MICHIGAN DEPARTMENT OF TRANSPORTATION

OFFICE OF AERONAUTICS

FINDING OF NO SIGNIFICANT IMPACT

for

RUNWAY 8/26 SHIFT, SHORTENING, AND APPROACH CLEARING

at

OAKLAND/SOUTHWEST AIRPORT

NEW HUDSON, MICHIGAN

May 2024

1.0 Introduction

This Finding of No Significant Impact (FONSI) has been prepared for a proposed project at the Oakland/Southwest Airport (Y47 or Airport). The Airport is a public-use, general aviation airport owned and operated by Oakland County. Y47 is located one mile southwest of New Hudson, Michigan in Oakland County.

The attached Final Short Form Environmental Assessment (Final Short Form EA) has been prepared in accordance with Federal Aviation Administration (FAA) Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions.* Based on the evaluation of the Final Short Form EA, there are no significant impacts associated with the Airport's proposed project. Therefore, an Environmental Impact Statement (EIS) will not be prepared, and this FONSI is being issued.

This FONSI provides a review of the Airport's proposed project and the basis of the Michigan Department of Transportation Office of Aeronautics (MDOT AERO) findings. Expected environmental consequences of the proposed project and mitigation commitments are defined and described further in the Final Short Form EA.

A summary of the proposed project, which was evaluated in the attached Final Short Form EA, is as follows:

2.0 Airport Proposed Project

Michigan administers Airport Improvement Program (AIP) grants under the FAA's State Block Grant Program (SBGP). In accordance with the SBGP, authorized under 49 U.S.C. § 47128, and 14 C.F.R. Part 156, Michigan handles annual AIP grants that go to airports classified as "other than primary" airports, which includes Y47. The Airport is classified as both a reliever airport for Detroit Metropolitan Wayne County Airport as well as a nonprimary local airport in the 2023-2027 National Plan of Integrated Airport Systems. As part of its responsibilities under the SBGP, the state of Michigan assumes environmental review responsibilities for FAA AIP grants in the state.

Under the SBGP, the state of Michigan provides funding and oversight for the proposed project along with the responsibility for evaluating the potential environmental impacts of the project, consistent with the National Environmental Policy Act (NEPA) of 1969.

During a 2020 ALP Update, a facilities requirements analysis was performed to identify the improvements necessary to accommodate existing and forecasted demand at the Airport. Of prime importance in meeting the current and projected demand are Y47's primary aircraft operational areas, as well as the configuration of key components such as the runway and taxiways. As part of the facilities requirements analysis, a determination of the appropriate Runway Design Code (RDC) for Runway 8/26 was conducted. The RDC is the code signifying the design standards to which a particular runway is built. These design standards are outlined in FAA Advisory Circular (AC) 150/5300-13B, *Airport Design*.

The facilities requirements analysis revealed that while the RDC for Runway 8/26 was previously designated as B-II, the appropriate RDC for the runway is A-I Small. Currently, Runway 8/26 does not meet many of the dimensional standards associated with RDC A-I Small. A runway length analysis also showed that a runway length of 2,300 feet (versus the existing runway length of 3,128 feet) would adequately accommodate most of the aircraft based and operating at the Airport on a regular basis.

The ALP Update recognized that an important consideration with any proposed runway threshold changes at Y47 was the presence of obstructions off both ends of Runway 8/26. There are many Federal Aviation Regulation (FAR) Part 77 penetrations existing in the vicinity of the Airport, including lateral penetrations of the primary and transitional surfaces. Most of these penetrations were by vegetation or trees; however, there were some poles, hangars, and towers that also penetrated surfaces. As part of the 2020 ALP Update, new aerial photography and obstruction mapping was prepared that allowed further analysis of potential obstructions.

Following an alternatives development process that focused on reconfiguring the airfield and removing/mitigating obstructions to the approach surfaces to meet FAA and state of Michigan design standards, the 2020 ALP Update recommended several key improvements. These included reconstructing Runway 8/26 to a length of 2,300 feet and a width of 60 feet; removing the parallel taxiway and constructing a bypass taxiway for Runway 26 and a turnaround for Runway 8; and acquiring easements and removing tree obstructions west of Runway 8 and east of Runway 26.

Based on the 2020 ALP Update and a subsequent Runway Protection Zone (RPZ) Analysis conducted in 2020 that documented a range of alternatives that could avoid or minimize the impact of incompatible land uses within the RPZs of a shortened Runway 8/26, Oakland County is exploring the potential environmental impacts of airfield reconfiguration, as well as avigation easements and obstruction (tree) clearing and grubbing at both ends of Runway 8/26. Removal of trees penetrating the approach surfaces will better facilitate clear approach and departure paths and enhance safety and utility of the Airport. Acquisition of easements will give Oakland County the right to maintain the airspace in these areas and allow for the removal of the trees.

Aerial photography and obstruction mapping for the 2020 ALP Update and a Light Detection and Ranging (LiDAR) Obstruction Analysis completed in 2020 for the FAR Part 77 approach surface identified parcels located on and off Airport property that are expected to be included in the avigation easement acquisition and tree removal process. These parcels include properties with existing obstructions to the FAR Part 77 approach surface as well as those with obstructions that are within 10 feet of the approach surface. Inclusion of these parcels allows for proper planning for future removals.

The major development items that were covered as a part of this Short Form Environmental Assessment (EA) included:

- Remove 220 feet of existing pavement from the Runway 8 end and 608 feet from the Runway 26 end, resulting in both a shifting of runway thresholds and an overall reduction in runway length from 3,128 feet to a new length of 2,300 feet.
- Widen Runway 8/26 to the standard width of 60 feet (existing width is 40 feet).
- Remove the existing full-length parallel taxiway, which is not required based on current and projected activity levels and replace with a taxiway turnaround at the Runway 8 end and a bypass taxiway at the Runway 26 end to facilitate 180-degree turns and back taxiing.
- Construct a taxiway connector between an executive hangar and Runway 8/26 to replace the existing taxiway connector that will be lost due to the removal of the parallel taxiway.
- Obtain avigation easements to remove trees that are obstructions to the FAR Part 77 approach surfaces and state of Michigan design standards for Runways 8 and 26.
- Clear and grub tree obstructions (where feasible) which penetrate the FAR Part 77 approach surfaces and state of Michigan design standards for Runways 8 and 26.
- Clear and grade the area between the Runway Safety Area (RSA) and the Runway Object Free Area (ROFA) on the south side of the runway to create a surface that the Airport can easily maintain.

3.0 Project Purpose and Need

The purpose of the proposed action is twofold. First, Oakland County proposes to reconfigure the airfield to right-size the Airport and reduce the cost of improvements necessary to meet FAA and MDOT AERO design standards. Second, Oakland County proposes to remove tree obstructions located in the approaches at both ends of Runway 8/26 to enhance safety and utility of Y47 for existing and future users. The need for reconfiguration of the Airport's airfield and removal of trees in the Runway 8/26 approaches was identified during the 2020 ALP Update.

As explained above, the Airport was previously designated as RDC B-II. However, during the 2020 ALP Update, it was determined that the appropriate RDC is A-I Small. Runway 8/26 currently does not meet many of the FAA's dimensional standards associated with this RDC. In addition, a runway length analysis showed that a runway length of 2,300 feet was sufficient for based aircraft as well as local and itinerant traffic.

A runway length of 2,300 feet would also allow for the elimination of the displaced landing thresholds at the Airport and the associated requirement for published declared distances due to the threshold displacements. MDOT AERO discourages the use of displaced thresholds and declared distances at general aviation airports in Michigan. Specifically, at general aviation airports similar to Y47 that are heavily used by student and recreational pilots, the use of declared distances is not recommended as this concept can be difficult to understand even for more experienced commercial rated pilots.

Also, Y47 currently cannot meet FAA safety standards outlined in FAA Order 5190.6B, *Airport Compliance Manual*, FAA AC 150/5300-13B, *Airport Design*, and FAR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* due to trees that have grown over time to now

become penetrations to the approach surfaces of Runways 8 and 26. These FAA documents establish runway design guidance for surfaces intended to protect the runway environment from objects that may interfere with aircraft operations. The design surfaces include two-dimensional areas such as RSAs and RPZs as well as three-dimensional approach surfaces as identified in FAR Part 77. Airports have a responsibility to protect and maintain these runway design surfaces so that objects do not become obstructions to aircraft operations.

The presence of obstructions in the Runway 8/26 approaches limits the safety and utility of the Airport and has resulted in a downgraded classification to a Basic Utility airport under MDOT AERO's requirements for airport licensing in the state of Michigan. Airports in Michigan are licensed based on their classification as either a Basic Utility airport or General Utility airport. Each classification includes various improved airport design standards and services, including minimum runway lengths as well as various obstruction clearance standards. Y47 was previously classified as a General Utility airport. By providing clear and unobstructed airspace at Y47, the Airport would again meet General Utility licensing standards and not compromise its federal and state funding capabilities.

4.0 Alternatives Considered

In accordance with FAA Order 1050.1F, a range of reasonable alternatives were evaluated to address the purpose and need of the project. The analysis of these alternatives presented in the attached Final Short Form EA, was prepared to determine different options that may reasonably meet the needs of the Airport. The alternative that best met the project's purpose and need was carried forward as the Preferred Alternative while all other alternatives were dismissed. The range of alternatives that were considered included:

- No Action Alternative – No Runway Reconstruction or Removal of Current or Future Obstructions

  The No Action Alternative assumes that Y47 would remain in its current state and no action would be taken to reconstruct Runway 8/26 or remove the obstructions to the runway approach surfaces. As such, the No Action Alternative does not meet the project's purpose and need of reconfiguring the airfield and removing obstruction hazards to air navigation. Under this alternative, the Airport would not accommodate existing and forecasted demand nor meet FAA and MDOT AERO design standards for safely and efficiently.

  Although the No Action Alternative does not meet the purpose and need, it is a baseline of comparison for environmental impacts associated with the build alternatives and is, therefore, retained and carried forward for analysis.

- Alternative 1 – Reconstruct Runway 8/26 to 2,300 Feet by 60 Feet; Clear/Grub Current and Future Obstructions in Upland Areas; Clear/Cut Current and Future Obstructions with No Ground Disturbance in Forested Wetland Areas (Preferred Alternative)

Alternative 1 proposes to reconstruct Runway 8/26 to a 2,300-foot length and 60-foot width. At the approach end of Runway 8, 220 feet of existing pavement would be removed, while 608 feet of pavement would be removed at the approach end of Runway 26, resulting in a shift and shortening of the runway from its existing length of 3,128 feet. The full-length parallel taxiway would also be removed and replaced with a taxiway turnaround at the approach end of Runway 8 and a bypass taxiway at the approach end of Runway 26. A taxiway connector between an executive hangar and Runway 8/26 would be constructed to replace the existing taxiway connector that would be lost due to the removal of the parallel taxiway. Reconstructing the runway to a 2,300-foot length would eliminate the need for displaced thresholds and declared distances. Displaced thresholds and declared distances are discouraged by the FAA and MDOT AERO.

This alternative also proposes to clear approximately 22 acres of land in the Runway 8/26 approaches containing current and future obstructions to the approach surfaces. The area between the RSA and ROFA on the south side of the runway would be cleared of low shrubs and trees.

Grubbing and earth moving activities under this alternative would occur only in upland areas and in non-forested wetland areas south of the runway between the RSA and ROFA. Once the trees and shrubs are cut and the stumps are grubbed, the project area would be graded as needed to create a level surface, and replacement turf grass would be planted. This alternative would create areas that Y47 can easily maintain to prevent obstructions in the future. It would also create a surface on the south side of the runway between the RSA and ROFA that the Airport can easily maintain.

In wetland areas in the runway approaches, trees would be cleared and stumps would remain with no ground disturbance. Since stumps would remain in the wetland areas, this alternative would create lowland areas that Y47 would have to continuously maintain to prevent regrowth that would result in future obstructions.

By moving the Runway 26 threshold further west, Alternative 1 eliminates several incompatible land uses in the relocated RPZ for Runway 26, which are two residences, Milford Road, and powerlines along Milford Road. A private driveway and the Huron Valley Trail would remain in the RPZ, but only in the far southeast corner.

The total cost to implement Alternative 1 is estimated at $10.6 million ($9.2 million for runway reconstruction; $690,000 for tree removals; and $700,000 for wetland mitigation), which is significantly less expensive than Alternative 2.

Advantages of this alternative:

- Meets the project's purpose and need.
- Provides long-term solution to vegetation maintenance in upland areas.
- Reduces incompatible land uses in the RPZ at the approach end of Runway 26.

- Minimizes impacts to wetlands and floodplains.
- Least expensive of the build alternatives.

Disadvantages of this alternative:

- Requires avigation easements over approximately 30 parcels to remove obstructions to the FAR Part 77 approach surfaces and MDOT AERO design standards.
- Requires ongoing vegetation maintenance in wetland areas.
- Requires an Michigan Environment, Great Lakes, and Energy (EGLE) Part 303 Wetland Protection Permit and purchase of wetland credits at an EGLE-approved mitigation bank.
- Requires an EGLE Part 31 Floodplain Permit and a compensating cut of material.
- Potential impacts to the NLEB, Indiana Bat, Tricolored Bat, and Eastern Massasauga Rattlesnake (EMR).
- Tree removals are proposed on the Huron Valley Trail.

- Alternative 2 – Reconstruct Runway 8/26 to 2,300 Feet by 60 Feet; Clear/Grub Current and Future Obstructions in Upland and Wetland Areas

  Alternative 2 also proposes to reconstruct Runway 8/26 at a length of 2,300 feet and a width of 60 feet. Like Alternative 1, 220 feet of existing pavement at the approach end of Runway 8 would be removed, and 608 feet of pavement would be removed at the approach end of Runway 26, eliminating the need for displaced thresholds and declared distances. The full-length parallel taxiway would be replaced with a taxiway turnaround at the approach end of Runway 8 and a bypass taxiway at the approach end of Runway 26. Also, a taxiway connector between an executive hangar and Runway 8/26 would be constructed to replace the existing taxiway connector that would be lost due to the removal of the parallel taxiway.

  In addition, approximately 22 acres of land in the Runway 8/26 approaches containing current and future obstructions to the FAR Part 77 approach surfaces and along the south side of the runway would be cleared. The area between the RSA and ROFA on the south side of the runway would be cleared of low trees and shrubs.

  Under this alternative, upland and wetland areas would be cleared, grubbed, and graded to create a level surface, and turf grass would be planted following removal of the trees and stumps. This alternative would create areas that the Airport can easily maintain to prevent obstructions in the future.

  Like Alternative 1, implementation of Alternative 2 would relocate the Runway 26 threshold to the west, which would remove two residences, Milford Road, and powerlines

along Milford Road from the relocated RPZ. A private driveway and a segment of the Huron Valley Trail would still remain in the southeast corner of the RPZ.

Alternative 2's estimated cost is approximately $11.7 million ($9.2 million for runway reconstruction; $630,000 for tree removals; and $1.9 million for wetland mitigation) and is the most expensive of the build alternatives.

Advantages of this alternative:

- Meets the project's purpose and need.
- Provides long-term solution to vegetation maintenance in upland and wetland areas.
- Reduces incompatible land uses in the RPZ at the approach end of Runway 26.

Disadvantages of this alternative:

- Requires avigation easements over approximately 30 parcels to remove obstructions to the FAR Part 77 approach surfaces and MDOT AERO design standards.
- Considerable impacts to wetlands are expected since wetland areas within the project area would be grubbed and graded.
- Requires an EGLE Part 303 Wetland Protection Permit and purchase of wetland credits at an EGLE-approved mitigation bank.
- Requires an EGLE Part 31 Floodplain Permit and a compensating cut of material.
- Potential impacts to the NLEB, Indiana Bat, Tricolored Bat, and EMR.
- Tree removals are proposed on the Huron Valley Trail.
- Most expensive of the build alternatives.

5.0 Preferred Alternative

After a thorough analysis of the advantages and disadvantages of each alternative, the alternative that best meets the project's purpose and need is Alternative 1 – Reconstruct Runway 8/26 to 2,300 Feet by 60 Feet; Clear/Grub Current and Future Obstructions in Upland Areas; Clear/Cut Current and Future Obstructions with No Ground Disturbance in Forested Wetland Areas.

Although both build alternatives meet the project's purpose and need, Alternative 1's primary advantage is that it minimizes impacts to wetlands and floodplains, since grubbing and grading activities would be confined to upland areas and the wetland area along the south side of the runway. Alternative 1 is also much less expensive to implement than Alternative 2.

Like Alternative 2, Alternative 1 would remove trees on the Huron Valley Trail. However, an MOU between Oakland County and the Michigan DNR outlines appropriate minimization steps. Also, both alternatives would have potential impacts on the NLEB, Indiana Bat, Tricolored Bat, and the

EMR. Any impacts would be easily mitigated through tree removal restrictions for bats and implementation of Best Management Practices (BMPs) for the EMR.

Lastly, Alternative 1 would not provide a complete long-term solution to vegetation management in lowland areas, but this criterion is outweighed by the need to minimize environmental impacts to wetlands and floodplains.

Based on the analysis presented above, Alternative 1 is considered the most reasonable alternative. As a result, Alternative 1 is carried forward in this Short Form Environmental Assessment for additional analysis, public comment, and agency review.

6.0 Public Review and Comment

Resource agencies and Native American tribes were contacted at the beginning of the project and given the opportunity to provide comment on the proposed action. A Public Meeting was also held at Salem-South Lyon District Library on May 1, 2024, from 5:30 PM to 7:00 PM. The purpose of the Public Meeting was to present the Preferred Alternative and its associated impacts to the public and receive written comments on the proposed action. Public comments received have been incorporated into the EA where appropriate.

The Public Meeting was an informal, walk-through event where individuals had the opportunity to review maps and displays, ask questions, give feedback, and discuss the project with Airport staff and consultant team members. Attendees could arrive at any time and could choose to visit each station or specific areas of interest. A printed open house guide was provided to inform guests of the station topics. According to the Public Meeting sign-in sheets, approximately 23 people attended the Public Meeting.

The legal public notice was advertised two local newspapers, The Oakland Press and the South Lyon Herald. These were published 31 and 27 days before the Public Meeting, respectively. The public notice explained that the Draft Short Form EA was available for public review and comment and announced the date, time, and location of the Public Meeting.

Physical copies of the Draft Short Form EA document were available for public review at the Airport during normal business hours and an electronic copy was also available on the Airport's website.

7.0 Environmental Consequences and Mitigation of the Preferred Alternative

This section presents an analysis of the expected impacts of the Preferred Alternative on the social, environmental, and economic environments of the area surrounding the Airport and describes avoidance and mitigation measures to minimize impacts. Only those resources where impacts are anticipated, or mitigation is required, are described. For a comprehensive discussion of the environmental consequences of the Preferred Alternative see the attached Final Short Form EA.

- **Air Quality**

  Oakland County is a maintenance area for the following pollutants:

  - Oakland County (Whole) – 8-Hour Ozone (2015)
  - Oakland County (Partial) – Carbon Monoxide (1971)
  - Oakland County (Whole) – PM-2.5 (2006)

  Because all components of the proposed project are listed as exempt or presumed to conform, the proposed action is not anticipated to cause or contribute to any violation of the NAAQS.

  In addition, Y47 experiences approximately 13,000 annual aircraft operations, well below the threshold that requires an air quality analysis (180,000 GA / air taxi operations) per the FAA's *Environmental Desk Reference for Airport Actions*. Therefore, an air quality assessment was not completed.

  During construction and tree removals, the Preferred Alternative would result in a minor temporary increase in emissions because of increased vehicle traffic and dust from ground disturbing activities. Any impacts to air quality during construction and tree removals will be temporary and easily mitigated through the regulatory permitting process and the use of BMPs. The following BMPs are recommended during construction and tree removals where feasible:

  - Use low-sulfur diesel fuel (less than 0.05 percent sulfur).
  - Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
  - Position the exhaust pipe so that the diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.
  - Use catalytic convertors to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
  - Use climate-controlled cabs that are pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operator's exposure to diesel fumes. Pressurization ensures that air is moved from the inside to the outside. HEPA filters ensure that any incoming air is filtered first.
  - Regularly maintain diesel engines, which is essential to keeping exhaust emissions low, and follow the manufacturer's recommended maintenance schedule. For example, blue/black smoke indicates that an engine requires servicing or tuning.
  - Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel operators to perform routine inspections, and maintaining filtration devices.

- Purchase new vehicles that are equipped with the most advanced emission control systems available.
- With older vehicles, use electric starting aids as block heaters to warm the engine to reduce diesel emissions.

- **Biological Resources**

  To determine the presence of threatened, endangered, proposed, and candidate species and evaluate the potential impacts from the proposed project at the federal and state level, a qualified biologist conducted site visits on September 16 – 17, 2021 and August 15 – 16, 2023, within a 45-acre Area of Interest (AOI). U.S. Fish and Wildlife Service (USFWS) coordination identified six federally endangered, proposed endangered, threatened, non-essential experimental, or candidate species potentially found in the project area (**Table 1-0 USFWS Endangered and Threatened Species List**).

Table 1-0
USFWS Endangered and Threatened Species List

Species Name	Common Name	Status
Myotis sodalis	Indiana Bat	Endangered
Myotis septentrionalis	Northern Long-eared Bat	Endangered
Perimyotis subflavus	Tricolored Bat	Proposed Endangered
Sistrurus catenatus	Eastern Massasauga Rattlesnake	Threatened
Grus americana	Whooping Crane	Experimental Population, Non-essential
Danaus plexippus	Monarch Butterfly	Candidate
Bombus affinis	Rusty Patched Bumble Bee	Endangered

Source: USFWS Information for Planning and Consultation (IPaC) Database

No critical habitat under USFWS jurisdiction was found in the project area.

A review of the IPaC database was coupled with use of the USFWS-directed Michigan Endangered Species Determination Key (DKey), which provided recommended effect determinations for species within the AOI. provided species and recommended effect determinations for protected species within the project area. See **Table 1--1 Recommended Effect Determinations from the Michigan Endangered Species Determination Key (DKey)**.

Coordination with EGLE revealed no occurrences for state-listed threatened and endangered species.

Table 1-1 Recommended Effect Determinations from the Michigan Endangered Species Determination Key (DKey)		
Common Name / Species Name	**Status**	**DKey Determination**
Indiana Bat *(Myotis sodalis)*	Endangered	NLAA*
Northern Long-eared Bat *(Myotis septentrionalis)*	Endangered	NLAA*
Eastern Massasauga Rattlesnake *(Sistrurus catenatus)*	Threatened	NLAA*
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	No effect
Whooping Crane *(Grus americana)*	Experimental Population, Non-essential	No effect
Monarch Butterfly *(Danaus plexippus)*	Candidate	No effect

*NLAA=May affect, but not likely to adversely affect
Source: Michigan Endangered Species Determination Key (DKey)

The potential for impacts to threatened and endangered species within the project area and recommended mitigation (if any) are discussed below.

Indiana Bat, Northern Long-eared Bat, and Tricolored Bat

The primary direct effect of the proposed project for the Indiana Bat, Northern Long-eared Bat (NLEB), and TCB is the loss of potential habitat, specifically larger trees that may provide potential roost trees and foraging habitat. No known roost trees for the NLEB or the Indiana Bat are present within the AOI. The proposed action would not affect winter habitat needs since there are no known hibernacula present in the AOI for either bat. However, suitable summer bat habitat is present within the AOI.

Selective tree removals (i.e., individual trees) will be employed to the greatest extent possible, especially in areas where the obstruction density is low. In wetland areas, trees will be cut and removed but grubbing or other land disturbance will be avoided. In addition, tree removal activities will be performed outside the summer roosting season of the Indiana Bat and NLEB and will only be allowed from October 1 through April 14. Adherence to these avoidance and minimization measures should limit incidental take of Indiana Bats and the NLEB. Therefore, the proposed action may affect but is not likely to adversely affect the Indiana Bat or the NLEB.

While the status of the TCB under the ESA is proposed endangered, Section 7(a)(4) of the ESA requires federal agencies to confer with USFWS if their action will jeopardize the continued existence of a proposed species. Suitable summer TCB habitat is potentially present within the AOI. However, since documented occurrences in Michigan and more specifically Oakland County are rare, it is unlikely that the bat is present. Following the recommendations for tree cutting within specific time frames (October 1 through April 14)

for the Indiana Bat and NLEB should limit any potential incidental take of TCB. Therefore, the proposed action will have no effect on the TCB.

Eastern Massasauga Rattlesnake

The AOI does not fall within Tier 1 or Tier 2 EMR habitat, and EMR are unlikely to be present. However, the AOI is within the known range of the snake. Potentially suitable habitat is present at the approach end of Runway 8 along an emergent / forested transition zone. Suitable hibernation sites and potentially suitable upland habitat in open areas that could provide nesting sites are present within this transition zone.

Clearing and grubbing activities will occur in upland areas only outside of the active season for the EMR, overlapping with the inactive season for bats. Trees within wetlands, areas potentially utilized by the snakes as hibernation sites during the winter, would be cut and removed with limited ground disturbance. No hydrologic alterations are anticipated to occur during project activities. The proposed project activities will not appreciably change surface water elevations upstream or downstream along the New Hudson No. 1 Drain nor include any significant changes to local hydrology.

Recommended BMPs for projects within the known EMR range will be implemented as follows:

- Use wildlife-safe erosion control materials.
- View the Michigan Department of Natural Resources' "60-Second Snakes: The Eastern Massasauga Rattlesnake" video and/or review the EMR fact sheet.
- Report any EMR observations (or any other threatened or endangered species) during project implementation.

Therefore, the proposed action may affect, but is not likely to adversely affect, the EMR. No additional mitigation is required.

Monarch Butterfly

Little suitable habitat is present within the AOI in part due to the long history of vegetation maintenance activities on the airfield and the presence of scrub-shrub, forested areas not conducive to supporting the Monarch's host plant. Therefore, the proposed project will have no effect on the Monarch Butterfly.

The Monarch Butterfly is a candidate species and is not yet listed or proposed for listing. Consultation with USFWS under Section 7 of the ESA is not required for candidate species. USFWS encourages opportunities to conserve the species if possible.

Rusty Patched Bumble Bee (RPBB)

The RPBB historically is associated with grasslands and tallgrass prairies of the Upper Midwest. This type of habitat provides nesting sites, overwintering sites, and nectar and pollen from an abundant array of forbs.

The AOI is within the historical range of the RPBB, but suitable foraging and nesting habitat is not present within the AOI on Airport property due to the long history of vegetation maintenance activities on the airfield. Therefore, the AOI on Airport property provides limited potential habitat for the RPBB.

The AOI outside of Airport property is covered by shrubby wetland areas often dominated by large areas of invasive species or mature forested areas, habitat that would not appear to provide the nectaring and foraging resources needed to support the RPBB. Therefore, the AOI outside of Airport property provides limited potential habitat for the RPBB.

The RPBB has not been documented within Oakland County since 1965, and it is unlikely to be present. Therefore, the proposed project will have no effect on the RPBB. Section 7 consultation and Incidental Take permits are not needed.

- **Section 4(f) Resources**

  The Huron Valley Trail runs in a southwest-northeast direction through the project area at the approach end of Runway 26. This 12-foot-wide asphalt recreational trail, developed and operated by the Western Oakland County Trailway Management Council (WOCTMC), is 12.2 miles in length and follows along the former Air-Line Railway, one of Michigan's first railroads.

  Several trees located in the trail's right-of-way have been identified as obstructions to the FAR Part 77 approach surface for Runway 26 and would be removed under the Preferred Alternative. In addition, an avigation easement would be required over the trail since a portion of it would pass through the RPZ of the reconfigured runway.

  To minimize the effects of tree removal under the Preferred Alternative, a Memorandum of Agreement (MOA) previously executed between Oakland County and the Michigan DNR requires all live trees to be replaced at a ratio of one-to-one. The replacement trees are to be planted within the trail right-of-way but outside of the avigation easement. The WOCTMC is responsible for specifying tree species and planting locations. Oakland County is to ensure that the trail remains open and recreational activities are not limited during tree removal activities. Additionally, the County's contractor will secure a bond prior to tree removal activities to address any unforeseen damage that may occur to the trail during construction.

- **Hazardous Materials, Solid Waste, and Pollution Prevention**

  A Transaction Screen Assessment (TSA) was conducted in January 2023, and found no evidence of Recognized Environmental Conditions (RECs) in connection with the airfield reconfiguration or obstruction clearing areas.

Although the TSA did not find any RECs posing a risk to project activities or participants, tree removal activities associated with the Preferred Alternative have the potential to create solid waste material (tree debris). Tree debris will be removed and preferably sold or offered to parcel owners, as appropriate.

The following is a summary of the mitigation required to address any potential impacts:

- The contractor is required to have a Spill Prevention, Control, and Countermeasure (SPCC) plan in place to be implemented if a spill occurs during construction operations.
- An approved erosion control plan is required.
- Any waste generated through project improvements will be disposed of in compliance with all federal, state, and local regulations.

- **Land Use**

  The Preferred Alternative is not expected to increase congestion, cause degradation of level of service, or permanently close any surface roads within, or adjacent to, the project area. Traffic from construction vehicles would be managed to avoid and minimize any impacts to local roads by defining haul routes away from residential areas and by scheduling the arrival and departure times of construction traffic so that normal traffic patterns are not interrupted. Any potential construction impacts to surface transportation would be temporary in nature.

- **Natural Resources and Energy Supply**

  Due to the nature of the project, electric or gas use required to operate Y47 facilities is not expected to increase because of the proposed project. The Preferred Alternative will not require the consumption of petroleum-based fuels or other natural resources in quantities that would surpass available supply. BMPs to reduce energy consumption during tree removal activities will be employed, where applicable.

  To reduce energy consumption associated with the temporary use of excavators and vehicles for the Preferred Alternative, construction equipment should be in good working order to ensure the most efficient use of fuel. All vehicles and equipment should be checked for leaks and repaired immediately.

- **Wetlands**

  Of the 11.231 acres of wetlands within the project area, a total of 4.583 acres would be impacted by the implementation of the Preferred Alternative. Wetlands that would be impacted in the runway approaches are classified as forested wetlands (total of 1.039 acres). Trees within these forested wetlands will be cleared without any ground disturbance.

Consultation with EGLE indicates that cutting trees in any forested wetland is considered an impact to that wetland even if there is no ground disturbance. Wetlands along the south side of the runway (total of 3.544 acres) are classified as non-forested wetlands and would be cleared, grubbed, filled, and graded to accommodate the RSA and ROFA for the reconstructed runway.

A total of 6.355 acres of wetland mitigation is expected including mitigation of 5.316 acres for non-forested wetlands (1:1.5 ratio) and 1.039 acres for the forested wetlands (1:1 ratio). Given that the forested wetland is not permanently removed but converted to a different type, EGLE has reduced their mitigation requirements to a ratio of 1:1 (rather than a 2:1 ratio for typical forested wetland impacts). Mitigation will include the purchase of wetland credits at an EGLE-approved mitigation bank within the same watershed. Final mitigation requirements are at the discretion of EGLE and will be incorporated into the anticipated wetland permit.

During final design of the Preferred Alternative, modifications will be considered to lessen the impacts on regulated wetlands. All delineated wetlands will be shown on construction plans to protect them from any possible direct or indirect impacts and construction documents will require avoidance and erosion control measures.

- **Floodplains**

  Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) were reviewed for the project area to evaluate potential floodplain impacts. FIRMs indicate that regulated floodplains are found in the project area. These floodplains are associated with New Hudson No. 1 Drain and a drainage ditch that runs along the southern edge of the existing RSA and around the Runway 8 threshold. No floodplain impacts are anticipated at the approach end of Runway 26.

  The Preferred Alternative may impact the floodplains at the approach end of Runway 8 due to grubbing and grading activities, although minimal grading or filling work is proposed. A determination of the amount of grading and filling work required will be made during final design. An EGLE Part 31 Floodplain Permit is anticipated as well as a compensating cut of material within the limits of the same floodplain in an area not classified as a protected resource. Final mitigation requirements are at the discretion of EGLE.

- **Surface Waters**

  One of the wetlands identified (Wetland 6) is a portion of the New Hudson No. 1 Drain, measuring approximately 2,039 feet long. The width of water flow is approximately 20 feet and top of bank width is approximately 35 – 45 feet. The ditch profile is fairly consistent throughout the portion of the project area at the approach end of Runway 8. The drain runs along the entire length of the north side of the runway and remains outside of the portions of the project area involving runway reconstruction and tree

removals at the approach end of Runway 26. The U.S. Environmental Protection Agency (USEPA) classifies the New Hudson No. 1 Drain as an impaired stream.

In addition, Wetland 4 is located at the approach end of Runway 8 and along the southern edge of the existing RSA. This wetland is partly composed of a drainage ditch that appears to drain north and intersects the New Hudson No. 1 Drain. The USEPA also classifies this ditch as an impaired stream.

Previously described site visits conducted to delineate wetlands found no other regulated waters within the project area.

The Preferred Alternative will reduce impervious surface areas and likely decrease stormwater runoff due to the proposed removal of runway and taxiway pavement for reconfiguration of the airfield. Estimates indicate a net decrease in impervious surfaces of 1.10 acres (48,200 square feet). However, soil erosion is a source of concern due to potential impacts to surface waters from runway reconstruction and tree removals. Since the Airport site is generally flat, a high risk of soil erosion during excavation and ground disturbing activities is not expected. However, some amount of erosion may occur. The following list of BMPs represents common erosion control measures that should be considered during construction and obstruction removal and applied where applicable:

- Sediment traps
- Temporary cement ponds
- Temporary grassing of disturbed areas
- Vegetation cover replaced as soon as possible
- Erosion mats and mulch
- Silt fencing and drainage check dams
- Settling basins for storm water treatment

All excavated soils and staging areas for construction equipment will be placed in non-sensitive upland areas with all disturbed areas replanted as soon as possible to reduce the likelihood of erosion.

Mitigation measures prepared under an erosion control plan, in accordance with FAA AC 150/5370-10H, Standard Specifications for Construction of Airports, will help minimize long-term impacts to area water quality and to the existing drainage system.

Part 91, Michigan Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, requires the Airport to acquire a soil erosion and sedimentation control permit from the Oakland County Water Resources Commissioner's Office.

The Airport is also required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from EGLE for construction activity disturbing one acre or more of soil. Permittees are required to control runoff from construction sites and develop a construction Stormwater Pollution Prevention Plan (SWPPP) that includes erosion prevention and sediment control BMPs.

- **Ground Water**

  The EGLE maintains several databases of water wells and wellhead protection areas in Michigan. According to EGLE's Open Data water wells GIS dataset, a few drinking water wells are within the limits of the project area, but there will be no direct impacts to these wells. However, the wells will be flagged in the field during tree removals and will be marked on construction plans to ensure they are avoided. If it is determined during final design that there will be impacts to any wells during project implementation, the wells will be relocated in accordance with state and local regulations.

8.0 MDOT AERO Finding

Michigan administers Airport Improvement Program (AIP) grants under the FAA's State Block Grant Program (SBGP). The SBGP, authorized under 49 U.S.C. § 47128, and 14 C.F.R. Part 156, allows the state of Michigan to assume environmental review responsibilities for FAA AIP grants in the state. After careful and thorough consideration of the facts contained in the attached Final Short Form EA, the undersigned MDOT AERO finds the proposed action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the NEPA and other applicable environmental requirements and will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to Section 102(2)(C) of NEPA.

B.B.

APPROVED: _____ DISAPPROVED: _____

E-SIGNED by BRYAN BUDDS
on 2024-05-13 11:53:37 EDT

_____

Responsible MDOT Official Title

Michigan Department of Transportation Office of Aeronautics

Date: _____