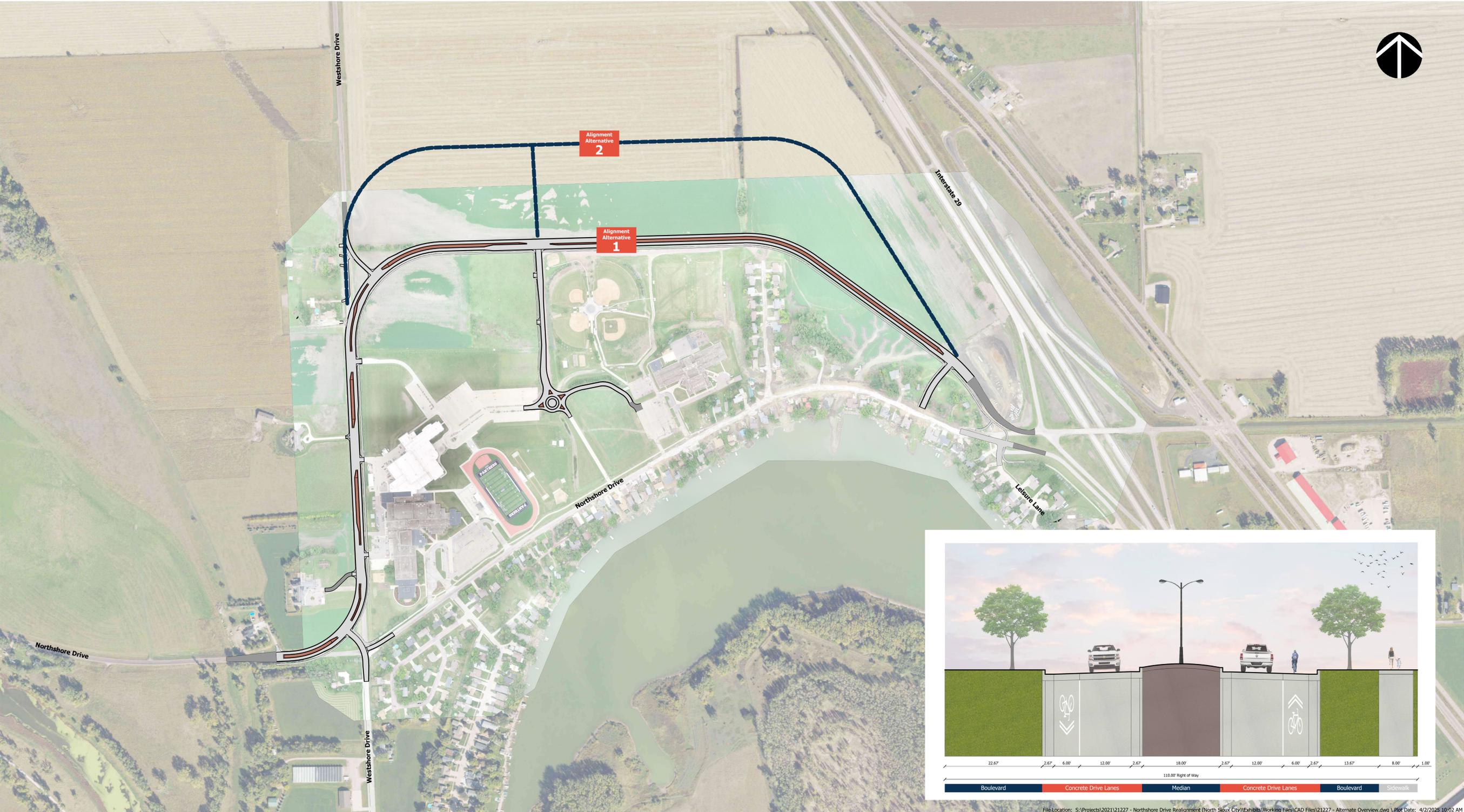


# Build Alternatives Evaluated



File Location: S:\Projects\2021\21227 - Northshore Drive Realignment (North Sioux City)\Exhibits\Working Files\CAD Files\21227 - Alternate Overview.dwg | Plot Date: 4/2/2025 10:02 AM

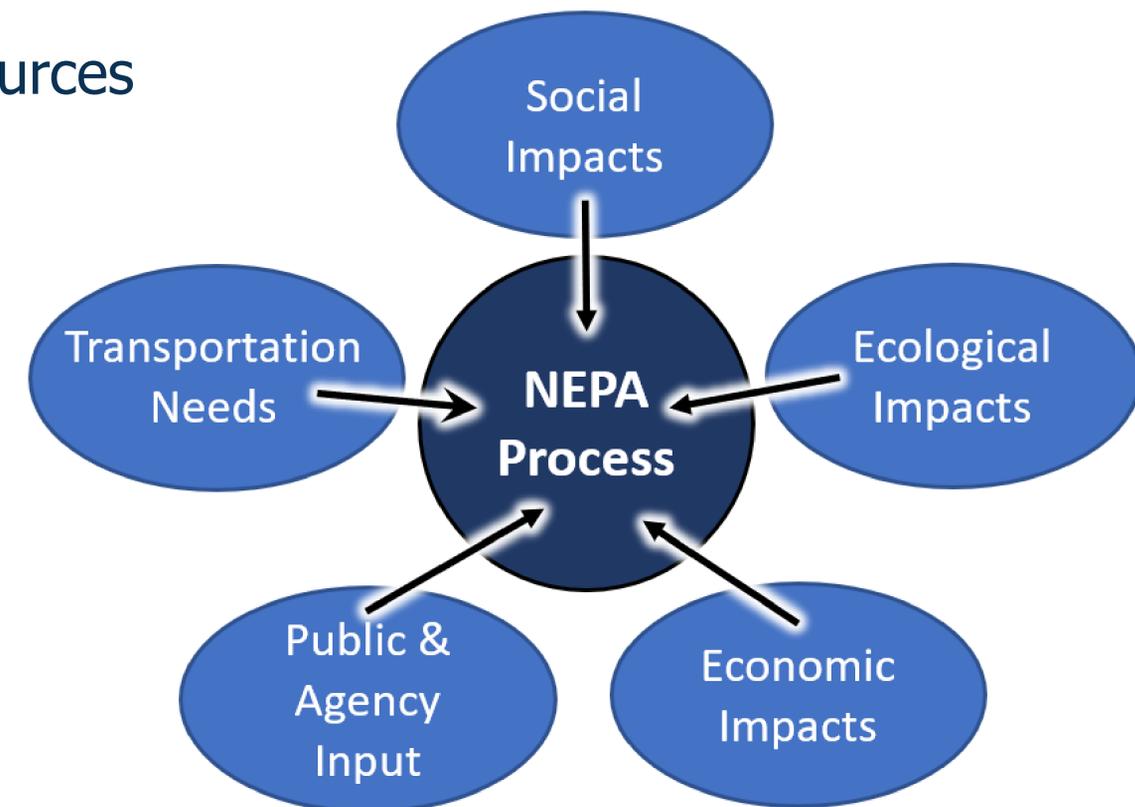
**PRELIMINARY PLAN**  
NOT FINAL - SUBJECT TO CHANGE

# Environmental Assessment



The **National Environmental Policy Act** (NEPA) requires federal agencies to assess the environmental impact of their actions before making decisions.

- Air Quality & Noise
- Constructability
- Construction Schedule
- Drainage & Floodplains
- Hazardous Materials
- Historic Properties
- Project Cost
- Project Length
- Land Use
- Trails & Recreational Resources
- Right-of-Way
- Safety
- Socio-Economic Impacts
- Traffic Control & Access
- Water Quality
- Wetland Impacts
- Utility Impacts
- Threatened and Endangered Species



# Purpose & Need



NEPA is a decision-making process guided by the Purpose and Need for the project.

- **Project Purpose**

- Accommodate future mobility in North Sioux City by reducing expected roadway congestion along the Northshore Drive.
- Fulfill the federally mandated funding requirements for the project:

*"...to complete a realignment, bypass project on Northshore Drive that would route farm, school, and residential traffic from west of McCook Lake off of the existing Northshore Drive."*

- **Project Needs**

- **Reduce Congestion** – Achieve Level of Service B or better on Northshore Drive. Currently Level of Service C and anticipated Level of Service D in 2045.
- **Legislative Mandate** – Complete a realignment, bypass project to route farm, school, and residential traffic off the existing Northshore Drive. In 2022 Federal Omnibus Bill.

# Evaluation Summary



## ALTERNATIVE 1

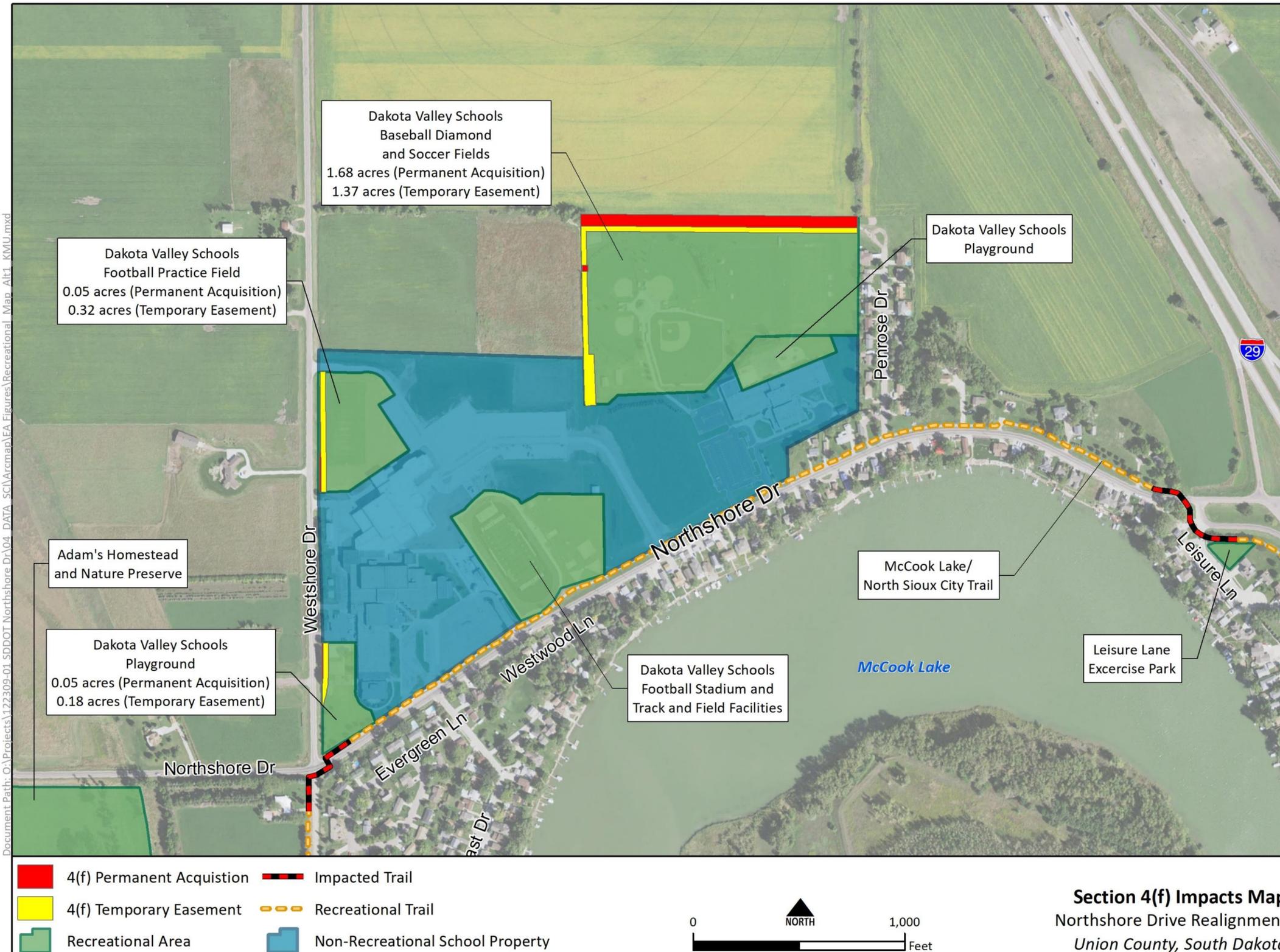
- **Advantages:**
  - Lower construction cost
  - Less ROW acquisition
  - Faster travel time and less delay
  - More likely to be utilized for travel to school due to being fastest route
  - Less impacts to farmland
  - Lower impacts to wetlands
  - More public comments in support
- **Disadvantages:**
  - More ROW required from Section 4(f) Dakota Valley Schools property

## ALTERNATIVE 2

- **Advantages:**
  - Less ROW required from Section 4(f) Dakota Valley Schools property
- **Disadvantages:**
  - Higher construction cost
  - More ROW Acquisition
  - Slower travel time with more delay
  - Less likely to be utilized for travel to school due to not being fastest route
  - More impacts to farmland.
  - Greater impacts to wetlands
  - Fewer public comments in support

**Build Alternative 1 = Preferred Alternative**

# Section 4(f) Resources



The project would result in a “use” of recreational resources.

There would be temporary easements and permanent acquisition of Dakota Valley Schools property, but not within the contributing recreational features (e.g., soccer fields, baseball diamonds, etc.).

Portions of the McCook Lake/North Sioux City Trail would be temporarily unusable. Trail access would be maintained through phasing and the use of a pedestrian detour.

This figure shows the recreational resources in the project area and anticipated impacts.

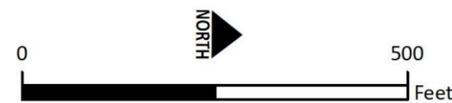
**PRELIMINARY PLAN**  
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# Section 4(f) Resources



Document Path: O:\Projects\122305-01\_SDDOT\_Northshore Dr\04\_DATA\_SCI\Arcmap\EA\_Figures\4f\Detour\_Map\_KMU.mxd

- Recreational Trail
- Proposed Trail Detour



**Proposed Trail Detour Map**  
Northshore Drive Realignment  
Union County, South Dakota

**Pedestrian and bicycle trail access would be maintained throughout construction.**

However, it may be limited at times.

Trail access would be maintained during construction through the use of a detour, temporary trail connections, and/or phasing.

This figure shows the proposed temporary pedestrian detour during construction of the Northshore Drive/Westshore Drive.

**PRELIMINARY PLAN**  
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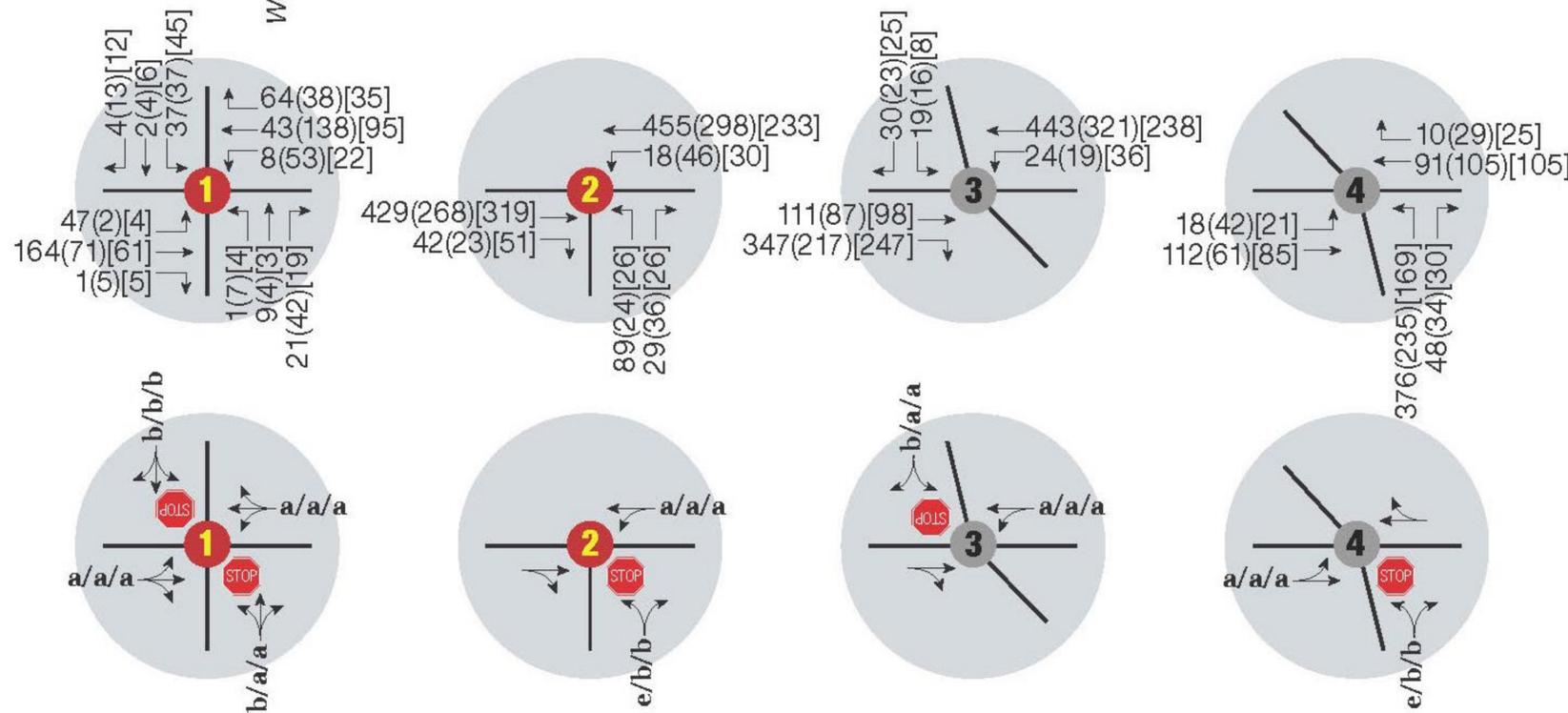
# Existing Traffic Conditions



## LEGEND

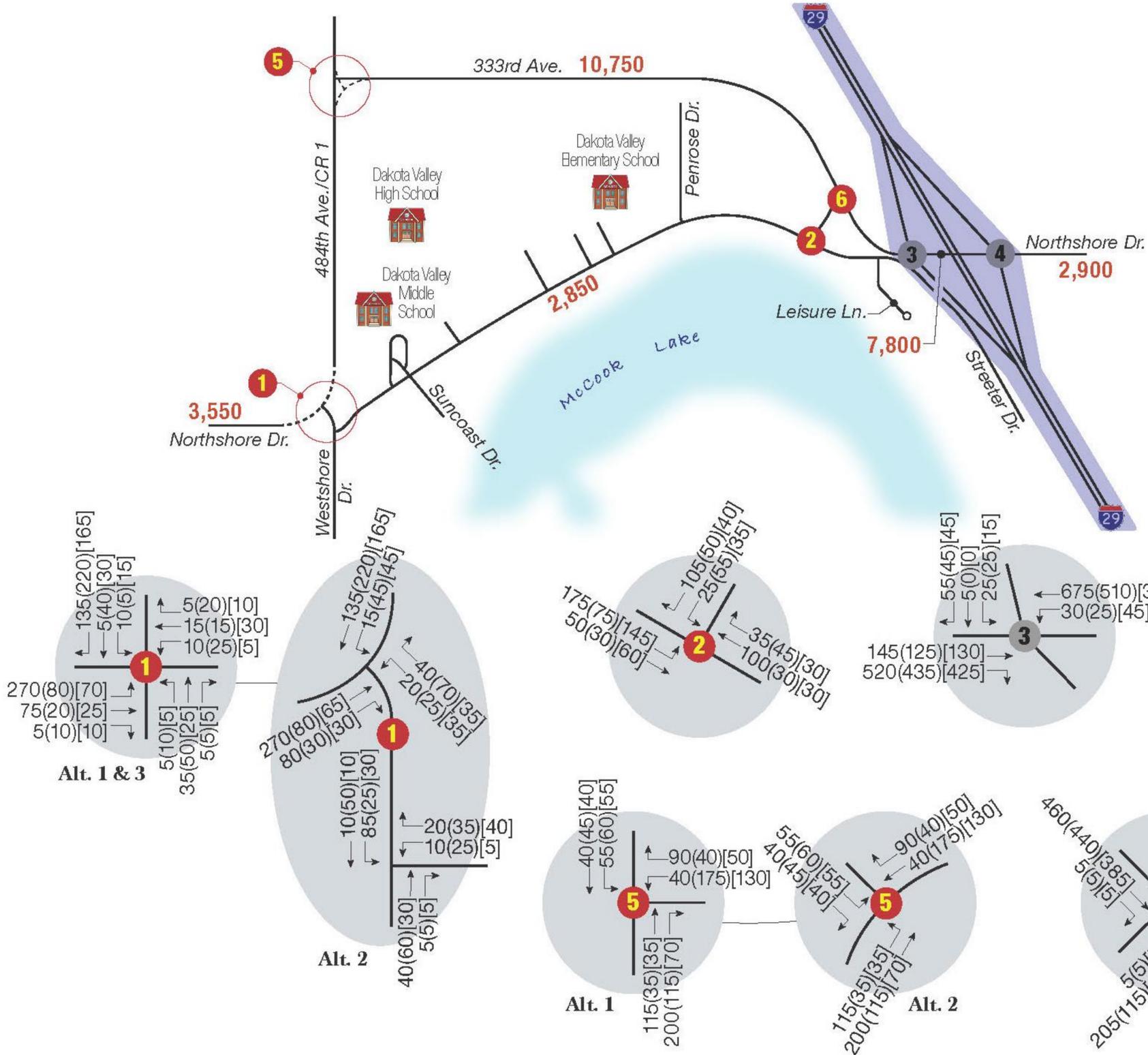
- XXX(XXX)[XXX] = AM(PM)[Dismissal] Peak Hour Traffic Volumes
- x/x/x = AM/PM/Dismissal Peak Hour Unsignalized Intersection Level of Service
- XXXX = Daily Traffic Volumes
- = Stop Sign
- = Study Intersection
- = Supplemental Intersection
- = Previously Studied

*NOTE: Exit 4 Interchange Previously Studied in the SDDOT 2020 DCIS and currently being further studied as part of the I-29 Corridor.*



**PRELIMINARY PLAN**  
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# Future Traffic Volumes



## LEGEND

XXX(XXX)[XXX] = AM(PM)[Dismissal] Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

X = Study Intersection

X = Supplemental Intersection

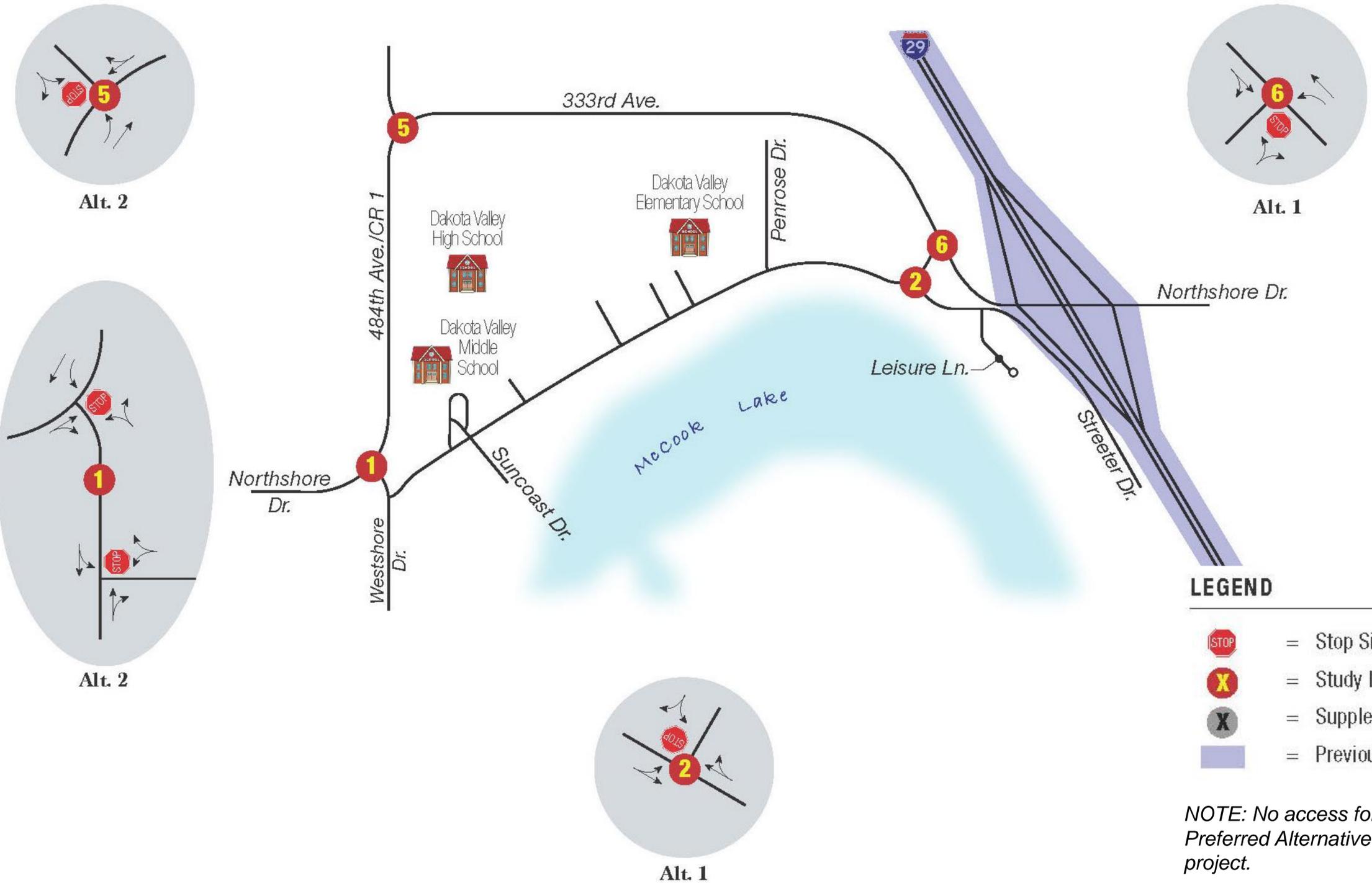
■ = Previously Studied

NOTE: No access from Penrose Drive to the Preferred Alternative is proposed as part of this project.



PRELIMINARY PLAN  
NOT FINAL - SUBJECT TO CHANGE

# Preferred Alternative



**LEGEND**

	= Stop Sign
	= Study Intersection
	= Supplemental Intersection
	= Previously Studied

*NOTE: No access from Penrose Drive to the Preferred Alternative is proposed as part of this project.*