

## 4.11 CULTURAL RESOURCES

### 4.11.1 Introduction

This section describes potential impacts to cultural resources associated with the construction and operation of the proposed Project and connected actions and discusses potential mitigation measures that would avoid or minimize the potential impacts. The information, data, methods, and/or analyses used in this discussion are based on information provided in the 2011 Final Environmental Impact Statement (Final EIS) as well as new circumstances or information relevant to environmental concerns that have become available since the publication of the Final EIS, including the proposed reroute in Nebraska. The information that is provided here builds on the information provided in the Final EIS as well as the 2013 Draft Supplemental EIS and, in many instances, replicates that information with relatively minor changes and updates; other information is entirely new or substantially altered.

Specifically, the following information, data, methods, and/or analyses have been substantially updated from the 2011 document:

- A new section (see Section 4.11.2, Impact Assessment Methodology) was added to explain the assessment methodology used to evaluate potential cultural resources impacts associated with the proposed Project.
- An updated description is provided of the potential cultural resources impacted within the proposed Project. Specific to Nebraska, this section provides new information on potential cultural resources impacted within the previously unsurveyed, proposed reroute.

The following information, data, methods, and/or analyses have been substantially updated from the 2013 Draft Supplemental EIS:

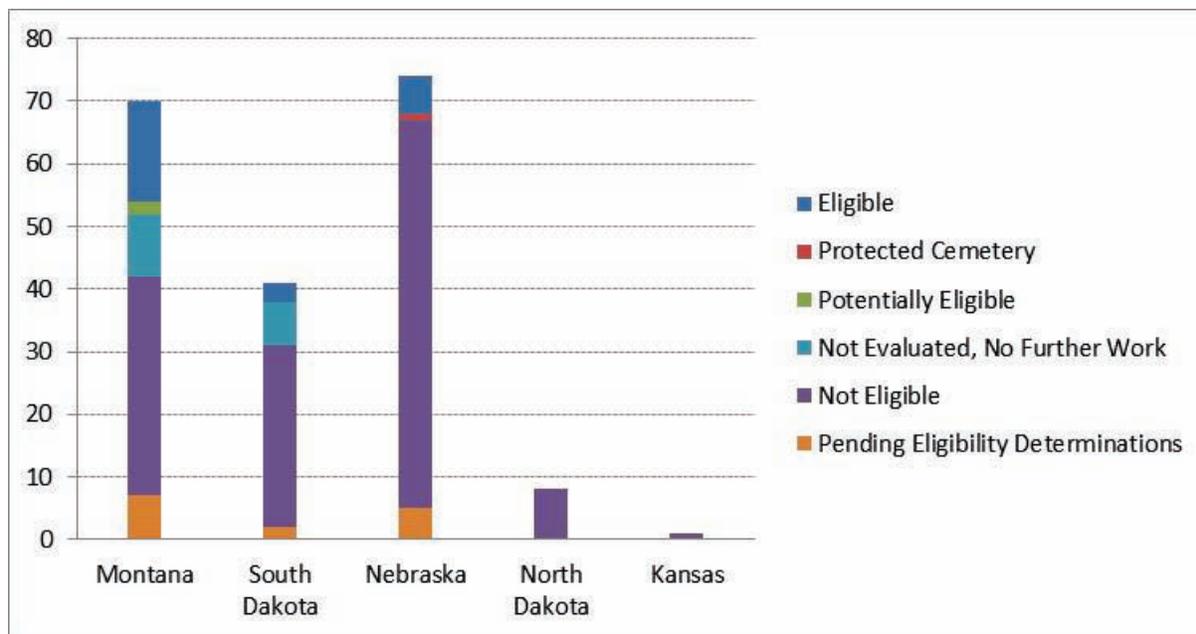
- An updated description is provided of the potential cultural resources impacted within the proposed Project.
- In response to public and agency comments, where necessary, text has been revised throughout the section.

#### *Summary*

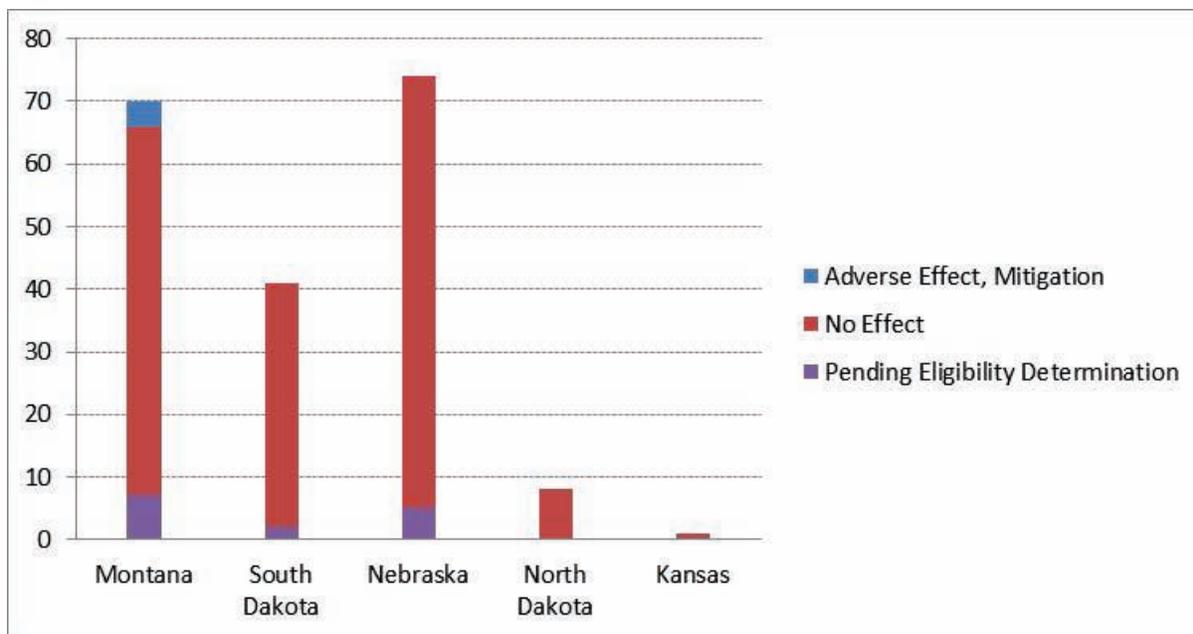
The proposed Project might affect cultural resources on or near the pipeline right-of-way (ROW) and in the locations of ancillary facilities (e.g., access roads, pump stations, and construction camps). This section describes the types of potential impacts, types of avoidance, and effect minimization measures, as well as potential mitigation measures for cultural resources. This section also provides a state-by-state breakdown of proposed Project potential effects to cultural resources and what measures are proposed to avoid, if possible, minimize, or mitigate adverse effects.

As outlined in Section 3.11, Cultural Resources, as of October 2013, of the 397 cultural resources identified within the proposed Project area of potential effects (APE), 194 cultural resources have been identified within the actual proposed Project construction footprint. Of these 194 cultural resources, 25 are recorded as eligible for inclusion in the National Register of Historic Places (NRHP), one is protected as a cemetery, two are potentially eligible, 135 are not eligible, 17 have not been evaluated, and 14 are awaiting NRHP eligibility determinations by the

U.S. Department of State (the Department) in consultation with the appropriate consulting parties (see Figure 4.11.1-1). Avoidance, if possible, is recommended for all eligible, potentially eligible, and unevaluated/pending sites. By avoiding these sites, the proposed Project would have no effect on these historic properties. Impacts to the 135 cultural resources that are recorded as not eligible for inclusion in the NRHP are not considered here. Of the 59 cultural resources that are recorded as eligible, protected, potentially eligible, and unevaluated/pending, the proposed Project would have no effect on 41 cultural resources due to avoidance by route modification, narrowing of the ROW, boring, fencing/restricted access, or another approved avoidance method. Fourteen sites are pending further analysis and review, and may be eligible for inclusion in the NRHP. The remaining four cultural resources would be adversely affected (see Figure 4.11.1-2). The Department has continued to consult with state and federal agencies as well as Indian tribes about the significance of the sites, and would work with TransCanada Keystone Pipeline, LP (Keystone) to avoid, if possible, adverse effects to the resources. If impacts to NRHP eligible properties could not be avoided, mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended Programmatic Agreement (PA) developed for the proposed Project. The specific actions proposed for individual known cultural resources are described in the following state-specific sections and tables.



**Figure 4.11.1-1 Cultural Resources Located within the Proposed Project Construction Footprint**



**Figure 4.11.1-2 Potential Effects to Cultural Resources Located within the Proposed Project Construction Footprint**

#### 4.11.2 Impact Assessment Methodology

To evaluate the potential impact on cultural resources, it is first necessary to evaluate the significance of the resources. Cultural resources are considered significant, in the context of National Historic Preservation Act (NHPA) of 1986 discussions, if they appear to meet the criteria for listing in the NRHP. These criteria are discussed at length in Section 3.11.2.2, National Register of Historic Places. For each cultural resource identified within the APE, significance has been measured by applying these criteria. Each resource has been identified as either listed in the NRHP, eligible for NRHP listing, not eligible for NRHP listing, or unevaluated (the latter meaning that further information is required to determine potential NRHP eligibility). An important distinction must be made between sites within the actual footprint of the proposed Project and sites outside the actual construction footprint but within the APE. The APE includes a buffer to allow for minor route modifications, as described in Section 3.11.3.2, Area of Potential Effect; sites within the APE but outside of the actual construction footprint may not be directly impacted by construction and operation of the proposed Project.

For significant or potentially significant cultural resources (i.e., those that are listed in the NRHP, those that are eligible for NRHP listing, and those that are unevaluated<sup>1</sup>), mitigation measures would be taken to avoid, if possible, or minimize impacts. The following are available mitigation measures:

<sup>1</sup> Cultural resources that are considered unevaluated have not been sufficiently assessed at this time to finalize an eligibility determination for the NRHP. These sites must either be further assessed through NRHP evaluation procedures or would be treated by the Department as a historic property, and avoidance or mitigation plans would be developed.

- Avoidance, which could be accomplished by shifting the proposed Project footprint away from the resource, boring underneath/around the resource, limiting activities in the vicinity of the resource, monitoring construction activities near the resource, or any combination of these techniques.
- Minimization, which would reduce to the extent possible the impact to the resource through avoidance measures as described above, but would not completely avoid the resource. For historic structures, impacts to viewshed could be minimized by reducing the visibility of the proposed Project such as planting of trees as a visual barrier or through fencing.
- Mitigation, which, when impact to a resource could not be avoided, would offset that impact through some means such as protection of a similar resource nearby, detailed documentation of the resource through data recovery excavations in the case of archaeological sites or Historic American Buildings Survey/Historic American Engineering Record documentation in the case of historic structures, contributions to the preservation of cultural heritage in the affected community, interpretative exhibits highlighting information gained about cultural resources through the proposed Project, or some combination of these strategies.

Impacts have been assessed for NHRP listed, NRHP eligible, or unevaluated cultural resources by considering how effectively the impact to the resource is avoided, minimized, or mitigated.

### **4.11.3 NRHP Eligibility, Effects, and Mitigation**

The Department, consistent with Section 106 of the NHPA, where appropriate (as codified in Title 36 of the Code of Federal Regulations [CFR] Part 800.5), applies the *criteria of adverse effect* to determine whether a project would affect historic properties. Effects are found when an undertaking changes, directly or indirectly, the characteristics of a historic property that qualify it for inclusion in the NRHP, in a manner that diminishes the historical integrity of the property. Reasonably foreseeable effects caused by the undertaking may occur later in time, be distant, or be cumulative. Federal agencies confer with consulting parties when there are potential adverse effects. The consultation attempts to resolve adverse effects and develop mitigation measures as necessary. For the proposed Project, the following are the principal types of effects that could occur:

- Physical destruction or damage to all or part of the property caused by construction-related activities, including trenching or related excavations;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features by short-term construction of the proposed Project or construction and operation of aboveground appurtenant facilities and roads; and
- Change of the character of the property's use or of physical features within the property's setting that contribute to its significance.

Historic properties under Section 106 of the NHPA are determined eligible by the lead federal agency in consultation with the applicable land managing agency (e.g., the Bureau of Land Management) and the State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO). A PA has been prepared in order to provide a process for the Department and the Section 106 consulting parties to implement the avoidance, if possible, or mitigation of adverse effects on historic properties. For those historic properties where avoidance is not possible, a Treatment Plan would be prepared consistent with the stipulations of the amended

PA. Cultural resources that are considered *pending* have not been sufficiently assessed at this time to finalize an eligibility determination for the NRHP. These sites must either be further assessed through NRHP evaluation procedures or would be treated by the Department as a historic property, and mitigation plans would be developed.

Avoidance could be achieved by moving the proposed Project corridor or the location of proposed Project facilities. Avoidance could also be achieved by keeping construction activities away from NRHP-eligible properties, limiting the effect to existing demonstrated disturbance areas, or avoiding the cultural resources by boring or horizontal directional drilling, depending on the nature of the resource.

If the proposed Project could not avoid a particular cultural resource, the Department would consult with the Advisory Council on Historic Preservation, SHPOs, consulting Indian tribes, and other federal and state consulting parties to determine those measures to be implemented by Keystone to minimize and mitigate adverse effects on affected historic properties identified in the APE. If the Department determines that the adverse effect could not be avoided, Keystone would draft a comprehensive Treatment Plan for each adversely affected historic property. The Treatment Plan would describe the measures to minimize and mitigate the adverse effect of proposed Project construction activities on historic properties, the manner in which these measures would be carried out, and a schedule for their implementation.

Keystone would submit the draft Treatment Plan at least 30 days prior to construction commencing in the area. Keystone would address timely comments and recommendations submitted by the Advisory Council on Historic Preservation, SHPOs, consulting Indian tribes, and other federal and state consulting parties in preparation of the Final Treatment Plan. Once it addressed all of the timely comments and recommendations, Keystone would submit the Final Treatment Plan to the Department for review and approval. Once the Department approves the Final Treatment Plan, mitigation would be conducted prior to construction following the Final Treatment Plan and the protocols outlined in the amended PA.

#### **4.11.4 Types of Potential Impacts**

The potential to impact cultural resources depends on the different stages and the types of development and use of the proposed Project. Discussion of potential impacts during the proposed construction and operations phases follows.

##### **4.11.4.1 Construction**

Construction of the proposed pipeline could involve various cultural resources impacts, including the following:

- Possible direct damage to cultural resources within the construction footprint;
- Possible indirect damage to cultural resources through vibrations caused by earthmoving, heavy equipment, blasting, drilling, boring, etc.;
- Temporary loss of community access to cultural resources, such as traditional cultural properties, during construction;
- Potential visual impacts to cultural resources during construction while heavy equipment and numerous personnel are present;

- Increased dust and noise, potentially impacting historic structures or traditional cultural properties near the construction area; and
- Unanticipated discovery of previously unknown cultural resources within the construction footprint.

Construction-related impacts could be either direct or indirect. Duration of the construction phase could affect the degree of indirect cultural resources impact. Indirect potential impacts during proposed construction such as noise, dust, vibrations, heavy equipment traffic, and changes in viewshed would be temporary and would be expected to last for the duration of construction in specific areas for discrete periods of time. Given the temporary nature of construction and use of the ancillary facilities such as pipe and contractor yards, no permanent indirect adverse effects to cultural resources are anticipated. Potential temporary effects to cultural resources, such as historic structures, could include visual effects from the stacked pipe, noise effects associated with loading and unloading pipe from trucks, dust from the contractor yard surface, and increased truck traffic to and from the contractor yard. The low-rise of stacked pipe and vehicle equipment would have a minimal effect on the viewshed. Noise associated with construction of ancillary facilities generally would be intermittent and limited to daytime hours when higher noise thresholds are permitted by federal agencies; therefore, noise would not be expected to be a significant factor in the development of the APE. Similarly, any increase in traffic, noise, or dust associated with truck traffic, in regards to cultural resources, such as historic structures, would be intermittent and temporary, and would be limited in duration.

Direct impacts, such as an unanticipated discovery of previously unknown cultural resources during construction, could have a permanent impact on that resource. A PA has been prepared in order to provide a process for the Department and the Section 106 consulting parties to implement the avoidance, if possible, or mitigation of adverse effects on historic properties. If impacts to NRHP eligible properties could not be avoided, mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended PA developed for the proposed Project.

#### **4.11.4.2 Operations**

During operation of the proposed Project, only previously disturbed areas would be expected to require periodic disturbance; therefore, the potential for additional direct impacts to cultural resources would be very limited.

Indirect impacts during operations could consist of a permanent change in viewshed to historic structures near permanent ancillary facilities such as pump stations and mainline valves, and a periodic increase in noise, vibration, and dust created by vehicular traffic conducting operation and maintenance activities. These types of impacts have been evaluated by the Department in consultation with state and federal agencies as well as Indian tribes as part of the Section 106 consistent evaluation process. Given the nature, location, and setting of permanent ancillary facilities, however, these facilities are unlikely to visually impact the setting and feeling of historic structures due to their distance from permanent ancillary facilities, their low-lying nature, and the various vegetative and topographic elements of the landscape in such areas. Similarly, periodic increase in noise, vibration, and dust created by vehicular traffic conducting operation and maintenance activities would not be expected to cause any adverse effects to such cultural resources.

### **4.11.5 Potential Impacts to Identified Cultural Resources**

The proposed Project route was designed to avoid disturbing historic properties to the maximum extent possible. Because significance for cultural resources is determined by a resource's eligibility for inclusion in the NRHP, cultural resources that have been determined not eligible, and thereby not historic properties, are *not* evaluated for proposed Project impacts. Additionally, the NRHP status of some cultural resources remains undetermined, and surveying in some of the proposed Project area is ongoing. For all cultural resources listed in the NRHP, considered to be eligible for the listing in the NRHP, or those that are unevaluated, avoidance would continue to be the preferred mitigation strategy. To mitigate potential impacts, Keystone has committed, whenever feasible, to avoid known cultural resources, minimize impacts when avoidance is not possible, and mitigate impacts when minimization is not sufficient. In addition, the proposed Project plans to implement Unanticipated Discovery Plans in order to ensure minimization of impacts to unknown cultural resources that may be inadvertently encountered during construction or operation of the proposed Project. The specific actions proposed for individual known cultural resources are described in the following state-specific sections and tables.

#### **4.11.5.1 Montana**

As of October 2013, of the 132 cultural resources identified in the Montana Project APE, 70 cultural resources have been identified within the actual proposed Project construction footprint in Montana. Of these 70 cultural resources, 16 are eligible for inclusion on the NRHP, two are potentially eligible, 35 are not eligible, 10 have not been evaluated, and seven are awaiting NRHP eligibility determinations by the Department in consultation with the appropriate consulting parties. Avoidance, if possible, is recommended for all eligible, potentially eligible, and unevaluated/pending sites. By avoiding these sites, the proposed Project would have no effect on these historic properties. Impacts to the 35 cultural resources that are recorded as not eligible for inclusion in the NRHP are not considered here. Of the 35 cultural resources that are recorded as eligible, potentially eligible, and unevaluated/pending, the proposed Project would have no effect on 24 cultural resources due to avoidance by route modification, narrowing of the ROW, boring, fencing/restricted access, or another approved avoidance method. Seven sites are pending further analysis and review, and may be eligible for inclusion in the NRHP. The remaining four cultural resources would be adversely affected. The Department would continue to consult with state and federal agencies as well as Indian tribes about the significance of the sites and would work to avoid, if possible, adverse effects to the resources. If impacts to sites could not be avoided, further evaluation of their NRHP eligibility may be required. The recommendations of eligibility by Keystone's consultants, determinations of eligibility by the Department, recommended mitigation actions by Keystone, and concurrences from SHPO are shown in Table 4.11-1.

**Table 4.11-1 Cultural Resources within the Proposed Project Construction Footprint of Montana**

Site #	Description	NRHP Eligibility Recommendation from Applicant	NRHP Eligibility Determination by Department	Montana SHPO Concurrence with Department Finding	Action Recommended by Applicant
24DW0289 (four segments)	Historic canal	Eligible	Eligible	Concur	Mitigate
24DW0419 (three segments)	Historic railroad	Eligible	Eligible	Concur	Avoided by bore; fence
24DW0426	Historic railroad	Not Eligible	Not Eligible	Concur	No effect
24DW0524	Historic transportation corridor	Not Eligible	Not Eligible	Concur	No effect
24DW0530	Historic homestead	Not Eligible	Not Eligible	Concur	No effect
24DW0531	Historic homestead	Not Eligible	Not Eligible	Concur	No effect
24DW0552	Historic homestead/farmstead	Not Eligible	Not Eligible	Concur	No effect
24DW0553	Historic road	Not Eligible	Not Eligible	Concur	No effect
24DW0555	Historic berm	Not Eligible	Not Eligible	Concur	No effect
24DW0560	Precontact open camp	Eligible	Eligible	Concur	Avoid or mitigate
24DW0561	Precontact stone circle	Potentially Eligible	Pending	Pending	Avoid or mitigate
24FA0382	Historic railroad	Eligible	Eligible	Concur	Avoided by bore
24FA0419	Precontact open camp	Unevaluated	Pending	Pending	Avoid or evaluate NRHP eligibility and mitigate if eligible
24FA0750	Precontact lithic scatter	Unevaluated	Unevaluated	Concur	Avoided
24FA0751	Historic debris scatter	Not Eligible	Not Eligible	Concur	No effect
24FA0762	Precontact lithic scatter	Not Eligible	Not Eligible	Concur	No effect
24MC0485	Precontact open camp	Eligible	Eligible	Concur	Avoided; fence and monitor
24MC0486	Precontact open camp	Eligible	Eligible	Concur	Avoided; fence and monitor
24MC0488	Historic berm	Not Eligible	Not Eligible	Concur	No effect
24MC0490	Precontact stone cairn	Potentially Eligible	Pending	Pending	Avoid or mitigate
24MC0628	Historic farmstead	Unevaluated	Unevaluated	Concur	Fence and monitor
24PE0723	Historic ranch complex	Unevaluated	Unevaluated	Concur	Fence and monitor
24PH0037	Undated stone cairn and depression	Potentially Eligible	Potentially Eligible	Concur	Fence and monitor
24PH1805	Historic homestead	Unevaluated	Unevaluated	Concur	Fence and monitor

Site #	Description	NRHP Eligibility Recommendation from Applicant	NRHP Eligibility Determination by Department	Montana SHPO Concurrence with Department Finding	Action Recommended by Applicant
					Traffic restricted to existing road disturbance; do not alter existing drainage patterns; no road maintenance (including dust control water trucks) within site boundary) exclusion fencing along road edge to protect features; no road upgrades, widening, or gravel within site boundary; periodic site assessments by environmental inspector or archaeologist.
24PH4267	Historic farmstead	Eligible	Eligible	Concur	
24PH4372	Precontact stone cairns	Potentially Eligible	Eligible	Eligible	Fence and monitor
24PH4488	Historic Irrigation ditch	Not Eligible	Pending	Pending	No effect
24VL0099 (two segments)	Historic railroad	Eligible	Eligible	Concur	No effect
24VL0938	Precontact stone circle	Eligible	Eligible	Concur	Mitigate
24VL0962	Precontact/historic stone feature site, lithic scatter, historic artifact scatter	Unevaluated	Unevaluated	Concur	Fence and monitor
24VL0972	Precontact/historic stone circle and cairn, historic fence line	Unevaluated	Unevaluated	Concur	Fence and monitor
24VL0979	Historic homestead	Eligible	Eligible	Concur	Avoid or mitigate
24VL1194 (two segments)	Historic canal	Eligible	Eligible	Concur	Mitigate
24VL1269/ 24VL1274	Precontact stone circle	Unevaluated	Unevaluated	Concur	Fence and monitor
24VL1628 (one segment)	Historic railroad	Eligible	Eligible	Concur	No effect
24VL1860	Historic stone fence	Unevaluated	Pending	Pending	No effect
24VL1889	Historic canal	Not Eligible	Not Eligible	Concur	No effect
24VL1890	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No effect
24VL1892	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No effect
24VL1901	Historic fence line and associated debris	Not Eligible	Not Eligible	Concur	No effect
24VL1919	Precontact stone circle	Eligible	Eligible	Concur	Mitigate

Site #	Description	NRHP Eligibility Recommendation from Applicant	NRHP Eligibility Determination by Department	Montana SHPO Concurrence with Department Finding	Action Recommended by Applicant
24VL1936	Precontact stone feature	Potentially Eligible	Potentially Eligible	Concur	Fence and monitor
24VL1938	Historic ranch complex	Unevaluated	Unevaluated	Concur	Traffic restricted to existing road disturbance; exclusion fencing along road edge; no road upgrades, widening, or gravel within site boundary; periodic site assessments by environmental inspector or archaeologist.
24VL1940	Historic farmstead	Unevaluated	Unevaluated	Concur	Fence and monitor
24VL1965	Precontact stone circle	Eligible	Eligible	Concur	Avoid or mitigate
24VL1968	Precontact stone circle	Not Eligible	Not Eligible	Concur	No effect
24VL1969	Historic stone alignment	Not Eligible	Not Eligible	Concur	No effect
24VL1985	Historic road grade	Not Eligible	Not Eligible	Concur	No effect
24VL1991	Saint Marie/Glasgow Air Force Base	Eligible	Pending	Pending	Avoided
24VL2062	Historic homestead	Unevaluated	Eligible	No Concurrence	Avoid or mitigate
24VL2066	Historic ditch	Not Eligible	Not Eligible	Concur	No effect
24VL2082	Precontact stone circle	Potentially Eligible	Pending	Pending	Avoided
C001DA001	Historic isolate	Not Eligible	Not Eligible	Concur	No effect
C001MC003	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C001PR002	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C055VA013	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C056MC007	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C057DA008	Historic isolate	Not Eligible	Not Eligible	Concur	No effect
C058FA001	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C058FA004	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C210FA001	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C277DA002	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C277MC001	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C512VA002	Historic isolate	Not Eligible	Not Eligible	Concur	No effect
C711MC001	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C711MC002	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C711VA008	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
C711VA008	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Eligibility Determination by Department</b>	<b>Montana SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
C720MC001	Precontact isolate	Not Eligible	Not Eligible	Concur	No effect
Lewis and Clark National Historic Trail (two segments)	Historic trail	NA	NA	NA	NA

Note: NA = not applicable

#### **4.11.5.2 South Dakota**

As of October 2013, of the 78 cultural resources identified in the South Dakota Project APE, 41 cultural resources have been identified within the actual proposed Project construction footprint in South Dakota. Of these 41 cultural resources, three are eligible for inclusion on the NRHP, 29 are not eligible, seven have not been evaluated, and two are awaiting NRHP eligibility determinations by the Department in consultation with the appropriate consulting parties. Avoidance, if possible, is recommended for all eligible and unevaluated/pending sites. By avoiding these sites, the proposed Project would have no effect on these historic properties. Impacts to the 29 cultural resources that are recorded as not eligible for inclusion in the NRHP are not considered here. Of the 12 cultural resources that are recorded as eligible and unevaluated/pending, the proposed Project would have no effect on 10 cultural resources due to avoidance by route modification, narrowing of the ROW, boring, fencing/restricted access, or another approved avoidance method. Two sites are pending further analysis and review, and may be eligible for inclusion in the NRHP. The Department would continue to consult with state and federal agencies as well as Indian tribes about the significance of the sites and would work to avoid, if possible, adverse effects to the resources. If impacts to sites could not be avoided, further evaluation of their NRHP eligibility may be required.

The recommendations of eligibility by Keystone's consultants, determinations of eligibility by the Department, recommended mitigation actions by Keystone, and concurrences from SHPO are shown in Table 4.11-2.

Additional cultural resources surveys in South Dakota for the proposed Project corridor and access roads are ongoing. These reports would be reviewed by the Department and then forwarded to the applicable consulting parties consistent with 36 CFR 800. NRHP assessments and any resulting avoidance or mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended PA developed for the proposed Project.

**Table 4.11-2 Cultural Resources within the Proposed Project Construction Footprint of South Dakota**

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Determination by Department</b>	<b>South Dakota SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
39HK0144	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39HK2257	Historic road and artifact scatter	Not Eligible	Not Eligible	Concur	No further work
39HN1082	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1129	Precontact isolate	Not Eligible	Unevaluated	No Concurrence	Monitoring
39HN1134	Historic rock art	Not Eligible	Not Eligible	Concur	No further work
39HN1143	Precontact isolate	Not Eligible	Pending	Pending	No further work
39HN1145	Precontact isolate	Not Eligible	Pending	Pending	No further work
39HN1157	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1158	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1159	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1160	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1174	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1194	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1196	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1197	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1198	Precontact site	Unevaluated	Unevaluated	Concur	Restricted to existing road disturbance (one lane). No road improvements within site boundary; exclusion fencing along road edge. Light duty, rubber tire vehicles only. Periodic site assessments by Environmental Inspector.
39HN1202	Precontact site	Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
39HN1203	European-American rock art	Not Eligible	Not Eligible	Concur	No further work
39HN1205	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1206	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN1207	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39HN2293	Historic irrigation system	Unevaluated	Unevaluated	Concur	Portion of site within construction footprint evaluated and not eligible; no further work

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Determination by Department</b>	<b>South Dakota SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
HN003	Historic Homestead	Unevaluated	Unevaluated	Concur	Restricted to existing road disturbance. No road improvements within site boundary, existing drainage patterns not be altered, dust control measures be used, fencing be used to protect features. Vehicle traffic limited to one lane, speed limited.
HN005	Pending	Unevaluated	Unevaluated	Concur	Traffic and road upgrades restricted to existing road disturbance, fencing along road edge.
39JN0052	Historic trash dump	Not Eligible	Not Eligible	Concur	No further work
39JN0064	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
39JN2007	Historic railroad	Eligible	Eligible	Concur	Avoided; no further work
LM009	Historic farmstead	Unevaluated	Unevaluated	Concur	Non-contributing portion of site/ground disturbance restricted to 100-foot survey corridor, fencing along survey corridor
39MD0894	Historic trash dump	Not Eligible	Not Eligible	Concur	No further work
39MD0939	Historic collapsed structure	Not Eligible	Not Eligible	Concur	No further work
MD00000339	Historic farmstead	Unevaluated	Unevaluated	Concur	Restricted to existing road disturbance. No road improvements within site boundary, existing drainage patterns not be altered, dust control measures be used, fencing be used to protect features.
39PE0399	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39PE0405	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39PE0406	Historic depression and artifact scatter	Not Eligible	Not Eligible	Concur	No further work
39PE0481	Precontact open camp	Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
39TP0056	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39TP0059	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39TP0060	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
39TP0061	Historic isolate	Not Eligible	Not Eligible	Concur	No further work

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Determination by Department</b>	<b>South Dakota SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
39TP0062	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
39TP0068	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work

#### **4.11.5.3 Nebraska**

As of October 2013, of the 178 cultural resources identified in the Nebraska Project APE, 74 cultural resources have been identified within the actual proposed Project construction footprint in Nebraska. Of these 74 cultural resources, six are eligible for inclusion on the NRHP, one is protected as a cemetery, 62 are not eligible, and five are awaiting NRHP eligibility determinations by the Department in consultation with the appropriate consulting parties. Avoidance, if possible, is recommended for all eligible, protected, and pending sites. By avoiding these sites, the proposed Project would have no effect on these historic properties. Impacts to the 62 cultural resources that are recorded as not eligible for inclusion in the NRHP are not considered here. Of the 12 cultural resources that are recorded as eligible, protected, and pending, the proposed Project would have no effect on seven cultural resources due to avoidance by route modification, narrowing of the ROW, boring, fencing/restricted access, or another approved avoidance method. Five sites are pending further analysis and review, and may be eligible for inclusion in the NRHP. The Department would continue to consult with state and federal agencies as well as Indian tribes about the significance of the sites and would work to avoid, if possible, adverse effects to the resources. If impacts to sites could not be avoided, further evaluation of their NRHP eligibility may be required. The recommendations of eligibility by Keystone's consultants, determinations of eligibility by the Department, recommended mitigation actions by Keystone, and concurrences from SHPO are shown in Table 4.11-3.

Additional cultural resources surveys in Nebraska for the proposed Project corridor and access roads are ongoing. These reports would be reviewed by the Department and then forwarded to the applicable consulting parties consistent with 36 CFR 800. NRHP assessments and any resulting avoidance or mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended PA developed for the proposed Project.

#### **4.11.5.4 North Dakota**

No historic properties have been identified within the construction footprint of the ancillary facility or the additional 225-acre area surveyed in North Dakota. If additional workspaces are required in North Dakota, cultural resources surveys would be required and resulting reports would be reviewed by the Department and then forwarded to the applicable consulting parties consistent with 36 CFR 800. NRHP assessments and any resulting avoidance or mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended PA developed for the proposed Project.

#### **4.11.5.5 Kansas**

No historic properties have been identified within the construction footprint of the pump stations in Kansas. If additional workspaces are required in Kansas, cultural resources surveys would be required and resulting reports would be reviewed by the Department and then forwarded to the applicable consulting parties consistent with 36 CFR 800. NRHP assessments and any resulting avoidance or mitigation plans would be reviewed by the Department and the consulting parties to evaluate the submitted information following the protocols outlined in the amended PA developed for the proposed Project.

**Table 4.11-3 Cultural Resources within the Proposed Project Construction Footprint of Nebraska**

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Eligibility Determination by Department</b>	<b>Nebraska SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
25AP74	Precontact artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25AP75	Historic farmstead; precontact isolate	Not Eligible	Not Eligible	Concur	No further work
25AP78	Historic dump site	Not Eligible	Not Eligible	Concur	No further work
25AP79	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25AP83	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25AP84	Historic dump site	Not Eligible	Not Eligible	Concur	No further work
25AP88	Precontact field camp	Not Eligible	Not Eligible	Concur	No further work
25AP89	Precontact camp/unidentified historic site	Potentially Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
25AP90	Historic dump	Not Eligible	Not Eligible	Concur	No further work
25AP93	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25AP94	Historic farmstead	Potentially Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
25BO60	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25BO61	Historic farmstead	Potentially Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
25BO63	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25BO64	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25BO65	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25BO67	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25FM23	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25FM24	Historic railroad	Not Eligible	Not Eligible	Concur	No further work
25FM27	Precontact artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25HT62	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25JF45	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25JF46	Historic railroad	Not Eligible	Not Eligible	Concur	No further work
25JF47	Historic railroad bed	Not Eligible	Not Eligible	Concur	No further work
25JF48	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25JF49	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Eligibility Determination by Department</b>	<b>Nebraska SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
25JF50	Historic railroad bed	Not Eligible	Not Eligible	Concur	No further work
25JF59	Precontact camp	Potentially Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
25KP349	Historic school house	Potentially Eligible	Eligible	Concur	Avoid or evaluate NRHP eligibility and mitigate if eligible
25KP350	Precontact lithic scatter	Not Eligible	Not Eligible	Concur	No further work
25KP351	Historic dump site	Not Eligible	Not Eligible	Concur	No further work
25MK35	Historic livestock barn	Not Eligible	Not Eligible	Concur	No further work
25MK36	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25PK31	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25PK42	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25PK43	Historic school house	Not Eligible	Not Eligible	Concur	No further work
25SA87	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25SA89	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25SA90	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25SA91	Historic railroad	Not Eligible	Not Eligible	Concur	No further work
25SA92	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25SA93	Historic dump site	Not Eligible	Not Eligible	Concur	No further work
25SA94	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
25YK20	Historic railroad	Not Eligible	Not Eligible	Concur	No further work
25YK24	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25YK25	Historic railroad bed	Not Eligible	Not Eligible	Concur	No further work
25YK28	Precontact field camp	Not Eligible	Not Eligible	Concur	No further work
25YK30	Historic farm outbuilding/ historic activity area	Not Eligible	Not Eligible	Concur	No further work
25YK31	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
25YK33	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
AP00-000	Active Railroad (BNSF Railway Company)	Not Eligible	Not Eligible	Concur	No further work
AP00-300	Historic farmstead	Potentially eligible	Eligible	Concur	Avoided; fence
BD00-235	Historic windmill and cattle tank	Not Eligible	Not Eligible	Concur	No further work
BO00-000	Active Railroad (Union Pacific Railroad Company)	Not Eligible	Not Eligible	Concur	No further work

<b>Site #</b>	<b>Description</b>	<b>NRHP Eligibility Recommendation from Applicant</b>	<b>NRHP Eligibility Determination by Department</b>	<b>Nebraska SHPO Concurrence with Department Finding</b>	<b>Action Recommended by Applicant</b>
BO03-008	Historic farmstead	Not Eligible	Not Eligible	Concur	No further work
C501BO003	Historic trail	Not Eligible	Pending	Pending	No further work
C502AT005FS	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
C502NA005FS	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
C502NA017	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
C504AT005FS	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
C504AT007AT	Historic trail	Not Eligible	Not Eligible	Concur	No further work
C601JF002FS	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
C601JF007FS	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
C601NA002FS	Historic isolate	Not Eligible	Not Eligible	Concur	No further work
C601PK002FS	Historic animal pen	Not Eligible	Not Eligible	Concur	No further work
C601YK001FS	Precontact isolate	Not Eligible	Not Eligible	Concur	No further work
C601YK002FS	Historic artifact scatter	Not Eligible	Not Eligible	Concur	No further work
KP00-105	Wolf Creek Cemetery	Protected	Protected	Concur	Avoided
NC00-000	Active Railroad (Union Pacific Railroad Company)	Not Eligible	Not Eligible	Concur	No further work
PK00-220	Union Pacific Railroad Company	Not Eligible	Not Eligible	Concur	No further work
California National Historic Trail	Historic trail	Unevaluated	Pending	Pending	Avoided; monitor
Mormon National Historic Trails	Historic trail	Unevaluated	Pending	Pending	Avoided; monitor
Oregon National Historic Trail	Historic trail	Unevaluated	Pending	Pending	Avoided; monitor
Pony Express National Historic Trail	Historic trail	Unevaluated	Pending	Pending	Avoided; monitor

### **4.11.6 Additional Mitigation**

Should any unanticipated discoveries of cultural resources be made during construction or operation of the proposed Project, the terms of the Unanticipated Discovery Plans would be followed. Should a cultural resource discovered in this fashion appear to be significant, appropriate additional mitigation measures would be considered, as feasible and appropriate, consistent with the terms of the amended PA.

Construction would be monitored by tribal representatives for compliance consistent with Section 106 of the NHPA in areas of tribal concern, per the proposed Project's Tribal Monitoring Plan. Monitoring plans would be prepared to assist in identifying and minimizing proposed Project adverse effects on important cultural resources and would be implemented through the amended PA. Keystone would implement this plan with the Department's oversight in the event that unanticipated cultural materials or human remains are encountered during the construction phase of the proposed Project. The plan would apply to federal, state, and private lands. This plan, along with the unanticipated discovery plans, is attached to the amended PA.

### **4.11.7 Connected Actions<sup>2</sup>**

#### ***4.11.7.1 Bakken Marketlink Project***

A cultural resources survey of the Bakken Marketlink Project in Montana has been completed. The previous cultural resources survey of the area did not identify any cultural resources. The authorization and permit applications for this proposed connected action would be reviewed and acted on by other federal and state agencies.

#### ***4.11.7.2 Big Bend to Witten 230kV Transmission Line***

Cultural resources surveys for the proposed Big Bend to Witten 230-kV Transmission Line Project have yet to be performed. The authorization and permit applications for this proposed connected action would be reviewed and acted on by Rural Utilities Service (RUS), as lead federal agency, and other federal and state agencies. Those agencies may conduct more detailed cultural resources reviews of this proposed connected action. The types of potential impacts associated with the proposed Big Bend to Witten 230-kV Transmission Line Project are likely to be similar to those for the proposed Project pump station and pipeline construction ROW near this area. Potential impacts to cultural resources from this proposed connected action would be evaluated and avoided, if possible, minimized, or mitigated, in accordance with applicable regulations during the environmental review for this proposed connected action. Additionally, RUS would lead the effort for the potential development of a separate PA including RUS; Bureau of Land Management; U.S. Army Corps of Engineers; Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota; and the project applicant, Basin Electric Power Cooperative. This would ensure that identification, evaluation, and mitigation of historic properties would occur prior to construction of these connected actions in accordance with applicable regulations.

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<sup>2</sup> Connected actions are those that 1) automatically trigger other actions which may require environmental impact statements, 2) cannot or will not proceed unless other actions are taken previously or simultaneously, 3) are interdependent parts of a larger action and depend on the larger action for their justification.

#### **4.11.7.3 *Electrical Distribution Lines and Substations***

Cultural resources surveys for electrical distribution lines and substations have not been completed. The authorization and permit applications for this proposed connected action may be reviewed and acted on by RUS and other federal and state agencies, as appropriate. Those agencies may conduct more detailed cultural resources reviews of this proposed connected action. The types of potential impacts associated with the proposed electrical distribution line and substations are likely to be similar to those for the proposed Project pump station and pipeline construction ROW near this area. The authorization and permit applications for this proposed connected action would be reviewed and acted on by other federal and state agencies. Those agencies may conduct more detailed cultural resources reviews of the proposed electrical distribution line and substations. Potential impacts to cultural resources from the proposed electrical distribution line and substations would be evaluated and avoided, if possible, minimized, or mitigated, in accordance with applicable regulations during the environmental review for this proposed connected action.

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