



## **NH-80-1(192) *Brownson East*; C.N. 51535**

## **NH-80-1(195) *Brownson East Crossovers*; C.N. 51535A**

**LOCATION:** The proposed projects would involve approximately 7.08 miles of Interstate 80 (I-80) in Cheyenne County, and would include the Brownson Interchange 48 ramps to Link 17C (L-17C) between the ramp terminals. The proposed project would begin approximately 2.01 miles west of the Brownson Interchange 48 at Mile Marker (MM) 46+81 and end at MM 53+89, approximately 1.48 miles west of the Sidney West Interchange at Exit 55. Construction would begin and/or end approximately 200 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement.

**PURPOSE AND NEED:** The purpose of the proposed projects is to preserve the transportation asset, improve the reliability of the transportation system, and perpetuate the mobility of the traveling public. The need for the proposed project is based on the condition of the existing roadway and bridge structures.

**SCOPE OF WORK:** Proposed improvements on I-80 would consist of removing the existing pavement and foundation course of the driving lanes and shoulders and rebuilding with doweled concrete pavement on foundation course, constructing temporary crossovers, removing and replacing guardrail, culvert extensions, and bridge repairs and widening. The ramps at the Brownson Interchange would be reconstructed to the extent necessary to modify geometrics to meet acceleration/deceleration requirements. The remainder of the ramp lengths would be milled and resurfaced with asphalt. The improvements on L-17C would consist of concrete pavement repairs, milling and resurfacing the roadway and existing surfaced shoulders, bridge repairs and resurfacing, and removing and replacing guardrail. The existing rest area ramps and parking would also be reconstructed. The proposed improvements to the rest area would consist of constructing separate parking areas, one to accommodate 60 semi-trucks and the other to accommodate 30 cars and 7 recreational vehicles. A separate, concurrently running project, *Sidney (EB) Safety Rest Area Buildings*, would replace the buildings, sidewalks, and other associated facilities.

### **TRAFFIC VOLUMES:**

	<b>I-80</b>	<b>MM 46+81 – MM 53+89</b>
Year	2018	2038
Vehicles Per Day (ADT)	<b>8,225</b>	<b>9,675</b>
% Heavy Trucks	<b>61%</b>	<b>61%</b>

	<b>L-17C</b>	<b>MM 0+00 – MM 1+07</b>
Year	2018	2028
Vehicles Per Day (ADT)	<b>475</b>	<b>575</b>
% Heavy Trucks	<b>8%</b>	<b>8%</b>

**CONSTRUCTION SCHEDULE:** The proposed construction would be completed in three phases. The first phase of construction would begin the spring of 2018 and last until the winter of the same year, approximately seven months. The second phase would begin spring of 2019 and last until the winter of the same year, approximately seven months. The third phase of the proposed construction would take place in the summer of 2020, with anticipated completion prior to harvest season, and would consist mostly of erosion control and shoulder grading.

**ACCOMMODATION OF TRAFFIC:** The I-80 portion of the proposed projects would be constructed under traffic with lane closures accommodated by putting traffic head-to-head utilizing temporary median crossovers and other approved temporary traffic control. County Road 99 (CR-99) would be closed for approximately five weeks during the summers of 2018 and 2019 to accommodate the proposed bridge work along I-80 over CR-99 at S080 05035L and S080 05035R, and is anticipated to be open by harvest season of both years. A designated detour would be provided, utilizing County Road 20 (CR-20), U.S. Highway 30 (US-30), and Nebraska Highway 19 (N-19). The proposed construction at the Brownson Interchange 48 ramps to L-17C would require a detour. The detour would be effective spring until winter of 2018 and spring until winter of 2019. Eastbound I-80 traffic would exit at Interchange 38 and could utilize Link 17B (L-17B) toward Potter. Travelers would then have access to US-30 which sits parallel to I-80 between Potter and Sidney. Westbound traffic would exit at Interchange 55 and utilize N-19 toward Sidney. Travelers would then again have access to US-30.

**RIGHT-OF-WAY:** The proposed projects would require the acquisition of additional property rights including new right-of-way (ROW) and temporary easements (TE) for construction throughout the project area.

**POTENTIAL IMPACTS:** Impacts to wetlands are not anticipated.

**ESTIMATED COST:** The cost of the proposed project is approximately \$29 million and would derive from federal and state funding sources.

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