

7. ENVIRONMENTAL OVERVIEW

This section provides information on select environmental categories that are more frequently affected by airport development. This overview is not intended as a substitute for a National Environmental Policy Act (NEPA) document; however, it can help inform the likely NEPA documentation that may ultimately be required at the time of project implementation. NEPA is applicable to any activity that involves a federal action including but not limited to federal funding and Airport Layout Plan approval.

7.1 AIR QUALITY

Two primary regulations apply to air quality: NEPA and the Clean Air Act (CAA). As described in Section 2, Inventory of Existing Conditions, MKE is located within a maintenance area for Particulate Matter 2.5 (PM_{2.5}), which is one of the six criteria pollutants regulated under the CAA. Prior to a project being implemented, as part of NEPA process, it will need to be demonstrated that the proposed project conforms to the State Implementation Plan (SIP) for PM_{2.5}. If the project is included in the SIP, then no further analysis would be required for operational emissions. However, it is unlikely that any proposed MKE MPU projects are included in the SIP. Coordination with the Wisconsin Department of Natural Resources (WI DNR), the state agency responsible for the SIP, is recommended to discuss how to best account for the future projects in the SIP. If a project is not accounted for in the SIP, then the FAA requires a General Conformity Determination under the CAA to confirm that emissions from the project, during both operation and construction, will not exceed annual *de minimis* levels set by the state.

The FAA has identified a list of actions that may be exempt from the General Conformity requirement.¹ These actions include but are not limited to non-runway pavement work and terminal upgrades, conditioned that the activity/project is not affecting runway use, increasing capacity, allowing a larger category of aircraft, or changing existing airfield operations. These exemptions are also subject to the size of the project. Non-runway pavement projects included in the MPU recommendations include those associated with taxiways, cargo, GA, and deicing facilities. A terminal expansion is also included in the MPU recommendations. The expansion consists of additional holdroom, concourse/concessions, gates, aircraft parking, vehicle parking and car rental, and roadway modifications. Whether this terminal expansion can be considered exempt from General Conformity will need to be determined once the project is further defined in coordination with the regulatory agencies. Generally major terminal or concourse expansion projects that increase passenger or support increased capacity will require developing an emission inventory. Most of the proposed MPU runway/taxiway pavement projects are anticipated to change the existing airfield operations; the extent varies based on when the projects are implemented and therefore may require a General Conformity Determination.

For projects included in the MPU, coordination with the WI DNR and FAA will be required to confirm the level of analysis required to demonstrate conformity. Annual operation and construction emissions are typically considered in the determination to demonstrate that the proposed project does not exceed *de minimis* levels for criteria pollutants for which the Airport is not in attainment (currently PM_{2.5}). For purposes of this overview, it is assumed that the type of air quality analysis performed for emissions, whether construction only or construction and operation emissions, would be determined in consultation with the WI DNR. This would be done prior to the NEPA process to ensure the approach satisfies the requirements of the CAA.

¹ US Department of Transportation, Federal Aviation Administration, <https://www.federalregister.gov/documents/2007/07/30/07-3695/federal-presumed-to-conform-actions-under-general-conformity> accessed May 12, 2021).

7.2 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Section 2, Inventory of Existing Conditions, identified known resources based on readily available data. These resources include one building, the New Coeln House, which is on both the National and State Register of Historic Places. As shown on **Exhibit 7-1**, this structure is located approximately 1,500 feet southeast of Runway 7R. There are also three known archaeological sites on Airport property. Prior to implementing any projects with ground disturbance or other impacts, such as noise that exceeds FAA thresholds for noise-sensitive areas, further study will likely be required to comply with Section 106 of the National Historic Preservation Act of 1966. The State Historic Preservation Office determines if a project is Section 106 compliant.

7.3 BIOLOGICAL

Although a significant portion of the Airport property has been disturbed by airfield and landside development, the property does support various biotic resources. Section 2, Inventory of Existing Conditions, identified potential listed species that may be in the vicinity of the Airport. However, based on the areas of proposed development, the likelihood of any of these species being present is low, since vegetation is primarily mowed grass. If tree clearing is required for any of the projects, then impacts to the northern long-eared bat will need to be considered, and, by removing trees outside the roosting season, impacts can be avoided. Consultation with the US Fish and Wildlife Service (USF&WS) and WI DNR will be required to confirm no impacts to listed species prior to the implementation of any project.

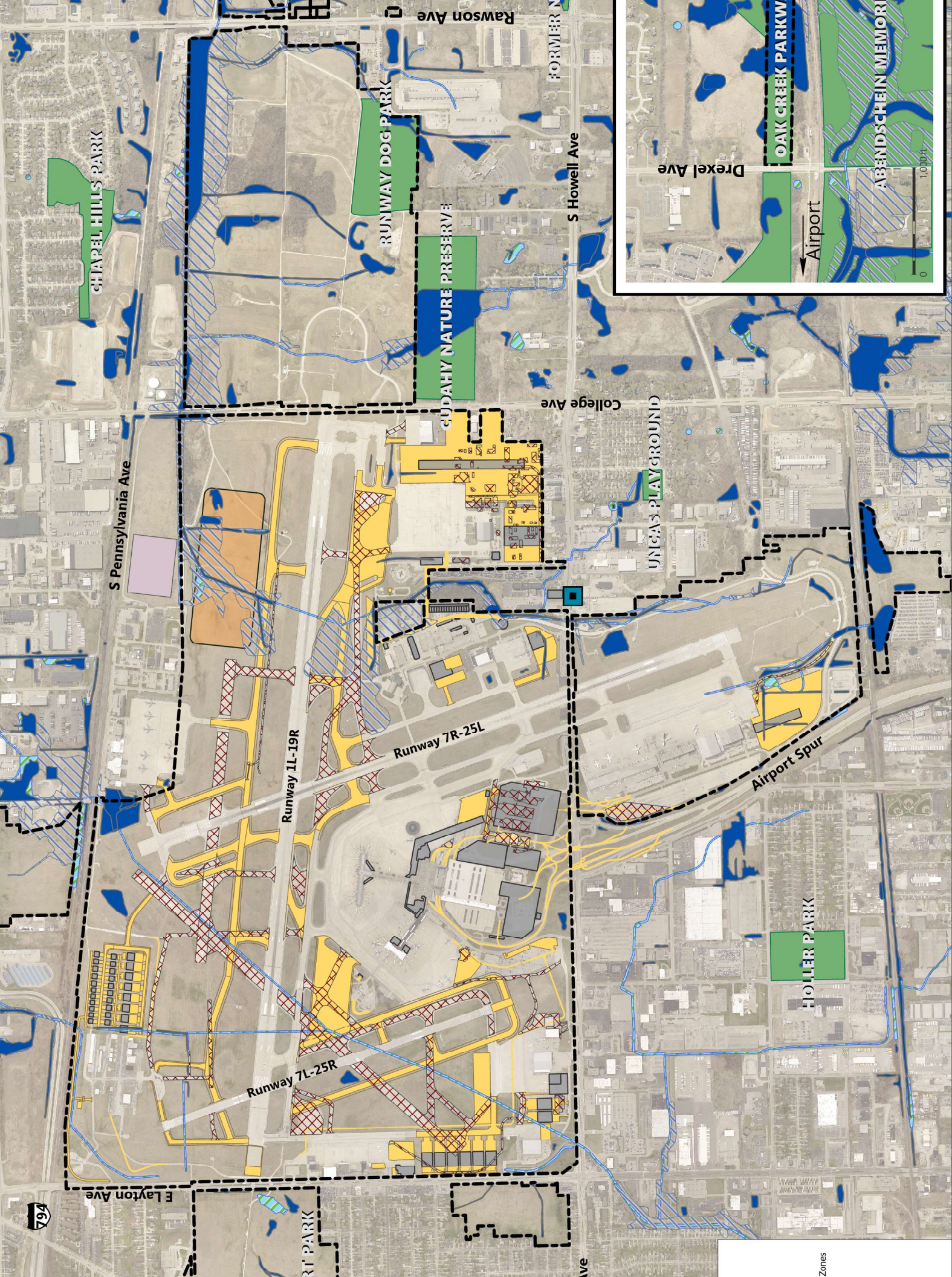
7.4 WATER RESOURCES

The MPU proposes development that includes airside and landside elements. Airside elements include numerous taxiway additions and removals, as well as cargo, terminal, and GA area/apron expansions, including deicing at two new locations (Central and South Deice Pads). Runway changes include the extensions of Runway 7L and Runway 19R, and removal of two Runways, 13-31 and 1R-19L. The MPU also recommends changes to the Airport roadways, the addition of aircraft and Airport maintenance facilities, expansion of the terminal area, reconfiguration of the Airport entrance road system, and additional area for parking and rental car facilities.

7.4.1 WATER QUALITY, SURFACE WATER, AND GROUNDWATER

At the Airport, surface water drains into two watersheds; the majority drains north into Wilson Creek, and ultimately the Kinnickinnic River, and the southern portion of the Airport drains south into the Oak Creek basin. The principal framework for considering water quality in federal decisions is contained in the Clean Water Act. Consideration of both point sources and nonpoint sources, including stormwater runoff and runoff pollutants, is included. Deicing facilities require special management and collection systems and must be considered in the Airport's Wisconsin Pollutant Discharge Elimination System (WPDES) Permit. Potential pollutants generated by maintenance and rental car facilities can include the lubricants, solvents, and fuel. Regulated pollutants include oil and grease; benzene, ethylbenzene, toluene, and xylene (BETX); and polyaromatic hydrocarbons (PAHs). Updates to the Airport's Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plans will also be required for these facilities.

Implementation of the MPU projects will result in disturbance of land associated with grading, installation of storm sewers, utilities, and an increase in impervious area associated with buildings, roads, parking, and airfield pavements.



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Stormwater management plans, which address both water quality and quantity, will be required to meet the requirements of the jurisdictions in which the Airport projects are located, as well as the Trans 401 Wisconsin Administrative Code Standards. Affected municipalities will perform the required coordination with the Milwaukee Metropolitan Sewerage District (MMSD) to ensure compliance with MMSD's Chapter 13 regulations regarding water quantity. For all projects, the stormwater management plan will need to assess pre- and post-development runoff rates and provide controls, if necessary, to meet the MMSD's release requirements. Effectively addressing the surface water regulation requires consideration of the timing of projects, as there are both removals and additions of impervious area. Two future detention basins are proposed in the MPU, one located on the airfield and another located in the landside/terminal area, in anticipation of the potential need for stormwater management enhancements.

Best management practices (BMPs) should be incorporated into projects with the goal of meeting the required release flow rates and pollutant reductions. However, because of the potential of becoming a wildlife attractant, wet detention, an effective BMP, is not recommended by the FAA within a 5-mile distance from the Air Operating Area (AOA). Dry detention for control of flow releases for new stormwater management facilities may be considered if the ponds can be drawn down within 48 hours², and their implementation is subject to both Airport and USDA–Wildlife Services review. BMPs to be considered will include bioswales, dry detention, and other methods acceptable in an airport environment.

7.4.2 WETLANDS

Exhibit 7-1 shows the wetlands from both the USF&WS National Wetland Inventory and WI DNR's Surface Water Data Viewer. These data sources are not developed to scale to accurately identify all wetlands and do not always reflect current conditions. The Southeast Wisconsin Regional Planning Commission (SEWRPC) also has a role in overseeing activities in wetlands, particularly if Advanced Identification (ADID) wetlands, which are ones that the SEWRPC identifies, are impacted. Although no ADID wetlands are on Airport property, coordination with SEWRPC is still advisable when a project is undertaken.

Prior to project implementation, a field review will be required to confirm the presence of wetlands in a project area if any ground disturbance is proposed; if present, a delineation will be completed. From these existing data sources, it appears there may be some wetland impacts with the MPU's proposed development, particularly with the future west cargo expansion, the northerly proposed taxiway for Runway 7L-25R, the future Snow Removal Equipment (SRE) staging area, the proposed parallel taxiway east of Runway 1L-19R, the future developments proposed southeast of the Howell Avenue tunnel, and aeronautical development east of Runway 1L-19R. If impacts are unavoidable, then a Section 404 permit will be required from the US Army Corps of Engineers for federally jurisdictional wetlands and waters of the US, as well as State 401 Water Quality Certification. Mitigation will be required, and State Department of Transportation banks are often available for use. Additionally, the state also has an In-Lieu Fee mitigation program.

7.4.3 FLOODPLAINS

Exhibit 7-1 shows the extent of regulated floodplains at the Airport. As shown, the taxiway projects (removal and construction) associated with Runway 1L-19R, both east and west of the runway, and the proposed aeronautical development area east of Runway 1L-19R will impact the floodplain. The FEMA and the State of Wisconsin, under Wisconsin Department of Natural Resources NR 116, regulate activities in the floodplain. For any projects impacting the floodplain, the project will need to include mitigation so there is no off-site increase in the 100-year flood elevation, and local and state permits, as well as a Letter of Map Revision to FEMA, will also be required.

² In accordance with FAA AC 150/5200-33, *Hazardous Wildlife Attractants on or Near Airports*

7.5 COMPATIBLE LAND USES

Land use compatibility within each of the Airport's existing and future runway protection zones (RPZs) was evaluated for both on-Airport and off-Airport land uses. This section also describes surrounding land uses that could potentially attract wildlife and US DOT 4(f) lands within a 1-mile radius of the Airport.

7.5.1 RUNWAY PROTECTION ZONES

This section focuses on land uses within the RPZs for all five existing runways at MKE. An RPZ is a two-dimensional, trapezoidal-shaped area at ground level that is located prior to the landing threshold or beyond the departure end of a runway. The FAA describes an RPZ's function within paragraph 310 of FAA AC 150/5300-13A, *Airport Design*: "The RPZ's function is to enhance the protection of people and property on the ground. This is best achieved through airport owner control over RPZs. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities."³

Paragraph 310.d of AC 150/5300-13A identifies the only permissible land uses within an RPZ that will not otherwise require further evaluation with the FAA:

- farming that meets airport design standards
- irrigation channels that meet the requirements of AC 150/5200-33 and the FAA/USDA manual, *Wildlife Hazard Management at Airports*
- airport service roads, if they are not public roads and are directly controlled by the airport operator
- underground facilities, if they meet other design criteria, such as runway safety area requirements, as applicable
- unstaffed NAVAIDs and facilities, such as equipment for airport facilities that are considered fixed by function regarding the RPZ

Additionally, the FAA issued a memorandum on September 27, 2012, "Interim Guidance on Land Uses Within a Runway Protection Zone." The interim guidance policy only addresses the introduction of new or modified land uses to an RPZ and proposed changes to the RPZ's size and location. This memorandum recognizes that RPZ land use compatibility is often complicated by ownership considerations. For new or modified land uses in the RPZ, the memorandum identifies land uses requiring coordination with the FAA:

- buildings and structures (e.g., residences, schools, churches, hospitals or other medical facilities, commercial/industrial buildings)
- recreational land use (e.g., golf courses, sports fields, amusement parks, other places of public assembly)
- transportation facilities (e.g., rail facilities [light or heavy, passenger or freight], public roads/highways, vehicular parking facilities)
- fuel storage facilities (aboveground and belowground)
- hazardous material storage (aboveground and belowground)
- wastewater treatment facilities
- aboveground utility infrastructure (i.e., electrical substations) including any type of solar panel installations

³ US Department of Transportation, Federal Aviation Administration, Advisory Circular 150-5300-13A, Change 1, *Airport Design*, February 26, 2014.

Milwaukee County currently uses its Height Limitation Zoning Ordinance (HLZO) as its means to control the MKE airspace and RPZs. MKE has obtained avigation easements or parcels in fee simple as a way to provide permanent control of the airspace and compatible land use in the RPZ. Future updates to the HLZO are recommended to account for airfield changes.

This section documents current land uses and ownership within the existing RPZs, and it identifies any noncompatible land uses. This section also identifies the future condition associated with the proposed runway modifications and their associated RPZ changes, including a 300-foot extension of the Runway 7L end, a 10-foot extension of the Runway 19R end, and the ultimate decommissioning of Runway 13-31 and Runway 1R-19L.

7.5.1.1 RUNWAY 1L

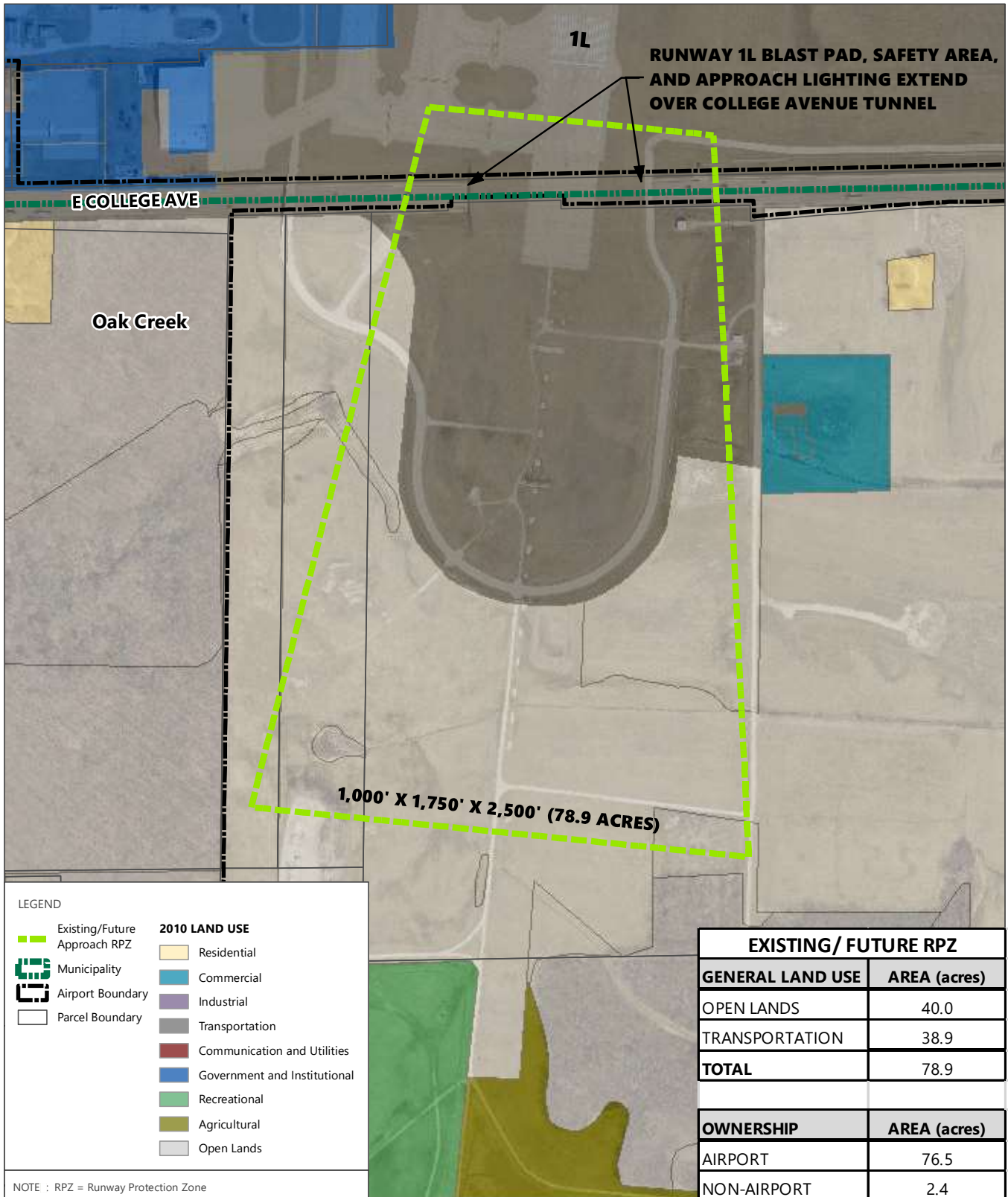
Exhibit 7-2 illustrates the existing RPZ for Runway 1L and its relationship to Airport property, surrounding parcels, and land use. Approximately 97 percent of the land within this RPZ is owned by MKE Airport, with the balance of land comprising the College Avenue right-of-way. While isolated, noncompatible segments of College Avenue encroach the northeast and northwest corners of the RPZ. However, the runway and its safety area span overtop the College Avenue tunnel, which lessens the extent of this roadway that could be considered incompatible land use. Portions of the airfield's paved perimeter service road and other gravel access roadways to NAVAIDs are located within the RPZ and are considered compatible land uses, as they are not accessible to the public and are under control of MKE Airport. Two small, unoccupied buildings that house facilities associated with the tunnel are located east of the structure and are also compatible, as they are unstaffed, unoccupied, and fixed by function. No future modifications to the Runway 1L RPZ are planned as part of the MPU.

7.5.1.2 RUNWAY 19R

Exhibit 7-3 illustrates the RPZ conditions off the end of Runway 19R. While a 10-foot extension is proposed to this runway end in the future, no change is proposed to the location of the landing threshold. As such, the approach RPZ for Runway 19R will not change, and the departure RPZ areas are encompassed within the approach RPZ. Approximately 93 percent of the land within this RPZ is owned by MKE Airport. The areas outside this ownership comprise right-of-way segments for Layton Avenue and a small segment of S. Brust Avenue within the City of St. Francis at the northeast corner of the RPZ. While these roadway segments are incompatible land uses, the vehicle traffic through these segments is generally free flowing with little or no queuing. Portions of the airfield's paved perimeter service road and other gravel access roadways to NAVAIDs are located within the RPZ and are considered compatible land uses, as they are not accessible to the public and are under control by Milwaukee County.

7.5.1.3 RUNWAY 7R

Exhibit 7-4 illustrates that a significant portion of the existing Runway 7R RPZ is located over Airport property, but it also spans portions of South 6th Street, the Canadian Pacific Railroad, underlies high-voltage overhead transmission lines, and parcels containing various types of vehicle storage or auto salvage. The southwest corner of the Runway 7R RPZ extends over two parcels that contain aboveground and belowground fuel storage and distribution facilities (Quick Fuel Incorporated, which is a commercial fueling station, and a Lamers A&K Bus Line parcel). Railroads, roadways, vehicle parking, and fuel storage facilities are specifically identified by the FAA as incompatible land uses within an RPZ. Portions of the airfield's paved perimeter service road and other gravel access roadways to NAVAIDs are located within the RPZ and are considered compatible land uses as they are not accessible to the public and are under control of MKE Airport. Two small, unoccupied shelters that house facilities associated with the NAVAIDs for Runway 7R-25L are located within the Runway 7R RPZ and are also compatible, as they are unstaffed, unoccupied, and fixed by function. No future modifications to the Runway 7R RPZ are planned as part of the MPU.



SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

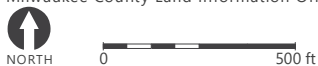


EXHIBIT 7-2
 RUNWAY PROTECTION ZONE LAND USES
 RUNWAY 1L END



SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

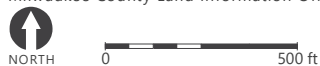
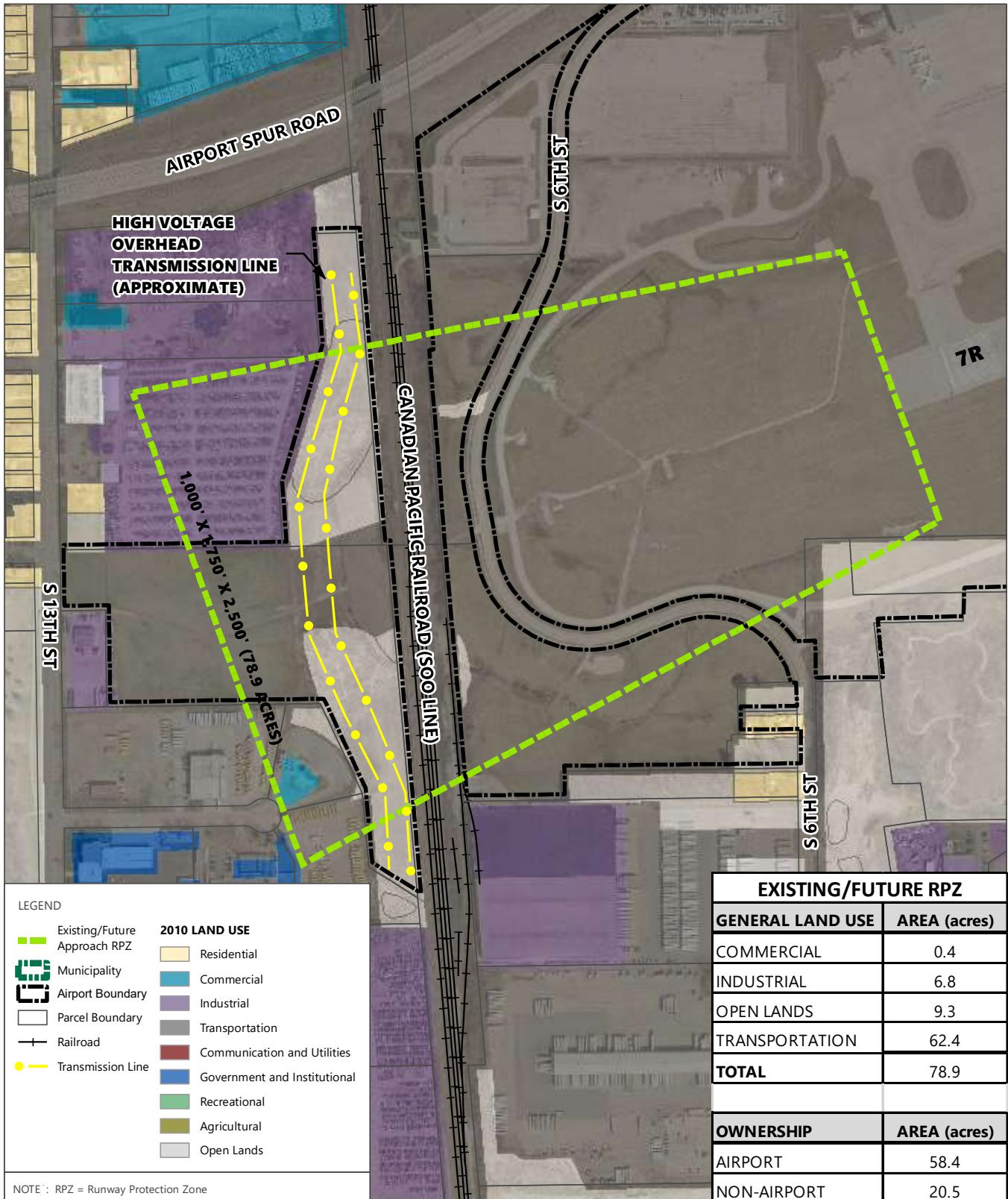
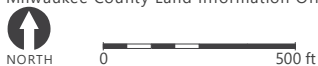


EXHIBIT 7-3
 RUNWAY PROTECTION ZONE LAND USES
 RUNWAY 19R END



SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)



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7.5.1.4 RUNWAY 25L

The approach RPZ is generally larger than the RPZ associated with departure operations from the opposite end of the runway and is generally the more restrictive in terms of land coverage. However, in certain instances, the departure RPZ may extend beyond the approach RPZ. Such is the case for the Runway 25L end, as illustrated on **Exhibit 7-5**, where the Runway 7R departure RPZ (shown in orange) extends further to the east than the Runway 25L approach RPZ (shown in green). The majority of both RPZs are located over Airport property, with some encroachment into noncompatible land uses associated with the Union Pacific Railroad. Some portions of both RPZs also extend into the We-Energies' right-of-way that runs along the east side of the railroad. A small portion of the northwest corner of the Runway 7R departure RPZ, approximately 0.5 acres, extends into a parcel of industrial land use. A segment of the airfield's paved perimeter service road is located within both RPZs and is considered compatible land use, as it is not accessible to the public and is under control of MKE Airport. No changes to either the approach or departure RPZs extending from this runway end are planned as part of the MPU.

7.5.1.5 RUNWAY 7L

Exhibit 7-6 illustrates the existing and future approach RPZ conditions associated with the Runway 7L end. Under existing conditions, over 94 percent of this RPZ is located within existing Airport property, with the balance of the RPZ extending into Howell Avenue and a small portion of the northwest corner (0.01 acres) extending into a commercial-use parcel of land. The roadway intersection between Howell Avenue and W. Edgerton Avenue is signalized, and some traffic queuing does occur within the outer limits of the RPZ, primarily within the southbound lanes of Howell Avenue. A segment of the Airport's paved perimeter service road runs through the RPZ, but it is considered compatible land use as it is not accessible to the public and is under control by MKE Airport. There is also a segment of frontage roadway running along the east side of Howell Avenue that is also within the existing Runway 7L RPZ, but this roadway would not be considered compatible land use as it is accessible by the public.

Under future conditions, Runway 7L is proposed to be extended by 300 feet to the west with the existing Runway 7L threshold remaining in place. Under this condition, the future Airport approach RPZ ownership for this runway end is anticipated to remain the same, however, the departure RPZ for Runway 25L departures extends east in-line with the 300 foot extension, with segments of the RPZ (approximately 0.76 acres) extending into commercial-use properties (commercial parking, restaurants, and hotels) west of Howell Avenue. From aerial imagery, it appears one of the hotel sites is under redevelopment⁴. The future Runway 7L departure RPZ also extends into more of Howell Avenue and Edgerton Avenue and within additional traffic queuing areas associated with the signalized intersection of these roadways. Given the increase in incompatible land use resulting from the future runway extension, evaluation with the FAA will be required at the time of project implementation.

7.5.1.6 RUNWAY 25R

Exhibit 7-7 illustrates the Runway 25R RPZ that is entirely contained within Airport property. A segment of the Airport's paved perimeter service road runs through the RPZ, but it is considered compatible land use as it is not accessible to the public and is under control by MKE Airport. A drainage channel conveys stormwater from the southeast to the northwest and is lined in concrete, which helps lessen the attractant to wildlife. A segment of nonsecure access road from Layton Avenue extends into the RPZ and terminates at the Airport's perimeter fence and a security gate. The MPU proposes to realign this access road and security fencing outside the RPZ. No other modifications to this runway end or its associated RPZ are proposed.

⁴ Aerial Imagery prepared by Martinez Geospatial, September 2018.



LEGEND

- Existing/Future Approach RPZ
- Existing/Future Departure RPZ
- Municipality
- Airport Boundary
- Parcel Boundary
- Railroad

2010 LAND USE

- Residential
- Commercial
- Industrial
- Transportation
- Communication and Utilities
- Government and Institutional
- Recreational
- Agricultural
- Open Lands

NOTE : RPZ = Runway Protection Zone

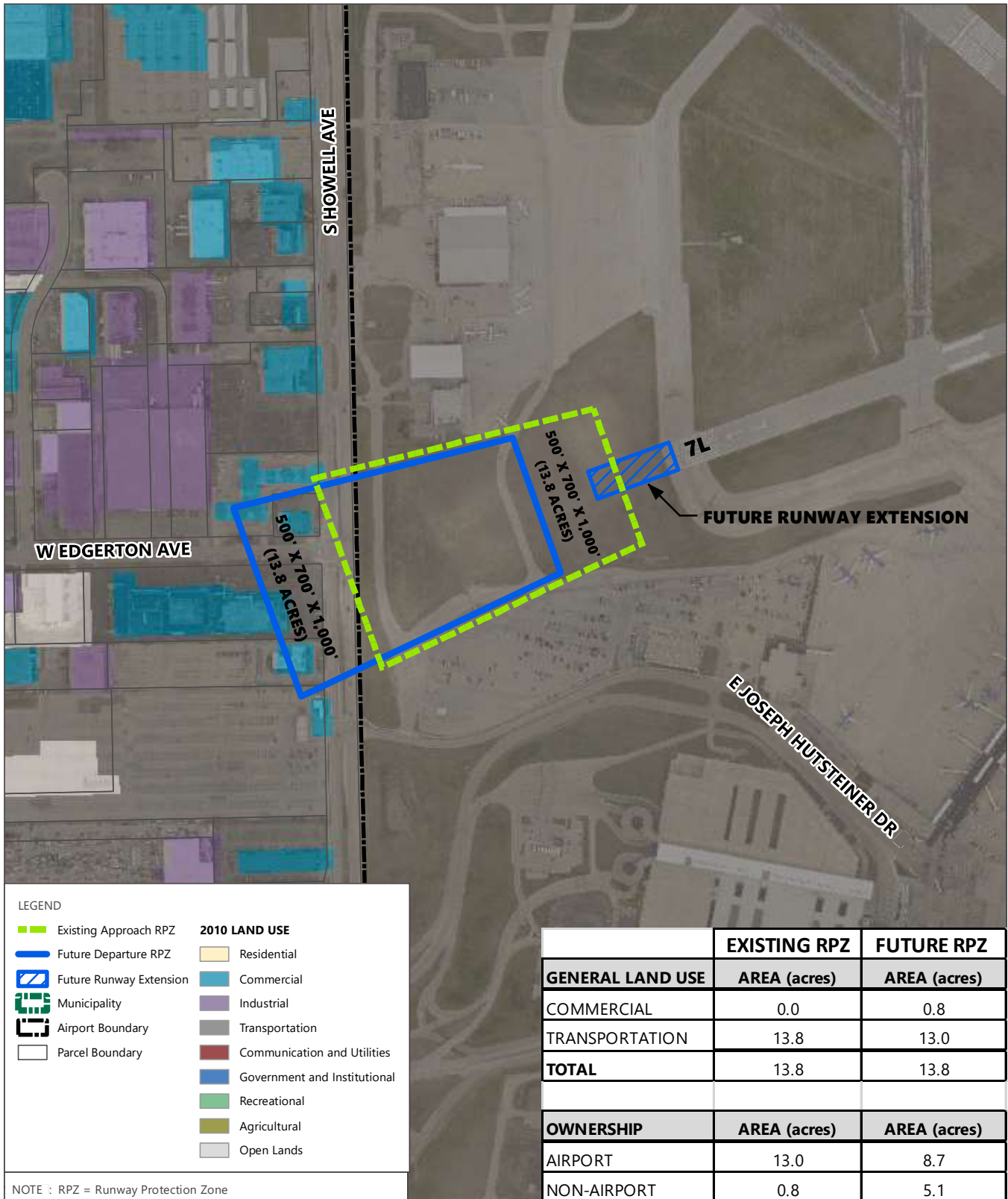
	APPROACH RPZ	DEPARTURE RPZ
GENERAL LAND USE	AREA (acres)	AREA (acres)
AGRICULTURAL	4.6	12.7
COMM. AND UTILITIES	2.5	2.2
INDUSTRIAL	0.0	0.5
OPEN LANDS	0.2	0.2
TRANSPORTATION	22.1	13.9
TOTAL	29.5	29.5
OWNERSHIP	AREA (acres)	AREA (acres)
AIRPORT	24.2	24.6
NON-AIRPORT	5.3	4.9

SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)



EXHIBIT 7-5

**RUNWAY PROTECTION ZONE LAND USES
RUNWAY 25L END**



LEGEND

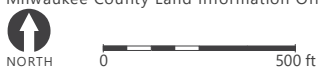
- ▬ Existing Approach RPZ
- ▬ Future Departure RPZ
- ▭ Future Runway Extension
- ▭ Municipality
- ▭ Airport Boundary
- ▭ Parcel Boundary

2010 LAND USE

- Residential
- Commercial
- Industrial
- Transportation
- Communication and Utilities
- Government and Institutional
- Recreational
- Agricultural
- Open Lands

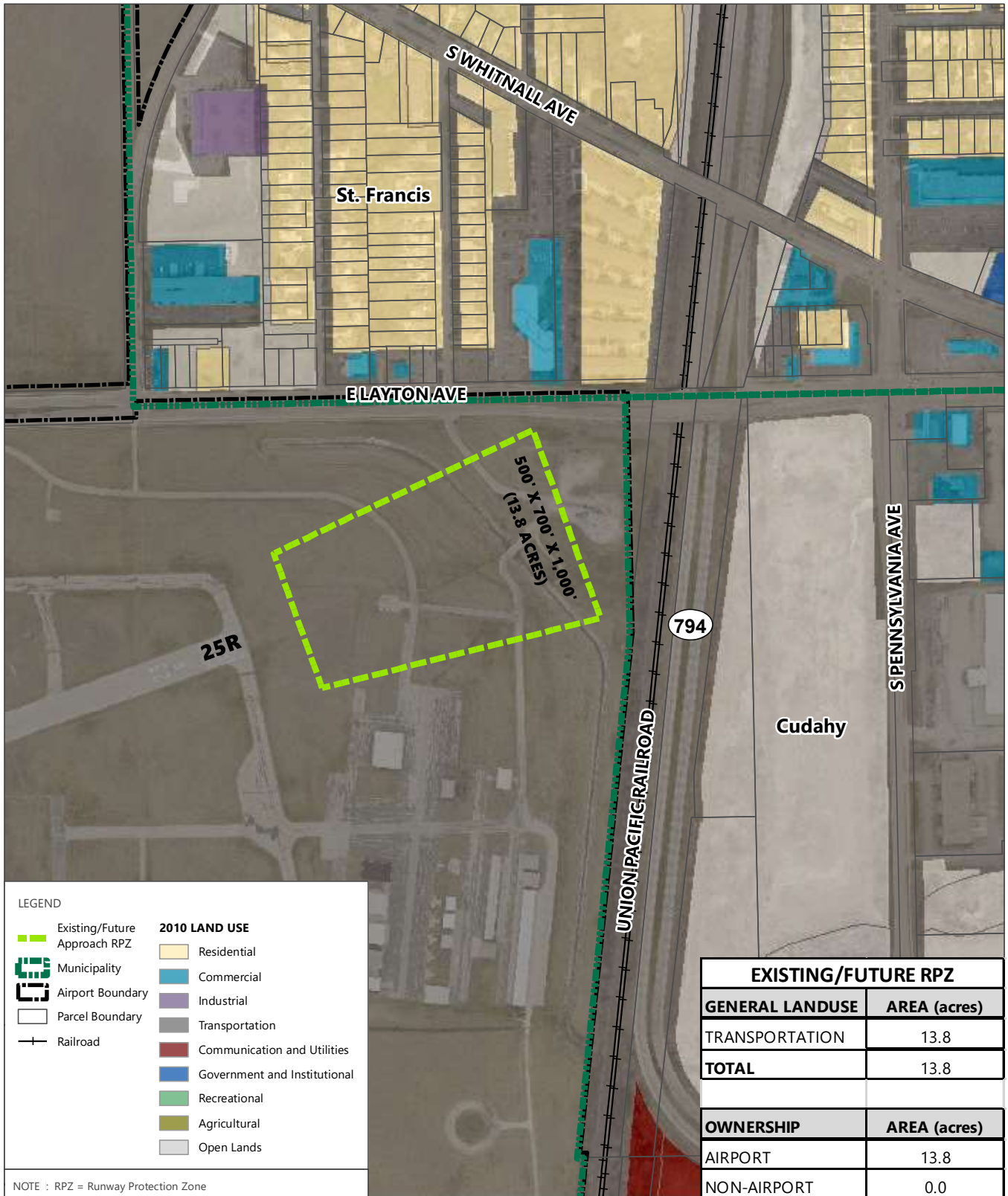
NOTE : RPZ = Runway Protection Zone

SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)



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EXHIBIT 7-6
RUNWAY PROTECTION ZONE LAND USES
RUNWAY 7L END



SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

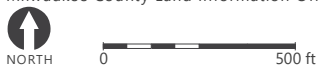


EXHIBIT 7-7
RUNWAY PROTECTION ZONE LAND USES
RUNWAY 25R END

7.5.1.7 RUNWAY 13

Exhibit 7-8 illustrates the approach and departure RPZs that extend off the end of Runway 13. Given the displaced threshold to Runway 13, the approach RPZ is more contained within existing Airport property than the Runway 31 departure RPZ. Approximately 94 percent of the Runway 13 approach RPZ is within Airport property, with the balance extending into the right-of-way for Layton Avenue. Approximately 82 percent of the Runway 31 departure RPZ is located within Airport property, with a greater portion of this RPZ extending into the right-of-way for Layton Avenue. An isolated segment of nonsecure access road extends into the Runway 31 departure RPZ, as well as a small segment of a concrete-lined drainage channel. Runway 13-31 is identified for future decommissioning as part of the MPU.

7.5.1.8 RUNWAY 31

Exhibit 7-9 illustrates the approach and departure RPZs that extend off the end of Runway 31. Given the displaced threshold to Runway 31, the approach RPZ is more contained within existing Airport property than the Runway 13 departure RPZ. Approximately 98 percent of the Runway 31 approach RPZ is within Airport property, with the balance extending into the Union Pacific Railroad Right-of-way (ROW). Approximately 88 percent of the Runway 13 departure RPZ is located within Airport property, with a greater portion of this RPZ extending into the Union Pacific Railroad ROW and the We-Energies utility corridor that runs along the railroad to the east. A segment of the Airport's paved perimeter service road runs through both RPZs, but it is considered compatible land use as it is not accessible to the public and is under control of MKE Airport. Runway 13-31 is identified for future decommissioning as part of the MPU.

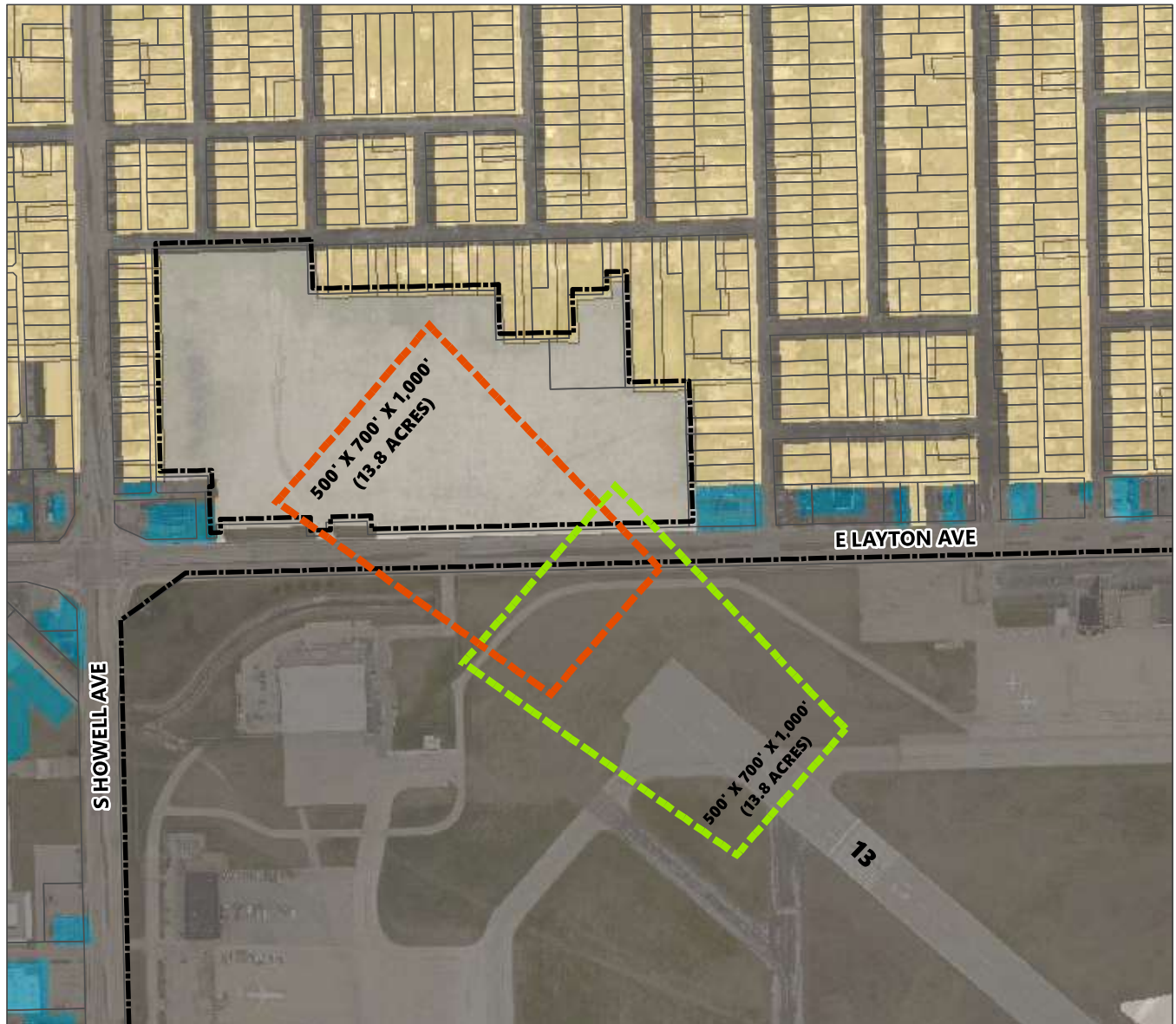
7.5.1.9 RUNWAY 1R-19L

The RPZ areas for Runways 1R and 19L are illustrated on **Exhibit 7-10** and **Exhibit 7-11**, respectively. The RPZs on both runway ends are well-controlled and entirely contained on Airport property. There are isolated segments of paved airfield perimeter service roads that extend through each RPZ area, providing access to navigational instruments. They are considered compatible land use as they are not accessible to the public and are controlled by MKE Airport. Runway 1R-19L is identified for decommissioning as part of the MPU. The Mitchell Field Drainage Ditch and another drainage feature are in the Runway 1R RPZ and are within mapped floodplain.

7.5.2 WILDLIFE HAZARDS

As described in Section 2, Inventory of Existing Conditions, wildlife attractants are present on and near the Airport. Some of the most prominent attractants include Bailey's Pond, drainage ditches (including the Edgerton Channel, Cudahy Infall, and Oak Creek Tributary), and woodland. Off-site attractants include grasslands, woodlands south of College Avenue, and the Milwaukee Area Technical College (MATC) ponds, which have been equipped with an overhead grid that has been effective in waterfowl management.

The future airport layout will require additional stormwater management facilities and possible floodplain mitigation. FAA AC 150/5200-33, *Hazardous Wildlife Attractants on or Near Airports*, provides guidance for stormwater management design, recommending that the design be developed in consultation with a Qualified Airport Wildlife Biologist (QAWB) to minimize wildlife attractants. To address wildlife hazards, MKE Airport employs a full-time USDA Wildlife Services QAWB who implements deterrent and mitigation measures. In accordance with the Airport's Wildlife Hazard Management Plan (WHMP), the USDA biologist participates in early phases of Airport building projects to avoid increases in wildlife hazards resulting from architectural or landscape features/changes, particularly to the exteriors. The continued involvement of a QAWB to review land-use and infrastructure plans early in the process is important so that features that may attract wildlife can be avoided.



LEGEND

	Existing/Future Approach RPZ	2010 LAND USE	
	Existing/Future Departure RPZ		Residential
	Municipality		Commercial
	Airport Boundary		Industrial
	Parcel Boundary		Transportation
			Communication and Utilities
			Government and Institutional
			Recreational
			Agricultural
			Open Lands

NOTE : RPZ = Runway Protection Zone

	APPROACH RPZ	DEPARTURE RPZ
GENERAL LAND USE	AREA (acres)	AREA (acres)
OPEN LANDS	0.4	7.9
TRANSPORTATION	13.4	5.9
TOTAL	13.8	13.8
OWNERSHIP	AREA (acres)	AREA (acres)
AIRPORT	12.9	11.3
NON-AIRPORT	0.9	2.5

SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)



EXHIBIT 7-8

**RUNWAY PROTECTION ZONE LAND USES
RUNWAY 13 END**



LEGEND

- Existing/Future Approach RPZ
- Existing/Future Departure RPZ
- Municipality
- Airport Boundary
- Parcel Boundary
- Railroad

2010 LAND USE

- Residential
- Commercial
- Industrial
- Transportation
- Communication and Utilities
- Government and Institutional
- Recreational
- Agricultural
- Open Lands

NOTE: RPZ = Runway Protection Zone

	APPROACH RPZ	DEPARTURE RPZ
GENERAL LAND USE	AREA (acres)	AREA (acres)
AGRICULTURAL	0.0	0.0
COMM. AND UTILITIES	0.0	0.4
OPEN LANDS	0.1	0.2
TRANSPORTATION	13.7	13.2
TOTAL	13.8	13.8
OWNERSHIP	AREA (acres)	AREA (acres)
AIRPORT	13.5	12.1
NON-AIRPORT	0.3	1.7

SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

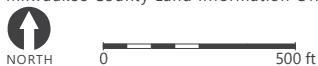
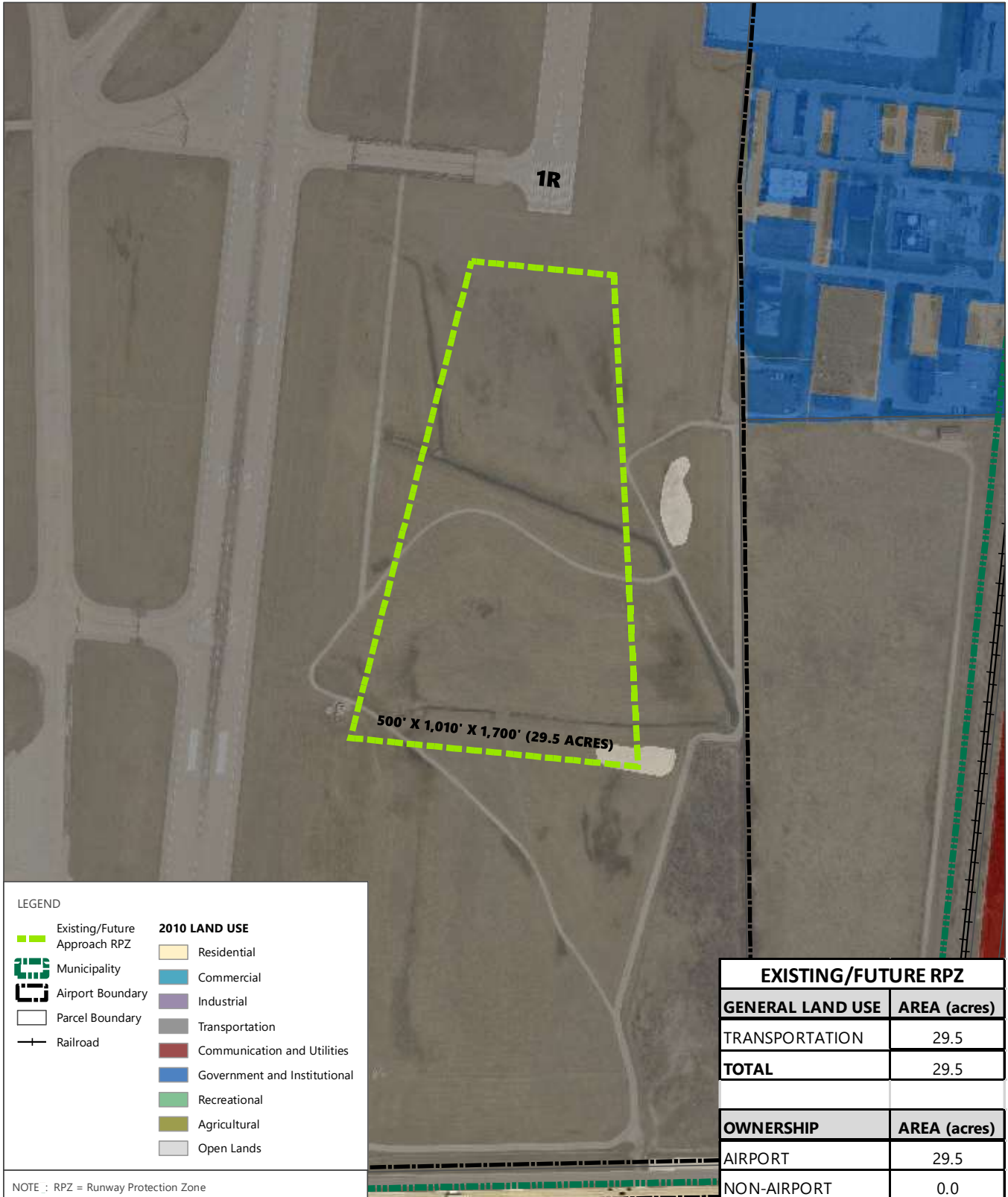


EXHIBIT 7-9

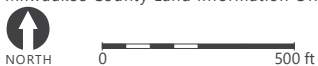
**RUNWAY PROTECTION ZONE LAND USES
RUNWAY 31 END**

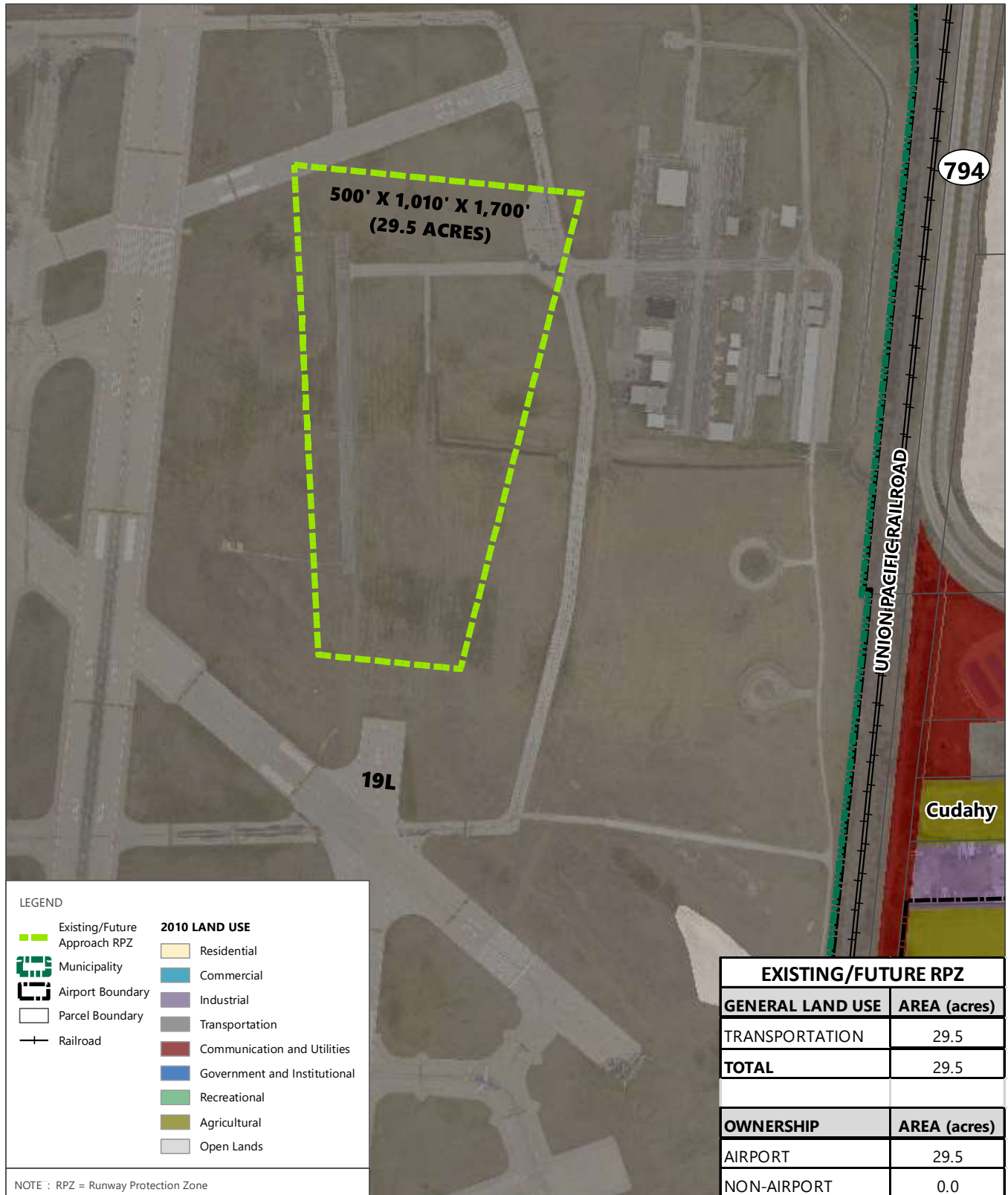


SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

EXHIBIT 7-10

RUNWAY PROTECTION ZONE LAND USES
RUNWAY 1R END

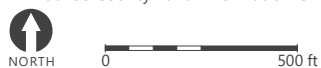




SOURCES: Southeastern Wisconsin Regional Planning Commission, 2010 (land use); Milwaukee County Land Information Office, 2020 (parcels, aerial)

EXHIBIT 7-11

**RUNWAY PROTECTION ZONE LAND USES
RUNWAY 19L END**



7.5.3 DEPARTMENT OF TRANSPORTATION SECTION 4(F)

Section 4(f) lands include parks, recreational areas, including trails, and historic/cultural sites. Figure 7-1 shows parks in the vicinity of the Airport. However, based on the proposed projects and the proximity of the parks, no impacts to Section 4(f) properties are anticipated. Regardless, this should be verified as projects are undertaken, since conditions may change.

7.6 ENVIRONMENTAL RESOURCES OVERVIEW SUMMARY

As stated previously, this overview does not represent a substitute for a NEPA document, but the findings summarized in this section can help inform the likely NEPA and associated environmental documentation that may ultimately be required at the time of project implementation.

7.6.1 AIR QUALITY

The Airport is in a maintenance area for PM_{2.5}. At the time of project implementation, MKE Airport will need to demonstrate General Conformity and compliance with the SIP for pollutants regulated at that time. The level of effort will need to be determined in coordination with the WI DNR and FAA.

7.6.2 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

At the time of this analysis, no known resources are evident in the project areas. Compliance with Section 106 of the National Historic Preservation Act of 1966 is required prior to implementation of projects with ground disturbance or other impacts. At that time, this requirement may involve additional field work to confirm the status of resources.

7.6.3 BIOLOGICAL

At the time of project implementation, consultation with the USF&WS and WI DNR will be necessary to confirm no listed species identified in the inventory will be adversely affected.

7.6.4 WATER RESOURCES

7.6.4.1 WATER QUALITY, SURFACE WATER, AND GROUNDWATER

Due to anticipated impacts from implementation of the MPU projects, stormwater management plans, SWPPPs, and SPCC plans will be required. The WPDES permit will need to be modified to include deicing facilities.

7.6.4.2 WETLANDS

From the National Wetland Inventory and WI DNR wetland maps, some project impacts are identified. Because of the unknown extent of grading and the age and level at which resource agency maps were developed, a field review by a biologist prior to implementation is recommended.

7.6.4.3 FLOODPLAINS

Taxiway projects associated with Runway 1L-19R and the proposed aeronautical development area east of Runway 1L-19R are located within designated FEMA flood hazard areas. Prior to implementation, floodplain analysis, permits, and a Letter of Map Revision will be required.

7.6.5 INCOMPATIBLE LAND USE

This section summarizes incompatible land uses within the RPZs for all five runways at MKE. Greater detail is provided within the narrative and exhibits found in Section 7.5.1, Runway Protection Zones. In short, incompatible land uses are identified within the majority of existing RPZs. The majority of runway ends are not proposed for modification as part of the MPU. The extension of Runway 7L-25R to the west will require coordination with the FAA at the time the project is undertaken.

Additionally, an update to the existing HLZO should be undertaken to align with airfield changes and to protect MKE airspace.

7.6.5.1 RUNWAY 1L

The only existing incompatible land use for this runway consists of the segment of College Avenue that extends through the RPZ, but it is largely mitigated by the College Avenue tunnel. No changes to the RPZ are planned.

7.6.5.2 RUNWAY 19R

The only existing incompatible land uses identified are right-of-way segments for Layton Avenue and a small segment of Brust Avenue, but these represent a low level of impact due to vehicle traffic generally flowing freely through these segments with little or no queuing. No changes to the RPZ are planned.

7.6.5.3 RUNWAY 7R

Several incompatible land uses are located within the existing approach RPZ for Runway 7R. These include the Canadian Pacific Railroad, South 6th Street, vehicle parking/staging, overhead electrical transmission lines, fuel storage, and fuel distribution facilities. No changes to the RPZ are planned.

7.6.5.4 RUNWAY 25L

Portions of the Runway 25L approach RPZ encroach noncompatible land uses comprising the Union Pacific Railroad and the We-Energies' utility right-of-way corridor. The departure RPZ for Runway 7R also extends into these areas and further east into an additional parcel of industrial land use. No changes to the RPZ are planned.

7.6.5.5 RUNWAY 7L

The Runway 7L departure RPZ is the only one identified for change as part of the improvements proposed under the MPU. Existing incompatible land uses for this RPZ consist of areas extending into Howell Avenue, a small portion extending into a commercial-use parcel, and a segment of nonsecure Airport frontage road running along the east side of Howell Avenue. Future conditions propose to extend this runway and the Runway 25R departure RPZ by 300 feet to the west (the existing Runway 7L arrival threshold will remain in its current location), into greater areas of commercial-use property and more of Howell and Edgerton Avenues and the signalized intersection of these roadways. These impacts will require coordination with the FAA at the time the project is undertaken.

7.6.5.6 RUNWAY 25R

A segment of nonsecure access road represents the only incompatible land use within this existing RPZ. The road and adjoining security fencing are proposed to be relocated outside this RPZ.

7.6.5.7 RUNWAY 13

A portion of the approach RPZ to Runway 13 extends into the right-of-way for Layton Avenue, an incompatible land use. The departure RPZ for Runway 31 extends farther northwest and into greater portions of Layton Avenue. The

Runway 31 departure RPZ also overlays a small segment of nonsecure roadway providing access to the Airport from Layton Avenue. Runway 13-31 and its associated RPZs are identified for future decommissioning as part of the MPU.

7.6.5.8 RUNWAY 31

A portion of the approach RPZ to Runway 31 extends into the Union Pacific Railroad, an incompatible land use. The departure RPZ for Runway 13 extends farther southeast and into greater portions of the Union Pacific Railroad, as well as a portion of the We-Energies' utility corridor. Runway 13-31 and its associated RPZs are identified for future decommissioning as part of the MPU.

7.6.5.9 RUNWAY 1R-19L

No incompatible land uses were identified within the RPZs to either runway end. Runway 1R-19L and its associated RPZs are identified for future decommissioning as part of the MPU.

7.6.5.10 POTENTIAL WILDLIFE ATTRACTANTS

Because the MPU's proposed projects include additional impervious area and grading, implementation will require additional stormwater management facilities and possible floodplain mitigation. Stormwater management facility and vegetation plans should be coordinated with/reviewed by a QAWB for potential attractants.

7.6.5.11 DEPARTMENT OF TRANSPORTATION SECTION 4(F) PROPERTIES

No impacts to Section 4(f) properties are anticipated, but this should be verified as projects are undertaken.