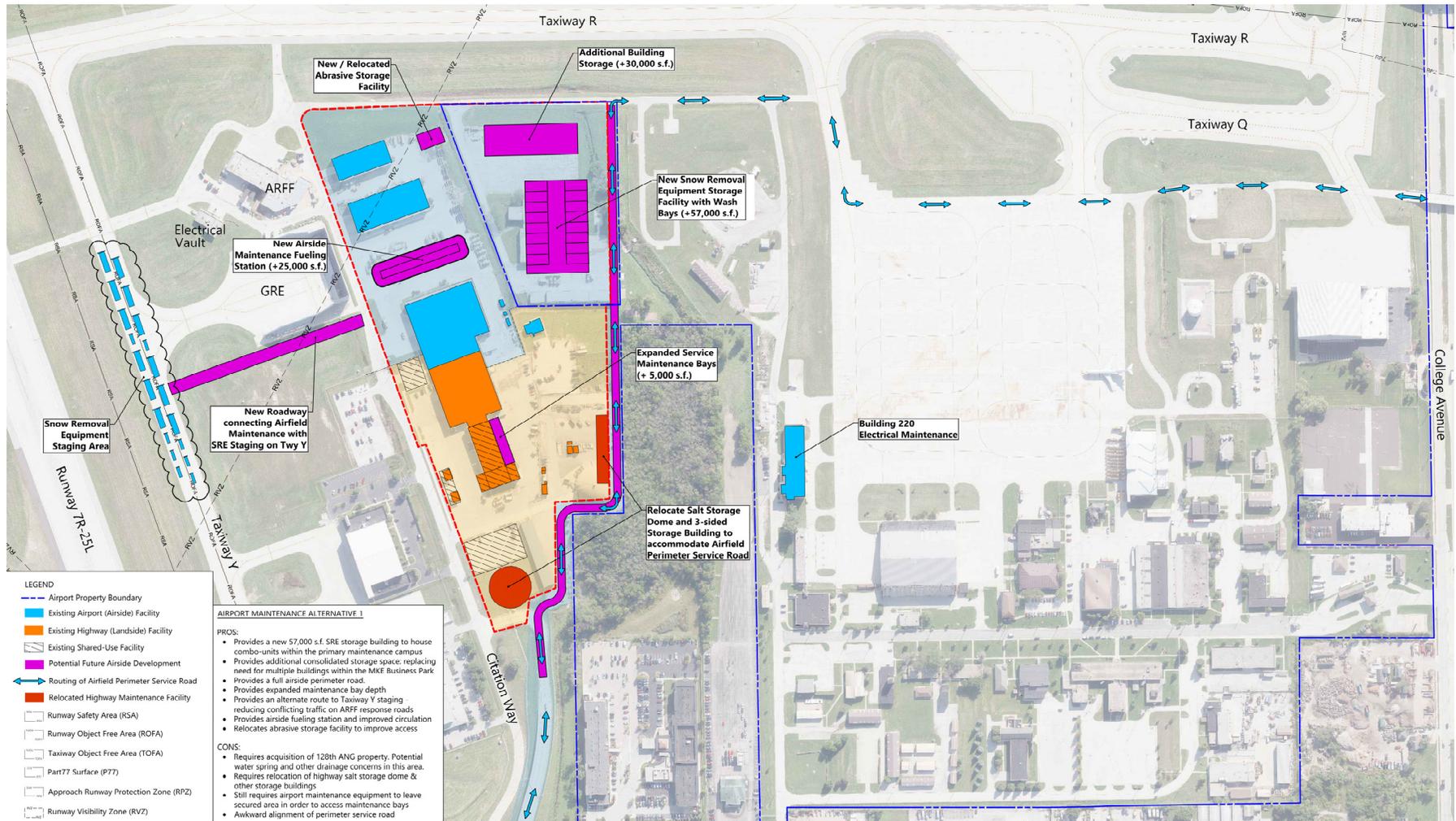


EXHIBIT 5-56 AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES COMPONENT ALTERNATIVE 1

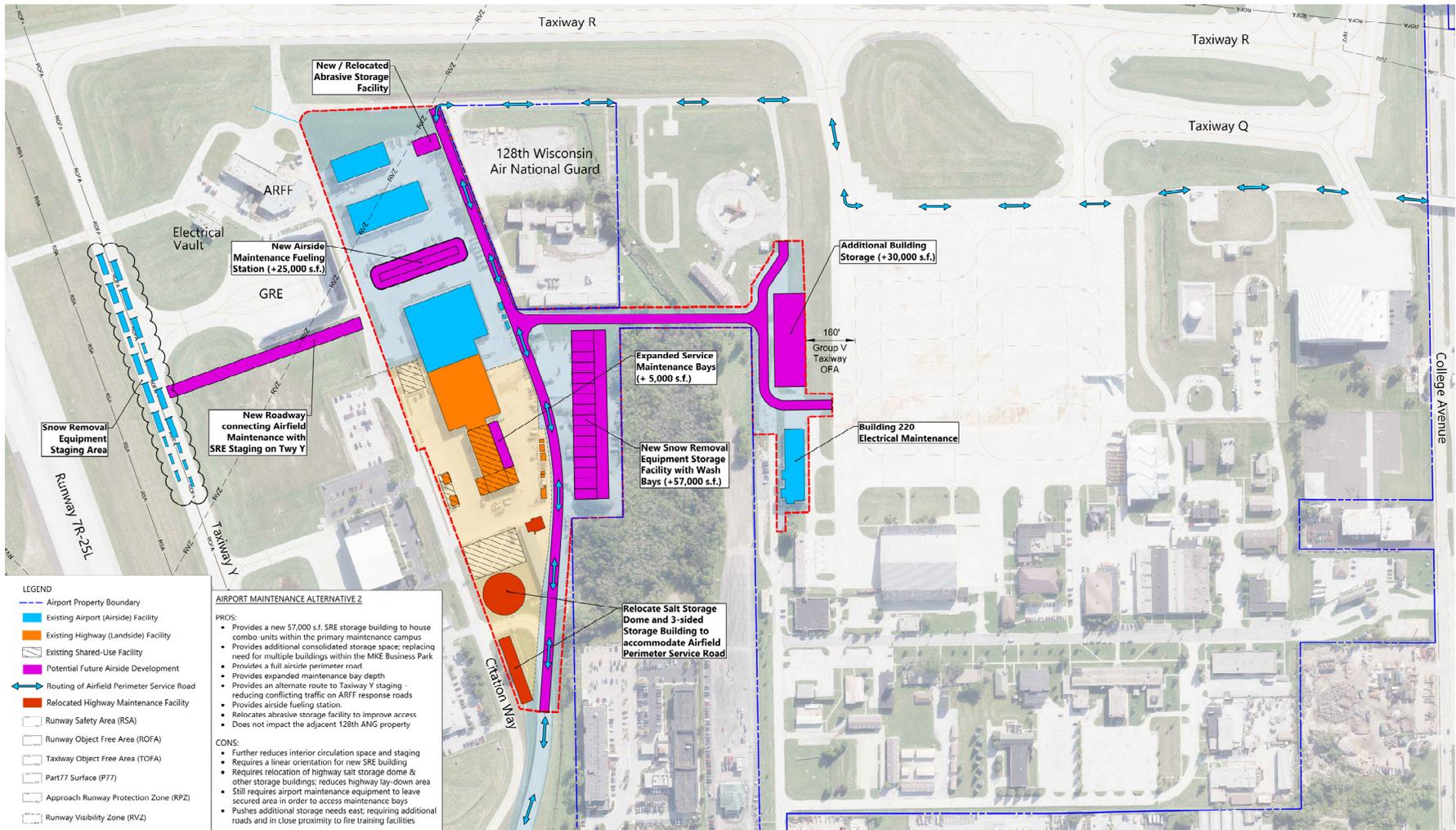


NOTES:

Blue – existing Airport maintenance facilities and SRE staging; magenta – future airport maintenance facilities; orange – Milwaukee County Department of Transportation maintenance facilities.

SOURCE: Mead & Hunt, October 2019.

EXHIBIT 5-57 AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES COMPONENT ALTERNATIVE 2

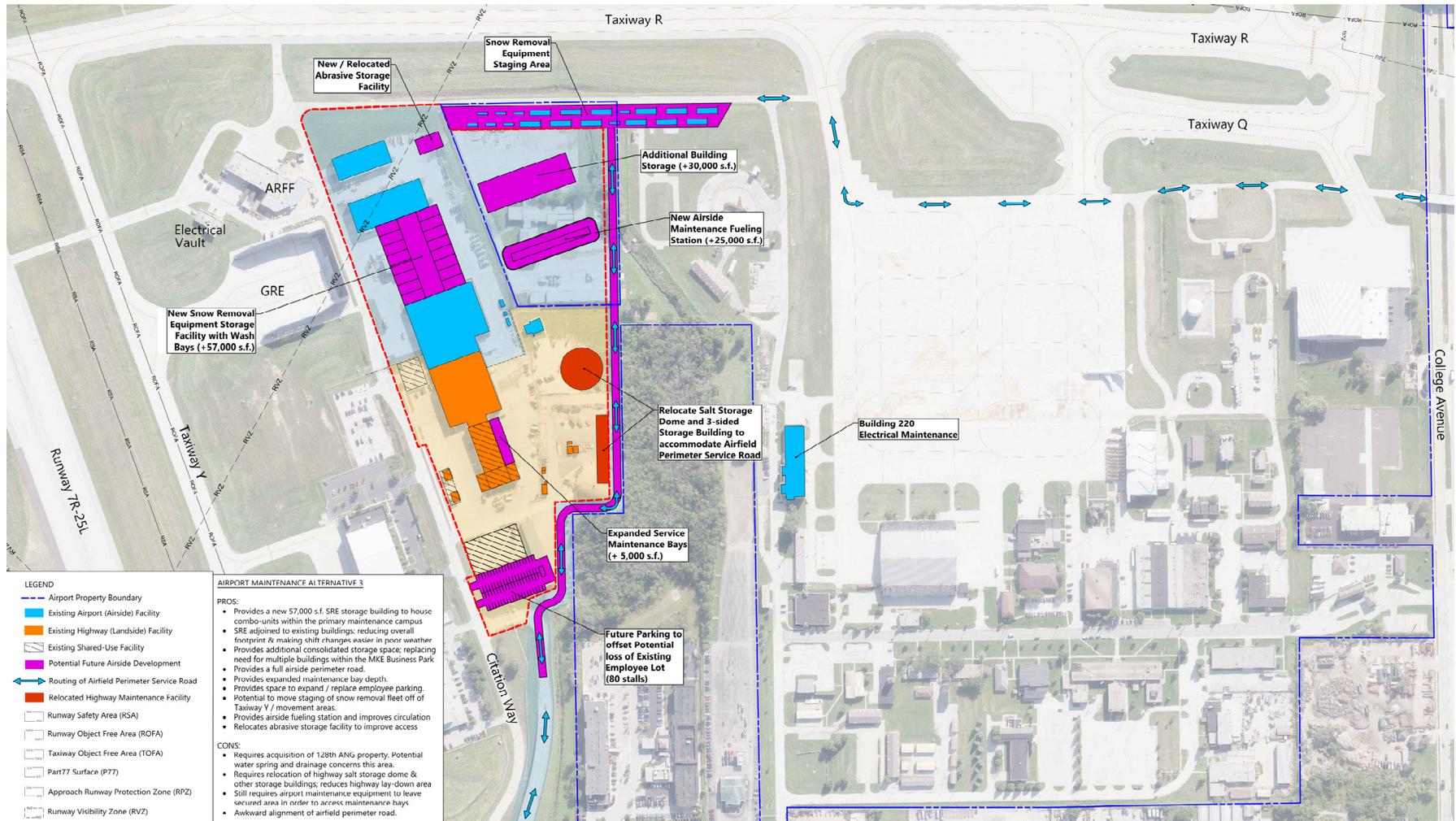


NOTES:

Blue – existing Airport maintenance facilities and SRE staging; magenta – future airport maintenance facilities; orange – Milwaukee County Department of Transportation maintenance facilities.

SOURCE: Mead & Hunt, October 2019.

EXHIBIT 5-58 AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES COMPONENT ALTERNATIVE 3

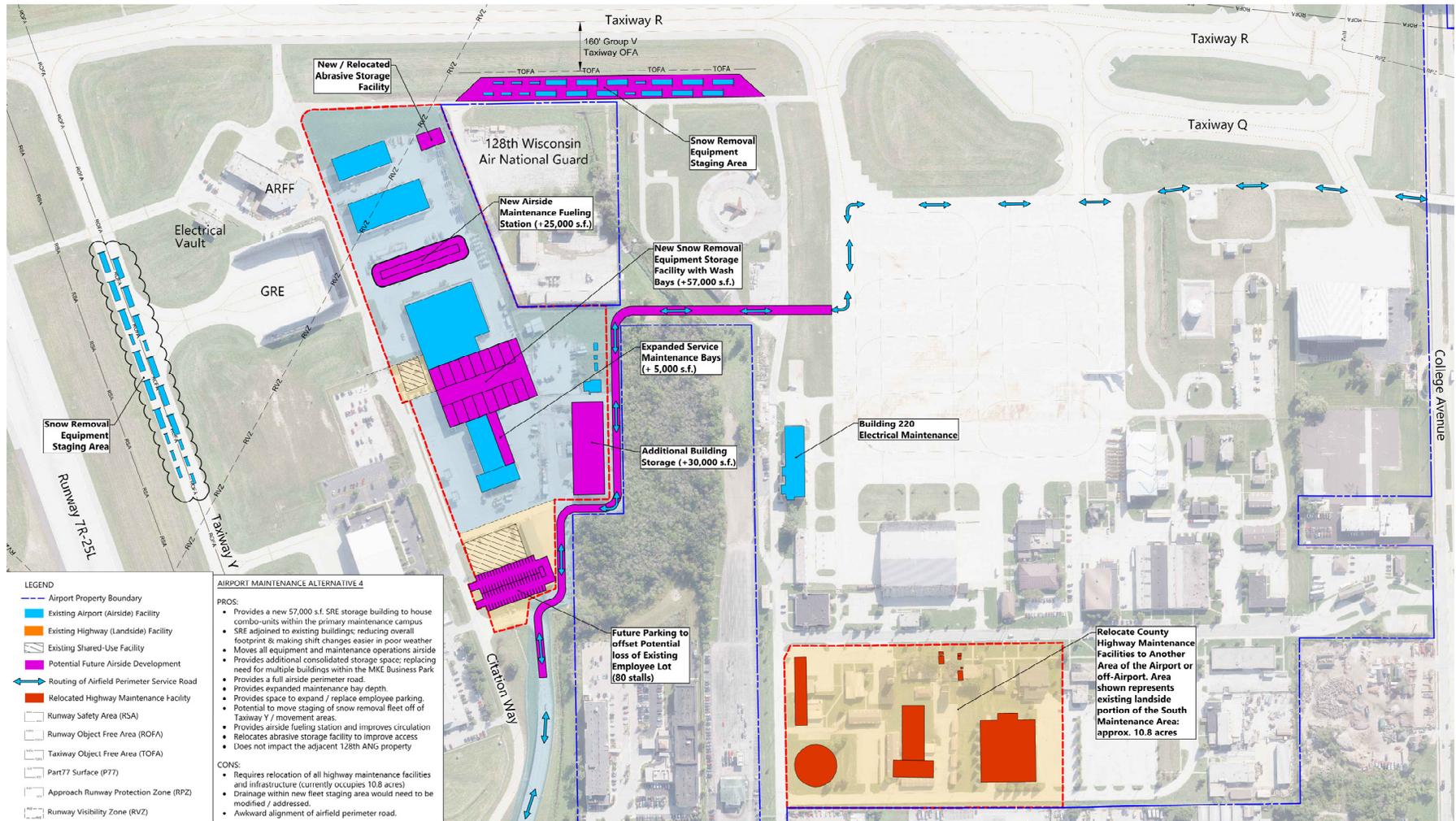


NOTES:

Blue – existing Airport maintenance facilities and SRE staging; magenta – future airport maintenance facilities; orange – Milwaukee County Department of Transportation maintenance facilities.

SOURCE: Mead & Hunt, October 2019.

EXHIBIT 5-59 AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES COMPONENT ALTERNATIVE 4



NOTES:

Blue – existing Airport maintenance facilities and SRE staging; magenta – future airport maintenance facilities; orange – Milwaukee County Department of Transportation maintenance facilities.

SOURCE: Mead & Hunt, October 2019.

TABLE 5-9 (1 OF 2) SUPPORT FACILITIES COMPONENT ALTERNATIVES – AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES

ALTERNATIVE	DESCRIPTION
Alternative 1	<ul style="list-style-type: none"> <li>▪ A new 57,000-square-foot SRE storage building is incorporated to house SRE combo-units within the primary maintenance campus.</li> <li>▪ Additional consolidated storage space is provided, replacing the need for multiple buildings within the MKE Regional Business Park.</li> <li>▪ Expanded maintenance bay depth is provided.</li> <li>▪ An alternate route to Taxiway Y is provided for SRE staging to reduce the use of ARFF response roads.</li> <li>▪ An airside (secure) vehicle fueling station is provided, improving vehicle circulation.</li> <li>▪ The abrasive storage facility is relocated to improve access.</li> <li>▪ This alternative requires the acquisition of the 128th Wisconsin Air National Guard (“Guard West”) property.</li> <li>▪ The existing well (within Guard West property) requires modification.</li> <li>▪ The Milwaukee County Highway Department salt storage dome and other storage buildings are relocated.</li> <li>▪ This alternative does not mitigate the requirement for Airport maintenance vehicles/equipment to leave the secure area to access the maintenance building.</li> </ul>
Alternative 2	<ul style="list-style-type: none"> <li>▪ A new 57,000-square-foot SRE storage building is incorporated to house SRE combo-units within the primary maintenance campus.</li> <li>▪ An additional consolidated storage space is provided, replacing the need for multiple buildings within the MKE Regional Business Park.</li> <li>▪ Expanded maintenance bay depth is provided.</li> <li>▪ An alternate route to Taxiway Y for SRE staging is provided to reduce the use of ARFF response roads.</li> <li>▪ An airside (secure) vehicle fueling station is provided.</li> <li>▪ The abrasive storage facility is relocated to improve access.</li> <li>▪ The Milwaukee County Highway Department salt storage dome and other storage buildings are relocated, reducing the Highway Department circulation area.</li> <li>▪ This alternative does not mitigate the requirement for Airport maintenance vehicles/equipment to leave the secure area to access the maintenance building. It relocates a portion of maintenance facilities to the south, requiring additional roads in proximity to the fire training facilities.</li> </ul>
Alternative 3	<ul style="list-style-type: none"> <li>▪ A new 57,000-square-foot SRE storage building is incorporated to house SRE combo-units within the primary maintenance campus.</li> <li>▪ The SRE storage building is located adjacent to existing buildings, reducing the overall facility footprint and easing shift changes.</li> <li>▪ Additional consolidated storage space is provided, replacing the need for multiple buildings within the MKE Regional Business Park.</li> <li>▪ Expanded maintenance bay depth is provided.</li> <li>▪ Expanded and/or replaced employee parking is accommodated.</li> <li>▪ The SRE staging is relocated to a non-movement area.</li> <li>▪ An airside (secure) vehicle fueling station is provided, improving vehicle circulation.</li> <li>▪ The abrasive storage facility is relocated to improve access.</li> <li>▪ This alternative requires the acquisition of the 128th WI ANG (Guard West) property.</li> <li>▪ The existing well (within Guard West property) requires modification.</li> <li>▪ This alternative relocates the Milwaukee County Highway Department salt storage dome and other storage buildings, reducing the Highway Department circulation area. It does not mitigate the requirement for Airport maintenance vehicles/equipment to leave the secure area to access the maintenance building.</li> </ul>

TABLE 5-9 (2 OF 2) SUPPORT FACILITIES COMPONENT ALTERNATIVES – AIRPORT MAINTENANCE AND OTHER SUPPORT FACILITIES

ALTERNATIVE	DESCRIPTION
Alternative 4	<ul style="list-style-type: none"> <li>▪ A new 57,000-square-foot SRE storage building is incorporated to house SRE combo-units within the primary maintenance campus.</li> <li>▪ The SRE storage building is located adjacent to existing buildings, reducing the overall facility footprint and easing shift changes.</li> <li>▪ This alternative locates all equipment and maintenance operations in the airside (secure) environment.</li> <li>▪ Additional consolidated storage space is provided, replacing the need for multiple buildings within the MKE Regional Business Park.</li> <li>▪ Expanded maintenance bay depth is provided.</li> <li>▪ Expanded and/or replaced employee parking is accommodated.</li> <li>▪ The SRE staging is relocated to a non-movement area.</li> <li>▪ An airside (secure) vehicle fueling station is provided, improving vehicle circulation.</li> <li>▪ The abrasive storage facility is relocated to improve access.</li> <li>▪ All Milwaukee County Highway Department facilities and operations (currently occupying 10.8 acres) are relocated.</li> </ul>

NOTES:

ARFF – Aircraft Rescue and Fire Fighting

SRE – Snow Removal Equipment

WI ANG – Wisconsin Air National Guard

SOURCE: Mead & Hunt, Inc., October 2019.

## 5.4 INTEGRATION AND INITIAL EVALUATION OF ALTERNATIVES

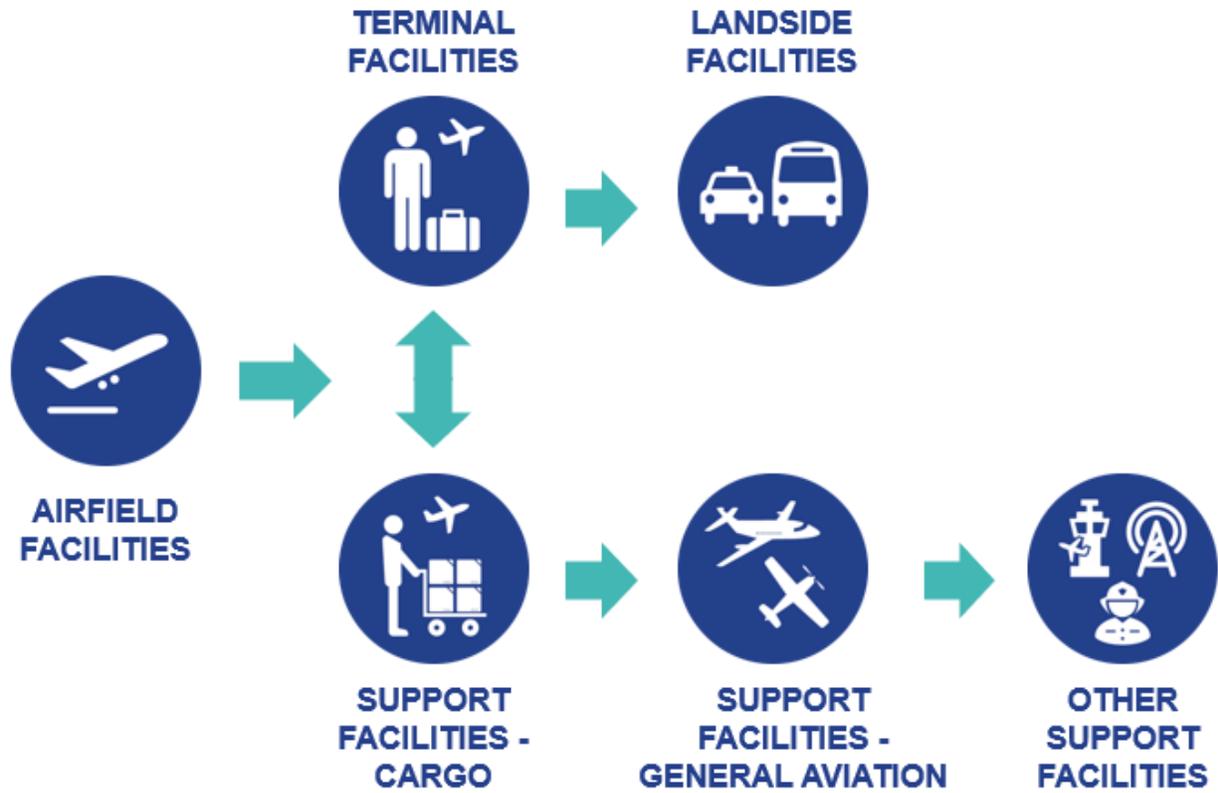
The initial group of facility component alternatives presented in Section 5.3, Identification and Screening of Component Alternatives, was screened to eliminate those alternatives deemed not viable for further consideration. After the initial screening of the component alternatives, an integration compatibility matrix was used to identify the component alternatives that were compatible in defining integrated (comprehensive) alternatives given the hierarchy of facilities.

A general hierarchy was used in the development and eventual integration of alternatives. The hierarchy considered the need to prioritize the aeronautical safety, capabilities, and utility of the Airport. Given the facility hierarchy, exploration of each component influenced the consideration of subsequent components. **Exhibit 5-60** illustrates the facility planning hierarchy used for the alternatives integration.

To determine the compatibility of the alternatives, each alternative was assessed on its ability to fully integrate, partially integrate with modifications, or minimally integrate with other component alternatives. The compatible component alternatives were then integrated to create the six comprehensive development alternatives described in this section. While many component alternatives were compatible, only those requiring limited or minimal modification were advanced for further refinement.

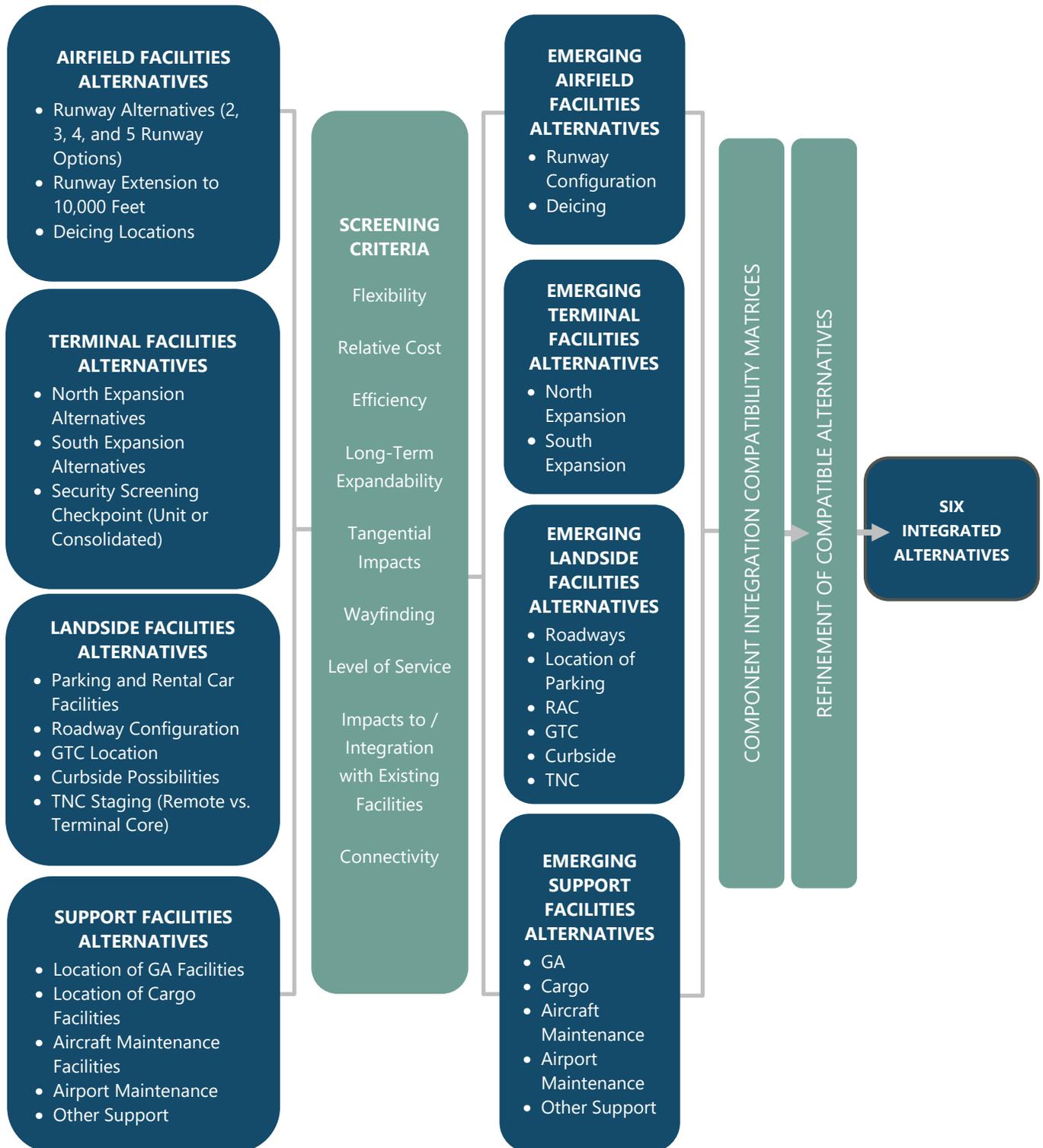
**Exhibit 5-61** presents the component alternatives integration process diagram.

EXHIBIT 5-60 ALTERNATIVES ANALYSIS – FACILITY PLANNING HIERARCHY



SOURCE: Ricondo & Associates, Inc., October 2019.

EXHIBIT 5-61 COMPONENT ALTERNATIVES INTEGRATION – SCREENING CRITERIA



NOTES:

GTC – Ground Transportation Center; TNC – Transportation Network Company; GA – General Aviation; RAC – Rental Car Facility

SOURCE: Ricondo & Associates, Inc., November 2020.

### 5.4.1 DESCRIPTION OF INTEGRATED ALTERNATIVES

Using the previously described process, six comprehensive and integrated Airport development alternatives emerged. Four of these alternatives included three runways, while two included four runways. Alternatives 5A and 5B both include four runways, preserving the existing runways given that activity is forecast to exceed 60 percent of the ASV within the planning horizon. These integrated alternatives were refined, as needed, to accommodate planning and operational challenges identified within each. The integration considered locational dependencies and requirements, operational efficiencies, and passenger and tenant convenience/LOS. **Table 5-10** lists the major elements of the six integrated alternatives and **Exhibit 5-62** through **Exhibit 5-67** illustrate the integrated alternatives. These alternatives can also be found in **Appendix E**, which includes the presentation that supported discussion of alternatives during a third workshop with Aviation Division representatives.

### 5.4.2 EVALUATION OF INITIAL INTEGRATED ALTERNATIVES

The six integrated alternatives were reviewed further, and a shortlist of three alternatives was selected. The six integrated alternatives were evaluated in more detail using the following 12 evaluation criteria:

- **Flexibility:** ability of the alternative to efficiently accommodate facility development that may emerge differently than planned (timing, location, size, other) without adversely impacting dependent or adjacent facilities or conceptual development
- **Rightsizing:** effectiveness of the alternative in optimizing long-term facility development, balancing capacity with forecast aeronautical demand
- **Relative Cost:** relative measure of comparative capital investment to implement the full alternative
- **Operational Efficiency:** measure of the relative efficiency of activity and operations (airfield, terminal, landside, and supporting facilities) with full implementation of the alternative
- **Implementation Complexity:** measure of the relative complexity of project and full-alternative implementation considering project dependencies, required enabling projects, operational impacts during construction, and related considerations
- **Long-Term Expandability:** ability to accommodate demand-driven development efficiently and effectively beyond the 2040 planning horizon, maintaining a balance among airfield, terminal, and landside facilities
- **Collateral Development Potential:** ability of the alternative to accommodate nonaeronautical, revenue-generating development on Airport-owned land that is not required to satisfy aviation demand
- **Compatibility with Adjacent Land Uses:** relative measure of the compatibility of the alternative with adjacent and proximate land uses in the vicinity of the Airport
- **Landside Wayfinding:** relative measure of the complexity of landside wayfinding for Airport users, considering arrival, departure, circulation, recirculation, and access decision points
- **Facility Consolidation:** relative measure of the effectiveness of the alternative in consolidating similar facilities and operations in organized areas of the Airport, considering airside and landside activities associated with various facilities
- **Sustainability:** relative measure of the environmental, social, operational, and economic aspects and enhancements associated with the long-term development of the alternative (focus on meeting present needs without compromising the ability to meet future needs)
- **Land Acquisition Requirement:** relative measure of the amount of additional land required to accommodate alternative development

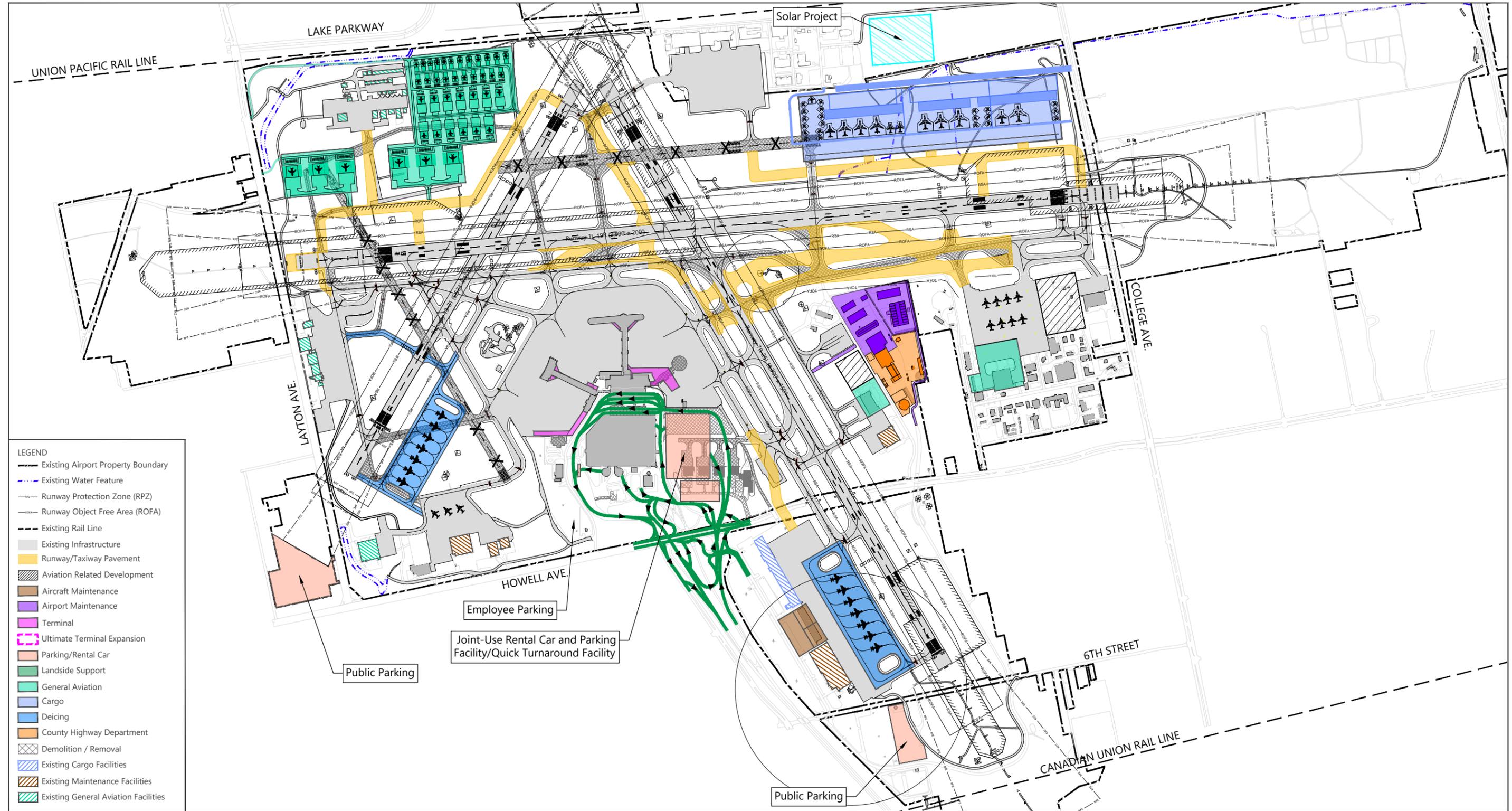
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TABLE 5-10 DESCRIPTION OF INTEGRATED ALTERNATIVES

	AIRFIELD FACILITIES	TERMINAL FACILITIES	LANDSIDE FACILITIES	SUPPORT FACILITIES
Alternative 1	Runway 1L-19R extended 10 feet to north or south airfield component Alternative 3B three-runway concept (decommissioning Runways 1R-19L and 7L-25R) modified deicing Alternative 5 (similar location) – central deicing north of terminal	terminal component Alternative 3 – north terminal expansion (new Concourse B finger pier – single loaded) Concourse E redevelopment	roadway component Alternative 4 joint-use (parking/RAC) facility south of existing facility remote parking component Alternative 6 – surface parking on Layton/Howell parcel additional surface parking west of Runway 7R-25L and west cargo area	southeast quadrant cargo development (Alternative 2) consolidated northeast quadrant general aviation expansion (Alternative 2) Alternative 1 – additional aircraft maintenance facilities accommodated on former air cargo building site (adjacent to SkyWest facility) Airport maintenance facility reconfigured on existing site and Guard West property (Alternative 4)
Alternative 2	Runway 1L-19R extended 10 feet to north or south airfield component Alternative 3C three-runway concept (decommissioning Runways 1R-19L and 13-31) Runway 7L-25R shifted north 100 feet to accommodate ADG III dimensional standards deicing component Alternative 2 – south deicing	terminal component Alternative 1 – south terminal expansion (Concourse E expansion) Concourse E redevelopment	roadway component Alternative 7 parking component Alternative 3 – surface parking supplements garage expansion joint-use parking/RAC expansion in existing parking garage surface parking located south of relocated entrance roadway and west of Runway 7R-25L and west cargo area	southeast quadrant cargo development (Alternative 5) existing cargo buildings utilized northeast and northwest quadrants general aviation expansion (Alternative 3) consolidated southwest aircraft maintenance campus (Alternative 2) Airport maintenance facility reconfigured, and additional roadway added to connect existing facility with electrical shop and new facility located south of existing campus (Alternative 3)
Alternative 3	Runway 1L-19R extended 10 feet to north or south airfield component Alternative 3E – three-runway concept (decommissioning Runways 7L-25R and 13-31) Runway 1R-19L extended (length to be refined upon selection of preferred alternative) deicing component Alternative 1 – central deicing northeast of terminal	terminal component Alternative 2 – north terminal expansion (Concourse C finger pier expansion – dual loaded) Concourse E redevelopment	roadway component Alternative 4 parking (surface) expanded in terminal core area south of existing parking structure remote parking component Alternative 1 – remote consolidated RAC facility on Layton/Howell parcel	cargo expansion in west cargo area (north of Runway 7R-25L; Alternative 2) cargo development in portion of MKE Regional Business Park (Alternative 8) northeast, north, and northwest quadrants general aviation expansion (Alternative 1) northwest quadrant aircraft maintenance campus (Alternative 1) Airport maintenance facility reconfigured and expanded on existing site and on Guard West property (Alternative 4)
Alternative 4	Runway 1L-19R extended 10 feet to north or south airfield component Alternative 3E – three-runway concept (decommissioning Runways 7L-25R and 13-31) Runway 1R-19L extended (length to be refined upon selection of preferred alternative) deicing component Alternative 1 – central deicing northeast of terminal	terminal component Alternative 3 – north terminal expansion (new Concourse B finger pier – single loaded) Concourse E redevelopment	modified roadway component Alternative 6 (expands northward, closer to Runway 7L-25R) joint-use facility (parking/RAC) south of existing parking structure and existing terminal access road remote parking Alternative 6 – surface parking adjacent to Runway 19R RPZ, north of Layton Avenue	cargo expansion in west cargo area (north of Runway 7R-25L; Alternative 5) cargo development south of Runway 7R-25L and connecting taxiway infrastructure (land acquisition required; Alternative 5) northeast quadrant general aviation expansion; southeast quadrant general aviation development (Alternative 1) northwest quadrant airline maintenance campus (Alternative 1) Milwaukee County Highway Department facilities relocated to northwest corner of MKE Regional Business Park; Airport maintenance facilities take over former Highway Department site (Alternative 4)
Alternative 5A	Runway 1L-19R extended 10 feet to north or south airfield component Alternative 4B – four-runway concept Runway 1R-19L extended (length to be refined upon selection of preferred alternative) Runway 7L-25R shifted north 100 feet to accommodate ADG III dimensional standards deicing component Alternative 1 – central deicing northeast of terminal	terminal component Alternative 1 – south terminal expansion (Concourse E expansion) Concourse E redevelopment	modified roadway component Alternatives 2 and 5 remote parking component Alternative 1 – remote consolidated rental car/QTA located on Howell/Layton parcel expansion of parking structure to the west; development of surface lots in terminal core area south of terminal roadway parking garage exit plaza relocation employee surface parking west of Runway 7R-25L and west cargo area	consolidated cargo campus in MKE Regional Business Park (Alternative 8) redevelop west cargo area as airline maintenance campus; expand airline maintenance into northeast quadrant (Alternative 4) expansion of general aviation in northwest quadrant (Alternative 5) Airport maintenance facility reconfigured and expanded on existing site and on Guard West property (Alternative 1)
Alternative 5B	Runway 1L-19R extended 10 feet to north or south modified airfield component Alternative 4B – four-runway concept Runway 1R-19L extended (length to be refined upon selection of preferred alternative) Runway 7L-25R extended 300 feet to the west deicing component Alternative 1 – central deicing northeast of terminal	terminal component Alternative 1 – south terminal expansion (Concourse E extension with additional finger pier) Concourse E redevelopment	roadway component Alternative 1 remote consolidated rental car/QTA located on Howell/Layton parcel parking and rental car component Alternative 7 new parking structure located on Supersaver Lot A	cargo expansion in west cargo area (north of Runway 7R-25L) and in portion of MKE Regional Business Park (Alternative 2) northwest and northeast quadrants general aviation growth (Alternative 3) consolidated aircraft maintenance campus in portion of MKE Regional Business Park (Alternative 3) Airport maintenance facility reconfigured and expanded on existing site and on Guard West property (Alternative 1)

NOTES:  
ADG – Airplane Design Group  
QTA – Quick Turnaround  
SOURCE: Ricondo & Associates, Inc., January 2020.

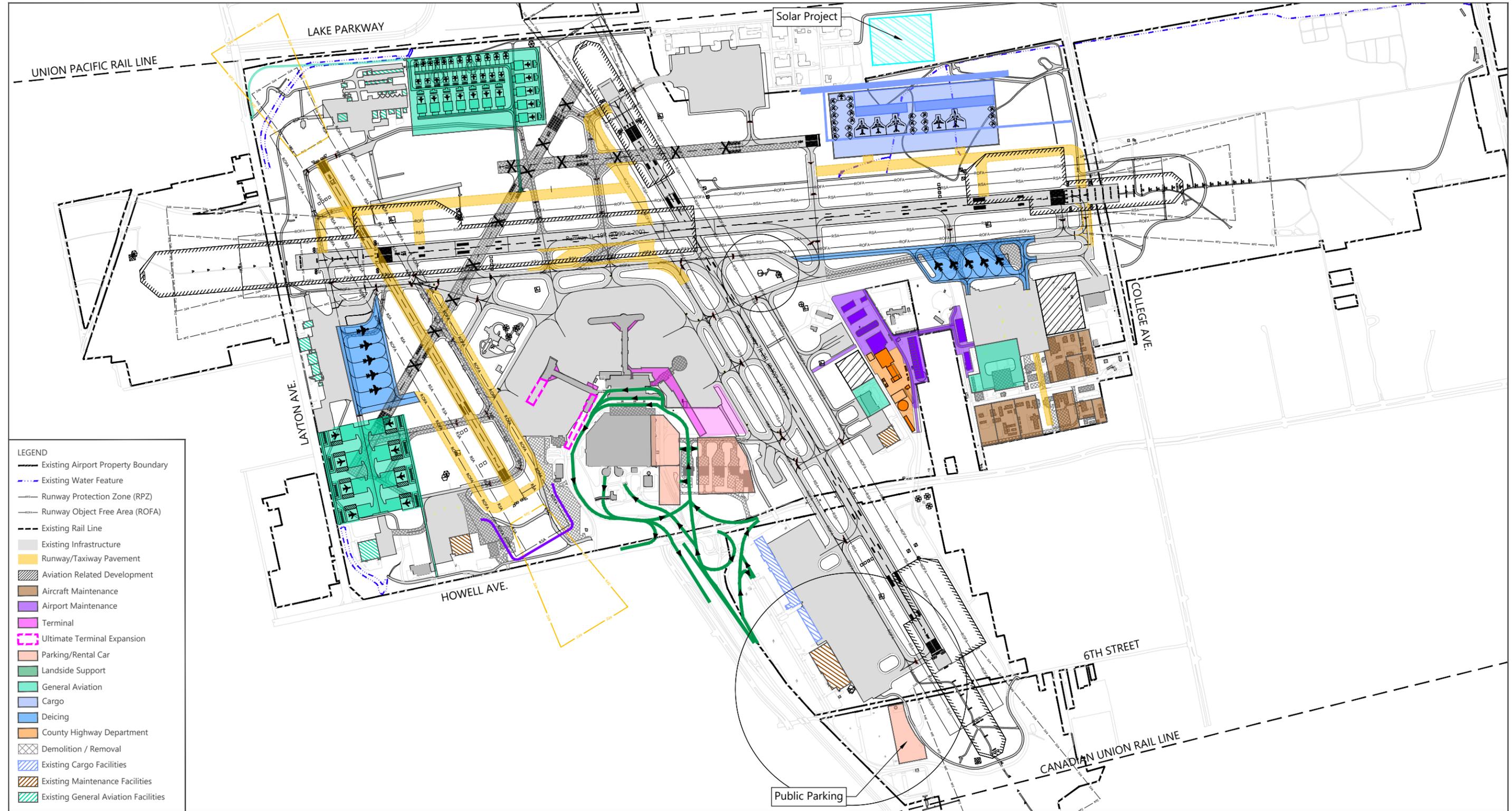
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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



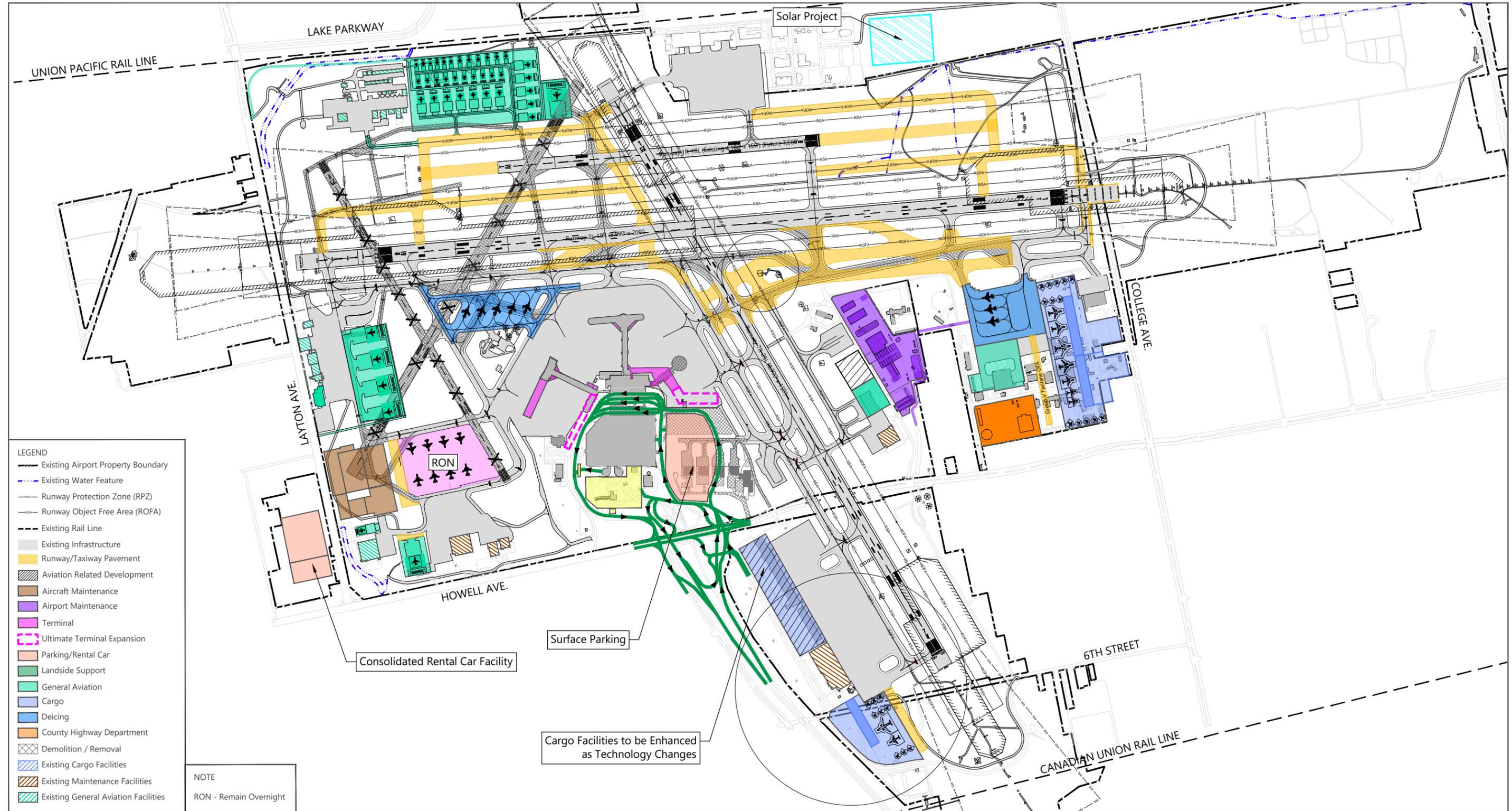
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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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- LEGEND**
- Existing Airport Property Boundary
  - Existing Water Feature
  - Runway Protection Zone (RPZ)
  - Runway Object Free Area (ROFA)
  - Existing Rail Line
  - Existing Infrastructure
  - Runway/Taxiway Pavement
  - Aviation Related Development
  - Aircraft Maintenance
  - Airport Maintenance
  - Terminal
  - Ultimate Terminal Expansion
  - Parking/Rental Car
  - Landside Support
  - General Aviation
  - Cargo
  - Deicing
  - County Highway Department
  - Demolition / Removal
  - Existing Cargo Facilities
  - Existing Maintenance Facilities
  - Existing General Aviation Facilities
- NOTE**  
RON - Remain Overnight

SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).

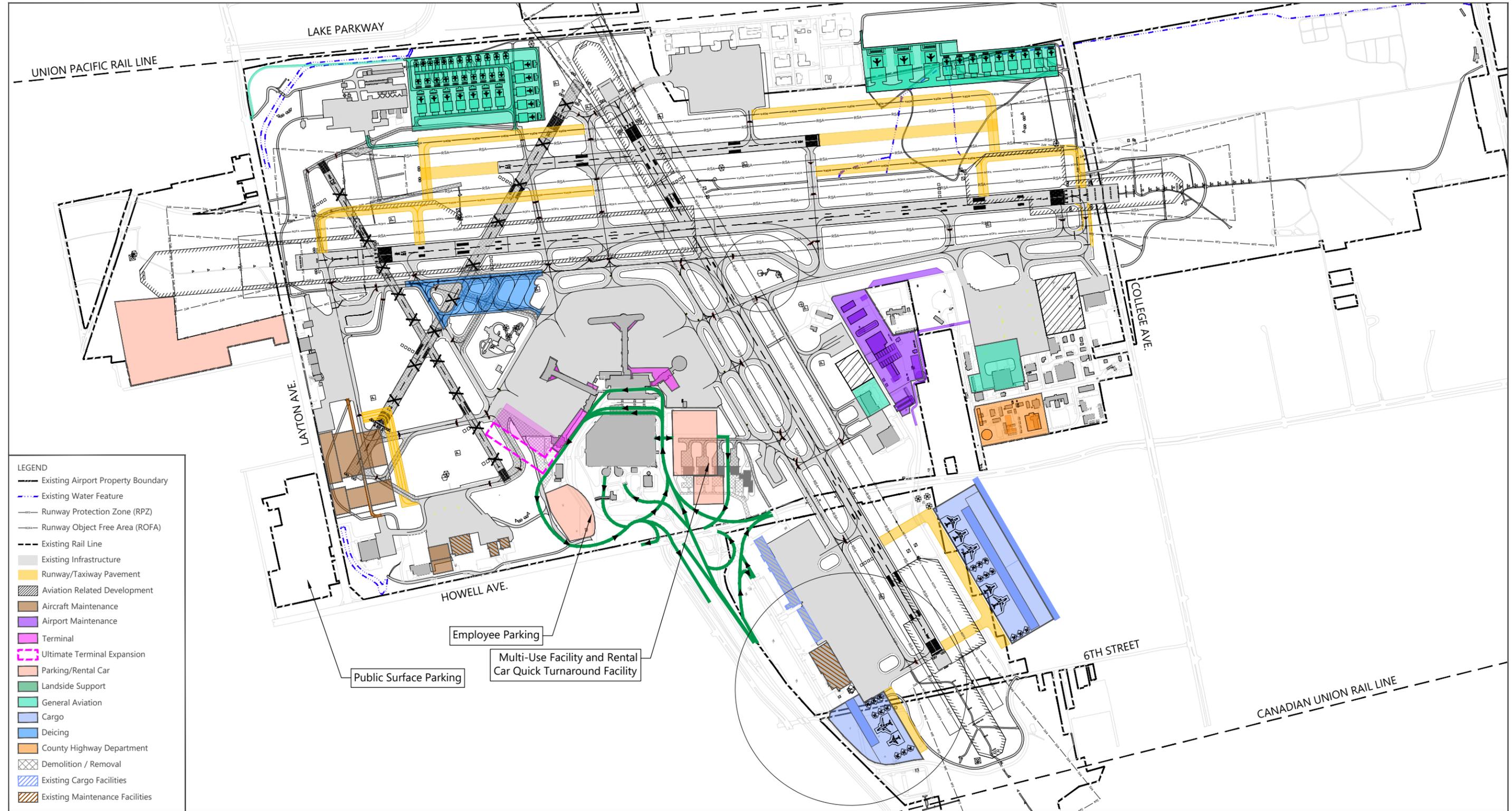
EXHIBIT 5-64

INTEGRATED ALTERNATIVE 3



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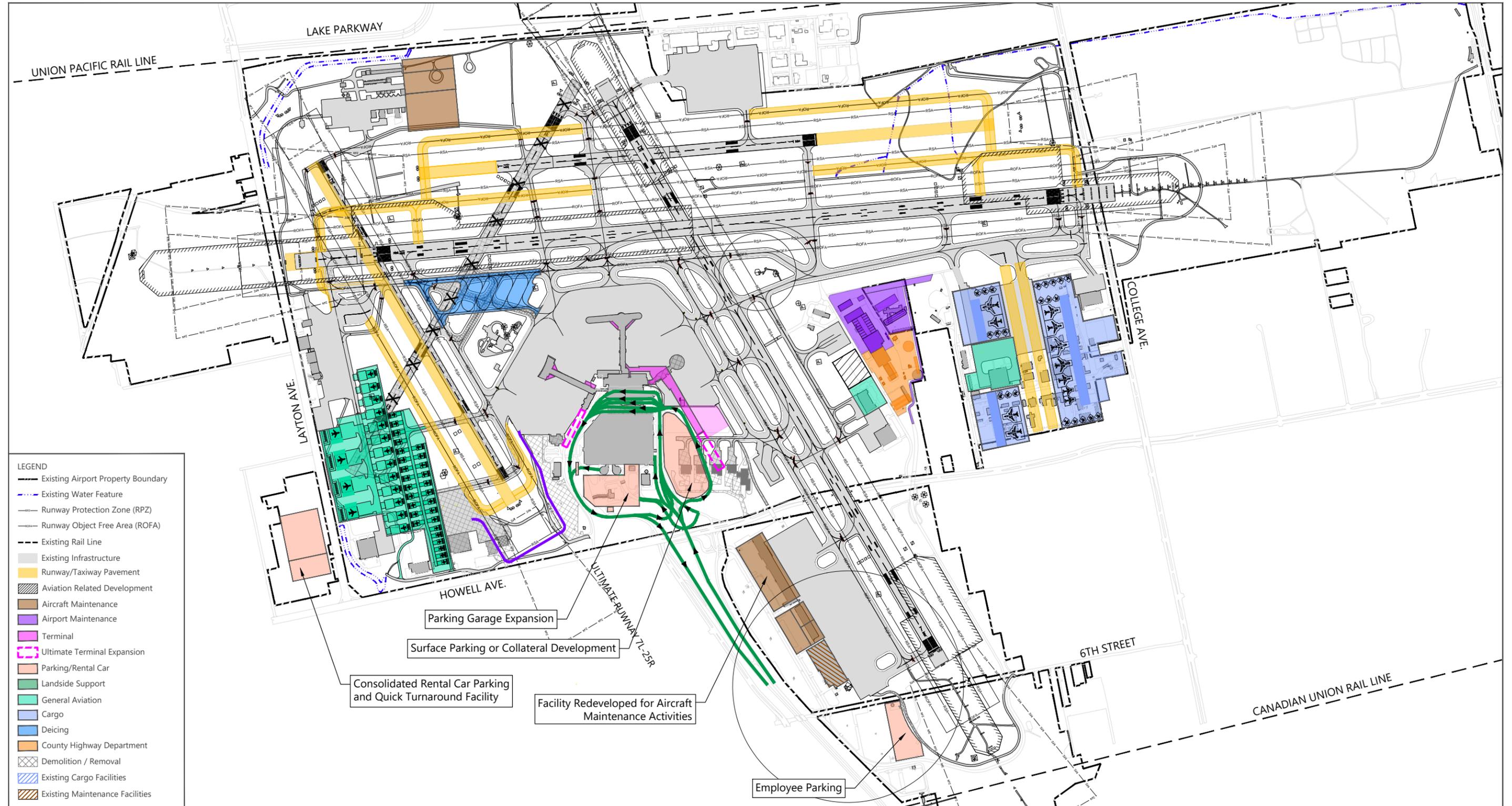
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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



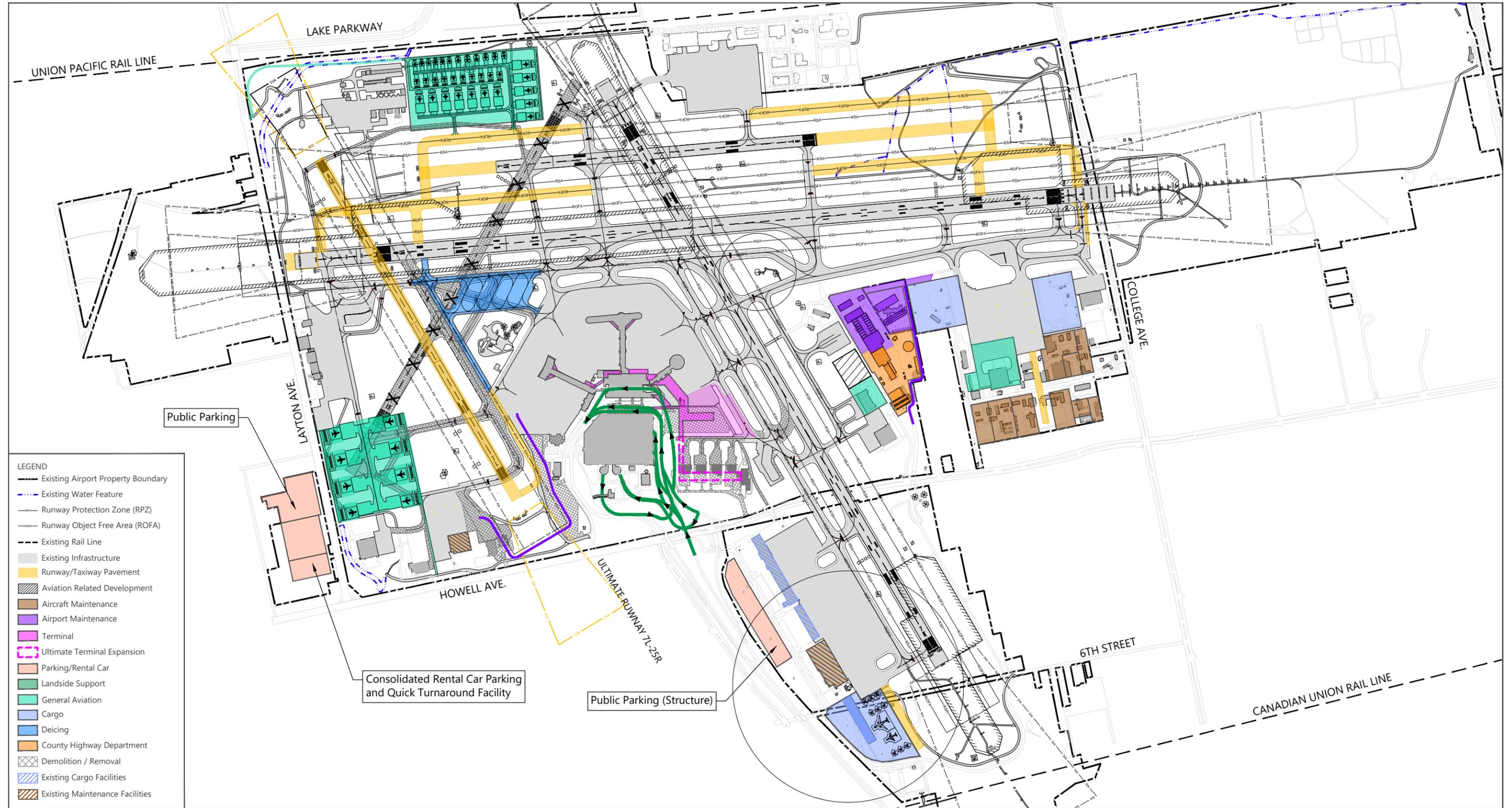
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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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The initial evaluation identified alternatives to carry forward for further evaluation. This evaluation of the six alternatives was conducted in a workshop with MKE representatives to generate a shortlist of alternatives, as well as identify areas of potential refinement. **Exhibit 5-68** depicts the results of the evaluation, which emerged during the third alternatives analysis workshop (Appendix E documents the working presentation from this workshop).

EXHIBIT 5-68 INTEGRATED ALTERNATIVES SCREENING RESULTS

Initial Evaluation Criteria	Alternative Number						
	1	2	3	4	5A	5B	
Flexibility	●	●	●	●	●	●	
Rightsizing	●	●	●	●	●	●	
Relative Construction Cost	●	●	●	●	●	●	
Operational Efficiency	●	●	●	●	●	●	
Implementation Complexity	●	●	●	●	●	●	
Long Term Expandability	●	●	●	●	●	●	
Collateral Development Potential	●	●	●	●	●	●	
Compatibility with Adjacent Land Uses	●	●	●	●	●	●	
Landside Roads and Wayfinding	●	●	●	●	●	●	
Facility Consolidation	●	●	●	●	●	●	
Sustainability/Environmental	●	●	●	●	●	●	
Requires Land Acquisition	●	●	●	●	●	●	

NOTE:  
 Alternatives 1, 2, and 3 were shortlisted to move forward for further refinement and evaluation.  
 SOURCE: Ricondo & Associates, Inc., January 2020.

5.4.3 SHORTLISTED ALTERNATIVES

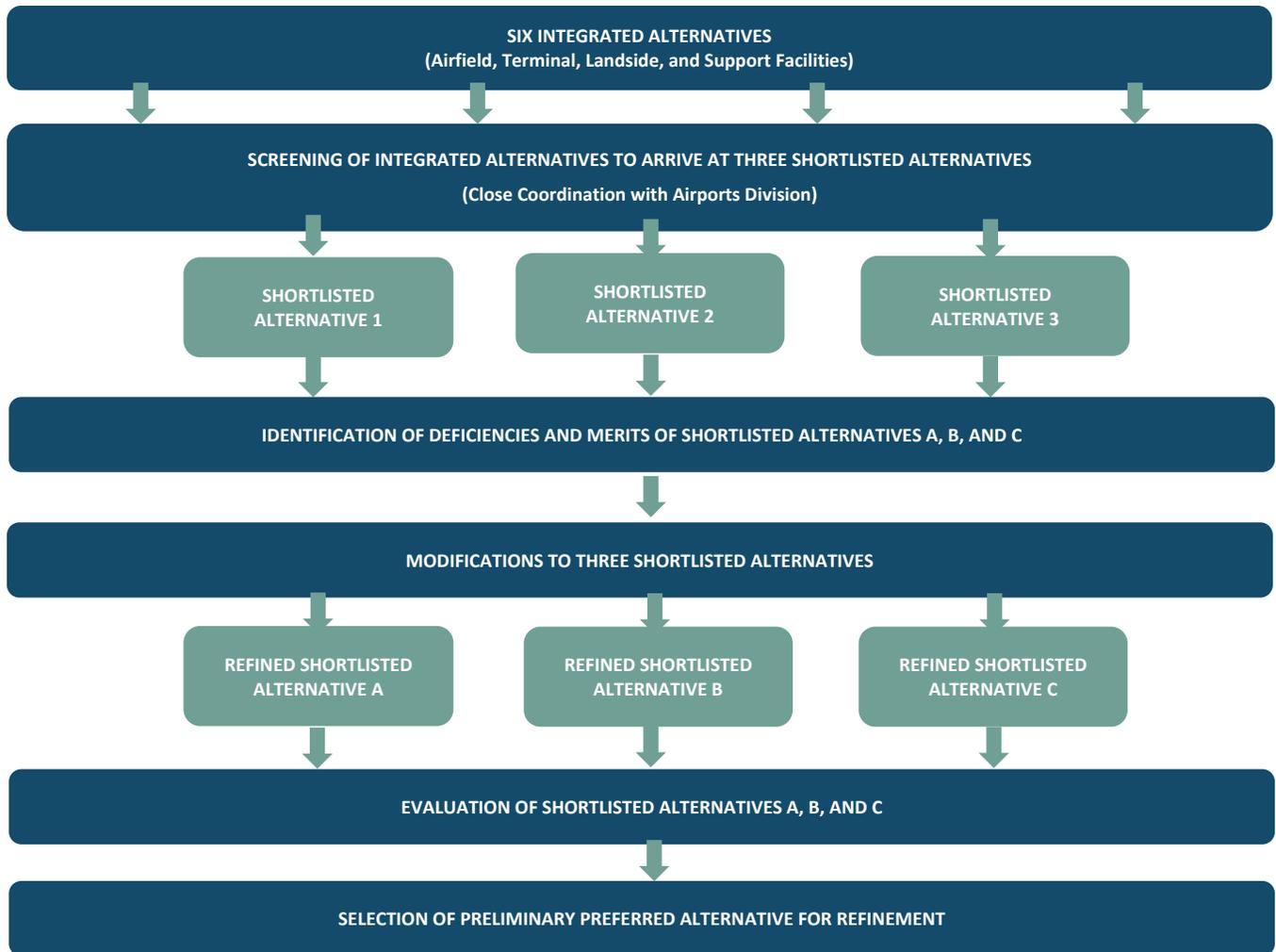
Shortlisted alternatives emerged from the evaluation of the six integrated alternatives, following the adjustment of specific component elements to strengthen the overall alternatives. Shortlisted Alternatives 1, 2, and 3 were identified as those appropriate to move forward into further refinement and evaluation. The shortlisted alternatives were renamed Shortlisted Alternatives A, B, and C, respectively, to clarify those that moved into the final evaluation. **Exhibit 5-69** illustrates the evaluation process that resulted in the shortlist of three alternatives.

The evaluation process ensured the shortlisted alternatives satisfied the facility requirements over the planning horizon, as well as aligned with the goals of the MPU. The following subsections describe Shortlisted Alternatives A, B, and C.

5.4.3.1 SHORTLISTED ALTERNATIVE A

**Table 5-11** and **Exhibit 5-70** present the major components of Shortlisted Alternative A.

EXHIBIT 5-69 ALTERNATIVES SHORTLIST PROCESS



SOURCE: Ricondo & Associates, Inc., November 2020.

TABLE 5-11 SHORTLISTED ALTERNATIVE A COMPONENTS

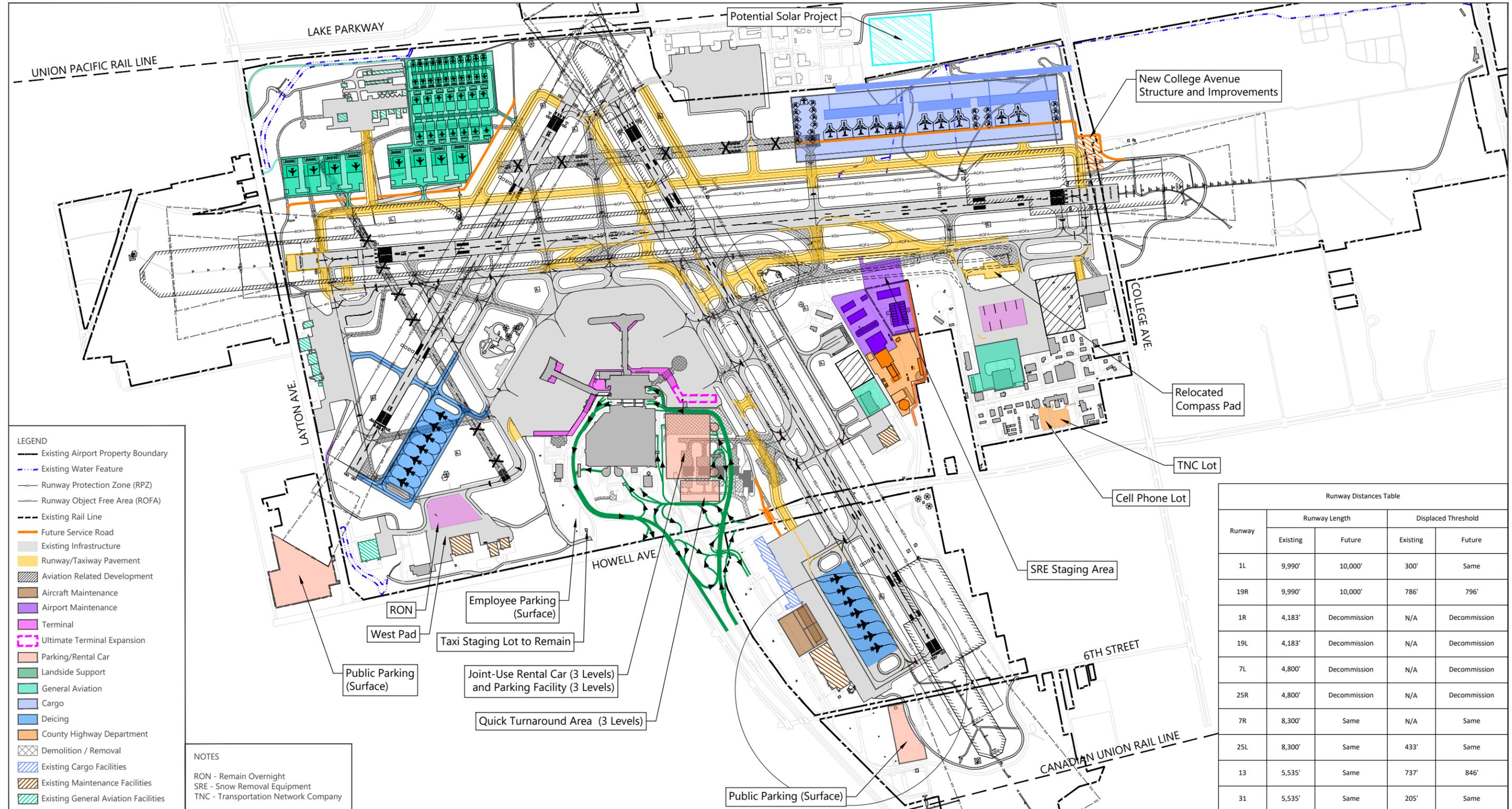
COMPONENT		DESCRIPTION
Airfield	Runways	Runways 7L-25R and 1R-19L decommissioned Runway 1L-19R extended 10 feet to north to a total length of 10,000 feet to meet future military (WI ANG) operational needs
	Taxiways	Full-length taxiway provided to support Runway 1L-19R operations on east side (military and future cargo operations) Taxiway R realigned parallel to Runway 1L-19R (single parallel taxiway) to preserve flexibility for an ultimate dual parallel taxiway system to support Runway 1L-19R operations
	Deicing	Taxiway B extended and bridged over Howell Avenue to support enhanced use of 7R deice pad operations; new deice pad near Runway 13 end (14 ADG III deice positions between Runway 7R deice pad and new Runway 13 deice pad)
	Other Airfield	Compass calibration pad relocated to south airfield adjacent to Runway 1L (displaced by Taxiway B extension)
	RON Aircraft Parking	RON aircraft parking provided on west and south ramps
	Terminal	Gates
Screening and Baggage Handling		Terminal footprint expanded to encompass consolidation of security checkpoint and expanded baggage handling space
Roadway		Relocated Airport entrance road south of expanded parking facilities; requires relocation of Airport Spur bridge over Howell Avenue to provide for new terminal circulation and accommodate future development in terminal core area Recirculation from Airport exit roadway to terminal road shifted west of Howell Avenue (off Airport property) to increase weaving distance
Landside	Parking Egress	Parking garage exit plaza relocated to north side of exit helix to provide additional length for vehicle merge and weave movements
	Rental Car/Parking	New joint-use (rental car and parking) structure and QTA facility south of and adjacent to existing parking garage; additional remote surface parking south of Super Saver Lot B and at additional surface parking lot at Howell Avenue/Layton Avenue
Cargo and General Aviation	General Aviation	Private aircraft and corporate general aviation campus in northeast quadrant Fixed-base operators (Signature Flight Support and Avflight) activities remain in current locations
	Cargo	Consolidated cargo campus located in southeast quadrant Current FedEx building to remain in place and operational
Aircraft and Airport Maintenance	Airport Maintenance	Consolidated and expanded Airport maintenance complex requires use of WI ANG Guard West property (property transaction); snow removal equipment (SRE) staging located east of consolidated facility adjacent to Taxiway R Realignment of perimeter vehicle service road to remain in secure environment through the Airport maintenance campus
	Aircraft Maintenance	Aircraft maintenance facilities remain in current location, expanding east of SkyWest hangar

## NOTES:

ADG – Airplane Design Group; QTA – Quick Turnaround; RON – Remain Overnight; WI ANG – Wisconsin Air National Guard

SOURCE: Ricondo &amp; Associates, Inc., December 2020.

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**LEGEND**

- Existing Airport Property Boundary
- Existing Water Feature
- Runway Protection Zone (RPZ)
- Runway Object Free Area (ROFA)
- Existing Rail Line
- Future Service Road
- Existing Infrastructure
- Runway/Taxiway Pavement
- Aviation Related Development
- Aircraft Maintenance
- Airport Maintenance
- Terminal
- Ultimate Terminal Expansion
- Parking/Rental Car
- Landside Support
- General Aviation
- Cargo
- Deicing
- County Highway Department
- Demolition / Removal
- Existing Cargo Facilities
- Existing Maintenance Facilities
- Existing General Aviation Facilities

**NOTES**

- RON - Remain Overnight
- SRE - Snow Removal Equipment
- TNC - Transportation Network Company

Runway	Runway Length		Displaced Threshold	
	Existing	Future	Existing	Future
1L	9,990'	10,000'	300'	Same
19R	9,990'	10,000'	786'	796'
1R	4,183'	Decommission	N/A	Decommission
19L	4,183'	Decommission	N/A	Decommission
7L	4,800'	Decommission	N/A	Decommission
25R	4,800'	Decommission	N/A	Decommission
7R	8,300'	Same	N/A	Same
25L	8,300'	Same	433'	Same
13	5,535'	Same	737'	846'
31	5,535'	Same	205'	Same

SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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### 5.4.3.2 SHORTLISTED ALTERNATIVE B

**Table 5-12** and **Exhibit 5-71** present the major components of Shortlisted Alternative B.

TABLE 5-12 SHORTLISTED ALTERNATIVE B COMPONENTS

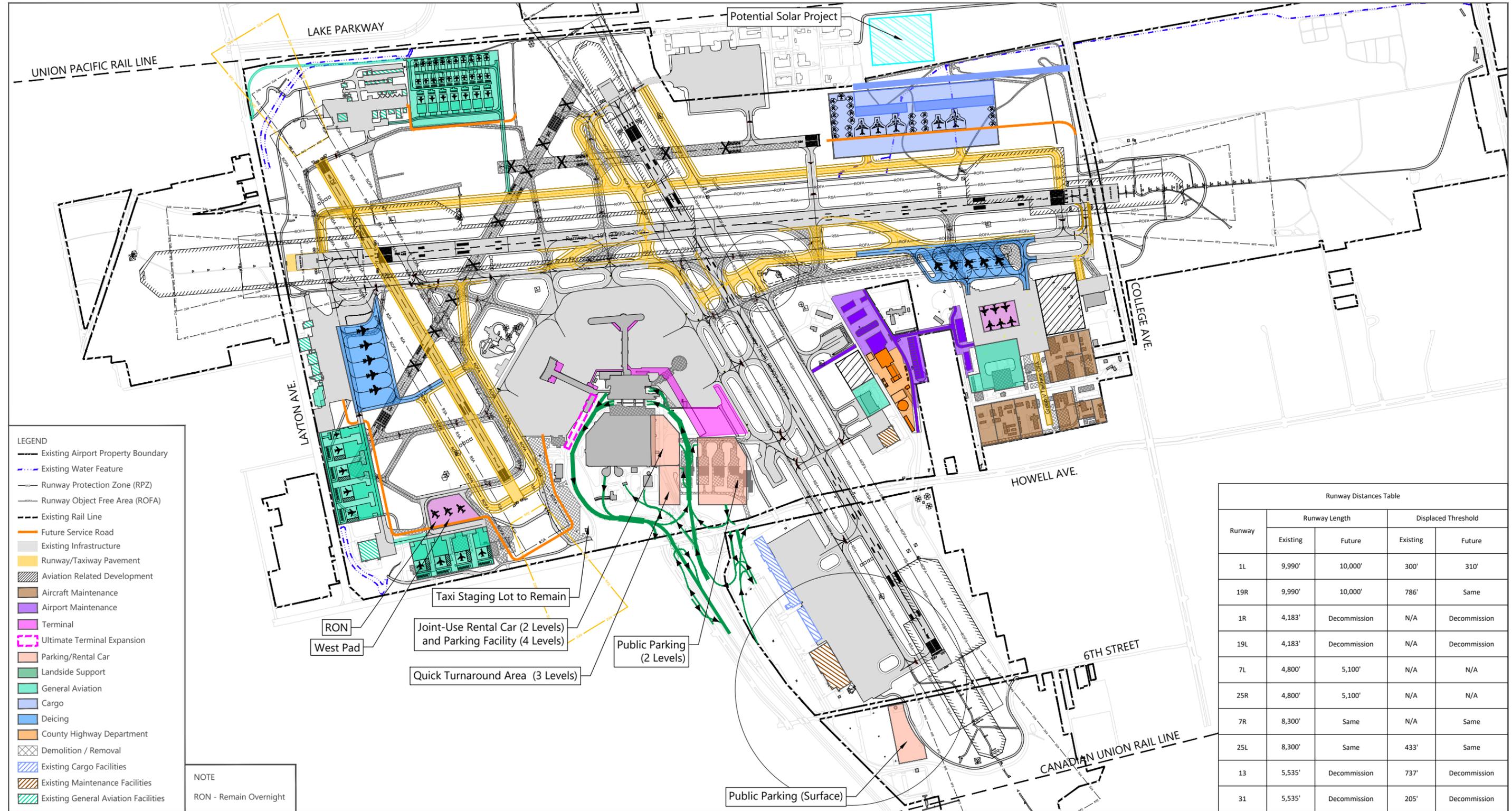
COMPONENT		DESCRIPTION
Airfield	Runways	Runways 13-31 and 1R-19L decommissioned Runway 1L-19R extended 10 feet to north to a total length of 10,000 feet to meet future military (WI ANG) operational needs Runway 7L-25R widened to 150 feet to accommodate ADG III operations and extended 300 feet to the west; Taxiway V shifted south to provide a 400-foot centerline separation to support ADG III operations
	Taxiways	Taxiway R realigned parallel to Runway 1L-19R (single parallel taxiway) to preserve flexibility for future dual parallel taxiway system; full-length parallel taxiway provided to support Runway 1L-19R operations on east side
	Deicing	Five-position deice pad adjacent to south ramp and an additional five-position deice pad west of the Z pad
	RON Aircraft Parking	RON aircraft parking provided on west and south ramps
Terminal	Gates	Concourse E redeveloped and expanded to accommodate 10 gates anticipated through 2040 planning horizon Future Concourse B could be developed to accommodate need beyond 2040 planning horizon
	Screening and Baggage Handling	Terminal footprint expanded to encompass consolidation of security checkpoint and expanded baggage handling space
Landside	Roadway	Relocated Airport entrance road realigned south of expanded parking and rental car facilities; widening of entrance roadway bridge over Howell Avenue (south); reconfigure and shift Air Cargo Way and Howell Avenue intersection; modify Airport Spur exit to Howell Avenue and Air Cargo Way intersection Recirculation from Airport exit roadway remains in its existing location
	Parking Egress	Parking garage exit plaza remains in its current location
	Rental Car/Parking	Existing parking garage expanded to the south (joint-use rental car and parking structure) with QTA west of expanded parking garage; additional parking capacity south of relocated terminal entrance road (structure) and south of Super Saver B lot (surface); Super Saver A lot modified to accommodate reconfigured ramping from Airport Spur to Air Cargo Way
Cargo and General Aviation	General Aviation	Private/small GA facilities expanded in northeast quadrant Corporate GA facilities in northwest quadrant Signature Flight Support and Avflight activities remain in current locations
	Cargo	Second cargo campus located in southeast quadrant; existing cargo facilities remain with renovation/enhancement to increase capacity
Aircraft and Airport Maintenance	Airport Maintenance	Partially consolidated Airport maintenance area surrounds WI ANG Guard West property (some Airport maintenance activity/facilities remain in MKE Regional Business Park area); Milwaukee County Highway Department facilities remain in Airport maintenance campus; SRE staging remains on Taxiway Y with addition of SRE access road Realignment of perimeter vehicle service road to remain in secure environment through the Airport maintenance campus
	Aircraft Maintenance	Aircraft maintenance facilities consolidated to a campus in the MKE Regional Business Park; SkyWest hangar remains

NOTES:

ADG – Airplane Design Group; QTA – Quick Turnaround; WI ANG – Wisconsin Air National Guard; GA – General Aviation; SRE – Snow Removal Equipment;  
RON – Remain Overnight

SOURCE: Ricondo & Associates, Inc., December 2020.

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SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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### 5.4.3.3 SHORTLISTED ALTERNATIVE C

**Table 5-13** and **Exhibit 5-72** present the major components of Shortlisted Alternative C.

TABLE 5-13 SHORTLISTED ALTERNATIVE C COMPONENTS

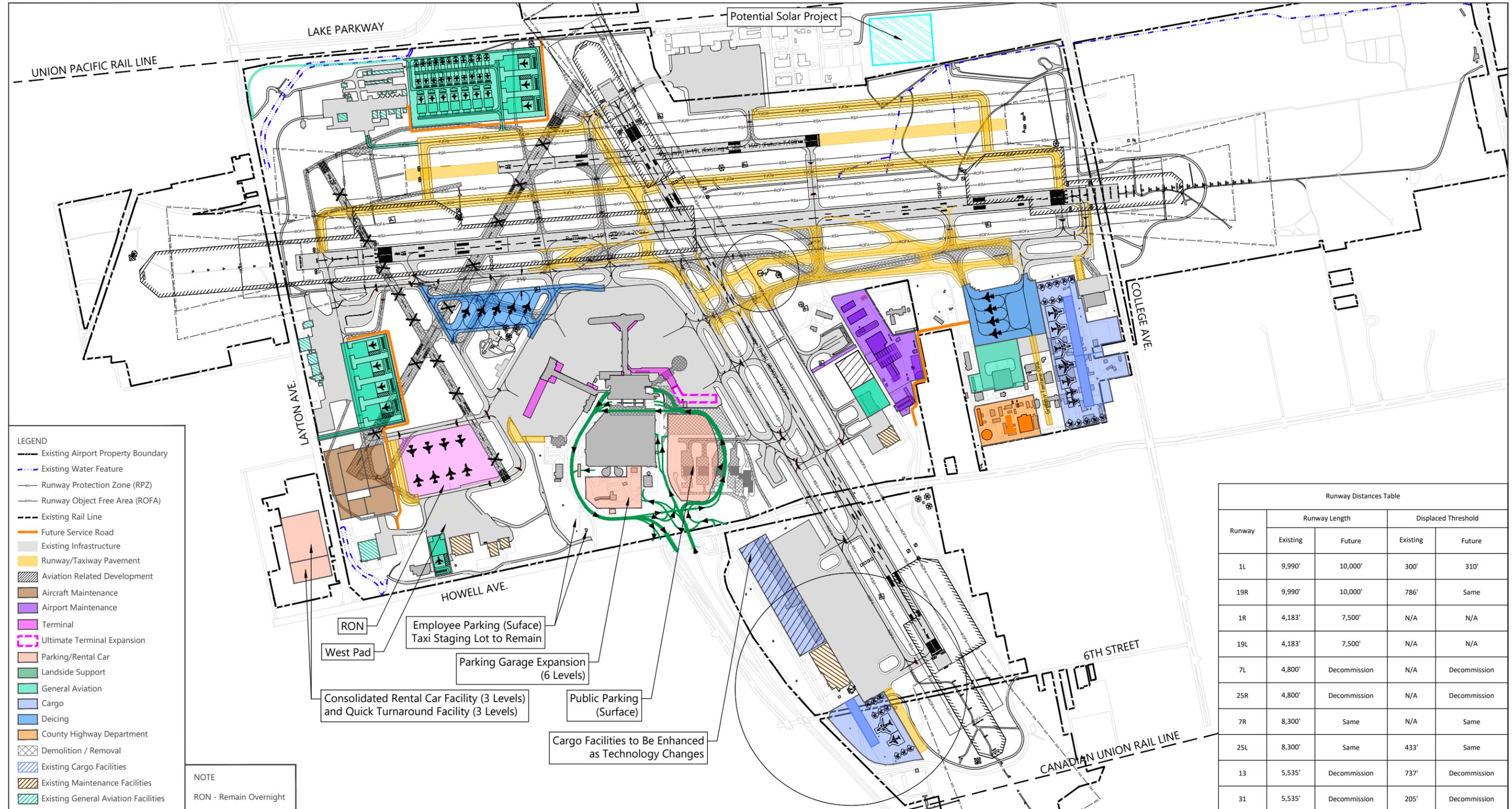
	COMPONENT	DESCRIPTION
Airfield	Runways	Runways 13-31 and 7L-25R decommissioned Runway 1L-19R extended 10 feet to south to a total length of 10,000 feet to meet future military (WI ANG) operational needs Runway 1R-19L ultimate extension to approximately 7,400 feet to accommodate ADG IV operations (extension triggered by specific aircraft demands)
	Taxiways	Partial parallel taxiway east of Runway 1R-19L provided to accommodate GA and military operations; full-length parallel taxiway between Runways 1L-19R and 1R-19L accommodates air-carrier, GA, and military operations Taxiways R and Q extended and realigned parallel to Runway 1L-19R (dual parallel taxiways); Taxiway Q object free area penetrates limited portion of WI ANG Guard West property
	Deicing	Five ADG III deice positions on central deice pad near terminal; four ADG III deice positions on south ramp
	RON Aircraft Parking	Expanded RON aircraft parking adjacent to west ramp
Terminal	Gates	Concourse C extended westward (finger pier) to accommodate six gates through the 2040 planning horizon Concourse E redevelopment to accommodate four gates Concourse E has potential for expansion to accommodate ultimate gate need beyond 2040 planning horizon
	Roadway	Relocated Airport entrance road south of expanded surface parking facilities; no impact to Airport Spur bridges over Howell Avenue Terminal recirculation road reconfigured as flyover across entrance and parking roadways
	Parking Egress	Parking garage exit plaza relocated to north side of exit helix to provide additional length for vehicle merge and weave movements
Landside	Rental Car/Parking	Existing parking garage expanded to the west; rental car and quick turnaround area (QTA) facility located at northeast corner of Howell Avenue and Layton Avenue; additional parking surface capacity in terminal core (north of reconfigured terminal entrance road)
	General Aviation	Private/small GA facilities expanded in northeast quadrant with limited corporate/large GA facilities Corporate GA facilities concentrated in campus on north side, opposite existing FBO facilities Additional GA hangar infill adjacent to maintenance facilities in northwest quadrant Signature Flight Support and Avflight facilities remain in current locations
Cargo and General Aviation	Cargo	Expanded cargo campus located in MKE Regional Business Park; additional expansion west of existing cargo apron; existing cargo facilities renovated/enhanced to remain with renovation/enhancement to increase capacity Current west cargo area buildings to remain in place and operational
	Airport Maintenance	Consolidated Airport maintenance area surrounds WI ANG Guard West property with County Highway Department facilities relocated to MKE Regional Business Park; SRE staging remains on Taxiway Y with addition of SRE road adjacent to GRE Realignment of perimeter vehicle service road to remain in secure environment through the Airport maintenance campus
Aircraft and Airport Maintenance	Aircraft Maintenance	Additional aircraft maintenance facilities accommodated in northwest quadrant; SkyWest hangar remains in place

NOTES:

ADG – Airplane Design Group; WI ANG – Wisconsin Air National Guard; GA – General Aviation; FBO – Fixed-Base Operator; SRE – Snow Removal Equipment  
GRE – Ground Runup Enclosure; RON – Remain Overnight

SOURCE: Ricondo & Associates, Inc., December 2020.

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**LEGEND**

- Existing Airport Property Boundary
- Existing Water Feature
- Runway Protection Zone (RPZ)
- Runway Object Free Area (ROFA)
- Existing Rail Line
- Future Service Road
- Existing Infrastructure
- Runway/Taxiway Pavement
- Aviation Related Development
- Aircraft Maintenance
- Airport Maintenance
- Terminal
- Ultimate Terminal Expansion
- Parking/Rental Car
- Landside Support
- General Aviation
- Cargo
- Deicing
- County Highway Department
- Demolition / Removal
- Existing Cargo Facilities
- Existing Maintenance Facilities
- Existing General Aviation Facilities

**NOTE**  
RON - Remain Overnight

Runway	Runway Length		Displaced Threshold	
	Existing	Future	Existing	Future
1L	9,990'	10,000'	300'	310'
19R	9,990'	10,000'	786'	Same
1R	4,183'	7,500'	N/A	N/A
19L	4,183'	7,500'	N/A	N/A
7L	4,800'	Decommission	N/A	Decommission
25R	4,800'	Decommission	N/A	Decommission
7R	8,300'	Same	N/A	Same
25L	8,300'	Same	433'	Same
13	5,535'	Decommission	737'	Decommission
31	5,535'	Decommission	205'	Decommission

SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).



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## 5.5 EVALUATION OF SHORTLISTED ALTERNATIVES

A detailed evaluation of the shortlisted alternatives was conducted to select the preferred development alternative. This included a waterfall analysis in which each component (airfield, terminal, landside, and support facilities) was reviewed to identify downstream consequences based on the performance of each component. The waterfall analysis followed the defined hierarchy of facilities (Exhibit 5-8), starting with airfield elements. Considering the evaluation results, the waterfall analysis specifically confirmed the components of the shortlisted alternatives. In this manner, opportunities to refine elements of the preferred alternative to improve the alternative's overall performance were identified.

The evaluation of the shortlisted alternatives included a workshop with Airport representatives to review the evaluation and waterfall analysis and reach consensus on the selection of the preferred alternative. Stakeholder input was gathered following a meeting of the TAG and SAG memberships, in which the alternatives, evaluation process, and conclusions were reviewed.

## 5.6 EVALUATION CRITERIA AND METHODOLOGY

Each shortlisted alternative was initially assessed on how well it aligned with the eight established MPU goals, as shown on **Exhibit 5-73**. Although the three shortlisted alternatives met the eight goals, certain alternatives aligned better with specific goals than others. The purpose of the goal assessment was not to select a preferred alternative but rather to gather insight into whether there may be an opportunity for the preferred alternative, once selected, to be adjusted or refined considering the MPU goals.

EXHIBIT 5-73 ALIGNMENT WITH MASTER PLAN UPDATE GOALS

DRAFT Master Plan Update Goal	Alternative A	Alternative B	Alternative C
Affirm a <b>future-focused airport</b> that supports aviation growth in a safe, efficient, and cost-effective manner through an organized and synergistic long-range development plan.			
Recognize opportunities to <b>enhance the sustainability, resiliency, and environmental sensitivity</b> with continued growth of MKE.			
Seek opportunities for an <b>enhanced customer and passenger experience</b> .			
<b>Optimize infrastructure and resources</b> in an operationally, financially, and sustainable manner.			
Adopt <b>scalable development plans</b> that flexibly accommodate variations in demand and technology over the planning horizon.			
Protect <b>long-range utility</b> of the Airport (post-2040).			
Recognize opportunities for enhanced <b>nonaeronautical revenue generation</b> in the utilization of MKE property and amplify the revenue-generating potential of Airport property.			
Define a long-range development plan that <b>reflects MKE's role in the community</b> and recognizes diversity in community stakeholder priorities.			

### LEGEND



Aligns Well with Master Plan Update Goal



Aligns with Master Plan Update Goal

SOURCE: Ricondo & Associates, Inc., September 2020 (Workshop #4).

Evaluation matrices were then developed for each of the component areas of the three alternatives to evaluate the components of each alternative and quantitatively measure performance. By design, the evaluation criteria used in the matrices are increasingly specific as the screening and evaluation process progresses. **Table 5-14** summarizes the evaluation criteria for each component. The workshop discussion materials and individual evaluation matrices can be found in **Appendix D**.

TABLE 5-14 (1 OF 3) SHORTLISTED ALTERNATIVES EVALUATION CRITERIA

CRITERIA	DEFINITION
<b><i>Airfield</i></b>	
Removes Airfield Constraints	Effectiveness in mitigating current operational constraint or noncompliant condition; reduces runway intersections and does not increase runway crossings
Allows Aircraft Traffic Segregation (in operating configurations)	Runway layout supports the segregation of general aviation, cargo, and commercial aircraft operations (can enhance capacity via runway mix index); layout fosters separation of activity with dissimilar operating characteristics
Improves Operational Flexibility/Redundancy (provides parallel runways)	Concept supports multiple airfield operating configurations and use in varying weather conditions
Facilitates Increasing Long-Term Runway Capacity (post-2040)	Concept can accommodate ultimate expansion of airfield beyond the 2040 horizon, allowing for ultimate capacity enhancement
Developable Area Potential (relative to the existing terminal area)	Airfield configuration allows ultimate expansion of terminal facilities beyond the 2040 horizon
Relative Cost to Construct	Relative construction cost assessment
<b><i>Deicing</i></b>	
Efficient Taxi Capability During Winter Operations	Concept minimizes inefficient, circuitous, or constrained taxi flows; concept accommodates bypass taxi capability
Proximity to Primary Departure Runway Ends in Winter Operations	Deicing areas are located within reasonable taxi distance to winter departure flows
Opportunity for Future Expansion; Additional Deicing Positions	Location allows for deicing apron to expand as additional demand arises
Impact to Existing Infrastructure	Existing facilities require relocation to accommodate deicing infrastructure
<b><i>Landside – Roadways</i></b>	
Implementation Complexity	Measure of the relative complexity of project and full-concept implementation considering project dependencies, required enabling projects, operational impacts during construction, and related considerations
Impact to Airport Spur Bridges (single or multiple locations)	Concept requires relocation or modification to non-County-owned assets, such as Department of Transportation bridge structures over Howell Avenue
Visibility to Terminal Core Area	Enhancement to visibility of terminal core area upon entering Airport roadway (wayfinding)
Segregates Traffic Based on Destination	Concept supports separation and channelization of traffic based on destination (minimizing weave conflicts, dissimilar traffic, and related considerations)
Operational Impact of Construction	Degree of operational impact during implementation of major concept elements
Benefits to Air Cargo Way Circulation	Concept incorporates new traffic pattern or circulation in vicinity of Air Cargo Way
Relative Cost to Construct	Relative construction cost assessment

TABLE 5-14 (2 OF 3) SHORTLISTED ALTERNATIVES EVALUATION CRITERIA

CRITERIA	DEFINITION
<b><i>Landside – Curbside</i></b>	
Line-of-Sight and Wayfinding	Concept improves line-of-sight to terminal, parking, or rental car functions
Increases Volume of Curbside Traffic	Concept creates an increase in curbside traffic from varying access modes
Flexibility to Expand Beyond 2040 Horizon	Concept can accommodate additional capacity enhancements beyond the 2040 horizon
Encompasses GTC Capable of Handling Varied Modes	Concept encompasses a ground transportation center (accommodates varying modes such as taxi cabs, limos, TNCs)
<b><i>Landside – Parking</i></b>	
Remote Public Parking	Public parking areas located outside the terminal core area
Impacts to Walking Distances (close-in parking)	Relative increase in parking passenger walking distance
Requires Shuttles (future parking areas)	Parking shuttle required to support vehicle parking areas
Relative Cost to Construct (structure vs. surface)	Relative cost to construct parking infrastructure
Construction Complexity	Relative complexity of implementation; impacts to adjacent areas
Accommodates New Exit Plaza for Parking Garage to Meter Traffic Flow onto Exit Roadway	Accommodates changes in parking structure exit to meter traffic flow onto Airport exit roadway
<b><i>Landside – Rental Car</i></b>	
Requires Shuttle	Proximity of rental car facilities to terminal core area
Construction Complexity	Concept can accommodate additional capacity enhancements beyond the 2040 horizon
Expansion Capability	Concept can accommodate additional rental car expansion beyond the 2040 planning horizon
Passenger Experience	Concept improves passenger journey or convenience
<b><i>Terminal</i></b>	
Expandability Beyond 2040	Concept accommodates expansion of terminal area beyond the 2040 planning horizon
Requires Relocation of Existing Gates	Concept impacts existing gate locations or capability
Construction Complexity	Relative complexity of implementation; impacts to adjacent areas
Impact to MKE Administration Space	Impact to Airport administrative space (Concourse C base)
Location of Remain Overnight (RON)	RON operation proximity to terminal area
Expandability of Check-in / Bag Claim	Ability for check-in and baggage claim facilities to be expanded beyond 2040 horizon as demand changes

TABLE 5-14 (3 OF 3) SHORTLISTED ALTERNATIVES EVALUATION CRITERIA

CRITERIA	DEFINITION
<b><i>Support - Cargo</i></b>	
Creates a Campus Environment (consolidation)	Concept accommodates consolidated campus for cargo activity
Impact to Existing Facilities	Degree of impact to existing facilities
Efficient Taxi Connectivity to Most Cargo-Capable Runways	Ability to connect to main departure and arrival runways capable of handling cargo activity
Impact to Existing Facilities	Degree of impact to existing facilities to accommodate future development
Compatibility with Roadway Network	Impact to existing landside traffic flows and circulation
<b><i>Support - General Aviation</i></b>	
Creates a Campus Environment (consolidation)	Concept accommodates consolidated campus for general aviation activity
Proximity to Existing Corporate Activity	Concept allows for corporate aviation to be adjacent to similar activity and facilities
Access Locations	Requires new landside access point
Allows for Expansion Beyond 2040 Need	Concept can accommodate additional capacity enhancements beyond the 2040 horizon
Implementation Complexity	Relative complexity of implementation; impacts to adjacent areas; project dependencies
<b><i>Support - Aircraft Maintenance</i></b>	
Creates a Campus Environment (consolidation)	Concept accommodates consolidated campus for aircraft maintenance activity
Impact to Existing Facilities	Degree of impact to existing facilities to accommodate future development
Proximity to GRE	Relative distance to ground runup enclosure
Provides Space for Future Growth and/or Consolidation	Land area available to expand beyond 2040 as demand changes
<b><i>Support - Airport Maintenance</i></b>	
Requires Land Transaction with WI ANG	Requires use of land currently owned by WI ANG
Relocates Highway Department Facilities	Degree of relocation or displacement of County Highway Department facilities
Allows for Staging of Snow Removal Equipment off Taxiway	Staging of snow removal equipment is accommodated in other than taxiway locations
Landside/Airside Split Accommodates Extended Perimeter Service Road	Perimeter service road relocation accommodated to allow secure access for transiting vehicles
Consolidates Airport Maintenance Facilities	Concept creates a campus-type environment keeping facilities located adjacent to existing facilities

## NOTES:

GTC – Ground Transportation Center

TNC – Transportation Network Company

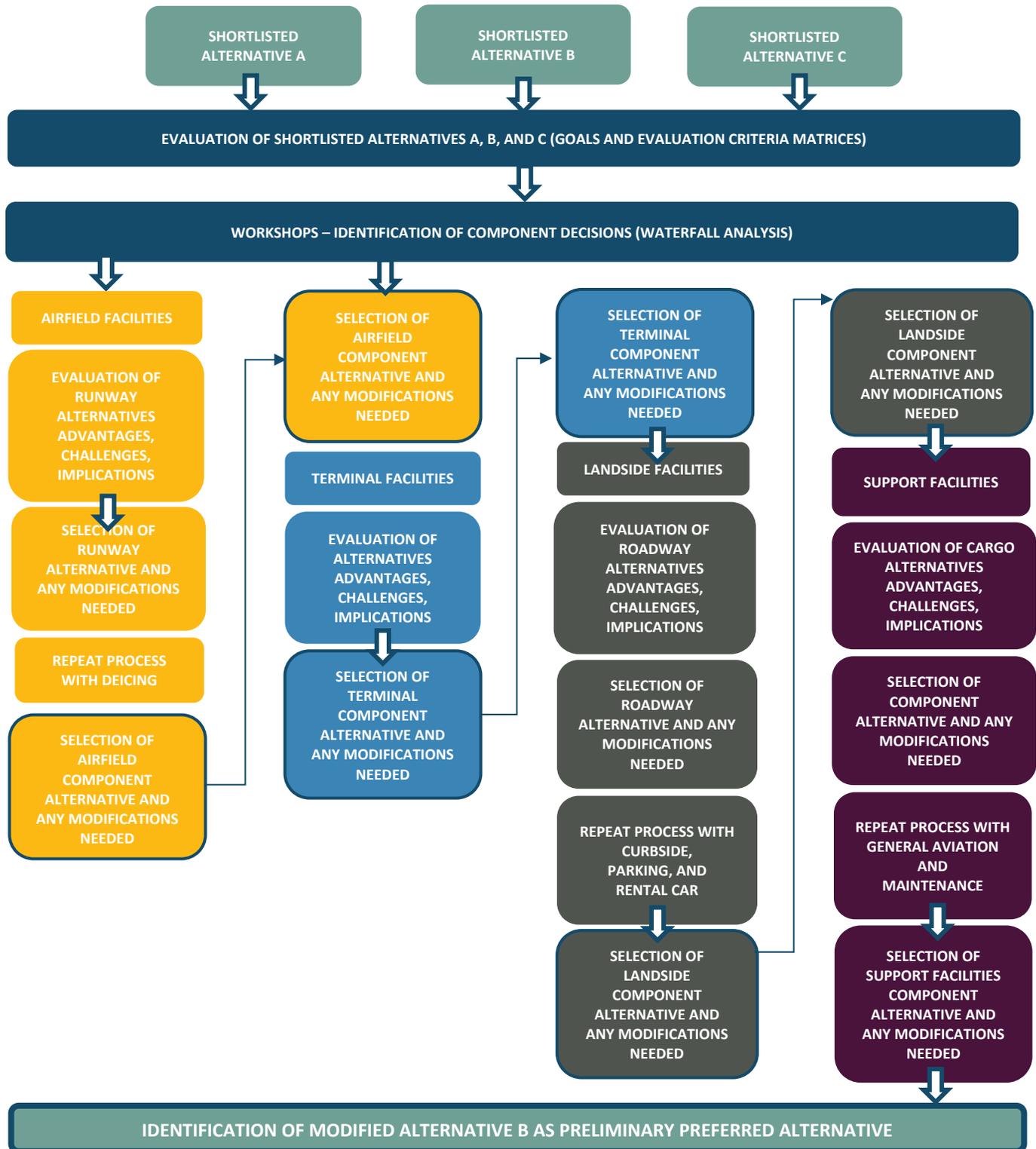
WI ANG – Wisconsin Air National Guard

SOURCE: Ricondo &amp; Associates, Inc., March 2020.

During a workshop with MKE representatives, the completed evaluation matrices were used to highlight the benefits and challenges of each alternative (overall and components) and to provide a quantitative measure of the performance of each alternative relative to the other two shortlisted alternatives. To further evaluate and select a Preliminary Preferred Alternative, the workshop with MKE representatives compared alternatives through an exploration of the consequences and opportunities of each (waterfall analysis). The result of this waterfall analysis was a cascading series of conclusions that ultimately led to the identification of the Preliminary Preferred Alternative, including the refinements necessary to address specific challenges. **Exhibit 5-74** depicts this process.

Based on the evaluation, documented in the matrix, Alternative B emerged as the best performing alternative. The waterfall analysis yielded a preferred alternative that is based primarily on Alternative B, with several refinements that incorporate elements of Alternative C. **Table 5-15** summarizes the results of the waterfall analysis and **Exhibit 5-75** illustrates the outcome of the selection process and the Preliminary Preferred Alternative. **Appendix D** presents the matrix summary of the evaluation of the three shortlisted alternatives.

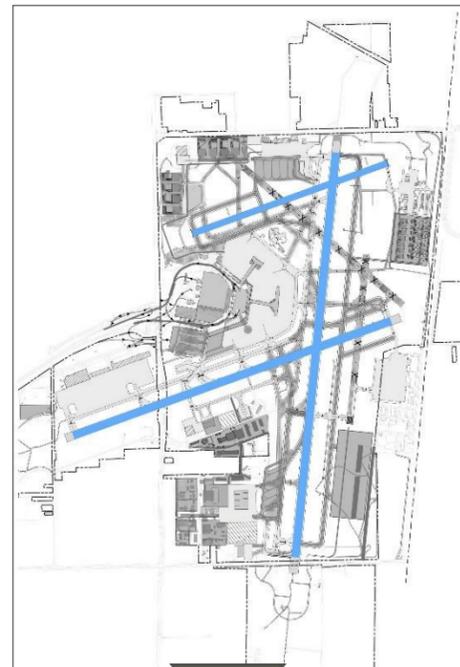
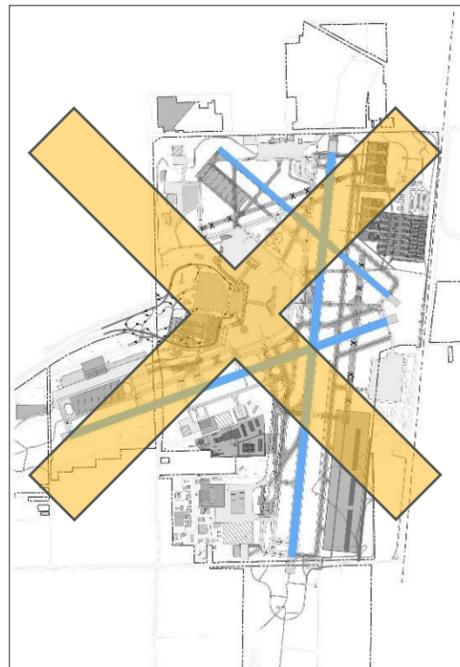
EXHIBIT 5-74 PROCESS DIAGRAM – SELECTION OF PRELIMINARY PREFERRED ALTERNATIVE



SOURCE: Ricondo & Associates, Inc., September 2020.

TABLE 5-15 (1 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

AIRFIELD – RUNWAYS			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Operational flexibility during limited but specific weather conditions</li> <li>Accommodates deice pad in north airfield</li> <li>Decommissioned Runway 1R-19L has lowest PCI values</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>No long-term capacity potential</li> <li>Without availability of Runway 7L-25R, reduction in current capacity (ASV)</li> <li>Post-2040, future capacity likely to require substantial land acquisition (future parallel Runway 7-25)</li> <li>More regular and intensive use of runway (&gt;500 annual operations) may affect critical aircraft designation and required dimensional and operational standards</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Reduced (existing) capacity and long-term capacity constraint are significant limitations balanced against limited utility of Runway 13-31</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Maintains existing capacity (ASV)</li> <li>With on-Airport runway extension to 5,100 feet (Runway 7L-25R), incremental capacity gain anticipated</li> <li>Supports operational segregation of GA traffic</li> <li>Accommodates deice pad in north airfield (runway crossing required)</li> <li>Runway 7L-25R: favorable PCI values</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Post-2040, future capacity likely to require land acquisition (extension over Howell Avenue or future parallel Runway 7-25)</li> <li>Limited Runway 7L-25R extension capability (on Airport)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Long-term capacity increase limited without land acquisition (to accommodate air carrier aircraft)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Provides maximum long-term capacity</li> <li>Allows incremental runway extensions to meet fleet evolution</li> <li>Deicing adjacent to terminal gate area</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Condition of Runway 1R-19L pavement is aging and will need to be reconstructed (capital investment needed)</li> <li>Parallel taxiway needed between 1–19 runways (significant capital investment)</li> <li>Limits adjacent land uses (WI ANG)</li> <li>Runway crossing for component of GA activity</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Significant near-term capital investment required; protects long-term capacity growth potential</li> </ul>	N/A



Airfield – Deice Pads



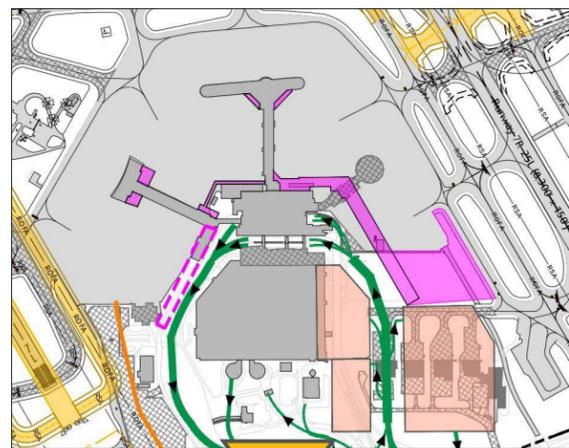
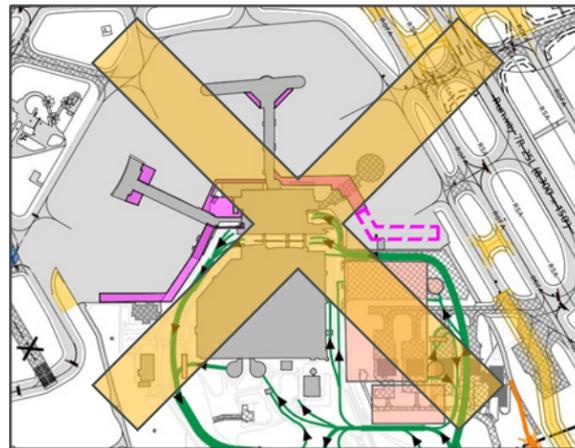
TABLE 5-15 (2 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

AIRFIELD – DEICE PADS			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>7R deice pad is existing with deicing fluid collection system</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Efficient use of 7R deice pad requires taxiway bridge over Howell Avenue and relocation of compass pad (substantial cost driver)</li> <li>No dedicated deice pad at Runway 1L (a primary winter departure runway)</li> <li>Post-2040, future capacity likely to require substantial land acquisition (future parallel Runway 7-25)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>North deice pad requires modification to accommodate Airfield Alternative B</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Deice pads at both ends of Runway 1L-19R (primary winter runway)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>South deice pad configuration constrains options for future dual parallel taxiway (R and Q) to support Runway 1L-19R and MKE Regional Business Park (if developed for aeronautical uses)</li> <li>Proximity of north deice pad to residential area (north of Layton Avenue) anticipated to create community concern</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Future dual parallel taxiway to support Runway 1L-19R constrained by future south deice pad</li> <li>Anticipated community opposition to north deice pad (noise, deice fluid overspray)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Deicing adjacent to terminal gate area</li> <li>Accommodates future dual parallel taxiway system to Runway 1L (Taxiways R and Q)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Limited capacity of south deice pad (potential to expand with future relocation of burn pit)</li> <li>North deice pad requires modification to accommodate Airfield Alternative B (reduction in size/capacity)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Modification to north deice pad</li> <li>Restricted development potential in portion of MKE Regional Business Park</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate future configuration or expansion of south deice pad (Alternative B) into Alternative C as triggered by demand and development</li> <li>Preserve dual taxiway capability, if possible</li> </ul>
			

TABLE 5-15 (3 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

TERMINAL

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Minimal dependency on roadway improvements (timing/phasing advantage)</li> <li>Compatible with Landside Alternatives B and C (flexibility)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Requires modification (expansion of Concourse E) to accommodate Airfield Alternative B (Runway 7L-25R); reduces long-term gate capability</li> <li>Operational complexity near Concourse C and Concourse B when paired with Airfield Alternative B (Runway 7L-25R)</li> <li>Requires relocation or reconstruction of Airport administration facility (third level of future concourse); reduces phasing flexibility</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Reduction in long-term gate expansion capability (Airfield Alternative B; Runway 7L-25R limits gate expansion)</li> <li>Relocation or reconstruction of Airport administration facility increases capital need without improving capacity or operational efficiency</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>General compatibility with existing roadway and landside facilities</li> <li>Allows incremental (demand driven) expansion of Concourse E gates</li> <li>Concentrates new gates on south side of terminal complex, closer to primary runways used by air carriers</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Not compatible with Landside Alternatives A or C without significant modification</li> <li>Displaces Delta GSE building</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Impact to footprint of landside facilities (parking and/or rental car)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Compatible with Landside Alternatives A and B (flexibility)</li> <li>Allows incremental runway extensions to meet anticipated fleet evolution</li> <li>Provides maximum terminal expansion potential</li> <li>Deicing adjacent to terminal gate area</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Puts additional passenger circulation demand on Concourse C "stem"; potential for widening concourse to accommodate circulation demand</li> <li>Operational complexity near extended Concourse C when paired with Airfield Alternative B (Runway 7L-25R)</li> <li>Concourse C gates taken out of service during construction</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Footprint of expanded Concourse C requires modification to accommodate Airfield Alternative B (Runway 7L-25R)</li> </ul>	<p>N/A</p>

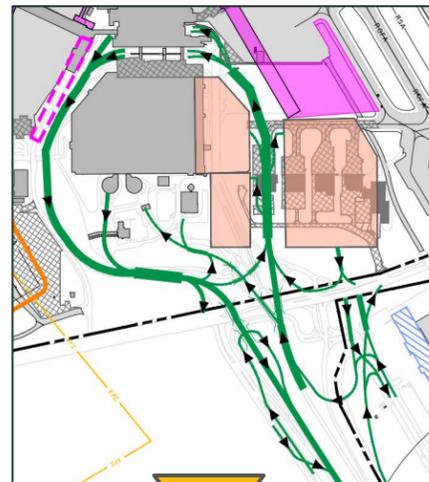
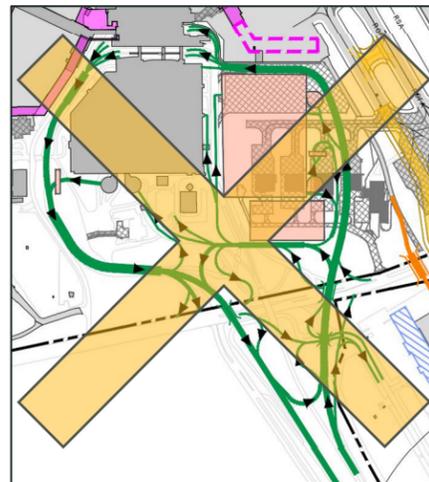


Landside Facilities



TABLE 5-15 (4 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

LANDSIDE – ROADWAY			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Enhanced segregation of inbound traffic (increased decision times and longer weave distances)</li> <li>Roadway improvements west of Howell Avenue allow roadway elements to be more widely dispersed</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability of bridging Howell Avenue and Air Cargo Way; increased on-Airport roadway lengths</li> <li>Impact to Super Saver B lot (limited reduction in parking capacity)</li> <li>Implementation timing given the coordination necessary for modifications to Airport Spur (bridging over Howell Avenue) and roadway improvements west of Howell Avenue</li> <li>Circuitous roadway routings</li> <li>Limited incremental phasing opportunities (commitment to bridge and roadway configuration required)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Increased roadway footprint and traffic segregation challenges affordability</li> <li>Large-scale program necessary (financial commitment) due to inability to incrementally construct</li> <li>Timing and cost uncertainties for roadway modifications off MKE property</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Reduced complexity of Air Cargo Way and Howell Avenue intersection (southward shift)</li> <li>Main truck route from Air Cargo Way to Airport Spur improved (all right-hand turns, simplified entrance)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability (widening of inbound Airport Spur bridge)</li> <li>Required modification of Super Saver A lot reduces available revenue-generating spaces</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Timing and cost uncertainties for roadway modifications off MKE property</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>No impact to Airport Spur bridges</li> <li>All roadway improvements are on-Airport</li> <li>Relocated parking garage revenue/exit plaza enhances merge onto Airport exit roadway</li> <li>Implementation flexibility</li> <li>Affordability (flyover bridge for recirculation is major cost item)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Limited capacity of south deice pad (potential to expand with future relocation of burn pit)</li> <li>North deice pad requires modification to accommodate Airfield Alternative B (reduction in size/capacity)</li> <li>CONRAC shuttles added to roadways</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Enhanced affordability limits scope of roadway adjustments (tight turn radii)</li> <li>Modification required to accommodate Terminal Alternative B (convert surface parking to structure)</li> </ul>	<ul style="list-style-type: none"> <li>Alternative B moves forward with the incorporation of Alternative C's relocated parking garage revenue/exit plaza</li> </ul>



Landside – Curbside

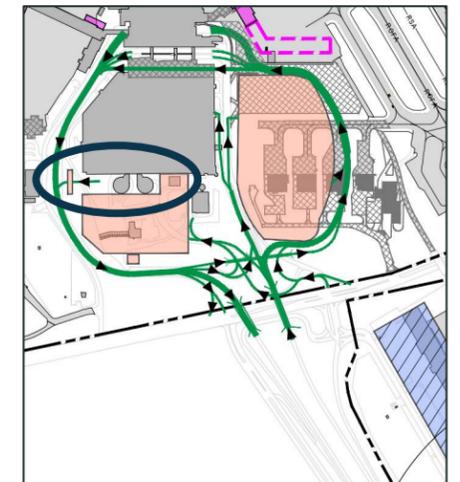


TABLE 5-15 (5 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

LANDSIDE – CURBSIDE	
ALTERNATIVE A / ALTERNATIVE B	ALTERNATIVE C
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Affordability – linear extension and allocation of curb may require canopy/enclosed space</li> <li>Consistency with current operation</li> <li>Linear curbside extension flexibility is maximized by full single-level roadway system; facilitates incremental expansion</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Curbside management necessary to protect roadway throughput capacity</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Management of curbside (policy), reallocating curbside among modes, maintains level of service with minimal infrastructure investment</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Maximizes terminal roadway capacity with limited infrastructure investment</li> <li>Allows for segregation of traffic modes</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Limitation on vehicle types that can utilize remote curbside (vertical clearance; vertical limitation can be mitigated by demolition of 1 to 2 bays of existing parking structure when reconstructed)</li> <li>Remote curb users have longer walk than current; multiple vertical transitions to cross terminal roadway</li> <li>Aging garage structure rehabilitation (or reconstruction) could impact remote curb</li> <li>Displaces existing rental car customer counters and operations; also requires curbside frontage for CONRAC shuttles</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Efficient curbside environment increases passenger vertical transitions to use remote curb</li> <li>Requires construction of CONRAC prior to implementation of interior garage remote curb</li> </ul>
	<p><b>ALTERNATIVE MODIFICATIONS</b></p> <ul style="list-style-type: none"> <li>Curbside reallocation by mode as triggered by demand</li> </ul>

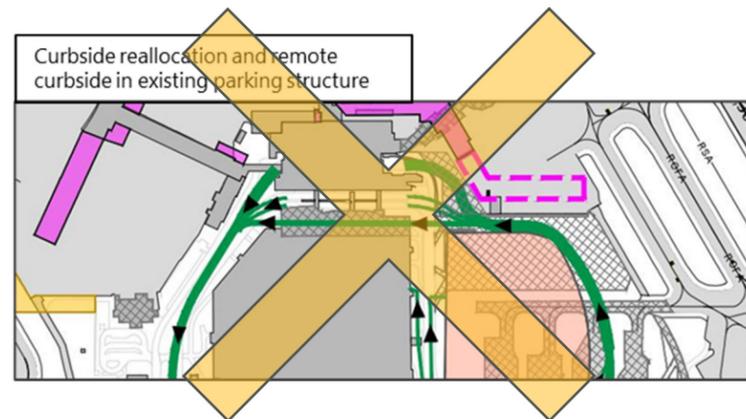
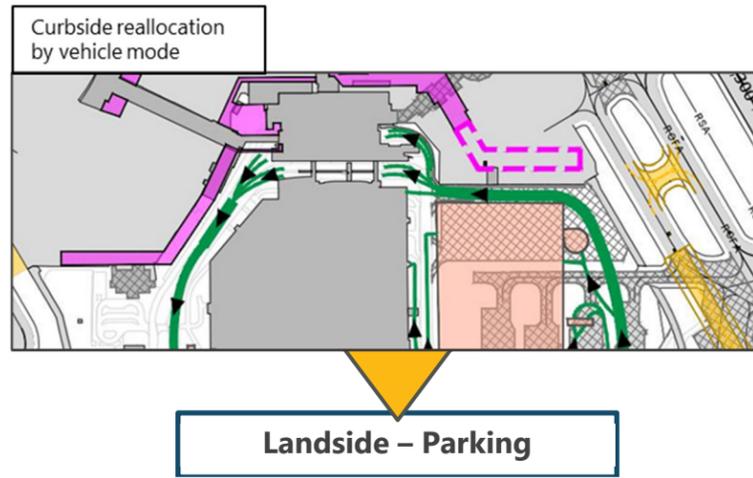


TABLE 5-15 (6 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

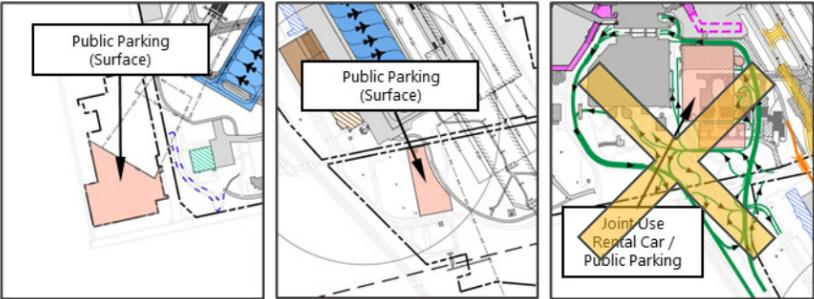
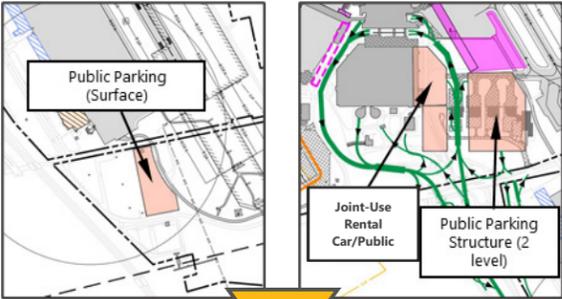
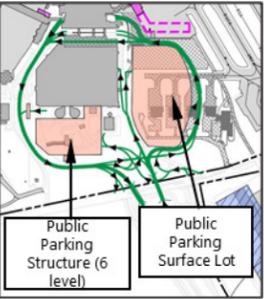
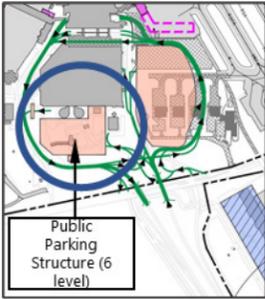
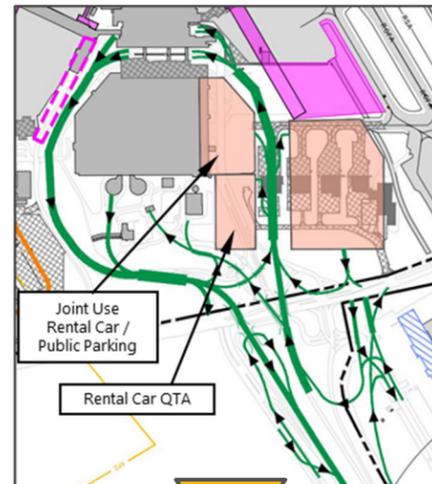
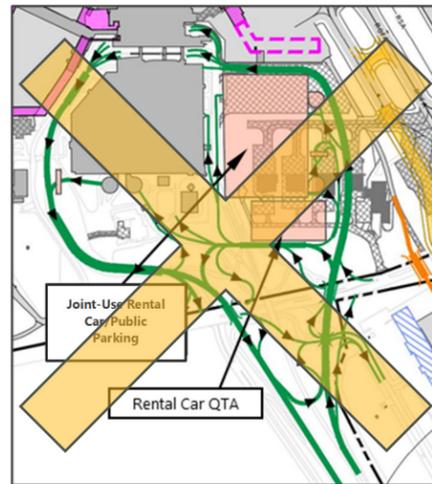
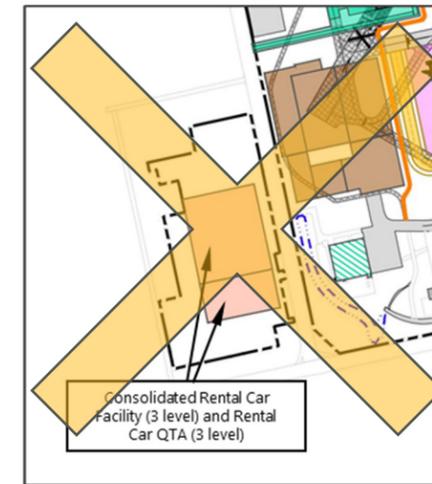
LANDSIDE – PARKING			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Proximity to terminal of significant portion of future public parking</li> <li>Expanded remote surface parking increases economy parking (price sensitive users)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability</li> <li>Limited ability for incremental development or flexible phasing to respond to demand triggers (large-scale program driven by bridge relocation)</li> <li>Large-scale landside program requires substantial financial commitment with potential to extend implementation duration</li> <li>Prioritizes rental car capacity over parking capacity in terminal core (drives additional remote parking)</li> <li>Joint-use facility requires modification to accommodate Terminal Alternative B</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Affordability: large-scale landside program anticipated, dependent on bridge relocation</li> <li>Competition with private parking operators (leakage) given expanded remote parking facilities</li> <li>Integration with rental car structure creates project dependencies</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Proximity to terminal of significant portion of future public parking</li> <li>Expanded remote surface parking increases economy parking (price sensitive users)</li> <li>Parking improvements (two-level structure) can be implemented independent of roadway configuration (temporary connections)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability</li> <li>Limited parking expansion capability beyond 2040 horizon (challenging to expand structure vertically; height limits due to ATC line-of-sight)</li> <li>Roadway relocation required to accommodate joint rental car/parking facility</li> <li>Walking distance to terminal entrance stretches convenience (may require shuttle)</li> <li>Remote surface parking not compatible with preferred Cargo Alternative C (requires additional replacement spaces)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Phasing/implementation flexibility can be balanced with overall financial capability</li> <li>Integration with rental car structure creates project dependencies</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Proximity to terminal of all additional public parking</li> <li>Parking facilities can be implemented largely independent of roadway improvements</li> <li>Flexibility in parking facility phasing and implementation timing (align with demand)</li> <li>Relative affordability</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Height of expanded parking structure is limited (maximum six levels) by preferred Airside Alternative B (maintain Runway 7L-25R in operation)</li> <li>Surface parking facility requires modification to accommodate preferred Terminal Alternative B and supporting roadway</li> <li>Affordability</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Prioritizes public parking proximity over rental car proximity</li> <li>Concentrating public parking in core provides flexibility in scope and timing of improvements (financial feasibility)</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate relocation of parking revenue plaza to meter traffic entering the exit roadway and expansion of existing parking structure (Alternative C) into Alternative B to provide maximum development flexibility when triggered by demand</li> </ul>
			
			

TABLE 5-15 (7 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

LANDSIDE – RENTAL CAR			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Proximity to terminal of rental car facilities</li> <li>On-site QTA reduces vehicle traffic (on terminal roadway and Howell Avenue; currently shuttling to remote QTA)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability</li> <li>Not compatible with preferred Terminal Alternative B (modification opportunity [increased height] limited by line-of-sight considerations)</li> <li>Large-scale landside program requires substantial financial commitment with potential to extend implementation duration</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Rental car facilities reduce long-term parking capacity in terminal core, creating more remote parking in competitive environment</li> <li>Integration with parking structure creates project dependencies (timing may not align with demand)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Proximity to terminal of rental car facilities</li> <li>On-site QTA reduces vehicle traffic (on terminal roadway and Howell Avenue; currently shuttling to remote QTA)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability</li> <li>Large-scale landside program requires substantial financial commitment with potential to extend implementation duration</li> <li>Proximity of QTA (vehicle fueling) to ATCT (blast mitigation, other security measures may be required that impact cost)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Rental car facilities reduce parking capacity in terminal core, creating more remote parking in competitive environment</li> <li>Integration with rental car structure creates project dependencies (timing may not align with demand)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Allows 2040 parking demand to be accommodated at close-in location</li> <li>Rental car activity not on terminal roadway network; introduce rental car shuttles as new vehicle mode in landside environment</li> <li>Avoids project dependencies between rental car and parking facilities</li> <li>Simplified construction phasing (site outside terminal core allows more efficient construction)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Travel time/convenience to remote facility (weakens rental car location as differentiator)</li> <li>Desirability of designated remote location for other revenue-generating uses (remote CONRAC may be accommodated on other remote sites)</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Minimize dependency on roadway and parking facility projects (timing and cost)</li> <li>Remote parcel (irrespective of location) not available for alternative revenue-generating development/uses</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate expansion of existing parking structure from Parking Alternative B Modified into Alternative B to provide maximum development flexibility when triggered by rental car or parking demand</li> </ul>



**Support Facilities**



(NOTE: Remote CONRAC may be accommodated on other remote sites)

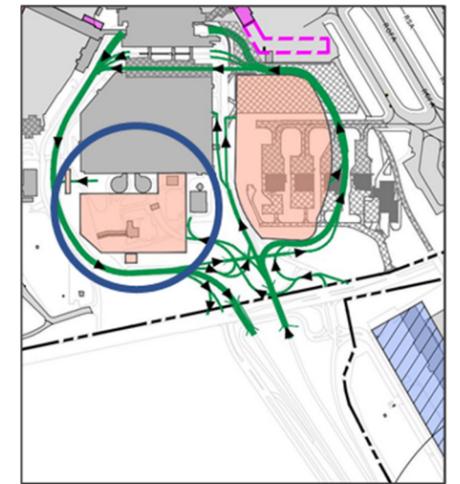


TABLE 5-15 (8 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

SUPPORT FACILITIES – CARGO			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Dedicated cargo campus reduces cargo-related traffic at Air Cargo Way and Howell Avenue intersection</li> <li>MKE Regional Business Park remains available for revenue-generating uses</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability – significant airfield infrastructure required to support new cargo campus</li> <li>Undeveloped land is primary drainage area for watershed (significant drainage and potential environmental mitigation required to develop)</li> <li>Not compatible with ultimate protection of Runway 1R-19L airspace</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Substantial capital cost</li> <li>Cargo development not compatible with Runway 1R-19L protection (ultimate condition)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Dedicated cargo campus reduces cargo-related traffic at Air Cargo Way and Howell Avenue intersection</li> <li>Post-2040 expansion capability</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Affordability – significant airfield infrastructure required to support new cargo campus</li> <li>Undeveloped land is primary drainage area for watershed (significant drainage and potential environmental mitigation required to develop)</li> <li>Not compatible with ultimate protection of Runway 1R-19L airspace</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Substantial capital cost</li> <li>Cargo development not compatible with Runway 1R-19L protection (ultimate condition)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Redevelopment of majority of MKE Regional Business Park for aeronautical use</li> <li>Relative affordability</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Phased redevelopment/upgrade of existing west cargo facilities is operationally challenging</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Cargo development, while displacing tenants of the MKE Regional Business Park, can occur incrementally, avoiding a large-scale cargo development program</li> </ul>	N/A

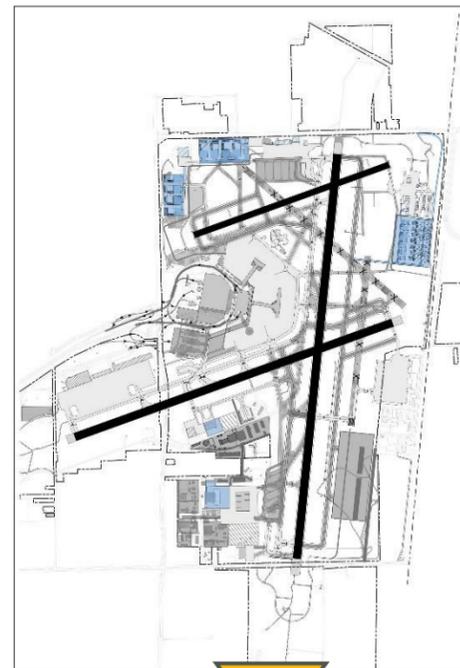
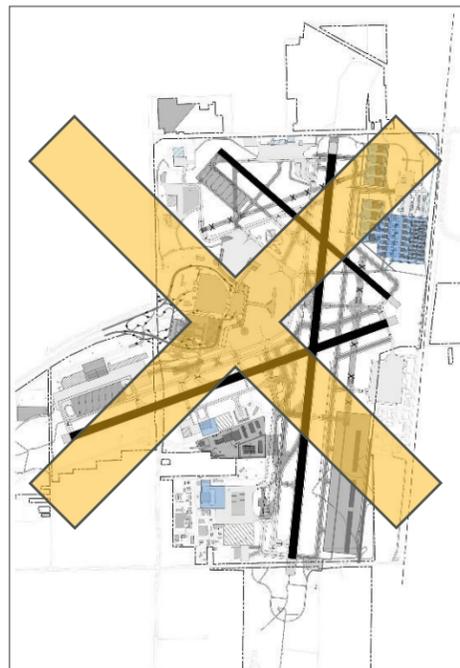


**Support Facilities – General Aviation**

TABLE 5-15 (9 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

SUPPORT FACILITIES – GENERAL AVIATION

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Development concentrated in area with limited utility for other types of development</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Facility configuration requires adjustment to accommodate preferred Airfield Alternative B</li> <li>Corporate GA facilities not segregated from small GA facilities</li> <li>Not compatible with ultimate protection of Runway 1R-19L airspace</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Consolidation of GA facilities does not facilitate segregation of corporate GA development</li> <li>GA development not compatible with Runway 1R-19L protection (ultimate condition)</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Compatible with ultimate Runway 1R-19L</li> <li>Segregation of corporate GA facilities from small GA facilities</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Corporate GA development abutting Layton Avenue may cause community concern</li> <li>Displaces existing aircraft maintenance facilities</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Segregation of corporate GA facilities (abutting Layton Avenue) may not be compatible with community preferences</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Incremental expansion potential in response to demand</li> <li>Limited segregation of corporate GA facilities from small GA facilities</li> <li>Development concentrated in area with limited utility for other types of development</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Corporate GA facilities in north quadrant require adjustment to accommodate preferred Airfield Alternative B</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Limited segregation of corporate GA facilities necessary to avoid development abutting Layton Avenue</li> </ul>	<ul style="list-style-type: none"> <li>Alternative B moves forward with the incorporation of Alternative C's expanded GA Area</li> </ul>



**Support Facilities – Maintenance**

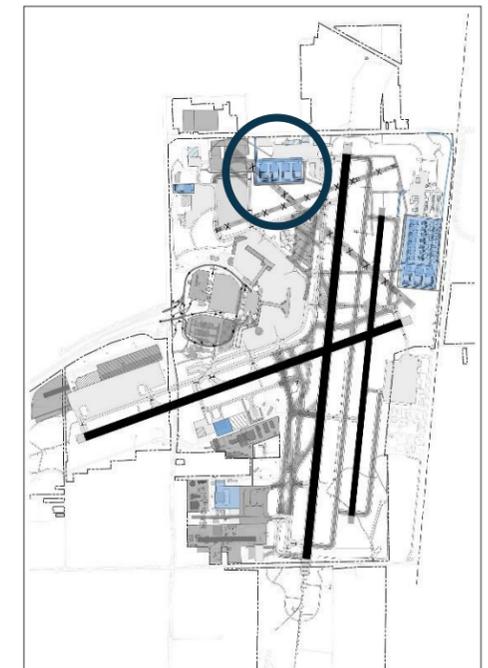
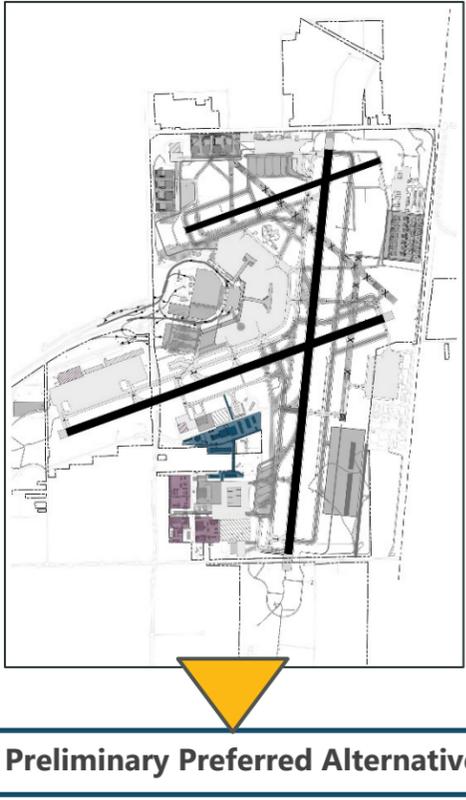
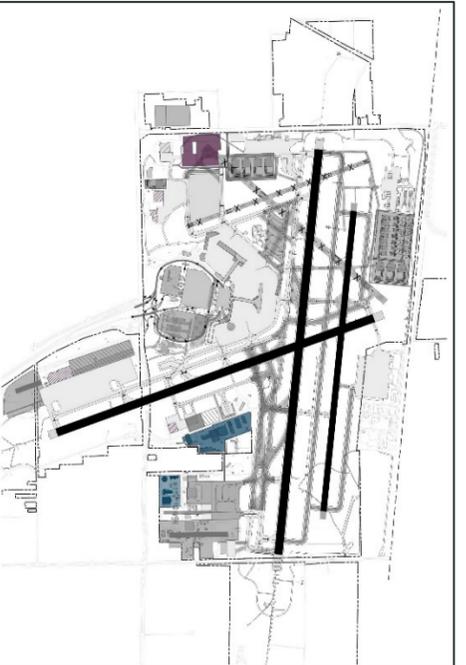


TABLE 5-15 (10 OF 10) WATERFALL ANALYSIS OF COMPONENTS OF PRELIMINARY PREFERRED ALTERNATIVE

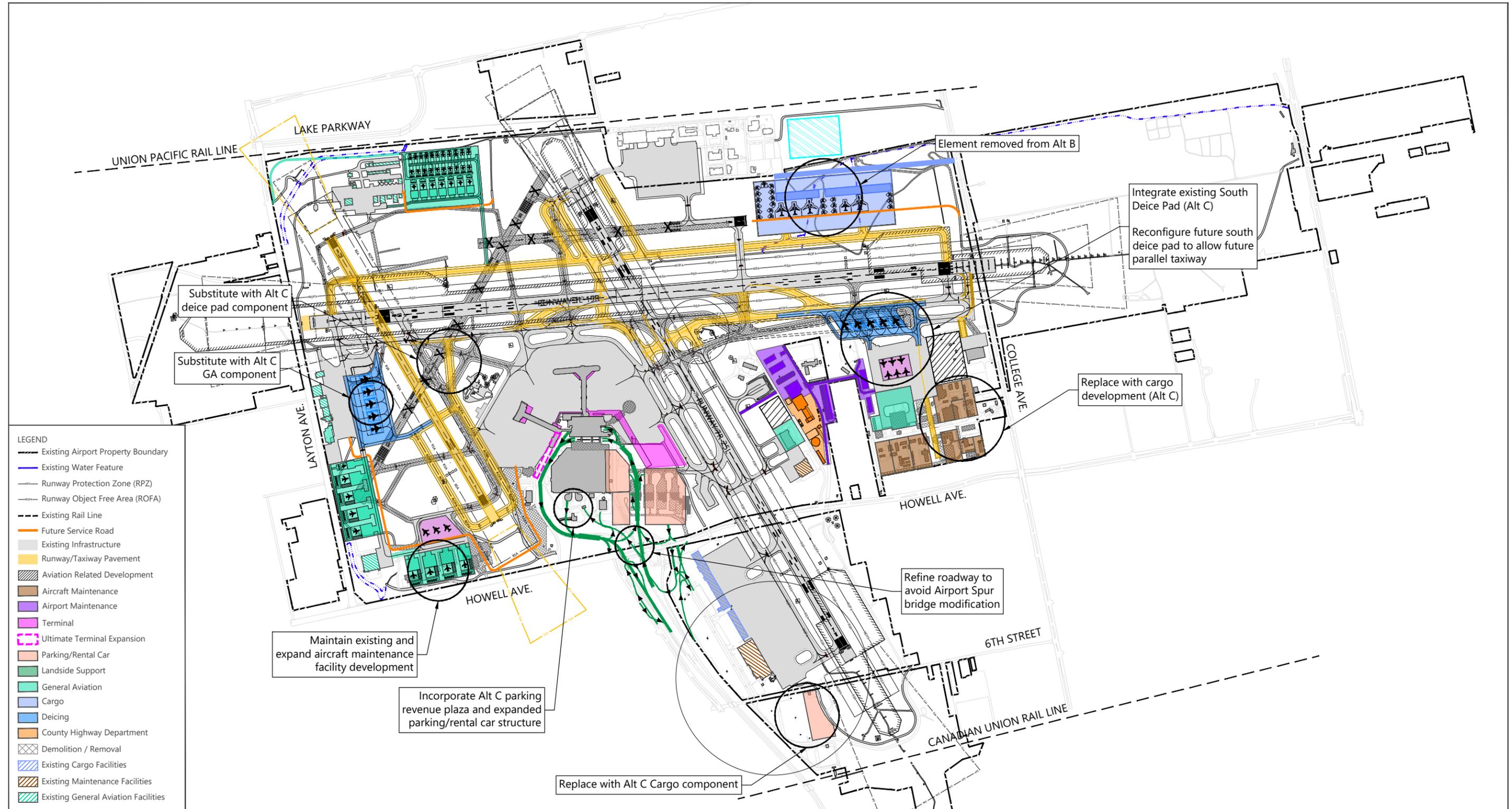
SUPPORT FACILITIES – MAINTENANCE			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE MODIFICATIONS
<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>County Highway Department remains in existing facilities</li> <li>Consolidated Airport maintenance facilities</li> <li>Snow removal vehicle staging accommodated on roadway (no longer staged on Taxiway Y)</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Land exchange with WI ANG required for Airport maintenance facility development (Guard West parcel)</li> <li>Development of Guard West parcel influenced by future dual parallel Taxiway R / Taxiway Q configuration</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Land exchange/transaction to maintain consolidated and contiguous facilities</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>County Highway Department remains in existing facilities</li> <li>Snow removal vehicle staging accommodated on roadway (no longer staged on Taxiway Y)</li> <li>Aircraft maintenance campus accommodates incremental/phased expansion</li> <li>Redevelopment of majority of MKE Regional Business Park for aeronautical use</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Airport maintenance facilities partially dispersed</li> <li>With deicing pad, concentration of aircraft maintenance facilities may require dual parallel taxiway with increased activity</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Dispersed Airport maintenance facilities do not require land transaction</li> </ul>	<p><b>Primary Advantages</b></p> <ul style="list-style-type: none"> <li>Consolidated Airport maintenance facilities</li> <li>Snow removal vehicle staging accommodated on roadway (no longer staged on Taxiway Y)</li> <li>Aircraft maintenance campus accommodates incremental/phased expansion</li> </ul> <p><b>Primary Challenges</b></p> <ul style="list-style-type: none"> <li>Relocation of County Highway Department facilities to MKE Regional Business Park parcel (not available for revenue-generating development)</li> <li>Aircraft maintenance development abutting Layton Avenue may cause community concern</li> </ul> <p><b>Primary Implications</b></p> <ul style="list-style-type: none"> <li>Relocation of County Highway Department is not highest and best use of MKE Regional Business Park land</li> <li>Consolidated aircraft maintenance campus location (along Layton Avenue) may cause community concern</li> </ul>	<ul style="list-style-type: none"> <li>Alternative B moves forward with the incorporation of Alternative C's expanded aircraft maintenance development</li> </ul>
			

**Preliminary Preferred Alternative**

NOTES:  
 PCI – Pavement Condition Index  
 ASV – Annual Service Volume  
 GA – General Aviation  
 SOURCE: Ricondo & Associates, Inc., September 2020.

GSE – Ground Support Equipment  
 WI ANG – Wisconsin Air National Guard  
 CONRAC – Consolidated Rental Car facility

ATC – Air Traffic Control  
 QTA – Quick Turnaround  
 ATCT – Air Traffic Control Tower



- LEGEND**
- Existing Airport Property Boundary
  - Existing Water Feature
  - Runway Protection Zone (RPZ)
  - Runway Object Free Area (ROFA)
  - Existing Rail Line
  - Future Service Road
  - Existing Infrastructure
  - Runway/Taxiway Pavement
  - Aviation Related Development
  - Aircraft Maintenance
  - Airport Maintenance
  - Terminal
  - Ultimate Terminal Expansion
  - Parking/Rental Car
  - Landside Support
  - General Aviation
  - Cargo
  - Deicing
  - County Highway Department
  - Demolition / Removal
  - Existing Cargo Facilities
  - Existing Maintenance Facilities
  - Existing General Aviation Facilities

SOURCES: Milwaukee Mitchell International Airport Representatives, May 2018 (base files); Mead & Hunt, Inc., October 2019 (support facilities, cargo, and GA); Ricondo & Associates, Inc., November 2019 (landside, airfield, and terminal).

EXHIBIT 5-75



PRELIMINARY PREFERRED ALTERNATIVE

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