

3.11 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, requires the lead federal agency with jurisdiction over a federal undertaking (i.e., a project, activity, or program that is funded by a federal agency or that requires a federal permit, license, or approval) must consider impacts to historic properties before that undertaking occurs. A historic property is defined as any district, archeological site, building, structure, or object that is either listed, or eligible for listing, in the National Register of Historic Places (NRHP). Under this definition, other cultural resources may be present within a project's area of potential effect (APE) but are not historic properties if they do not meet the eligibility requirements for listing in the NRHP. To be considered eligible for the NRHP, a property generally must be greater than 50 years of age, although there are provisions for listing cultural resources of more recent origin if they are of "exceptional" importance. The intent of Section 106 is for federal agencies to take into account a proposed undertaking's effects on any historic properties situated within the APE; and to consult with the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers (SHPOs), federally recognized Indian tribes, applicants for federal assistance, local governments, and any other interested parties regarding the proposed undertaking and its potential impacts on historic properties.

The implementing regulation of Section 106 is 36 CFR Part 800. This regulation establishes a process of identifying NRHP-eligible or listed historic properties that may be affected by the proposed undertaking; assessing the undertaking's effects on those resources; and engaging in consultation that seeks ways to avoid, reduce, or mitigate any impacts on NRHP-listed or -eligible properties. Impacts include, but are not limited to, destruction or alteration of all or part of a property; isolation from or alteration of its surrounding environment; introduction of visual, audible, or atmospheric elements that are out of character with the property or that alter its setting; transfer or sale of a federally owned property without adequate conditions or restrictions regarding preservation, maintenance, or use; and neglect of a property resulting in its deterioration or destruction (36 CFR 800.5).

36 CFR Part 800 specifies that certain parties must be consulted during the process. These parties include each SHPO whose state would physically include any portion of the APE. The SHPO is appointed by each state to protect the interests of its citizens with respect to issues of cultural heritage. Section 101(b)(3) of the NHPA provides each SHPO a prominent role in advising the responsible federal agencies and ACHP in their efforts to carry out Section 106 requirements. The SHPO, as well as the federal agencies, have an obligation to work with state and local governments, private organizations, and individuals during the initial planning and development of the Section 106 process. Federal agencies usually consult with the SHPO when developing methodologies related to cultural resource investigations and are required to notify SHPO when making findings related to the establishment of an APE, NRHP-eligibility of identified cultural resources, project effects, and resolution of impacts. On non-tribal lands, the lead federal agency—in consultation with the SHPO and other consulting parties—assesses the need for cultural resources investigations in the project APE, generates and approves methodologies for undertaking such investigations within the state, and evaluates the preliminary NRHP status of any cultural resources located within the APE. The SHPO also assists the lead federal agency and ACHP to assess any potential impacts to historic properties and works with the project applicant, lead federal agency, ACHP, and Indian tribes to mitigate any negative impacts that could occur to historic properties.

Section 106 recognizes the importance of consulting with Indian tribes for federal undertakings that are proposed within tribal ancestral territories. Specifically, 36 CFR 800.2(c)(2)(ii) notes: "Section 101(d)(6)(B) of the NHPA requires the agency official to consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural importance to historic properties that may be affected by an undertaking. This requirement applies regardless of the location of the historic property."

In addition, sub-part (B) of the same statute says the “Federal Government has a unique legal relationship with Indian tribes set forth in the Constitution of the United States, treaties, statutes, and court decisions. Consultation with Indian tribes should be conducted in a sensitive manner respectful of tribal sovereignty. Nothing in this part alters, amends, repeals, interprets or modifies tribal sovereignty, any treaty rights, or other rights of an Indian tribe, or preempts, modifies or limits the exercise of any such rights.”

The proposed Project does not currently cross any federally recognized Indian tribal lands. In the event of its occurrence, the Section 106 responsibilities described above can be assumed by a Tribal Historic Preservation Officer (THPO) under Section 101(d)(2) of the NHPA. In this event, all consultations regarding the Project and its potential effect on historic properties within the relevant tribal lands would be through the THPO and would follow the procedures outlined in the Programmatic Agreement (PA) created for this undertaking. The state SHPO still must be consulted relative to non-tribal lands. In the event that the tribe has not assumed the SHPO functions on its lands, the lead federal agency is required to consult with both the SHPO and the tribe’s designated representative for any impacts anticipated for historic properties situated on the tribal lands.

Section 106 regulations state that each SHPO (or THPO, if they have assumed the SHPO’s role) generally is required to respond within 30 days of receiving a request to review a proposed action, or a request to review a federal agency’s finding or determination regarding historic properties located within the project APE. In the event that the SHPO/THPO does not respond within this time frame, 36 CFR 800.3(c)(4) states that the lead agency can decide to (1) proceed to the next step in the application process based on any earlier findings or determinations that have been made up to that point; or (2) consult directly with the ACHP in lieu of the SHPO/THPO. If, after this step is followed, the SHPO or THPO decides to re-enter the Section 106 process, 36 CFR 800.3(c)(4) further states that the lead agency official may continue the consultation proceeding without being required to reconsider previous findings or determinations.

DOS has elected to primarily follow the assessment criteria for pipeline projects that have been developed by FERC, given their experience in these types of projects. For cultural resources, the relevant assessment schema is found in the “Guidelines for Reporting on Cultural Resources Investigations for Pipeline Projects,” published by the FERC Office of Energy Projects in 2002. Unless otherwise stated, the statements made in this document to assess Section 106 compliance for the Keystone Project have used those guidelines in their determination. Keystone provided information, analyses, and recommendations to assist DOS in complying with NEPA and Section 106, in accordance with NHPA regulations.

As a whole, cultural resources are locations of human activity, occupation, or usage that contain materials, structures, or landscapes that were used, built, or modified by people. Cultural resources include spatially circumscribed areas of human activity, such as Pre-contact Native American archeological sites, American farmsteads or a district of historic buildings. Not all cultural resources are considered historic properties under Section 106. To be designated as a historic property, the cultural resource must be listed or eligible for listing in the NRHP. The criteria (36CFR 60.4 [a–d]) used to evaluate the significance of a cultural resource are as follows:

- a. It is associated with events that have made a significant contribution to the broad patterns of American history; or
- b. It is associated with the lives of past significant persons; or
- c. It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

- d. It has yielded or may be likely to yield, information important in history or prehistory.

This analysis includes a summary of all cultural resources that have been reported to DOS for the Keystone Project. This includes cultural resources that are already listed on the NRHP, NRHP-eligible historic properties, cultural resources assessed as being NRHP-ineligible, and cultural resources for which NRHP eligibility has not been evaluated. The reported cultural resources are divided into three main temporal groupings: Pre-contact period, Historic period, and multi-component. Pre-contact resources are sites that contain material evidence of Native American activities before Europeans entered the project area. Examples of Pre-contact sites include, but are not limited to, rock art; camp or village sites; rock shelters; and scatters of stone, bone, or ceramic tool-making debris. Historic period resources can include recent Native American activity locations but generally reflect Euro-American activities of the last 250 years. These can include residential, government, or commercial structures; farmsteads; mining sites; roads or railways; and ceramic, metal, and glass artifact scatters. Multi-component resources are locations where both Historic period and Pre-contact cultural remains are present.

The category of historic properties can also include traditional cultural properties (TCPs) as well as sites of traditional religious and/or cultural importance that meet the above criteria of eligibility but that do not necessarily have physical evidence of human activity. Bulletin #38 of the National Register defines TCPs as locations that embody the “beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community’s historically rooted beliefs, customs, and practices.” No TCPs have been defined to date within the Keystone Project APE. DOS has requested in writing and through meetings that participating parties provide information on properties of religious or cultural significance so that potential impacts can be avoided or addressed. These requests were made to federally recognized Indian tribes, as described in Section 3.11.3. Requests for the identification of TCPs of significance to non-Indian tribal communities were made through open public meetings with local community members. To assist with the identification of TCPs, on November 8, 2007, DOS offered to fund TCP studies conducted by consulting Indian tribes. To date, only two tribes have agreed to participate in this effort. DOS also has included the identification and assessment of TCPs within the PA that has been developed for the Project (see Section 3.11.3 and Appendix R).

The PA is being used to conclude Section 106 review to ensure that an appropriate formal process is followed for the outstanding cultural resources surveys that result from Project adjustments or from current denial of survey permissions. This process is described under 36 CFR 800.4(b)(2), which states where “alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, the agency official may use a phased process to conduct identification and evaluation efforts. The agency official may also defer final identification and evaluation of historic properties if it is specifically provided for in a memorandum of agreement executed pursuant to § 800.6, a programmatic agreement executed pursuant to § 800.14 (b), or the documents used by an agency official to comply with the National Environmental Policy Act pursuant to §800.8.”

3.11.1 Environmental Setting

The proposed Keystone Project includes the Mainline Project that crosses six states (North Dakota, South Dakota, Nebraska, Kansas, Missouri, and Illinois) and the proposed Cushing Extension that lies within three states (Nebraska, Kansas, and Oklahoma). The proposed Keystone pipeline does not traverse Indian tribal lands; therefore, no THPO assumed SHPO Section 106 duties. The legislation enacted for Section 106 of the NHPA declares for projects crossing state boundaries that the relevant SHPO offices may choose to designate one of their members as having Lead SHPO authority. This provision, 36 CFR

800.3(c)(2), would allow the Lead SHPO to take all actions necessary to conclude the Section 106 application process. The relevant SHPO offices did not elect to exercise the Lead SHPO option for this undertaking. The cultural resources sections of the EIS, therefore, summarize the cultural resources aspects of the Keystone Project in relation to each individual affected state.

Although the APE for the proposed Project varies from state to state, the Project corridor generally ranges between 200 and 300 feet wide and is centered on the Project centerline. Where the Keystone Project is collocated with an existing pipeline, the APE is adjusted from 40 to 60 feet on the collocated side and from 160 to 240 feet on the non-collocated side. The APE for the Project also includes Project access roads, additional temporary workspace, pipeline reroutes, and appurtenant facilities. Figures 2.1-10 to 2.1-17 provide the routes of the pipeline through the affected states. Table 3.11.1-1 also illustrates the APEs for each respective state.

3.11.1.1 North Dakota

The Keystone pipeline would enter North Dakota from Canada and would extend through the state for approximately 217.8 miles. The counties crossed include Cavalier, Pembina, Walsh, Nelson, Steele, Barnes, Ransom, Sargent, and Dickey. Metcalf Archaeological Consultants (Metcalf) was contracted on behalf of Keystone to perform the required cultural resources assessments within the state. Their draft survey report was submitted to the North Dakota SHPO in January 2007 (Bleier et al. 2007a). A supplemental report for fieldwork conducted from October 2006 to August 2007 was submitted to DOS and the SHPO in October (Stein et al. 2007).

Before beginning fieldwork, Metcalf undertook a Class I literature and file search of the proposed pipeline route in January 2006; this research was revised in September 2006 to incorporate projected changes to the then-preferred route. The searches collected cultural site and survey data that were housed at the State Historical Society of North Dakota. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and that was 1 mile wide, centered on the route's proposed centerline. The records search identified 119 cultural resources within this region. The resources included 18 Pre-contact sites, four Historic period sites, eight sites with both Historic period and Pre-contact cultural components, 26 locations represented by architectural remains, and nine locations limited to isolated cultural finds. The specific locations of these resources generally could be plotted in relation to the planned survey corridor. In contrast, most of the remaining 54 cultural resources could not be plotted on the Project maps, as precise geographic data were not available for these site "leads." The background research indicated that only one known cultural resource, a church structure, was located within the projected corridor.

Along with the literature review, Metcalf submitted its research design for cultural resources field studies to the North Dakota SHPO in January 2006. The purpose of the research design was to present the methods Metcalf would use to assess the Keystone pipeline and identify historic properties. It was based on the results of the site file research and results of previous surveys. The design incorporated a sampling strategy that assessed the route in terms of high and low probabilities for containing Section 106-defined historic properties (excluding TCPs); this sampling strategy follows procedures generally accepted by the SHPO and FERC for pipeline projects and is permissible under 36 CFR 800.4(b)(1). It was developed in part through discussions with the North Dakota SHPO. The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

**TABLE 3.11.1-1
Area of Potential Effect for the Keystone Project by State**

State	Counties	Corridor Area of Potential Effect
North Dakota	Cavalier, Pembina, Walsh, Nelson, Steele, Barnes, Ransom, Sargent, Dickey	300-foot-wide corridor, centered on Project centerline
South Dakota	Brown, Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, Yankton	300-foot-wide corridor, centered on Project centerline
Nebraska	Cedar, Wayne, Stanton, Platte, Colfax, Butler, Seward, Saline, Jefferson, Gage	300-foot-wide corridor centered on Project centerline; for collocated pipeline, 60 feet on collocated side and 240 feet on non-collocated side
Kansas	Marshall, Nemaha, Brown, Doniphan, (Washington, Clay, Dickinson, Marion, Butler, and Cowley)	200-foot-wide corridor centered on Project centerline (300-foot-wide corridor for Cushing Extension)
Missouri	Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Audrain, Montgomery, Lincoln, and St. Charles	200-foot-wide corridor centered on centerline used for Rockies Express Western Phase Project survey
Illinois	Madison, Bond, Fayette, Marion	200-foot-wide corridor; for areas with collocated pipeline, 40 feet on collocated side and 160 feet on non-collocated side; 300-foot-wide corridor centered on centerline in greenfield areas
Oklahoma	Kay, Noble, Payne	300-foot-wide corridor centered on Project centerline

The research design proposed that a cultural resources pedestrian field effort (labeled a Class III survey in North Dakota) be conducted along 49.5 miles of the proposed pipeline, using a 300-foot-wide survey corridor that was centered on the proposed Project centerline. The excavation of shovel probes was proposed at high-potential landforms with low surface visibility. The sampling strategy focused on landform types that were derived from the known site database and the results of previous surveys. The pedestrian survey was to use survey transects spaced no more than 65.6 feet (20 meters) apart and to use 15.7-inch- (40-centimeter-) diameter shovel probes at locations with poor surface visibility or where cultural materials within 3.3 feet (1 meter) of the ground surface were suspected. The research design further proposed Class II vehicular reconnaissance of the entire pipeline route by geomorphologists to ascertain locations where deeply buried cultural deposits were possible and at 41 miles of the route for archaeologists to field-assess additional Class III survey locations. The SHPO accepted the proposed research plan in a letter dated February 23, 2006.

Metcalf conducted the initial cultural resources field survey of the proposed Keystone pipeline route between May and August 2006. The 2006 surveys examined a 300-foot-wide corridor that field-assessed 67.4 miles; it included 47.7 miles of the original planned route and 19.7 miles of proposed reroutes (Bleier et al. 2007a). Additional surveys were conducted by Metcalf in 2007 for proposed reroutes and Project items. The surveys conducted to August 2007 were reported by Stein et al. (2007) and included 28.53 miles of additional pipeline route, 55.1 acres of proposed pump stations, and 10 roads totaling 2.5 miles in length with a 50-foot-wide assessment corridor being used for the latter Project items. While no federally owned land is bisected within the North Dakota corridor, the above areas included properties with easements that were assessed at the request of USFWS.

The applicant has abandoned portions of the originally proposed route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-2 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access was denied to Metcalf along 8.04 miles of the planned survey areas; therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline is incomplete at this time. The cultural resources surveys for Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities are ongoing. Further survey reports must be submitted and reviewed by consulting parties prior to land-altering activities occurring within these areas, using the process outlined in the PA.

3.11.1.2 South Dakota

The Keystone pipeline would enter South Dakota from Dickey County in North Dakota and would extend through the state for approximately 219.8 miles. The counties crossed include Brown, Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, and Yankton. Metcalf was contracted on behalf of Keystone to perform the required cultural resources assessments within the state. Their draft survey report was submitted to the South Dakota SHPO and DOS in January 2007. A revised draft report was submitted in September 2007 (Bleier et al. 2007b).

Metcalf undertook a literature review and file search (Level I study) of the preliminary pipeline route in January 2006; this research was revised in September 2006 to incorporate projected changes to the preferred route. The cultural site and survey data collected were located at the South Dakota Archeological Research Center and the South Dakota State Historic Preservation Office. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the route's proposed centerline. The records search identified 30 cultural resources within this region. These resources included 10 Pre-contact sites and 17 Historic period sites. The specific locations of these resources generally could be plotted in relation to the planned survey corridor. In contrast, the remaining three cultural resources could not be plotted on the Project maps, as precise geographic data were not available for these site leads. A total of 243 Historic period structures and buildings also were plotted within the confines of the 2-mile-wide evaluation zone. The data collected indicated that several Historic period railway lines were the only known cultural resources that would be crossed by the proposed pipeline Project.

**TABLE 3.11.1-2
Cultural Resources Survey Status of the Keystone Mainline Project in
North Dakota as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
North Dakota	Cavalier	0.00	4.58	Not selected for survey in sampling strategy	4.58
North Dakota	Cavalier	4.58	6.83	Survey complete	2.25
North Dakota	Pembina	6.83	8.23	Survey complete	1.40
North Dakota	Pembina	8.23	8.73	Not selected for survey in sampling strategy	0.50
North Dakota	Pembina	8.73	9.16	Survey complete	0.43
North Dakota	Pembina	9.16	15.21	Not selected for survey in sampling strategy	6.05
North Dakota	Pembina	15.21	17.25	Survey complete	2.04
North Dakota	Pembina	17.25	17.47	Required – no access	0.22
North Dakota	Pembina	17.47	18.33	Survey complete	0.86
North Dakota	Pembina	18.33	18.46	Not selected for survey in sampling strategy	0.13
North Dakota	Pembina	18.46	25.19	Survey complete	6.73
North Dakota	Pembina	25.19	29.20	Not selected for survey in sampling strategy	4.02
North Dakota	Pembina	29.20	29.61	Survey complete	0.40
North Dakota	Pembina	29.61	30.72	Not selected for survey in sampling strategy	1.11
North Dakota	Pembina	30.72	32.00	Survey complete	1.28
North Dakota	Walsh	32.00	32.26	Not selected for survey in sampling strategy	0.26
North Dakota	Walsh	32.26	33.07	Not selected for survey in sampling strategy	0.81
North Dakota	Walsh	33.07	33.28	Survey complete	0.21
North Dakota	Walsh	33.28	33.42	Required – no access	0.14
North Dakota	Walsh	33.42	35.11	Not selected for survey in sampling strategy	1.69
North Dakota	Walsh	35.11	35.41	Survey complete	0.30
North Dakota	Walsh	35.41	36.23	Not selected for survey in sampling strategy	0.82
North Dakota	Walsh	36.23	36.53	Survey complete	0.30
North Dakota	Walsh	36.53	36.93	Not selected for survey in sampling strategy	0.41
North Dakota	Walsh	36.93	37.34	Survey complete	0.41
North Dakota	Walsh	37.34	38.02	Not selected for survey in sampling strategy	0.68
North Dakota	Walsh	38.02	38.35	Survey complete	0.34
North Dakota	Walsh	38.35	40.73	Not selected for survey in sampling strategy	2.37
North Dakota	Walsh	40.73	40.86	Survey complete	0.14
North Dakota	Walsh	40.86	41.25	Not selected for survey in sampling strategy	0.38
North Dakota	Walsh	41.25	42.94	Survey complete	1.69
North Dakota	Walsh	42.94	45.90	Not selected for survey in sampling strategy	2.96
North Dakota	Walsh	45.90	46.59	Survey complete	0.69
North Dakota	Walsh	46.59	48.63	Not selected for survey in sampling strategy	2.04
North Dakota	Walsh	48.63	49.42	Required – no access	0.79
North Dakota	Walsh	49.42	49.58	Survey complete	0.16
North Dakota	Walsh	49.58	53.74	Not selected for survey in sampling strategy	4.17
North Dakota	Walsh	53.74	54.91	Survey complete	1.17
North Dakota	Walsh	54.91	56.79	Not selected for survey in sampling strategy	1.88
North Dakota	Nelson	56.79	57.05	Required – no access	0.26
North Dakota	Nelson	57.05	58.80	Survey complete	1.75
North Dakota	Nelson	58.80	74.79	Not selected for survey in sampling strategy	15.99
North Dakota	Nelson	74.79	75.25	Survey complete	0.47
North Dakota	Nelson	75.25	76.20	Not selected for survey in sampling strategy	0.95
North Dakota	Nelson	76.20	77.25	Survey complete	1.05
North Dakota	Nelson	77.25	79.36	Not selected for survey in sampling strategy	2.11
North Dakota	Nelson	79.36	79.86	Survey complete	0.50

**TABLE 3.11.1-2
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
North Dakota	Nelson	79.86	80.43	Not selected for survey in sampling strategy	0.57
North Dakota	Nelson	80.43	82.50	Survey complete	2.07
North Dakota	Nelson	82.50	86.03	Not selected for survey in sampling strategy	3.54
North Dakota	Nelson	86.03	86.72	Survey complete	0.69
North Dakota	Nelson	86.72	87.23	Not selected for survey in sampling strategy	0.51
North Dakota	Nelson	87.23	88.27	Survey complete	1.04
North Dakota	Nelson	88.27	89.55	Not selected for survey in sampling strategy	1.29
North Dakota	Nelson	89.55	90.07	Survey complete	0.51
North Dakota	Nelson	90.07	91.91	Not selected for survey in sampling strategy	1.84
North Dakota	Nelson	91.91	92.91	Survey complete	1.00
North Dakota	Nelson	92.91	93.92	Not selected for survey in sampling strategy	1.01
North Dakota	Steele	93.92	97.96	Not selected for survey in sampling strategy	4.04
North Dakota	Steele	97.96	98.53	Survey complete	0.57
North Dakota	Steele	98.53	101.11	Not selected for survey in sampling strategy	2.58
North Dakota	Steele	101.11	101.50	Survey complete	0.39
North Dakota	Steele	101.50	109.79	Not selected for survey in sampling strategy	8.29
North Dakota	Steele	109.79	110.29	Survey complete	0.50
North Dakota	Steele	110.29	110.83	Not selected for survey in sampling strategy	0.55
North Dakota	Steele	110.83	111.29	Survey complete	0.45
North Dakota	Steele	111.29	112.83	Not selected for survey in sampling strategy	1.54
North Dakota	Steele	112.83	113.34	Survey complete	0.50
North Dakota	Steele	113.34	117.47	Not selected for survey in sampling strategy	4.13
North Dakota	Steele	117.47	118.00	Survey complete	0.53
North Dakota	Steele	118.00	119.13	Not selected for survey in sampling strategy	1.13
North Dakota	Steele	119.13	119.38	Survey complete	0.25
North Dakota	Steele	119.38	122.00	Not selected for survey in sampling strategy	2.62
North Dakota	Steele	122.00	122.55	Survey complete	0.55
North Dakota	Steele	122.55	124.72	Not selected for survey in sampling strategy	2.17
North Dakota	Barnes	124.72	127.87	Not selected for survey in sampling strategy	3.15
North Dakota	Barnes	127.87	128.13	Survey complete	0.26
North Dakota	Barnes	128.13	128.26	Not selected for survey in sampling strategy	0.14
North Dakota	Barnes	128.26	128.90	Survey complete	0.64
North Dakota	Barnes	128.90	134.05	Not selected for survey in sampling strategy	5.14
North Dakota	Barnes	134.05	135.08	Survey complete	1.03
North Dakota	Barnes	135.08	137.78	Not selected for survey in sampling strategy	2.70
North Dakota	Barnes	137.78	139.75	Survey complete	1.97
North Dakota	Barnes	139.75	140.27	Required – no access	0.52
North Dakota	Barnes	140.27	162.59	Not selected for survey in sampling strategy	22.33
North Dakota	Barnes	162.59	164.62	Survey complete	2.02
North Dakota	Barnes	164.62	166.18	Required – no access	1.56
North Dakota	Barnes	166.18	167.33	Survey complete	1.14
North Dakota	Barnes	167.33	167.84	Required – no access	0.51
North Dakota	Ransom	167.84	175.96	Survey complete	8.12
North Dakota	Ransom	175.96	176.22	Not selected for survey in sampling strategy	0.26
North Dakota	Ransom	176.22	176.72	Survey complete	0.50
North Dakota	Ransom	176.72	177.67	Not selected for survey in sampling strategy	0.95
North Dakota	Ransom	177.67	177.76	Survey complete	0.09
North Dakota	Ransom	177.76	178.26	Not selected for survey in sampling strategy	0.50
North Dakota	Ransom	178.26	179.03	Survey complete	0.77
North Dakota	Ransom	179.03	180.89	Not selected for survey in sampling strategy	1.86

TABLE 3.11.1-2 (Continued)					
State	County	Milepost		Status	Miles
		From	To		
North Dakota	Ransom	180.89	181.16	Required – no access	0.27
North Dakota	Ransom	181.16	181.39	Not selected for survey in sampling strategy	0.23
North Dakota	Ransom	181.39	184.11	Survey complete	2.73
North Dakota	Ransom	184.11	185.09	Not selected for survey in sampling strategy	0.97
North Dakota	Ransom	185.09	185.41	Survey complete	0.32
North Dakota	Ransom	185.41	187.44	Not selected for survey in sampling strategy	2.03
North Dakota	Ransom	187.44	187.93	Survey complete	0.49
North Dakota	Ransom	187.93	188.46	Not selected for survey in sampling strategy	0.53
North Dakota	Ransom	188.46	190.03	Survey complete	1.57
North Dakota	Ransom	190.03	191.20	Not selected for survey in sampling strategy	1.17
North Dakota	Ransom	191.20	191.83	Survey complete	0.63
North Dakota	Ransom	191.83	192.57	Not selected for survey in sampling strategy	0.74
North Dakota	Sargent	192.57	194.94	Not selected for survey in sampling strategy	2.37
North Dakota	Sargent	194.94	196.58	Survey complete	1.64
North Dakota	Sargent	196.58	197.00	Required – no access	0.42
North Dakota	Sargent	197.00	198.08	Survey complete	1.08
North Dakota	Sargent	198.08	199.19	Not selected for survey in sampling strategy	1.11
North Dakota	Sargent	199.19	200.20	Survey complete	1.01
North Dakota	Sargent	200.20	200.53	Required – no access	0.33
North Dakota	Sargent	200.53	203.12	Survey complete	2.59
North Dakota	Sargent	203.12	203.62	Required – no access	0.50
North Dakota	Sargent	203.62	205.12	Survey complete	1.50
North Dakota	Sargent	205.12	205.67	Required – no access	0.55
North Dakota	Sargent	205.67	217.80	Not selected for survey in sampling strategy	12.13
Total miles surveyed					63.73
Miles outside sampling strategy					148.01
Total miles still required to survey					6.06

Along with the literature review, Metcalf submitted its research design for cultural resources field studies to the South Dakota SHPO in February 2006. The initial research design was developed in part through discussions with the South Dakota SHPO. The purpose of the research design was to present the methods Metcalf would use to assess the Keystone pipeline and to identify historic properties within the APE. It was based on the results of the site file research and results of previous surveys. The design incorporated a sampling strategy that assessed the route in terms of high and low probabilities for containing historic properties (excluding TCPs); this sampling strategy follows procedures generally accepted by the SHPO and FERC for pipeline projects and is permissible under 36 CFR 800.4(b)(1). The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is generally considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

The research design proposed that a cultural resources pedestrian survey (labeled a Level II study in South Dakota) be conducted along 38.5 miles of the proposed pipeline, using a 300-foot-wide survey corridor that was centered on the proposed centerline. The sampling strategy focused on landform types that were derived from the known site database and the results of previous surveys. The pedestrian

survey was to use survey transects spaced no more than 65.6 feet (20 meters) apart and to use 15.7-inch- (40-centimeter-) diameter shovel probes at locations with poor surface visibility or where cultural materials within 3.3 feet (1 meter) of the ground surface were suspected. The research design further proposed vehicular reconnaissance of the entire pipeline route by geomorphologists to ascertain locations where deeply buried cultural deposits were possible and along 52 miles of the route for archaeologists to field-assess additional Level II survey locations. The SHPO accepted this proposed research plan in a letter dated March 28, 2006.

Metcalf conducted the initial cultural resources field survey of the proposed Keystone pipeline between May and August 2006. Route adjustments to the line were surveyed between October and November 2006; geomorphological testing was also conducted during this period (Bleier et al. 2007b). The survey examined a 300-foot-wide corridor that extended for 49.4 miles; it included 39.5 miles of the original planned route and 9.9 miles of proposed reroutes. While no federally owned land is bisected within the South Dakota project corridor, the areas inspected included properties with easements that were assessed at the request of USFWS.

The South Dakota SHPO sent letters to DOS on March 23 and April 24, 2007, which did not concur with some findings of the initial Metcalf field survey. Metcalf met with the South Dakota SHPO on June 15 to discuss the SHPO comments and agreed to revise the draft report to provide additional details on the literature review and provide additional information to the SHPO and DOS. This amended report was submitted to DOS and the SHPO in September 2007. Further field surveys were conducted by Metcalf in 2007 for additional portions of the original route (as requested by DOS and the SHPO) and for reroutes, appurtenant facilities, and access roads. The surveys conducted from March to August 2007 were reported by Metcalf in an addendum report that was filed with DOS in October 2007 (Stine et al. 2007). The additional surveys included 22.06 miles of additional pipeline route, 37.3 acres of proposed pump stations and 14 access roads totaling 5.03 miles in length; a 50 foot wide assessment corridor was used for the access road surveys.

Table 3.11.1-3 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access was denied to Metcalf along 2.29 miles of the planned survey areas; therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline is incomplete at this time. Keystone also has committed to additional field work based on discussions held with DOS and the SHPO in December 2007, specifically for a survey of the proposed pipeline between MP 389.0 and 391.0. Cultural resources surveys for other Project access roads, additional temporary workspace outside the surveyed corridor, pipeline reroutes, and appurtenant facilities are stated as being completed at this time (Stine et al. 2007). However, reports are required for the above project items and for any design changes; these must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

**TABLE 3.11.1-3
Cultural Resources Survey Status of the Keystone Mainline Project in South Dakota
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
South Dakota	Marshall	217.80	218.81	Not selected for survey in sampling strategy	1.01
South Dakota	Marshall	218.81	219.82	Survey complete	1.01
South Dakota	Marshall	219.82	228.66	Not selected for survey in sampling strategy	8.84
South Dakota	Marshall	228.66	229.74	Required – no access	1.08
South Dakota	Marshall	229.74	230.13	Survey complete	0.38
South Dakota	Marshall	230.13	242.60	Not selected for survey in sampling strategy	12.47
South Dakota	Day	242.60	245.15	Not selected for survey in sampling strategy	2.55
South Dakota	Day	245.15	246.13	Survey complete	0.98
South Dakota	Day	246.13	256.15	Not selected for survey in sampling strategy	10.02
South Dakota	Day	256.15	256.68	Required – no access	0.53
South Dakota	Day	256.68	259.68	Not selected for survey in sampling strategy	3.00
South Dakota	Day	259.68	260.16	Survey complete	0.48
South Dakota	Day	260.16	261.85	Not selected for survey in sampling strategy	1.69
South Dakota	Day	261.85	262.53	Survey complete	0.68
South Dakota	Day	262.53	264.15	Not selected for survey in sampling strategy	1.62
South Dakota	Day	264.15	266.69	Survey complete	2.54
South Dakota	Day	266.69	268.28	Not selected for survey in sampling strategy	1.58
South Dakota	Day	268.28	270.37	Survey complete	2.09
South Dakota	Day	270.37	273.36	Not selected for survey in sampling strategy	2.99
South Dakota	Clark	273.36	297.99	Not selected for survey in sampling strategy	24.63
South Dakota	Clark	297.99	300.00	Survey complete	2.01
South Dakota	Clark	300.00	310.17	Not selected for survey in sampling strategy	10.17
South Dakota	Beadle	310.17	311.19	Survey complete	1.02
South Dakota	Beadle	311.19	311.70	Not selected for survey in sampling strategy	0.51
South Dakota	Beadle	311.70	312.22	Survey complete	0.51
South Dakota	Beadle	312.22	314.27	Not selected for survey in sampling strategy	2.06
South Dakota	Beadle	314.27	315.30	Survey complete	1.03
South Dakota	Beadle	315.30	316.37	Not selected for survey in sampling strategy	1.07
South Dakota	Beadle	316.37	318.07	Survey complete	1.70
South Dakota	Beadle	318.07	318.58	Not selected for survey in sampling strategy	0.51
South Dakota	Beadle	318.58	321.66	Survey complete	3.08
South Dakota	Beadle	321.66	322.70	Not selected for survey in sampling strategy	1.04
South Dakota	Beadle	322.70	323.44	Survey complete	0.74
South Dakota	Beadle	323.44	326.79	Not selected for survey in sampling strategy	3.35
South Dakota	Kingsbury	326.79	328.05	Survey complete	1.26
South Dakota	Kingsbury	328.05	333.67	Not selected for survey in sampling strategy	5.62
South Dakota	Kingsbury	333.67	334.19	Survey complete	0.52
South Dakota	Kingsbury	334.19	335.18	Not selected for survey in sampling strategy	0.98
South Dakota	Kingsbury	335.18	336.16	Survey complete	0.98
South Dakota	Kingsbury	336.16	339.18	Not selected for survey in sampling strategy	3.02
South Dakota	Kingsbury	339.18	339.31	Required – no access	0.13
South Dakota	Kingsbury	339.31	340.36	Not selected for survey in sampling strategy	1.05
South Dakota	Kingsbury	340.36	341.36	Survey complete	1.00
South Dakota	Miner	341.36	350.63	Not selected for survey in sampling strategy	9.27
South Dakota	Miner	350.63	351.59	Survey complete	0.97
South Dakota	Miner	351.59	365.47	Not selected for survey in sampling strategy	13.88
South Dakota	Miner	365.47	366.13	Survey complete	0.66

**TABLE 3.11.1-3
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
South Dakota	Hanson	366.13	368.80	Not selected for survey in sampling strategy	2.66
South Dakota	Hanson	368.80	369.30	Survey complete	0.50
South Dakota	Hanson	369.30	374.96	Not selected for survey in sampling strategy	5.67
South Dakota	Hanson	374.96	375.57	Survey complete	0.61
South Dakota	Hanson	375.57	376.00	Not selected for survey in sampling strategy	0.43
South Dakota	Hanson	376.00	378.03	Survey complete	2.03
South Dakota	Hanson	378.03	380.19	Not selected for survey in sampling strategy	2.16
South Dakota	McCook	380.19	380.67	Survey complete	0.48
South Dakota	McCook	380.67	383.26	Not selected for survey in sampling strategy	2.59
South Dakota	McCook	383.26	384.25	Survey complete	0.99
South Dakota	McCook	384.25	385.24	Not selected for survey in sampling strategy	0.98
South Dakota	McCook	385.24	386.25	Survey complete	1.01
South Dakota	McCook	386.25	387.28	Not selected for survey in sampling strategy	1.04
South Dakota	McCook	387.28	387.34	Survey complete	0.06
South Dakota	McCook	387.34	387.69	Not selected for survey in sampling strategy	0.35
South Dakota	McCook	387.69	387.85	Survey complete	0.15
South Dakota	McCook	387.85	389.00	Not selected for survey in sampling strategy	1.15
South Dakota	McCook	389.00	391.00	Survey required – SHPO requested	2.00
South Dakota	McCook	381.00	391.47	Not selected for survey in sampling strategy	0.47
South Dakota	Hutchinson	391.47	393.74	Survey complete	2.27
South Dakota	Hutchinson	393.74	396.35	Not selected for survey in sampling strategy	2.61
South Dakota	Hutchinson	396.35	396.78	Survey complete	0.42
South Dakota	Hutchinson	396.78	400.43	Not selected for survey in sampling strategy	3.65
South Dakota	Hutchinson	400.43	400.69	Survey complete	0.26
South Dakota	Hutchinson	400.69	407.04	Not selected for survey in sampling strategy	6.35
South Dakota	Hutchinson	407.04	407.18	Survey complete	0.14
South Dakota	Hutchinson	407.18	407.74	Required – reroute	0.56
South Dakota	Hutchinson	407.74	409.10	Survey complete	1.35
South Dakota	Hutchinson	409.10	415.38	Not selected for survey in sampling strategy	6.28
South Dakota	Yankton	415.38	419.52	Not selected for survey in sampling strategy	4.14
South Dakota	Yankton	419.52	424.74	Survey complete	5.22
South Dakota	Yankton	424.74	428.39	Survey complete	3.65
South Dakota	Yankton	428.39	428.81	Not selected for survey in sampling strategy	0.42
South Dakota	Yankton	428.81	428.89	Survey complete	0.08
South Dakota	Yankton	428.89	432.91	Not selected for survey in sampling strategy	4.01
South Dakota	Yankton	432.91	433.00	Survey complete	0.09
South Dakota	Yankton	433.00	433.20	Not selected for survey in sampling strategy	0.20
South Dakota	Yankton	433.20	434.25	Survey complete	1.06
South Dakota	Yankton	434.25	436.77	Not selected for survey in sampling strategy	2.51
South Dakota	Yankton	436.77	437.61	Survey complete	0.84
Total miles surveyed					44.88
Miles outside sampling strategy					170.64
Total miles still required to survey					4.29

3.11.1.3 Nebraska

Mainline Project

The Mainline Project would enter Nebraska from Yankton County, South Dakota and would extend through the state for approximately 214.6 miles. The counties crossed include Cedar, Wayne, Stanton, Platte, Colfax, Butler, Seward, Saline, Jefferson, and Gage. American Resources Group, Ltd. (ARG) and SWCA Environmental Consultants (SWCA) were contracted on behalf of Keystone to perform the required cultural resources background research and field assessments in the state. Keystone also entered into an agreement with Kinder Morgan and Rockies Express Pipeline LLC to purchase the results of cultural resource studies that were conducted in 2005/2006 for the proposed Rockies Express (REX) Natural Gas Pipeline Project. Keystone submitted the REX Project reports (Schwegman et al. 2006, Schwegman 2006, Rieken 2007, Anderson and Aberle 2007, Shah Lomas 2007c) as evidence of existing survey coverage at potential Keystone Project ancillary facilities, access roads, and 12.3 miles of collocated corridor in Jefferson and Gage Counties. The potential environmental impacts of the REX pipeline were assessed as part of FERC's evaluation of FERC Docket CP06-354-000. Portions of the following discussion are derived from the EIS that was produced during that evaluation. Both DOS and the SHPO have accepted that the cultural resources surveys performed for the REX Project adequately address Section 106 compliance requirements for the concomitant aspects of the Keystone Project. Information concerning the use of the REX Project surveys has been subsequently forwarded to all consulting parties.

Prior to the Keystone fieldwork, SWCA performed a records review (labeled a Class I files search in Nebraska) of the proposed pipeline route in January 2006 (Burnett and Slessman 2006a); this research was revised in March 2006 to take into account projected changes to the preferred route (Burnett and Slessman 2006b). The cultural site and survey data were located at the State Historical Preservation Office in Nebraska and the online records of the Nebraska General Land Office (GLO). The information from the State Historic Preservation Office was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the proposed centerline. The records search identified 40 cultural resources in this area. The resources included 27 Historic period sites, 10 Pre-contact sites, one site with both Pre-contact and Historic period artifact assemblages, and one proto-Historic period (European contact-era) site. The potential age and type of one site could not be determined based on the information presented on the site form. The data indicated that four known cultural resources were plotted within 150 feet of the proposed pipeline centerline. These included two Pre-contact village or burial sites (25BU3 and 25CD21) and two Historic period cabin or trail sites (25CX7 and 25PT108). The review of GLO records examined land parcels situated within 150 feet of the proposed pipeline centerline. This search identified 14 properties, including roads between Fort Leavenworth and Laramie, Fort Kearney and Nebraska City, Fort Kearney and Omaha, and Omaha and Fort Sterling. A Union Pacific & Burlington system railroad crossing was noted.

Along with the literature review, Keystone, through its cultural resource contractor, submitted its initial and revised research designs for cultural resources field studies to the Nebraska SHPO in February and March 2006 (Burnett and Slessman 2006a, 2006b). An email dated March 8, 2006, also was sent to the SHPO that summarized the research design. The purpose of the research design was to present the methods ARG would use to assess the Keystone pipeline and to identify historic properties within the APE. It was based on the results of the site file research and results of previous surveys. The design incorporated field evaluation of the entire proposed pipeline corridor, wherever previous survey coverage had not been achieved. It focused on identifying Section 106-defined historic properties within the proposed Project areas, excluding TCPs. It was developed in part through discussions with the Nebraska SHPO. The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation

of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

The research design proposed that a cultural resources field survey be conducted along the entire proposed pipeline, using a 300-foot-wide survey corridor. Where collocated with another pipeline, the survey would cover 60 feet to the collocated side and 240 feet to the non-collocated side. At greenfield sections, the survey corridor would be centered on the proposed centerline. The pedestrian survey was to use survey transects spaced no more than 98.4 feet (30 meters) apart and to use shovel tests at locations where surface visibility was less than 10 percent. These shovel tests also would be spaced 98.4 feet (30 meters) apart. The research design further proposed that the Phase I survey results would be used to determine potential geomorphological studies, at locations where deeply buried cultural deposits may be possible. The SHPO accepted the proposed research plan in a letter dated March 8, 2006. No federally owned or managed land that requires review by a federal agency is present within the Nebraska Project corridor.

ARG conducted the initial cultural resources and geoarchaeological field surveys of the proposed Mainline Project route from May to June and October to November 2006; the area surveyed did not include the collocated REX pipeline section in Jefferson and Gage Counties (discussed separately below). ARG examined a 300-foot-wide corridor that extended for 214 miles of the planned pipeline route and included 24.8 miles of additional survey that resulted from route design changes (Ensor et al. 2007). Additional surveys were conducted by ARG in 2007 for proposed reroutes and Project items (Anderson et al. 2007a). These surveys, conducted in July 2007, included 40.97 miles of additional pipeline route and 69.15 acres of proposed pump station facilities. Consistent with the approved research design, the field-inspected locations were examined through pedestrian survey and shovel testing. Geomorphological testing at 35 locations also was performed during this period; 15 locations were recommended for additional research.

Keystone has abandoned portions of the originally proposed route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-4 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access to 15.62 miles of the planned survey area was denied to ARG; therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline is incomplete at this time. Cultural resources surveys and geomorphological studies for Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities are ongoing. Further survey reports must be submitted and reviewed by consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

Keystone submitted five REX Project reports to document previous survey coverage of the proposed Mainline Project corridor and potential ancillary facilities (Schwegman et al. 2006, Schwegman 2006, Anderson and Aberle 2007, Rieken 2007, Shah Lomas 2007c). The portion of the Keystone pipeline that is collocated within the REX survey corridor is situated in Jefferson and Gage Counties between MP 637.3 and 649.6. A research design for the Nebraska segment of the REX Project was submitted to the SHPO in December 2005 (Schwegman et al. 2006). The FERC EIS for the REX Project states that the Nebraska SHPO indicated on January 6, 2006, that the entire pipeline route in Nebraska should be surveyed. This would include the portion of the REX pipeline that is collocated with the Mainline Project. The research design in the submitted report (Schwegman et al. 2006) indicates that the pipeline

corridor was examined through a combination of shovel testing and pedestrian survey, identical to the methodology utilized for the Keystone survey.

**TABLE 3.11.1-4
Cultural Resources Survey Status of the Keystone Mainline Project in Nebraska
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
Nebraska	Cedar	437.61	437.86	Not required – surveyed for REX Project	0.25
Nebraska	Cedar	437.86	440.00	Survey complete	2.14
Nebraska	Cedar	440.00	440.15	Required – no access	0.15
Nebraska	Cedar	440.15	441.87	Survey complete	1.72
Nebraska	Cedar	441.87	441.91	Required – no access	0.05
Nebraska	Cedar	441.91	447.04	Survey complete	5.13
Nebraska	Cedar	447.04	447.66	Required – no access	0.61
Nebraska	Cedar	447.66	474.69	Survey complete	27.03
Nebraska	Wayne	474.69	479.63	Survey complete	4.94
Nebraska	Wayne	479.63	479.94	Required – no access	0.31
Nebraska	Wayne	479.94	480.45	Survey complete	0.50
Nebraska	Wayne	480.45	480.93	Required – no access	0.49
Nebraska	Wayne	480.93	493.21	Survey complete	12.28
Nebraska	Stanton	493.21	495.18	Survey complete	1.97
Nebraska	Stanton	495.18	495.43	Required – no access	0.25
Nebraska	Stanton	495.43	496.19	Survey complete	0.76
Nebraska	Stanton	496.19	498.69	Required – no access	2.50
Nebraska	Stanton	498.69	510.65	Survey complete	11.96
Nebraska	Stanton	510.65	510.69	Required – no access	0.04
Nebraska	Stanton	510.69	518.11	Survey complete	7.42
Nebraska	Platte	518.11	522.17	Survey complete	4.06
Nebraska	Colfax	522.17	522.26	Required – no access	0.09
Nebraska	Colfax	522.26	535.90	Survey complete	13.64
Nebraska	Colfax	535.90	536.41	Required – no access	0.51
Nebraska	Colfax	536.41	542.68	Survey complete	6.27
Nebraska	Colfax	542.68	543.17	Required – no access	0.49
Nebraska	Colfax	543.17	544.61	Survey complete	1.43
Nebraska	Butler	544.61	545.24	Required – no access	0.64
Nebraska	Butler	545.24	550.55	Survey complete	5.31
Nebraska	Butler	550.55	550.87	Required – no access	0.31
Nebraska	Butler	550.87	563.65	Survey complete	12.78
Nebraska	Butler	563.65	564.14	Required – no access	0.50
Nebraska	Butler	564.14	566.75	Survey complete	2.60
Nebraska	Butler	566.75	567.22	Required – no access	0.47
Nebraska	Butler	567.22	568.22	Survey complete	1.00
Nebraska	Seward	568.22	575.86	Survey complete	7.64
Nebraska	Seward	575.86	575.91	Required – no access	0.05
Nebraska	Seward	575.91	589.17	Survey complete	13.27
Nebraska	Seward	589.17	589.93	Required – no access	0.75
Nebraska	Seward	589.93	593.01	Survey complete	3.09
Nebraska	Seward	593.01	593.28	Required – no access	0.27
Nebraska	Saline	593.28	599.57	Survey complete	6.29
Nebraska	Saline	599.57	599.72	Required – no access	0.14
Nebraska	Saline	599.72	603.40	Survey complete	3.68

TABLE 3.11.1-4 (Continued)						
State	County	Milepost		Status	Miles	
		From	To			
Nebraska	Saline	603.40	604.27	Required – no access	0.87	
Nebraska	Saline	604.27	605.50	Survey complete	1.23	
Nebraska	Saline	605.50	607.74	Required – no access	2.24	
Nebraska	Saline	607.74	608.74	Survey complete	0.99	
Nebraska	Saline	608.74	609.74	Required – no access	1.00	
Nebraska	Saline	609.74	611.20	Survey complete	1.47	
Nebraska	Saline	611.20	611.25	Required – no access	0.04	
Nebraska	Saline	611.25	611.74	Survey complete	0.50	
Nebraska	Saline	611.74	612.75	Required – no access	1.01	
Nebraska	Saline	612.75	617.95	Survey complete	5.20	
Nebraska	Jefferson	617.95	618.45	Survey complete	0.50	
Nebraska	Jefferson	618.45	618.94	Required – no access	0.49	
Nebraska	Jefferson	618.94	621.58	Survey complete	2.65	
Nebraska	Jefferson	621.58	621.98	Required – no access	0.40	
Nebraska	Jefferson	621.98	626.19	Survey complete	4.21	
Nebraska	Jefferson	626.19	626.60	Required – no access	0.41	
Nebraska	Jefferson	626.60	639.29	Survey complete	12.69	
Nebraska	Jefferson	639.29	639.82	Required – no access	0.53	
Nebraska	Jefferson	639.82	644.37	Not required – surveyed for rex project	4.55	
Nebraska	Gage	644.37	652.26	Not required – surveyed for rex project	7.89	
Total miles surveyed for Keystone Project					186.34	
Total miles surveyed for REX Project					12.69	
Total miles still required to survey					15.62	

In comparison to the 300-foot-wide corridor used for the Keystone Project, ARG surveyed a 200-foot-wide corridor for the REX Project. This corridor was itself collocated with an existing pipeline ROW for the entire length of the portion that is relevant to the Keystone Project. According to the documents filed by Keystone, all 12.3 miles of the collocated REX pipeline in Jefferson and Gage Counties was surveyed for cultural resources. ARG also inspected six locations along this 12.3-mile-long section where temporary extra workspace areas would lie outside of the 200-foot-wide survey corridor (Schwegman et al. 2006).

ARG also conducted geomorphological investigations at 60 stream-valley locations along the REX corridor, of which five were associated with the section collocated with the Mainline Project. Their report (Schwegman et al. 2006) recommended that 35 stream crossing locations should be further investigated using backhoe trenching, including one of the locations relevant to Keystone. The results of this additional fieldwork were presented in a separate report (Anderson and Aberle 2007). A total of 62 backhoe trenches were excavated to assess the 35 locations recommended from the earlier field effort. Only one of the locations within the Keystone Project APE was found to have a buried Pre-contact archeological site (25JF41; see Table 3.11.2-3).

In their primary document for the cultural resources field survey (Schwegman et al. 2006), ARG reported that a 40-acre area was inventoried to cover the proposed Steele City Compressor Station location (REX MP 431.5 in Gage County). In addition, ARG inspected the location for a proposed Natural Gas Pipeline

Company of America Meter Station (REX MP 423.1 in Jefferson County). An addendum report (Schwegman 2006) that was prepared for the REX Project indicated that cultural resources studies had been completed at a 17.7-acre compressor station location in Phelps County (REX MP 286.9) and at a proposed 1.2-acre site for a proposed meter station in Jefferson County (REX MP 286.9). A separate addendum report (Shah Lomas 2007c) discussed the evaluation of 12 additional temporary workspaces for the REX Project totaling 7.8 acres. The latter report noted the finding of a single cultural resource, a multi-component site that was not recommended as being eligible for listing in the NRHP (Site 25GA128; see Table 3.11.2-3).

The ARG primary report (Schwegman et al. 2006) for the REX Project was submitted to the SHPO on May 15, 2006. In a letter dated June 6, 2006, the Nebraska SHPO agreed with the recommendations in that report. Keystone, through ARG, also submitted a letter to the Nebraska SHPO on November 18, 2006, requesting that survey results for the REX Project be applied to Keystone. Keystone provided maps of the Mainline Project corridor to the SHPO for this analysis. The SHPO responded on November 28, 2006, that this was acceptable. The SHPO also sent two letters on June 4, 2007, to ARG that concurred with the field findings for submitted addenda reports (Anderson and Aberle 2007, Shah Lomas 2007).

Cushing Extension

Only 2.51 miles of the proposed Cushing Extension pipeline is situated within the state of Nebraska (Table 3.11.1-5). This segment is in the southeastern portion of Jefferson County and extends due south into Washington County, Kansas. The preliminary Project plans anticipated 2.42 miles of pipeline to be located within the state, which was examined for cultural resources by Geo-Marine, Inc. in February 2007. The survey involved examination of a 300-foot-wide linear corridor through pedestrian survey transects spaced approximately 100 feet apart. ARG, which replaced Geo-Marine as the cultural resources contractor after fieldwork was completed by Geo-Marine, filed a draft technical report with with DOS and the SHPO in August 2007, indicating that no cultural resource concerns were present (Shah Lomas 2007d).

State	County	Milepost		Status	Miles
		From	To		
Nebraska	Jefferson	0.00	0.34	Required – no access	0.34
Nebraska	Jefferson	0.34	2.51	Survey completed	2.17
Total miles surveyed					2.17
Total miles still required to survey					0.34

The applicant provided information in December 2007 indicating that a portion of this route will be abandoned and that a new reroute will require cultural resources survey, as shown in Table 3.11.1-5. Access was denied to ARG along 0.34 mile of this planned survey area; therefore, the cultural resources inventory of the proposed Cushing Extension pipeline in Nebraska is incomplete at this time. The cultural resources survey results for this reroute, along with any required Project access roads, additional temporary workspace outside of the surveyed corridor, and appurtenant facilities must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

3.11.1.4 Kansas

Mainline Project

The Mainline Project would enter Kansas from Gage County, Nebraska and would extend through the state for 98.67 miles. The counties crossed include Marshall, Nemaha, Brown, and Doniphan. ARG was contracted on behalf of Keystone to perform the required cultural resources assessments within the state. Keystone also entered into an agreement with Kinder Morgan and Rockies Express Pipeline LLC to purchase the results of cultural resources studies that were conducted in 2005/2006 for the proposed REX Project. Keystone submitted the REX report (Myers et al. 2006a) as evidence of existing survey coverage at potential Keystone Project ancillary facilities and access roads, and along the collocated pipeline corridor. The potential environmental impacts of the REX pipeline were assessed as part of FERC's evaluation of the project (FERC Docket CP06-354-000). Portions of the following discussion are derived from the EIS that was produced during that evaluation. Both DOS and the SHPO have accepted that the surveys performed for the REX West Project adequately address Section 106 compliance requirements for the concomitant aspects of the Keystone Project.

Prior to commencing fieldwork, in November 2005, ARG undertook a literature and file search of the proposed REX pipeline route. The searches collected online cultural site and survey data that were located at the Kansas State Historical Society. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the proposed centerline. The records search identified 29 cultural resources within this zone, including 24 Pre-contact sites, two Historic period sites, and three sites with both Historic period and Pre-contact cultural components. The data indicated that none of these known cultural resources lies within the projected REX pipeline (and, by extension, the Keystone) APE.

ARG submitted its research design for the REX cultural resources field studies to the Kansas SHPO in November 2005. It proposed that a cultural resources field survey be conducted along 36.7 miles of the proposed pipeline, using a 200-foot-wide survey corridor. The sampling strategy used to select the survey segments focused on landform types that were derived from the known site database and the results of previous surveys. Pedestrian survey using transects spaced no more than 49.2 feet (15 meters) apart was to be employed at landforms with existing land disturbance, on landforms with slopes greater than 20 percent, and at areas demonstrating greater than 40-percent surface visibility. The survey was to use 13.8- to 17.7-inch- (35- to 45-centimeter-) diameter shovel tests spaced 49.2 feet (15 meters) apart at survey locations where surface visibility decreased below the 40-percent threshold. The research design further proposed geomorphological testing at 25 locations where deeply buried cultural deposits were considered possible. The Kansas SHPO accepted the proposed research plan in a letter dated December 14, 2005.

ARG conducted their initial cultural resources field survey of the proposed REX pipeline route in 2006 (Myers et al. 2006a). The surveys examined a 200-foot-wide corridor that measured 40 feet toward the existing pipeline and 160 feet to the side opposite the existing pipeline. A total of 48 separate segments in Marshall, Nemaha, Brown, and Doniphan Counties were field examined. This sample comprised 36.4 miles of the entire pipeline route. ARG also examined 31 locations where temporary extra workspaces would lie outside of the 200-foot-wide survey corridor. According to the documents filed by Keystone, all of the collocated REX pipeline that was selected for survey in Kansas has been examined for cultural resources. The inventory of the concomitant sections of the proposed Keystone pipeline is therefore also complete at this time (barring future route adjustments).

As part of the REX Project, ARG surveyed a proposed meter station location and access road (REX MP 497.8). No cultural resources concerns were found (Myers et al. 2006). ARG also received

permission to examine a 0.14-mile section of the REX corridor for which land access had been denied, 10 additional temporary workspaces that lay outside the original corridor, and two pipeline reroutes (Shah Lomas 2007a). A single Historic period cultural resource (Site 14MH164) was located at one of the latter reroutes (Table 3.11.2-5). Additional cultural resources surveys for Project access roads, additional temporary workspace, pipeline reroutes, and appurtenant facilities are ongoing. Keystone anticipates that an addendum report will be filed for these aspects of the Project in September 2007.

ARG conducted geomorphological investigations at 25 stream-valley locations and recommended that 12 of these stream crossing locations receive further investigation, using backhoe trenching (Myers et al. 2006a). The results of this additional fieldwork were presented in a separate report (Anderson and Schwegman 2007). A total of 22 backhoe trenches were excavated and resulted in identification of a single buried Pre-contact archeological site (14NH112; see Table 3.11.2-6). Geoaicheological studies for the Kansas portion of the REX Project are now considered complete. The Kansas SHPO sent a letter to ARG on April 17, 2007, that accepted both the level of effort and findings of the geoaicheological report. DOS also agrees with the Section 106 findings of FERC and the SHPO for all aspects of the above REX West surveys, where they overlap with the Keystone Project.

Keystone has abandoned portions of the originally proposed REX West route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-6 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access to all of the planned survey area was granted to ARG; therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline in Kansas is complete, barring any future route deviations. Cultural resources surveys for Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities may still occur. If so, further survey reports must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

Cushing Extension

The Cushing Extension lateral pipeline would enter Kansas from Jefferson County, Nebraska and would extend through the state for approximately 210.36 miles. The counties crossed include Washington, Clay, Dickinson, Marion, Butler, and Cowley. Geo-Marine, Inc. and ARG were the companies contracted by Keystone to perform the required cultural resources background investigations and assessments within the state. Prior to commencing fieldwork, in March 2006, ARG submitted a research design to the SHPO that included a records review and plan to conduct field surveys for the Cushing Extension pipeline route in Kansas. The purpose of the research design was to present the field methods to be used to assess the Cushing Extension pipeline and to identify historic properties within the APE. It was based on the results of the site file research and results of previous surveys. The design incorporated a sampling strategy that assessed the route in terms of high and low probabilities for containing Section 106-defined historic properties (excluding TCPs); this strategy follows procedures generally accepted by the SHPO and FERC for pipeline projects in Kansas. The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

**TABLE 3.11.1-6
Cultural Resources Survey Status of the Keystone Mainline Project in Kansas
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
Kansas	Marshall	652.26	681.19	Not required (REX Project corridor)	28.93
Kansas	Nemaha	681.19	686.93	Not required (REX Project corridor)	5.74
Kansas	Nemaha	686.93	687.59	Survey completed	0.65
Kansas	Nemaha	687.59	691.05	Not required (REX Project corridor)	3.46
Kansas	Nemaha	691.05	692.02	Survey completed	0.97
Kansas	Nemaha	692.02	696.08	Not required (REX Project corridor)	4.06
Kansas	Nemaha	696.08	696.26	Survey completed	0.19
Kansas	Nemaha	696.26	706.02	Not required (REX Project corridor)	9.76
Kansas	Brown	706.02	715.20	Not required (REX Project corridor)	9.18
Kansas	Brown	715.20	715.71	Survey completed	0.51
Kansas	Brown	715.71	716.73	Not required (REX Project corridor)	1.02
Kansas	Brown	716.73	717.24	Survey completed	0.51
Kansas	Brown	717.24	722.41	Not required (REX Project corridor)	5.17
Kansas	Brown	722.41	723.48	Survey completed	1.07
Kansas	Brown	723.48	724.41	Not required (REX Project corridor)	0.93
Kansas	Brown	724.41	725.41	Survey completed	0.99
Kansas	Brown	725.41	725.53	Not required (REX Project corridor)	0.12
Kansas	Brown	725.53	725.70	Survey completed	0.17
Kansas	Brown	725.70	727.00	Not required (REX Project corridor)	1.30
Kansas	Brown	727.00	727.93	Survey completed	0.93
Kansas	Brown	727.93	730.58	Not required (REX Project corridor)	2.65
Kansas	Doniphan	730.58	740.06	Not required (REX Project corridor)	9.48
Kansas	Doniphan	740.06	740.63	Survey completed	0.57
Kansas	Doniphan	740.63	750.92	Not required (REX Project corridor)	10.29
Total miles surveyed for Keystone Project					6.57
Miles within REX Project area					92.10
Total miles still required to survey					0.00

The SHPO responded in a letter dated March 17, 2006, agreeing with the essential components of the plan but requested several clarifications and alterations to the sampling strategy. Keystone subsequently retained Geo-Marine, which filed with the Kansas SHPO a revised research plan for the Cushing Extension in December 2006. The Geo-Marine research plan included a record review of previously identified cultural resources and surveys. The records used online cultural site and survey data that were housed at the Kansas State Historical Society. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the proposed centerline.

The records search identified 129 cultural resources within this zone, including 104 Pre-contact sites, three Historic period sites, six sites with both Historic period and Pre-contact cultural components, and 16 sites for which temporal information was unavailable. The data indicated that eight known cultural resources may lie within the projected Cushing Extension APE. Seven of these sites were listed as being of Pre-contact age (14BU337, 14BU1304, 14CO414, 14CY407, 14MN358, 14MN359, and 14WH318), and one site (14BU383) included both Historic period and Pre-contact assemblages. None of these eight

sites had been assessed previously for their potential eligibility for listing in the NRHP. The research design also noted that five listed NRHP properties are located within 1 mile of the proposed Project. They include two Historic period bridges; a frame farm house; a Historic period lodge dating to the early 1900s; and the Marion Archeological District, which comprises 26 archaeological sites that mainly date 300 – 500 years ago and are associated with the Great Bend Aspect cultural period.

The Geo-Marine research design proposed a cultural resources field survey along 40 pipeline segments that total 104.5 miles of the proposed lateral route, using a 300-foot-wide survey corridor. The sampling strategy used to select the survey segments focused on landform types that were derived from the known site database and the results of previous surveys. A pedestrian survey using transects spaced no more than 49.2 feet (15 meters) apart generally was to be used at landforms with greater than 40-percent surface visibility. The field methods specified the use of 13.8-inch- (35-centimeter-) diameter shovel tests spaced 98.4 feet (30 meters) apart at survey locations where surface visibility decreased below the 40-percent threshold and at locations based on the judgment of the field director. The research design further proposed geomorphological testing at 59 locations where deeply buried cultural deposits were considered possible. This research design, developed in part through discussions with the Kansas SHPO, was accepted by the SHPO in a letter dated January 9, 2007.

Geo-Marine initiated cultural resource field studies within the Cushing Extension corridor in January 2007. In February, ARG replaced Geo-Marine as the cultural resources contractor and completed the field investigation. ARG contacted the SHPO to discuss the change and revised the research design to increase the level of survey by 5.1 miles, to an approximate total of 109.6 miles of the proposed lateral route. These survey areas were primarily added because of the presence of Historic period trails.

ARG provided an initial technical report stating that .85 miles of the proposed Cushing Extension pipeline was surveyed for cultural resources between January and March 2007 (Aberle et al. 2007). Additional cultural resources surveys, conducted from March to August 2007, were reported by ARG in a status letter dated August 23, 2007. They included 11.57 miles of additional pipeline route, 5 acres associated with a proposed pump station location, and 12 access roads. Geomorphological testing was also reported by Anderson (2007) for 60 locations. Of these, 21 were assessed as requiring additional research and 11 were not completed due to a landowner denying access to the properties. The Cushing Extension also crosses approximately 3.6 miles of federally owned land.

Table 3.11.1-7 displays the cultural resources survey status of the currently designed Cushing Extension route in Kansas. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by the applicant (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access was denied to ARG along 23.95 miles of the planned survey areas; therefore, the cultural resources inventory of the proposed Cushing Extension pipeline is incomplete at this time. Geoarchaeological testing and cultural resources surveys for Project access roads, additional temporary workspace outside the surveyed corridor, pipeline reroutes, and appurtenant facilities are ongoing. Further survey reports must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

**TABLE 3.11.1-7
Cultural Resources Survey Status of the Keystone Cushing Extension in Kansas
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
Kansas	Washington	2.51	5.04	Survey completed	2.53
Kansas	Washington	5.04	6.55	Not selected for survey in sampling strategy	1.51
Kansas	Washington	6.55	7.19	Survey completed	0.64
Kansas	Washington	7.19	8.00	Not selected for survey in sampling strategy	0.81
Kansas	Washington	8.00	9.10	Survey completed	1.10
Kansas	Washington	9.10	9.74	Required – no access	0.64
Kansas	Washington	9.74	15.45	Survey completed	5.71
Kansas	Washington	15.45	15.68	Not selected for survey in sampling strategy	0.22
Kansas	Washington	15.68	16.18	Survey completed	0.51
Kansas	Washington	16.18	17.14	Not selected for survey in sampling strategy	0.96
Kansas	Washington	17.14	18.16	Survey completed	1.01
Kansas	Washington	18.16	19.66	Not selected for survey in sampling strategy	1.51
Kansas	Washington	19.66	20.67	Survey completed	1.01
Kansas	Washington	20.67	21.17	Not selected for survey in sampling strategy	0.50
Kansas	Washington	21.17	23.06	Survey completed	1.89
Kansas	Washington	23.06	23.68	Not selected for survey in sampling strategy	0.62
Kansas	Washington	23.68	24.49	Survey completed	0.81
Kansas	Washington	24.49	25.78	Not selected for survey in sampling strategy	1.29
Kansas	Washington	25.78	26.41	Survey completed	0.63
Kansas	Washington	26.41	28.57	Not selected for survey in sampling strategy	2.16
Kansas	Washington	28.57	30.10	Survey completed	1.53
Kansas	Washington	30.10	32.80	Not selected for survey in sampling strategy	2.70
Kansas	Clay	32.80	34.05	Survey completed	1.25
Kansas	Clay	34.05	34.26	Not selected for survey in sampling strategy	0.22
Kansas	Clay	34.26	35.84	Survey completed	1.57
Kansas	Clay	35.84	36.13	Not selected for survey in sampling strategy	0.29
Kansas	Clay	36.13	37.75	Survey completed	1.62
Kansas	Clay	37.75	38.66	Not selected for survey in sampling strategy	0.91
Kansas	Clay	38.66	38.92	Survey completed	0.25
Kansas	Clay	38.92	40.65	Not selected for survey in sampling strategy	1.73
Kansas	Clay	40.65	41.34	Survey completed	0.69
Kansas	Clay	41.34	42.83	Not selected for survey in sampling strategy	1.49
Kansas	Clay	42.83	43.83	Required – no access	1.00
Kansas	Clay	43.83	44.67	Survey completed	0.84
Kansas	Clay	44.67	49.39	Not selected for survey in sampling strategy	4.72
Kansas	Clay	49.39	50.05	Survey completed	0.66
Kansas	Clay	50.05	50.60	Required – no access	0.55
Kansas	Clay	50.60	51.58	Not selected for survey in sampling strategy	0.97
Kansas	Clay	51.58	51.91	Required – no access	0.33
Kansas	Clay	51.91	52.16	Survey completed	0.25
Kansas	Clay	52.16	52.56	Required – no access	0.40
Kansas	Clay	52.56	53.37	Survey completed	0.81
Kansas	Clay	53.37	53.44	Required – no access	0.07
Kansas	Clay	53.44	53.61	Survey completed	0.17
Kansas	Clay	53.61	54.71	Required – no access	1.10
Kansas	Clay	54.71	55.47	Survey completed	0.76

**TABLE 3.11.1-7
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
Kansas	Clay	55.47	58.48	Survey completed	3.01
Kansas	Clay	58.48	59.90	Not selected for survey in sampling strategy	1.42
Kansas	Clay	59.90	60.47	Survey completed	0.58
Kansas	Clay	60.47	60.62	Not selected for survey in sampling strategy	0.15
Kansas	Clay	60.62	61.27	Survey completed	0.65
Kansas	Clay	61.27	61.99	Not selected for survey in sampling strategy	0.72
Kansas	Dickinson	61.99	62.50	Survey completed	0.51
Kansas	Dickinson	62.50	65.89	Not selected for survey in sampling strategy	3.39
Kansas	Dickinson	65.89	66.10	Survey completed	0.21
Kansas	Dickinson	66.10	68.02	Not selected for survey in sampling strategy	1.93
Kansas	Dickinson	68.02	68.28	Survey completed	0.25
Kansas	Dickinson	68.28	68.79	Required – no access	0.51
Kansas	Dickinson	68.79	72.03	Survey completed	3.25
Kansas	Dickinson	72.03	72.56	Required – no access	0.52
Kansas	Dickinson	72.56	73.90	Not selected for survey in sampling strategy	1.35
Kansas	Dickinson	73.90	76.15	Survey completed	2.24
Kansas	Dickinson	76.15	76.68	Required – no access	0.53
Kansas	Dickinson	76.68	77.47	Survey completed	0.79
Kansas	Dickinson	77.47	79.21	Not selected for survey in sampling strategy	1.74
Kansas	Dickinson	79.21	80.81	Survey completed	1.60
Kansas	Dickinson	80.81	83.29	Not selected for survey in sampling strategy	2.49
Kansas	Dickinson	83.29	83.93	Survey completed	0.64
Kansas	Dickinson	83.93	84.82	Not selected for survey in sampling strategy	0.89
Kansas	Dickinson	84.82	85.59	Survey completed	0.77
Kansas	Dickinson	85.59	85.99	Not selected for survey in sampling strategy	0.39
Kansas	Dickinson	85.99	86.32	Required – no access	0.33
Kansas	Dickinson	86.32	88.39	Survey completed	2.07
Kansas	Dickinson	88.39	90.80	Not selected for survey in sampling strategy	2.41
Kansas	Dickinson	90.80	92.66	Survey completed	1.86
Kansas	Dickinson	92.66	93.51	Not selected for survey in sampling strategy	0.85
Kansas	Dickinson	93.51	94.00	Required – no access	0.49
Kansas	Dickinson	94.00	94.79	Survey completed	0.79
Kansas	Dickinson	94.79	95.00	Not selected for survey in sampling strategy	0.21
Kansas	Dickinson	95.00	95.51	Survey completed	0.51
Kansas	Dickinson	95.51	96.42	Not selected for survey in sampling strategy	0.91
Kansas	Dickinson	96.42	97.51	Survey completed	1.09
Kansas	Dickinson	97.51	98.23	Not selected for survey in sampling strategy	0.72
Kansas	Dickinson	98.23	98.53	Required – no access	0.30
Kansas	Dickinson	98.53	99.42	Survey completed	0.89
Kansas	Marion	99.42	99.83	Not selected for survey in sampling strategy	0.41
Kansas	Marion	99.83	100.52	Survey completed	0.69
Kansas	Marion	100.52	101.25	Not selected for survey in sampling strategy	0.72
Kansas	Marion	101.25	102.15	Survey completed	0.90
Kansas	Marion	102.15	102.53	Not selected for survey in sampling strategy	0.39
Kansas	Marion	102.53	103.78	Survey completed	1.25
Kansas	Marion	103.78	106.03	Not selected for survey in sampling strategy	2.25

**TABLE 3.11.1-7
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
Kansas	Marion	106.03	106.78	Survey completed	0.75
Kansas	Marion	106.78	108.03	Not selected for survey in sampling strategy	1.24
Kansas	Marion	108.03	109.04	Survey completed	1.01
Kansas	Marion	109.04	109.28	Required – no access	0.24
Kansas	Marion	109.28	111.29	Not selected for survey in sampling strategy	2.01
Kansas	Marion	111.29	112.23	Survey completed	0.94
Kansas	Marion	112.23	113.74	Required – no access	1.51
Kansas	Marion	113.74	114.84	Survey completed	1.10
Kansas	Marion	114.84	115.10	Required – no access	0.26
Kansas	Marion	115.10	116.06	Survey completed	0.97
Kansas	Marion	116.06	116.60	Required – no access	0.53
Kansas	Marion	116.60	117.00	Survey completed	0.40
Kansas	Marion	117.00	118.10	Required – no access	1.10
Kansas	Marion	118.10	119.59	Survey completed	1.49
Kansas	Marion	119.59	120.59	Not selected for survey in sampling strategy	1.00
Kansas	Marion	120.59	121.36	Survey completed	0.78
Kansas	Marion	121.36	123.10	Not selected for survey in sampling strategy	1.73
Kansas	Marion	123.10	124.73	Survey completed	1.63
Kansas	Marion	124.73	127.23	Not selected for survey in sampling strategy	2.50
Kansas	Marion	127.23	130.90	Survey completed	3.66
Kansas	Marion	130.90	132.79	Not selected for survey in sampling strategy	1.90
Kansas	Marion	132.79	133.78	Survey completed	0.98
Kansas	Marion	133.78	134.06	Not selected for survey in sampling strategy	0.28
Kansas	Marion	134.06	134.87	Survey completed	0.81
Kansas	Marion	134.87	135.70	Not selected for survey in sampling strategy	0.83
Kansas	Marion	135.70	136.88	Survey completed	1.18
Kansas	Butler	136.88	137.39	Required – no access	0.52
Kansas	Butler	137.39	137.78	Survey completed	0.38
Kansas	Butler	137.78	139.18	Not selected for survey in sampling strategy	1.41
Kansas	Butler	139.18	141.92	Survey completed	2.73
Kansas	Butler	141.92	142.90	Required – no access	0.98
Kansas	Butler	142.90	143.16	Survey completed	0.26
Kansas	Butler	143.16	144.57	Not selected for survey in sampling strategy	1.41
Kansas	Butler	144.57	145.44	Survey completed	0.87
Kansas	Butler	145.44	146.94	Not selected for survey in sampling strategy	1.50
Kansas	Butler	146.94	147.44	Survey completed	0.50
Kansas	Butler	147.44	148.45	Not selected for survey in sampling strategy	1.01
Kansas	Butler	148.45	149.39	Survey completed	0.94
Kansas	Butler	149.39	150.64	Not selected for survey in sampling strategy	1.26
Kansas	Butler	150.64	151.50	Survey completed	0.86
Kansas	Butler	151.50	153.00	Not selected for survey in sampling strategy	1.50
Kansas	Butler	153.00	155.91	Survey completed	2.91
Kansas	Butler	155.91	156.35	Required – no access	0.44
Kansas	Butler	156.35	158.14	Survey completed	1.79
Kansas	Butler	158.14	158.36	Required – no access	0.22
Kansas	Butler	158.36	159.41	Survey completed	1.05
Kansas	Butler	159.41	159.92	Required – no access	0.51

**TABLE 3.11.1-7
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
Kansas	Butler	159.92	161.81	Survey completed	1.89
Kansas	Butler	161.81	161.87	Required – no access	0.07
Kansas	Butler	161.87	162.43	Survey completed	0.56
Kansas	Butler	162.43	163.69	Required – no access	1.26
Kansas	Butler	163.69	164.39	Survey completed	0.70
Kansas	Butler	164.39	165.48	Not selected for survey in sampling strategy	1.09
Kansas	Butler	165.48	165.91	Survey completed	0.44
Kansas	Butler	165.91	167.88	Not selected for survey in sampling strategy	1.96
Kansas	Butler	167.88	168.08	Survey completed	0.20
Kansas	Butler	168.08	168.71	Required – no access	0.64
Kansas	Butler	168.71	174.08	Not selected for survey in sampling strategy	5.37
Kansas	Butler	174.08	176.60	Survey completed	2.51
Kansas	Butler	176.60	178.61	Not selected for survey in sampling strategy	2.01
Kansas	Cowley	178.61	179.35	Not selected for survey in sampling strategy	0.74
Kansas	Cowley	179.35	179.71	Survey completed	0.36
Kansas	Cowley	179.71	180.75	Not selected for survey in sampling strategy	1.04
Kansas	Cowley	180.75	181.41	Required – no access	0.67
Kansas	Cowley	181.41	184.53	Not selected for survey in sampling strategy	3.11
Kansas	Cowley	184.53	185.01	Survey completed	0.49
Kansas	Cowley	185.01	186.03	Required – no access	1.02
Kansas	Cowley	186.03	186.37	Survey completed	0.34
Kansas	Cowley	186.37	186.67	Required – no access	0.30
Kansas	Cowley	186.67	187.55	Survey completed	0.87
Kansas	Cowley	187.55	188.05	Required – no access	0.51
Kansas	Cowley	188.05	188.57	Survey completed	0.52
Kansas	Cowley	188.57	190.57	Required – no access	2.01
Kansas	Cowley	190.57	191.58	Survey completed	1.01
Kansas	Cowley	191.58	192.22	Required – no access	0.64
Kansas	Cowley	192.22	192.61	Not selected for survey in sampling strategy	0.39
Kansas	Cowley	192.61	193.03	Survey completed	0.41
Kansas	Cowley	193.03	197.61	Not selected for survey in sampling strategy	4.58
Kansas	Cowley	197.61	198.60	Survey completed	0.99
Kansas	Cowley	198.60	204.54	Not selected for survey in sampling strategy	5.94
Kansas	Cowley	204.54	207.01	Required – no access	2.47
Kansas	Cowley	207.01	207.95	Not selected for survey in sampling strategy	0.95
Kansas	Cowley	207.95	208.41	Survey completed	0.46
Kansas	Cowley	208.41	209.39	Required – no access	0.98
Kansas	Cowley	209.39	211.20	Not selected for survey in sampling strategy	1.81
Kansas	Cowley	211.20	211.52	Required – no access	0.32
Kansas	Cowley	211.52	212.59	Not selected for survey in sampling strategy	1.07
Kansas	Cowley	212.59	212.87	Survey completed	0.28
Total miles surveyed					90.80
Miles outside sampling strategy					95.61
Total miles still required to survey					23.95

3.11.1.5 Missouri

The Keystone pipeline would enter Missouri from Doniphan County, Kansas and would extend through the state for approximately 98 miles. The counties crossed include Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Audrain, Montgomery, Lincoln, and St. Charles. ARG was contracted on behalf of Keystone to perform the required cultural resources field assessments in the state. Keystone also entered into an agreement with Kinder Morgan and Rockies Express Pipeline LLC to purchase the results of cultural resource studies that were conducted in 2005/2006 for the proposed REX Natural Gas Pipeline Project. Keystone submitted several REX Project reports (Myers et al. 2006b, Aberle 2007, Rieken 2007b, Myers et al. 2007, Shah Lomas 2007b) as evidence of existing survey coverage at potential Keystone Project ancillary facilities, access roads, and 173.2 miles of collocated corridor within Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, and Audrain Counties. The potential environmental impacts of the REX pipeline were assessed as part of the evaluation of FERC Docket CP06-354-000. Portions of the following discussion are derived from the EIS that was produced during that evaluation. Both DOS and the SHPO have accepted that the surveys performed for the REX West Project adequately address Section 106 compliance requirements for the concomitant aspects of the Keystone Project.

Prior to the Keystone fieldwork commencing, ARG undertook a files search of the proposed pipeline route in January and February 2006. The searches collected cultural site and survey data that were housed at the Archeological Survey of Missouri. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the proposed centerline. The record searches identified 72 cultural resources that generally could be associated with the Project region. These resources included 12 Historic period sites, 47 Pre-contact sites, seven sites with both Pre-contact and Historic period artifact assemblages, and three sites where the information did not provide specific information on the age of the cultural resource. The data indicated that 17 known cultural resources (23BN8, 23BN38, 23CI11, 23CH73, 23MT74, 23LN11, 23LN13, 23LN14, 23LN24, 23LN48, 23LN57, 23LN192, 23LN202, 23SC5, 23SC29, 23SC670, and 23SC776) were located within the proposed survey corridor. These cultural resources included 10 of the Pre-contact sites, three of the multi-component Historic period/Pre-contact sites, two Historic period sites, and two of the sites with unknown cultural remains. The eligibility for listing in the NRHP of all but two of these 17 cultural resources had not previously been established. Pre-contact site 23BN38 was recommended as ineligible for listing in the NRHP during a 1991 study; site 23LN11 was recommended as being potentially eligible for listing in the NRHP based on information collected during the 1930s, 1950s, and in 1996 (Titus 2006a). The review of archival records identified 169 potential Historic period structures and features within or in proximity to the Project corridor. These included 155 residential structures, six schools, three cemeteries, two railroad stations, one church, one barn, and one post office (Titus 2006a).

Along with the literature review, ARG submitted its research design for cultural resources field studies to the Missouri SHPO in March 2006 (Titus 2006a). The purpose of the research design was to present the field methods ARG would use to assess the Keystone pipeline and to identify historic properties within the APE, excluding TCPs. It was based on the results of the site file research and results of previous surveys. The design incorporated a sampling strategy that assessed the route in terms of high and low probabilities for containing Section 106-defined historic properties (excluding TCPs); this sampling strategy follows procedures generally accepted by the SHPO and FERC for pipeline projects in Missouri and is permissible under 36 CFR 800.4(b)(1). The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

The Keystone research design proposed a cultural resources field survey for 153.8 miles of the proposed pipeline corridor; the research design was accepted by the Missouri SHPO in a letter dated March 15, 2006. Keystone subsequently decided to submit the REX Project field survey results for the 173.2 miles of collocated ROW in Missouri. Consequently, the number of miles selected for a cultural resources survey as part of the Keystone Project was reduced to 78.0 miles. The sampling strategy used to select the survey segments focused on landform types that were derived from the known site database and the results of previous surveys. The pedestrian survey was to use survey transects spaced 49.2 to 65.6 feet (15 to 20 meters) apart. Shovel tests were to be used on un-eroded landforms with slopes under 20 percent and where surface visibility was less than 25 percent. These shovel tests would be spaced 49.2 feet (15 meters) apart, with a diameter of 11.8 to 15.7 inches (30 to 40 centimeters), and would be excavated to 19.7 inches (50 centimeters) below ground surface. The SHPO accepted the proposed research plan in a letter dated March 15, 2006.

ARG conducted the initial set of cultural resource and geomorphological field surveys from spring 2006 to August 2007; the areas surveyed did not include the collocated REX West pipeline (discussed separately below) but did encompass route deviations from the REX line (Myers et al. 2007). ARG examined a 200-foot-wide survey corridor when the proposed pipeline was collocated with an existing ROW and a 300-foot-wide corridor at areas of new construction. A special 550-foot-wide corridor was used for a 1.4-mile-long segment that terminated at the Mississippi River. In total, ARG reported that 103.57 miles of the Keystone Project corridor, including route design changes, was surveyed for cultural resources and that 39.4 acres of additional land was surveyed for three potential pump station facilities. Keystone also filed a letter report with DOS and COE in August that reported cultural resources surveys conducted at Confluence Point State Park in St. Charles County, an area managed by COE (Titus 2007a). These surveys involved pedestrian survey at 5-meter intervals within areas where ground visibility exceeded 25 percent and shovel tests excavated at 15-meter intervals in lands with poor surface exposures. The survey corridor was 300 feet wide in greenfield environments and 200 feet wide where the corridor was collocated with an existing pipeline corridor. The total length of the corridor examined on COE-regulated lands was 1.43 miles.

Keystone has abandoned portions of the originally proposed route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-8 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access to 19.48 miles of the planned survey area was denied to ARG; therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline is incomplete at this time. Geomorphological testing at 16 locations also was performed during this period; nine of these locations were recommended for additional research, and one could not be examined due to a landowner denying survey permission (Myers et al. 2007a). Cultural resources surveys and geomorphological studies for Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities are therefore ongoing. Further survey reports must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

**TABLE 3.11.1-8
Cultural Resources Survey Status of the Keystone Mainline Project in Missouri
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
Missouri	Buchanan	750.92	751.19	Not required (REX Project corridor)	0.27
Missouri	Buchanan	751.19	753.07	Survey completed	1.88
Missouri	Buchanan	753.07	756.94	Not required (REX Project corridor)	3.87
Missouri	Buchanan	756.94	758.43	Survey completed	1.49
Missouri	Buchanan	758.43	770.30	Not required (REX Project corridor)	11.87
Missouri	Buchanan	770.30	771.30	Survey completed	0.99
Missouri	Clinton	771.30	783.94	Not required (REX Project corridor)	12.65
Missouri	Clinton	783.94	784.65	Survey completed	0.70
Missouri	Clinton	784.65	787.38	Not required (REX Project corridor)	2.73
Missouri	Clinton	787.38	787.70	Survey completed	0.32
Missouri	Clinton	787.70	787.98	Not required (REX Project corridor)	0.28
Missouri	Clinton	787.98	789.33	Survey completed	1.35
Missouri	Clinton	789.33	791.76	Not required (REX Project corridor)	2.43
Missouri	Clinton	791.76	792.02	Survey completed	0.26
Missouri	Clinton	792.02	792.87	Not required (REX Project corridor)	0.85
Missouri	Caldwell	792.87	799.82	Not required (REX Project corridor)	6.95
Missouri	Caldwell	799.82	800.27	Survey completed	0.45
Missouri	Caldwell	800.27	815.50	Not required (REX Project corridor)	15.24
Missouri	Caldwell	815.50	815.82	Survey completed	0.32
Missouri	Caldwell	815.82	816.07	Not required (REX Project corridor)	0.25
Missouri	Caldwell	816.07	816.20	Survey completed	0.13
Missouri	Caldwell	816.20	817.18	Not required (REX Project corridor)	0.98
Missouri	Carroll	817.18	821.51	Not required (REX Project corridor)	4.33
Missouri	Carroll	821.51	821.70	Survey completed	0.19
Missouri	Carroll	821.70	830.37	Not required (REX Project corridor)	8.66
Missouri	Carroll	830.37	830.54	Survey completed	0.17
Missouri	Carroll	830.54	830.92	Not required (REX Project corridor)	0.38
Missouri	Carroll	830.92	831.06	Survey completed	0.14
Missouri	Carroll	831.06	833.47	Not required (REX Project corridor)	2.41
Missouri	Carroll	833.47	833.66	Survey completed	0.20
Missouri	Carroll	833.66	843.43	Not required (REX Project corridor)	9.77
Missouri	Chariton	843.43	850.92	Not required (REX Project corridor)	7.49
Missouri	Chariton	850.92	852.37	Survey completed	1.45
Missouri	Chariton	852.37	855.87	Not required (REX Project corridor)	3.51
Missouri	Chariton	855.87	856.09	Survey completed	0.22
Missouri	Chariton	856.09	867.22	Not required (REX Project corridor)	11.13
Missouri	Chariton	867.22	867.87	Survey completed	0.65
Missouri	Chariton	867.87	869.23	Not required (REX Project corridor)	1.36
Missouri	Chariton	869.23	869.70	Survey completed	0.46
Missouri	Chariton	869.70	869.99	Not required (REX Project corridor)	0.29
Missouri	Chariton	869.99	870.47	Survey completed	0.48
Missouri	Chariton	870.47	875.45	Not required (REX Project corridor)	4.98
Missouri	Randolph	875.45	883.61	Not required (REX Project corridor)	8.16
Missouri	Randolph	883.61	883.88	Survey completed	0.27
Missouri	Randolph	883.88	896.86	Not required (REX Project corridor)	12.98
Missouri	Randolph	896.86	897.39	Survey completed	0.53
Missouri	Audrain	897.39	898.39	Survey completed	1.00

**TABLE 3.11.1-8
(Continued)**

State	County	Milepost		Status	Miles
		From	To		
Missouri	Audrain	898.39	911.78	Not required (REX Project corridor)	13.39
Missouri	Audrain	911.78	912.04	Survey completed	0.26
Missouri	Audrain	912.04	918.96	Not required (REX Project corridor)	6.91
Missouri	Audrain	918.96	919.36	Survey completed	0.40
Missouri	Audrain	919.36	921.00	Not required (REX Project corridor)	1.65
Missouri	Audrain	921.00	921.60	Survey completed	0.60
Missouri	Audrain	921.60	924.63	Not selected for survey in sampling strategy	3.04
Missouri	Audrain	924.63	925.87	Survey completed	1.24
Missouri	Audrain	925.87	926.31	Not selected for survey in sampling strategy	0.44
Missouri	Audrain	926.31	926.63	Survey completed	0.32
Missouri	Audrain	926.63	928.50	Not selected for survey in sampling strategy	1.87
Missouri	Audrain	928.50	929.57	Survey completed	1.07
Missouri	Audrain	929.57	931.38	Not selected for survey in sampling strategy	1.81
Missouri	Audrain	931.38	932.23	Survey completed	0.84
Missouri	Audrain	932.23	935.95	Not selected for survey in sampling strategy	3.72
Missouri	Montgomery	935.95	940.18	Not selected for survey in sampling strategy	4.23
Missouri	Montgomery	940.18	941.21	Survey completed	1.03
Missouri	Montgomery	941.21	941.90	Not selected for survey in sampling strategy	0.69
Missouri	Montgomery	941.90	943.72	Survey completed	1.81
Missouri	Montgomery	943.72	946.71	Not selected for survey in sampling strategy	2.99
Missouri	Montgomery	946.71	948.04	Survey completed	1.33
Missouri	Montgomery	948.04	950.00	Not selected for survey in sampling strategy	1.96
Missouri	Montgomery	950.00	950.18	Survey completed	0.18
Missouri	Montgomery	950.18	950.73	Not selected for survey in sampling strategy	0.55
Missouri	Montgomery	950.73	952.55	Survey completed	1.82
Missouri	Montgomery	952.55	952.75	Not selected for survey in sampling strategy	0.20
Missouri	Montgomery	952.75	953.06	Survey completed	0.31
Missouri	Montgomery	953.06	953.80	Not selected for survey in sampling strategy	0.75
Missouri	Montgomery	953.80	954.64	Survey completed	0.84
Missouri	Montgomery	954.64	955.26	Not selected for survey in sampling strategy	0.61
Missouri	Montgomery	955.26	955.92	Survey completed	0.67
Missouri	Montgomery	955.92	956.28	Not selected for survey in sampling strategy	0.35
Missouri	Montgomery	956.28	956.73	Required – no access	0.45
Missouri	Montgomery	956.73	957.00	Survey completed	0.27
Missouri	Lincoln	957.00	959.86	Required – no access	2.86
Missouri	Lincoln	959.86	962.19	Survey completed	2.33
Missouri	Lincoln	962.19	962.24	Required – no access	0.05
Missouri	Lincoln	962.24	962.64	Survey completed	0.40
Missouri	Lincoln	962.64	962.70	Required – no access	0.06
Missouri	Lincoln	962.70	964.20	Survey completed	1.51
Missouri	Lincoln	964.20	964.49	Required – no access	0.29
Missouri	Lincoln	964.49	964.62	Survey completed	0.13
Missouri	Lincoln	964.62	964.74	Required – no access	0.12
Missouri	Lincoln	964.74	965.05	Survey completed	0.31
Missouri	Lincoln	965.05	965.46	Required – no access	0.41
Missouri	Lincoln	965.46	970.85	Survey completed	5.38
Missouri	Lincoln	970.85	971.02	Required – no access	0.17
Missouri	Lincoln	971.02	974.25	Survey completed	3.23
Missouri	Lincoln	974.25	975.91	Required – no access	1.66
Missouri	Lincoln	975.91	979.90	Survey completed	4.00

TABLE 3.11.1-8 (Continued)					
State	County	Milepost		Status	Miles
		From	To		
Missouri	Lincoln	979.90	980.97	Required – no access	1.07
Missouri	Lincoln	980.98	981.61	Survey completed	0.64
Missouri	Lincoln	981.61	982.30	Required – no access	0.69
Missouri	Lincoln	982.30	982.51	Survey completed	0.21
Missouri	Lincoln	982.51	984.87	Required – no access	2.36
Missouri	Lincoln	984.87	985.65	Survey completed	0.78
Missouri	St. Charles	985.65	986.59	Survey completed	0.94
Missouri	St. Charles	986.59	987.14	Required – no access	0.55
Missouri	St. Charles	987.14	1000.71	Survey completed	13.57
Missouri	St. Charles	1000.71	1001.69	Required – no access	0.97
Missouri	St. Charles	1001.69	1002.65	Survey completed	0.96
Missouri	St. Charles	1002.65	1002.91	Required – no access	0.26
Missouri	St. Charles	1002.91	1003.98	Survey completed	1.08
Missouri	St. Charles	1003.98	1004.47	Required – no access	0.49
Missouri	St. Charles	1004.47	1005.20	Survey completed	0.74
Missouri	St. Charles	1005.20	1005.27	Required – no access	0.07
Missouri	St. Charles	1005.27	1007.11	Survey completed	1.84
Missouri	St. Charles	1007.11	1007.30	Required – no access	0.19
Missouri	St. Charles	1007.30	1015.60	Survey completed	8.30
Missouri	St. Charles	1015.60	1015.85	Required – no access	0.25
Missouri	St. Charles	1015.85	1018.16	Survey completed	2.31
Missouri	St. Charles	1018.16	1024.68	Required – no access	6.52
Missouri	St. Charles	1024.68	1024.90	Not required – open water	0.22
Miles within REX Project area					155.99
Total miles surveyed for keystone project					75.28
Miles outside keystone project sampling strategy					23.22
Total miles still required to survey					19.48

Keystone submitted a separate report (Myers et al. 2006b) that documents existing cultural resources survey coverage where the Keystone pipeline would be collocated with the proposed REX pipeline corridor (Table 3.11.1-7). The Keystone pipeline lies parallel to the REX pipeline between MP 748.3 and 921.5 in Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, and Audrain Counties. A research design for the Missouri segment of the REX Project was submitted to the SHPO by ARG in November 2005. The research design presented in the submitted report (Myers et al. 2006) states that the pipeline corridor was examined through a combination of shovel testing and pedestrian survey, identical to the methodology used for the Keystone survey. Approximately 71 miles of the 175.6 miles of ROW situated in Missouri was expected to be inventoried for cultural resource concerns. The research design also proposed geomorphological testing at 37 locations where deeply buried cultural deposits were considered possible. The Missouri SHPO accepted the proposed testing strategy in a letter dated December 6, 2005.

ARG surveyed a 200-foot-wide corridor for the REX Project (Myers et al. 2006b), that investigated 71.8 miles of the ROW at 92 separate segments along the proposed route in Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, and Audrain Counties. Seven additional miles at 19 properties that had been

selected for field assessment were not surveyed because land access was denied by the owners (see Table 3.11.1-7). ARG also examined 37 additional temporary extra workspaces that lay outside the 200-foot-wide survey corridor (Myers et al. 2006b). Two separate REX Project supplemental reports have been filed that detail the cultural resources surveys conducted at 7.1 miles of lands where survey permission had previously been denied, six pipeline reroutes, 26 access roads, and over 50 additional temporary workspaces (Rieken 2007b; Shah Lomas 2007b). A total of 12 archeological sites were identified during these studies, which are addressed in Section 3.11.2 and in Table 3.11.2-7. SHPO letters agreeing with the survey methodologies were received by ARG on May 30 and June 15, 2007.

Several ancillary facilities also were assessed during the REX cultural resources investigation. The submitted report (Myers et al. 2006b) states that surveys were completed at a 56-acre compressor station site (REX MP 572.7 in Clinton County) and at a 50-acre parcel surveyed for a proposed meter station (REX MP 712.7 in Audrain County). No cultural resource concerns were identified at these locations. A letter from the Missouri SHPO that concurred with the level of effort and findings was sent to ARG on May 31, 2006.

ARG also conducted geomorphological investigations at 38 stream-valley locations along the proposed REX corridor. Their report (Myers et al. 2006b) recommended that 18 of the examined stream crossing locations be further investigated using backhoe trenching. The results of this additional fieldwork were presented in a separate report (Anderson et al. 2007b). A total of 43 backhoe trenches ultimately were excavated and resulted in identification of three buried Pre-contact archeological sites within the Keystone APE (Sites 23AU1153, 23CH1345, and 23AU1154; see Table 3.11.2-7). Geoarcheological studies for the Missouri portion of the REX Project are now considered complete. The Missouri SHPO sent a letter to ARG on April 17, 2007, that accepted both the level of effort and findings of the geoarcheological report. DOS also agrees with the Section 106 findings of FERC and the SHPO for all aspects of the above REX West surveys, where they overlap with the Keystone Project.

3.11.1.6 Illinois

The Keystone pipeline would enter Illinois from St. Charles County, Missouri and would extend through the west-central portion of the state for approximately 56.9 miles. The counties crossed include Madison, Bond, Fayette, and Marion. ARG was contracted on behalf of Keystone to perform the required cultural resources field assessments in the state.

In January 2006, prior to the Keystone fieldwork commencing, ARG performed a records review of the proposed pipeline route. The file searches collected cultural site and survey data that were housed at the Illinois Historic Preservation Agency. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on its proposed centerline. These record searches identified a large number of cultural resources that generally could be associated with the project region, particularly in Madison County. The records review therefore focused on sites within one-quarter mile of the proposed Keystone centerline to develop its literature review (Titus 2006b).

The data indicated that 20 known cultural resources (11MS17, 11MS26, 11MS111, 11MS178, 11MS348, 11MS400, 11MS441, 11MS619, 11MS620, 11MS831, 11MS1143, 11MS1144, 11MS1293, 11MS1292, 11MS1600, 11MS2007, 11MS2018, 11MS2186, 11FY20, and 11FY138) were plotted within the then-proposed survey corridor. These cultural resources included 17 Pre-contact sites, one Historic period site, and two sites that were not identified as the site forms were not available. The eligibility for listing in the NRHP of 12 cultural resources had not been previously established. Four of the Pre-contact sites (11MS178, 11MS17, 11MS2018, and 11FY138) were recommended as being potentially eligible for

listing, while two Pre-contact sites (11MS1292 and 11MS2007) were declared ineligible based on the results of previous surveys. The review of archival records identified 45 potential Historic period structures or buildings and features in or in close proximity to the Project corridor. These included 42 residential structures, two schools, one cemetery, and one church (Titus 2006b).

Along with the literature review, ARG submitted its research design to the Illinois SHPO in March 2006. The purpose of the research design was to present the field methods ARG would use to assess the Keystone pipeline and to identify historic properties within the APE, excluding TCPs. It used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

The research design proposed a cultural resources field survey of the entire proposed pipeline, using a 200- to 300-foot-wide survey corridor. The APE would be assessed by pedestrian survey using transects spaced no more than 49.2 feet (15 meters) apart at landforms with existing land disturbance and on landforms with slopes greater than 20 percent. On landforms with less than 20-percent slope and with at least 25-percent surface visibility, the pedestrian survey transects were to be spaced 16.4 feet (5 meters) apart. Where surface visibility dropped below 25 percent, these landforms also would be subjected to 11.8- to 12.2-inch- (30- to 40-centimeter-) diameter shovel tests spaced 49.2 feet (15 meters) apart. The research design proposed geomorphological testing at 18 locations where deeply buried cultural deposits were considered possible. The Illinois SHPO accepted the proposed research plan.

In October 2007, ARG reported the results of the cultural resources surveys and geomorphological testing that have been conducted in Illinois from May 2006 to June 2007 (Myers et al. 2007b). The surveys examined a 200- to 300-foot-wide corridor. The 200-foot-wide corridor measured 40 feet toward an existing collocated pipeline and 160 feet to the side opposite the existing pipeline. The 300-foot-wide corridor was limited to greenfield sections and was 150 feet to either side of the proposed Keystone centerline. Consistent with the approved research design, the field-inspected locations were examined through pedestrian survey and shovel testing.

The Myers et al. report states that 73.28 miles of the pipeline route was surveyed for cultural resources, along with two pumping station facilities that totaled 97 acres in area. The surveyed total includes approximately 3.0 miles of lands within the Carlyle Lake Wildlife Management Area (WMA) in Fayette County, which is overseen by COE. These surveys used a 200-foot-wide survey corridor, as it was collocated with an existing pipeline. ARG submitted a separate interim report for the Carlyle Lake WMA in January 2007 (Myers 2007). COE sent a reply to ARG on March 8, 2007, that agreed with the survey effort but requested additional subsurface testing at one of the three archeological sites found within the area (Site 11FY203; see Table 3.11.2-8). Keystone conducted an additional pedestrian survey at 2-meter intervals, excavated the additional shovel tests at 10-meter intervals within the site area, and submitted an updated letter report to DOS and COE in July 2007 (Titus 2007b). Geomorphological testing at 19 locations also was performed during this period; eight of these locations were recommended for additional research (Myers et al. 2007b).

Keystone has abandoned portions of the originally proposed route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-9 displays the cultural resources survey status of the currently designed pipeline route. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by Keystone (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access was denied to Metcalf along 6.06 miles of the planned survey areas;

**TABLE 3.11.1-9
Cultural Resources Survey Status of the Keystone Mainline Project in Illinois
as of November 2007 (Excluding Abandoned Routes)**

State	County	Milepost		Status	Miles
		From	To		
Illinois	Madison	1024.90	1025.07	Not required – Mississippi River	0.17
Illinois	Madison	1025.07	1028.23	Survey complete	3.16
Illinois	Madison	1028.23	1028.56	Required – no access	0.33
Illinois	Madison	1028.56	1029.41	Survey complete	0.86
Illinois	Madison	1029.41	1031.54	Required – no access	2.13
Illinois	Madison	1031.54	1032.37	Required – no access	0.83
Illinois	Madison	1032.37	1034.09	Survey complete	1.72
Illinois	Madison	1034.09	1034.98	Required – no access	0.89
Illinois	Madison	1034.98	1035.86	Survey complete	0.87
Illinois	Madison	1035.86	1036.54	Required – no access	0.68
Illinois	Madison	1036.54	1036.72	Survey complete	0.18
Illinois	Madison	1036.72	1038.16	Required – no access	1.44
Illinois	Madison	1038.16	1042.29	Survey complete	4.13
Illinois	Madison	1042.29	1042.57	Required – no access	0.28
Illinois	Madison	1042.57	1047.38	Survey complete	4.81
Illinois	Madison	1047.38	1047.42	Required – no access	0.05
Illinois	Madison	1047.42	1048.76	Survey complete	1.34
Illinois	Madison	1048.76	1048.80	Required – no access	0.04
Illinois	Madison	1048.80	1049.31	Survey complete	0.51
Illinois	Madison	1049.31	1049.43	Required – no access	0.12
Illinois	Madison	1049.43	1050.07	Survey complete	0.64
Illinois	Madison	1050.07	1050.19	Required – no access	0.12
Illinois	Madison	1050.19	1053.65	Survey complete	3.46
Illinois	Bond	1053.65	1059.69	Survey complete	6.04
Illinois	Bond	1059.69	1059.76	Required – no access	0.07
Illinois	Bond	1059.76	1067.82	Survey complete	8.07
Illinois	Bond	1067.82	1068.06	Required – no access	0.24
Illinois	Bond	1068.06	1069.59	Survey complete	1.53
Illinois	Bond	1069.59	1069.85	Required – no access	0.26
Illinois	Bond	1069.85	1072.37	Survey complete	2.52
Illinois	Fayette	1072.37	1076.69	Survey complete	4.32
Illinois	Fayette	1076.69	1076.90	Required – no access	0.21
Illinois	Fayette	1076.90	1077.29	Survey complete	0.40
Illinois	Fayette	1077.29	1077.54	Required – no access	0.25
Illinois	Fayette	1077.54	1078.84	Survey complete	1.30
Illinois	Marion	1078.84	1081.69	Survey complete	2.85
Illinois	Marion	1081.69	1081.80	Required – no access	0.10
Total miles surveyed					48.70
Not required (open water)					0.17
Total miles still required to survey					8.04

therefore, the cultural resources inventory of the proposed 30-inch-diameter Keystone pipeline is incomplete at this time. Geoarchaeological testing and cultural resources surveys for Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities are ongoing. Further survey reports must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

3.11.1.7 Oklahoma (Cushing Extension)

The Cushing Extension lateral pipeline would enter Oklahoma from Cowley County, Kansas and would cross through the northern portion of the state for 83.12 miles. The counties crossed include Kay, Noble, and Payne. Geo-Marine, Inc. initially was contracted by Keystone to perform the required cultural resources assessments in the state. Prior to commencing fieldwork, in March 2006, Geo-Marine submitted a research design to the SHPO that included a records review and plan to conduct field surveys for the Cushing Extension pipeline route in Kansas.

ARG replaced Geo-Marine as the archeological contractor for the Oklahoma portion of the Cushing Extension and filed a new research design with the SHPO in February 2007. The research plan used the records review previously presented by Geo-Marine (Carrier Jones and Kuehn 2006). The records used online cultural site and survey data that were housed at the Oklahoma State Historical Preservation Office, the Oklahoma Archaeological Survey, and the online NRHP database. The information was reviewed in relation to a corridor that extended for the length of the proposed pipeline route and was 2 miles wide, centered on the proposed centerline. The records search identified 61 cultural resources in this zone, including 31 Pre-contact sites and 30 Historic period sites. The data indicated that 16 known cultural resources lay within the projected Cushing Extension APE (34KA45, 34KA135, 34KA145, 34KA323, 34KA324, 34KA334, 34KA335, 34PY70, 34PY77, 34PY89, 34PY91, 34PY92, 34PY93, 34PY94, 34PY95, and 34PY98). They include seven Pre-contact sites and nine Historic period sites, of which four have been recommended as ineligible for listing in the NRHP. The remaining 12 sites of this group had not been previously assessed for their eligibility status. The research design also identified six Historic period properties listed in the NRHP or on the Oklahoma Landmarks Inventory that lie near but outside the Project APE.

The purpose of the research design was to present the field methods ARG would use to assess the Keystone pipeline and to identify historic properties within the APE, excluding TCPs. It was based on the results of the site file research and results of previous surveys. The submitted research design used the preliminary pipeline route as its basis; subsequent alterations to the route did not require submission of a new research design but involved implementation of the general procedures outlined in the research design. This process also is considered acceptable by the SHPO, FERC, and DOS. The procedures used to identify TCPs and historic properties of cultural or religious importance to Indian tribes is outlined in the discussion of the consultation process (see Section 3.11.4).

The revised ARG research design proposed that cultural resources field surveys be conducted along the entire proposed lateral route, using a 300-foot-wide survey corridor. A pedestrian survey using transects spaced no more than 65.6 feet (20 meters) apart was to be conducted at landforms exceeding 10-percent surface visibility and exhibiting less than 20-percent slope. The field methods also specified the use of shovel tests spaced 65.6 feet (20 meters) apart at level landforms where the ground surface was obscured; this interval was to be reduced to 32.8-foot (10-meter) intervals when cultural materials were encountered. The research design further proposed geomorphological testing at 13 locations where deeply buried cultural deposits were considered possible. The SHPO responded in a letter dated March 1, 2007, that agreed with the essential components of the plan but noted how the SHPO expected Historic period structures and buildings to be recorded. No federally owned or managed land that requires review by a federal agency is present along the proposed Cushing Extension route in Oklahoma.

ARG provided an initial technical report that stated 63.33 miles of the proposed Cushing Extension pipeline was surveyed for cultural resources between February and March 2007 (Shah Lomas et al. 2007). Geomorphological testing was also reported by Shah Lomas et al. (2007) for 13 water crossings. Of these, five were assessed as requiring additional research and two were not completed due to a landowner denying access to the properties.

The applicant has abandoned portions of the originally proposed route due to landowner concerns, the presence of wetland or biological concerns, or for cultural resources that are potential historic properties. Table 3.11.1-10 displays the cultural resources survey status of the currently designed Cushing Extension route in Kansas. It excludes proposed routes that were surveyed for cultural resources but subsequently removed from the APE through abandonment by the applicant (and to avoid confusion from duplicated, changed, and overlapping mileposts). Access was denied to ARG along 23.06 miles of the planned survey areas; therefore, the cultural resources inventory of the proposed Cushing Extension pipeline is incomplete at this time. Cultural resources surveys for Project access roads, additional temporary workspace outside the surveyed corridor, pipeline reroutes, appurtenant facilities, and remaining geomorphological tests are ongoing. Further survey reports must be submitted and reviewed by the consulting parties prior to land-altering activities occurring within these areas, as outlined in the PA.

State	County	Milepost		Status	Miles
		From	To		
Oklahoma	Kay	212.87	213.57	Survey completed	0.70
Oklahoma	Kay	213.57	214.34	Required – no access	0.77
Oklahoma	Kay	214.34	215.84	Survey completed	1.49
Oklahoma	Kay	215.84	216.38	Required – no access	0.54
Oklahoma	Kay	216.38	217.34	Survey completed	0.96
Oklahoma	Kay	217.34	218.35	Required – no access	1.01
Oklahoma	Kay	218.35	223.10	Survey completed	4.75
Oklahoma	Kay	223.10	223.35	Required – no access	0.25
Oklahoma	Kay	223.35	226.36	Survey completed	3.01
Oklahoma	Kay	226.36	226.87	Required – no access	0.51
Oklahoma	Kay	226.87	228.38	Survey completed	1.51
Oklahoma	Kay	228.38	228.87	Required – no access	0.49
Oklahoma	Kay	228.87	233.63	Survey completed	4.75
Oklahoma	Kay	233.63	234.56	Required – no access	0.93
Oklahoma	Kay	234.56	235.42	Survey completed	0.86
Oklahoma	Kay	235.42	237.51	Required – no access	2.09
Oklahoma	Kay	237.51	237.70	Survey completed	0.19
Oklahoma	Kay	237.70	237.75	Required – no access	0.06
Oklahoma	Kay	237.75	238.88	Survey completed	1.13
Oklahoma	Kay	238.88	239.43	Required – no access	0.54
Oklahoma	Kay	239.43	239.93	Survey completed	0.50
Oklahoma	Kay	239.93	240.43	Required – no access	0.50
Oklahoma	Kay	240.43	240.70	Survey completed	0.26
Oklahoma	Kay	240.70	241.10	Required – no access	0.40

TABLE 3.11.1-10 (Continued)					
State	County	Milepost		Status	Miles
		From	To		
Oklahoma	Kay	241.10	244.17	Survey completed	3.07
Oklahoma	Noble	244.17	246.72	Survey completed	2.55
Oklahoma	Noble	246.72	254.39	Required – no access	7.67
Oklahoma	Noble	254.39	259.09	Survey completed	4.70
Oklahoma	Noble	259.09	259.88	Required – no access	0.79
Oklahoma	Noble	259.88	260.32	Survey completed	0.44
Oklahoma	Noble	260.32	260.96	Required – no access	0.64
Oklahoma	Noble	260.96	263.01	Survey completed	2.05
Oklahoma	Noble	263.01	264.07	Required – no access	1.07
Oklahoma	Noble	264.07	266.09	Survey completed	2.02
Oklahoma	Noble	266.09	266.62	Required – no access	0.52
Oklahoma	Noble	266.62	269.35	Survey completed	2.74
Oklahoma	Payne	269.35	269.90	Required – no access	0.55
Oklahoma	Payne	269.90	271.32	Survey completed	1.42
Oklahoma	Payne	271.32	271.84	Required – no access	0.52
Oklahoma	Payne	271.84	275.11	Survey completed	3.27
Oklahoma	Payne	275.11	275.49	Required – no access	0.37
Oklahoma	Payne	275.49	279.95	Survey completed	4.46
Oklahoma	Payne	279.95	280.21	Required – no access	0.26
Oklahoma	Payne	280.21	280.46	Survey completed	0.25
Oklahoma	Payne	280.46	281.30	Required – no access	0.84
Oklahoma	Payne	281.30	288.48	Survey completed	7.18
Oklahoma	Payne	288.48	288.91	Required – no access	0.43
Oklahoma	Payne	288.91	292.64	Survey completed	3.73
Oklahoma	Payne	292.64	292.90	Required – no access	0.26
Oklahoma	Payne	292.90	293.43	Survey completed	0.53
Oklahoma	Payne	293.43	293.63	Required – no access	0.20
Oklahoma	Payne	293.63	295.14	Survey completed	1.51
Oklahoma	Payne	295.14	295.99	Required – no access	0.85
Total miles surveyed					60.05
Total miles still required to survey					23.06

3.11.2 Potential Impacts and Mitigation

Section 106 of the NHPA (as codified in 36 CFR 800.5) requires federal agencies to apply the “Criteria of Adverse Effect” to determine whether a project will affect historic properties. Impacts are found when an undertaking alters, 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. Impacts may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be distant, or be cumulative.

For the Keystone Project, the principal types of impacts that would occur include physical destruction or damage, to all or part of the property, caused by pipeline trenching or related excavations or boring; introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features by short-term pipeline construction or construction 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.

Under Section 106 regulations, historic properties are effectively classified into three basic categories: not eligible, eligible, and unevaluated. Historic properties that are classified as not eligible do not possess the qualities of significance as defined by the NRHP criteria for evaluation (36 CFR 60.4 [a–d]). They are therefore not Section 106 historic properties and do not generally require mitigation measures. Historic properties, including TCPs and properties of traditional or religious significance to Indian tribes, that are designated as eligible by the lead federal agency and SHPO/THPO meet the NRHP criteria for evaluation; these are historic properties under Section 106 guidelines. Negative impacts must be avoided if a finding of No Adverse Effect is to be attached to the historic property. If negative impacts to the property cannot be avoided, mitigation treatment plans must be developed in consultation with the lead federal agency, SHPO, ACHP, Indian tribes, and other relevant consulting parties. In the discussions below, historic properties can also be categorized as unevaluated. This designation simply means that insufficient data were currently available for DOS to state definitively that the cultural resource does, or does not, meet the criteria of significance for listing in the NRHP. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be treated as *de facto* historic properties. If the latter option is selected, avoidance plans must be developed in order to prevent any impact to the cultural remains or features that are present.

To limit impacts to historic properties, and in line with FERC guidelines, the Keystone Project is instituting plans to avoid impacts to historic properties that are unevaluated or that have been found eligible for listing in the NRHP. Avoidance is achieved by rerouting the pipeline corridor and/or related appurtenances, keeping construction activities away from NRHP-eligible properties, limiting the impact to existing demonstrated disturbance areas, and digging underneath the cultural deposits by boring or HDDs. At least 30 days prior to construction commencing in the area, Keystone will be required to file with DOS the results of NRHP assessments, demonstrating that historic properties designated as unevaluated are not historic properties. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to each eligible and unevaluated site, using the procedures described below. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

The following mitigation measures are applicable for historic properties determined to be eligible historic properties or unevaluated properties, in order to have a finding of No Effect or No Adverse Effect:

(1) Avoidance through reroute.

For each reroute, Keystone will file with DOS a map at 1:24,000 scale or better that clearly shows with mileposts the original surveyed corridor, the known boundaries of the eligible or unevaluated property, the reroute that avoids the property, and survey information showing that no historic properties are located within the reroute.

(2) Avoidance through abandonment.

For each abandonment, Keystone will file with DOS a letter that states the facility or road at which the eligible or unevaluated property was located and a statement that the facility or road is no longer associated with the Project.

(3) Avoidance through bore or HDD.

For each instance, Keystone will file with DOS a map and technical drawing that clearly shows the projected depth below surface and the entrance and exit points of the drill in relation to the boundaries of the eligible or unevaluated property.

(4) Avoidance by narrowing construction corridor (“neckdown”).

For each instance, Keystone will file with DOS an alignment sheet map at 1:500 scale or better that clearly shows the construction corridor (including additional temporary work space) in relation to the eligible or unevaluated property boundary. Prior to construction commencing in the area, safety fencing must be erected along the relevant outer edges of the eligible or unevaluated property. A qualified monitor must also be present during installation of the pipeline in that area to ensure that accidental impacts do not occur to the property.

(5) Avoidance by limiting impact to existing roadway.

For each instance, Keystone will file with DOS an alignment sheet map at 1:500 scale that clearly shows the access road in relation to the eligible or unevaluated property, a description of the existing state of the roadway, and a statement that Project traffic will be limited entirely to the existing roadway and that the road will not be widened or upgraded as a result of the Project.

Short-term construction-related impacts will be mitigated by implementing measures in Keystone’s CMR Plan (Appendix B). If impacts do occur to any eligible historic property or unevaluated cultural resource, they will be resolved through consultation with all consulting parties, using the protocols outlined in the PA that were developed for this project (see Appendix R). The PA addresses unanticipated discoveries, future historic properties identification and evaluation efforts, avoidance commitments and measures, and the process for future consultation.

3.11.2.1 North Dakota

A total of 49 historic properties were identified during surveys of the Mainline Project APE in North Dakota (Bleier et al. 2007a, Stine et al. 2007a). These historic properties were classified as 11 Pre-contact (i.e., prehistoric period) sites, 19 Pre-contact isolated finds, and 19 Historic period sites (Table 3.11.2-1). Each of the 30 Pre-contact historic properties was noted by the presence of stone tools or stone waste flakes in varying quantities. The 19 Historic period historic properties included 10 railroad features, seven farmsteads, and two sites that contained structural depressions or foundation remains. Keystone also has filed a report (Bleier and Stine 2007) that presents the results of additional NRHP evaluative testing at two of the Pre-contact cultural loci (32RM160 and 32RMx89). A research design also has been submitted to the ND SHPO and DOS for forthcoming National Register evaluation testing at three additional Pre-contact-era sites (32RM250, 32WA251, and 32WA260).

**TABLE 3.11.2-1
Historic Properties Identified in North Dakota during Keystone Mainline Project
Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Anticipated Action by Keystone
Mainline	32BA1185	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32BA170	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32NEx99	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	32PB202	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32PB204	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32WA252	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	32WA252	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	32WA254	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32WA255	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	32RM260	Pre-contact scatter	Unevaluated	Avoidance or NRHP evaluation
Mainline	32WA247	Historic period farmstead (depression)	Unevaluated	Avoidance or NRHP evaluation
Mainline	32WA250	Pre-contact scatter	Unevaluated	Avoidance or NRHP evaluation
Mainline	32WA251	Pre-contact scatter	Unevaluated	Avoidance or NRHP evaluation
Mainline	32BA148	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32BA171	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32NE70	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32NE72	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32RM155	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32SA47	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32SA80	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32ST171	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32WA244	Historic period railroad	Unevaluated	Bore underneath site
Mainline	32WA246	Historic period railroad	Unevaluated	Bore underneath site
Access road	32SA32	Historic period farmstead	Unevaluated	Limit use to existing road
Mainline	32BAx107	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx108	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx109	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx110	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx111	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx112	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32BAx277	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32PBx176	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32PBx254	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32PBx255	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32PBx256	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RM160	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	32RM162	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	32RM163	Historic period depression	Not eligible	None unless corridor moves
Mainline	32RMx260	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RMx261	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RMx262	Pre-contact isolate	Not eligible	None unless corridor moves

**TABLE 3.11.2-1
(Continued)**

Project Item	Site	Site Type	NRHP Eligibility	Anticipated Action by Keystone
Mainline	32RMx263	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RMx264	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RMx265	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	32RMx89	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	32SA81	Historic period foundation	Not eligible	None unless corridor moves
Pump station	32WA253	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	32WAx211	Pre-contact isolate	Not eligible	None unless corridor moves
Pump station	32WAx234	Pre-contact isolate	Not eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

In total, based on the information provided to date by the applicant, DOS has assessed 25 of the 49 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])¹. This assessment includes two Historic period farmsteads, the two Historic period sites that contained structural depression or foundation remains, all 19 Pre-contact isolated finds, and the two Pre-contact period artifact scatters that were evaluated through additional testing (Table 3.11.2-1). No additional investigations at these 25 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has evaluated the NRHP significance of the remaining 15 Historic period and nine Pre-contact period historic properties listed in Table 3.11.2-1 as unevaluated. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will be required to file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impacts to the site, in the format described above (see Section 3.11.2). DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and make formal findings of effect.

As noted in Section 3.11.1.1, survey permission was denied to Metcalf for 6.06 miles of the proposed Keystone pipeline route that was selected under the sampling strategy. Historic properties surveys for these pipeline sections and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in North Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4 before pipeline construction begins, per the stipulations outlined in the PA.

¹ All determinations of eligibility listed in Section 3.11.2.1 were submitted by DOS to the ND SHPO on September 13, 2007 and December 5, 2007; a reply concurring with these determinations was received on September 20, 2007, and December 6, 2007.

3.11.2.2 South Dakota

A total of 33 historic properties were identified during surveys of the Project APE in South Dakota. Half (17) of the historic properties were identified during field surveys conducted in 2006 and were reported in a technical report that was submitted to DOS and the SHPO (Bleier et al. 2007b). The remaining 16 historic properties have been summarized in an addendum report that was filed with DOS and the SHPO in October 2007 (Stine et al. 2007b). The historic properties were classified as three Pre-contact (i.e., Prehistoric period) sites, five Pre-contact isolated finds, and 25 Historic period sites (Table 3.11.2-2). All three Pre-contact sites were identified by the presence of rock cairns on the ground surface while the Pre-contact isolated finds were defined by the limited presence of bone/stone tools or stone waste flakes. The 25 historic properties included 10 railroad features, 12 farmstead complexes (some with standing structures), one cemetery, a standing structure not associated with a farmstead complex, and a single historic canal feature.

Based on the information provided to date by the applicant, DOS has assessed seven of the 33 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])². This assessment includes all five reported Pre-contact isolated find sites and two abandoned railway lines (Table 3.11.2-2). No additional investigations at these seven sites are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has categorized the NRHP significance of the remaining 23 Historic period and three Pre-contact period historic properties listed in Table 3.11.2-1 as unevaluated. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will be required to file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

As noted in Section 3.11.1.2, survey permission was denied to Metcalf for 2.29 miles of the proposed Keystone pipeline route and Keystone has committed to surveying an additional 2 miles of the corridor between MP 389 and 391 at the request of DOS and the SD SHPO. Historic properties surveys for these pipeline sections and any unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in South Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins. At the request of the SD SHPO, and with the agreement of DOS, Keystone also will support the creation of educational materials (such as a documentary) regarding historic properties and the Project following pipeline construction, will facilitate site visits and overflights of the pipeline by the SHPO during construction, and will conduct additional shovel testing at specified locations requested by DOS and the SHPO.

² All determinations of eligibility listed in Section 3.11.2.2 were submitted by DOS to the SD SHPO on September 13, 2007, December 5, 2007, and December 20, 2007. An initial reply was received on December 17, 2007, and a final reply concerning determinations of eligibility is forthcoming.

**TABLE 3.11.2-2
Historic Properties Identified in South Dakota during Keystone Mainline Project
Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Mainline	39CK2055	Historic period railroad	Not eligible	None unless corridor moves
Mainline	39DA2040	Historic period railroad	Not eligible	None unless corridor moves
Mainline	39MN21	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	39MN22	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	39YK75	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	39YK76	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	39YK80	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	39MK2007	Historic period railroad	Unevaluated	Avoid by bore
Mainline	39ML2000	Historic period railroad	Unevaluated	Avoid by bore
Mainline	39YK2003	Historic period railroad	Unevaluated	Avoid by bore
Mainline	39CK50	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39DA0073	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39DA070	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39DA071	Pre-contact cairn	Unevaluated	Avoid by reroute
Mainline	39HT133	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39HT134	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39YK77	Pre-contact cairn	Unevaluated	Avoid by reroute
Mainline	39YK78	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	39YK79	Pre-contact cairn	Unevaluated	Avoid by reroute
Mainline	DA-000-00951	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	KB-000-00462	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	SD# 46342	Historic period structure	Unevaluated	Avoid by reroute
Mainline	SD# 46352	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	SD# 46356	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	SD# 46359	Historic period cemetery	Unevaluated	Avoid by reroute
Mainline	39BE2072	Historic period railroad	Unevaluated	Bore underneath site
Mainline	39DA2000	Historic period railroad	Unevaluated	Bore underneath site
Mainline	39KB2003	Historic period railroad	Unevaluated	Bore underneath site
Mainline	39ML2000	Historic period railroad	Unevaluated	Bore underneath site
Mainline	39YK2003	Historic period railroad	Unevaluated	Bore underneath site
Mainline	SD# 46385	Historic period canal	Unevaluated	File mitigation (reconstruction) plans
Access road	SD# 46341	Historic period farmstead	Unevaluated	Limit use to existing road
Access road	SD# 46357	Historic period farmstead	Unevaluated	Limit use to existing road
Mainline	39CK2055	Historic period railroad	Not eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

3.11.2.3 Nebraska

Mainline Project

A total of 35 historic properties were identified by ARG during surveys of the Mainline Project APE in Nebraska (Ensor et al. 2007, Anderson et al. 2007a); this total includes surveys of the pipeline corridor and Project items that are shared with the FERC-regulated REX Project in Jefferson and Gage Counties (Anderson and Aberle 2007, Schwegman 2006, Schwegman et al. 2006, Shah Lomas 2007c). The identified historic properties were classified as nine Pre-contact (i.e., prehistoric period) sites, two Pre-contact isolated finds, 22 Historic period sites, and two sites that contained both Pre-contact and Historic period components (Table 3.11.2-3). Twelve of the 13 sites that contained Pre-contact artifacts (including the two multi-component sites) were noted by the presence of stone tools or stone waste flakes in varying quantities; the remaining Pre-contact-era site was classified as a potential burial area. The 22 Historic period historic properties included seven farmsteads, 11 scatters of Historic artifacts, three sites that contained structural remains, and one cemetery.

Based on the information provided to date by the applicant, DOS has evaluated 28 of the 35 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])³. This assessment includes the portions of the seven Historic period farmsteads that lie within the surveyed corridor, 10 of the 11 Historic period artifact scatters, two sites exhibiting Historic period structural remains, both multi-component sites, and seven Pre-contact period artifact scatters (Table 3.11.2-3). No additional investigations at these 28 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has categorized the NRHP significance of the remaining three Historic period and four Pre-contact period historic properties listed in Table 3.11.2-3 as unevaluated. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will file the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property with DOS. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

As noted in Section 3.11.1.3, survey permission was denied to ARG for 15.62 miles of the proposed Keystone pipeline route. Historic properties surveys for these pipeline sections, and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in South Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

³ All determinations of eligibility listed in Section 3.11.2.3 for the Keystone Mainline Project were formally submitted by DOS to the NE SHPO on September 13, 2007, and December 10, 2007. A previous reply from the NE SHPO concurring with the initial determinations was received on January 17, 2007; replies from the NE SHPO concurring with additional determinations were received by DOS on September 25, 2007, and on October 18, 2007.

**TABLE 3.11.2-3
Historic Properties Identified in Nebraska during Keystone Mainline Project
Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Mainline	25CD21	Pre-contact burial	Unevaluated	Avoid by reroute
Mainline	25CX07	Historic period structure	Unevaluated	Avoid by reroute
Mainline	25CX32	Pre-contact Camp	Unevaluated	Avoid by reroute
Mainline	25SA79	Historic period scatter	Unevaluated	Avoid by reroute
Mainline	25SW53	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	25SW54	Pre-contact scatter	Unevaluated	Avoid by reroute
Mainline	Pleasant Hill Cemetery	Historic period cemetery	Unevaluated	Avoid by reroute
Mainline	25BU59	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25BU60	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25BU61	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	25CD84	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	25GA126	Historic period scatter	Not eligible	None unless corridor moves
REX pipeline	25GA127	Pre-contact scatter	Not eligible	None unless corridor moves
REX ATWS	25GA128	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	25JF37	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	25JF38	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	25JF39	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	25JF40	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25JF43	Historic period Windmill	Not eligible	None unless corridor moves
Mainline	25SA77	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SA78	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SA80	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SA81	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25SA82	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25SA83	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25SA84	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25ST39	Historic period school	Not eligible	None unless corridor moves
Mainline	25ST40	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25ST41	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SW51	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SW52	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	25SW55	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SW56	Historic period scatter	Not eligible	None unless corridor moves
Mainline	25SW57	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	25SW58	Historic period scatter	Not eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

REX = Rockies Express Western Phase Project.

ATWS = Additional temporary workspace.

Cushing Extension

As noted in Section 3.11.1.3, no historic properties have been identified to date within the 2.51-mile corridor that was surveyed in Nebraska for the Cushing Extension pipeline (Table 3.11.2-4). Survey permission was denied to ARG for 0.34 mile of the proposed Cushing Extension pipeline route. Historic

properties surveys for this pipeline section and any unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in Nebraska must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

3.11.2.4 Kansas

Mainline Project

A total of 24 historic properties were identified by ARG during surveys of the Mainline Project APE in Kansas; this total was entirely derived from surveys of pipeline corridor and Project items that are shared with the FERC-regulated REX Project (Myers et al. 2006a, Anderson and Schwegman 2007, Rieken 2007a, Schwegman 2006, Shah Lomas 2007a). These were classified as 12 Pre-contact sites, nine Historic period sites, and three multi-component sites. Each of the 12 Pre-contact historic properties was noted by the presence of stone tools or stone waste flakes in varying quantities. The nine Historic period historic properties included six farmsteads, two sites that displayed Historic period artifact scatters, and one fence feature. The three multi-component sites were two mid-19th- to 20th-century farmsteads and one Historic period artifact scatter with evidence of earlier Pre-contact period occupations. Keystone also has filed a report (Schwegman et al. 2007) that presents the results of additional NRHP evaluative testing at four of the Pre-contact cultural loci (14MH160, 14NH107, 14NH112, and 14NH112).

The field survey report for the REX Project was initially submitted to the Kansas SHPO on May 15, 2006. The Kansas SHPO provided comments in a letter dated June 12, 2006. The SHPO agreed with the recommendations for NRHP eligibility but noted that additional data were needed if the REX survey had recorded and evaluated Historic period standing structures within the Project APE. Based on data submitted by Keystone, Historic period structures are not located within the Project APE.

Based on the information provided to date by the applicant, DOS has assessed all 24 of the REX Project historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])⁴. This assessment includes the four Pre-contact period artifact scatters that were evaluated through additional NRHP testing. No additional investigations at these 24 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

As noted in Section 3.11.4, ARG was granted survey permission for all of the proposed Keystone pipeline route that was selected under the Keystone and REX Project sampling strategies; therefore, the historic properties inventory of the proposed 30-inch-diameter Keystone pipeline in Kansas is complete, barring any future route deviations. However, historic properties surveys will be required for any new Keystone Project access roads, additional temporary workspace outside of the surveyed corridor, pipeline reroutes, and appurtenant facilities. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

⁴ All determinations of eligibility listed in Section 3.11.2.4 for the Keystone Mainline Project were accepted by the KS SHPO as a part of the REX Project and were accepted for the purposes of the Keystone Project on December 21, 2006.

TABLE 3.11.2-4 Historic Properties Identified in Nebraska during Keystone Cushing Extension Field Surveys as of November 2007				
Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
No historic properties identified to date				

TABLE 3.11.2-5 Historic Properties Identified in Kansas during Keystone Mainline Project Field Surveys as of November 2007				
Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
REX pipeline	ARG-01	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-02	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-03 (14MH160)	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-04	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-05	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-06	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-07	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-08	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-09	Historic period scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-10 (14NH107 & 14NH112)	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-11	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-12 (14NH110)	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-13	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-14	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-15	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-16	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-17	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-18	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-19	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-20	Historic period scatter	Not eligible	None unless corridor moves
REX pipeline	ARG-21	Historic period fence	Not eligible	None unless corridor moves
REX pipeline	ARG-22	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	ARG-23	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
REX reroute	14MH164	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

REX = Rockies Express Western Phase Project.

Cushing Extension

A total of 40 historic properties were identified during surveys of the Cushing Extension APE in Kansas. Thirty-eight of the historic properties were located during field surveys that have been reported in a technical report submitted to DOS and the SHPO (Aberle et al. 2007; also Anderson 2007). The

remaining two historic properties have been summarized in a status report update that has been filed with DOS for ongoing field surveys, but the full technical details have not yet been presented. These 40 historic properties were classified as seven Pre-contact (i.e., prehistoric period) sites, three Pre-contact isolated finds, 25 Historic period sites, one Historic period isolated find, and four sites that contained both Pre-contact and Historic period components (Table 3.11.2-6). All 14 sites that contained Pre-contact cultural materials (including the five multi-component sites) were noted by the presence of stone tools or stone waste flakes in varying quantities. The Historic period historic properties were 16 farmsteads (which includes three of the multi-component sites, one site that may also have represented a Historic period fort, and one farmstead that may contain unmarked American homestead burials), six sites with structural or foundation remains, five sites with Historic artifact scatters present (including one of the multi-component sites and the single Historic period isolate), two roads/trails, and one cemetery. Keystone has filed a report (Scott et al. 2007) that presents the results of additional NRHP evaluative testing at one of the Pre-contact cultural loci (14WH318).

Based on the information provided to date by the applicant, DOS has assessed 30 of the 40 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])⁵. This assessment includes the portions of 11 Historic period farmsteads that lie within the surveyed corridor, five Historic period sites that contained structural or foundation remains, the four Pre-contact and Historic period isolated finds, six Pre-contact period artifact scatters, two Historic period artifact scatters, and two of the multi-component sites (Table 3.11.2-6). No additional investigations at these 25 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has determined that one of the identified sites is eligible for listing in the NRHP under Criterion D (the ability to yield information important to history or prehistory). The site (14WH318; Table 3.11.2-6) consists of the remains of a large Pre-contact era (Smoky Hills Phase of the Central Plains Tradition) occupation that is located within a Historic period farmstead in Washington County; the Pre-contact component of this site was subjected to additional evaluation in autumn 2007 (Scott et al. 2007). The historic property is situated within the currently proposed Project corridor. Prior to construction commencing, Keystone will be required to file its plans with DOS that detail the specific avoidance procedures to be implemented in order to avoid impacts to the site, in the format described in Section 3.11.2. If an impact to the historic property is anticipated, Keystone must submit a mitigation plan so that DOS and all relevant consulting parties can evaluate the impact, following the protocols outlined in the PA and in 36 CFR 800.5.

DOS has categorized the NRHP significance of the remaining seven Historic period and two Pre-contact period sites listed in Table 3.11.2-6 as unevaluated. This includes the two historic properties for which only summary data have been filed. As each of these sites has the potential to be a Section 106-defined historic property, they must be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will be required to file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

⁵ All determinations of eligibility listed in Section 3.11.2.4 for the Cushing Extension were submitted by DOS to the KS SHPO on September 13, 2007; replies concurring with these determinations were received on September 6, 2007, September 27, 2007, and October 1, 2007.

**TABLE 3.11.2-6
Historic Properties Resources Identified in Kansas during
Keystone Cushing Extension Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Cushing	14WH318	Pre-contact scatter / Historic period farmstead	Eligible	Avoid by reroute
Cushing	KS-KEY-CX-801	Historic period scatter	Unevaluated	Additional reporting
Cushing	KS-KEY-CX-802	Historic period structure	Unevaluated	Additional reporting
Cushing	Brethren in Christ Cemetery	Historic period cemetery	Unevaluated	Avoid by narrowing construction corridor
Cushing	14BU130	Pre-contact scatter / Historic period farmstead	Unevaluated	Avoid by reroute
Cushing	14MN104	Pre-contact scatter	Unevaluated	Avoid by reroute
Cushing	14MN109	Historic period farmstead or fort	Unevaluated	Avoid by reroute
Cushing	14MN110	Historic period Trail (Santa Fe)	Unevaluated	HDD under site
Cushing	14MN112	Historic period road	Unevaluated	HDD under site
Cushing	14WH103	Historic period farmstead (reported burial)	Unevaluated	Avoid by narrowing construction corridor
Cushing	14WH318	Pre-contact scatter / Historic period farmstead	Unevaluated	NRHP testing and reporting; avoid by reroute
Cushing	14BU126	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14BU127	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14BU128	Historic period structure	Not eligible	None unless corridor moves
Cushing	14BU129	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14BU131	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14BU132	Historic period scatter	Not eligible	None unless corridor moves
Cushing	14DN101	Historic period foundation	Not eligible	None unless corridor moves
Cushing	14DN102	Historic period foundation	Not eligible	None unless corridor moves
Cushing	14DN103	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14DN104	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14MN101	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14MN102	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14MN103	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14MN105	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14MN106	Historic period structure	Not eligible	None unless corridor moves
Cushing	14MN107	Historic period scatter	Not eligible	None unless corridor moves
Cushing	14MN108	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Cushing	14MN111	Pre-contact isolate	Not eligible	None unless corridor moves
Cushing	14WH101	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	14WH102	Pre-contact scatter	Not eligible	None unless corridor moves
Cushing	14WH104	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	IF-01	Pre-contact isolate	Not eligible	None unless corridor moves
Cushing	IF-02	Pre-contact isolate	Not eligible	None unless corridor moves
Cushing	IF-03	Historic period isolate	Not eligible	None unless corridor moves
Cushing	KS-KEY-CX-101	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	KS-KEY-CX-204	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	KS-KEY-CX-205	Historic period farmstead	Not eligible	None unless corridor moves

TABLE 3.11.2-6 (Continued)				
Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Cushing	KS-KEY-CX-206	Historic period farmstead	Not eligible	None unless corridor moves
Cushing	KS-KEY-CX-208	Historic period farmstead	Not Eligible	None unless corridor moves
Cushing	KS-KEY-CX-601	Historic period structure	Not Eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

As noted in Section 3.11.1.4, survey permission was denied to ARG for 23.95 miles of the proposed Keystone Cushing Extension pipeline route that was selected under the sampling strategy. Historic properties surveys for these pipeline sections and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in South Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

Additional cultural resources studies for Cushing Extension site evaluation testing and the survey of access roads, additional temporary workspace, pipeline reroutes, and appurtenant facilities in Kansas are ongoing. Keystone filed additional reports for these aspects of the Project in October and December 2007. Keystone also has indicated that geomorphological testing results will be filed with DOS in March 2008.

3.11.2.5 Missouri

A total of 109 historic properties were identified by ARG during surveys of the Keystone Project APE in Missouri (Myers et al. 2007b; also Titus 2007a). This total includes surveys of the pipeline corridor and Project items that are shared with the FERC-regulated REX Project (Myers et al. 2006b, Anderson et al. 2007b, Myers et al. 2007c, Rieken 2007b, Shah Lomas 2007b). The identified historic properties were classified as 58 Pre-contact (i.e., prehistoric period) sites, four Pre-contact isolated finds, 36 Historic period sites, and 11 sites that contained both Pre-contact and Historic period components (Table 3.11.2-7). All 73 sites that contained Pre-contact artifacts (including the 11 multi-component sites) were noted by the presence of stone tools or stone waste flakes in varying quantities. The 47 Historic period historic properties included 32 farmsteads (including eight associated with multi-component sites), six Historic artifact scatters (including three multi-component sites), three cemeteries, three well features, one hunting camp, one road, and the remains of one industrial site. Keystone also has filed two reports (Aberle 2007; Myers et al. 2007a that present the results of additional NRHP evaluative testing at 16 of the cultural loci (23AU137, 23CH343, 23CH344, 23CH348, 23CH1345, 23CI088, 23LN298, 23LN299, 23LN300, 23LN301, 23LN303, 23LN307, 23LN308, 23MT420, 23SC1055, and 23SC1056).

Based on the information provided to date by the applicant, DOS has assessed 90 of the 109 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])⁶. This assessment includes the portions of 21 Historic period farmsteads that lie within the surveyed corridor; the three Historic period artifact scatters; and the three Historic period well features, road, hunting camp, and industrial site. It also includes 45 of the Pre-contact period artifact scatters (including 14 of the sites that were further assessed through NRHP evaluative testing), all four Pre-contact era isolated finds, and 10 of the 11 multi-component sites (Table 3.11.2-7). DOS has made a finding that NRHP eligibility determinations are not required for six of the Pre-contact sites and one of the multi-component sites, as they are not situated within the current Project APE. No additional investigations at these 96 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has determined that two of the identified sites that were subjected to further evaluation (23CH348 and 23CI088; Table 3.11.2-7) are eligible for listing in the NRHP under Criterion D (the ability to yield information important to history or prehistory). These sites include a large Pre-contact era (Middle to Late Woodland) occupation site in Chariton County and a 19th-century farmstead in Clinton County (Myers et al. 2007a). Both of these historic properties are situated within portions of the Project corridor that are shared with the REX Project. Prior to construction commencing, Keystone will be required to file plans with DOS that detail the specific avoidance procedures to be implemented in order to avoid impacts to these two sites, in the format described in Section 3.11.2. If impacts to the historic properties are anticipated, Keystone must submit its mitigation and treatment plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact, following the protocols outlined in the PA and in 36 CFR 800.5.

DOS has categorized the NRHP significance of the remaining five Historic period and six Pre-contact period historic properties listed in Table 3.11.2-7 as unevaluated. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will be required to file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone must provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

As noted in Section 3.11.1.5, survey permission was denied to ARG for 19.48 miles of the proposed Keystone pipeline route. Historic properties surveys for these pipeline sections and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in South Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

⁶ All determinations of eligibility listed in Section 3.11.2.5 were submitted by DOS to the MO SHPO on September 13, 2007, and on December 12, 2007; a reply from the MO SHPO concurring with these determinations is forthcoming. The use of REX pipeline NRHP determinations of eligibility was agreed to by the MO SHPO on August 23, 2007.

**TABLE 3.11.2-7
Historic Properties Identified in Missouri during Keystone Mainline Project
Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
REX pipeline	23CH348	Pre-contact scatter	Eligible	Submit avoidance or mitigation plan
REX pipeline	23CI0088	Historic period farmstead	Eligible	Submit avoidance or mitigation plan
Mainline	23SC2102	Pre-contact scatter	Unevaluated	Additional reporting; avoid by narrowing construction corridor
Mainline	MO-LN-105	Pre-contact scatter	Unevaluated	Additional survey and reporting
Mainline	23SC1054	Pre-contact scatter	Unevaluated	Avoid by narrowing construction corridor
Mainline	23SC2087	Pre-contact scatter	Unevaluated	Avoid by narrowing construction corridor
Mainline	23SC2086	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	Ebenezer Cemetery	Historic period cemetery	Unevaluated	Avoid by reroute
Mainline	Immaculate Conception Cemetery	Historic period cemetery	Unevaluated	Avoid by reroute
REX pipeline	23AU139	Historic period Cemetery (Barnett)	Unevaluated	Avoid by reroute or by reducing width of construction corridor
REX access road	23CW1040	Historic period farmstead	Unevaluated	Avoidance or NRHP evaluation
Mainline	23SC2071	Pre-contact scatter	Unevaluated	Avoidance or NRHP evaluation
Mainline	23LN1345	Pre-contact scatter	Unevaluated	HDD under site
Mainline	23SC2109	Pre-contact scatter	Unevaluated	NRHP testing and reporting
Mainline	23AU1144	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23AU1153	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23AU1154	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23AU137	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23AU138	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23AU140	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23AU141	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23AU142	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23AU143	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23BN1130	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23BN40	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23BN72	Historic period road	Not eligible	None unless corridor moves
REX pipeline	23BN73	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CA158	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CH1345	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CH1346	Historic period farmstead / Pre-contact isolate	Not eligible	None unless corridor moves
REX access road	23CH1347	Historic period farmstead	Not eligible	None unless corridor moves
REX reroute	23CH1348	Historic period farmstead	Not eligible	None unless corridor moves

**TABLE 3.11.2-7
(Continued)**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
REX reroute	23CH1349	Historic period farmstead / Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CH338	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CH339	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CH340	Historic period hunting camp	Not eligible	None unless corridor moves
REX pipeline	23CH341	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CH342	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CH343	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CH344	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CH345	Historic period scatter	Not eligible	None unless corridor moves
REX pipeline	23CH346	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CH347	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CI0087	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CI0089	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CI1088	Pre-contact scatter	Not eligible	None unless corridor moves
REX pipeline	23CW0053	Historic period well	Not eligible	None unless corridor moves
REX pipeline	23CW0054	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CW0055	Historic period wells	Not eligible	None unless corridor moves
REX pipeline	23CW0056	Pre-contact isolate	Not eligible	None unless corridor moves
REX pipeline	23CW0057	Pre-contact isolate	Not eligible	None unless corridor moves
REX pipeline	23CW0058	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CW0060	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23CW0061	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23LN1327	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	23LN1328	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	23LN1329	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1330	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1331	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	23LN1332	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1333	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1334	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1335	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1341	Prehistoric scatter	Not eligible	None unless corridor moves
Mainline	23LN1342	Prehistoric scatter	Not eligible	None unless corridor moves
Mainline	23LN1343	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1344	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN1346	Pre-contact / Historic period scatters	Not eligible	None unless corridor moves
Mainline	23LN298	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN299	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN300	Pre-contact scatter	Not eligible	None unless corridor moves

**Table 3.11.2-7
(continued)**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Mainline	23LN301	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN302	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN303	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN304	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN305	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN306	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN307	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23LN308	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23MT074	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23MT1419	Historic period well	Not eligible	None unless corridor moves
Mainline	23MT419	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23MT420	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23RN1426	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC0776	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC1055	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC1056	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC1057	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC2068	Historic period industrial	Not eligible	None unless corridor moves
Mainline	23SC2072	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC2073	Historic period scatter	Not eligible	None unless corridor moves
Mainline	23SC2074	Historic period scatter	Not eligible	None unless corridor moves
Mainline	23SC2103	Pre-contact scatter/Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC2105	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC2106	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC2107	Pre-contact scatter/Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC2108	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC2109	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC2110	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	23SC2111	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	23SC2112	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	23SC2113	Historic period farmstead	Not eligible	None unless corridor moves
REX pipeline	23BN03	Pre-contact scatter	Not needed	None (outside Keystone APE)
REX pipeline	23BN08	Pre-contact scatter	Not needed	None (outside Keystone APE)
REX pipeline	23BN38	Pre-contact scatter	Not needed	None (outside Keystone APE)
REX pipeline	23BN59	Pre-contact scatter	Not needed	None (outside Keystone APE)
REX pipeline	23CH073	Pre-contact scatter / Historic period farmstead	Not needed	None (outside Keystone APE)
REX pipeline	23CI0011	Pre-contact scatter	Not needed	None (outside Keystone APE)

APE = Area of potential effect.

HDD = Horizontal directional drilling.

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

REX = Rockies Express Western Phase Project.

3.11.2.6 Illinois

A total of 49 historic properties were identified by ARG during surveys of the Keystone project APE in Illinois (Myers et al. 2007d; also Titus 2007a). The identified historic properties were classified as 27 Pre-contact (i.e., prehistoric period) sites, two Pre-contact isolated finds, 13 Historic period sites, and seven sites that contained both Pre-contact and Historic period components (Table 3.11.2-8). All but one of the 36 sites with a Pre-contact component (including all seven multi-component sites) were noted by the presence of stone tools or stone waste flakes in varying quantities; the sole locus that differed was a mound site that was recorded prior to the Keystone survey (11MS0178). The Historic period historic properties included 13 farmsteads (including three associated with multi-component sites), six Historic artifact scatters (including four multi-component sites), and one cemetery. Keystone also has filed a report (Schwegman et al. 2007b) that presents the results of additional NRHP evaluative testing at eight of the cultural loci (11B155, 11FY204, 11FY205, 11MS2018, 11MS2275, 11MS2276, 11MS2277, and 11MS2278). Keystone has provided information to DOS stating their intention to conduct National Register evaluation testing at three additional Pre-contact era sites (11B159, 11B164, and 11B165).

Based on the information provided to date by the applicant, DOS has assessed 41 of the 49 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])⁷. This assessment includes the portions of nine Historic period farmsteads that lie within the surveyed corridor, two Historic period artifact scatters, 20 of the Pre-contact period artifact scatters (including nine of the sites that were further assessed through NRHP evaluative testing), both Pre-contact era isolated finds and all seven multi-component sites (Table 3.11.2-8). DOS has also made a finding that NRHP eligibility determinations are not required for two of the Pre-contact sites as they are either destroyed or are situated outside the current Project APE. No additional investigations at these 43 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

DOS has determined that one of the identified sites subjected to further evaluation is eligible for listing in the NRHP under Criterion D (the ability to yield information important to history or prehistory). This site (11FY205; Table 3.11.2-8) consists of the remains of a large Pre-contact era (Archaic to Woodland Periods) occupation in Fayette County (Schwegman et al. 2007b). The historic property is situated within the currently proposed Project corridor. Prior to construction commencing, Keystone will be required to file its plans with DOS that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. If an impact to the historic property is anticipated, Keystone must submit a mitigation plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact, following the protocols outlined in the PA and in 36 CFR 800.5.

DOS has categorized the NRHP significance of the remaining two Historic period and three Pre-contact period historic properties listed in Table 3.11.2-8 as unevaluated. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures, or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present. Prior to construction commencing, Keystone will be required to file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone will provide plans that detail the specific avoidance procedures

⁷ All determinations of eligibility listed in Section 3.11.2.6 were submitted by DOS to the IL SHPO on September 13, 2007; a reply concurring with these determinations was received on November 23, 2007. The SHPO submitted a follow-up letter to DOS on December 12 that stated they had mistakenly assessed Site 11MR121 as potentially eligible for listing in the NRHP, instead of not eligible, as they had intended.

to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, and will make formal findings of effect.

**TABLE 3.11.2-8
Historic Properties Identified in Illinois during Keystone Mainline Project
Field Surveys as of November 2007**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Mainline	11FY205	Pre-contact scatter	Eligible	Bore or HDD underneath site
Mainline	11MS0178	Pre-contact mound	Unevaluated	Additional survey and reporting
Mainline	Wanda Cemetery	Historic period cemetery	Unevaluated	Additional survey and reporting; avoid by reroute
Mainline	11MR124	Historic period farmstead	Unevaluated	Avoid by reroute
Mainline	11FY020	Pre-contact scatter	Unevaluated	HDD under site
Pump station	11MS2287	Pre-contact scatter	Unevaluated	File abandonment plan
Mainline	11B159	Pre-contact scatter	Unevaluated	NRHP testing and reporting
Mainline	11B164	Pre-contact scatter	Unevaluated	NRHP testing and reporting
Mainline	11B165	Pre-contact scatter	Unevaluated	NRHP testing and reporting
Mainline	11B149	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11B150	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	11B151	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11B152	Historic period scatter	Not eligible	None unless corridor moves
Mainline	11B153	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B154	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B155	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B156	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B157	Pre-contact Isolate	Not eligible	None unless corridor moves
Mainline	11B158	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B159	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B160	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	11B161	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11B162	Pre-contact isolate	Not eligible	None unless corridor moves
Mainline	11B163	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B164	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11B165	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11FY197	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11FY203	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11FY204	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11FY206	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MR121	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MR122	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MR123	Historic period scatter	Not eligible	None unless corridor moves
Mainline	11MR130	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MS0831	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11MS2018	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11MS2274	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	11MS2275	Pre-contact scatter	Not eligible	None unless corridor moves

**TABLE 3.11.2-8
(Continued)**

Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Mainline	11MS2276	Pre-contact scatter / Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MS2277	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11MS2278	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11MS2279	Pre-contact scatter	Not eligible	None unless corridor moves
Pump Station	11MS2280	Pre-contact scatter	Not eligible	None unless corridor moves
Mainline	11MS2281	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MS2282	Pre-contact / Historic period scatter	Not eligible	None unless corridor moves
Mainline	11MS2283	Historic period farmstead	Not eligible	None unless corridor moves
Mainline	11MS2284	Prehistoric scatter	Not eligible	None unless corridor moves
Mainline	11MS2285	Prehistoric scatter	Not eligible	None unless corridor moves
Pump Station	11MS2286	Historic farmstead	Not eligible	None unless corridor moves
Mainline	11MS348	Prehistoric scatter	Not eligible	None unless corridor moves
Mainline	11MS1292	Prehistoric scatter	Not needed	None (site outside APE or destroyed)
Mainline	11MS1293	Prehistoric scatter	Not needed	None (site outside APE or destroyed)

APE = Area of potential effect.

HDD = Horizontal directional drilling.

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

REX = Rockies Express Western Phase Project.

As noted in Section 3.11.1.6, survey permission was denied to ARG for 8.04 miles of the proposed Keystone pipeline route. Historic properties surveys for these pipeline sections and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in South Dakota must be completed before Section 106 compliance is achieved. Further survey reports must be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4 before pipeline construction begins.

3.11.2.7 Oklahoma (Cushing Extension)

A total of 15 historic properties were identified by ARG during surveys of the Keystone Cushing Extension APE in Oklahoma (Shah Lomas et al. 2007). The identified historic properties were classified as one Pre-contact (i.e., prehistoric period) site, one Pre-contact isolated find, 12 Historic period sites, and one National Historic Landmark that contains both Historic and Pre-contact attributes (Table 3.11.2-9). The two sites with a Pre-contact component were noted by the presence of stone tools or stone waste flakes in varying quantities. The Historic period historic properties included six farmsteads, one Historic artifact scatter, and five structures (of which four were not assigned designations). The National Historic Landmark, situated in Kay County, is discussed in more detail below.

TABLE 3.11.2-9 Historic Properties Identified in Oklahoma during Keystone Cushing Extension Field Surveys as of November 2007				
Project Item	Site	Site Type	NRHP Eligibility	Action Required by Keystone
Cushing Extension	34KA318 (101 Ranch)	National Historic Landmark (Historic and Pre-contact)	Eligible (listed)	Submit avoidance or mitigation plan
Cushing Extension	34KA456	Pre-contact scatter	Unevaluated	Avoidance or NRHP evaluation
Cushing Extension	34NB87	Historic period farmstead	Unevaluated	Avoidance or NRHP evaluation
Cushing Extension	34BN84	Historic period scatter	Not eligible	None unless corridor moves
Cushing Extension	34BN85	Historic period structure	Not eligible	None unless corridor moves
Cushing Extension	Undesignated	Historic period structure	Not eligible	None unless corridor moves
Cushing Extension	Undesignated	Historic period structure	Not eligible	None unless corridor moves
Cushing Extension	Undesignated	Historic period structure	Not eligible	None unless corridor moves
Cushing Extension	Undesignated	Historic period structure	Not eligible	None unless corridor moves
Cushing Extension	34BN86	Historic period farmstead	Not eligible	None unless corridor moves
Cushing Extension	34KA455	Historic period farmstead	Not eligible	None unless corridor moves
Cushing Extension	34NB83	Historic period farmstead	Not eligible	None unless corridor moves
Cushing Extension	34PY110	Historic period farmstead	Not eligible	None unless corridor moves
Cushing Extension	34PY77	Historic period farmstead	Not eligible	None unless corridor moves
Cushing Extension	OK-KEY-CX-104	Pre-contact isolate	Not eligible	None unless corridor moves

NRHP Eligibility = National Register of Historic Places eligibility as determined by DOS.

Based on the information provided to date by the applicant, DOS has evaluated 12 of the 15 historic properties as not meeting the criteria of significance for listing in the NRHP (36 CFR 60.4 [a-d])⁸. This evaluation includes the portions of the six Historic period farmsteads that lie within the surveyed corridor, the sole Pre-contact period isolated find, and all five historic structures (Table 3.11.2-9). No additional investigations of these 12 resources are required unless construction activities are projected to fall outside the surveyed corridor. In that event, additional cultural resources surveys must be conducted, following the protocols outlined in the PA.

One of the historic properties located within the Project APE is a National Historic Landmark; the property is also listed in the NRHP (No. 73001560) as the 101 Ranch Historic District and is known in the Oklahoma Site Files as Site 34KA318. Located in Kay County, the 101 Ranch Historic District was listed in the NRHP for its significance in the areas of Agriculture, Performing Arts, African-American culture, and Commerce. While its primary period of significance is associated with the late 19th century, the 101 Ranch Historic District contains at least two archeological sites within its boundaries, including a Pre-contact component. This National Historic Landmark is situated within the currently proposed

⁸ All determinations of eligibility listed in Section 3.11.2.6 were submitted by DOS to the OK SHPO on September 13; a reply concurring with these determinations was received on October 24, 2007.

Project corridor. Keystone has informed DOS that there is a commitment to avoid this property. Prior to construction commencing, Keystone will file plans with DOS that detail the specific avoidance procedures to be implemented, in the format described in Section 3.11.2. If an impact to the historic property is still anticipated, Keystone must submit a mitigation plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact, following the protocols outlined in the PA and in 36 CFR 800.5.

DOS has categorized the NRHP significance of the remaining single Historic period and single Pre-contact period historic properties listed in Table 3.11.2-9 as unevaluated. As each of these sites has the potential to be considered a Section 106-defined historic property, they must either be further assessed through the NRHP evaluation process or they must be completely avoided to prevent impacts to the cultural remains or features that are present. Prior to construction commencing, Keystone will file with DOS the results of NRHP site evaluations demonstrating that a listed cultural resource is not a historic property. Alternatively, Keystone will provide plans that detail the specific avoidance procedures to be implemented in order to avoid impact to the site, in the format described in Section 3.11.2. DOS and the consulting parties will evaluate the submitted information, following the protocols outlined in the PA, prior to making the formal findings of effect.

As noted in Section 3.11.1.7, survey permission was denied to ARG for 23.06 miles of the proposed Cushing Extension pipeline route. Historic properties surveys for these pipeline sections and all unsurveyed Project access roads, additional temporary workspaces that lie outside of the surveyed corridor, reroutes, and appurtenant facilities in Oklahoma must be completed before Section 106 compliance is achieved. Further survey reports will be submitted and reviewed by DOS. In consultation with the SHPO and other consulting parties, DOS will complete the identification and evaluation of historic properties in accordance with 36 CFR § 800.4, preferably before pipeline construction begins.

3.11.3 Consultation

3.11.3.1 Introduction

Under Section 106 of the NHPA, federal agency officials are required to share project information and consult with consulting parties. This includes Indian tribes, SHPOs, local governments, and applicants for federal permits. For this Project, DOS consulted with seven SHPOs, 87 Indian tribes, numerous federal and state agencies and local governments, and members of the public. Overall, the level of consultation DOS performed with each party was commensurate with the interest and concern that was displayed. Government-to-government consultation meetings, direct mailing, teleconferencing, direct telephone communications, and email were all utilized to keep consulting party members informed and to solicit comments on the Project. Public scoping and comment meetings also were conducted during the EIS process.

Informal discussions with SHPOs and Indian tribes were initiated by Keystone and their consultants in 2006. These initial communications by Keystone followed protocols used by FERC to conduct tribal and agency consultations. The FERC guidelines generally require the applicant to inform these groups of the project application and to seek their comments on it. In July 2006, DOS informed Keystone that its consultants should no longer directly communicate with Indian tribes. In an effort to appropriately observe the government-to-government relationship of the federal government with Indian tribes, DOS elected to retain the position as the lead federal agency under Section 106 and to consult directly with the Indian tribes, SHPOs, and agencies. A summary of the communications that were made by DOS to

federal agencies and SHPO offices is presented in Table 3.11.3-1. The communications that have occurred between DOS and Indian tribes is shown in Table 3.11.3-2.

TABLE 3.11.3.1 State Historic Preservation Offices and Other Government Agencies Contacted by the U.S. Department of State Regarding Historic Properties (as of December 2007)				
Federal or State Agency	Letters Sent	Phone Contacts*	Emails	Meetings
Advisory Council on Historic Preservation	11/20/07		07/27/07, 07/27/07, 08/06/07, 08/10/07, 09/24/07, 10/10/07, 10/10/07, 10/10/07, 10/11/07, 10/11/07, 10/19/07, 11/02/07, 11/06/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/16/07, 11/16/07, 11/16/07, 11/16/07, 11/16/07, 11/19/07, 11/19/07, 11/24/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	10/23/07
North Dakota SHPO	8/3/06, 8/23/06, 1/17/07, 2/1/07, 3/21/07, 6/10/07, 8/13/07, 9/12/07, 9/20/07, 10/02/07, 10/04/07, 10/18/07, 11/20/07	10/5/06, 3/21/07	10/5/06, 2/12/07, 1/16/07, 3/20/07, 3/21/07, 08/08/07, 09/24/07, 10/08/07, 10/09/07, 10/11/07, 10/19/07, 11/2/07, 11/05/07, 11/06/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/24/07, 12/05/07, 12/05/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	2/22/07
North Dakota Natural Resources Policy	1/17/07			
South Dakota SHPO	03/28/06, 8/3/06, 1/17/07, 2/1/07, 3/23/07, 6/10/07, 09/12/07, 10/02/07, 10/18/07, 11/20/07	10/5/06, 3/22/07	10/5/06, 2/12/07, 1/16/07, 3/20/07, 3/22/07, 3/27/07, 06/05/07, 08/08/07, 08/08/07, 8/10/07, 08/31/07, 09/19/07, 10/09/07, 10/11/07, 10/19/07, 11/02/07, 11/2/07, 11/06/07, 11/08/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/24/07, 12/04/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	8/28/07, 8/29/07, 10/23/07
South Dakota Public Utilities Commission	1/17/07			
Kansas SHPO	03/02/06, 3/8/06, 8/3/06, 8/30/06, 9/19/06, 12/21/06, 1/9/07, 1/17/07, 2/1/07, 3/27/07, 6/10/07, 8/27/07, 09/06/07, 09/12/07, 09/27/07, 10/01/07, 10/02/07, 10/18/07, 11/20/07	10/5/06	10/5/06, 2/12/07, 1/16/07, 3/20/07, 08/08/07, 09/24/07, 10/09/07, 10/11/07, 10/19/07, 11/2/07, 11/06/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/24/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	
Kansas Corp. Commission for Oil and Gas	1/17/07			
Kansas Department of Health and Environment	1/17/07			

**TABLE 3.11.3.1
(Continued)**

Federal or State Agency	Letters Sent	Phone Contacts*	Emails	Meetings
Missouri SHPO	1/07/05, 8/3/06, 1/10/07, 1/17/07, 1/26/07, 2/1/07, 6/10/07, 08/20/07, 09/12/07, 10/02/07, 10/16/07, 10/18/07, 11/20/07	10/5/06, 2/8/07, 3/21/07	10/5/06, 2/12/07, 1/16/07, 3/20/07, 08/08/07, 8/17/07, 8/20/07, 09/13/07, 09/24/07, 10/09/07, 10/11/07, 10/16/07, 10/17/07, 10/19/07, 11/02/07, 11/06/07, 11/08/07, 11/09/07, 11/09/07, 11/13/07, 11/16/07, 11/24/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	8/28/07, 8/29/07
Missouri Natural Resources Department	1/17/07			
Illinois SHPO	1/07/05, 05/18/06, 8/3/06, 1/17/07, 2/1/07, 2/9/07, 6/10/07, 08/23/07, 9/12/07, 10/02/07, 10/04/07, 10/11/07, 10/18/07, 11/20/07, 11/21/107	10/5/06, 3/13/07	2/12/07, 1/16/07, 3/13/07, 3/20/07, 08/08/07, 8/20/07, 09/24/07, 10/02/07, 10/09/07, 10/11/07, 10/19/07, 11/02/07, 11/06/07, 11/8/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/21/07, 11/24/07, 11/29/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	2/27/07, 8/28/07, 8/29/07
Illinois Commerce Commission	1/17/07			
Illinois EPA Groundwater Section	1/17/07			
Illinois Hydrogeology Compliance	1/17/07			
Oklahoma SHPO	8/3/06, 9/12/06, 9/19/06, 1/17/07, 2/1/07, 6/10/07, 8/13/07, 09/12/07, 10/02/07, 10/03/07, 10/11/07, 10/18/07, 10/24/07, 11/20/07	10/5/06	2/112, 2/12/07, 1/16/07, 3/20/07, 08/08/07, 8/20/07, 10/09/07, 10/11/07, 10/19/07, 11/2/07, 11/06/07, 11/08/07, 11/08/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	2/27/07
Oklahoma Office of the Secretary of the Environment	1/17/07			
Oklahoma Office of the Governor	1/17/07			

**TABLE 3.11.3-2
Federally Recognized Native American Tribes Contacted by the U.S. Department of State (as of December 2007)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Absentee Shawnee Tribe of Indians of OK	OK	8/3/06, 2/1/07, 2/9/07, 3/22/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07	10/6/06, 2/16/07, 5/15/07(vm), 6/22/07, 7/12/07, 8/15/07	6/22/07, 10/05/07, 10/15/07, 10/16/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07			√		TBD
Blackfeet Nation	MT	8/3/06, 3/22/07, 9/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	5/15/07(vm), 5/15/07, 6/22/07, 6/25/07, 6/28/07, 7/10/07, 7/10/07(lm), 7/11/07, 7/18/07(vm), 8/21/07, 10/17/07, 10/17/07, 12/05/07(lm), 12/12/07(vm)	7/3/07, 7/4/07, 7/6/07, 7/11/07, 8/21/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/04/07, 12/05/07, 12/05/07, 12/10/07, 12/10/07, 12/12/07, 12/12/07		8/28/07, 8/29/07, 10/23/07		√		TBD
Caddo Tribe of OK	OK		10/6/06, 2/16/07, 5/15/07(vm), 5/21/07(vm), 6/22/07(lm), 6/25/07, 6/27/07		2/8/07, 2/15/07		√			TBD
Cherokee Nation	OK	8/3/06, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	10/5/06, 2/16/07, 5/15/07(vm), 5/15/07(vm), 6/22/07(vm), 6/25/07(vm), 6/26/07, 6/28/07	10/5/06, 3/5/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07		√			

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Cheyenne - Arapaho Tribe of OK	OK	8/3/06, 9/19/06, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	10/6/06, 2/16/07, 5/15/07(nr), 5/18/07(vm), 6/7/07(nr), 6/22/07(vm), 6/25/07(vm), 6/26/07(nr), 6/28/07(nr), 6/29/07, 7/10/07, 7/12/07(vm)	6/29/07, 7/31/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/11/07, 12/12/07, 12/12/07	2/8/07, 2/15/07	8/28/07, 8/29/07		√		TBD
Cheyenne River Sioux	SD	8/3/06, 9/19/06, 1/17/07, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07	10/6/06, 2/16/07, 3/27/06, 5/15/07(vm), 5/15/07(lm), 5/15/07(lm), 6/18/07(lm), 6/19/07, 8/15/07, 8/16/07	6/20/07, 8/20/07, 8/20/07, 9/19/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07	2/8/07, 2/15/07		√			TBD
Chickasaw Nation of OK	OK	8/3/06, 2/1/07, 8/13/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07	10/5/06, 2/16/07, 5/15/07(lm), 6/22/07(vm), 6/25/07(vm), 6/25/07, 6/26/07(lm), 6/26/07, 7/2/07(vm), 7/18/07(lm)	6/26/07, 7/9/07, 7/23/07, 8/3/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/27/07, 11/28/07	2/8/07, 2/15 not thru, 2/16/07 not thru		√			TBD
Chippewa-Cree	MT	8/3/06, 1/17/07, 2/1/07, 08/16/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	10/5/06, 2/16/07, 5/15/07(nr), 6/22/07(lm), 6/25/07, 6/28/07, 6/29/07, 7/10/07(lm), 8/15/07, 8/16/07, 12/05/07	6/29/07, 09/19/07, 09/21/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/16/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07	8/28/07, 8/29/07		√		TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Choctaw Nation of OK	OK	8/3/06, 2/1/07	10/5/06, 2/16/07, 5/15/07, 5/15/07, 5/15/07, 5/18/07, 5/21/07(nr), 6/6/07, 6/7/07, 6/7/07 6/7/07	10/5/06, 2/7/07	2/7/07, 2/15/07		√			
Citizen Potawatomi Nation	OK	8/3/06, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07	2/16/07, 3/9/07	10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07				√	
Comanche Nation	OK	3/22/07	5/15/07				√			
Confederated Salish and Kootenai Tribes of the Flathead Indian Nation	MT	3/22/07	5/15/07(vm), 5/15/07, 6/22/07(vm), 6/27/07				√			TBD
Crow Creek Sioux	SD	8/3/06, 9/19/06, 1/17/07, 2/1/07, 11/20/07	10/5/06, 2/16/07, 6/7/07	2/15/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07	8/28/07, 8/29/07	√			
Delaware Nation	OK	8/3/06, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	10/5/06, 2/16/07, 5/15/07, 6/22/07(vm), 6/27/07, 6/28/07, 7/12/07(lm), 8/15/07, 8/20/07(na)	6/28/07, 6/28/07, 7/13/07, 7/16/07, 7/16/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07			√		

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Eastern Band of Cherokee Indians	NC	8/3/06, 2/1/07	10/5/06, 2/16/07, 5/15/07(vm), 6/22/07(vm), 6/25/07	2/15/07	2/8/07, 2/15/07		√			
Eastern Shawnee Tribe of OK	MO	8/3/06, 2/1/07	2/16/07, 5/15/07(lm)	2/15/07, 2/20/07, 3/5/07	2/8/07, 2/15/07		√			
Eastern Shoshone Tribe	WY	9/29/07, 10/02/07, 10/18/07, 11/20/07		6/13/07, 8/20/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07			√			
Flandreau Santee Sioux Tribe	SD	8/3/06, 9/19/06, 1/17/07, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/19/06, 2/16/07, 2/27, 6/7/07(vm), 6/11/07, 6/12/07(vm), 6/13/07, 7/2/07(vm), 7/10/07, 8/15/07(vm), 8/22/07, 8/20/07(vm)	10/19/06, 2/15/07, 6/13/07, 8/9/07, 8/15/07, 8/20/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07	8/28/07, 8/29/07	√			
Forest County Potawatomi Community of Wisconsin Potawatomi Indians	WI	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	10/19/06, 2/16/07, 6/22/07(vm), 6/25/07(vm), 6/27/07(vm), 6/28/07(vm), 6/29/07, 7/18/07(vm), 8/16/07(vm), 8/20/07(vm)	6/29/07, 8/15/07, 8/20/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07			√		

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Fort Peck Tribes	MT	6/28/07, 09/29/07, 10/02/07, 10/09/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	5/15/07, 5/17/07, 6/6/07, 8/15/07(vm), 8/20/07, 8/20/07(vm), 10/05/07, 12/05/07(lm), 12/10/07	5/17/07, 6/14/07, 6/18/07, 6/19/07, 8/15/07, 8/20/07, 8/20/07, 10/03/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07		5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD
Fort Sill Apache	OK	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	5/21/07, 7/10/07(lm), 8/15/07(na), 8/15/07(na)	5/21/07, 7/13/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07			√			TBD
Gros Ventre and Assiniboine Tribe of Ft. Belknap	MT	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07		10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07					√	
Gun Lake Potawatomi	MI	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/19/06, 2/16/07, 6/22/07(vm), 6/25/07(vm), 6/27/07(vm), 6/28/07(vm), 6/29/07(vm), 7/3/07(vm), 8/20/07(not in)	10/19/06, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/7/07 bad #, not thru 2/15, 2/16/07		√			

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Hannahville Indian Community	MI	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/19/06, 2/16/07, 6/22/07, 6/25/07, 6/27/07 (vm), 7/3/07	2/15/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, not thru 2/15				√	
Ho-Chunk Nation of Wisconsin	WI	8/3/06, 2/1/07, 2/8/07, 6/28/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	10/19/06, wrong #, 6/22/07 (vm), 6/25/07 (vm), 6/26/07(vm), 6/27/07, 8/16/07(vm), 8/20/07(vm)	2/15/07, 6/27/07, 6/28/07, 7/02/07, 8/9/07, 8/15/07, 8/20/07, 8/22/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/7/07 bad #			√		
Huron Potawatomi Nation	MI	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/17/06, 2/16/07, 6/25/07 (lm), 6/27/07 (vm)	2/15/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/7/07 bad #				√	
Iowa Tribe of Kansas and Nebraska	KS	8/3/06, 9/19/06, 2/1/07, 11/08/07, 11/20/07, 11/21/07	2/16/07 no answer, 6/18/07, 6/18/07	2/15/07, 7/27/07, 10/19/07, 11/16/07, 11/19/07, 11/24/07, 12/06/07	2/8/07, 2/15/07	11/14/06, 10/23/07		√		
Iowa Tribe of Oklahoma	OK	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/5/06, 2/16/07, 3/9/07, 6/18/07 (vm), 7/2/07	2/15/07, 6/20/07, 8/9/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/7 bad #, 2/15/07	11/16/06, 11/16/06, 8/28/07, 8/29/07	√			TBD

TABLE 3.11.3-2 (Continued)										
Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Jena Band of Choctaw Indians	LA	8/3/06, 2/1/07	2/16/07 no answer, 6/21/07 (vm), 6/22/07	2/15/07	2/8/07, 2/15/07		√			
Jicarilla Apache Tribe	NM	3/22/07	6/21/07, 6/25/07	5/21/07, 5/22/07, 5/23/07	5/21/07, 5/22/07, 5/23/07		√			
Kaw Tribe of Oklahoma	OK	8/3/06, 9/19/06, 10/4/06, 1/17/07, 2/1/07, 11/08/07, 11/21/07	10/04/06, 2/16/07, 5/21/07, 5/23/07, 5/24/07, 5/30/07, 12/05/07(vm), 12/12/07	10/05/06, 2/15/07, 5/21/07, 5/22/07, 5/23/07, 10/09/07, 10/11/07, 10/19/07, 6/15/07, 11/2/07, 11/08/07, 11/09/07, 12/05/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07			√		
Kialegee Tribal Town of the Creek Nation of Oklahoma	OK	8/3/06, 2/1/07	10/6/06, # no longer in service, 5/22/07, 5/22/07	10/6/06	2/7/07 bad #, not thru 2/15/07		√			
Kickapoo Traditional Tribe of Texas	TX	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	2/16/07 no answer, 6/21/07 (lm), 6/28/07, 7/3/07	10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/7/07 bad #, 2/15/07		√			
Kickapoo Tribe of Kansas	KS	8/3/06, 2/1/07, 10/30/07, 11/08/07, 11/16/07, 11/20/07, 11/21/07	10/6/06, 2/16/07, 5/22/07, 5/22/07 (vm), 6/18/07, 6/18/07, 11/16/07, 12/05/07(vm), 12/07/07, 12/07/07	11/2/07, 6/18/07, 11/16/07, 11/19/07, 11/21/07, 11/24/07, 11/29/07, 11/30/07, 12/11/07	2/7/07, 2/15/07	10/23/07		√		

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Kickapoo Tribe of Oklahoma	OK	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/6/06, 2/16/07, 6/18/07, 7/2/07, 7/10/07, 8/16/07(na), 8/20/07(not in)	10/6/06, 6/18/07, 7/13/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/7/07 bad #, not thru 2/15/07, 2/16/07		√			
Kiowa Indian Tribe of Oklahoma	OK	8/3/06, 2/1/07, 3/22/07	6/18/07 (lm), 6/21/07, 6/25/07, 6/27/07	6/18/07			√			
Lower Brule Sioux	SD	8/3/06, 9/19/06, 1/17/07, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/6/06, 2/16/07, 5/11/07, 6/19/07(vm), 6/21/07(vm), 6/25/07(vm), 6/27/07(vm), 6/28/07(vm), 6/29/07(vm), 7/3/07(vm), 8/20/07(vm), 8/23/07	10/6/06, 6/7/07, 6/11/07, 8/23/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/7/07 bad #, 2/15/07, 2/16/07			√		
Lower Sioux Indian Community	MN	8/3/06, 1/17/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	12/5/07, 12/12/07	2/15/07, 6/11/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 10/31/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/10/07, 12/12/07, 12/12/07	2/7/07 bad#, not thru 2/15/07	8/28/07, 8/29/07, 10/23/07		√		TBD

TABLE 3.11.3-2
(Continued)

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Mandan, Hidatsa and Arikara Nation	ND	8/3/06, 9/19/06, 1/17/07, 2/1/07, 11/08/07, 11/21/07	10/5/06, 2/16/07 left message, 12/06/07	2/15/07, 12/06/07	2/8/07, 2/15/07	10/23/07		√		
Miami Tribe of Oklahoma	OK	8/3/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/5/06, 2/16/07 left message, 5/22/07(vm), 6/25/07, 7/2/07(vm), 7/10/07(vm), 7/20/07, 8/20/07(lm)	6/25/07, 7/13/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07		√			TBD
Mille Lacs Band of Ojibwe	MN	9/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	7/10/07(vm), 12/05/07(vm), 12/12/07	7/24/07, 8/9/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/17/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 11/28/07, 12/03/07, 12/05/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07		5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD
Modoc Tribe of Oklahoma	OK	3/22/07	6/19/07, 7/10/07(vm), 7/12/07(vm), 7/12/07	6/19/07			√			

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Muscogee-Creek Nation	OK	8/3/06, 9/19/06, 11/22/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/19/06, 2/16/07, 6/19/07(vm), 6/21/07(vm), 6/25/07, 6/27/07(lm), 6/28/07, 8/20/07	6/28/07, 6/28/07, 6/29/07, 7/2/07, 7/13/07, 8/20/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/7/07, 2/15/07		√			
Northern Arapaho Tribe	WY	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	5/15/07, 6/13/07, 7/2/07(vm), 7/10/07(vm), 12/05/07(lm), 12/12/07, 12/12/07(vm)	5/15/07, 7/30/07, 8/15/07, 8/20/07, 8/21/07, 8/21/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 10/31/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/20/07, 11/24/07, 11/28/07, 12/05/07, 12/07/07, 12/10/07, 12/10/07, 12/12/07, 12/12/07		8/28/07, 8/29/07, 10/23/07		√		TBD
Northern Cheyenne Tribe	MT	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	6/19/07(vm), 6/21/07, 6/25/07, 6/27/07(vm), 6/28/07, 6/29/07, 7/3/07(vm), 12/05/07(lm), 12/06/07	8/14/07, 10/02/07, 10/05/07, 10/11/07, 10/15/07, 10/16/07, 10/31/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/11/07		10/23/07		√		
Northern Ute Tribe	UT	9/29/07, 10/02/07, 10/18/07, 11/20/07	6/19/07, 6/21/07, 6/22/07, 6/25/07	10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07					√	

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Oglala Sioux	SD	9/19/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	10/5/06, 2/16/07, 5/11/07, 6/19/07, 6/21/07, 6/25/07, 6/27/07, 8/15/07, 8/20/07(vm), 8/21/07	6/27/07, 6/27/07, 8/21/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/7/07, 2/15/07	8/28/07, 8/29/07, 10/23/07		√		TBD
Omaha Tribe of Nebraska	NE	8/3/06, 9/19/06, 1/17/07 2/1/07	10/5/06, 2/16/07		2/7/07, 2/15		√			
Osage Nation of Oklahoma	OK	8/3/06, 9/19/06, 2/1/07, 3/22/07, 9/25/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	10/5/06, 2/15/07, 3/13/07, 5/23/07, 5/23/07, 7/9/07, 7/18/07(vm), 10/09/07, 10/10/07, 10/15/07, 12/05/07(vm)	2/15/07, 5/23/07, 6/19/07, 6/19/07, 6/19/07, 6/19/07, 6/19/07, 6/19/07, 6/29/07, 7/18/07, 7/19/07, 8/3/07, 8/20/07, 10/03/07, 10/05/07, 10/09/07, 10/10/07, 5/10/10/07, 10/11/07, 10/15/07, 10/19/07, 10/15/07, 10/15/07, 10/15/07, 10/15/07, 10/16/07, 10/30/07, 10/30/07, 10/30/07, 10/31/07, 11/02/07, 11/05/07, 11/05/07, 11/08/07, 11/09/07, 11/13/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/05/07, 12/06/07, 12/10/07, 12/12/07, 12/12/07	2/7/07, 2/15/07	10/22/07		√		TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Otoe-Missouri Tribe	OK	8/3/06, 9/19/06, 2/1/07	10/5/06, 2/16/07, 6/19/07	10/5/06, 2/15/07	2/7/07, 2/17/07		√			
Ottawa Tribe of Oklahoma	OK	3/22/07	8/3/06, 9/19/06, 2/1/07, 9/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	5/23/07			√			
Pawnee Nation of Oklahoma	OK	8/3/06, 9/19/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	10/6/06, 2/16/07 left message, 5/23/07, 7/2/07(vm), 12/05/07(vm)	9/27/06, 2/7/07, 2/15/07, 3/28/07, 5/23/07, 6/19/07, 06/20/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/03/07, 12/05/07, 12/10/07, 12/10/07, 12/12/07, 12/12/07	2/7/07, 2/15/07	2/7/07, 2/15/07	8/28/07, 8/29/07	√		TBD
Peoria Indian Tribe of Oklahoma	OK	8/3/06, 9/19/06, 2/1/07	10/5/06, 2/16/07, 5/23/07(vm), 6/19/07(vm)	2/7/07, 2/15/07	2/7/07, 2/15/07		√			
Poarch Band of Creek Indians	AL	8/3/06, 9/19/06, 2/1/07	10/5/06, 2/16/07, 6/19/07(vm), 6/25/07(vm), 6/28/07	10/5/06, 2/15/07	2/7/07, 2/15/07		√			

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contact	Email Sent	Fax Sent	Meeting Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Pokagon Band of Potawatomi Indians of Michigan	MI	9/19/06, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	10/5/06, 2/16/07 busy, 6/21/07, 8/20/07(lm)	10/6/06, 2/15/07, 6/25/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/7/07, not thru 2/15			√		TBD
Ponca Tribe of Indians of Oklahoma	OK	8/3/06, 9/19/06, 2/1/07, 2/7/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	2/16/07 left message, 6/7/07(vm), 6/19/07, 6/21/07	6/25/07, 6/25/07, 7/7/07, 7/9/07, 7/10/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/1/07	11/16/06		√		TBD
Ponca Tribe of Nebraska	NE	3/22/07, 09/29/07	6/19/07, 7/3/07	6/19/07, 11/08/07, 11/09/07					√	
Prairie Island Band of Potawatomi Indians	KS	9/19/06, 2/1/07, 09/29/07	5/23/07, 6/19/07		no fax#				√	
Prairie Island Indian Community	MN	8/3/06, 9/19/06, 2/1/07	9/20/06(vm), 5/23/07(vm), 6/19/07, 6/19/07(vm), 06/20/07, 7/10/07	6/20/07, 10/11/07, 10/11/07	2/7/07, not thru 2/15				√	
Quapaw Tribe	OK	9/19/06, 2/1/07	2/16/07, 6/7/07(lm), 6/8/07, 6/8/07		2/8/07, 2/15/07				√	

TABLE 3.11.3-2 (Continued)										
Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Red Lake Band of Chippewa Indians of Minnesota	MN	8/3/06, 1/17/07, 2/1/07, 2/7/07	2/16/07, 6/19/07		bad fax#, not thru 2/15, 2/16/07		√			
Rosebud Sioux Tribe	SD	9/19/06, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/17/07, 10/18/07, 10/29/07, 11/05/07, 11/08/07, 11/15/07, 11/20/07	2/16/07, 8/20/07, 8/20/07	2/15/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07, 11/29/07	2/8/07, 2/15/07	10/23/07		√		TBD
Sac and Fox in Iowa	IA	8/3/06, 2/1/06, 2/9/07, 7/6/07	2/1/06, 6/25/07(vm), 6/29/07(lm), 7/3/07	2/15/07, 2/16/07, 7/3/07, 7/3/07	2/8/07, 2/15/07		√			
Sac and Fox of the Missouri in Kansas and Nebraska	KS	8/3/06, 2/1/07, 2/9/07, 11/05/07, 11/08/07, 11/20/07, 11/21/07	2/16/07, 10/18/07	2/16/07, 11/16/07, 11/19/07, 11/24/07	2/9/07, not thru 2/15	10/23/07	√			
Sac and Fox Nation of Oklahoma	OK	8/3/06, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	6/21/07, 2/16/07, 7/18/07	2/15/07, 2/16/07, 6/25/07, 7/6/07, 7/10/07, 7/13/07, 7/17/07, 8/1/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07			√		TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Santee Sioux Tribe of Nebraska	NE	8/3/06, 1/17/07, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 10/26/07, 11/08/07, 11/20/07, 11/21/07	2/16/07, 8/15/07, 8/15/07(lm), 8/20/07, 11/15/07, 12/06/07, 12/06/07	2/15/07, 2/16/07, 3/1/07, 5/10/07, 7/5/07,8/7/07, 8/9/07, 8/15/07, 8/20/07, 8/20/07, 8/20/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/13/07, 11/13/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/06/07, 12/07/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07	5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD
Shakopee Mdewankanton Sioux	MN	8/3/06, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	6/25/07, 2/16/07	2/15/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07		√			TBD
Shawnee Tribe	OK	2/1/07, 2/9/07	6/25/07	3/5/07, 10/11/07	2/9/07, 2/15/07		√			

TABLE 3.11.3-2 (Continued)										
Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Sisseton-Wahpeton Oyate Sioux	SD	8/3/06, 9/19/06, 1/17/07, 2/1/07, 2/9/07, 09/27/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/15/07, 11/20/07, 11/21/07	8/3/06, 9/19/06, 1/17/07, 2/1/07, 2/9/07, 09/27/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/15/07, 11/20/07, 11/21/07	3/28/07, 4/11/07, 5/10/07, 7/24/07, 7/26/07, 7/31/07, 7/31/07, 8/9/07, 09/28/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/15/07, 10/16/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/15/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	no fax#	5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD
Sisseton-Wahpeton Oyate Wahpekutz	SD	9/18/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/21/07	9/18/07	7/31/07, 09/18/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/18/07, 10/19/07, 11/08/07, 11/09/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07		5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD
Southern Ute Indian Tribe	CO	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	6/29/07(vm)	10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07					√	
Spirit Lake Tribe	ND	9/19/06, 11/17/06, 1/17/07, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	12/12/07	10/5/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/10/07, 12/12/07, 12/12/07	2/9/07, 2/15/07	5/30/07, 8/28/07, 8/29/07, 10/23/07		√		TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Standing Rock Sioux Tribe	ND	2/9/07, 9/19/06, 1/17/07, 2/1/07, 9/10/07, 9/12/07, 09/12/07, 09/19/07, 09/29/07, 10/02/07, 10/10/07, 10/18/07, 10/31/07, 10/31/07, 11/01/07, 11/02/07, 11/08/07, 11/09/07, 11/15/07, 11/15/07, 11/20/07, 11/21/07	2/28/07, 8/15/07, 8/16/07	3/2/07, 8/15/07, 09/04/07, 09/05/07, 09/19/07, 09/24/07, 09/25/07, 9/26/07, 10/01/07, 10/02/07, 10/03/07, 10/05/07, 10/09/07, 10/10/07, 10/11/07, 10/11/07, 10/15/07, 10/15/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/14/07, 11/14/07, 11/14/07, 11/16/07, 11/19/07, 11/24/07, 11/27/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/9/07, 2/15/07	5/30/07, 8/28/07, 8/29/07, 10/23/07, 10/24/07		√		TBD
Stockbridge-Munsee Tribe	WI						√			
Three Affiliated Tribes	ND	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	6/25/07(vm), 6/28/07(vm), 6/29/07, 8/20/07, 8/20/07(lm)	6/29/07, 6/29/07, 8/14/07, 8/15/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07		8/28/07, 8/29/07		√		TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Tonkawa Tribe	OK	2/1/07, 3/12/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07, 11/21/07	6/7/07(vm), 6/25/07(vm), 6/29/07(vm), 7/3/07, 8/1/07, 8/2/07	7/3/07, 7/13/07, 7/16/07, 7/17/07, 7/17/07, 8/2/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 11/02/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/8/07, 2/15/07			√		TBD
Trenton Indian Service Area	ND	3/22/07	6/28/07	6/28/07, 6/29/07, 6/29/07			√			
Turtle Mountain Band of Chipewa	ND	8/3/06, 9/19/06, 11/2/06, 1/17/07, 2/1/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	2/16/07,6/25/07(v m), 6/28/07(vm), 6/29/07(vm), 7/3/07(vm), 7/10/07(vm)	2/15/07, 2/16/07, 10/05/07, 10/15/07, 10/16/07, 10/19/07, 11/16/07, 11/19/07, 11/24/07	2/9/07, 2/15/07	10/25/07	√			TBD
United Keetoowah Band of Cherokee Indians	OK	8/3/06, 9/19/06, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	2/16/07 bad #, 8/16/07	2/15/07, 7/30/07, 8/15/07, 8/20/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 11/2/07, 11/08/07, 11/09/07, 11/16/07, 11/19/07, 11/24/07, 12/05/07, 12/10/07, 12/12/07, 12/12/07	2/9/07, 2/15/07, 8/16/07, 8/16/07			√		TBD
Upper Sioux-Pezihutazizi	MN	8/3/06, 2/1/07, 2/9/07, 11/08/07, 11/21/07	2/16/07 message, 6/26/07(vm), 6/28/07		2/8/07, 2/15/07		√			TBD

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Ute Mountain Tribe	CO	3/22/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	6/26/07(vm), 6/28/07(vm), 6/29/07(vm), 7/3/07(vm)	10/5/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07					√	
White Earth Band of Minnesota Chippewa	MN	8/3/06, 1/17/07, 2/1/07, 2/9/07, 09/29/07, 10/02/07, 10/18/07, 11/20/07	2/16/07 message, 6/26/07(vm), 6/28/07, 6/29/07(vm)	2/15/07, 10/05/07, 10/15/07, 10/16/07, 11/16/07, 11/19/07, 11/24/07	2/8/07, 2/15/07				√	
Wichita and Affiliated Tribes	OK	9/19/06, 2/1/07, 2/9/07	2/16/07 na, 6/28/07		2/8/07, not thru 2/15		√			
Winnebago Tribe	NE	2/1/07	2/16/07 message, 6/26/07(vm), 6/26/07, 6/28/07, 7/2/07	6/26/07, 6/26/07, 6/26/07, 6/28/07	2/9/07, 2/15/07		√			
Wyandotte Nation	OK	2/1/07, 2/9/07	2/16/07 message, 6/26/07, 7/10/07, 7/10/07(vm)	6/26/07, 6/26/07	2/8/07, 2/15/07		√			

3.11-79

**TABLE 3.11.3-2
(Continued)**

Native American Nation	Office State	Letters Sent	Telephone Contacts	Emails Sent	Faxes Sent	Meetings Held	No Objection to Project	DOS Consultation Ongoing	No Response from Tribe to Date	PA Signatory
Yankton Sioux	SD	8/3/06, 9/19/06, 2/1/07, 3/12/07, 09/29/07, 10/02/07, 10/18/07, 11/08/07, 11/20/07, 11/21/07	8/15/07(na), 8/16/07(na), 8/20/07	6/12/07, 6/29/07, 7/2/07, 7/6/07, 7/20/07, 7/20/07, 7/31/07, 7/31/07, 8/15/07, 8/20/07, 8/31/07, 8/31/07, 10/05/07, 10/09/07, 10/11/07, 10/15/07, 10/16/07, 10/19/07, 11/2/07, 11/08/07, 11/09/07, 11/13/07, 11/13/07, 11/13/07, 11/15/07, 11/16/07, 11/16/07, 11/19/07, 11/21/07, 11/24/07, 11/29/07, 12/05/07, 12/10/07, 12/11/07, 12/12/07, 12/12/07		5/30/07, 10/23/07		√		TBD

lm = Left message.
 TBD = To be determined.
 vm = Left voice mail.

3.11.3.2 Federal and State Agency Consultation

In an effort to coordinate compliance with NEPA and Section 106, DOS consulted with federal agencies whose participation in the Project was considered an undertaking as per 36 CFR 800.16(y). These agencies included the USDA (FSA, RUS, and NRCS), COE, and USFWS. On October 25, 2006, the ACHP entered consultation finding that Criteria 3 and 4 of Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of the regulations (36 CFR Part 800) implementing Section 106 of the NHPA, had the potential to be met. All of these agencies are signatories to a PA. Separately, DOE will ensure that Section 106 of the NHPA is followed for related actions of the Project that fall under their regulatory oversight. Through a series of teleconferences and meetings with these agencies, DOS identified overlapping responsibilities for Section 106 on certain federally owned or managed lands in the Project area. Most notably, COE and USFWS have reviewed and approved the findings of historic properties investigations on properties that they own or manage, in coordination with DOS. DOS also actively worked with all federal agencies toward implementing the PA by soliciting and responding to comments or concerns.

In a November 8, 2007 letter to DOS, the ACHP expressed a number of questions regarding the DOS's coordination of NEPA with Section 106, the applicability of NAGPRA, the condemnation of historic properties, the extra-territorial application of Section 402 of the NHPA, the initiation and subsequent performance of consultation with Indian tribes, the appropriate use of sample field investigations, and the incomplete identification of historic properties of religious and cultural significance to Indian tribes. DOS responded in a November 30, 2007 letter that addressed the ACHP's questions.

DOS also has consulted with several state agencies, including the seven SHPO offices in the Project area: South Dakota SHPO, North Dakota, SHPO, Nebraska SHPO, Kansas SHPO, Missouri SHPO, Oklahoma SHPO, and Illinois SHPO. DOS has consulted with each SHPO to develop appropriate research and field survey methods that adequately identified and evaluated historic properties. DOS also has consulted with the SHPOs to gain concurrence on the APE, NRHP eligibility of historic properties, Project effects, and development of a PA. Any concerns expressed by the SHPOs were addressed through monthly teleconferences and/or meetings.

The South Dakota SHPO submitted several substantive comments subsequent to publishing of the Draft EIS. The South Dakota SHPO expressed concerns regarding consultation of Indian tribes, identification of TCPs and sites of religious and cultural importance, and use of an inadequate archaeological sampling model. In order to address these and other issues presented by the South Dakota SHPO, the Applicant agreed to all avoidance measures outlined in the DOS determination of eligibility letter dated December 5, 2007, a pedestrian survey of a 2-mile long section of the Project corridor, the inclusion of additional areas for subsurface testing, supporting the development of education materials, facilitation of site visits by the SHPO during construction, and providing the South Dakota SHPO with updates as construction monitoring reports are prepared. DOS also has endeavored to address the identification of properties of religious and cultural significance, including TCPs, as noted below.

Each SHPO has been actively consulted concerning filing of the various Unanticipated Discoveries Plans for each state. With the assistance of the ACHP, two drafts of the Unanticipated Discoveries Plans were shared with all consulting parties for comment. These were distributed to the consulting parties on September 12, 2007, and on October 19, 2007. The final approved plans will be an attachment to the PA. DOS also actively worked with all consulting parties to develop a PA. Working closely with the ACHP, DOS presented drafts of the PA to all consulting parties for comment on July 30, 2007, September 18, 2007, and October 19, 2007. The comments on these drafts were reviewed and incorporated into a final

draft. The final draft is currently under review by the ACHP and DOS. It will soon be ready for signature. The PA will become a condition of the Presidential Permit.

3.11.3.3 Native American Consultation

The list of Indian tribes that were notified for this project was derived from lists maintained by SHPOs, state tribal liaisons, THPOs, the U.S. Bureau of Indian Affairs, and recommendations from other tribes. Even though the Project does not bisect any Native American reservations, several Indian tribes requested consultation, consistent with 36 CFR 800.2(c)(2)(ii), due to the Project's potential to affect tribal historic properties that are situated on ancestral lands. DOS is continuing consultation with the tribes who have interests in the Project.

In compliance with 36 CFR 800.2 and confidentiality requirements, DOS provided consulting Indian tribes with information pertaining to any findings or determinations that were derived from historic properties reports prepared for portions of the Project's APE. Following an initial round of consultation completed in July 18, 2007, 22 Indian tribes had notified DOS as having no interest either in consulting or objecting to the Project; 13 tribes had yet to respond to requests for consultation. Consultation with the remaining Indian tribes has been ongoing since publication of the Draft EIS. Following an additional round of calls, letters, and consultation meetings through December 2007, 31 tribes expressed an interest in receiving updates regarding the progress of the Project, with 24 tribes requesting consulting party status in writing to DOS. The consulting tribes are listed in Table 3.11.3-3. A summary of the tribal consultation efforts is included in Table 3.11.3-2.

Considerable effort and time has been expended contacting individual tribes to determine their level of interest and their willingness to consult with DOS. As part of this consultation outreach, several of the tribes requested development of a Tribal Advisory Committee (TAC). The TAC was developed based on the inclusion of tribes who wanted to participate. The TAC met via monthly conference calls before Indian tribes expressed a preference for face-to-face consultation. These meetings served as a forum for Indian tribes to express concerns about the Project's potential for impacts to historic properties. The TAC approach was abandoned when several tribes requested small group and individual face-to-face consultation rather than a large group approach over the telephone.

In recognition of the United States Government's trust responsibilities and consistent with the intent of Executive Order 13175 – *Consultation and Coordination with Indian Tribal Governments*, DOS held several combined government-to-government and Section 106 meetings with Indian tribes. These meetings are listed in Table 3.11.3-4. On May 30, 2007, a meeting was convened in North Dakota that was attended by officials representing DOS, USFWS, COE, ACHP, Western, DOE, SD SHPO, OK SHPO, and officials that represented eight Sioux tribes (the Sisseton-Wahpeton Oyate, Yankton Sioux, SWO Wahpekutz, Santee Sioux Nation of Nebraska, Standing Rock Sioux, Spirit Lake Tribe, Fort Peck Tribes, and Mille Lacs Band of Ojibwe). At this meeting, the tribes made several requests that were taken into account by DOS, as noted in the Group Consultation Meeting Summary (Table 3.11.3-5).

At additional government-to-government consultation meetings held on August 28–29 and October 22–24, 2007, several Indian tribes reiterated their concerns about the Project's potential to affect historic properties that could include TCPs and sites of traditional religious and/or cultural importance, as well as the concerns noted above. Many of these same concerns were expressed by the ACHP in its November 8, 2007 letter to DOS. Table 3.11.3-5 outlines DOS's efforts to resolve these concerns.

The ACHP also had questions about the identification of religious and cultural sites of importance to Indian tribes in a November 8, 2007 letter to DOS. In an attempt to resolve these concerns, on

November 8, 2007, DOS extended an offer to the 31 consulting tribes to fund studies of religious and cultural significance, including TCPs, by the consulting tribes within the Project corridor. To date, one Indian tribe has agreed to conduct the studies, which are due to be completed by February 1, 2008. DOS addressed the concerns of the ACHP through a letter on November 30, 2007, and continues to work with the Indian tribes and the ACHP in the finalization of the PA.

**TABLE 3.11.3-3
Consulting Tribes under Section 106**

1	Blackfeet Nation
2	Cherokee-Arapaho Tribe of Oklahoma
3	Chippewa-Cree
4	Fort Peck Tribes
5	Kickapoo Tribe of Kansas
6	Sisseton-Wahpeton Oyate Sioux
7	Sissteon Wahpeton Oyate Wahpekute
8	Santee Sioux Nation of Nebraska
9	MHA Nation
10	Flandreau Santee Sioux Tribe
11	Northern Arapahoe Tribe
12	Standing Rock Sioux Tribe
13	Rosebud Sioux
14	Spirit Lake Tribe
15	Yankton Sioux
16	Iowa Tribe of Kansas and Nebraska
17	Mille Lacs Band of Ojibwe
18	Kaw Tribe
19	Fort Sill Apache
20	Sac and Fox Nation of the Missouri in Kansas and Nebraska
21	Osage Nation of Oklahoma
22	Pawnee Nation of Oklahoma
23	United Keetoowah Band of Cherokee
24	Cherokee Nation
25	Lower Sioux Indian Community
26	Ho-Chunk Nation of Wisconsin
27	Oglala Sioux
28	Forest County Potawatomi
29	Delaware Nation
30	Kickapoo Tribe of Oklahoma
31	Miami Tribe of Oklahoma
32	Tonkawa Tribe
33	Three Affiliated Tribes
34	Pokagon Band of Potawatomi
35	Ponca Tribes of Oklahoma
36	Muscogee Creek Nation
37	Cheyenne-Arapaho Tribe of Oklahoma
38	Northern Cheyenne Tribe

**TABLE 3.11.3-4
List of Group Consultation Meetings with Indian Tribes**

Date	Place	Indian Tribes Present	Agencies Represented
May 30, 2007	Dakota Magic Casino, ND	Sisseton-Wahpeton Oyate Sioux, Yankton Sioux, Sisseton-Wahpeton Wahpekutz, Santee Sioux Nation of Nebraska, Standing Rock Sioux, Spirit Lake Tribe, Fort Peck Tribes, and Mille Lacs Band of Ojibwe, Standing Rock Sioux Tribe, Yankton Sioux	DOS, USFWS, COE, SD SHPO, OK SHPO, ACHP by phone
August 28, 2007	Royal River Casino, Flandreau, SD	Blackfeet Nation, Cheyenne-Arapaho Tribe of OK, Chippewa-Cree, Crow Creek Sioux, Flandreau Santee Sioux Tribe, Fort Peck Tribes, Iowa Tribe of Oklahoma, Lower Sioux Community, Mille Lacs Band of Ojibwe, Northern Arapaho Tribe, Oglala Sioux, Pawnee Nation of Oklahoma, Santee Sioux Tribe of Nebraska, Sisseton-Wahpeton Oyate Sioux, Sisseton-Wahpeton Oyate Wahpekutz, Spirit Lake Tribe, Standing Rock Sioux Tribe, Three Affiliated Tribes	DOS, IL SHPO, SD SHPO, USFWS, BLM
August 29, 2007	Royal River Casino, Flandreau, SD	Blackfeet Nation, Cheyenne-Arapaho Tribe of OK, Chippewa-Cree, Crow Creek Sioux, Flandreau Santee Sioux Tribe, Fort Peck Tribes, Iowa Tribe of Oklahoma, Lower Sioux Community, Mille Lacs Band of Ojibwe, Northern Arapaho Tribe, Oglala Sioux, Pawnee Nation of Oklahoma, Santee Sioux Tribe of Nebraska, Sisseton-Wahpeton Oyate Sioux, Sisseton-Wahpeton Oyate Wahpekutz, Spirit Lake Tribe, Standing Rock Sioux Tribe, Three Affiliated Tribes	DOS, IL SHPO, SD SHPO, BLM, COE
October 22, 2007	Osage Indian Reservation Pawhuska, OK	Andrea Hunter, Osage Nation THPO	DOS
October 23, 2007	Prairie Knights Casino, Fort Yates, ND	Fort Peck Tribes, Iowa Tribe of Kansas and Nebraska, Kickapoo Tribe of Kansas, MHA Nation, Mille Lacs Band of Ojibwe, Northern Arapaho Tribe, Oglala Sioux, Rosebud Sioux Tribe, Sac and Fox of the Missouri in Kansas and Nebraska, Santee Sioux Tribe of Nebraska, Sisseton-Wahpeton Oyate Sioux, Sisseton-Wahpeton Oyate Wahpekutz, Spirit Lake Tribe, Standing Rock Sioux Tribe, Yankton Sioux	DOS, SD SHPO, COE
October 24, 2007	Prairie Knights Casino, Fort Yates, ND	Fort Peck Tribes, Iowa Tribe of Kansas and Nebraska, Kickapoo Tribe of Kansas, MHA Nation, Mille Lacs Band of Ojibwe, Northern Arapaho Tribe, Oglala Sioux, Rosebud Sioux Tribe, Sac and Fox of the Missouri in Kansas and Nebraska, Santee Sioux Tribe of Nebraska, Sisseton-Wahpeton Oyate Sioux, Sisseton-Wahpeton Oyate Wahpekutz, Spirit Lake Tribe, Standing Rock Sioux Tribe, Yankton Sioux	DOS, ACHP Note: The Indian tribes left the meeting early

**TABLE 3.11.3-4
(Continued)**

Date	Place	Indian Tribes Present	Agencies Represented
December 18, 2007	Dept. of State, Washington, DC	Fort Peck Tribe, Kaw Nation of Oklahoma, Mille Lacs Band of Ojibwe, Chippewa-Cree, Osage, Pawnee Nation of Oklahoma, Northern Cheyenne Tribe, Northern Arapaho Tribe, Lower Sioux Indian Community, Kickapoo Tribe of Kansas, Spirit Lake Tribe, Blackfeet Nation, Santee Sioux Tribe of Nebraska, MHA Nation, Iowa Tribe of Kansas and Nebraska	DOS, COE

**TABLE 3.11.3-5
Summary Table of Tribal Concerns Addressed by DOS
during Group Consultation Meetings**

Tribal Action Items	DOS Discussion
May 30, 2007 Consulting Tribes Group Consultation Meeting	
1. Set up another meeting with all project-related information and invite the Canadian First Nations Tribes.	DOS set up another 2-day meeting on August 28–29, 2007, and asked for contacts of Canadian First Nations Tribes.
2. Establish a Tribal Advisory Committee (TAC) with a tribal liaison.	A TAC was formed and maintained until the next tribal consultation meeting in August, when DOS was asked to eliminate the TAC.
3. Outline the protocols for inadvertent discovery of human remains – establish a TAC if necessary.	The Unanticipated Discovery Plans for both artifacts and human remains are official attachments to the Programmatic Agreement (PA).
4. Complete a 100% archaeological survey in North and South Dakota.	Sample field investigations are routinely used in South and North Dakota and are permissible under 36 CFR 800.4(b)(1). Project reports were sent to Indian tribes.
5. Tribal members should be funded to undertake their own survey for traditional cultural properties (TCPs).	In August, DOS asked the Indian tribes if a tribal member would like to lead a study of religious and cultural significant sites, including TCPs. No consensus was reached about who would lead this study, and no tribes informed DOS in writing that they were interested. On November 8, 2007, DOS offered to fund studies of traditional religious and cultural sites, as well as TCPs.
6. Work with the ACHP to resolve issues concerning the 100% survey.	The ACHP officially entered consultation on October 25, 2006. Following a letter from the ACHP on November 8, 2007, requesting clarification of survey methods used in South Dakota, DOS responded in a letter dated November 30, 2007. The letter provided additional justification for the identification and evaluation methods used in South Dakota.

**TABLE 3.11.3-5
(Continued)**

Tribal Action Items	DOS Discussion
August 28–29, 2007 Consulting Tribes Group Consultation Meeting	
1. An integrated, inter-agency historic properties management plan is needed. Who will manage the project in the future?	A PA implemented through 36 CFR 800 represents a more useful planning and consultation tool as the Project proceeds from planning to construction to operation. It governs the process of consultation; inadvertent discoveries; the responsibilities of consulting parties; the avoidance, minimization, and/or mitigation of impacts to historic properties; and the resolution of disagreements. DOS will remain the lead federal agency for the duration of the Project and will be principally responsible for all future findings, determinations, and cultural resources oversight.
2. A TCP/sites of religious and cultural importance survey is needed.	On November 8, 2007, DOS formally offered in writing, to fund a study of religious and cultural significance, including TCPs, to each consulting tribe. Thirty-one tribes who had shown an interest in completing this study were offered this funding. No tribes responded in writing.
3. The TAC should not be continued and face-to-face, government-to-government meetings should be conducted.	The TAC was abandoned in favor of face-to-face, government-to-government meetings.
4. 100% of the project corridor should be surveyed.	“Sample field investigations” are an appropriate means of identifying historic properties as per 36 CFR 800.4(b)(1). The methods for deriving the selective sampling of areas have been further explained and justified in Final EIS Section 3.11.1
5. Canadian tribes should be included in consultation, and impacts to sites in Canada should be considered.	DOS made several attempts to contact members of the Canadian First Nations. No response has been received to date. The federal undertakings within this Project do not occur beyond the territorial boundaries of the United States. DOS therefore is not required to consider the impacts to historic properties in Canada.
6. Tribes should be compensated for participation in any TCP studies.	On November 8, 2007, DOS offered to fund a TCP/sites of religious and cultural importance survey to each consulting tribe.
7. The process for tribal involvement in inadvertent discoveries should be clear.	The roles of tribes in inadvertent discoveries are outlined in the Unanticipated Discoveries Plans that are attached to the PA. The tribes have also been afforded an opportunity to comment on these plans prior to their implementation.
8. If a site cannot be avoided, what is the process for contacting/consulting with tribes?	While the Project has yet to adversely affect a historic property, the process for consultation with tribes if an impact is unavoidable is outlined in the PA.
9. For NEPA consultation on the Draft EIS, the Indian tribes want to be involved and consulted through every step of TCP identification, inadvertent discovery plans, and environmental justice.	The Indian tribes have been consulted at every phase of the Keystone Project. From the initial scoping meetings, through the Draft EIS comment period, and to present, the tribes have been supplied with any information that was requested and have been afforded opportunities to comment on the identification and evaluation methods and efforts, all official determinations and findings, the PA, and the Unanticipated Discoveries Plans.

**TABLE 3.11.3-5
(Continued)**

Tribal Action Items	DOS Discussion
10. The tribes wish to have a tribal liaison appointed by DOS.	DOS is unable to appoint a dedicated tribal liaison at this point. All official consultation with Indian tribes will be conducted through the DOS's Bureau of Oceans and International Environmental and Scientific Affairs, Office of Environmental Policy.
11. DOS needs to address properties that have yet to be surveyed.	Sites that have yet to be identified, due to the area not being included in the sample or because of property owner objection, will be handled either immediately following condemnation, through the Unanticipated Discoveries Plans, as well as through the PA.
12. DOS needs to schedule additional meetings so that tribal concerns can be heard and addressed, and so that the federal government and tribes can gain a better understanding of their respective cultures.	Following the May 30, 2007 meeting, DOS scheduled additional meetings on August 28–29, 2007, October 22–23, 25, 2007, and December 18, 2007.
13. DOS needs to address the applicability of NAGPRA.	NAGPRA applies only to lands that are controlled by federal agencies. Approximately 3 miles of federally owned land are on the proposed Mainline Project corridor and 3.6 miles along the Cushing Extension corridor. In addition to these lands, an easement for a property in Missouri held by the Natural Resources Conservation Service will be considered property "controlled" by the federal government. Prior to construction, determinations regarding the applicability of NAGPRA on lands that are either administered or featuring easements held by the USFWS will be made. These determinations will be shared with all consulting parties and explained in the PA.
October 22, 2007 Government-to-Government Consultation Meeting with Osage Tribe	
1. Discussed the possibilities of a 100% survey.	The PA will ensure that historic properties that were not surveyed are protected through Unanticipated Discoveries Plans and a process for consultation with all consulting parties.
2. Discussed the need for including National Park Service (NPS) legal terminology for standards and methodology accreditation as an appendix in the PA. Even though it is already included in the document, it would be stronger if it was included as an Appendix H.	The NPS guidelines referring to the identification and evaluation of historic properties, as well as the professional standards, are referenced in the PA; DOS will ensure that the Applicant complies with these standards.
3. All staging areas have not been identified, and inaccessible areas have not been surveyed. Dr. Hunter suggested having a monitor to ensure compliance with burial laws in Kansas and Missouri.	Monitors will be used at select locations for the Project, but DOS will ensure that the Applicant complies with all state laws. The relevant state laws governing the treatment of human remains are included as an attachment to the PA.

**TABLE 3.11.3-5
(Continued)**

Tribal Action Items	DOS Discussion
October 23, 2007, Consulting Tribes Group Consultation Meeting	
1. The tribes have not had enough time to review the documentation.	The Draft EIS was released on August 10, and the comment period was completed in September; comments were accepted through November 2007.
2. Tribes do not recognize international boundaries; DOS should be assessing impacts to historic properties abroad.	Canada has its own environment impact assessment process, and historic properties are being considered as a part of that process. DOS cannot impose or enforce U.S. laws in Canada. Furthermore, the federal undertaking does not occur in Canada.
3. There has been a general lack of consultation regarding the methodologies and research designs prepared for the archaeological surveys prepared for South and North Dakota. There should be 100% surveys for those two states.	The PA will ensure that historic properties that were not surveyed are protected through Unanticipated Discoveries Plans and a process for consultation with all consulting parties. All information regarding the survey methodologies and research designs have been forwarded to the Indian tribes for their review and comments.
4. NAGPRA applies to the corridor.	NAGPRA applies only to lands that are controlled by federal agencies. Approximately 3 miles of federally owned land are on the proposed Mainline Project corridor and 3.6 miles along the Cushing Extension corridor.
5. How will the Project avoid historic properties?	Keystone will employ several different methods of avoidance, including reroutes, boring, and neckdowns. DOS is encouraging avoidance of all historic properties.
6. The tribes have requested a tribal liaison at DOS.	DOS is unable to appoint a dedicated tribal liaison at this point. All official consultation with Indian tribes will be conducted through the DOS's Bureau of Oceans and International Environmental and Scientific Affairs, Office of Environmental Policy.
7. Private individuals do not want Keystone to survey their land.	Many property owners do not wish to relinquish certain rights to their land and do not want it to be surveyed as a consequence. Keystone will need to wait for state condemnation procedures to be complete before unsurveyed private property can be surveyed by archaeologists.
8. Will there be tribal monitors?	Monitors will be used at select locations for the Project, but DOS will ensure that the Applicant complies with all state laws. The relevant state laws governing the treatment of human remains are included as an attachment to the PA.
9. We want a 100% survey for sites of religious or cultural significance.	On November 8, 2007, DOS offered to fund studies of traditional religious and cultural sites as well as TCPs. To date, only two tribes have agreed to undertake the survey.
10. Tribes have a right to determine sites eligible for the NRHP.	Ultimately, DOS makes determinations of NRHP eligibility; however, DOS acknowledges that Indian tribes possess special expertise in assessing the eligibility of historic properties that may have religious and cultural significance to them. DOS therefore will take that special knowledge into account.

**TABLE 3.11.3-5
(Continued)**

Tribal Action Items	DOS Discussion
October 24, 2007 Government-to-Government Consultation Meeting with Standing Rock Tribe	
The Standing Rock Tribe left the meeting and gave up their opportunity for their day of government-to-government consultation.	DOS set up the meeting on October 24, 2007, as the day for government-to-government consultation with the Standing Rock Tribe. Per numerous Indian tribes' requests at this meeting, another meeting was held on December 18, 2007. All consulting parties were asked to join the meeting with DOS.
December 18, 2007 Government-to-Government Consultation Meeting with Consulting Tribes	
Seventeen Indian tribes sent representatives to this meeting. Issues discussed included the following questions about permits (what, when, and who): Role of other federal agencies Protocols of tribal consultation, timeline, and tribal resolutions PA, NEPA, and NHPA Experts Tribal socioeconomic impacts (jobs, royalty-trust fund, sacred sites)	DOS listened to the Indian tribes represented at the meeting and to COE staff who attended. DOS answered the questions posed by the Indian tribes to provide further clarification to everyone at the meeting. There appear to be some differences of opinion between some of the Indian tribes and DOS on what constitutes government-to government consultation. The December 18 meeting was the fifth government-to-government Section 106 consultation meeting that was held for the Project. The Indian tribes were invited to meet as a group due to their previous request to organize the meeting in this manner. Tribal elders and tribal chairmen and chairwomen have been invited to all of the consultation meetings. DOS will be responding to some of the questions and requests made by some of the Indian tribal representatives in writing.

3.11.4 Public Involvement

In a manner consistent with 36 CFR 800.2(d)(1-3), DOS has followed ACHP guidance in its efforts to involve the public in the Section 106 process through the NEPA process. As stated previously, DOS placed notices in the Federal Register (including the NOI and the notice of availability for the Draft EIS) and provided copies of the NOI and Draft EIS to local communities within the Project APE. Thirteen public scoping meetings were held along the pipeline corridor and 13 public comment meetings on the Draft EIS were held along the corridor. DOS provided direct mailings to stakeholders through mailing lists that included approximately 6,000 individuals and organizations. The public comment period for the Draft EIS ended on September 24, 2007. In October and November 2007, 13 property owners in South and North Dakota directly affected by the Project requested consulting party status in writing to DOS consistent with 36 CFR 800.3(f)(3) (see Table 3.11.3-6). The property owners also requested that Level III archaeological surveys be conducted on their properties, and six explicitly requested tribal participation in those surveys. Following consultation with the SHPOs of North and South Dakota, DOS will determine whether these property owners should be consulting parties. While the property owners maintain a potential economic interest and are directly affected by the Project, DOS determined that the property owners' requests for surveys of their respective properties and their requests for tribal involvement could be granted under the terms of the PA. On December 12, 2007, DOS submitted a letter to that effect to the property owners.

**TABLE 3.11.3-6
Affected Property Owners Who Requested Consulting Status
Consistent with 36 CFR 800.3(f)(3)**

Property Owner Name	County of Affected Property	State	Request for Consultation?	Request for Level III Archaeological Survey?	Request for Tribal Involvement in Archaeological Survey?
Major Richard Starke	Barnes	North Dakota	Yes	Yes	Yes
Mr. Calvin Heitzman	Hanson	South Dakota	Yes	Yes	No
Mr. Raymond Anderson	Marshall	South Dakota	Yes	Yes	No
Mr. Ed Goss	Butte	South Dakota	Yes	Yes	Yes
Mr. Joe Wurtz	Brown	South Dakota	Yes	Yes	No
Mr. James Bush	Marshall	South Dakota	Yes	Yes	No
Ms. Mary Opsahl	Clark	South Dakota	Yes	Yes	Yes
Ms. Kim Madsen	Clark	South Dakota	Yes	Yes	Yes
Ms. Kim Madsen	Beadle	South Dakota	Yes	Yes	Yes
Mr. Kaley John Mack	Clark	South Dakota	Yes	Yes	Yes
Mr. and Mrs. Delwin & Pam Hofer	Beadle	South Dakota	Yes	Yes	No
Mr. and Mrs. Richard and Charlene Schmit	Miner	South Dakota	Yes	Yes	No
Mr. Kent Moeckly (for Merl Moeckly Company)	Marshall	South Dakota	Yes	Yes	No

Note: Mr. Moeckly's property was surveyed as requested and no historical properties were found.

3.11.5 Unanticipated Discoveries Plans

Keystone, through its cultural resources contractor ARG, submitted operational plans to the SHPOs and DOS for the Project that Keystone will implement in the event that unanticipated cultural materials or human remains are encountered during the construction phase of the Project. The filed REX Project plans also apply to the portion of the Keystone pipeline that is collocated with the REX pipeline. The plans were submitted on March 21, 2006, to the Nebraska and Kansas SHPOs and on April 5, 2006, to the Missouri SHPO as appendices to the filed REX Project historic properties inventory reports (Myers et al. 2006a, 2006b; Schwegman et al. 2006a). In a letter to ARG dated March 29, 2006, the Nebraska SHPO accepted the plan as filed. The Kansas and Missouri SHPOs both requested minor revisions to the filed Unanticipated Discoveries Plans. ARG made the requested changes, and both SHPOs accepted the revised plans. FERC also concurred with the plan in the EIS that was prepared for the REX pipeline under FERC Docket CP06-354-000.

Keystone, through its cultural resources contractors, has filed similar Unanticipated Discoveries Plans with DOS for those portions of the Keystone Mainline Project that are not associated with the REX pipeline and for the Cushing Extension. DOS requested minor changes to the plans filed for the North Dakota and South Dakota portions of the Project. Metcalf made the requested changes and re-filed the plans with DOS and the SHPOs. In a letter to DOS dated March 23, 2007, the South Dakota SHPO requested an additional change to the South Dakota plan. Metcalf met with the South Dakota SHPO on June 15, 2007, to discuss the SHPO comments and has agreed to make the requested changes.

To address concerns regarding the use of Unanticipated Discoveries Plans by Indian tribes, DOS subsequently created additional drafts of the plans on September 12, 2007, and on October 19, 2007, and

supplied them to all consulting parties. After receiving additional comments from consulting parties, DOS worked closely with the ACHP to standardize the content of the plans but within the parameters of the different state laws concerning inadvertent discoveries and the uncovering of human remains. These standardized plans will be provided to all consulting parties for concurrence prior to the issuance of the ROD. Following review by consulting parties, the Unanticipated Discoveries Plans became attachments to the PA

3.11.6 Summary

Keystone has completed historic property surveys for the majority of the proposed Keystone Mainline Project and Cushing Extension in North Dakota, South Dakota, Nebraska, Kansas, Missouri, Illinois, and Oklahoma. Additional historic properties inventories and geomorphological testing remain to be completed for lands where owners refused survey permission and for many Project access roads, additional temporary workspaces, pipeline reroutes, and appurtenant facilities. DOS consultation with Indian tribes is ongoing regarding the definition of TCPs and properties of cultural and religious significance within the Project APE. Consequently, there will be ongoing review of new data regarding the identification of, Project effects to, and mitigation of historic properties after the PA is signed and the ROD is issued. The process of complying with Section 106 of the NHPA is not complete.

A PA (see Appendix R) is being used to conclude the Section 106 review of historic properties. The PA ensures that an appropriate formal process is followed for the determination of TCPs and properties of cultural and religious significance within the Project APE and to complete the remaining cultural resources surveys. Excluding the definition of TCPs and properties of cultural and religious significance, the remaining areas of compliance to be conducted by Keystone in each state are discussed below.

3.11.6.1 North Dakota

Historic properties surveys still need to be conducted for 6.06 miles of the Keystone Mainline Project route in North Dakota. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be inspected. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the North Dakota SHPO and other consulting parties, will then make a determination(s) of eligibility and Project effects.

To date, 49 historic properties have been identified within the Keystone Mainline Project APE in North Dakota. Of these, 25 have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor. The remaining 24 historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

3.11.6.2 South Dakota

Historic properties surveys still need to be conducted for 4.29 miles of the Mainline Project pipeline route in South Dakota. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be

inspected. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the South Dakota SHPO and other consulting parties, will then make a determination(s) of eligibility.

To date, 33 historic properties have been identified within the Keystone Mainline Project APE in South Dakota. Seven of these have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor. The remaining 23 historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

3.11.6.3 Nebraska

Mainline Project

Historic properties surveys still need to be conducted for 15.62 miles of the Mainline Project route in Nebraska. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be inspected; and geoarchaeological testing at 15 locations needs to be completed. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Nebraska SHPO and other consulting parties, will then make a determination(s) of eligibility and Project effects.

To date, 35 historic properties have been identified within the Keystone Mainline Project APE in Nebraska, including locations that are shared with the REX Project. Of these, 28 have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor. The remaining seven historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

Cushing Extension

Historic properties surveys still need to be conducted for 0.34 mile of the Cushing Extension route in Nebraska. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor may need to be inspected. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Nebraska SHPO and other consulting parties, will then make a determination(s) of eligibility and Project effects.

3.11.6.4 Kansas

Mainline Project

Historic properties surveys have been completed at all required portions of the Keystone Mainline Project route in Kansas. However, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor may need to be inspected. Once these locations have been finalized, any unreported areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Kansas SHPO and other consulting parties, will then make a determination(s) of eligibility and determination of Project effects.

To date, 24 historic properties have been identified within the Keystone Mainline Project APE in Kansas, consisting solely of locations that are shared with the REX Project. All 24 sites have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor.

Cushing Extension

Historic properties surveys still need to be conducted for 23.95 miles of the Cushing Extension route in Kansas. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be inspected; and geoarchaeological testing at 32 locations needs to be completed. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Kansas SHPO and other consulting parties, will then make a determination(s) of eligibility and evaluation of Project effects.

To date, 40 historic properties have been identified within the Cushing Extension APE in Kansas. One site has been assessed as an eligible historic property under Criterion D, while 30 sites have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor. The remaining nine historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

3.11.6.5 Missouri

Historic properties surveys still need to be conducted for 19.48 miles of the Keystone Mainline Project route in Missouri. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and any temporary workspace areas outside of the pipeline survey corridor need to be inspected. Once these locations have been finalized and/or survey permission has been obtained, these areas should be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Missouri SHPO and other consulting parties, will then make a determination(s) of eligibility and evaluation of Project effects.

To date, 109 historic properties have been identified within the Keystone Mainline Project APE in Missouri. Of these, 96 have been assessed by DOS as being ineligible for listing in the NRHP or lie outside the Project APE. These 96 resources require no further action unless construction activities are projected to fall outside of the surveyed corridor. DOS has made a determination that two archaeological sites are historic properties that are eligible for listing in the NRHP under Criterion D. Prior to

construction commencing, Keystone will be required to file plans with DOS that detail the avoidance procedures that will be implemented in order to avoid impacts to these sites. If impacts to the historic properties are anticipated, Keystone must submit its mitigation and treatment plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact. The remaining 11 historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

3.11.6.6 Illinois

Historic properties surveys still need to be conducted for 8.04 miles of the Keystone Mainline Project route in Illinois. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be inspected; and geoarchaeological testing at eight locations needs to be completed. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Illinois SHPO and other consulting parties, will then make a determination(s) of eligibility and evaluate Project effects.

To date, 49 historic properties have been identified within the Keystone Mainline Project APE in Illinois. Of these, 43 have been assessed by DOS as being ineligible for listing in the NRHP or lie outside the Project APE. These 43 resources require no further action unless construction activities are projected to fall outside of the surveyed corridor. DOS has made a determination that one archaeological site is a historic property that is eligible for listing in the NRHP under Criterion D. Prior to construction commencing, Keystone will be required to file plans with DOS that detail the avoidance procedures that will be implemented in order to avoid impacts to this site. If impacts to the historic properties are anticipated, Keystone must submit its mitigation and treatment plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact. The remaining five historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

3.11.6.7 Oklahoma (Cushing Extension)

Historic properties surveys still need to be conducted for 23.06 miles of the Cushing Extension route in Oklahoma. In addition, unevaluated reroutes, access roads, warehouse yards, pipe storage yards, compressor stations, and temporary workspaces outside of the pipeline survey corridor need to be inspected; and geoarchaeological testing at seven locations needs to be completed. Once these locations have been finalized and/or survey permission has been obtained, these areas need to be inventoried and the results submitted by Keystone to DOS for review. DOS, in consultation with the Oklahoma SHPO and other consulting parties, will complete the determination(s) of eligibility and evaluate Project effects.

To date, 15 historic properties have been identified within the Cushing Extension APE in Oklahoma. Of these, 12 have been assessed by DOS as being ineligible for listing in the NRHP and require no further action unless construction activities are projected to fall outside of the surveyed corridor. One of the historic properties located within the current Project APE is a National Historic Landmark, listed in the NRHP as the 101 Ranch Historic District. Keystone has informed DOS that it is committed to avoiding this property. Prior to construction commencing, Keystone will be required to file its plans with DOS that

detail the specific avoidance procedures to be implemented to avoid impacts to the site. If an impact to the historic property is still anticipated, Keystone must submit a mitigation plan so that DOS, the SHPO, ACHP, and all relevant consulting parties can evaluate the impact. The remaining two historic properties have been designated as unevaluated properties. As each of these sites has the potential to be a Section 106-defined historic property, they must either be further assessed through National Register evaluation procedures or they must be completely avoided in order to prevent any impact to the cultural remains or features that are present.

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