of open flame welding or torches unless adequate fire safety precautions are provided and the airport operator has approved their use.	222.a(2)	☒ Yes	☐ No	☐ N/A	
The CSPP prohibits the use of flare pots within the AOA at anytime.	222.a(4)	☒ Yes	☐ No	☐ N/A	
The CSPP prohibits the use of electrical blasting caps on or within 1000 feet (300m) of airport property.	222.a(3)	☒ Yes	☐ No	☐ N/A	

Appendix B – Airfield Construction Inspection Checklist

FAR Part 139 Construction Inspection Checklist

	RUNWAYS AND TAXIWAY PAVEMENTS	YES	NO
1	NO pavement cracks that could impede directional control	☐	☐
2	Pavement surface irregularities	☐	☐
3	Cleanliness of pavement	☐	☐
4	Pot holes over 5" in diameter over 3" in depth	☐	☐
5	Standing water on pavement	☐	☐
6	Pavement grooves in good condition	☐	☐
7	Pavement elevation differences (between old and new pavements)	☐	☐
8	Is pavement clean?	☐	☐
9	Transition ramps installed correctly	☐	☐

	PAVEMENT MARKINGS	YES	NO
1	Are markings in good conditions	☐	☐
2	Have markings lost reflective characteristics	☐	☐
3	Markings faded from vehicle traffic	☐	☐
4	Markings removed from closed sections of pavement	☐	☐
5	Are new enhanced centerline markings required	☐	☐
6	Are hold bars in the correct location	☐	☐
7	Have surface painted signs been replaced	☐	☐
8	Have markings been removed due to paving operations	☐	☐
9	Have all temporary markings been painted	☐	☐

	RUNWAY SAFETY AREAS (RSA) & RUNWAY OBJECT FREE AREA (ROFA)	YES	NO
1	All equipment removed from safety area (once runway is opened)	☐	☐
2	All stockpiles removed from safety area (once runway is opened)	☐	☐
3	All excavations have been back filed to existing grade	☐	☐
4	Any elevation changes greater than 3" must be removed (filled in or cut down)	☐	☐
5	Remove any and all standing water in the safety area	☐	☐
6	All concrete structures and electrical bases graded to surrounding elevations	☐	☐
7	Slopes in RSA not to exceed 5% grade change	☐	☐
8	No tire ruts deeper or higher than 3" above ground elevation	☐	☐

9	Have all barricades been removed from the safety area	☐	☐
10	Any work to take place in the runway safety area must be completed when runway is CLOSED	☐	☐
11	All excavations in the ROFA are properly barricaded and lighted	☐	☐
12	All materials and stockpiles removed from ROFA at end of work day	☐	☐
13	All equipment removed from ROFA at end of work day	☐	☐
14	No standing water in the ROFA	☐	☐

	TAXIWAY SAFETY AREAS (TSA) AND TAXIWAY OBJECT FREE AREAS (TOFA)	YES	NO
1	Work no closer than the TOFA of a taxiway	☐	☐
2	Excavations within the TOFA are delineated with low slung barricades	☐	☐
3	No stockpiles or material permitted within the TSA	☐	☐
4	No stockpiles or material permitted within the TOFA	☐	☐
5	All excavations protected with low mass barricades	☐	☐

	AIRFIELD ELECTRICAL	YES	NO
1	ALL temporary electrical cables in grass areas in PVC or steel pipe	☐	☐
2	ALL temporary electrical cables on pavement areas in steel pipe ONLY	☐	☐
3	Electrical conduits securely attached to pavements	☐	☐
4	Vehicles crossing temp cables have ramps been constructed to protect pipe	☐	☐
5	Temporary conduit CLEARLY Marked	☐	☐
6	Have all electrical circuits that were shutdown, been energized and are operational?	☐	☐
7	ALL Manhole lids MUST fit flush with frame of manhole	☐	☐
8	Base cans firmly attached to ground/ pavements	☐	☐
9	Runway edge light lenses facing the correct way	☐	☐
10	In-surface light fixtures not obscured by paint, debris, or dirt	☐	☐
11	Runway pavement sensors in good condition	☐	☐
12	Pavement in-surface fixtures colored lenses are placed in the correct location/sequence	☐	☐
13	ALL Runway lighting in correct color sequence	☐	☐
14	Are yellow taxiway lights in position at service road crossings	☐	☐

15	All guidance signs in correct location	☐	☐
16	Guidance sign bases poured at surrounding ground elevations	☐	☐
17	All signs in place before a runway or taxiway is opened	☐	☐
18	ALL Mandatory Hold signs in place before runway or taxiway is opened	☐	☐
19	If Mandatory Hold Sign is missing, has a NOTAM been issued?	☐	☐
20	Are all guidance signs legends clean and readable	☐	☐
21	Are new mandatory hold signs installed in line with painted hold bar	☐	☐
22	ALL electrical bases and foundations in the RSA or TSA graded to existing elevations	☐	☐
23	Runway wind cones in good condition and operational	☐	☐
24	Have all electrical lockout and tagging procedures been adhered to?	☐	☐

	NAVAGATIONAL EQUIPMENT (NAVAIDS)	**YES**	**NO**
1	Are NAVAIDS properly marked and adequately barricaded to protect critical areas?	☐	☐
2	Is any material, stockpiles, equipment parked near a NAVAID	☐	☐
3	Have all NAVAID Locates been completed prior to excavations	☐	☐
4	Are PAPI's clear of any obstructions	☐	☐
5	Are lenses on PAPI's clean and free of any debris	☐	☐

	CRANE OPERATIONS	**YES**	**NO**
1	Has 5 day notice been given to City Operations before a crane is used for the first time?	☐	☐
2	Do you have the correct location for your crane?	☐	☐
3	Has City Operations been notified prior to the crane being erected (issue NOTAM)	☐	☐
4	Are red obstruction lights placed on the crane (and operational)	☐	☐
5	Is a Construction safety flag required for operation of the crane	☐	☐
6	Has City Operations been notified when the crane has been boomed down (cancel NOTAM)	☐	☐

	GENERAL AIRPORT CONSTRUCTION SAFETY	YES	NO
1	Are all barricades in good condition and lights operating properly	☐	☐
2	ONLY Approved O'Hare barricades used for runway and taxiway closures	☐	☐
3	Are all haul routes approved	☐	☐
4	Haul routes that cross a taxiway constantly monitored for cleanliness	☐	☐
5	Are all Mandatory hold bars clear and visible	☐	☐
6	Are all fire access roads clear and passable by the fire department	☐	☐
7	Cleanliness on the job site (NO FOD Hazards)	☐	☐
8	Are all electrical circuits operational	☐	☐
9	Inoperable lighting circuits - have they been NOTAMed inoperative	☐	☐
10	Any work taking place outside designated work areas or out of phase	☐	☐
11	Does the above have any conflicts with other airfield projects	☐	☐
12	Have all temporary electrical circuits been properly protected	☐	☐
13	Has all drainage been properly maintained for the site	☐	☐
14	Are enough sweepers present on the site	☐	☐

Appendix C – FAA Form 5200-8 SAS-1

Airports Safety Risk Management (SRM)

Safety Assessment Screening for Projects (SAS-1) ***Page 1***

1. Project Location

a. Loc ID	ORD	
b. Airport	O'Hare International Airport	SMS ID:
c. City	Chicago	
d. State	Illinois	
e. Sponsor		
f. Service Level		
g. CFR 139 date		
h. CFR 139 type	Class E	

2. Describe the Proposed Action (include any identifying number or date of submission (e.g: date of draft ALP)

Taxiway Y Rehabilitation construction project will mill and overlay the pavement of Taxiway Y (3" overlay) as well as repaving of Taxiways "Y1", "Y2", "Y3" and "Y4" from the RSA of Runway 4R-22L to the intersection of Taxiway Y. Additionally, deep crack repair on the taxiway pavements and full depth demolition / construction of Taxiway "Y3" fillet widening will be completed.

3. Approval Action Type/Triggering Event (Select all that apply)

- a. ☐ Airport Layout Plan (ALP) (New or update)
- b. ☐ Airport construction review, coordination and approval
- c. ☐ Other airport changes not involving construction
- d. ☐ Part 150 Noise Compatibility Program (measures that may affect aviation safety)

4. Project Screening

- a. ☐ A preliminary analysis indicates that an SRM review is required (Complete pages 2 & 3)
- b. ☐ The proposal does not require further SRM review (Discard pages 2 & 3)

Prepared by: _____ Sign: _____

Office: _____ Date: _____

Title: _____

Airports Safety Risk Management (SRM)

Safety Assessment Screening for Projects (SAS-1) **Page 2**

SMS ID: ☐

5. Was the proposal reviewed by OE/AAA?

a. ☐ Yes ☐ No (skip to block number 6)

b. Case Number ☐

c. Determination Date ☐

d. ☐ OE/AAA review comments are attached

e. ☐ OE/AAA review indicates an objection to the proposal

6. A review of the proposal indicates the following: (select all that apply)

ARP System Safety Impact Checklist

a. ☐ The Proposed Action may deviate from applicable FAA Standards
b. ☐ The Proposed Action may affect aviation safety
c. ☐ The Proposed Action may affect aviation operations
d. ☐ The Proposed Action may affect navigational aids
e. ☐ The Proposed Action may impact TERPS surfaces
f. ☐ Other safety impact:_____

SRM Panel

g. ☐ The OE/AAA review indicates that an SRM panel is required
h. ☐ The SRM Impact checklist indicates that an SRM panel is required
i. ☐ An SRM Panel is not required. No further SRM review is necessary. Complete and sign block # 12.

7. SRM Panel and Findings

a. Report Date ☐ b. ☐ Report is attached

8. Initial Risk Determination

a. ☐ **Low Initial Risk**. Attach supporting documents.
b. ☐ **Medium Initial Risk**. Attach detailed explanation of hazards.
c. ☐ **High Risk**. Attach detailed explanation of hazards. Requires review by the ARP Safety Review Board.

9. Final Risk Determination

a. ☐ **Low Initial Risk**. Attach detailed explanation of mitigation measures, including NOTAM requirements.
b. ☐ **Medium Initial Risk**. Attach detailed explanation of mitigation measures, including NOTAM requirements.
c. ☐ **High Risk**. The project proposal with risk mitigation in place is unacceptable.

Airports Safety Risk Management (SRM)

Safety Assessment Screening for Projects (SAS-1) **Page 3**

SMS ID:

10. SRM Panel Members and Certification

We certify that we have reviewed the project documentation and have fully considered the potential hazards (and any proposed mitigation) before reaching this determination. Dissenting opinions concerning the determination are included in the report.

FAA Office	Name and Title	Date	Signature

11. Airport Sponsor Certification and Acceptance

As a duly authorized representative of the sponsor of the airport identified above, I hereby certify that I have reviewed and understand the hazards and mitigation measures identified in the attached documentation. I further certify that I understand it is our legal duty as sponsor, to ensure that any and all airport related mitigation measures are fulfilled and documented in a timely manner. Any such commitments on our part represent and obligation on our part under our Federal grant assurances, regardless of whether the FAA participates in the funding of any part of the proposed action. Nothing in the FAA's review may be deemed as relieving the sponsor of its legal obligations as owner and operator of the airport.

Name and Title	Date	Signature

12. FAA SRM Approval

Hazards were identified and analyzed using standard procedure and processes in accordance with FAA order 5200.11. Mitigation measures including NOTAM requirements, if necessary, are attached and are included with the formal FAA project approval action. These measures will help ensure safety levels are maintained at acceptable levels both during and after the proposed construction and non-construction airport changes.

Name and Title	Date	Signature

Appendix D – CSPP Comment Review Email Notification

DRAFT CSPP Review for Taxiway Y Rehabilitation

To: Amin Yaghmour (connectchicagojv.com), Frank Friar (careplusllc.org), Michael Fox (connectchicagojv.com), Carl Larson (connectchicagojv.com), Drake Krohn (connectchicagojv.com), Tony Lewandowski (connectchicagojv.com), Tiffany Hannigan (cityofchicago.org), Frank Grimaldi (cityofchicago.org), Robert Stankiewicz (exp.com), Stephen Elrod (exp.com), Brad McMullen (connectchicagojv.com), Fahd Alam (connectchicagojv.com), Marty Carroll, Alex Vickas (airportsafetytraining.com), Carl Sassolino (airportsafetytraining.com), Frame, Aaron (cityofchicago.org), Rod, Adam (cityofchicago.org), Ryan Houston (connectchicagojv.com), Jen Hoffman (jacobsendaniels.com), Michael P. Hanlon (jacobsendaniels.com), Jennifer Figura (faa.gov), Kevin M Gnagey (faa.gov), Joe Mantello (faa.gov), Brian Cugno (faa.gov), Smith, Olivet (FAA) (faa.gov), Dan Kierna (cityofchicago.org), Joe Torres (cityofchicago.org), Jose Rivas (cityofchicago.org), Marco Avila (cityofchicago.org), Martinez-Aviles, Juan (cityofchicago.org), Erasmo Alarcon (cityofchicago.org), Keith Wisniewski (cityofchicago.org), George Lyman (cityofchicago.org), Tracy Walsh (cityofchicago.org), Jeff Wytaniec (cityofchicago.org) Cc Bcc

DRAFT CSPP Review for Taxiway Y Rehabilitation

Good morning,

Please see the attached DRAFT CSPP for the O'Hare International Airport "Y" Taxiway Rehabilitation. This projects includes the complete re-paving of the "Y" Taxiway and transitions from "Y1" up to the 28R approach, widening the pavement fillet on "Y3" and "Y" and repair to several 28C ALSF in-pavement lights.

Similar to the runway 4R rehab project, this project will require work through the 10C LOC critical area on "Y" Taxiway and the 28R Glide slope on the "P"/"Y" Intersection.

Please feel free to forward to anyone that should be on this review.

Please have any comments back by COB Tuesday (yeah it's March) March 2nd.

Specific Comments for this CSPP:

1. Page 7 - Design team please verify contract dates
2. Page 8 - Please note construction activities will be required through the 10C LOC and 28R Glide slope critical area. Please review comments regarding restrictions are accurate as written.
3. Page 11 - Review taxiway and runway closure restrictions.
4. Page 14 - Shows closure details for 30 closure of Y3 and Y intersection.
5. Page 14 - note restrictions for 10R closure when working on Y1 and Y2
6. Page 15 - work area 2 will require driving thru the 10C Loc critical area, the assumption is in 10C arrivals, this will not be permitted day or night, is that correct?
7. Page 18 - shows 7 day extended closing for both Y and Y4 taxiways
8. Page 21 - restriction in work area 3 for any work in the Y/P Intersection if landing 28R (inside the G/S critical area
9. Page 22 - work area 4 will require closures on 10L-28R for paving
10. Page 24 - work area 4 has a double whammy - while outside the RSA of 28R the runway can be open, but then inside the G/S critical area. will need close coordination and understanding by the contractor.
11. Page 26 - contract documents show part of the E/W snow road as a staging area, this might not be available due to the demo of the fuel farm. The demo contractor has a lot of the area allocated with equipment
12. Page 28 - During the 7 day closure of Y and Y4 only night work is permitted, the area stays closed during the day for concrete cure time. nothing will be staged in the LOC critical area when work is complete for the evening.

VOLUME 1 - Contains all the site/project specific information and AOA impacts of the project. Details each Phase and work area

VOLUME 2 - Contains information, rules, regulations, and procedures that will be the same for every project. Revised Jan 2020

As with other reviews, all information specific to this project is highlighted in yellow.

Thank you
George

George Vickas
Managing Director
ASSET LLC
312-656-3522
www.ordsafe.com