

Master Common Use Gate Space Plan & Terminal Capacity Parameters: **Summer 2024**

September 5, 2023

TSUPS SUBMISSION REQUIREMENTS

- The City is bound by the Terminal Space Use Protocols (TSUPS) to submit a Master Common Use Gate Space Plan and Terminal Capacity Parameters to the Scheduling Manager on August 24th, 2023, 6 weeks prior to the IATA initial submission deadline.
- The gate space plan should include all the relevant information needed for the Scheduling Manager to process assignments to Common Use Gate Space and Hardstand Space.
- The terminal capacity parameters submission should include all the useful information to process assignments of the following:
 - Check-in and bag drop positions, including self-service kiosks.
 - Security screening checkpoints.
 - Baggage handling and makeup.
 - Federal inspection station and baggage claim.
- The submission should include terminal capacity parameters related to these processes, at a level of detail reasonably deemed appropriate by the city.

NOTES: TSUPS – Terminal Space Use Protocols (effective April 15, 2019)
IATA – International Air Transport Association



Scheduling Capacity Summary

METHODOLOGY AND ASSUMPTIONS

- The Summer 2024 terminal capacity parameters are based upon a methodology consistent with prior capacity declarations (including the Summer 2023 capacity declaration). These parameters are based upon the following:
 - An analytical assessment of the processes using previously sampled data and industry metrics.
 - Periodic on-site observations to understand the following:
 - Operational specificities
 - Gather stakeholder input
 - Changes in airport operations
- The capacities resulting from this analysis are expressed for the entire Summer 2024. These include variations in capacity due to construction activities, as well as infrastructure and operational improvements.
- The analysis considers the impact of domestic airline changes (Delta Air Lines move to Terminal 5, Frontier Airlines route restructuring, Southwest Airlines growth at Terminal 5, and Spirit and EAS moving to Terminal 2 post G/L Swap).
- Capacities assume that Summer 2023 is representative of traffic growth at Common Use facilities (i.e. consistent domestic/international split, peaking profile, etc.).

COMMON USE PROCESSING CAPACITY MAIN TERMINALS

Process	Unit	Common Use units used as a basis for capacity declaration	
		Summer 2023 (prior equivalent season)	Summer 2024
Terminal 1			
No Common Use Facilities	-	-	-
Terminal 2			
Check-in	Positions	-	8 ^{1/ 2/}
Security Screening ^{3/}	Lanes	-	6 ^{1/}
Baggage Makeup	Devices	-	1 (Joint Use) ^{1/ 4/}
Non-FIS Baggage Reclaim	Devices	-	1 ^{1/}
Terminal 3			
Check-in	Positions	8 ^{2/}	-
Security Screening ^{3/}	Lanes	20	-
Baggage Makeup	Devices	1 (Joint Use) ^{5/}	-
Non-FIS Baggage Reclaim	Devices	1	-
Bus Gates	Gates	1 (G15)	1 (G15) ^{6/}

NOTES: 1/ Capacity may be provided at Terminal 2 or Terminal 3.

2/ Common Use check-in allocation subject to use of Terminal 3 Joint Use baggage makeup.

3/ Security screening provided for TSA Precheck as well as standard processes.

4/ The Terminal 2 Joint Use baggage makeup carousel provides 14 makeup positions shared with Alaska Airlines and JetBlue Airways (shared with Spirit Airlines if capacity is provided at Terminal 3).

5/ The Terminal 3 Joint Use baggage makeup carousel provides 14 makeup positions shared with Spirit Airlines.

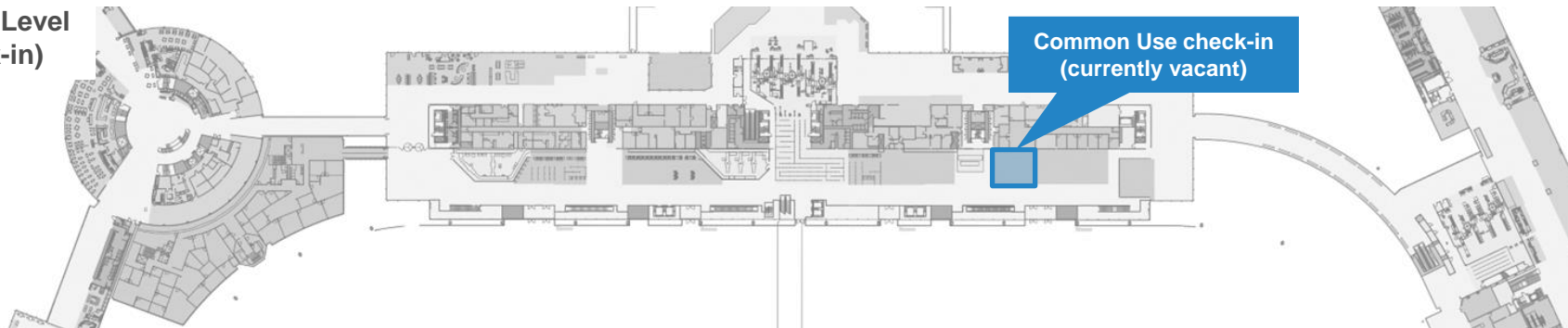
6/ The Scheduling Manager shall coordinate with CDA Operations to ensure bus availability.

SOURCE: Ricondo & Associates, Inc., August 2023.

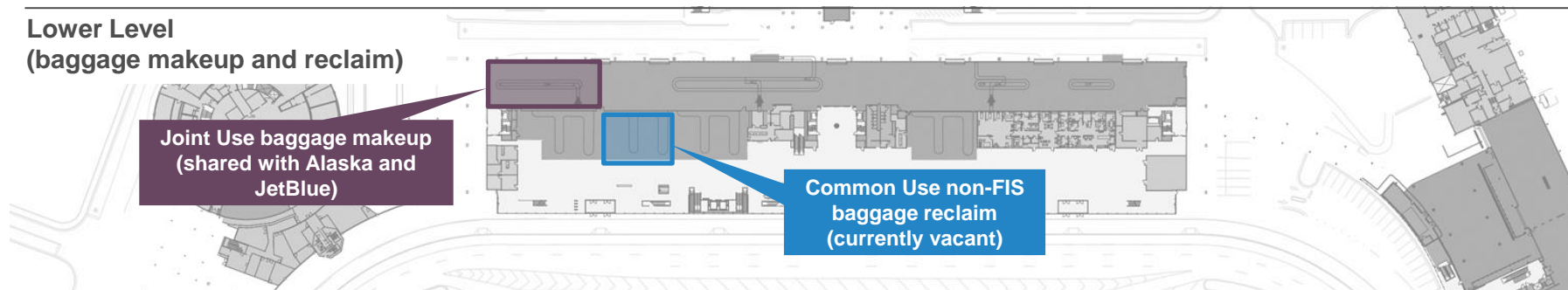
MAIN TERMINALS – ANTICIPATED CONDITIONS

TERMINAL 2 DECLARED PROCESSES

Upper Level
(check-in)



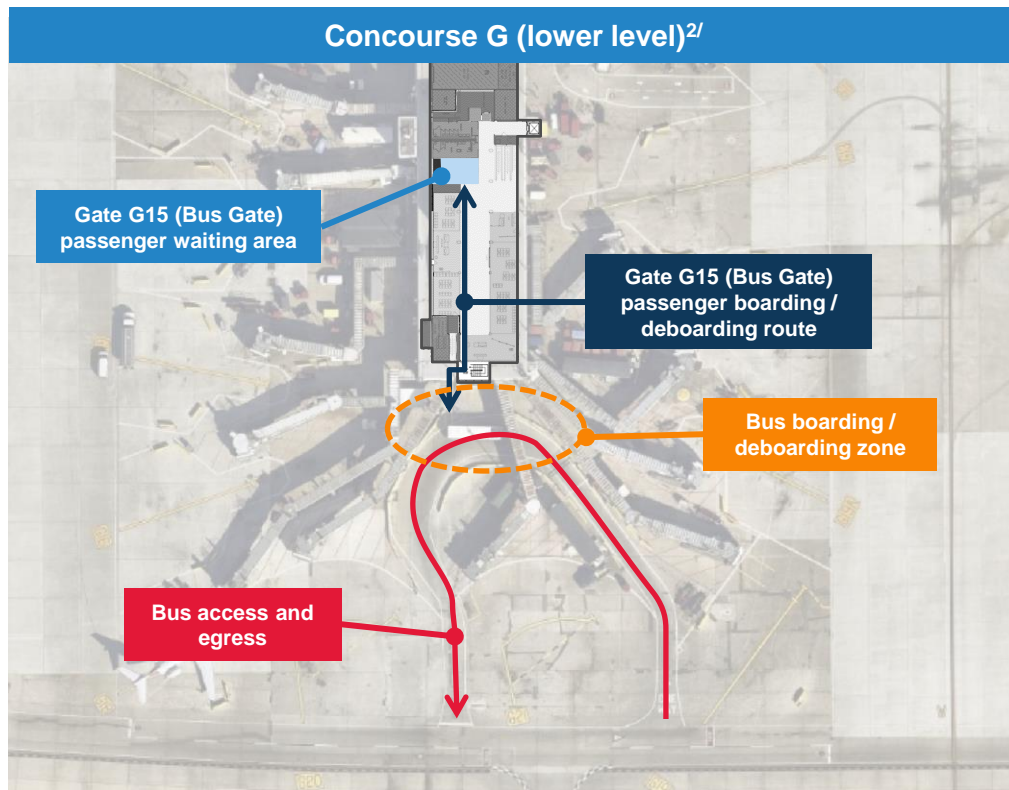
Lower Level
(baggage makeup and reclaim)



SOURCES: Chicago O'Hare International Airport. Current Leased Space Including Vacancies, April 15, 2020; Raytheon, Chicago O'Hare International Airport Nationwide Technology Deployment, March, 2019; Ricondo & Associates, Inc., August 2023.

MAIN TERMINALS – ANTICIPATED CONDITIONS

G15 BUS GATE / TERMINAL TRANSFER BUS STOP



- A single door is provided for Gate G15 and Terminal Transfer Bus^{1/} operations.
- The Gate G15 waiting area is sized to primarily handle aircraft with 50 seats or less.
- The Scheduling Manager shall coordinate with CDA Operations to ensure bus availability.

Image not to scale : North ↑

NOTE: 1/ Terminal Transfer Bus provided for passengers connecting between Main Terminals and Terminal 5.

2/ Ramp and interior layout are indicative and subject to change.

SOURCES: Nearmap, September 28, 2022 ; Ricondo & Associates, Inc., August 2023.

COMMON USE PROCESSING UNITS

TERMINAL 5

Process	Unit	Common Use units as a basis for capacity declaration	
		Summer 2023 Declared (prior equivalent season)	Summer 2024 (Terminal 5 extension complete)
International Arrivals			
Federal Inspection Station	Primary positions	42	56
FIS Baggage Reclaim	Devices	8	9 ^{1/}
Transfers Recheck	Common-use positions	16	16
Domestic and Precleared Arrivals			
Non-FIS Baggage Reclaim	Devices	2 ^{2/}	2 ^{2/}
Departures			
Check-in	Positions	128 ^{3/}	132 ^{3/}
Security Screening ^{4/}	Lanes	13	13
Baggage Departure Processing	Originating in-line EDS machines	5 ^{5/}	5 ^{5/}
Baggage Makeup	Makeup positions (standard) ^{6/}	180	180
Bus Gates	Gates	1 (M13)	1 (M13) ^{7/}

NOTES: 1/ Includes 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

2/ Based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot presentation length (excludes 1 Preferential Use Delta Air Lines device).

3/ Common-use positions only. Does not include Delta Air Lines Preferential Use space; Summer 2023 capacity declaration assumes 3 CTX machines on west side of hall, reduced to 2 machines in Summer 2024.

4/ Security screening provided for TSA Precheck as well as standard processes.

5/ Baggage departures processing assumed to be limited by CBIS capacity. Includes EDS machines provided in-line for the departures process (excludes any machines provided for transfers recheck). 1 EDS machine used as redundancy.

6/ Makeup positions include space occupied by any vehicle (tugs, carts, or dollies) parked next to each carousel. 4 additional positions used for out-of-gauge / oversize makeup. All makeup carousels will be provided with common use equipment.

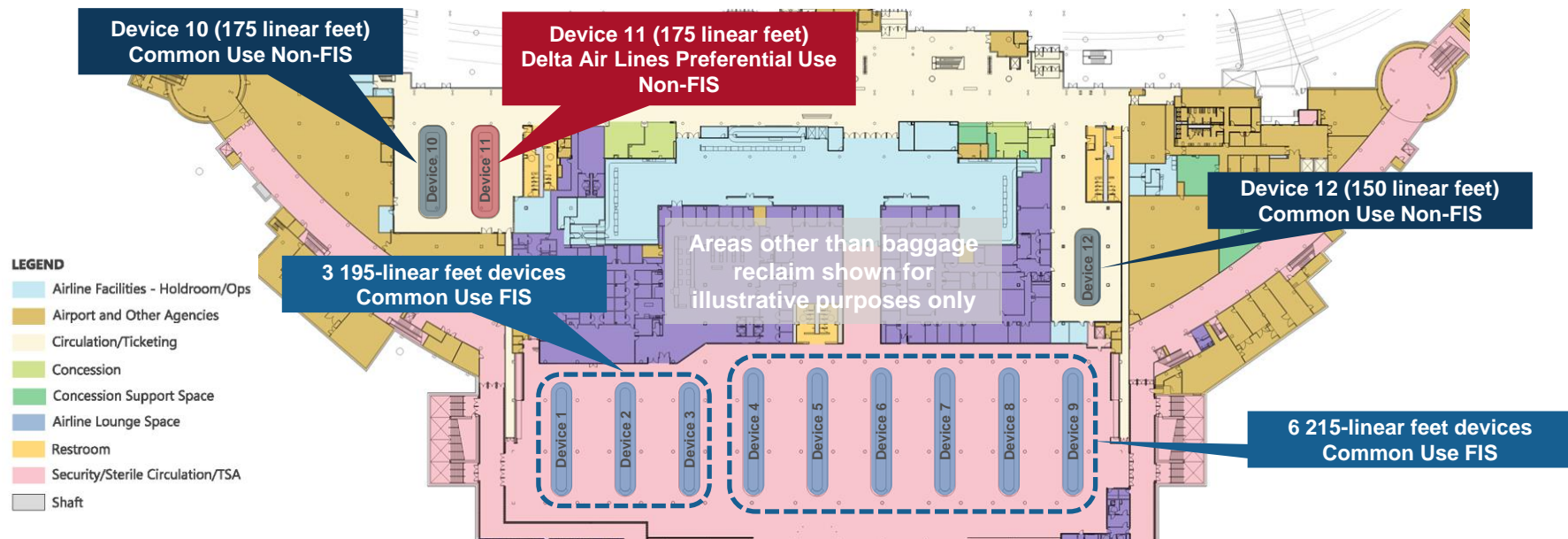
7/ The Scheduling Manager shall coordinate with CDA Operations to ensure bus availability.

SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Vanderlande, *Acceleration Plan for West Phase*, March 2023; Ricondo & Associates, Inc., August 2023.

Processing unit variation between
Summer 2023 and Summer 2024

TERMINAL 5 – ANTICIPATED CONDITIONS

BAGGAGE RECLAIM

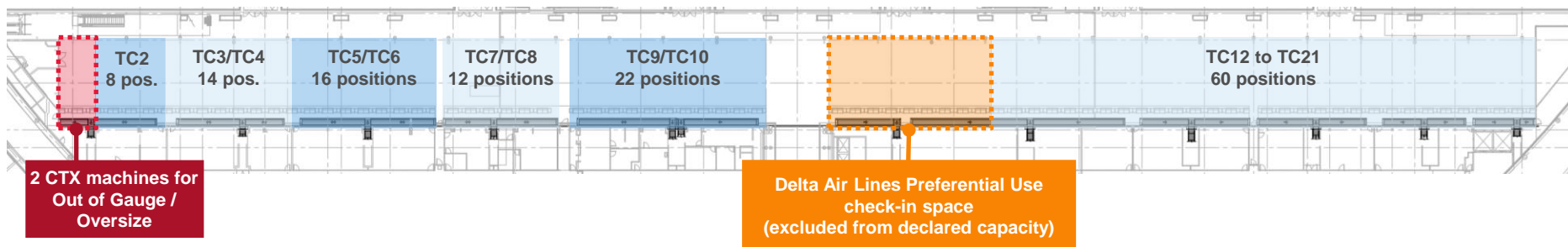


- The declared capacity assumes two non-FIS baggage reclaim devices (one 150 linear foot device and one 175 linear foot device)
- All FIS baggage reclaim projects are anticipated to be complete, with 9 common use devices available

SOURCES: Chicago Department of Aviation, Executive Working Group – Terminal 5 Subcommittee, February 8, 2023; Ricondo & Associates, Inc., August 2023.

TERMINAL 5 – ANTICIPATED CONDITIONS

COMMON USE CHECK-IN COUNTERS



**Summer 2024
Declared capacity**



132
**Common use
check-in positions**

All check-in baggage handling system improvements are anticipated to be completed by Summer 2024

SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Vanderlande, *Acceleration Plan for West Phase*, March 2023; Ricondo & Associates, Inc., August 2023.

TERMINAL 5 – ANTICIPATED CONDITIONS

BAGGAGE MAKEUP



Makeup carousels
15 carousels

Oversize makeup
2 devices

Makeup positions (standard)
180 positions^{2/}

Makeup positions (out-of-gauge / oversize)
4 positions^{2/}

NOTE: 1/ Areas shown are not to scale.

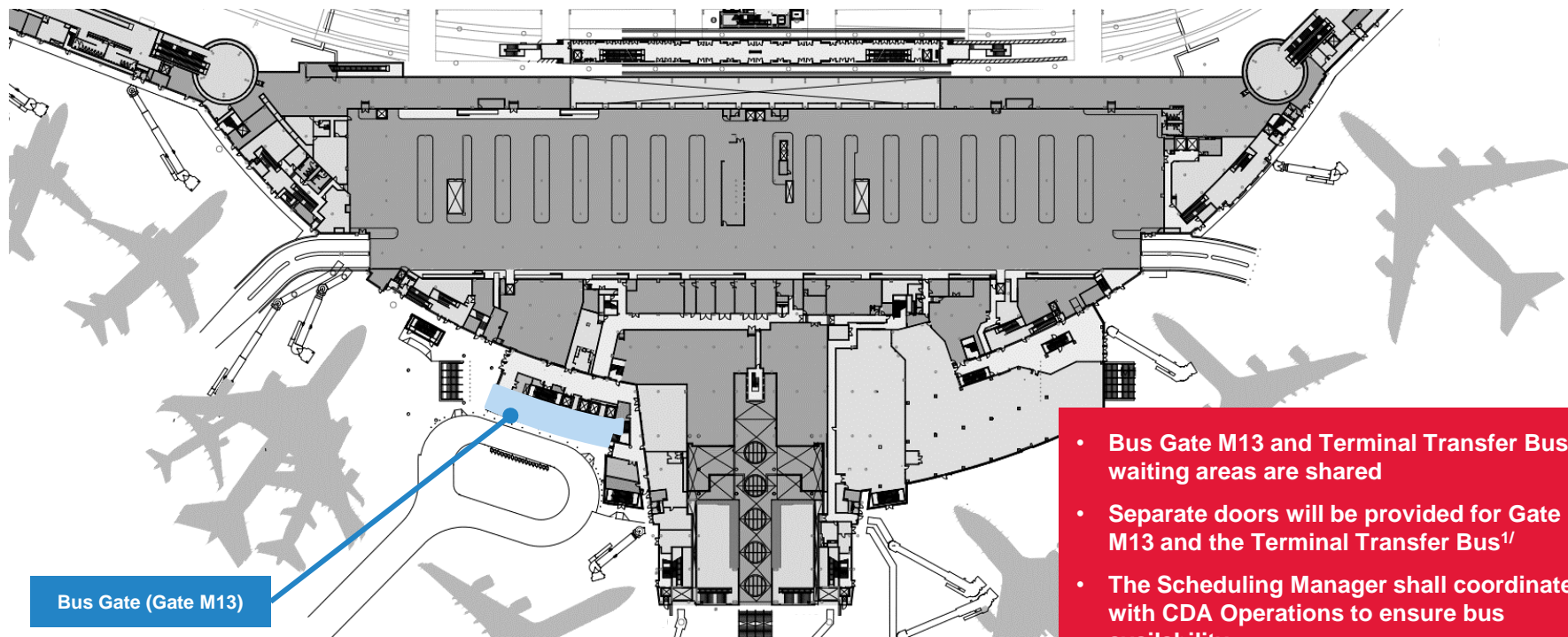
2/ Makeup positions include space occupied by any vehicle (tugs, carts, or dollies) parked next to each carousel or oversize makeup.

3/ All makeup carousels will be provided with common use equipment.

SOURCES: Ricondo & Associates, Inc., August 2023.

TERMINAL 5 – ANTICIPATED CONDITIONS

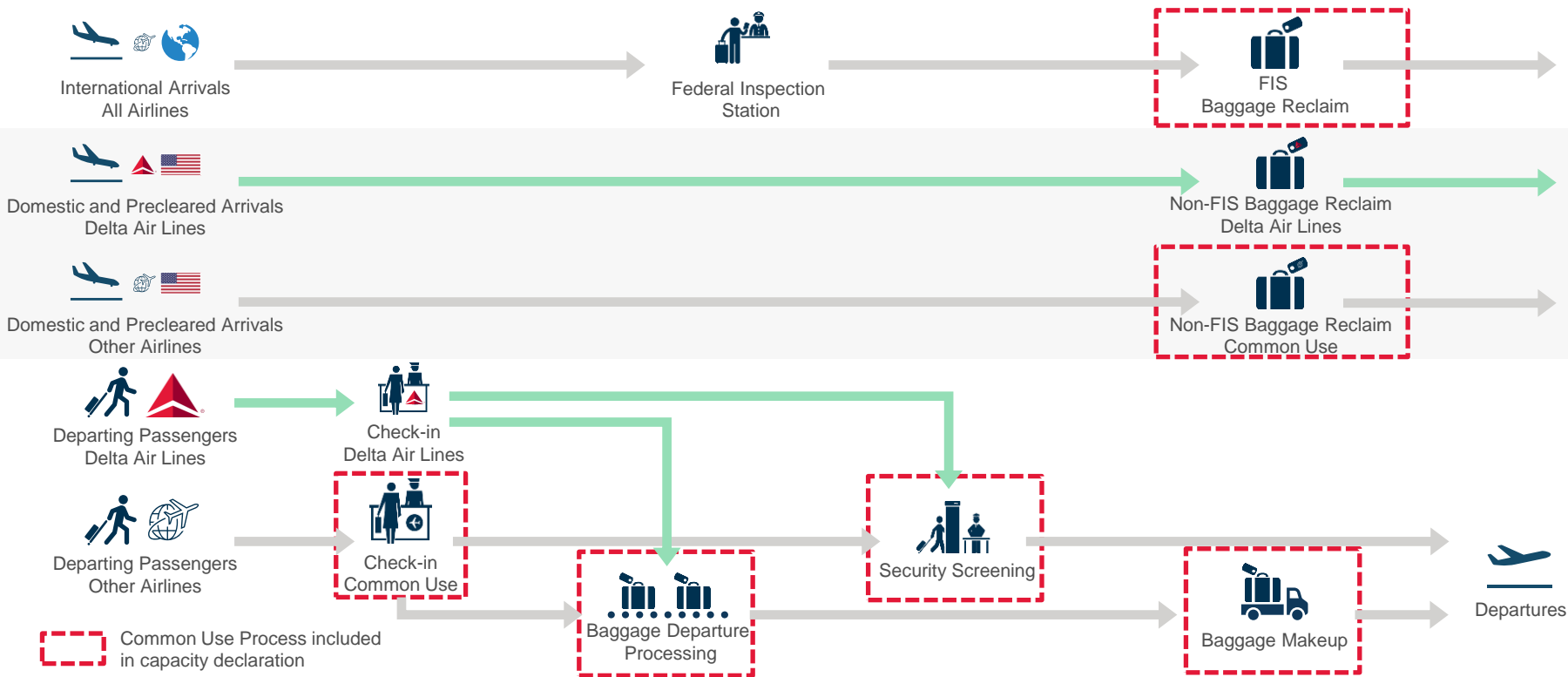
M13 BUS GATE / TERMINAL TRANSFER BUS STOP



NOTE: 1/ Terminal Transfer Bus provided for passengers connecting between Main Terminals and Terminal 5.

SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Ricondo & Associates, Inc., August 2023.

COMMON USE DECLARED CAPACITIES – TERMINAL 5






Declared capacities based upon total demand at Common Use processes (including Delta Air Lines and other airlines)

SOURCE: Ricondo & Associates, Inc., August 2023.

MAIN TERMINALS – SUMMER 2024 CAPACITY PARAMETERS

MARCH 31, 2024 – OCTOBER 26, 2024

Passenger Flow	Process	Time of Day	Available Common Use Units		Declared Common Use Capacity	
			Unit	Capacity	Unit	Capacity
Terminal 1						
No Common Use Facilities	-	-	-	-	-	-
Terminal 2						
  Domestic and Precleared Arrivals	Non-FIS Baggage Reclaim ^{1/}	All day	Devices	1	Domestic seats per hour ^{3/}	900
 Departures	Check-in ^{1/}	All day	Positions	8 ^{4/}	Seats per four hours	1,000
	Security Screening ^{1/}	All day	Lanes	6	Seats per four hours	4,600
	Baggage Makeup ^{1/}	All day	Devices	1 (Joint Use) ^{5/}	Seats per four hours	1,900 (Joint Use) ⁵
Terminal 3						
No Common Use Facilities	-	-	-	-	-	-

NOTES: 1/ Capacity may be provided at Terminal 2 or Terminal 3. Security screening and baggage makeup four-hour seat capacity assumes capacity is provided in Terminal 2.

2/ All Terminal 2 carriers are anticipated to use security screening capacity outlined in the table. United Airlines, Alaska Airlines, Air Canada, JetBlue and Spirit Airlines are anticipated to operate Preferential Use or Joint Use check-in, makeup and non-FIS baggage reclaim.

3/ Non-FIS baggage reclaim capacity is equivalent to 300 precleared international seats per hour. Each precleared international seat is equivalent to 3 domestic seats due to higher average number of passengers with baggage and longer time at reclaim.

Canadian flights shall be considered domestic for the purpose of domestic and precleared arrivals capacity.




4/ After check-in passengers manually drop their bag off at in-lobby screening before heading to security screening.

5/ The Terminal 2 Joint Use baggage makeup carousel provides 14 makeup positions shared with Alaska Airlines and JetBlue Airways (shared with Spirit Airlines if capacity declared in Terminal 3).

SOURCE: Ricondo & Associates, Inc., August 2023.

TERMINAL 5 – SUMMER 2024 CAPACITY PARAMETERS

MARCH 31, 2024 – OCTOBER 26, 2024

Passenger Flow	Process	Time of Day	Available Common Use Units		Declared Common Use Capacity ^{1/}	
			Unit	Capacity	Unit	Capacity
 International Arrivals	Federal Inspection Station ^{2/}	All day	Primary positions	56	Seats per 2-hours	6,700
	FIS Baggage Reclaim	All day	Devices	9 ^{3/}	Seats per 2-hours	6,800
 Domestic and Precleared Arrivals	Non-FIS Baggage Reclaim	All day	Devices	2 ^{4/}	Domestic seats per hour ^{4/}	2,100
 Departures	Check-in	All day	Positions	132	Seats per 4-hours	6,700
	Security Screening	Peak (12:30-20:30)	Lanes	13	Seats per 4-hours	8,900
		Off-peak (20:30-12:30)	Lanes	11	Seats per 4-hours	7,500
	Baggage Departures Processing	All day	In-line EDS machines	5 ^{5/}	Seats per 4-hours	10,700
	Baggage Makeup	All day	Makeup positions (standard)	180 ^{6/}	Seats per 4-hours	7,500

NOTES: 1/ All Terminal 5 carriers are anticipated to use Federal Inspection Station, security screening, non-FIS and FIS baggage reclaim, baggage departures processing and baggage makeup capacity outlined in the table. Delta Air Lines is anticipated to operate Preferential Use check-in and does not use Common Use check-in capacity.

2/ Capacity is subject to U.S. Customs and Border Protection staffing.

3/ FIS baggage reclaim includes 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

4/ Non-FIS baggage reclaim capacity is equivalent to 700 precleared international seats per hour. Each precleared international seat is equivalent to 3 domestic seats due to higher average number of passengers with baggage and longer time at reclaim. Capacity based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot presentation length. Canadian flights shall be considered domestic for the purpose of domestic and precleared arrivals capacity.

5/ Baggage departures processing assumed to be limited by CBIS capacity. Includes EDS machines provided in-line for the departures process (excludes any machines provided for transfers recheck). 1 EDS machine used as redundancy.

6/ Makeup positions include space occupied by any vehicle (tugs, carts, or dollies) parked next to each carousel. 4 additional positions used for out-of-gauge / oversize makeup. All makeup carousels will be provided with common use equipment.

SOURCE: Ricondo & Associates, Inc., August 2023.



Gate Count, Phasing & Capacity

SUMMER 2024 – O'HARE COMMON USE STANDS

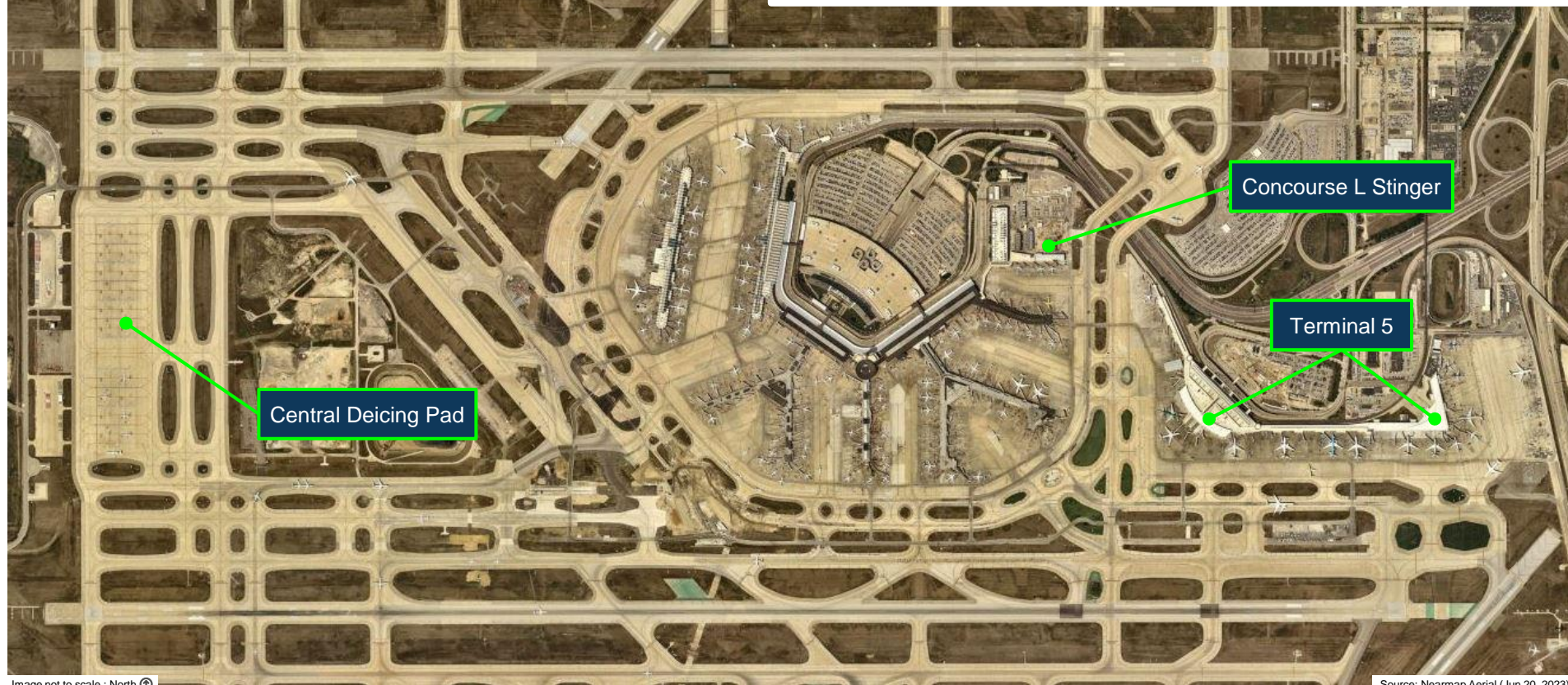


Image not to scale : North

Source: Nearmap Aerial (Jun 20, 2023)

O'HARE TERMINAL 5 AIRCRAFT PARKING LAYOUT – SUMMER 2024

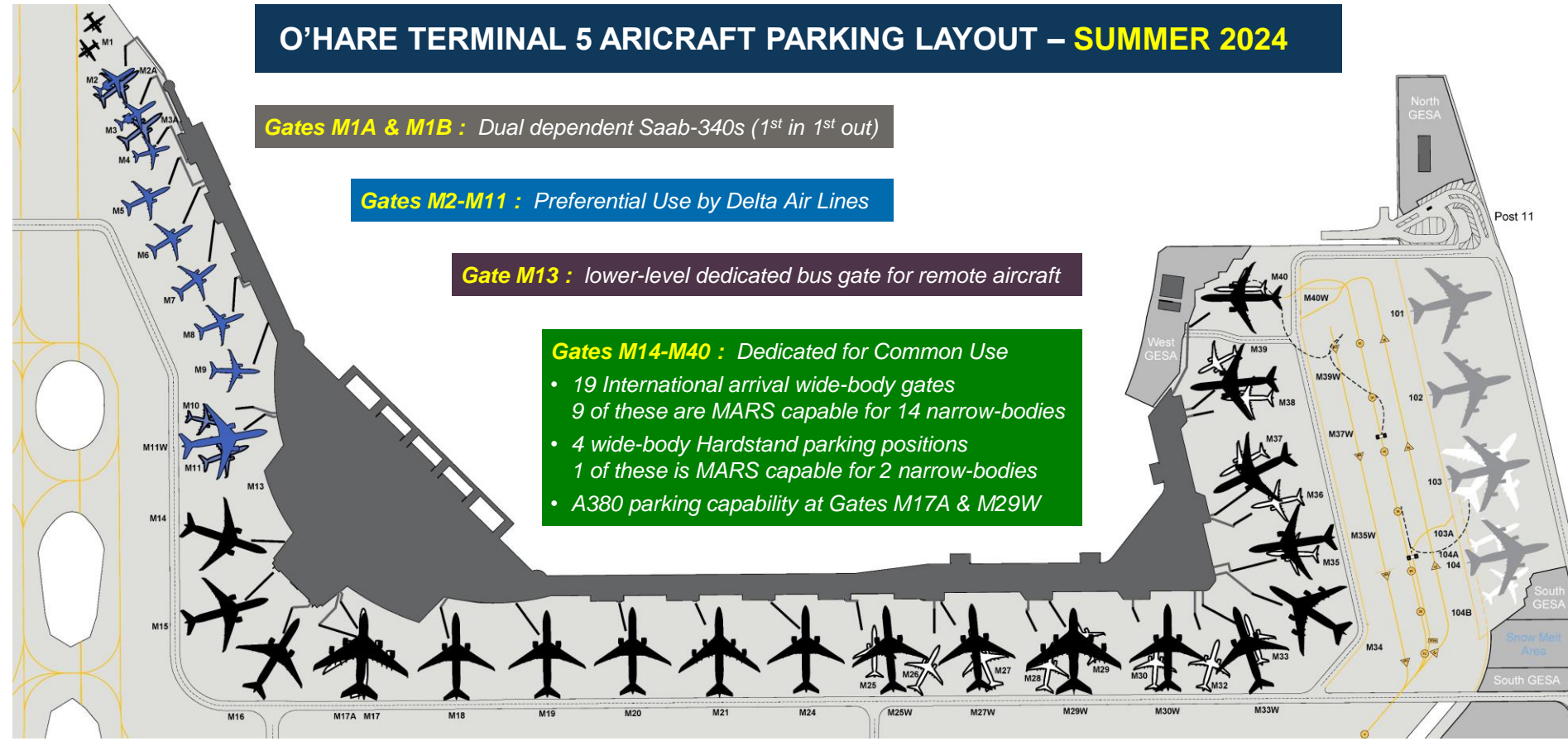
Gates M1A & M1B : Dual dependent Saab-340s (1st in 1st out)

Gates M2-M11 : Preferential Use by Delta Air Lines

Gate M13 : lower-level dedicated bus gate for remote aircraft

Gates M14-M40 : Dedicated for Common Use

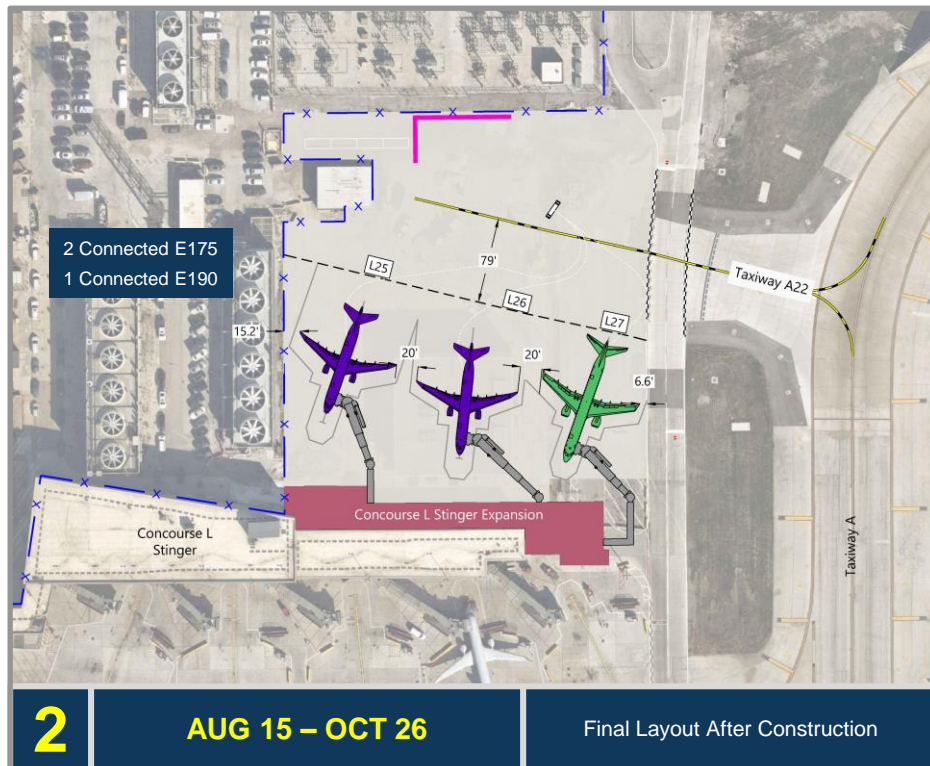
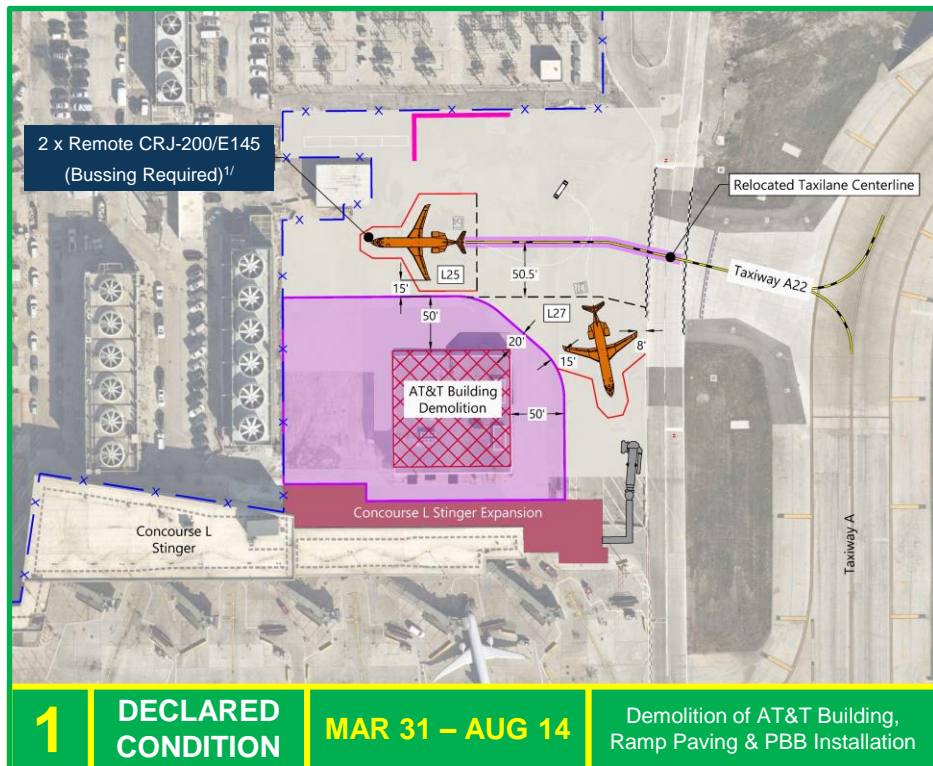
- 19 International arrival wide-body gates
9 of these are MARS capable for 14 narrow-bodies
- 4 wide-body Hardstand parking positions
1 of these is MARS capable for 2 narrow-bodies
- A380 parking capability at Gates M17A & M29W



Source: Chicago Department of Aviation – Future Airport Layout Plan for O'Hare International Airport (December 5, 2022); TY Lin Design Plans & Bulletin #031; Ricondo (August 22, 2023)

Image not to scale : North

O'HARE CONCOURSE L STINGER - **SUMMER 2024** : Aircraft Parking Layout During & After Construction



NOTE: 1/ Depending on construction progress, it may be possible midway through the Summer 2024 Season to upgrade Gate L27 to accommodate larger aircraft up to & including E190.

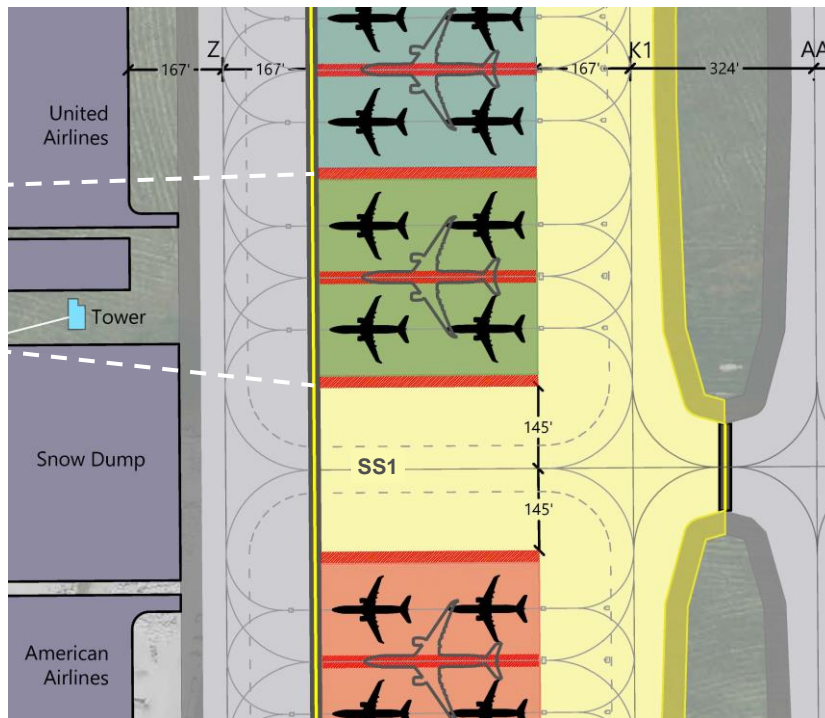
Source: Chicago Department of Aviation; Corgan; Nearmap Aerial (June 20, 2023); Ricondo (August 24, 2023) / Image not to scale / North



Image not to scale : North ↑

O'HARE CENTRAL DE-ICING PAD – HARDSTAND PARKING

Used primarily for Common Use Deicing from October 1 – May 15



Source: Chicago Department of Aviation, O'Hare International Airport - Future Airport Layout Plan (December 5, 2023)
Nearmap Aerial (June 20, 2023)

Common Area

4 Narrow-bodies

(2 lines – 1st in, 1st out)

or

1 wide-body

Field access via:

Twy T from North

Twy K from South

Ramp Tower Control by
United & American Airlines



CHICAGO DEPARTMENT OF AVIATION

JAMIE L. RHEE, COMMISSIONER



flychicago.com