CHAPTER 7- ENVIRONMENTAL REVIEW

Introduction

This chapter provides an overview of existing environmental conditions at Minot International Airport and the immediate vicinity. This environmental review section is not intended to fulfill the requirement of environmental review required by National Environmental Policy Act (NEPA) or provide a definitive class of action determination for the proposed improvements. The purpose of this environmental review is to provide community, airport sponsor, and regulatory awareness of the importance of minimizing the environmental impacts of proposed airport development and to provide a general indication of the likely need for further investigation. Appropriate environmental documentation in accordance with FAA Order 5050.4B, *NEPA Instructions for Airport Actions* and FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* is required to be completed prior to commencing with project actions.

For purposes of this study area, key environmental resources are described in the following sections.

Environmental Conditions

Biological Resources

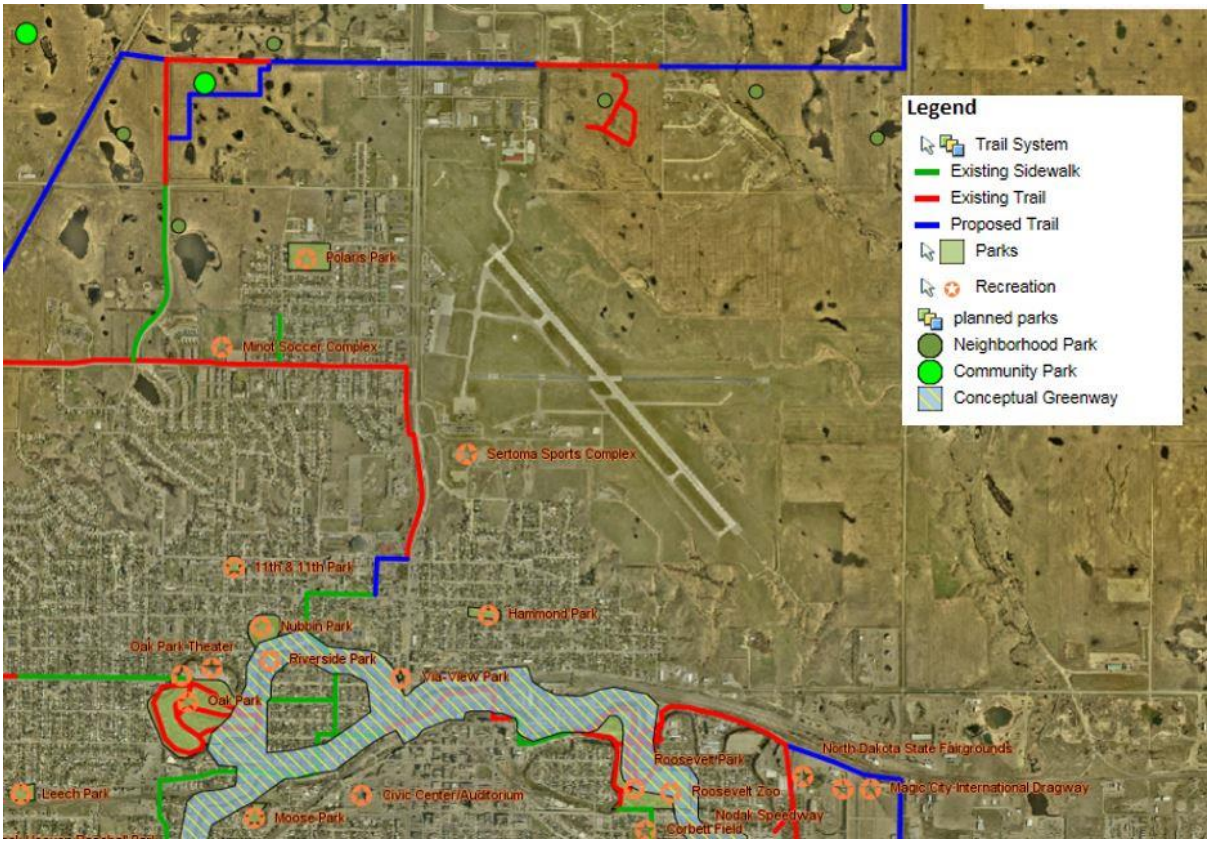
Biological resources include flora and fauna that are present in an area. The US Fish & Wildlife Service (USFWS) website indicated that 6 species and 1 critical habitat occur in Ward county, ND. These include two endangered species: Whooping crane and the Gray wolf; four threatened species: Piping plover, Dakota skipper, Rufa red knot, and the Northern long-eared bat; and one critical habitat: Piping plover habitat. In accordance with Section 7 of the Endangered Species Act, consultation with USFWS to determine the potential for occurrences of federally-listed threatened and endangered species in the project area would be necessary for future projects at Minot International Airport. Prior to project implementation, further analysis is required to identify the potential for fish, wildlife and plant impacts as a result of the project.

Department of Transportation Section 4(f) and Section 6(f)

Section 4(f) of the Department of Transportation Act of 1966, as codified in the 49 U.S.C. § 303, provides that the Secretary shall not approve any program or project which requires the use of publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge of national state, or local significance, or land of an historic site of national, state, or local significance as determined by the officials having jurisdiction thereof, unless: (1) there is no feasible or prudent alternative to the use of such land, and (2) such program or project includes all possible planning to minimize harm resulting from the use.

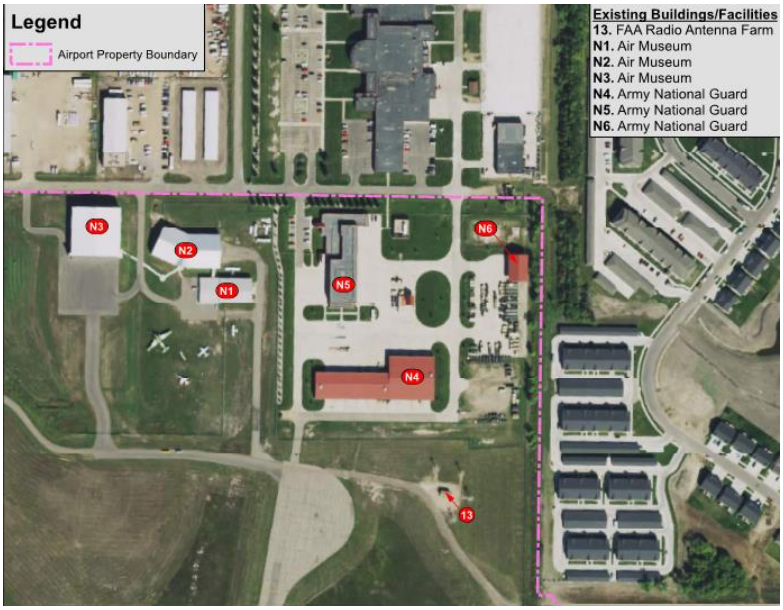
There are publicly owned lands from parks and recreation areas within the immediate vicinity of the Airport. Minot Soccer Complex and Polaris Park are located west of the Airport. Keith White Sertoma Softball Complex is located immediately south of the terminal parking lots. This complex is owned by the City of Minot and operated by the Sertoma Club of Minot. There is an existing trail (red lines on **Exhibit 7-1, Parks and Recreation Areas**) located west of the Airport that connects to other existing and proposed trails (blue lines) in Minot. Hammond Park and Roosevelt Park are located about one half mile south of the Airport. According to City of Minot Facilities Map several parks areas are planned (Green dots) for north Minot.

Exhibit 7-1 – Parks and Recreation Areas



Source: City of Minot Facilities Map

The privately owned Dakota Territory Air Museum is also located on publicly owned Airport Property. Since the museum is privately owned and operated, it would not normally be considered under Section 4(f) but coordination should be considered to verify, if a museum project is pursued in the future. No improvements to the Museum facilities are planned in this study. The Roosevelt Park Zoo, which is owned by the City of Minot, is located about 0.66 miles one half mile to the south of Minot International Airport. Publicly owned museums and zoos are not normally considered as parks, recreation areas, or wildlife and waterfowl refuges and are therefore not subject to Section 4(f), unless they are significant historic sites. However, if proposed improvements at the airport would impact either of these properties,



Dakota Air Museum and Army National Guard

additional evaluation will be required to determine if the primary purpose of these facilities is to serve as a significant park or recreation area. At this time that does not appear to be the case.

Proposed improvements are not anticipated to impact existing publicly owned lands from parks, recreation areas, refuge areas, but could possibly impact historic sites within the vicinity of the airport; therefore, further analysis is required. Please refer to the ***Historical, Architectural, Archeological, and Cultural Resources*** section for more information.

Section 6(f) provides funds for buying or developing public use recreational lands through grants to local and state governments. Section 6(f)(3) prevents conversion of lands purchased or developed with Land and Water Conservation Funds (LWCF) to non-recreation uses, unless the Secretary of the Department of the Interior (DOI), through the National Park Service (NPS), approves the conversion. Conversion may only be approved if consistent with the comprehensive statewide outdoor recreation plan in force when the approval occurs, and the converted property is replaced with other recreation property of reasonably equivalent usefulness and location and at least equal fair market value. No LWCF grant funds were used to purchase or develop land on the existing airport. There are no proposed airport improvements that would convert existing 6(f) funded projects therefore, further analysis is not required for projects on existing airport property. It is recommended that an updated search for LWCF funded projects be done prior to development projects involving property outside the existing property boundary.

Hazardous Materials, Solid Waste, and Pollution Prevention

FAA Order 5050.4B requires an analysis of the proposed improvements and their associated solid waste impacts as they relate to waste from the airfield development, waste from terminal area development, and the location of local waste disposal facilities.

The proposed improvements at Minot International Airport are not likely to produce any significant increases in solid waste collection, control, or disposal, other than what is associated with construction activity. Airport Management has not recorded any spills and no signs or evidence of any spills are prevalent upon visual examination, so there are no hazardous materials believed to be in the area. If hazardous materials are encountered, project work will be suspended in the impacted area and the NDDOH will be notified within 24 hours.

HAZARDOUS MATERIALS

The Toxic Release Inventory (TRI) had two listings for Ward County. This area is located approximately 2 miles southeast of the airport at Strata Concrete Minot in which Lead was released and Nitrate compounds were released during two separate events. Underground Storage Tanks (USTs) and Above Ground Storage Tanks (ASTs) were noted in Minot, ND. Three of the sites noted contained USTs and ASTs: Incident #4116, #3517, #3515. The spills have been contained, and the site file is archived at the North Dakota Department of Health (NDDOH).

If land acquisition is required, then prior to the acquisition, FAA recommends that an Environmental Due Diligence Audit (EDDA) be performed. An EDDA includes a more detailed review of an area, relative to NEPA-level review, for the possible presence of environmental contamination.

SOLID WASTE

The airport has not produced significant amounts of solid waste including garbage, refuse or sludge as compared to the broader community. FAA requires a Solid Waste Management Plan to be developed as part of this Airport Master Plan study. A Solid Waste study is located in **Appendix U: Airport Solid Waste and Recycling**. The study recommends the airport recognize and establish four waste streams to handle waste and increase recycling opportunities that would include separating trash, plastics, paper, and cardboard. These are based on the best ways that recyclables can be handled to minimize cost.

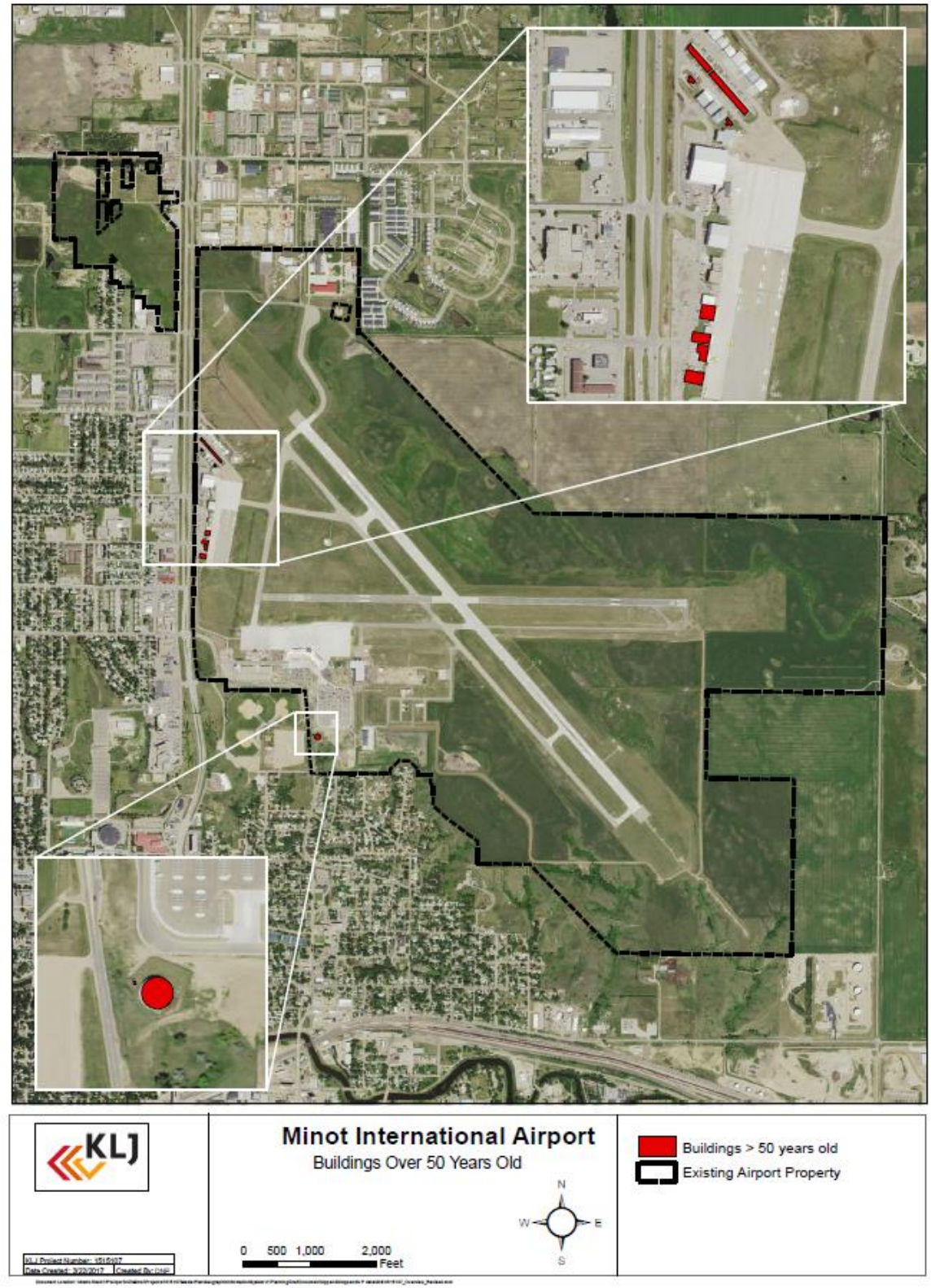
Historical, Architectural, Archaeological, and Cultural Resources

Before a project that involves land disturbance is implemented, an analysis to identify the potential for previously identified cultural resources will need to be conducted for the project area. In recent years all of the Airport's existing property has been surveyed by archaeologist and traditional cultural specialists from area tribes. A number of previously recorded sites are located within the Airport's boundaries, however most of these have been determined to be *Not Eligible* and would not require avoidance. Additionally, there are several prehistoric stone features located on the property. Due to the sensitive nature of these features their location have not been included in this document.

Coordination with the State Historic Preservation Office (SHPO) and the tribes would be necessary for all projects involving new land disturbance. Additionally, any project affecting buildings that have the potential to be listed in the National Register of Historic places would require correspondence with SHPO. Please see **Exhibit 7-2 - Buildings Over 50 Years Old** for buildings over 50 years of age that are located on Airport property that will need further review.

Activities undertaken to address discoveries will comply with NEPA, the American Indians Religions Freedom Act, NAGPRA, and the Archaeological Resources Protection Act, as appropriate to the situation. Further review regarding potential cultural sites historic properties will be required at the environmental documentation phase.

Exhibit 7-2 – Buildings Over 50 Years Old



Land Use

Compatible land uses are those that typically are not influenced by normal airport operations. The compatibility of existing land uses in the vicinity of an airport is usually associated with safety concerns and the extent of noise impacts occurring from airport property. Incompatible land uses are typically items such as fuel storage facilities, areas of public assembly, tree rows, high density residential areas, and areas that have the potential to attract hazardous wildlife. In general, Minot International Airport is surrounded by prairie, industrial and residential property, natural and artificial water features, open spaces, agriculture, and human development. Approximately 16 acres of the existing approach and departure RPZ west of Runway 8 -26 include incompatible land uses consisting of approximately 16 residences, a gas station, two restaurants and other businesses.

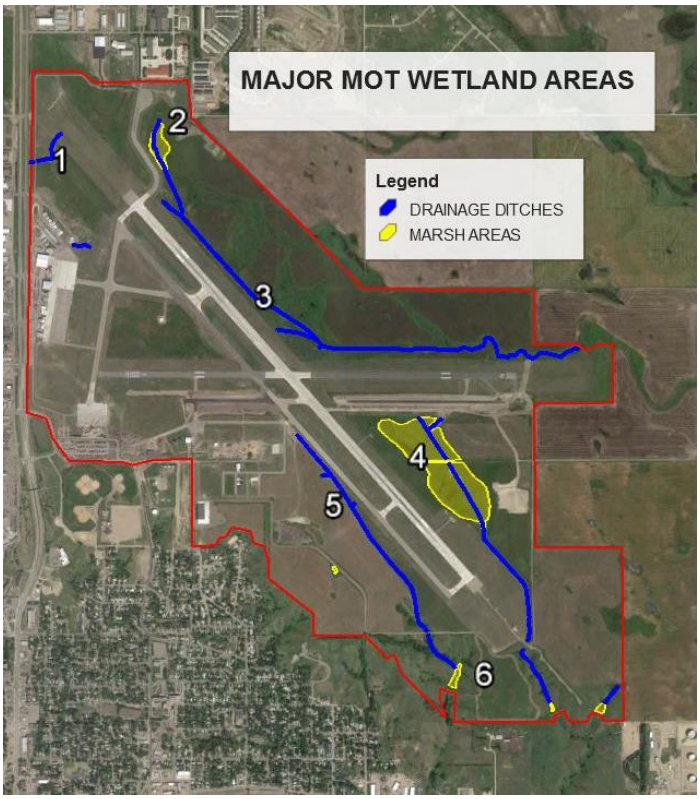
FAA AC 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports, recommends wildlife attractants be located 10,000 feet away from airport operation areas for turbine-powered aircraft. Land uses that could be considered wildlife attractants may include small wetlands, freshwater ponds, and agricultural crops that surround the Airport. Please see **Exhibit 7-4 - National Wetland Inventory Map** and **Exhibit 7-5 – Wetland Classification Map**.

WILDLIFE HAZARDS

On a national level, FAA has implemented procedures and guidelines to mitigate wildlife damages to aircraft and aviation operations. Wildlife collisions in the nation have increased over the past two decades and reporting has increased awareness of hazards to human health, safety and financial losses.

A year-long Wildlife Hazard Assessment (WHA) of the Minot International Airport was completed in 2014-2015 by a qualified Airport Wildlife Biologist. The WHA measured the wildlife activity present at the airport. Please see the ***Wildlife Hazard Assessment*** and **Exhibit 7-3 Drainage/Marsh Area from WHA**. Recommendations from this assessment were identified as operational adjustments and capital projects. Capital projects were prioritized according to the highest expected potential to reduce wildlife hazards at the airport and include:

Exhibit 7-3 – Drainage/Marsh Area from WHA



Priority Ranking	Recommendation
1	Modify and Improve Drainage Ditches
2	Modify Airfield Marsh
3	Replace Alfalfa with Grass
4	Remove Airfield Trees and Shrubs
5	Increase Perimeter Fence Height to Ten Feet

Source: 2014-2015 Wildlife Hazard Assessment of the Minot International Airport

A Wildlife Hazard Mitigation Plan was compiled in 2016 and approved in 2018 to address the responsibilities, policies, and procedures necessary to reduce wildlife hazards at airports. Wildlife species of concern and their various management/control options are listed in the ***Wildlife Hazard Mitigation Plan***. Further analysis of the environmental impacts will be required as part of an Environmental Assessment that is being developed for future capital projects related to drainage ditches and marshes identified in these two documents.

Noise and Noise-Compatible Land Use

Noise emitted from aircraft can significantly affect the well-being of people living or working near an airport. The FAA requires noise studies for certain projects. If a project involves Airplane Design Groups I and II and have forecasted operations of less than 90,000 annual propeller operations or 700 annual adjusted jet operations, than no further noise analysis is required. Minot International Airport does not exceed the annual propeller operations but does exceed the annual adjusted jet operations, therefore a noise analysis may be required.

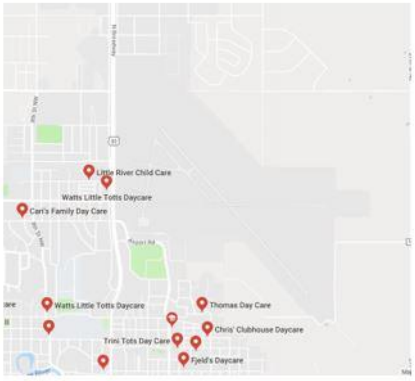
Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

Social impacts from a project depend on how that project affects the character, habits, and economic conditions of the people living within the affected area of the project. The project's effects on business, employment, transportation, utilities, etc. are factors that affect the social climate of a community. Any action that would either adversely or beneficially affect the factors stated above would be considered as having some type of social impact on the residents of a particular community. Off-airport actions include the acquisition of land use and airspace/avigation easements and potential future obstruction mitigation. The proposed improvements involve land acquisition, and land currently zoned agricultural would be rezoned for the airport. Further analysis is required.

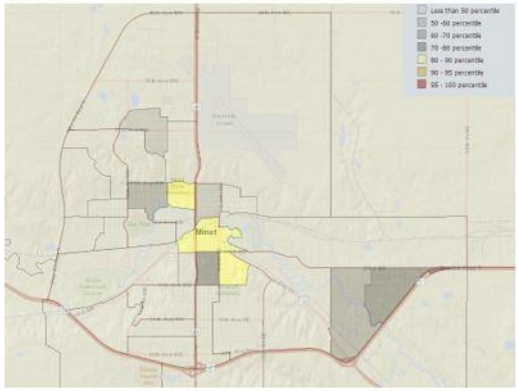
Exhibit 7-4 – Schools, Day Care Centers, and Low Income/Minority Neighborhoods

Schools

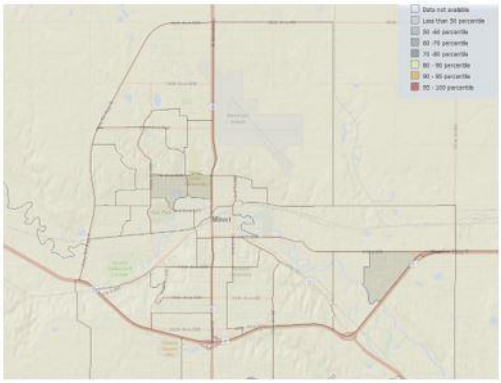
Daycare Centers



Low Income Neighborhoods



Minority Neighborhoods



Source: City of Minot Facilities Map, Google Maps, and US EPA'S Environmental Justice Screening and Mapping Tool

Water Resources - Wetlands

Wetlands are defined in Executive Order 11990, Protection of Wetlands, as those areas that are inundated by surface or groundwater with a frequency to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland as outlined in the US Army Corps of Engineers Wetland Delineation Manual are hydric soils, hydrophytic vegetation, and hydrology.

There are wetlands in the National Wetland Inventory (NWI) located on the Airport property. Please see **Exhibit 7-5 - National Wetland Inventory Map**. All wetlands would require delineation to clearly identify their boundaries. In addition to maintaining water quality in rivers and recharging groundwater among other positive benefits, wetlands may have the potential to attract wildlife that can be hazardous to aircraft using the Airport.

Projects with wetland impacts may need to be reviewed in an Environmental Assessment (EA) to complete the NEPA documentation process. The decision to prepare an EA is not dependent on the U.S Army Corps of Engineers (USACE) jurisdiction over these resources but depends on the context and intensity of the impacts to them. Three wetlands delineations were completed for the Airport and submitted to the USACE in 2017, 2012, and 2010. The USACE determined several wetlands to be jurisdictional Waters of the United States at that time, as shown on **Exhibit 7-7 - Wetland Classification Map**. Please note that in November 2017 a new wetlands delineation was completed by another firm, Carlson McCain, for the Minot International Airport. While this was not completed as a part of this specific master plan, the findings were added to the **Exhibit 7-10 Summary of Constraints to Future Development** located at the end of this chapter.

Coordination with applicable resource agencies will be necessary prior to project implementation to further analyze the impacts the proposed improvements would have on wetlands. As such, further analysis is required for future projects.

Exhibit 7-5 - National Wetland Inventory Map

Water Resources - Floodplains

Floodplains constitute lands situated along rivers and their tributaries that are subject to periodic flooding on the average interval of 100 years or less. Minot International Airport is not located within a 100-year floodplain; However, an area in the southeast side of the Airport is mapped as Zone X (Other Flood Areas). Defined as "Areas of 500-year flood: areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile; and area protected by levees from 100-year flood. Therefore, further analysis is required. Please see **Exhibit 7-6 – FEMA Flood Insurance Rate Map**.

Exhibit 7-6 FEMA Flood Insurance Rate Map

Source: City of Minot Facilities Map

Water Resources – Surface and Ground Waters

The Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, provides the authority to establish water quality standards, control discharges into surface and subsurface waters, develop waste treatment management plans and practices, issue permits for discharges (Section 402) and for dredged or fill material (Section 404).

Airport activities can affect water quality. This is mainly due to stormwater runoff from paved areas. Providing treatment for stormwater runoff from runway, taxiway and apron areas through the use of best management practices and grassed swale areas would minimize potential impacts to water quality. Stormwater management will be of particular emphasis with the additional of large expanses of pavements for projects such as expanded aircraft parking/de-icing aprons.

The stormwater on the Airport flows to the South into multiple detention ponds and to the East into Livingston Creek. Please see the detention pond locations on **Exhibit 7-8 - Minot Detention Airport Ponds**. The airport completed a Stormwater Management Plan in April 2013 based on changes to the airfield configuration made as part of the new terminal building, apron, and parking areas. This terminal area development increased impervious surface area on airport property and increased runoff. As a result of this plan, existing natural drainage coulees were determined to be undersized and in 2015 the airport began a study to review design options for the rehabilitation and expansion of these natural coulees into Detention Ponds A and B.

A National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activities may be required from the NDDOH for any of the master plan's proposed improvements if the area of disturbance exceeds one acre. Construction permit requirements would need to be reviewed during the environmental documentation phase. Further coordination with the NDDOH and the City of Minot's Engineering Department, will be needed.

Exhibit 7-7– Wetland Classification Map

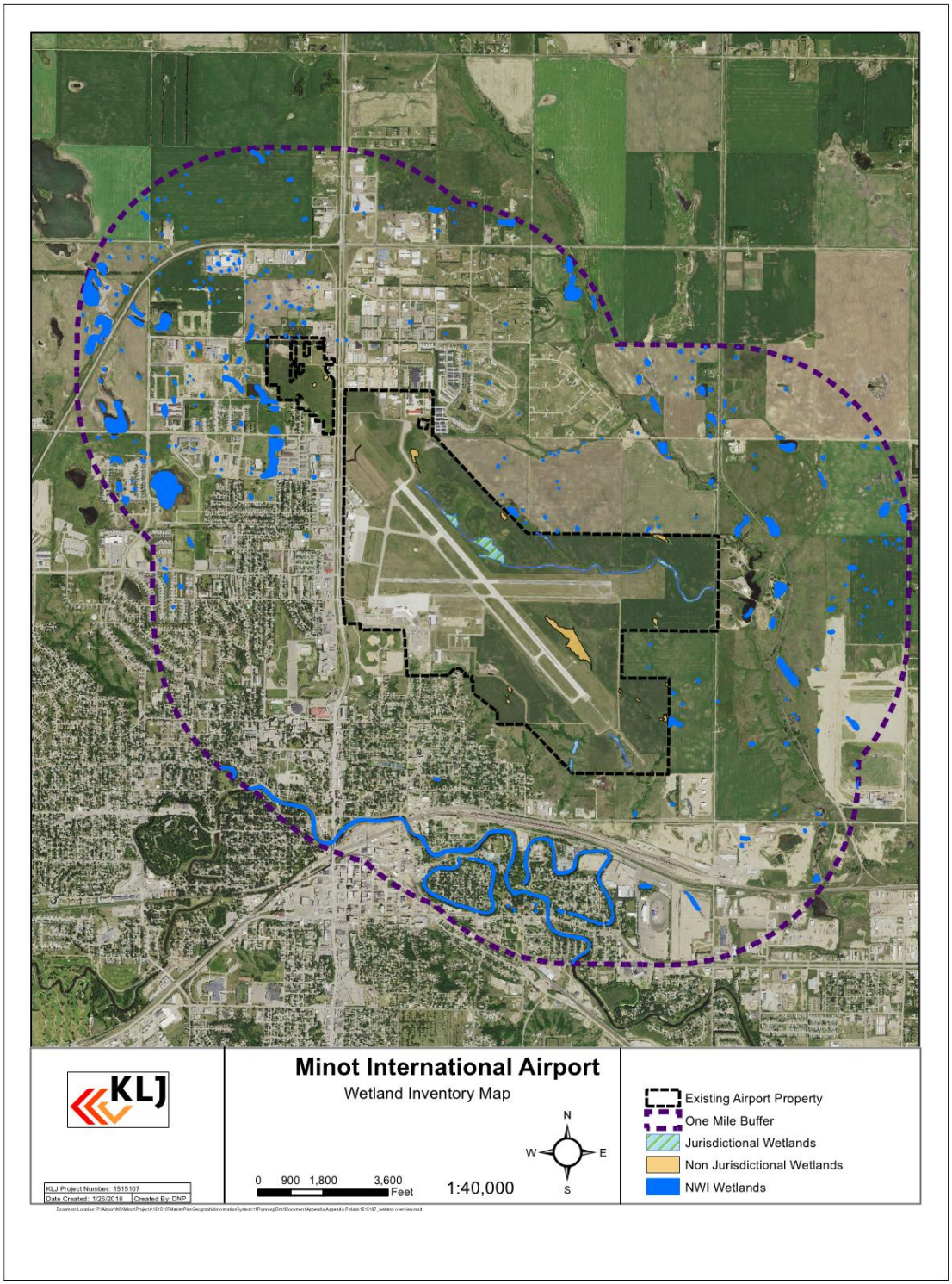
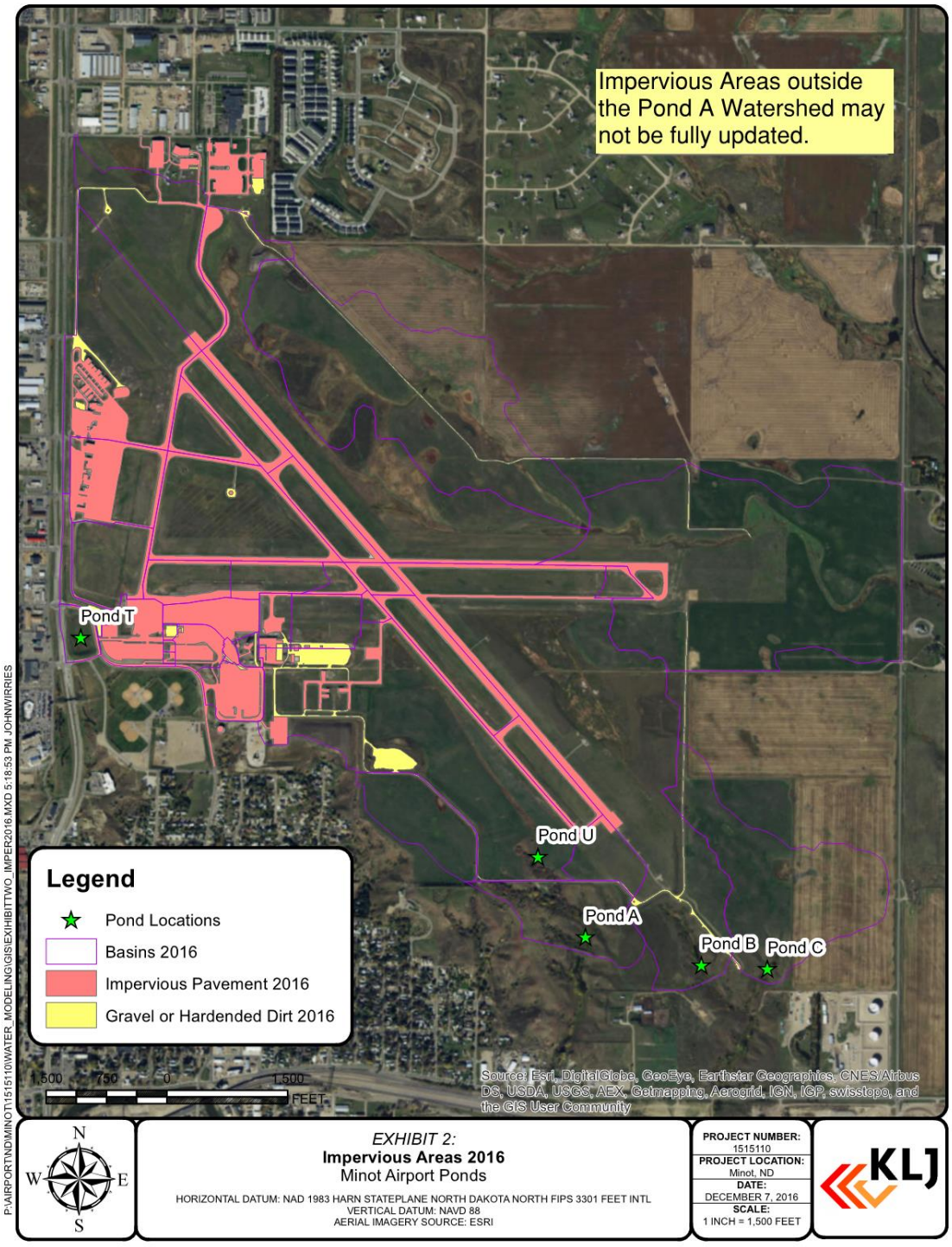


Exhibit 7-8 - Minot Detention Airport Ponds



Environmental Consequences Not Relevant to the Proposed Improvements

Air Quality

Areas identified by EPA as non-attainment areas may require additional analysis if one (1) or more of the six Ambient Air Quality Standards are exceeded. Minot International Airport is not located in a Clean Air Act non-attainment or maintenance area.

The emission inventories at the Airport are at low operation levels and are not likely to produce pollutant discharges high enough to cause degradation to the existing air quality. FAA Air Quality Handbook recommends an air quality analysis if the airport is either a commercial service airport with greater than 1.3 million annual passengers and more than 180,000 general aviation annual operations. The forecasted operations at the Minot International Airport are beneath these levels thus an air quality analysis is not required.

Temporary increases in emissions due to construction will be mitigated through the use of Best Management Practices (BMP's).

Climate

Although there are no federal standards for aviation-related Greenhouse Gas (GHG) emissions, it is well-established that GHG emissions can affect climate. The Council on Environmental Quality (CEQ) has indicated that climate should be considered in NEPA analyses. As noted by CEQ, however, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand."

With respect to GHG emissions, aviation activity at Minot International Airport represents a small percentage of U.S. and global emissions; therefore, no further review is required.

Coastal Resources

Coastal Resources include Coastal Barriers and Coastal Zone Management. Coastal Barriers include islands that protect the mainland from storm or hurricane-driven winds or waves by providing a buffer to the shoreline. Coastal Barriers protect fish, wildlife, human life, and property along coasts and shorelines. Facilities are not recommended to be built within the Coastal Barrier Resource System (CBRS). Coastal Zone Management includes development provisions actions to protect major shorelines and associated recreational, historical, cultural, and aesthetic values. The project area is not located in a coastal zone as defined in the Coastal Zone Management Act of 1972. No further analysis is required.

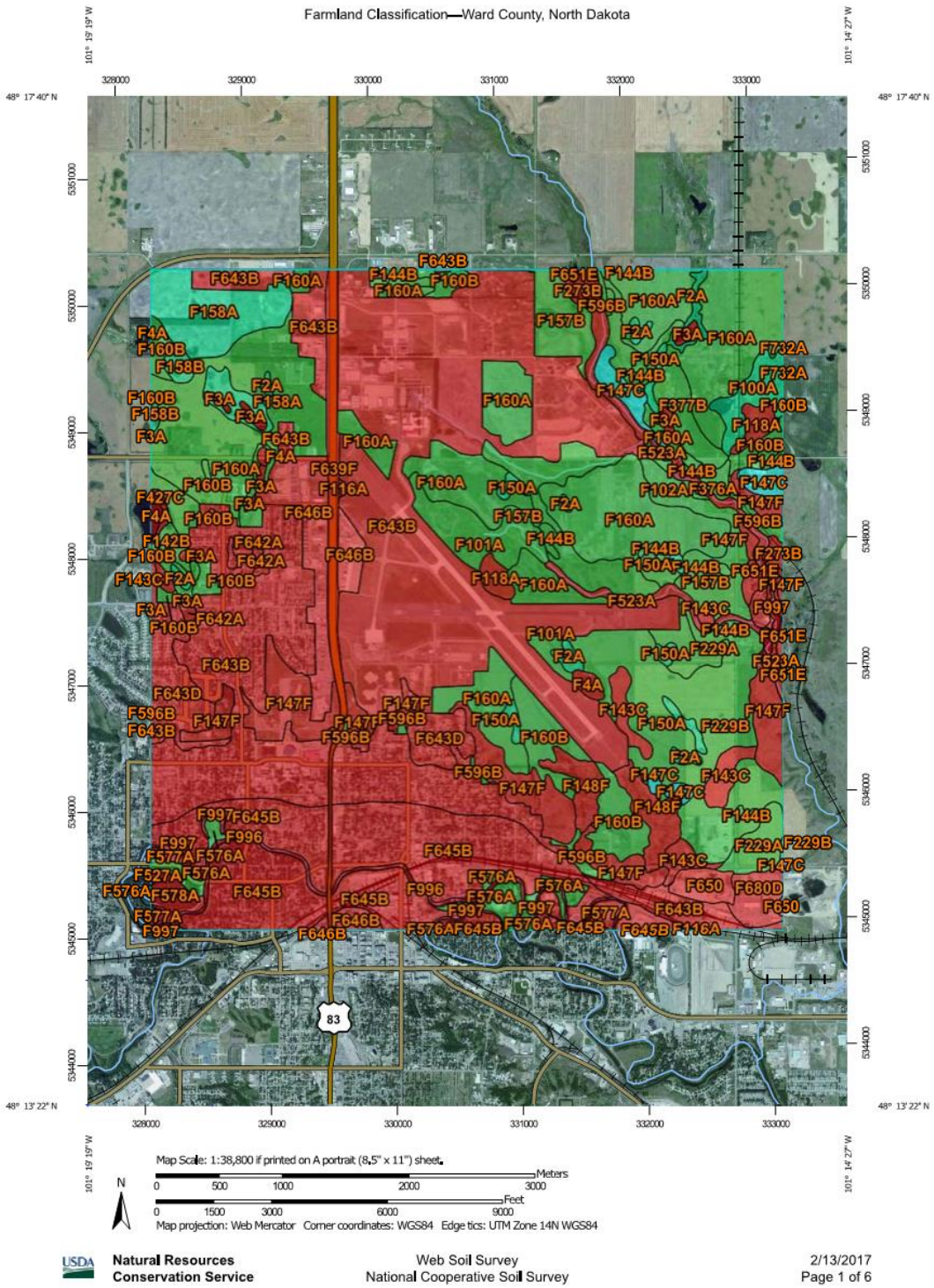
Farmland

Impacts to farmlands considered to be prime, unique, or statewide or locally important need to be considered under NEPA. The Farmland Protection Policy Act (FPPA) of 1981 provides protection to prime and unique farmlands. The Act defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. Unique farmland is farmland that is used for production of specific high value food, feed, and fiber crops. Statewide farmland is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops, and is determined by state agencies. Locally important

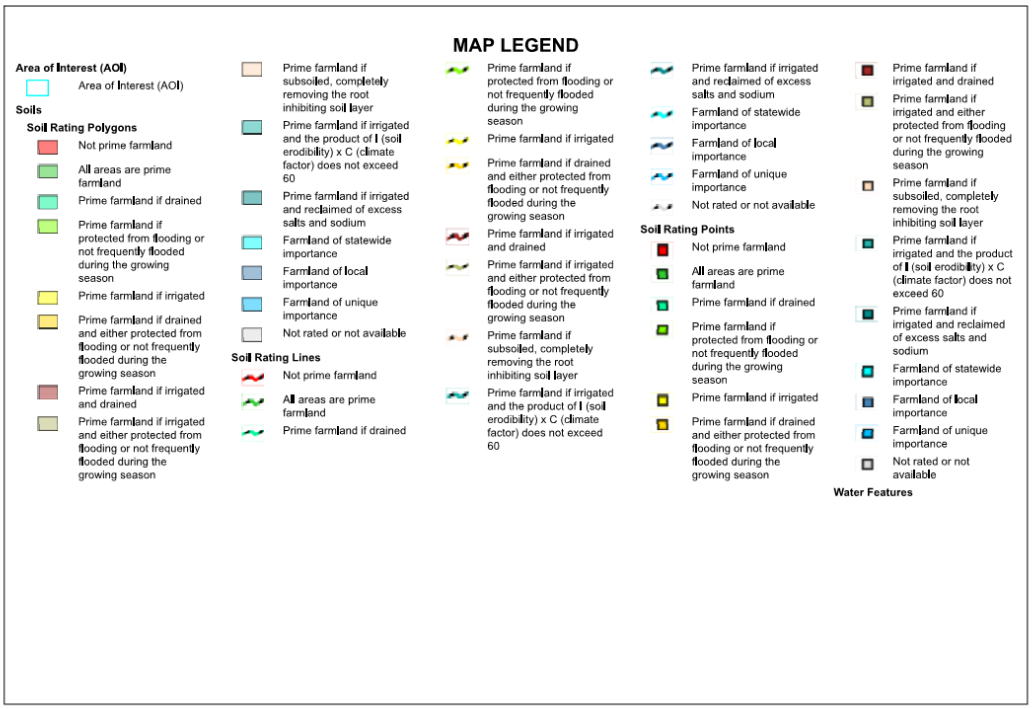
farmland is where the production of food, feed, fiber, forage, and oilseed crops, are not identified as having national or statewide importance but identified by local agencies as important.

A search of the USDA Natural Resources Conservation Service (NRCS) web soil survey identified farmlands within 1 mile of the airport that are classified as prime farmland if irrigated and farmland of statewide importance. Please see **Exhibit 7-9 - Farmland Classification Map**. Activities that may be subject to the FPPA include highway construction projects, airport expansions, railroad construction, telephone and electric cooperative construction projects, hydroelectric projects, federal agency projects that convert farmland, and other projects completed with Federal assistance. Activities not subject to FPPA include Federal permitting and licensing, projects completed without Federal agency assistance, projects already in urban development or water storage areas, construction within existing right of way purchased prior to August 1984, national defense projects, and construction of minor secondary structures. If farmland is being acquired for airport expansion, then further coordination with NRCS would be required, projects located on existing airport property would not require coordination with NRCS for farmland impacts.

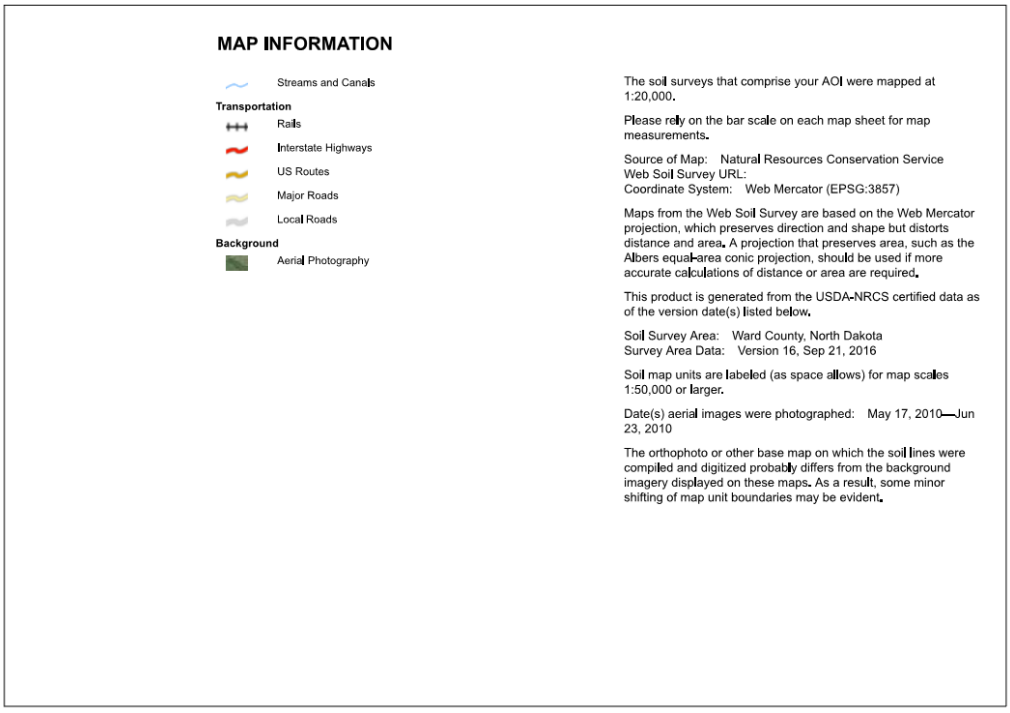
Exhibit 7-9 - Farmland Classification Map



Farmland Classification—Ward County, North Dakota



Farmland Classification—Ward County, North Dakota



Farmland Classification

Farmland Classification— Summary by Map Unit — Ward County, North Dakota (ND101)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
F2A	Tonka silt loam, 0 to 1 percent slopes	Prime farmland if drained	42.2	0.7%
F3A	Parnell silty clay loam, 0 to 1 percent slopes	Not prime farmland	25.1	0.4%
F4A	Southam silty clay loam, 0 to 1 percent slopes	Not prime farmland	19.1	0.3%
F100A	Hamerly-Tonka complex, 0 to 3 percent slopes	Prime farmland if drained	49.8	0.8%
F101A	Hamerly-Wyard loams, 0 to 3 percent slopes	All areas are prime farmland	114.6	1.8%
F102A	Hamerly loam, 0 to 3 percent slopes	All areas are prime farmland	3.2	0.0%
F116A	Easby clay loam, 0 to 1 percent slopes	Not prime farmland	2.1	0.0%
F118A	Vallers loam, saline, 0 to 1 percent slopes	Not prime farmland	35.1	0.5%
F142B	Svea loam, 3 to 6 percent slopes	All areas are prime farmland	7.4	0.1%
F143C	Barnes-Buse-Langhei loams, 6 to 9 percent slopes	Not prime farmland	69.0	1.1%
F144B	Barnes-Buse loams, 3 to 6 percent slopes	All areas are prime farmland	41.1	0.6%
F147C	Buse-Barnes-Darnen loams, 3 to 9 percent slopes	Farmland of statewide importance	56.2	0.9%
F147F	Buse-Barnes-Darnen loams, 9 to 35 percent slopes	Not prime farmland	293.5	4.5%
F148F	Buse-Barnes-La Prairie, occasionally flooded loams, 6 to 35 percent slopes	Not prime farmland	83.7	1.3%
F150A	Hamlet-Tonka-Wyard complex, 0 to 3 percent slopes	Prime farmland if drained	44.1	0.7%
F157B	Barnes loam, 3 to 6 percent slopes	All areas are prime farmland	295.7	4.6%
F158A	Hamlet-Hamlet, thin-Tonka complex, 0 to 3 percent slopes	Prime farmland if drained	150.8	2.3%
F158B	Hamlet-Hamlet, thin-Tonka complex, 0 to 5 percent slopes	Prime farmland if drained	15.7	0.2%

Farmland Classification— Summary by Map Unit — Ward County, North Dakota (ND101)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
F160A	Hamlet-Hamlet, thin loams, 0 to 3 percent slopes	All areas are prime farmland	1,014.6	15.6%
F160B	Hamlet-Hamlet, thin loams, 1 to 5 percent slopes	All areas are prime farmland	223.3	3.4%
F229A	Heimdal-Emrick loams, 0 to 3 percent slopes	All areas are prime farmland	72.3	1.1%
F229B	Heimdal-Emrick loams, 3 to 6 percent slopes	All areas are prime farmland	353.2	5.4%
F272E	Sioux-Arvilla-Renshaw complex, 9 to 25 percent slopes	Not prime farmland	3.0	0.0%
F273B	Sioux-Arvilla complex, 2 to 6 percent slopes	Not prime farmland	24.3	0.4%
F376A	Embden fine sandy loam, 0 to 2 percent slopes	All areas are prime farmland	14.7	0.2%
F377B	Embden-Egeland fine sandy loams, 2 to 6 percent slopes	All areas are prime farmland	47.5	0.7%
F427C	Wamduska-Mauvais complex, 0 to 9 percent slopes	Not prime farmland	5.8	0.1%
F523A	Lowe-Fluvaquents, channeled complex, 0 to 2 percent slopes, frequently flooded	Not prime farmland	102.2	1.6%
F527A	Ludden silty clay, very poorly drained, 0 to 1 percent slopes, frequently flooded	Not prime farmland	2.6	0.0%
F576A	Velva loam, moist, 0 to 2 percent slopes, occasionally flooded	All areas are prime farmland	70.7	1.1%
F577A	Velva, moist-Fluvaquents, channeled fine sandy loams, 0 to 2 percent slopes, frequently flooded	Not prime farmland	27.1	0.4%
F578A	Velva fine sandy loam, moist, wooded, 0 to 2 percent slopes, frequently flooded	Not prime farmland	13.7	0.2%
F596B	Darnen loam, 2 to 6 percent slopes	All areas are prime farmland	30.1	0.5%
F639F	Orthents-Aquents-Urban Land, highway complex, 0 to 35 percent slopes	Not prime farmland	84.0	1.3%

Farmland Classification— Summary by Map Unit — Ward County, North Dakota (ND101)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
F642A	Urban land-Aquents complex, 0 to 3 percent slopes	Not prime farmland	12.3	0.2%
F643B	Urban land-Udorthents loamy complex, 0 to 6 percent slopes	Not prime farmland	1,969.1	30.4%
F643D	Urban land-Udorthents loamy complex, 6 to 15 percent slopes	Not prime farmland	125.8	1.9%
F645B	Urban land-Udifluvents loamy complex, 0 to 6 percent slopes	Not prime farmland	641.2	9.9%
F646B	Urban land, 0 to 6 percent slopes	Not prime farmland	155.9	2.4%
F650	Pits, gravel and sand	Not prime farmland	30.4	0.5%
F651E	Udarents loamy, abandoned gravel pits, 0 to 25 percent slopes	Not prime farmland	15.4	0.2%
F680D	Barnes-Sioux complex, 6 to 15 percent slopes	Not prime farmland	41.0	0.6%
F732A	Swenoda-Barnes fine sandy loams, 0 to 3 percent slopes	All areas are prime farmland	0.1	0.0%
F996	Water	Not prime farmland	29.1	0.4%
F997	Water, intermittent	Not prime farmland	27.3	0.4%
Totals for Area of Interest			**6,484.8**	**100.0%**

Environmental Issues Generally Not Applicable

The following issues: Natural Resources and Energy, Visual Impacts, Floodplains, and Wild and Scenic Rivers are generally not applicable to the Minot International Airport.

Natural Resources and Energy

Impacts on energy supplies and natural resources are related to changes of stationary facilities, such as airfield lighting or terminal building heating and expansion, as well as any increase of fuel consumption by aircraft or ground vehicles. Proposed improvements at Minot International Airport would require additional energy, but are not anticipated to cause significant impacts to energy supplies or natural resources. No further analysis is required.

Visual Impacts

The aesthetic value of an area is influenced by its landscape and the viewer's response to the view, scenic resource, or man-made feature. The extent of potential visual contrast/compatibility effects with adjacent landforms and land uses are addressed from the vantage point of those looking to an airport from outside the system.

Wild and Scenic Rivers

The Wild and Scenic Rivers Act of 1968, as amended, identified rivers within the United States that are eligible to be included in a system afforded protection, which are free flowing and possessing outstandingly remarkable scenic recreational, geologic, fish and wildlife, historic, cultural or other similar values. Minot International Airport is not located near a wild or scenic river. Therefore, no further analysis is required.

Conclusion

The information collected and documented in this environmental overview provides a baseline foundation to update the Minot International Airport long-range plan. This information was used in helping determine viable alternatives in the development of this master plan and can be used with other planning efforts. Known environmental areas of concern will be avoided, if possible, and if unable to be avoided all efforts to minimize impacts will be reviewed and analyzed to the best extent possible. This information will feed into the alternative and implementations chapters to determine how facilities will meet the projected airport needs based on aviation activity forecasts.

Environmental Summary

The Environmental Review Summary identified in **Table 7-1** summarizes the potential environmental impacts identified in the prior sections of this Chapter. This table is intended to give a general indication of the likely need for further environmental analysis. Additional environmental investigation is necessary to determine possible impacts associated with the improvement area.

At the appropriate time, the FAA would decide whether, and to what extent, any additional investigation would be performed. Based on findings of this environmental review, it is estimated that further environmental analysis is required for the proposed improvements. See also **Exhibit 7-10 Summary of Constraints for Future Development**[1]**.**

[1] The wetland delineation in Exhibit 7-9 Summary of Constraints for Future Development is from updated findings compiled by Carlson McCain in a report dated November 16, 2017.

Table 7-1 – Environmental Review Summary

NEPA Impact Category	Further Analysis Required
Air Quality	NO
Biological Resources	YES
Climate	NO
Coastal Resources	NO
Department of Transportation Act Section 4(f)	YES
Farmlands	YES
Floodplains	YES
Hazardous Materials, Pollution Prevention, and Solid Waste	YES
Historical and Cultural Resources	YES
Land Use	YES
Natural Resources and Energy Supply	NO
Noise	YES
Socioeconomic Impacts and Environmental Justice	YES
Surface and Ground Water	YES
Visual Impacts	NO
Wetlands	YES
Wild and Scenic Rivers	NO

Source: KLJ Analysis, FAA Order 1050.1F, Environmental Impacts: Policies and Procedures

NEPA Environmental Review Process

Every Federal action requires an environmental review per NEPA. Actions shall be thoroughly evaluated and coordinated with resource agencies during the environmental review phase. Impacts should be avoided whenever possible, minimized, or mitigated as a final option. Federal actions fall into one of three types of actions:

- **Categorical Exclusion (CATEX):** This environmental documentation is used for actions that do not normally require an Environmental Assessment (EA) or Environmental Impact Statement (EIS), because they do not individually or cumulatively have a significant effect on the human and/or natural environment. Documentation required includes either simple documentation or the completion of a checklist with supporting documentation certifying that the action will not exceed any environmental impact thresholds.

- **Environmental Assessment (EA):** Typical actions that require an EA are those that are not categorically excluded or actions that may result in extraordinary circumstances such as impacts to wetlands, historical properties, or floodplains. EA documentation required here includes a condensed or comprehensive environmental analysis of the proposed action and alternatives, and the anticipated impacts from the proposed action. Agency review and coordination of the proposed action and impacts is required. The decision document proceeded after this analysis if no significant impacts are determined is a Finding of No Significant Impact (FONSI) issued by FAA, which is typically valid for three years.

- **Environmental Impact Statement (EIS):** Actions that require an EIS include those that will have a significant impact to the quality of the human and/or natural environment. An EIS may also be triggered if an EA concludes that the project will have a significant impact. This document provides in-depth impact and cumulative analyses of all proposed alternatives. The document published once a decision has been made on the alternative (typically the

alternative that achieves the actions goals but has the least impacts) to move forward with is a Record of Decision (ROD). The EIS is valid for a period of three years.

NEPA Documentation

Based on the preliminary environmental evaluation completed in this chapter and the anticipated major short, intermediate, and long-term projects in the Master Plan's 20-year implementation plan, **Table 7-2** has been prepared to document the anticipated environmental documentation necessary to proceed with the proposed actions. The ultimate decision on what documentation may be required for each proposed action will be determined by the FAA. All environmental reviews must be completed prior to initiating project design beyond 25 percent.

Table 7-2 – Environmental Documentation

Proposed Action(s)	Anticipated Environmental Documentation
Short-Term Improvements (2018-2022)	
ARFF station rehabilitation	Simple CATEX
General aviation apron reconstruction	Expanded CATEX (Pending Architectural Review)
QTA facility	Expanded CATEX (Pending Cultural & Historical Review)
Landside access road and parking for FBO and GA area	Expanded CATEX
Intermediate-Term Improvements (2023-2027)	
Runway rehabilitation	Simple CATEX
T-hangar development	Expanded CATEX
Cargo apron replacement	Expanded CATEX
Long-Term Improvements (2028-2037)	
Taxiway rehabilitation	Simple CATEX
Parking lot refurbishment	Simple CATEX
General aviation apron construction	Expanded CATEX or EA (Pending Architectural Review)
Perimeter fence replacement	Expanded CATEX
Runway extension	Environmental Assessment

Source: KLJ Analysis

Exhibit 7-10– Summary of Constraints for Future Development