

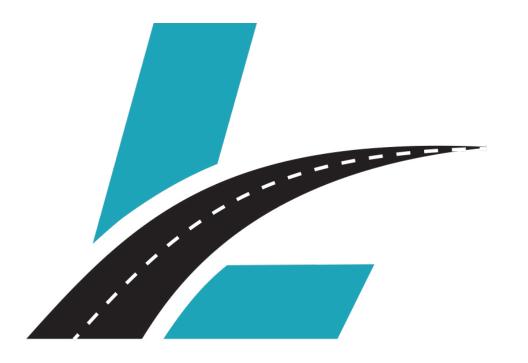
LEMMON DRIVE TRAFFIC IMPROVEMENTS **82 RESILENCY PROJECT** PUBLIC INFORMATION MEETING





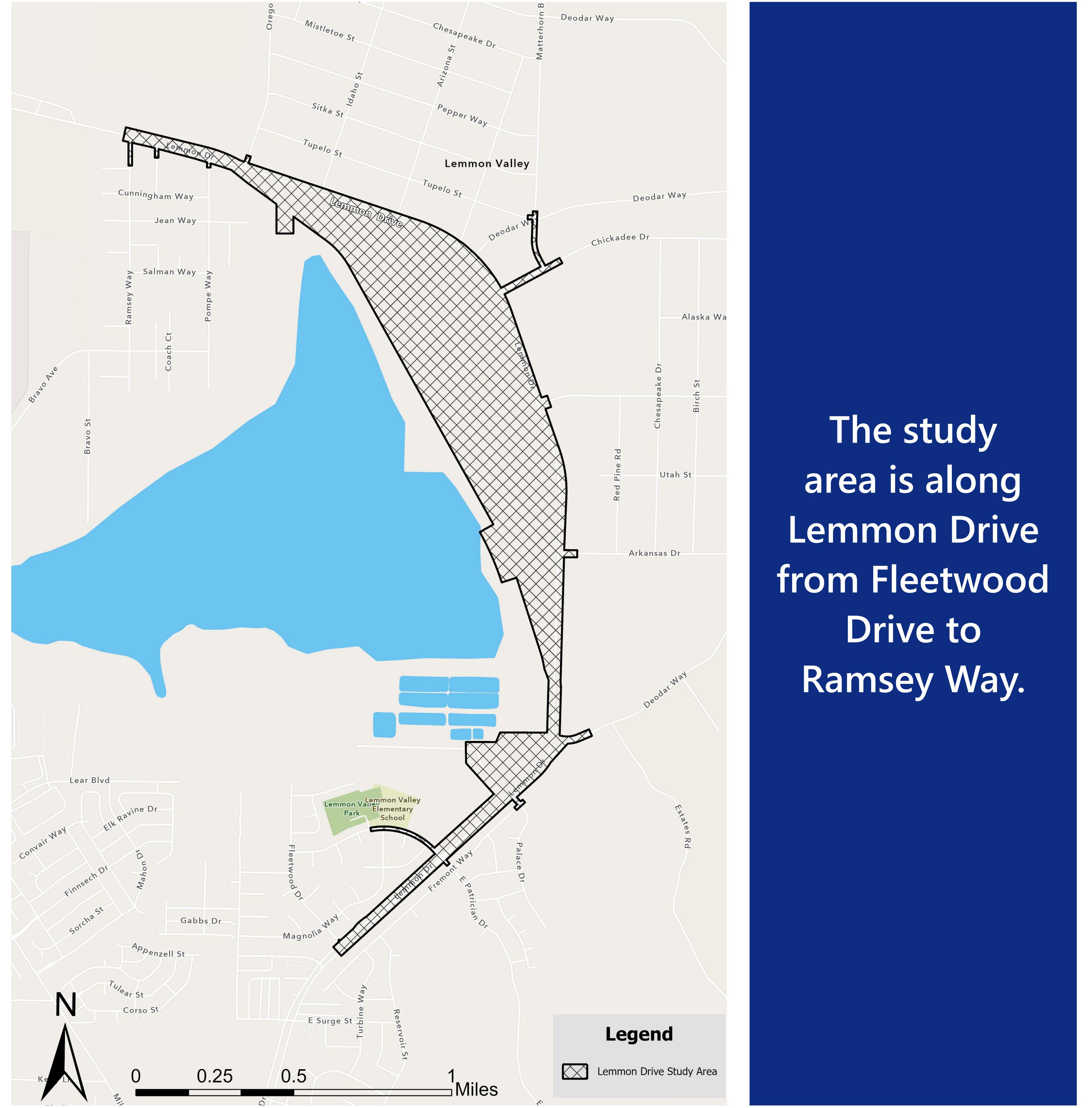


LEMMON DRIVE P R O J E C T



STUDY AREA

LEMMON DRIVE PROJECT



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Lemmon Drive Traffic Improvements & **Resiliency Project**

All information presented is preliminary and subject to revision







Project Need

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 continously provide flood mitigation for Lemmon Drive and private property. The total cost for maintenance, HESCO barrier replacement, and continous 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.

Project Purpose

- Provide a safe and reliable regional road with at least one dry lane in each direction of travel during a 100-year flood event (which is a 1% yearly chance of roadway being under water), as determined by FEMA Base Flood Elevation
- Provide safe access for all multi-modal users with enhanced shared use path opportunities and safer pedestrian crossings
- •Reconstruct and upgrade Lemmon Drive to meet current design standards, 2050 RTP regional needs, and address any deficiencies or safety concerns in the existing roadway alignment
- Reduce maintenance costs and burdens on Washoe County and City of Reno during flood events

THE PROJECT WOULD:

- Provide safe and reliable access to Lemmon Valley area during regulatory flood events Provide a new multi-use path for walking and biking Build the road in a way that doesn't cause more flooding Build flood mitigation basins near the road to help with potential
- future flooding
- Allow first responders to access homes more quickly during flood events





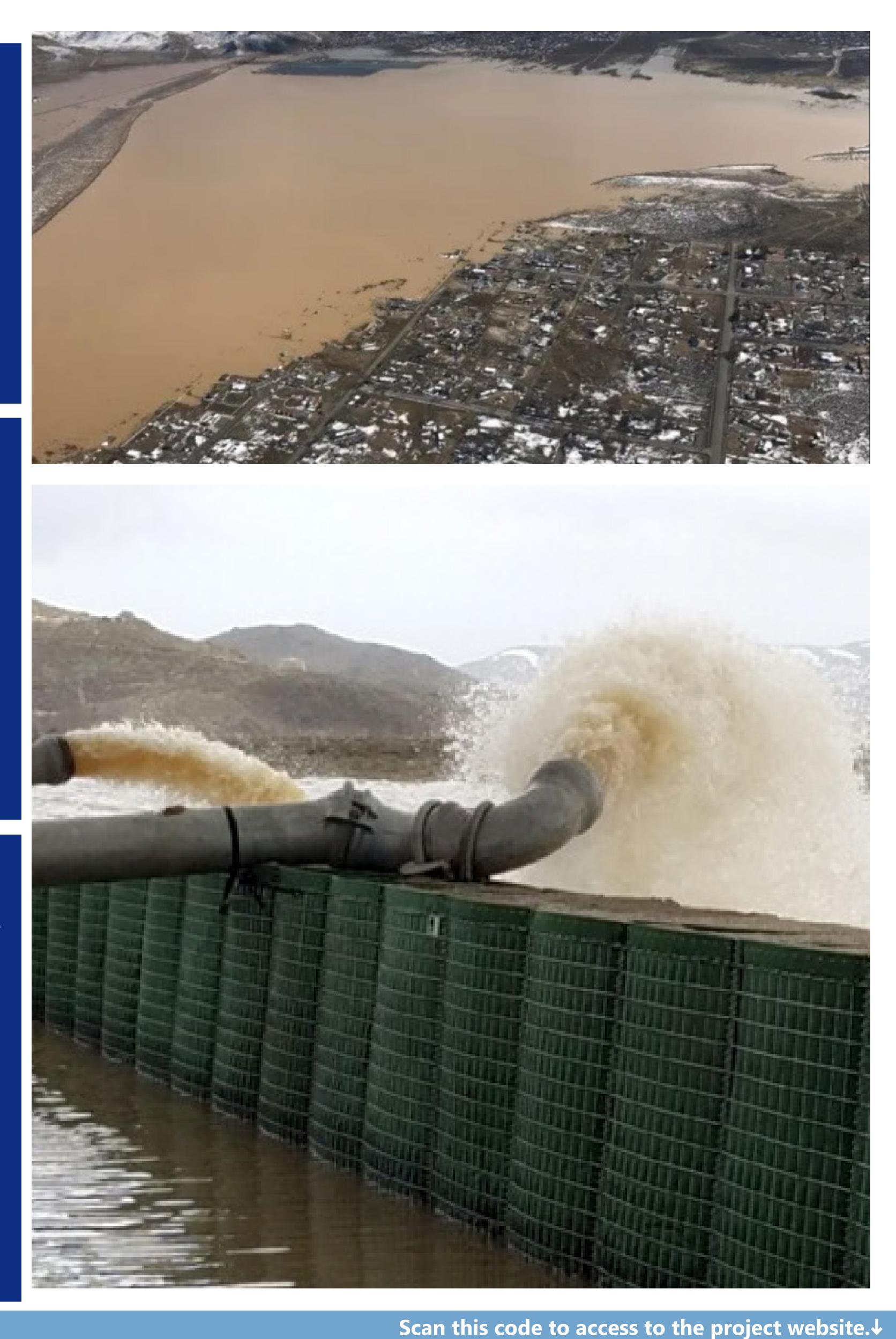
WHY IS THE PROJECT NEEDED?

THE PROJECT WOULD NOT:

- Have adverse effect to the mapped floodplain
- Provide additional land for development
- Have an impact on emergency-response times for medical emergencies/structural fires

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In early 2024, RTC held an online public meeting from January 24 through February 26, 2024 with an in-person event held on February 7, 2024. RTC also conducted a series of pop-up community meetings in May and June 2024. A summary of comments received at these meetings and responses are below.

<u>Comment:</u> Moving the roadway closer to Swan Lake doesn't make sense, wouldn't that mean it would increase the chance of flooding?

Response: The Build Alternative realigns Lemmon Drive to higher existing ground that is closer to Swan Lake, and is higher than the current roadway, which is located below the 100-year flood elevation. The majority of the proposed alignment is above the 100-year flood elevation and results in less land and excavation necessary for the required flood mitigation basins and reduces overall project costs.

<u>Comment:</u> We have concerns about the environmental impacts. Swan Lake is a nature preserve and there are a lot of waterfowl and other birds. We are also concerned about potential existing contamination of the soil and water of Swan Lake.

Response: As part of the National Environmental Policy Act (NEPA), RTC is evaluating potential impacts of the project which will be documented in an Environmental Assessment (EA). RTC is consulting with the US Fish and Wildlife Service (USFWS) regarding migratory birds. The project will avoid impacts to migratory birds by scheduling grounddisturbing construction activities outside the nesting season. An Initial Site Assessment will be prepared that will document potential sites of contamination and likelihood of encountering contamination during construction, and if applicable, mitigation strategies will be identified.





Public Comments Received

<u>Comment:</u> Why can't RTC raise the existing Lemmon Drive alignment?

<u>Response</u>: Raising the existing Lemmon Drive alignment was evaluated early in the alternatives development process but eliminated from further consideration due to the additional impacts to flood mitigation and costs. In response to comments received from the community, the project team reconsidered raising the existing Lemmon Drive alignment. To stay above the floodplain, Lemmon Drive would need to be raised approximately 2 feet to 10 feet. This would affect properties next to Lemmon Drive because their driveways would need to be adjusted to a suitable slope and could result in potential right-of-way impacts. Additionally, constructing the project while maintaining traffic on the roadway would be very difficult and expensive, and construction duration would be longer than the Build Alternative. Raising existing Lemmon Drive would also have siginificant drainage impacts resulting in additional mitigation needs between Oregon Boulevard and Waterash Street, requiring approximately 10 times greater volumetric earthwork mitigation than the Build Alternative.

<u>Comment</u>: Can the project provide an additional lane in each direction?

<u>Response</u>: The project evaluation includes conducting traffic forecasts out to the year 2050 based on current proposed land use and overall Washoe County growth model. This evaluation shows only one lane in each direction is needed to meet acceptable traffic operation standards. Adding unwarranted additional lanes could result in undesirable circumstances such as higher average vehicle speeds.

<u>Comment</u>: This project is going to increase flooding. **Response:** The Lemmon Drive project would not change flood elevations or limits. The project is needed to provide safe and reliable access to the community during flooding events and better access for local agencies to address flooding issues. Project design will conform to Section 110, Article 438 Flood Hazards in the Washoe County Development Code. The project would have no adverse impacts to the accepted 100-year FEMA floodplain. The project would enable Washoe County to focus resources on mitigating flooding on private property during flood events.

<u>Comment:</u> There needs to be additional connections to realigned Lemmon Drive, not just Chickadee Drive and Arkansas Drive. Consider additional access points at Idaho Street or Arizona Street. Consider access at Nectar Street for the fire station.

<u>Response</u>: The Build Alternative has been refined to include extending Arizona Street to the realigned Lemmon Drive. Additionally, existing Lemmon Drive from Waterash Street to Chickadee Drive would be reconstructed as a frontage road. A connection to Nectar Street was evaluated but is not included. **Discussions with the Truckee Meadows Fire Protection District indicates that the Nectar Station is a volunteer** station used only for wildfire events. Emergency services are provided from the Stead Station and those emergency response times would not be impacted. Residents who currently use Nectar Street to access their homes would use Arkansas Drive or Chickadee Drive.

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Response: RTC does not control development or entitlements. The realigned Lemmon Drive would require acquisition of private property from a major developer in the area, however, the project is not being altered to accommodate their needs. The land acquired would be used for flood mitigation basins and could not be developed in the future.

Response: The project team looked at how traffic rerouting may occur to gain a perspective on the change in traffic volumes along the roads that would maintain access to Lemmon Drive. The evaluation resulted in the following results for additional traffic in the existing afternoon peak period (4-6 pm).

Oregon Boulevard at Lemmon Drive would see approximately 20 more vehicles per hour which would be equivalent to less than 1 additional car per minute.

Arizona Street at Lemmon Drive would see a see approximately 120 more vehicles per hour which would be equivalent to 2 additional cars per minute.

Chickadee Drive at Lemmon Drive would see a see approximately 100 more vehicles per hour which would be equivalent to 2 additional cars per minute.

Arkansas Street at Lemmon Drive would see a see approximately 50 more vehicles per hour which would be equivalent to 1 additional car per minute.

Lemmon Drive Traffic Improvements & Resiliency Project



<u>Comment</u>: This project is being done to allow more development in our community that we do not want. Prado Ranch should be paying for this project. Moving the road opens up more land for development.

<u>Comment:</u> Removing access will significantly increase traffic on those roads providing access to the new Lemmon Drive.

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ALTERNATIVES ANALYSIS

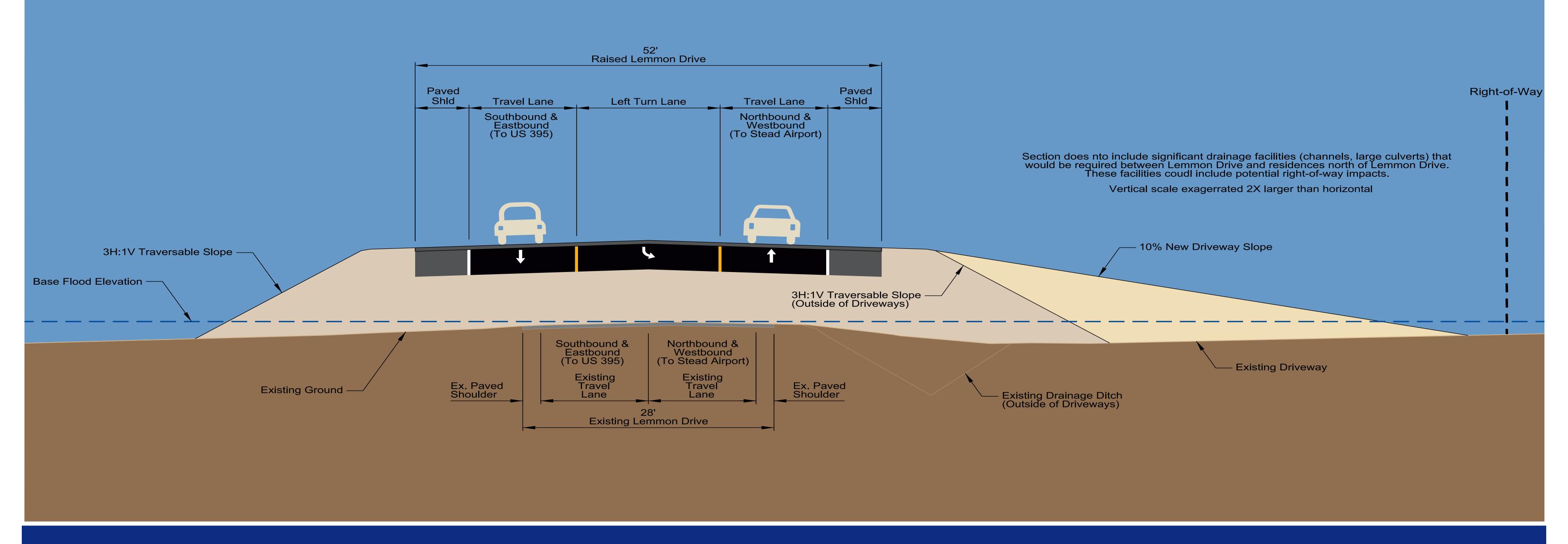
LEMMON DRIVE Project

RAISING EXISTING LEMMON DRIVE

In order to provide a roadway that is above the 100-year floodplain, utilizing the existing alignment would require raising Lemmon Drive by two to ten feet. Raising existing Lemmon Drive **would**:

- Directly impact traffic and travel times during construction due to adjacent improvements
- Create a barrier immediately adjacent to existing homes along the northern portion of the project resulting in impacts to hydraulic flows and require additional flood mitigation
 Require over 10x the volumetric mitigation excavation compared to utilizing the existing berm to avoid impacts to the 100-year floodplain
- Require construction of additional drainage facilities to minimize flood impacts

Raising Lemmon Drive <u>could</u> have increased visual impacts and impact existing TMWA waterlines.



NO BUILD ALTERNATIVE

The No Build Alternative (leaving existing Lemmon Drive as it is today), does not provide reliable residential, business, or emergency services access during flood events. The No Build Alternative would also continue to require substantial Washoe County and City of Reno resources to manage flood events. Each time a flood event occurs, it costs approximately \$1.1 million to deploy HESCO barriers, not including the ongoing costs for pumping.

REASONS FOR IMPROVEMENTS

- Currently, extensive flood mitigation efforts are required to mitigate major flood events along Lemmon Drive, which requires extensive resources and taxpayer money. These efforts would continue to be required with the No Build Alternative.
- Improvements are needed to provide reliable access for emergency services and first responders.

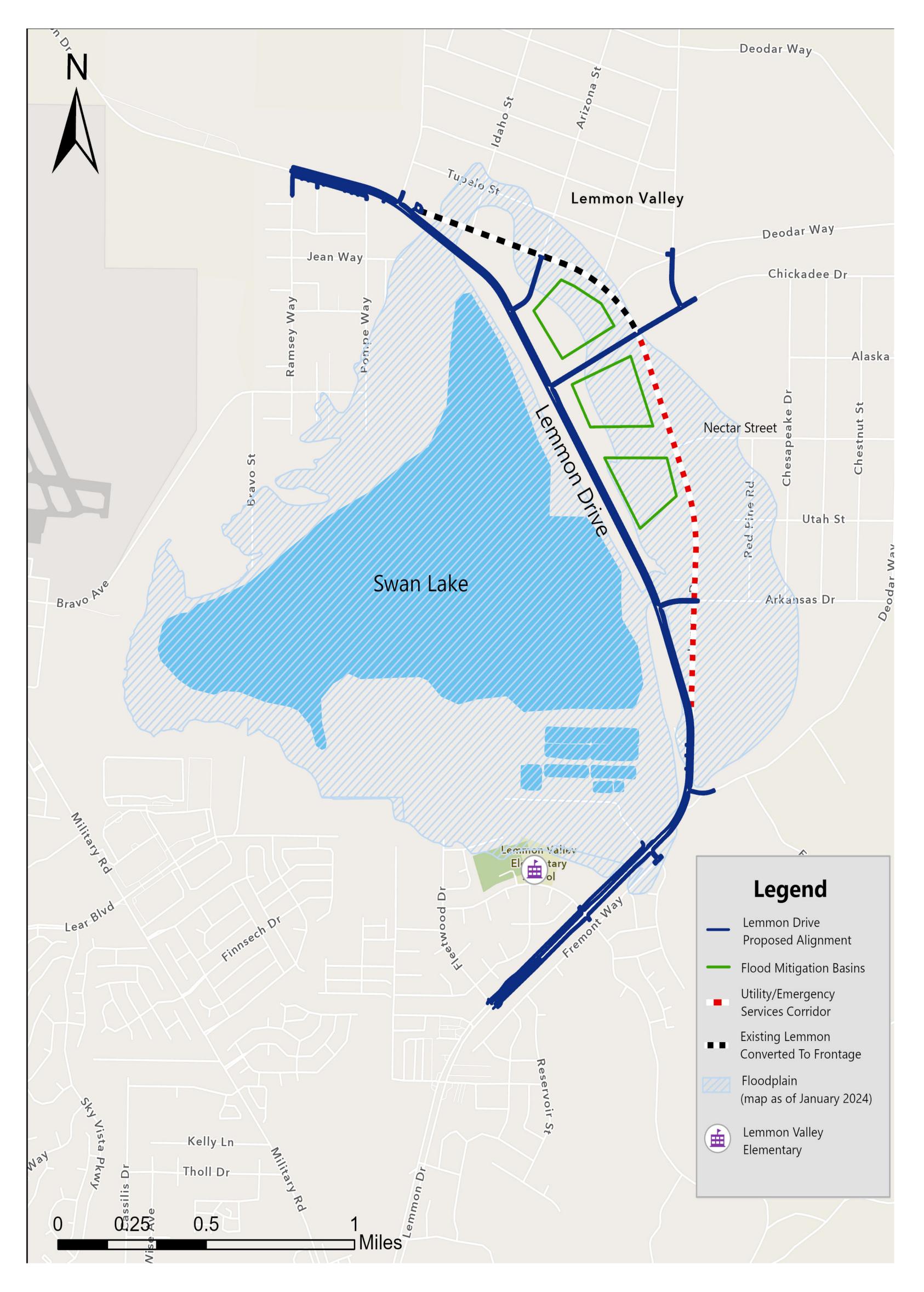


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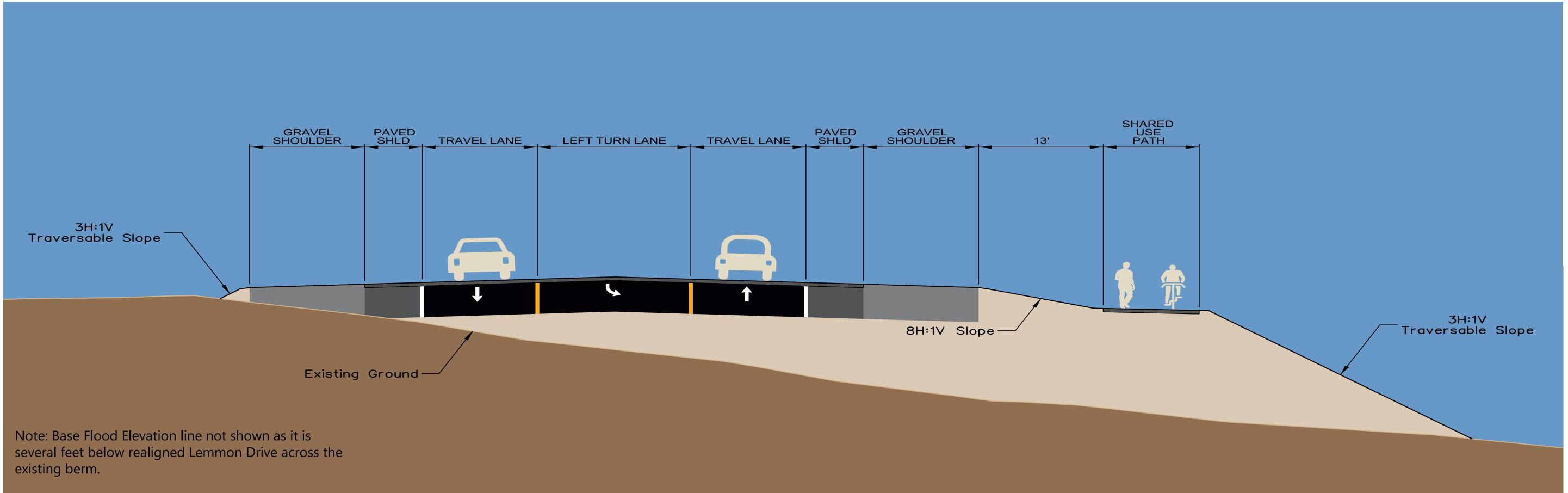
PROPOSED BUILD ALTERNATIVE

FLOOD MITIGATION

As required by Washoe County Code, the flood mitigation basins will be developed with 1.3 to 1 mitigation requirements. For every 1 cubic yard of material added to the floodplain, 1.3 cubic yards will be removed. Washoe County is the agency with jurisdiction granted by FEMA to comply with federal flood requirements.

SAFETY

Existing speed limits to be maintained. Roadway slope designed to be traversable with a maximum height of 16 feet. Project would have 6-foot paved shoulders and a 13-foot gravel shoulder between travel lanes and the roadway slope.



Based on public comments received during the February 2024 comment period, the project team has made refinements to the Build Alternative. To address access concerns, the Proposed Build Alternative would: Extend Arizona Street to connect with the realigned Lemmon Drive. Reconstruct existing Lemmon Drive from Waterash Street to Chickadee Drive as a frontage road. Convert a portion of existing Lemmon Drive to a Utility/Emergency Corridor.

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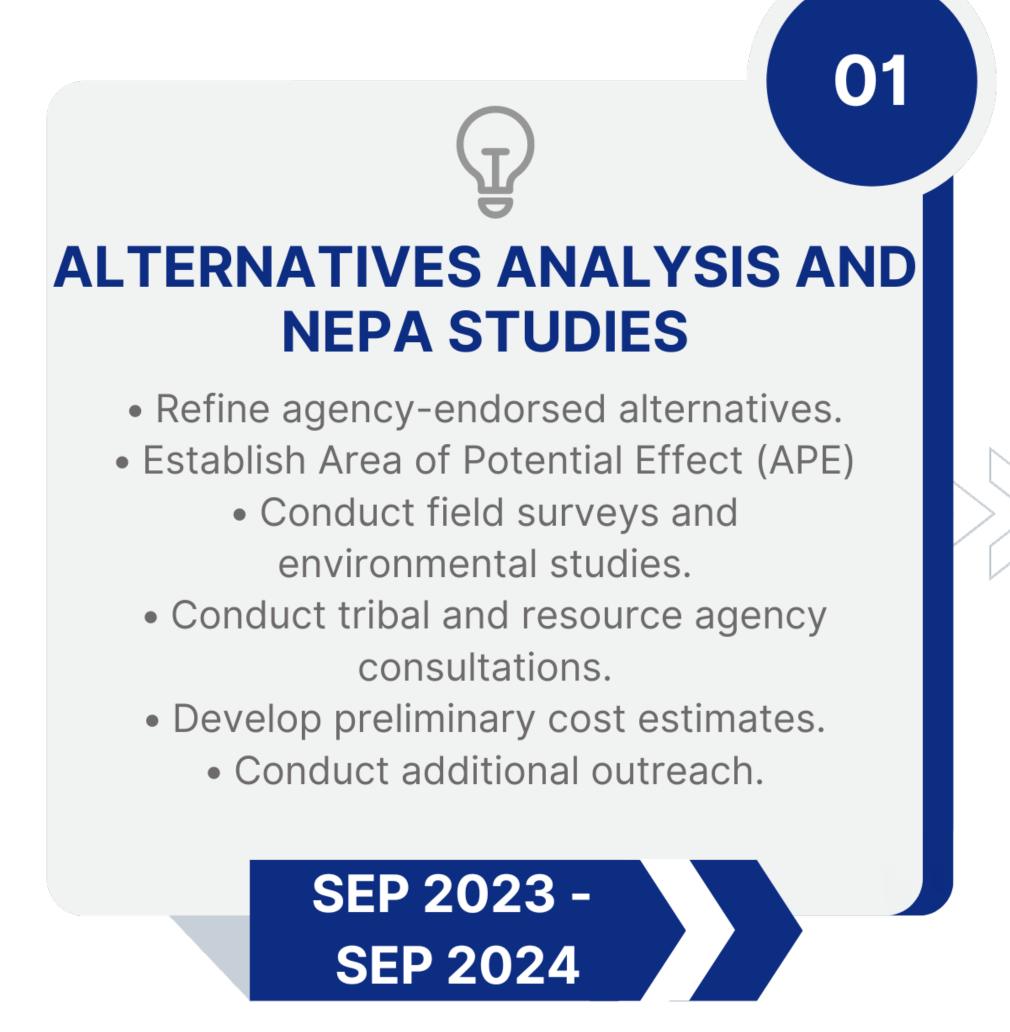






» NEPA is the National Environmental Policy Act (1969), requiring federal agencies to assess the environmental effects of proposed actions before making decisions.

throughout the process.





STUDY PROCESS

What is NEPA?



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» Using the NEPA process, agencies evaluate the environmental, social, and economic effects of proposed actions. Agencies also provide opportunities for public involvement

