



Section 4(f) Evaluation



LEMMON DRIVE
P R O J E C T

Washoe Regional Transportation Commission &
Nevada Department of Transportation

**Lemmon Drive Traffic Improvements
and Resiliency Project**

March 2025

Acronyms and Abbreviations

RTC	Regional Transportation Commission
NDOT	Nevada Department of Transportation
FHWA	Federal Highway Administration
FEMA	Federal Emergency Management Agency
NEPA	National Environmental Policy Act
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
AASHTO	American Association of State Highway and Transportation Officials
RTP	Regional Transportation Plan
USC	United States Code
NRHP	National Register of Historic Places
APE	Area of Potential Effect
ROW	Right-of-Way
USDOT	United States Department of Transportation

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Introduction

Project Overview

The Regional Transportation Commission of Washoe County (RTC Washoe), in cooperation with the Nevada Department of Transportation (NDOT) and the Federal Highway Administration (FHWA) are proposing improvements to Lemmon Drive in the City of Reno, Washoe County, Nevada. The Lemmon Drive Traffic Improvements and Resiliency Project involves realigning Lemmon Drive to reconstruct a safer and more resilient roadway between Fleetwood Drive and Ramsey Way. The project proposes to realign Lemmon Drive to the west on an existing berm, elevating the roadway to mitigate flooding impacts. The project also includes the reconstruction of a multi-use path within the project limits and the construction of a new path connecting Lemmon Drive to Lemmon Valley Elementary School. Additionally, the project would eliminate residential driveway connections to a regional road, implement required earthwork balancing to avoid altering the base flood elevation, and stormwater improvements, including the construction of retention and equalization basins. These comprehensive measures collectively enhance safety, connectivity, and transportation resiliency in Lemmon Valley.

The purpose of this report is to address the federal statute known generally as Section 4(f). Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 (United States Code [U.S.C.] Title 49, Section 303[c]) protects certain parks, recreation areas, historic and cultural resources, and wildlife and waterfowl refuges. Section 4(f) applies to the Lemmon Drive Traffic Improvements and Resiliency Project because eligible recreational resources and historic properties are present near the proposed project.

Purpose and Need of the Project

Why is the Project Needed?

In 2017, Lemmon Drive was overtopped by floodwaters and faced emergency closures and an extensive mitigation response which disrupted the community's access highlighting the need for a more resilient roadway. Washoe County has limited financial and human resources to continuously provide flood mitigation for Lemmon Drive and private property. The total cost for maintenance, HESCO barrier placement, and continuous pumping for the 2017-2019 flood event was \$11.6 million (Washoe County, 2022).

In addition, multimodal enhancements were identified as a community need in the RTC's North Valleys Regional Transportation Study.

What is the Purpose of the Project?

The purpose of the project is to provide a safe and reliable regional road with at least one dry lane in each direction of travel during a 100-year flood event and provide safe access for all multimodal users.

Proposed Action and Alternatives

Build Alternative

The Build Alternative would reconstruct and raise the profile of the existing roadway from Fleetwood Drive to Palace Drive along the existing alignment. The section of roadway would provide two through lanes in each direction with a raised median. Dedicated left- and right-turn lanes would be provided at the intersections of Fleetwood Drive, Patrician Drive, and Palace Drive.

As the roadway extends to the north it would transition to provide one lane in each direction with a raised center median. In the northbound direction, dedicated right turn pockets would be provided at Arkansas Street, Chickadee Drive, Arizona Street, and Oregon Drive. Just north of Deodar Way the roadway alignment would shift west of the existing roadway. This realigned segment of roadway would run along the east side of an existing berm allowing the roadway to be constructed above the existing Federal Emergency Management Agency (FEMA) 100-year flood elevation. Arkansas Street, Chickadee Drive, and Arizona Street would be extended to tie into the new, realigned roadway. Near Oregon Drive the roadway alignment would tie into the existing roadway alignment with full reconstruction extending to Ramsey Way. **See Figure 1.**

The Build Alternative would also involve modifications to cross-street direct access realigned Lemmon Drive at Nectar Street, Tupelo Street, Waterash Street, Idaho Street, Pompe Way, and Dillon Way. Pompe Way and Dillon Way would be connected via a new frontage road which provides access to Lemmon Drive at Ramsey Way. Idaho Street and Waterash Street would utilize rehabilitated existing Lemmon Drive as local frontage road access to Arizona Street or Chickadee Drive which would then provide access to the realigned Lemmon Drive. A new connection from the Matterhorn Drive and Tupelo Street intersection to Chickadee Drive would provide access to the realigned Lemmon Drive also.

In addition to roadway improvements, substantial drainage improvements would also be constructed under the Build Alternative. Key drainage features would include rehabilitation of the existing drainage channel from Fleetwood Drive to Palace Drive. Equalization culverts would be constructed to replicate existing drainage between the east and west side of the existing berm during higher Swan Lake water elevations. These equalization culverts would be located at existing breaks in the berm north of Deodar Way and near Idaho Street. Volumetric mitigation basins would also be constructed between the new, realigned Lemmon Drive and existing Lemmon Drive within the FEMA floodplain. This mitigation would provide 1.3 cubic yards of basin excavation for every one 1 cubic yard of embankment placed within the FEMA 100-year floodplain.

Additional items to be constructed with the Build Alternative include a 10-foot shared use path along the reconstructed and realigned Lemmon Drive roadway, intersection lighting, signing, striping, and reconstruction of the Patrician Drive rectangular rapid flashing beacon (RRFB). Additional pedestrian enhancements would be constructed from Lemmon Drive to the Lemmon Valley Elementary School along Patrician Drive.

No Build Alternative

The No Build Alternative would not construct any improvements to Lemmon Drive and only routine maintenance would continue. Lemmon Drive would remain below the 100-year floodplain. The No Build Alternative would eliminate the costs associated with construction of the project but would not meet the project's purpose and need.



Figure 1. Lemmon Drive Build Alternative

Regulatory Background and Study Methodology

Section 4(f) of the USDOT Act of 1966

Section 4(f) of the USDOT Act of 1966, 49 U.S.C. 303(c), is a federal law that protects publicly owned parks, recreation areas, and wildlife or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by USDOT. As a USDOT agency, FHWA must comply with Section 4(f).

This document has been prepared in accordance with Section 4(f) and FHWA regulations for Section 4(f) compliance codified at Code of Federal Regulations (CFR) Title 23, Part 774. Additional guidance was obtained from FHWA Technical Advisory T6640.8A (FHWA 1987) and the Revised FHWA Section 4(f) Policy Paper (FHWA 2012).

Study Area

Maps, aerial photography, and local comprehensive plans were reviewed to determine the location of parks and recreational lands.

The study area for identifying Section 4(f) cultural resources is the area of potential effects (APE), both direct and indirect, used in the project's Section 106 effort.

Types of Section 4(f) Properties

Section 4(f) requires NDOT and FHWA to consider the following:

- Parks and recreation areas of national, state, or local significance that are both publicly owned and open to the public
- Publicly owned wildlife and waterfowl refuges of national, state, or local significance that are open to the public
- Historic sites of national, state, or local significance in public or private ownership regardless of whether they are open to the public that are listed in, or eligible for, the National Register of Historic Places (NRHP)

Section 4(f) Determinations

According to 23 CFR 774.3, FHWA cannot approve the use of a Section 4(f) resource, as defined in 23 CFR 774.17, unless FHWA determines the following:

- There is no feasible and prudent avoidance alternative, as defined in 23 CFR 774.17, to the use of land from the property, and
- The action includes all possible planning, as defined in 23 CFR 774.17, to minimize harm to the property resulting from such use, or
- The use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact, as defined in 23 CFR 774.17, on the property.

Section 4(f) Evaluation Process

After identifying the Section 4(f) properties in the study area, FHWA determined whether and to what extent the project would use each property. The type of Section 4(f) use was then determined according to the following Section 4(f) use definitions:

- **Permanent Incorporation.** Pursuant to 23 CFR 774.17, a permanent incorporation occurs when land from a Section 4(f) property is permanently incorporated into a transportation project. This may occur as a result of partial or full acquisition of the Section 4(f) property, permanent easements, or temporary easements that exceed regulatory limits.
- **Temporary Occupancy.** As defined in 23 CFR 774.13(d), a temporary occupancy occurs when there is a temporary occupancy of land that is “adverse in terms of the statute’s preservation purpose as determined by the criteria in 23 CFR 774.13(d).” If the criteria in 23 CFR 774.13(d) are met, the “temporary use exception” applies, meaning that the temporary occupancy of the land is so minimal that it does not constitute a “use” within the meaning of Section 4(f). If the criteria in 23 CFR 774.13(d) are not met, the use is evaluated as permanent.
- **Constructive Use.** As defined in 23 CFR 774.15(a), a constructive use occurs when a transportation project does not incorporate land from a Section 4(f) property, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a property for protection under Section 4(f) are substantially impaired.

The primary steps in a Section 4(f) evaluation are described as follows:

1. Identify Section 4(f) resources in the study area.
2. Assess whether there are any potential uses of a Section 4(f)-protected resource; if so, proceed to the next step.
3. Determine whether impacts are *de minimis* or whether one of the five programmatic Section 4(f) evaluations can be used.
4. Analyze avoidance alternatives (as applicable). In this step, FHWA considers alternatives that completely avoid the individual use of a Section 4(f) property. The avoidance

analysis applies the Section 4(f) feasible and prudent criteria (23 CFR 774.17). An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An avoidance alternative is not considered prudent if any of the prudency factors in 23 CFR 774.17 apply. If there is no feasible and prudent avoidance alternative, proceed to the next step.

5. If applicable, determine the alternative(s) with the least overall harm. If no feasible and prudent alternatives are identified that would avoid the use of a Section 4(f) property, FHWA also determines which alternative would cause the least overall harm to Section 4(f) properties using the following factors (23 CFR 774.3[c][1]) and the results of all possible planning to minimize harm:
 - i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)
 - ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection
 - iii. The relative significance of each Section 4(f) property
 - iv. iv. The views of the officials with jurisdiction over each Section 4(f) property
 - v. v. The degree to which each alternative meets the purpose and need for the project
 - vi. vi. After reasonable mitigation, the magnitude of adverse effects to resources not protected by Section 4(f)
 - vii. vii. Substantial differences in cost among the alternatives

De Minimis Determinations

A determination of *de minimis* impacts can be made only if the project would not adversely affect the features, attributes, or activities that make the Section 4(f) property significant based on a consideration of impacts and mitigation measures. The *de minimis* determination can only be made after receiving and considering public comments and after FHWA receives concurrence from the official with jurisdiction. If the official with jurisdiction does not agree with a *de minimis* use determination in writing, an analysis of avoidance alternatives must be conducted. If the analysis concludes that there is no feasible and prudent alternative to use of the Section 4(f) property, FHWA may only approve the alternative or alternatives that cause the least overall harm. A least overall harm analysis is conducted to determine which alternative(s) may proceed. A *de minimis* use determination is inappropriate when a project results in a constructive use (49 U.S.C. 303[d], 23 CFR 774.3[b] and 774.17).

Parks, Recreation and Refuges

De minimis impacts at a public parkland, recreation area, or wildlife and waterfowl refuge is defined as that which does not “adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)” (23 CFR 774.17). This determination can be made only with the concurrence of the official with jurisdiction and can be made only after an opportunity for public review and comment on the proposed determination.

Historic Properties

As defined in 23 CFR 774.5 and 774.17, a *de minimis* impacts determination is made for a historic resource if land would be permanently incorporated from the resources but FHWA makes a finding for a property of “No Adverse Effect” or “No Historic Properties Affected” through consultation under Section 106 of the National Historic Preservation Act, and the State Historic Preservation Officer (SHPO) concurs with that finding.

Description of Section 4(f) Resources in the Study Area

This section identifies Section 4(f) resources located within the project’s Section 4(f) study area.

According to NDOT, RTC and FHWA’s review of all properties and ROW in the Section 4(f) study area, there are no wildlife or waterfowl refuges in the study area.

Park and Recreation Resources in the Study Area

Based on a review of applicable public agency park and recreation-related websites and adopted public agency park and recreation-related documents, there are four Section 4(f) park and recreation resources in the study area (listed in Table 1 and shown on Figure 2).

The following public agency websites were accessed to determine whether any park and recreation resource were present in the study area:

- Washoe County Regional Parks and Open Space:
https://www.washoecounty.gov/parks/board_committees/2019/files/Parks%20Master%20Plan%20Final%20Draft_070219.pdf
- Nevada State Parks: <https://parks.nv.gov/parks>
- National Park Service: <https://www.nps.gov/state/nv/index.htm>
- Bureau of Land Management:
https://webmaps.blm.gov/program_apps/BLM_Natl_Recreation_Opportunities/
- City of Reno Parks Recreation and Open Space Master Plan:
<https://www.reno.gov/home/showpublisheddocument/91608/638406574517270000>

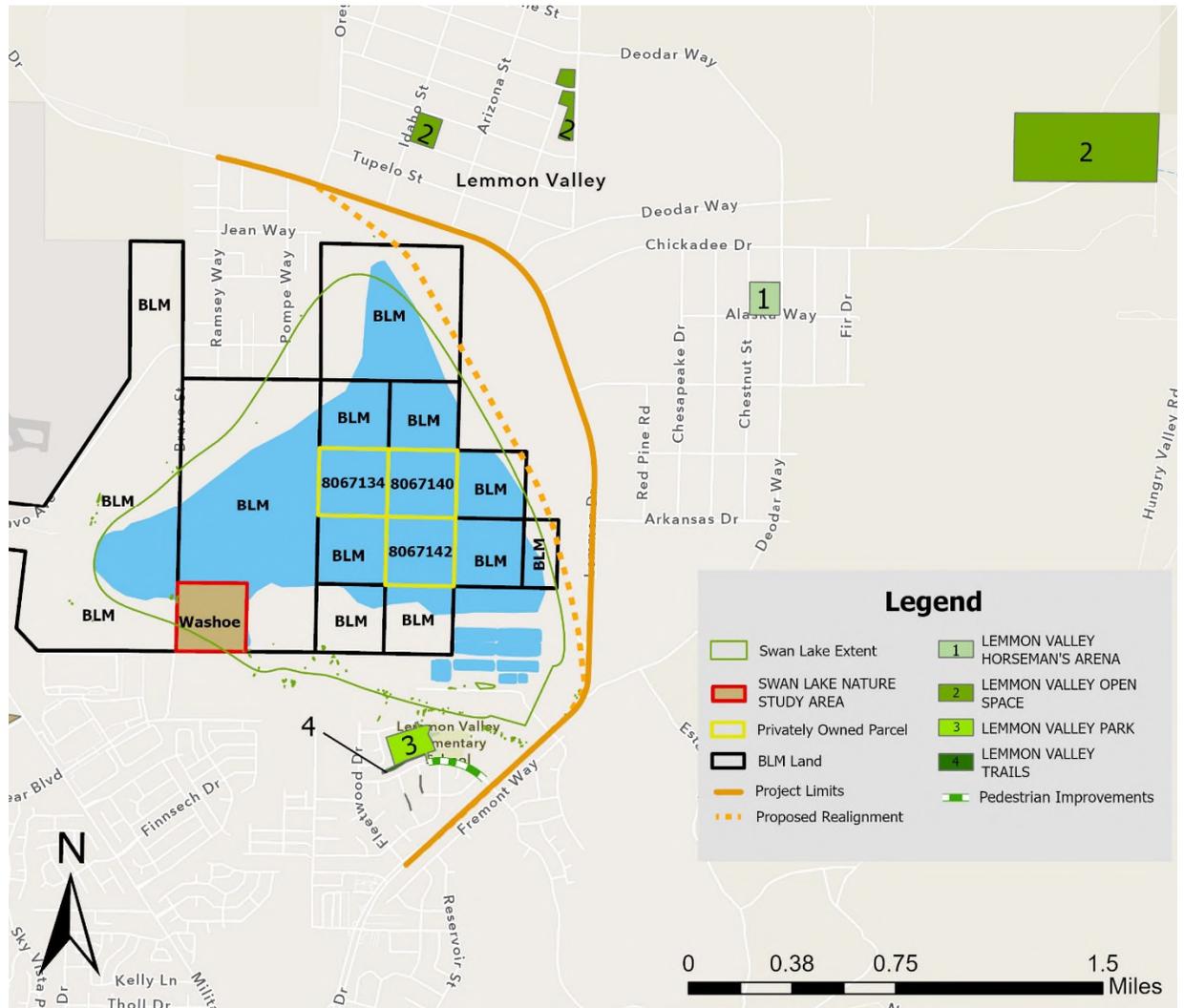


Figure 2: Parks and Recreation

Table 1: Section 4(f) Resources

Resource Name	Resource Description	Location
Lemmon Valley Horseman’s Arena	An eight-acre neighborhood park with one full-size and one smaller horse arena	East of the Study Area on Deodar Way
Lemmon Valley Park	A publicly owned 10-acre park open to public use	Adjacent to Lemmon Valley Elementary School on W Patrician Drive
Lemmon Valley Trails	A publicly owned hiking and biking trail	Adjacent to Lemmon Valley Elementary School on W Patrician Drive
Swan Lake Nature Study Area	A nature study area with hiking trails	Southwest portion of Swan Lake near Lear Boulevard

*There are 2 spaces in the study area that are owned by Washoe County and are designated as “Open Space” (as opposed to “Park”). However, because these parcels are not designated as “parks” in this master plan and do not contain any recreational features, attributes, or amenities, Section 4(f) does not apply to these parcels.

*Swan Lake is not a designated lake under Section 4(f).

Lemmon Valley Horseman’s Arena

Lemmon Valley Horseman’s Arena in Washoe County is a park near residential homes that has one large and one small horse arena. This park also has a children’s playground, picnic tables, basketball and volleyball courts, and horseshoe pits. The official jurisdiction for Lemmon Valley Horseman’s Arena is Washoe County.

Section 4(f) applies to Lemmon Valley Horseman’s Arena because it is publicly owned, is deemed significant by the official with jurisdiction according to its inclusion in the Washoe County Regional Parks and Open Space Master Plan (Washoe County 2019) and contains recreational features and amenities.

Lemmon Valley Park

Lemmon Valley Park is a 10-acre park located adjacent to Lemmon Valley Elementary School. This park includes a community building, picnic tables, a children’s playground, and various sports fields. It is also an area to observe natural wildlife in the area and within close proximity to Swan Lake.

Section 4(f) applies to Lemmon Valley Park because it is publicly owned, is deemed significant by the official with jurisdiction according to its inclusion in the Washoe County Regional Parks and Open Space Master Plan (Washoe County 2019) and contains recreational features and amenities.

Lemmon Valley Trails

Lemmon Valley Trails is adjacent to Lemmon Valley Park and Lemmon Valley Elementary School and is primarily used for hiking and biking.

Section 4(f) applies to Lemmon Valley Trails because it is publicly owned, is deemed significant by the official with jurisdiction according to its inclusion in the Washoe County Regional Parks and Open Space Master Plan (Washoe County 2019) and contains recreational features and amenities.

Swan Lake Nature Study Area

The Swan Lake Nature Study Area is a nationally recognized bird watching area that has a diverse population of birds. This area is also used for habitat protection, hiking, and includes a 600-foot-long board walk.

Section 4(f) applies to the Swan Lake Nature Study Area because it is publicly owned, is deemed significant by the official with jurisdiction (Washoe County), and contains recreational features and amenities.

Historic Resources in the Study Area

According to field investigations and office research, two architectural historic resources have been found to be eligible for the NRHP, as listed in table 2.

Table 2: Architectural Resources in the Study Area

SHPO Resource No.	Resource	Construction Date	Determination of Eligibility
D488	Valley Village	1963	Eligible under Criterion A
D489	Lemmon Valley Estates	1970	Eligible under Criteria A and Criteria C

Assessment of Potential Section 4(f) uses

Assessment of Potential Uses: Parks and Recreation Resources

Lemmon Valley Horseman’s Arena

The project would not acquire any ROW from the Lemmon Valley Horseman’s Arena. Therefore, there would not be a permanent incorporation of the Lemmon Valley Horseman’s Arena resource.

The project would not require temporary occupancy of the Lemmon Valley Horseman’s arena.

There would be no constructive use of the Lemmon Valley Horseman's Arena for the following reasons:

- The project would not construct any vertical infrastructure that would change the view for users of the Lemmon Valley Horseman's Arena; as such, there would not be a visual impact
- As noted in Table 3 of the *Lemmon Drive Traffic Improvements and Resiliency Noise Technical Report* (NDOT 2024), noise levels forecasted for the constructed project, when compared with projected noise levels if the project is not built, would not increase by more than 3 A-weighted decibels (dBA) at any location, including at the Lemmon Valley Horseman's Arena, and as such would not cause a noise related constructive use according to 23 CFR 774.15(f)(3). Additionally, the Lemmon Valley Horseman's Arena would not be considered a "noise-sensitive facility" according to 23 CFR 774.15(E)(1).
- The project would not impact existing access points to the Lemmon Valley Horseman's Arena; as such, there would not be an access point.

Conclusion

Based on this assessment, the project would not result in a Section 4(f) use of the Lemmon Valley Horseman's Arena.

Lemmon Valley Park

The project would not acquire any ROW from the Lemmon Valley Park. Therefore, there would not be a permanent incorporation of the Lemmon Valley Park resource.

The project would not require temporary occupancy of the Lemmon Valley Park.

There would be no constructive use of the Lemmon Valley Park for the following reasons:

- The project would not construct any vertical infrastructure that would change the view for users of the Lemmon Valley Park; as such, there would not be a visual impact
- As noted in Table 3 of the *Lemmon Drive Traffic Improvements and Resiliency Noise Technical Report* (NDOT 2024), noise levels forecasted for the constructed project, when compared with projected noise levels if the project is not built, would not increase by more than 3 A-weighted decibels (dBA) at any location, including at the Lemmon Valley Park, and as such would not cause a noise related constructive use according to 23 CFR 774.15(f)(3). Additionally, the Lemmon Valley Park would not be considered a "noise-sensitive facility" according to 23 CFR 774.15(E)(1).
- The project would not impact existing access points to the Lemmon Valley Park; as such, there would not be an access point.

Conclusion

Based on this assessment, the project would not result in a Section 4(f) use of Lemmon Valley Park.

Lemmon Valley Trails

The project would not acquire any ROW from the Lemmon Valley Trails. Therefore, there would not be a permanent incorporation of the Lemmon Valley Trails resource.

The project would not require temporary occupancy of the Lemmon Valley Trails.

There would be no constructive use of the Lemmon Valley Trails for the following reasons:

- The project would not construct any vertical infrastructure that would change the view for users of the Lemmon Valley Trails; as such, there would not be a visual impact
- As noted in Table 3 of the *Lemmon Drive Traffic Improvements and Resiliency Noise Technical Report* (NDOT 2024), noise levels forecasted for the constructed project, when compared with projected noise levels if the project is not built, would not increase by more than 3 A-weighted decibels (dBA) at any location, including at the Lemmon Valley Trails, and as such would not cause a noise related constructive use according to 23 CFR 774.15(f)(3). Additionally, the Lemmon Valley Trails would not be considered a “noise-sensitive facility” according to 23 CFR 774.15(E)(1).

The project would not impact existing access points to the Lemmon Valley Trails; as such, there would not be an access point.

Conclusion

Based on this assessment, the project would not result in a Section 4(f) use of Lemmon Valley Trails.

Swan Lake Nature Study Area

The project would not acquire any ROW from the Swan Lake Nature Study Area. The project would not require the temporary occupancy of land at the Swan Lake Nature Study Area.

There would be no constructive use of the Swan Lake Nature Study Area for the following reasons:

- The project would not construct anything that would change the view for users of the Swan Lake Nature Study Area; as such, there would not be a visual impact.
- As noted in Table 3 of the *Lemmon Drive Traffic Improvements and Resiliency Noise Technical Report* (NDOT 2024), noise levels forecasted for the constructed project, when compared with projected noise levels if the project is not built, would not increase more than 3 dBA at any location including the Swan Lake Nature Study Area, and as such

would not result in a noise-related constructive use according to 23 CFR 774.15(f)(3) (NDOT 2024).

- The project would not impact the existing access points to Swan Lake Nature Study Area; as such, there would not be an access impact.

Because there would be no impacts to this resource under Section 4(f), no measures to minimize harm or mitigation are warranted.

Conclusion

Based on this assessment, the project would not result in a Section 4(f) use of the Swan Lake Nature Study Area.

Assessment of Potential Uses: Historic Resources

The project would not permanently incorporate, nor temporarily occupy, any of the architectural resources located in the study area. There are no archaeological resources in the area. Per the Section 106 consultation done for the project, the project would not result in adverse effects to any of the architectural or archaeological Section 4(f) resources located in the study area.

Because there would be no impacts to any architectural or archaeological resources under Section 4(f), no measures to minimize harm or mitigation are warranted.

Conclusion

Based on the above assessment, the project would not result in the use of any Section 4(f) architectural or archaeological resources.

Coordination

This Draft Section 4(f) Evaluation will be available for comment by the officials with jurisdiction for the four park/recreation resources in the study area

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