

Welcome!

The purpose of this meeting is to:

- Present a range of conceptual alternatives
- Gather information from public agencies, potentially impacted landowners and the public

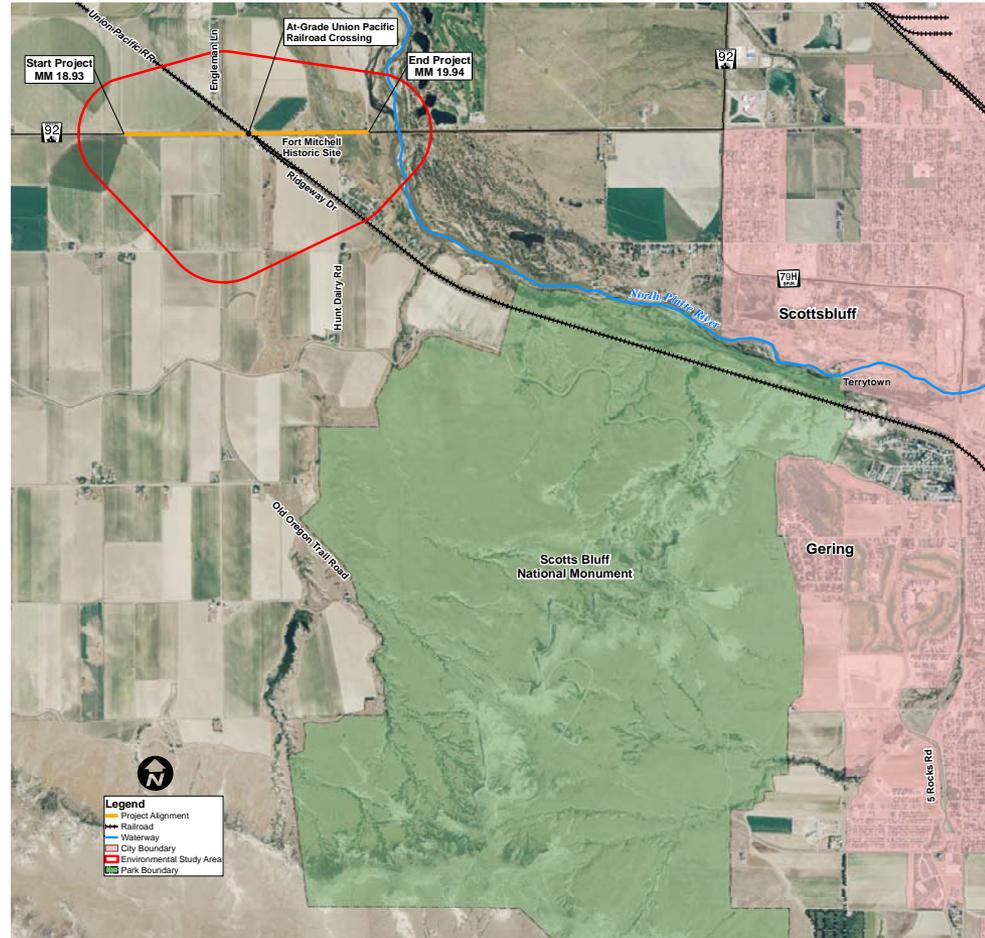


Project Number: STP-TMT-RRZ-92-1(121), Control Number: 51250



Project Description

- Construct a new viaduct over the existing Union Pacific Railroad (UPRR) mainline tracks to separate rail and roadway traffic on Highway N-92, two miles west of Scottsbluff
- Reconstruct approximately 1 mile of Highway N-92
- Realign the approach roadway to accommodate the new viaduct



Project Purpose

The purpose of the Project is to:

- Eliminate the potential for train-vehicle conflicts at the at-grade crossing of the UPRR mainline tracks and N-92
- Reduce the potential for vehicle-vehicle collisions at the at-grade crossing
- Reduce traffic delays and associated costs

What is a viaduct?

- Viaducts are bridges that separate intersecting traffic by moving traffic to different levels
- The Project viaduct would raise the roadway over the railroad tracks to avoid traffic delays and potential collisions



Example of a viaduct

Photo courtesy of GoogleEarth

Project Need

Train-Vehicle Conflicts

Year	Average Daily Traffic (ADT)	Trains/Day	Exposure Factor (ADT x Trains/Day)
2017	2,440	48	117,120
2037	2,865	75	214,875

- Exposure factor of 117,120 is more than twice the required minimum of 50,000 for consideration of a viaduct
- 35-degree skew angle affects drivers' ability to see oncoming trains

Vehicle-Vehicle Collisions

- Vehicle-vehicle accident rate along N-92, within the Project area, is roughly three times the statewide average rate for a two-lane rural highway
- History of rear-end collisions, hitting gate arms and other fixed objects

Traffic Delay & Cost

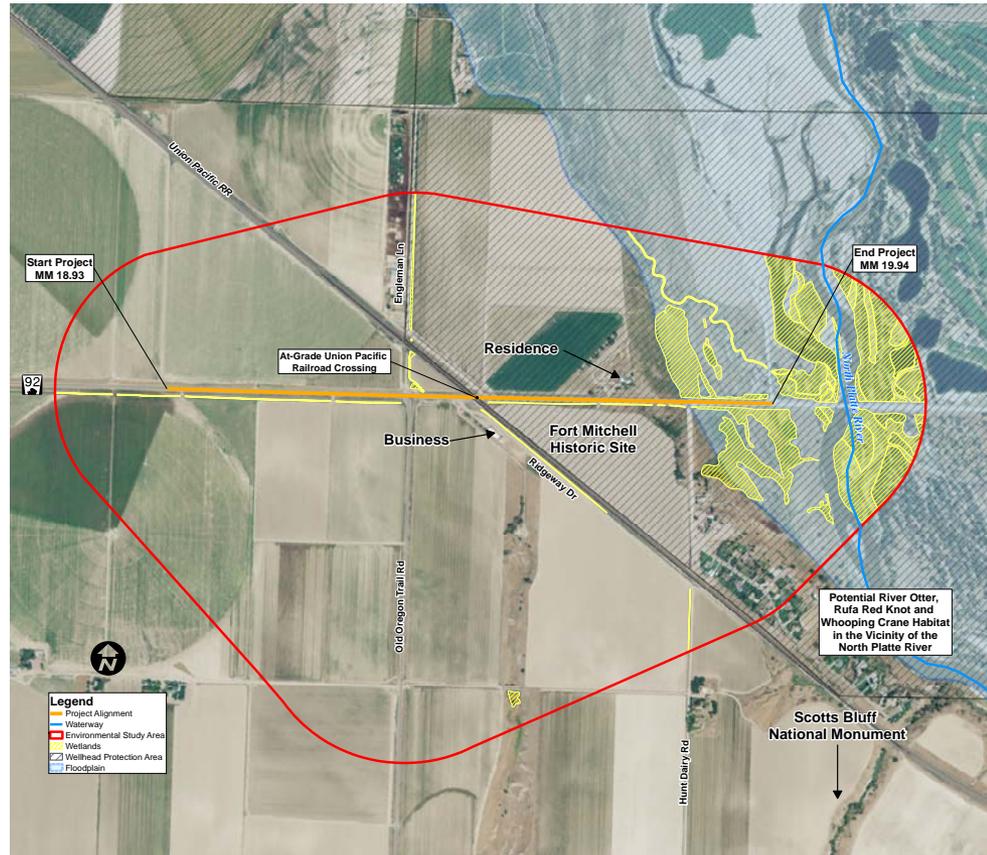
- Average time of crossing closure per train is approximately 2.7 minutes; over 2 hours of closure per day
- Estimated 5 total hours of vehicle delay per day
- Estimated annual cost of vehicle delay: \$27,450*
- Estimated annual cost of vehicle-vehicle collisions: \$49,650*
- Estimated annual cost of train-vehicle collisions: \$12,400*
- **Total estimated annual cost of traffic delay and collisions: \$89,500***

**These estimates reflect an average annual cost for all users based on the probability of delay and/or collisions occurring. These costs do not reflect actual costs for a specific incident.*

Environmental Considerations

The following key environmental factors are being considered throughout the decision-making process for this Project:

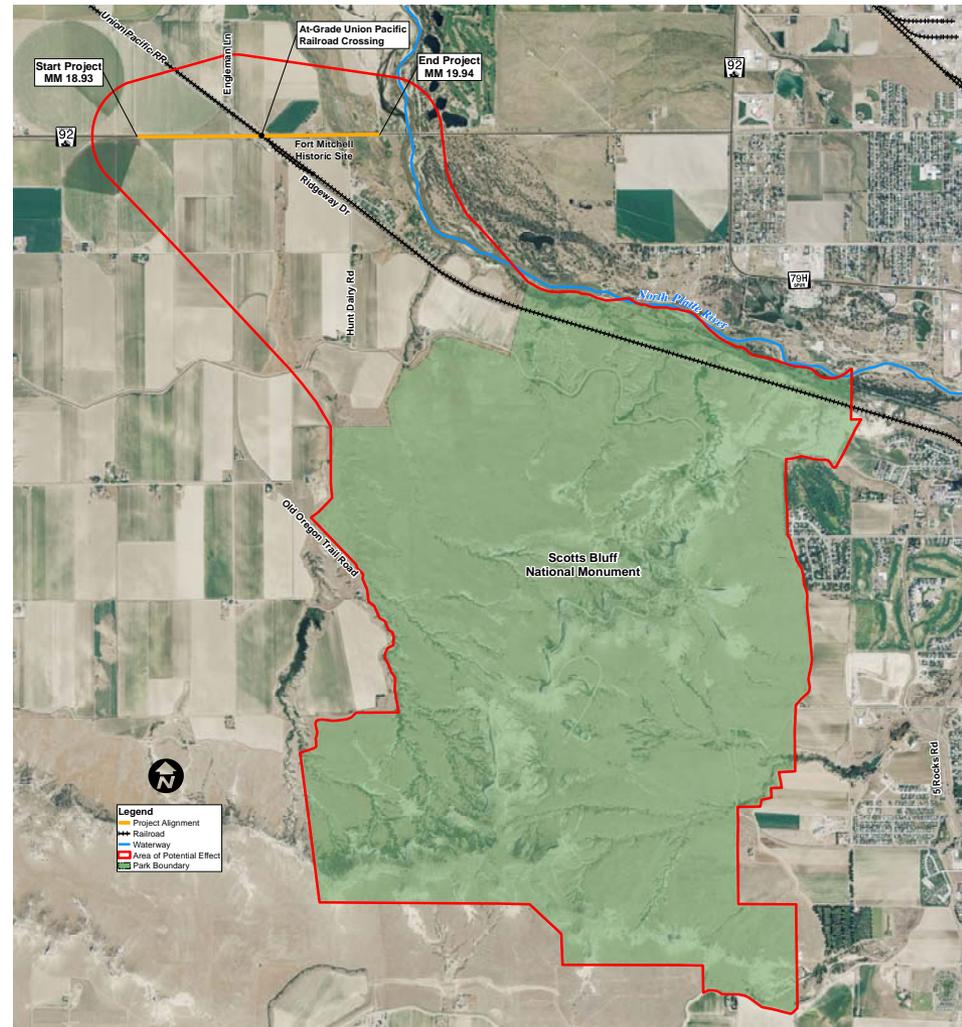
- Wetlands
- Regulated Materials
- Historic Properties
- Wellhead Protection Area
- Floodplain
- Threatened and Endangered Species



Identification & Evaluation of Historic Properties

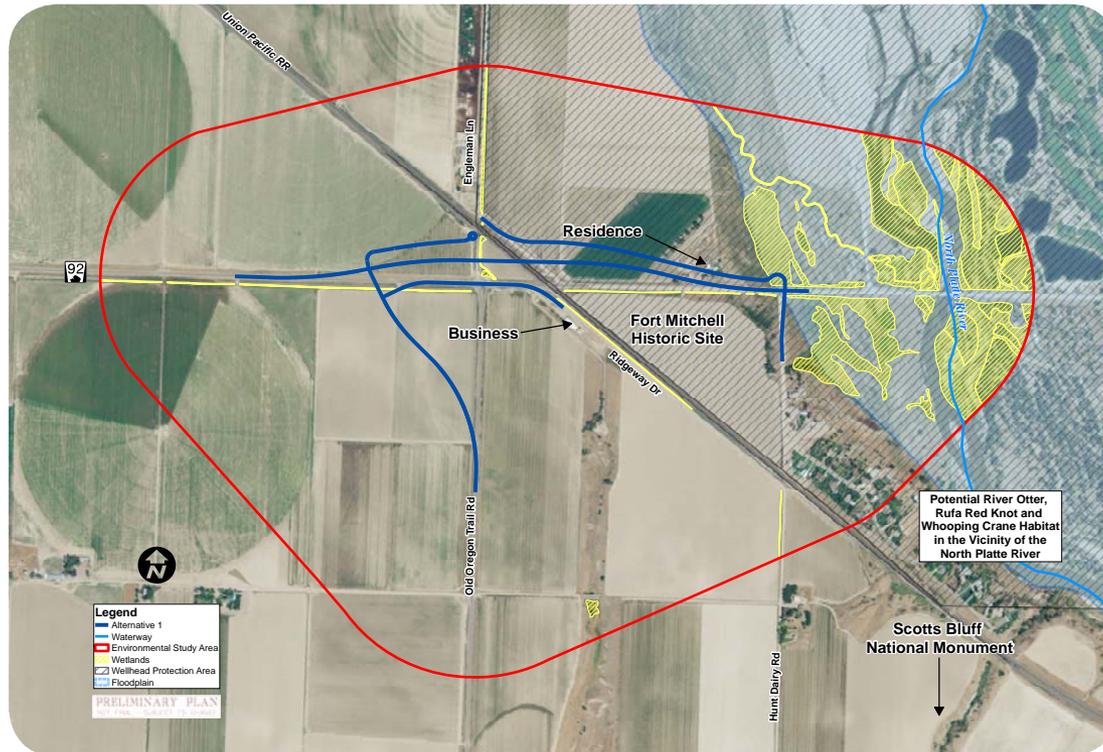
Section 106 of the National Historic Preservation Act

- Historic properties have been identified and evaluated for eligibility for the National Register of Historic Places
- One historic property, Fort Mitchell, has the potential to be directly impacted by the Project
- Section 106 evaluation would consider viewshed from the Scotts Bluff National Monument
- Potential consulting parties and Native American Indian tribes have been invited to participate in the Section 106 consultation process



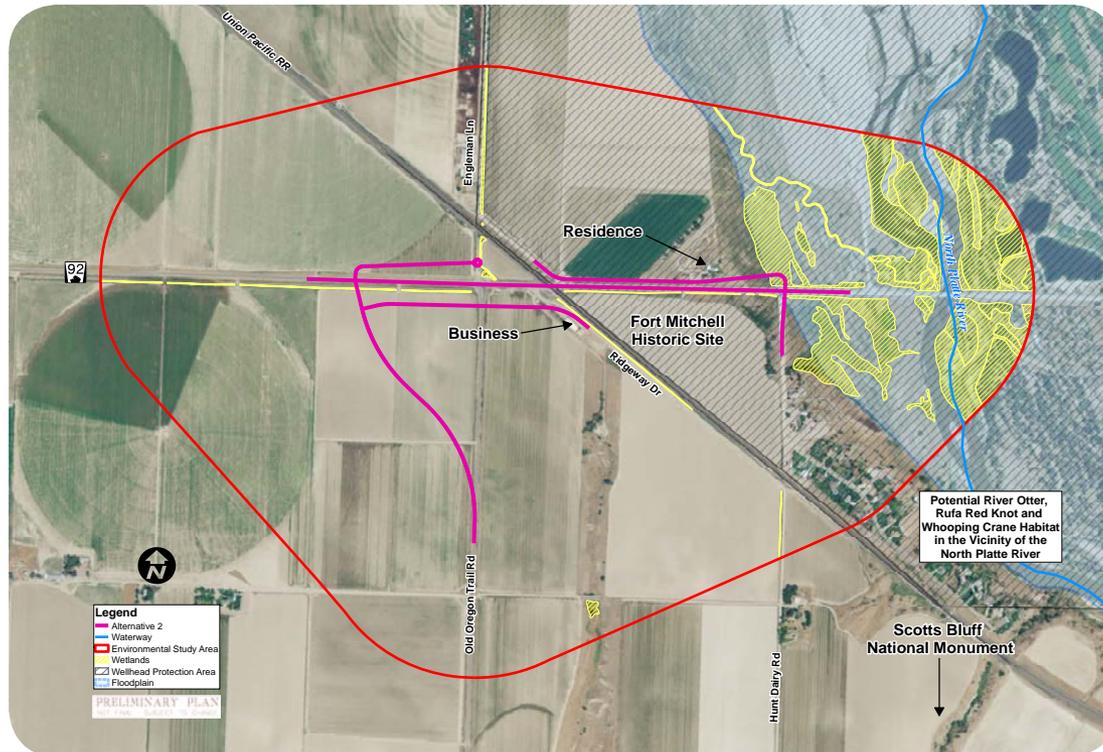
Alternative 1: North Alignment

- N-92 and the viaduct would be shifted to the north, parallel to the existing roadway
- Does not require a detour
- No impact on the Fort Mitchell historic property
- One residential impact on the north side of roadway



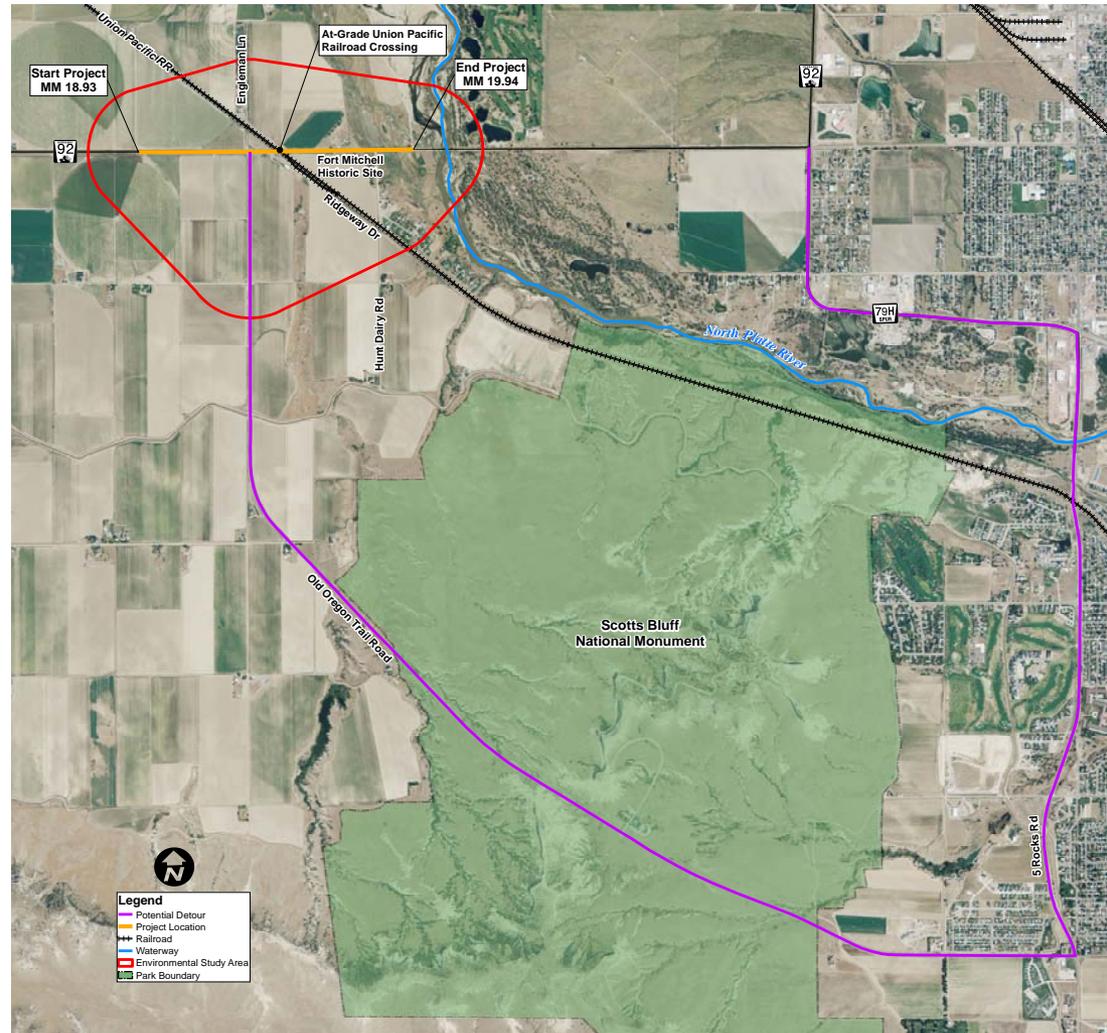
Alternative 2: On Existing Alignment

- N-92 and the viaduct would be constructed on the existing roadway alignment with long retaining walls east of the rail line
- Requires a detour through the Scotts Bluff National Monument property
- No impact on the Fort Mitchell historic property
- Requires the least amount of additional right-of-way and the least amount of fill



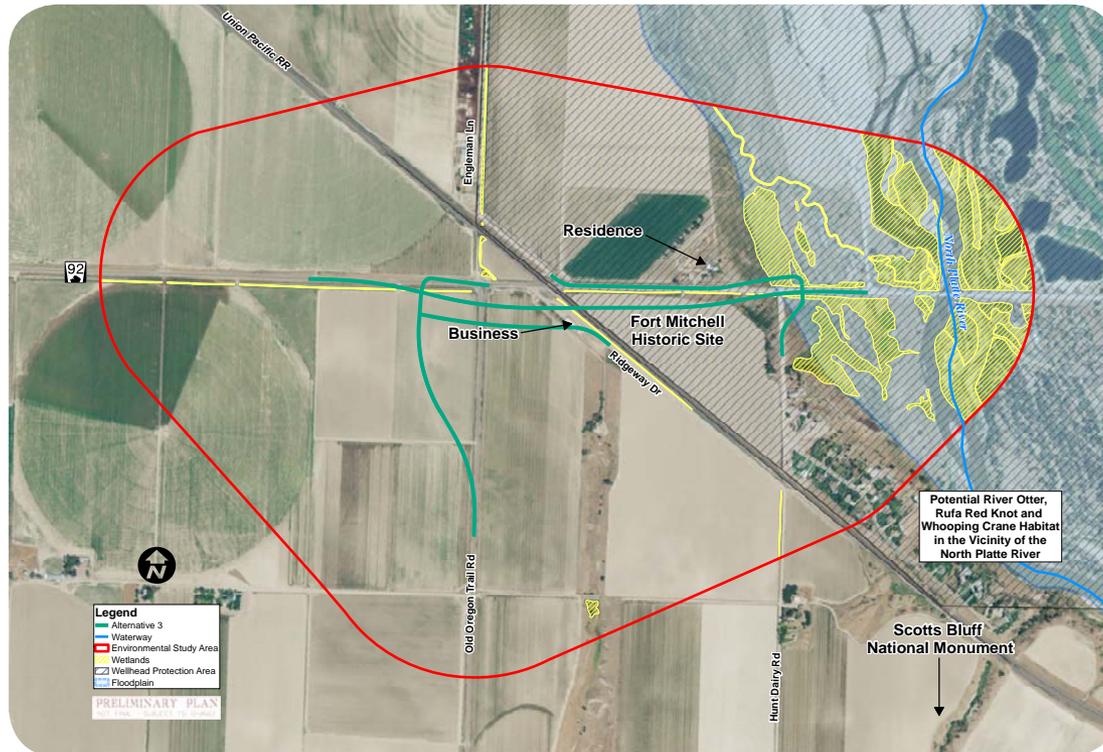
Potential Detour Route

- Potential detour through the Scotts Bluff National Monument property
- Detour required for Alternative 2
- Either temporary railroad crossing with signals **OR** detour required for Alternative 4



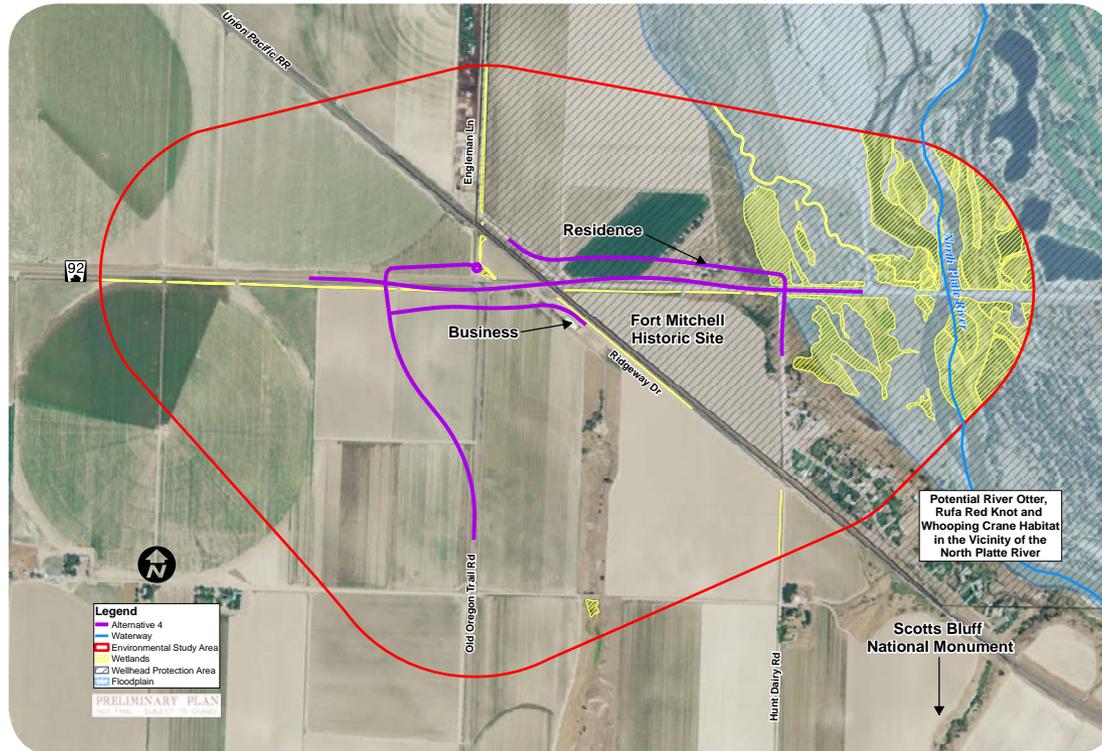
Alternative 3: South Alignment

- N-92 and the viaduct would be shifted to the south, parallel to the existing roadway
- Does not require a detour
- There is an impact on the Fort Mitchell historic property
- One business impact on the south side of roadway



Alternative 4: Modified North Alignment

- N-92 and the viaduct would be shifted slightly to reduce the crossing angle with the rail line
- Reduced crossing angle requires shorter bridge
- Requires temporary railroad crossing with signals **OR** detour through the Scotts Bluff National Monument property
- No impact on the Fort Mitchell historic property
- One residential impact on the north side of roadway



Preliminary Environmental Impacts

Impacts	Alternative 1 North Alignment	Alternative 2 On Existing Alignment	Alternative 3 South Alignment	Alternative 4 Modified North Alignment
Alternative Description	N-92 and the viaduct would be shifted to the north, parallel to the existing roadway.	N-92 and the viaduct would be constructed on the existing roadway alignment with long retaining walls east of the rail line.	N-92 and the viaduct would be shifted to the south, parallel to the existing roadway.	N-92 and the viaduct would be shifted slightly north of the existing roadway, reducing the crossing angle with the rail line.
Wetlands/Waterways	< 1 acre wetland 0 linear feet of stream	< 1.5 acres wetlands 0 linear feet of stream	< 2 acres wetlands 0 linear feet of stream	< 2 acres wetlands 0 linear feet of stream
Impact on Fort Mitchell Historic Site	No	No	Yes	No
Regulated Materials	Low risk	Low risk	Low risk	Low risk
Floodplain	Requires floodplain permit	Requires floodplain permit	Requires floodplain permit	Requires floodplain permit
Wellhead Protection Area	Project within wellhead protection area	Project within wellhead protection area	Project within wellhead protection area	Project within wellhead protection area
Threatened and Endangered Species	Project within potential habitat for River Otter, Rufa Red Knot, and Whooping Crane near North Platte River	Project within potential habitat for River Otter, Rufa Red Knot, and Whooping Crane near North Platte River	Project within potential habitat for River Otter, Rufa Red Knot, and Whooping Crane near North Platte River	Project within potential habitat for River Otter, Rufa Red Knot, and Whooping Crane near North Platte River
Right-of-way (ROW)	< 25 acres < 5 acres easement 1 residence acquired/relocated	< 15 acres < 5 acres easement No relocations	<25 acres < 10 acres easement 1 business acquired/relocated	< 25 acres < 10 acres easement 1 residence acquired/relocated
Constructability/ Construction Sequencing	Complexity – Moderate	Complexity – High	Complexity – Moderate	Complexity – Moderate
Detour	No	Yes; temporary at-grade crossing not viable at this location	No	Yes, or temporary at-grade rail crossing
Impact on Irrigation Facilities and Pivots	High – Relocate and/or reconstruct surface water irrigation controls; 1 pivot impacted	High – Relocate and/or reconstruct surface water irrigation controls; 1 pivot impacted	Low – Utilize existing surface water irrigation controls; 0 pivots impacted	High – Relocate and/or reconstruct surface water irrigation controls; 0 pivots impacted
Estimated Construction Costs⁽¹⁾	\$9.9 million	\$10.3 million	\$9.8 million	\$9.7 million ⁽²⁾
Estimated Detour-Related User Costs	N/A	\$2.2 million	N/A	\$2.2 million
Estimated Project Cost⁽³⁾	\$9.9 million	\$12.6 million	\$9.8 million	\$11.9 million

(1) The cost estimates for each alternative are based on NDOR Average Unit Prices from July 2013 to June 2014.

(2) Construction cost would be increased if a temporary crossing is used instead of a detour.

(3) The cost estimate does not include preliminary engineering, ROW, relocations, utilities, construction engineering or maintenance of the detour route.

Stay Involved!

Environmental Assessment (EA) Schedule *All Dates are Estimated and Subject to Change*



Construction has not been scheduled but is programmed in NDOR's five-year Surface Transportation Program (2016-2020).

For more information, visit:

www.Transportation.Nebraska.gov/projects

Click on the **Scottsbluff West Viaduct** link

Visit the online meeting from September 30 - October 15 at:

www.ScottsbluffWestViaductProject.com