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In the Matter of:	POWERTECH USA, INC. (Dewey-Burdock In Situ Uranium Recovery Facility)		
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of POWERTECH USA, INC. (Dewey-Burdock In Situ Uranium Recovery Facility)	Docket No. 40-9075-MLA ASLBP No. 10-898-02-MLA-BD01

Hearing Exhibit

Exhibit Number: NRC-214

Exhibit Title: Proposed Draft Cultural Resources Site Survey Methodology

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Proposed Draft Cultural Resources Site Survey Methodology

For the

Dewey Burdock *In-Situ* Uranium Recovery Project in Fall River and Custer Counties, South Dakota

February 2019

PROPOSED DRAFT CULTURAL RESOURCES SITE SURVEY METHODOLOGY

1. Introduction

This document describes the draft methodology that the U.S. Nuclear Regulatory Commission (NRC) staff is proposing as a starting point for discussion with the invited Tribes. This document builds upon information previously shared and discussed with invited Tribes (e.g., the NRC's March 16, 2018 approach (March 2018 Approach; Agencywide Documents Access and Management System [ADAMS] Accession No. ML18074A393) and November 21, 2018, letter (Accession No. ML18325A029) and meetings with the invited Tribes (e.g., June 2018 meetings) to facilitate development of the site survey methodology. This document, however, is not a final document but a working document intended to elicit and encourage an open and collaborative discussion in order to modify the draft site survey methodology, as appropriate, with the Oglala Sioux Tribe and other invited Tribes.

The draft methodology discussed in this document was developed in accordance with: (i) elements and parameters outlined in the NRC staff's March 2018 Approach, which was accepted as reasonable by the Oglala Sioux Tribe, Consolidated Intervenors, and Powertech (USA), Inc., and (ii) the Atomic Safety and Licensing Board's (Board's) October 30, 2018, decision.

The March 2018 Approach incorporated elements that the Oglala Sioux Tribe described in its May 31, 2017, letter to the NRC staff (ADAMS Accession No. ML17152A109) as necessary for accomplishing a comprehensive cultural resource survey. Further, the March 2018 Approach was constructed such that all elements described in the approach would work in harmony rather than in a compartmentalized manner, a design that was based on the Oglala Sioux Tribe's input and recommendations in its May 31, 2017, letter. For example, the preliminary findings of the first phase of the site survey would inform the oral history interviews, and Tribes would have the opportunity to discuss these preliminary findings with Tribal elders and spiritual leaders. Consequently, the success of the second phase of the physical site survey is directly connected to the success of the first phase of the physical site survey and the oral history interviews.

The Board's October 30, 2018 order defined the scope of the discussions and negotiations by explaining that "…the only aspect of the Approach that is open for discussion is the site survey methodology. That is, any tribal negotiating position or proposal should encompass the specific scientific method that would fit into the two-week periods set out in the March 2018 Approach for visiting the physical site, i.e., how the contractor and the Tribe members will walk the site and mark or record located Tribal resources." Accordingly, the methodology proposed in this document works within those parameters.

2. Background

The concept of Tribal Cultural Surveys (TCPs) has received renewed attention in recent years as Federal agencies attempt to incorporate traditional Tribal views in their management decisions with regard to historic preservation. Established methodologies for Tribal survey are rare, and those that do exist are typically relevant only to one specific group and are applicable to only one specific area or project. To our knowledge, no State has a consistent process for the recording and evaluation of TCPs or sacred sites (see also Branam et al. 2010:16).

In addition, TCPs have emerged as a mechanism, although a non-standardized one, to recognize and understand traditional Tribal perspectives and values as they relate to specific

locations. However, there are fundamental differences in how Indian Tribes and non-Tribal individuals view the world around them. To Indian Tribes, "everything is sacred" and all sites are part of a larger whole without defined boundaries (Nabokov 2006; Ollendorf and Anderson 2004), whereas non-Tribal individuals delimit the designation of sacred place to specific locations identified on a particular landscape, usually identified by physical remains associated with sacred activities (Branam et al. 2010), such as a church, a shrine, or a cemetery.

These fundamentally different world views make it difficult to square non-Tribal American (Federal) standards and criteria with Tribal perspectives that do not fit comfortably into those Federal standards and criteria. Therefore, the goal of this document is to develop a methodology that both describes the invited Tribes' sacred sites within the context of the all-encompassing sacredness of everything (*wakąn),* but also in a scientifically rigorous manner. In effect, this is a cross-cultural effort to make Tribal sacredness applicable and understandable to non-Tribal individuals.

TCPs are inherently locations of significance to an indigenous group, and significance is typically assigned by those individual groups. The implementation of a tribal cultural resource survey (or TCP Survey), therefore, is an attempt to facilitate the identification of TCPs using the Tribe's own traditional knowledge and expertise. In this case, the Dewey-Burdock ISR project area is geographically located in the area of the Black Hills of South Dakota, a landscape of significance to the Lakota and other federally recognized Tribes. The following draft methodology therefore reconciles traditional Tribal perspectives and values with existing Federal guidance – primarily National Register of Historic Places (NRHP) eligibility criteria – with an emphasis on Tribal self-determination and participation. Principles fundamental to this approach include: (1) TCPs often are not identified as such during the course of archaeological, historical, and architectural surveys, (2) Lakota Tribal members with traditional knowledge are the best authorities to identify, describe, and interpret TCPs, and (3) taxonomies used in Tribal surveys should accurately reflect Lakota views on site/feature nomenclature, purpose, and physical characteristics.

3. Concepts, Terms, and Parameters

3.1. Concepts and Terms

To facilitate our discussions, the NRC staff and contractor have provided further clarity on following bolded terms.

First is the concept that Tribal Cultural Survey methods should be specifically tailored to each Tribe and **scientifically** based. The scientific process requires the use of defined and articulated instruments to test a hypothesis or series of hypotheses by gathering observable, empirical evidence, and it calls for rigorous adherence to standards and practices accepted by scientific disciplines, such that results are measurable and replicable. But Tribal surveys might run counter to traditional scientific practices because, as discussed in Section 2.0 above, there are fundamental differences in how Indian Tribes and non-Tribal individuals view the world around them. Tribal surveys are intended to document what Tribal members *believe* to be significant, but these observations might not be measurable, replicable, or even observable to non-Tribal individuals.

A second matter involves the existing Federal standards for determining TCP eligibility (see Title 36 of the *Code of Federal Regulations* (36 CFR) Part 60, "National Register of Historic Places.)

As stated in 36 CFR § 60.4, "Criteria for Evaluation," a TCP is **eligible** for inclusion on the NRHP where:

> [T]he quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> (A) that are associated with events that have made a significant contribution to broad patterns of U.S. history, or
> (B) that are associated with the lives of significant persons in our nation's past, or
> (C) that embody distinctive characteristics of type, period, or method of construction, or represents the work of a master, or represents high artistic values, or that represent significant and distinguishable entity whose individual components may lack individual distinction, or
> (D) that have yielded or may be likely to yield information important in history or prehistory.

Thus, eligibility criteria focus on addressing places with physical remains, such as historic architecture and archaeological sites. But TCPs are often places of traditional cultural importance where little physical evidence might remain that can be associated with the activities that have occurred or will occur there.

Therefore, the draft **methodology** described in this document attempts to harmonize these issues by applying a scientific methodology to gather objective information that is both measurable and replicable, while also providing opportunities for the Tribe to participate in the survey and self-determine the sites of significance.

The most applicable scientific methodology relevant to Lakota TCPs is that developed by Dr. Sebastian LeBeau (2009), an enrolled member of the Cheyenne River Sioux Tribe. This methodology was developed by a Lakota, in consultation with Lakota Tribal elders and spiritual leaders, specifically for Lakota TCPs. Further, this methodology has been accepted and implemented by at least one other Federal agency (U.S. Army Corps of Engineers). As such, the NRC staff and contractor consider it acceptable for this particular project, but only so far as it applies to the Lakota. The draft methodology also draws from other methodologies, as appropriate, such as Ball et al. 2015. Section 5.0 provides additional information regarding the methodologies relied upon to formulate the draft methodology in this document. Appendix A provides additional information about the other methodologies reviewed.

This draft methodology also seeks to frame objective information gathered during the course of Tribal surveys within the context of existing Federal eligibility standards to ensure that locations considered by the Lakota and invited Tribes to be TCPs are, in fact, recognized as eligible for NRHP listing under one or more existing criteria. Specifically, LeBeau's Lakota-specific TCP site forms can be modified to elicit information on (1) how individual TCP locations relate to broader patterns of Lakota history, (2) whether TCP locations are associated with Lakota individuals of importance, (3) how constructed or modified Lakota features represent significant and distinguishable entities, even though they might lack individual distinction, and (4) how TCP locations might contribute to better understandings of Lakota history and prehistory. This process allows Lakota self-determination of a property's significance while placing the Tribe's assigned significance within an existing eligibility framework.

Three types of **traditional properties** are relevant to this discussion.

(i) A **traditional cultural landscape** is "any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them to that place. A tribal cultural landscape is determined by and known to a culturally related group of indigenous people with relationships to that place" (Ball et al. 2015:5). This definition is especially relevant to the Black Hills, a landscape that Lakota revere as *He Sapa*, or "the heart of everything that is" (Corbin 2001). As such, the Black Hills landscape it is infinitely sacred to the Lakota people (among others),and has shaped and defined their cultural and spiritual identity.

Because Native concepts of place and sacredness are holistic, Stapp and Burney (2002:152-157) suggested that cultural resources can only be understood within the context of "cultural landscapes," or all-inclusive landscapes composed of smaller interconnected places.

The U.S. Department of the Interior (DOI), as a matter of policy, is moving towards a landscape approach to cultural resource management to "more fully recognize natural and cultural resource conditions and trends, natural and human influences, and opportunities for resource preservation, conservation, restoration, and development" (Odess 2016:2; see also Ball et al. 2015). The DOI, however, has federal land management responsibilities, which the NRC, as an independent regulatory agency, does not. The Advisory Council on Historic Preservation (ACHP), through its "Native American Cultural Landscapes Action Plan," dated November 23, 2011 (ACHP 2011), has recognized the importance of traditional landscapes and the need to develop "tools to assist all participants in the recognition and consideration of Native American traditional cultural landscapes" (ACHP 2011:2; see also ACHP 2012 and ACHP 2016).

(ii) The U.S. National Park Service (NPS) Bulletin 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties," defines a **traditional cultural property**[1] (TCP) as a location that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (1) are rooted in that community's history, and (2) are important in maintaining the continuing cultural identity of the community. Bulletin 38 further expands the definition to include "a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world," and "a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional rules of practice" (Parker and King 1990:1).

This definition was augmented in 1996 by President William Jefferson Clinton, who described TCPs as "any specific, discrete, narrowly delineated location … that is identified by an Indian tribe, or individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion, provided that the tribe or

[1] There is a clear trend in the scholarly and government literature to refer to these as Traditional Cultural Places rather than as Traditional Cultural Properties. The latter term is retained because it is used in Federal guidance.

appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site" (Executive Order 13007).

Indian Tribes themselves should define and determine what is a TCP based on the significance assigned by a specific group or community. LeBeau (2009:9) stressed this theme, explaining that the Lakota are the most qualified to locate, identify, interpret, evaluate, and document Lakota TCPs, and "Since they are responsible for making a place culturally significant, they are also the ones who are best capable of communicating cross-culturally the actual significance of their TCPs."

This draft methodology recognizes and acknowledges a Lakota definition of TCPs as "those places we identify as *ohépi okítaŋiŋ* manifesting special places. An *ohé okítaŋiŋ* is any location in the landscape which our people ascribe cultural significance to" (LeBeau 2009:42).

(iii) A **TCP site** is a subset of a TCP. Whereas a TCP is a location on the landscape, regardless of whether it is natural, made by humans, or modified by humans, a TCP Site is the tangible evidence that occupies that space that can be readily seen and identified. Such sites are often recognizable to individuals that are not Lakota and can be commonly referred to by overly-simplistic popular names such as medicine wheel, four-winds altars, and sweat lodges. Specific site types used in this methodology are discussed in Table 1 and Table 2 (attached).

(iv) **Traditional cultural knowledge**, sometimes referred to as Traditional Ecological Knowledge, is the "cumulative body of knowledge, practice, and belief evolving by adaptive processes and handed down through generations by cultural transmission" (U.S. Department of Agriculture 2011). More simply put, it is the "knowledge base acquired by indigenous and local peoples over hundreds of years through direct experience and contact with the environment" (Anderson 2015:1). The Lakota view the land itself as the repository of traditional knowledge, and the agency of natural features in the landscape and certain physical characteristics they possess (scattered stone formations, natural depressions, flowering plants, tree species, and their growth forms) can communicate *wóslolyaṗi* (knowledge) of *wicócajeyateṗi (*traditions) (LeBeau 2009:89).

(v) **Traditional cultural significance** is the importance assigned to a traditional cultural landscape, TCP, or TCP Site by the Indian Tribes themselves. To the Lakota, these locations are symbolic triggers causing the individual viewing it to *waciŋkiksuya (*remember all things well) as *he ótaŋiŋ okíciyak aupi* (tradition manifests itself). The individual thus evokes powerful *wakíksuyaṗi (*memories) of *wicóahope* (custom) which reinforces a sense and awareness of his or her cultural and ethnic identity. The measure of significance results from the ability to name and describe the significant cultural activity that was or would be performed at that location (LeBeau 2009:106).

[*This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding concepts and terms are welcomed and encouraged.]*

3.2. Parameters

The parameters for the draft methodology, which have been established throughout the proceeding with the parties and the Atomic Safety and Licensing Board Panel, are discussed below.

Area of Potential Effects or APE: areas to be surveyed and examined within the Dewey-Burdock ISR license area

License Area: 4,282 ha (10,580 ac)

Length of the Survey: two non-contiguous, two-week periods. In other words, the field survey will be conducted in two phases, and each phase will be two weeks in length.

Participants:

- Invited Tribes who did not participate in the April 2013 tribal field survey of the Dewey-Burdock ISR Project
- NRC staff and Senior Technical Reviewer Jerry Spangler (SC&A, NRC contractor)
- Powertech (USA), Inc. staff (on a limited basis)

Reimbursement and Honorarium:

- Lodging and per diem: Powertech will provide $136.00 per day for lodging and $59.00 per day for meals and incidental expenses for each tribal representative.
- Mileage: Powertech will pay mileage at $0.535 per mile for one round trip for each phase of the field survey (two phases are included in the NRC Staff approach) for up to two vehicles for each invited Tribe from the tribal representatives' point of origin to Edgemont, South Dakota.
- Powertech will provide a $10,000 honorarium to each participating Tribe. This honorarium may be used at each Tribe's discretion.

4. Objectives and Goals of Discussions

Given the context described above, the primary objective of our discussions is to develop the methodology to be used at the pedestrian tribal cultural site survey at the Dewey-Burdock ISR project in Fall River and Custer Counties, SD, using an open and collaborative process with the participating Tribes that recognizes Tribal sovereignty and self-determination (cf. Ball et al. 2015; Smith 2012). The methodology must be consistent with the parameters outlined in Section 3.2 above, which were established in the March 2018 Approach and the October 30, 2018, Board Order, which stated that "…the only aspect of the Approach that is open for discussion is the site survey methodology. That is, any tribal negotiating position or proposal should encompass the specific scientific method that would fit into the two-week periods set out in the March 2018 Approach for visiting the physical site, i.e., how the contractor and the Tribe members will walk the site and mark or record located Tribal resources."

The NRC staff awarded a contract to SC&A, Inc. to facilitate implementation of the March 2018 Approach. The contractor's role is to work with the participating Tribes to develop a survey methodology and conduct the pedestrian site survey. As explained above, the expertise of the Tribes is essential in the development and implementation of a meaningful and comprehensive tribal cultural survey. The NRC staff recognizes that Tribes have the unique expertise to identify, interpret, and ascribe significance to resources, and there is no substitution for the Tribes' expertise. The NRC staff, accordingly, hired a contractor experienced in planning, performing, and reporting surveys to assist in the developing and implementing the survey methodology and survey report.

For the purposes of this discussion, a Tribal Cultural Survey is a pedestrian survey conducted with Tribal members with traditional knowledge who assign their own traditional cultural significance to traditional landscapes, properties, and sites. The goal of our discussions is to establish and document systematic methods to be used for conducting a pedestrian tribal cultural survey that are responsive to the following principles:

- Tribal self-determination of needs and priorities
- Articulation of the ways to proceed
- Consistent collaboration with the invited Tribes before, during, and following the Tribal survey
- Tribal self-determination as to what information will be publicly available

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the invited Tribes' objectives is welcomed and encouraged.]

5. Cultural Resource Survey Methodologies Considered

Although rare and a few have been subjected to rigorous peer review, established methodologies and approaches for Tribal surveys considered here have elements that can be valuable in developing the survey methodology for the Dewey-Burdock ISR project. Previous methodologies have typically employed ethnographic approaches or landscape theory or some combination of the two. With the exception of LeBeau (2009) and Ball et al. (2015), no other existing methodology was identified in which the methods were developed by the Tribes, the methods were implemented by the Tribes, and the results were interpreted by the Tribes. To arrive at a more thorough understanding of the various approaches used by others, however, different models and approaches were reviewed and are summarized in Appendix A.

5.1. The LeBeau Model

Dr. Sebastian LeBeau's model (LeBeau 2009) is a predictive model that offers a detailed approach to identifying Lakota TCPs on the landscape and their significance within the context of Lakota world views, values, history, and tradition. In effect, the model is a guide to help non-Lakotans see the landscape and TCPs found there as the Lakota people see them. He believes that Lakota TCPs can be assigned to one of two broad site types: places where spirits live and places where Lakota go to pray. The latter are further organized into places where Lakota go to pray, places where Lakota go to make offerings, and places where Lakota go to gather natural resources, all of which involve prayer and ritual (see Table 1). This is the only model that offers detailed instruction on how Lakota TCP Sites can be recognized on the landscape (see Table 2). As mentioned above, this model is directly applicable to the Dewey-Burdock ISR project because it is specific to the Lakota, it was developed by a Lakota in consultation with Lakota spiritual leaders, Tribal elders, and historians, and it is intended to apply exclusively to Lakota TCPs. The model is also well-suited to address both issues discussed above in Section 3.

- The model allows for invited Tribes themselves to identify, describe, and assign significance to TCPs based on Lakota values.

- The model allows for the organization of the data such that significance can be understood by individuals that are not Lakota who ultimately make NRHP eligibility determinations.

5.2. Bureau of Ocean Energy Management-National Oceanic and Atmospheric Administration Model (Ball et al. 2015)

This landscape-based approach, developed by the Bureau of Ocean Energy Management and the National Oceanic and Atmospheric Administration, emphasizes the integration of indigenous world views of the inter-connectedness of all resources into Federal landscape- and ecosystem-level planning and management, recognizing that Tribal knowledge is a valid component of Federal planning. The model offers detailed recommended guidance to Federal agencies on the early involvement of Tribes before project planning; Tribal self-determination and sovereignty; and data collection, synthesis, and presentation. Most relevant to this discussion are the specific steps Federal agencies should take to implement the model, outlined in Section 6 below.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, discussions are welcomed and encouraged.]

6. Cultural Resource Survey Methodology Implementation

The discussion that follows builds upon the methodology discussed in the NRC's November 21, 2018, letter to the Oglala Sioux Tribe, the LeBeau model described above, and certain aspects that the Tribe identified in their June 15, 2018, cultural resource survey proposal. It also incorporates aspects of the Ball et al. (2015) Traditional Cultural Landscape model, mentioned in Section 5.2, which offers detailed processual context accepted and implemented by other Federal agencies and emphasizes the role of Tribal authorities and experts in the planning and implementation phase.

The proposed methodology articulated in this document is intended be a framework for collaborative discussion. The invited Tribes' input will inform the methods that will be implemented. Ball et al. (2015:16) have outlined several steps that are relevant to this process, summarized in Sections 6.1 through 6.4 below.

6.1. Conceptualization

In collaboration, the group will A) establish the objective of the survey, B) determine the types of information to be collected and analyzed, C) establish formats for recording and processing the information, and D) discuss protection of sensitive information.

A. Identification of a survey objective. As a starting point, the NRC's objective is to identify sites of religious and cultural significance to the invited Tribes at the Dewey-Burdock ISR project. Equally important is the articulated objective in the Oglala Sioux Tribe's June 15, 2018, cultural resource survey proposal to "preserve and revitalize our Lakota culture through our Grass Roots Communities. These communities are working actively to bring back our traditional way of life by teaching our *wakanyeja* (children) our culture and traditional way of life. Our children are the ones who will bring back our *Tiyospaye* systems and language, which our ancestors sacrificed their lives for."

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the invited Tribes' objectives is welcomed and encouraged as discussed in Section 4.0 of this document.]

B. Types of information to be collected and analyzed. The NRC staff has considered some of the types of information that the Oglala Sioux Tribe identified in the June 15, 2018, proposal. The types of information sought by the Oglala Sioux Tribe in that proposal generally include "locations of TCPs which have been overlooked in past archaeological surveys" and the location of "view sheds and landscapes where TCPs are present [that] have the potential to be adversely effected."

However, the June 15 proposal suggests that the types of information to be gathered will be determined at a future point in time and only after Oglala spiritual leaders and keepers of the sacred ceremonies (*wicasa wakan*) seek guidance from the ancestors. Given the survey parameters discussed in Section 3.2 above, particularly the two two-week windows for the survey, it is important to establish the types of information to be collected as part of the methodology, prior to the commencement of the survey. The NRC will not dictate the information to be collected, but the information collected should be of a nature that properly informs the NRC of the TCP locations, physical characteristics, and significance. This information should be framed in a manner that is understandable to individuals that are non-Tribal individuals. The information gathered will assist NRC decision making, and at a minimum it should include the following:

- the exact location of TCPs (geospatial data)
- descriptions of the TCP sufficient to allow non-Tribal members to recognize them, in order to make relevant NEPA decisions
- clear articulation of why the TCP is significant

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the information to be collected and analyzed is welcomed and encouraged.]

C. Formats for recording and processing TCP information. Although the NRC has no role in dictating the format to be used to collect data relevant to TCPs, it does have an interest in ensuring that the format gathers sufficient objective and consistent information to allow informed decision making. To date, the Oglala Sioux Tribe has not offered a preferred format that could be used during a Tribal Cultural Survey. So as a starting point, the NRC staff proposes to use LeBeau's cross-cultural format and definitions therein (2009:104-110), which can be modified to address the group's stated objectives. In brief, LeBeau's format, which was designed to collect data on Lakota TCPs in a manner understandable to individuals that are not Lakota, includes the following data:

- ***Site Type***: The Lakota (Tribal) name of the cultural activity that occurred or could occur at that location

- ***Activity***: The type of cultural activity that occurred or could occur at that location, such as a place of prayer, a place to make offerings, or a place to gather natural resources.

- ***Intrinsic Nature***: Identifies the quality of power (*ton*) of the TCP

- ***Location***: Describes typical locations where this type of TCP can be found in the landscape

- ***Natural Site Features***: Describes natural features found at the TCP

- ***Physical Attributes***: Describes the physical components of the TCP (how the site can be recognized)

- ***Construction***: Describes how the TCP was constructed (if it is actually a constructed feature)

- ***Investigation***: Describes how the TCP was investigated

- ***Associated Physical Features***: Describes associated features generally located within view of the TCP

- ***Cultural Reference Section***: Provides pertinent additional information about the activity that occurred or could occur here. This includes Tribal Knowledge offered by Oglala Sioux Tribe spiritual leaders and Tribal elders, and the names of the individual(s) providing the information, as appropriate.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the information to be collected and analyzed is welcomed and encouraged.]

D. Protection of sensitive information. An objective of a Tribal Cultural Survey is to identify TCPs of significance to the invited Tribes *and* to supplement the analysis in the final supplemental environmental impact statement, a publicly available document. The Oglala Sioux Tribe indicated in its June 15, 2018, proposal that it retains ownership of all data collected during the Tribal Cultural Survey. The invited Tribes and the NRC will work closely to determine what information is appropriate to be disclosed in a public format in a manner that is respectful to the Tribes.

The NRC staff will protect sensitive information associated with the Tribal field survey and oral history interviews consistent with applicable federal laws and regulations. The protective order that governs this proceeding also provides appropriate protections. The NRC staff remains willing to consider the Tribe's input on the NRC staff's proposed amendment to the protective order or on modifications the Tribe wishes to develop and share.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the information to be collected and analyzed is welcomed and encouraged.]

6.2. Data Acquisition

Data standards and attributes, or the methods used to ensure data uniformity and quality, will be developed in collaboration with the invited Tribes. The NRC staff also emphasizes that the gathered information must be structured in a manner that is understandable to the NRC staff and facilitates informed decision making and accurate recommendations as to site eligibility.

The Tribes have indicated their wishes that any methodology be scientific in approach. As discussed in Section 3.1 above, the scientific method uses defined and articulated instruments to test a hypothesis or series of hypotheses by gathering observable, empirical evidence so that results are measurable and replicable. Uniformity in definitions and data collection process ensures replicability. This draft methodology focuses on the LeBeau (2009) model because he provides detailed definitions of Lakota TCP Sites and their observable characteristics, and he provides the specific means whereby they can be identified, documented, and evaluated based on empirical evidence at a particular location, but within the context of Lakota values, tradition, and world view (see Tables 1 and 2 attached).

LeBeau's approach can be modified during our discussions to be consistent with the Oglala Sioux Tribe's own objectives and perceptions of observable phenomena, keeping in mind that a scientifically sound methodology must include unequivocal definitions, a uniform process for documenting and describing observable features, and consistency in how significance is measured or quantified. LeBeau's model is the only one we identified that is specific to the Lakota and meets all three of these criteria for a scientific study.

Further, in its June 15, 2018, proposal, the Oglala Sioux Tribe indicated that TCPs need to be recorded and evaluated for NRHP from a Lakota cultural perspective. To that end, the NRC staff recommends that the instrument used to gather Lakota Tribal Knowledge also include questions to elicit specific information relevant to NRHP eligibility such as:

(1) Is this location associated with *events* that have made significant contributions to the invited Tribe's history?

(2) Is this location associated with *persons* significant to invited Tribe's history?

(3) Is this location distinct or characteristic of the invited Tribe's sites elsewhere that can be recognized by how it was constructed or is characteristic of a period of time? If not individually distinct, how is it part of a larger cultural landscape that is distinct?

(4) Can this location contribute information that can be used by the invited Tribe's spiritual leaders, Tribal elders, and Tribal historians to better understand invited Tribe's history or prehistory?

The NRC staff recognizes that a Tribal Cultural Survey by its very nature is intended to gather Traditional Knowledge that is considered proprietary and sensitive by the Tribes, and NRC will work with the Tribes to determine what information is appropriate to disclose to the public.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the data acquisition is welcomed and encouraged.]

6.3. Geo-references

This step involves the mapping of the Traditional Cultural Landscape and TCPs using GIS software to identify all resources of potential significance in the project area. Specific to the Dewey-Burdock ISR project area, these could include the following, to the extent possible:

- individual TCP locations identified by the Tribes within the context of the interrelatedness of those locations on the landscape
- TCP locations identified by the Tribes as they relate to natural features in the project area
- view spreads relevant to each TCP location
- spatial distribution of culturally significant natural resources identified by the Tribes, such as sacred or medicinal plants, fossil beds, and stone procurement locations
- integration of the above datasets (shape files) into a holistic view of the invited Tribe's land-use values.

Geo-spatial analysis can assist individuals that are not Tribal members to visual the cultural importance of the entire landscape and how individual locations are connected to each other and to natural features found on that landscape. It can also assist the NRC staff to identify and avoid culturally sensitive areas in their environmental determinations.

6.4. Synthesis

This analytical step links information between place, activities, traditional knowledge, context, and ultimately, cultural understanding. After both of the two-week surveys have been completed, this step in the process offers the Tribes an opportunity to provide input to NRC staff and contractor. It culminates in the development of a synthesized report that incorporates three elements:

(1) Field observations made by the invited Tribe's spiritual leaders, Tribal elders, and others that describe the nature, extent, and significance of individual TCPs and their surrounding natural features.

(2) Oral interviews with invited Tribe's spiritual leaders, Tribal elders, and others that offer traditional perspectives of TCPs within the Dewey-Burdock ISR project area and how they are related to the broader cultural landscape.

(3) Geo-spatial mapping of cultural and natural resources through which invited Tribes and public can visualize the interrelatedness of the TCPs to each other and their natural environment.

The NRC contractor will work in coordination with the invited Tribes to prepare a report that accurately reflects the invited Tribes' traditions and values, and the significance ascribed to the TCPs by the invited Tribes themselves. This survey report can include the following information as discussed in the March 2018 Approach:

- an identifying label for each identified site of historic, cultural, or religious significance to the Tribes (for example, OST-1, OST-2, etc.);
- a discussion of the fieldwork completed, including the survey methodology and license areas examined;
- a brief description of each individual site recorded;
- a National Register of Historic Places (NRHP) evaluation of each site recorded, including recommendations concerning the potential NRHP eligibility and basis;

- potential impacts to identified sites; and
- recommendations for appropriate avoidance buffers or possible mitigation measures, should any of the sites be impacted by the project.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding the synthesized report are welcomed and encouraged.]

7. Oral History Interviews

The purpose of the oral history interviews will be to supplement the pedestrian site survey. Oral history interviews with Tribal Elders will be narrowly focused on the immediate region surrounding the project area and would serve to inform the results the site survey. The intent is to better understand and document the Tribal history of the Tribe to these ancestral lands where the Dewey-Burdock ISR project will be constructed, how the TCPs are related to the broader cultural landscape, and to get this understanding directly from the Tribes. The sole purpose of these interviews with Tribal Elders is to gather information about the Tribe's history, culture, perspective, and significance in the surrounding region of the proposed project's location.

In its June 15, 2018, proposal, the Oglala Sioux Tribe has indicated that oral history interviews need to be conducted by Oglala Sioux Tribe Cultural Affairs and Historic Preservation Office and the designated cultural survey team. The Tribe further stated that the oral interviews need to be conducted throughout the duration of the site visits and the day after the site visits have concluded. However, in order to ensure that these interviews fit within the parameters discussed in Section 3.2, the NRC has proposed that the oral history interviews be conducted in collaboration between the Tribe and the NRC contractor after the first phase of the pedestrian site survey to inform and focus the oral history interviews and provide the appropriate space for these. Phase 2 of the site survey would be informed by the preliminary findings of Phase 1 and by the information gathered during the oral history interviews.

In collaboration with the invited Tribes, the NRC contractor will develop questions to guide the interviews. No audio recordings will be used. The contractor will take notes, which can be withheld and returned to the Tribe upon their request. Those notes will be used to develop a summary that can be made publicly available. The summary will be shared with the Tribes in draft form for review and comment, and finalized after considering the Tribe's input.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input regarding, for example, interview questions, are welcomed and encouraged.]

8. Implementation Schedule

Phase 1: April 1 – 12, 2019

Day 1

- Safety Briefings

  On the first day of the site survey the licensee, Powertech, will provide a safety briefing to the survey participants. Each participating tribal representative would be expected to sign a release of liability.

- Maps

  Distribution of the project area maps showing the locations of known tribal cultural resources and proposed construction and operation areas.

- Site Forms

  Distribution of site forms to be used for recording.

- Windshield Tour

  The physical site survey would start with a "windshield tour" of the entire site to familiarize the Tribes with the Dewey-Burdock ISR site, the landscape, and scope of the proposed construction and operation activities.

Day 2 – Day 5

The NRC staff has proposed traversing the site based on the following priorities and needs:

- Access to the entire project area will be provided. However, in an effort to carry out an effective and efficient field survey within two-week periods, Tribal representatives are encouraged to focus their field survey efforts on those portions of the license area that would potentially be disturbed by project construction and operations (i.e., based on the likelihood of potential effects). It is the NRC staff's intent, to the extent possible, to identify potential areas to be examined in coordination with the invited Tribes and NRC contractor prior to the field survey.
    - Revisit known burial sites and tribal cultural resources (estimated four or five per day) to fully document them
    - Project areas surrounding the previously identified resources
    - Areas proposed for ground disturbance (direct impact) not already surveyed
    - Additional areas of interest to the participating Tribes
- The project areas will be traversed using transects, to the extent possible. The length and use of the transects can be discussed upon arrival to the project area to be examined and revised, as necessary, based on factors such as terrain, visibility, landscape, and topographical features.
- Powertech representatives will escort tribal representatives to the areas to be surveyed but, to the extent possible, they will not directly accompany the tribal representatives during their examination of the areas (if requested).

Day 6

- Opportunity to review accomplishments and findings as a group.
- Opportunity to make adjustments to the methodology as a group, if necessary.

- Continue to traverse the project area.

Day 7- 11

- Continue to traverse the project area.
- The group can also decide whether a break should be taken between day 7 and day 11.

Day 12

- Conclusion of first phase of the pedestrian site survey.
- Discuss next steps
    - Development of the draft report documenting the results and findings of the first phase of the field survey, which will be shared with the participating Tribes for their review and comment.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input is welcomed and encouraged.]

Oral History Interviews: May 20 - 31, 2019

Conduct oral history interviews using the results and findings of the first phase of the field survey.

Phase 2: June 17-28, 2019

Day 1

- Safety Briefings

  On the first day of the site survey the licensee, Powertech, will provide a safety briefing to the survey participants. Each participating tribal representative would be expected to sign a release of liability.

- Maps

  Distribution of the project area maps showing the locations of known tribal cultural resources and proposed construction and operation areas.

- Site Forms

  Distribution of site forms to be used for recording.

- Preliminary Results and Findings from First Phase

Distribute preliminary results and findings from first phase of the pedestrian site survey and oral history interviews, and an opportunity to make adjustments to the methodology as a group, if necessary.

Day 2-11

- Continue to traverse the project area, based on proposed priorities and needs stated above and as adjusted based on the preliminary findings of the first phase of the site survey and oral history interviews.
- The group can also decide whether a break should be taken between day 7 and day 11.

Day 12

- Conclusion of second phase of the pedestrian site survey.
- Discuss next steps
    - Development of the draft survey report documenting the results and findings of field survey, which will be shared with the participating Tribes for their review and comment.

[This is a working document to be developed in collaboration with the Tribes and based on the Tribes self-determination. Accordingly, additional input is welcomed and encouraged.]

Appendix A – Other Cultural Resource Survey Methodologies Reviewed

Below are the summaries of other methodologies reviewed in consideration of the proposed draft site survey methodology.

1. North Dakota Department of Transportation Approach

This approach requires cultural resource specialists to include a Tribal Traditional Cultural Specialist (TCS) into their field inventory efforts at the beginning of the field inventories specifically to identify stone features or other cultural resources of importance to the Tribes. Sites are identified and documented in consultation with a Tribal member with particular knowledge of the identified feature, and eligibility evaluations are conducted with Tribal involvement (see North Dakota Department of Transportation, 2017). This approach lacks specificity into how Tribal surveys should be conducted, but the involvement of Tribal specialists in the initial cultural resource inventory is noteworthy.

2. Southern Nevada Model

This geographic information system (GIS)-based model uses field-interview forms to identify resources, places, and landscapes of cultural significance. Place-specific forms are used to record site history, uses, and natural resources; these forms are intended to elicit detailed ethnographic information on material, behavioral, and spiritual connections between resources and places. This is based on a "conceptual organization of both features and places that are linked to the traditional practices, values, beliefs, history, and ethnic identity of a community" (Toupal et al. 2001:172). Methods involved having Indian Tribes evaluate the sites themselves, furnishing as much background materials as possible to assist in the evaluation, providing a standardized instrument for data collections that reflected the Indian Tribe's informant's concerns and areas of knowledge, allowing the informants to speak freely through use of open-ended response opportunities, and developing a data-recording process that captured all comments and recommendations. Use of a GIS database allows for visualization of the interrelated nature of site types, natural resources, and settlement locations (e.g., sites are not found in isolation, but are connected to one another and to natural resources that comprise the cultural landscape). The model has been applied successfully to non-Tribal cultural groups as well.

3. The Stoffle Method

The Stoffle approach employs the term "cultural landscape" to convey the manner in which Native peoples conceptualize their holistic view of the land and its cultural resources (Stoffle et al. 2000). Such a viewpoint encompasses the land, its natural components, places touched by pre-human spirits, and objects left by earlier Indian people. This concept of cultural landscapes reflects the full range of human activities, all of which are perceived as being a part of life and therefore culturally significant. Stoffle et al. (2000) identifies six categories of indigenous cultural landscapes: (1) eventscapes, (2) holy landscapes, (3) storyscapes, (4) regional landscapes, (5) ecoscapes, and (6) landmarks.

4. Solomon Islands Model

This conservation-oriented model emphasizes the complex interactions that occur between ideas, social structure, and physical features, and the importance of baseline ecological data to understand human-environmental systems and human responses to environmental change.

The model's three-step approach included (1) meetings and workshops with indigenous people to develop a better understanding of the cultural landscape and how they are valued, (2) allowing the community to develop its own conservation program constructed around their own knowledge base, and (3) integration of 87 different ecosystem variables into a cultural landscape map that accommodates community values and accomplishes preservation objectives. The communities that applied this model overwhelming assigned greater conservation priority to resources that were engrained in their cultural heritage (Walter and Hamilton 2014).

5. Cultural Values Model

Stephenson (2008) has proposed a Cultural Values Model that emphasizes that all landscapes are valued in multiple ways by those closely associated with them. In brief, the common theme is that self-identity and group identity are intimately connected with the events and history associated with a tangible environment. Cultural values are not only attributes considered to be cultural, such as stories and oral traditions, but also natural attributes that are valued because meaning, significance, and interpretations of a landscape are generated by human relationships with and within landscapes. Stephenson's model, based on her research in New Zealand, is rooted in landscape theory, although it draws from ethnographic approaches targeting stories, traditions, genealogies, naming practices, and a range of indigenous values to measure the relative contributions of landscapes. This methodology offers good insights into different ways to look at landscapes, in particular different ways humans interact with and assign value to landscapes, but it offers limited perspectives on resources found on those landscapes.

6. Twin Cities Model

Branam et al. (2010) used ethnographic consultation as their primary instrument in an attempt to establish a uniform state database of Dakota sacred sites in the Minneapolis-St. Paul area. This methodology emphasizes Dakota world views, values, concerns, and interests. This approach is primarily ethnographic in scope, but is supplemented by site visits to complete a site form that includes site name, site type, location information, landowner information, site characteristics, cultural/community affiliation, site significance, impact risk assessments, NRHP status, form preparation information, public disclosure information, and additional information and attachments. The researchers suggest a four-step process for identifying and evaluating TCPs, embracing LeBeau's (2009) predictive model as "a place to start" (Branam et al. 2010:32). The methodology was designed to address sacred sites in urban areas where land ownership is predominantly private and heavily impacted by development.

Table 1 LeBeau (2009) TCP Types by Activity Represented and Location

Ohé wócekiye (Prayer Place)	Activity	Intrinsic Nature	Location	Natural Features
haŋbléceya (cry for a vision)	*waǩaŋ wicóȟaŋ* (energy life way of doing)	An area filled with toŋ—emission of power, able to transmit energy life to humans	Secluded places with view of fresh water; hilltops preferred, but some at base of the hills; wooded creeks along hillsides; hills with caves, rock shelves, and ledges	Hills with specific shapes distinctly separate from other land forms; large boulders; naturally occurring stone rings and rock features resembling human or animal forms; fossil beds, caves, animal dens; a specific vegetation
iníǩaġa wókeya (sweat lodge) *Išnátipi* (dwelling alone)	*waǩaŋ wicóȟaŋ* (energy life way of doing)	*yuwáǩaŋ*—to make energy or life	Sweat lodges traditionally located on the outskirts of a village on the north side of the encampment; women's menses lodges were erected south of the encampment in a secluded area	No uniformity in environmental surroundings; often constructed near trees or creeks; can be constructed anywhere there is level, grassy ground
Wiwaŋyaŋk wacípi (sun dance)	*waǩaŋ wicóȟaŋ* (energy life way of doing)	Area filled with *ton* (emission of power) and quality of *wakaŋ* (energy-life)	Traditionally performed on high, open, level plateaus, but may be found in mountains, foothills, canyons, and fresh water sources	Can occur anywhere but often a preference for locations with certain natural boulders or rock formations, a spiritually significant fresh water source, and certain types of trees growing in patterns indicative of phases of the moon
Caŋgléška wakaŋ (sacred hoop medicine wheel)	*waǩaŋ wicóȟaŋ* (energy life way of doing)	Area filled with *ton* (emission of power) and quality of *wakaŋ* (energy-life)	Traditionally located on elevated plateaus overlooking water sources, but can also be found in open grassland settings or in wooded areas in clearings	Variable
Iŋyaŋ waǩáġa (rock image)	*waǩaŋ wicóȟaŋ* (energy life way of doing)	*yuwáǩaŋ*—to make energy or life	Commonly found on plateaus, hillsides, and valleys in both wooded and grassland settings with abundant naturally occurring stones	Variable

Hekti (lodge-what is past) and *Wágle wóšŋaṗi* (altar)	*wakaŋ ќáġaṗi* (acts of worship)	*yuwáќaŋ*—to make energy or life	Traditionally found on hilltops, plateaus, shorelines, along trails, on small islands in rivers and lakes, below waterfalls, above springs, on buttes overlooking encampments, and at stone quarries, burial grounds, fossil beds, caves, and kill sites	Variable, but usually where there is abundant natural stones at high and low elevations
Wówapetogtoŋṗi (sacred marks)	*waќaŋ wicóȟaŋ* (energy life way of doing)	*yuwáќaŋ* (to make energy or life) or *wóšice* (negative-bad)	Traditionally found in canyons, on mountain ledges, cliff faces, caves, and on stones and trees along river and lake shores	Variable
Wicágnaќaṗi (scaffold burial) and *Owícaȟe* (grave)	*waќaŋ wicóȟaŋ* (energy life way of doing)	*yuwáќaŋ*—to make energy or life	Scaffold burials typically located on hilltops or within traditional burial grounds near semi-sedentary encampments; burials are historic practice, generally located on hilltops or benches	Generally located within view of a road or trail
Wanáġitiṗi (dwelling of the spirits) and *Caŋ oṫila* (little tree dweller spirit lodge)	*wakaŋ ќáġaṗi* (acts of worship)	*wóokihi*—power and potency	Spirits can reside anywhere	Typically associated with a hill, tree, cave, body of water, hole in the ground, or stone formations
***Ohé wauŋyeya* (Offering Place)**	**Activity**	**Intrinsic Nature**	**Location**	**Natural Features**
Wágna wosnapi (altar of sacrifice)	*wakaŋ ќáġaṗi* (acts of worship)	*yuwáќaŋ*—to make energy or life	Typically a stone feature or rock formation located on hills, plateaus, ridgelines, river shorelines, creeks, streams, lakes, or on small islands in rivers and lakes	Variable, but typically set apart from other features

Owáuŋyaŋp̣i (acts of sacrifice) and *Hékt̓aḱiya níicú* (give back)	*wakaŋ ḱáġap̣i* (acts of worship)	*yuwáḱaŋ*—to make energy or life	Found on or close to *ohép̣i wócekiye (*prayer places) alongside well-traveled trails, paths, and roads. Sites may also be found near natural springs, waterfalls, hilltops, wooded creeks, caves, or stone and mineral quarries	Variable, but typically they are natural features in the open that are easily seen
***Ohép̣i waḱámna* (Gathering Place)**	**Activity**	**Intrinsic Nature**	**Location**	**Natural Features**
Waḱámna (gathering)	*wicóahop̣e* (custom) *wōecoŋp̣i* (practices)	*wićoni*—life and *wówaš ̓ake*—energy	Anywhere natural biotic and mineral resources are found	Any resource possessing spiritual or medicinal properties identified as culturally significant

Table 2 LeBeau (2009) TCP Site Types by Observable Characteristics

Cultural Features (Prayer Places)	Physical Attributes Inherent in Site Feature
taṫé ṫob kiŋ (four-winds fasting altar)	*kabláya,* four *taṫé ṫóṗa caŋ (*four-winds wood-directional staffs of chokecherry or June berry); a *pte ḣcáka pa (*buffalo skull); a *huŋkátacaŋ* (pipe rack); a *wáṗaha* (ceremonial staff with feathers tied to it); small mound of dirt in front of the west directional staff; *kabláya* (make level by beating), a leveled area of prescribed size
*tataŋḱa hócoka (*buffalo altar)	*pte ḣcáka pa* (buffalo skull) placed next to the *kabláya* (leveled area)
hócoka iŋyaŋ ti (stone ring lodge)	Cobble rings arranged into one, two, three, or four circles; not required to be symmetrical; associated with a small stone cairn, identified as *hekti* (lodge-what is past); typically 2 to 6 meters in diameter
Ománi škaŋ hócoka (moves walking altar)	kabláya, pte ḣcáka pa, and a wáṗaha (ceremonial staff with feathers tied to it) made from caŋpá (chokecherry) or ḣaŋṫé (cedar) Tied to the top of the staff is a small *tahá gmigméla (*raw-hide disk)
*maká ok'e wówaŋyaŋke (*vision pit)	Either a small pit 10 centimeters to 1 meter deep (open) or a larger, oblong pit 1.5 meters deep, 1.5 meters long, and 1 meter wide (enclosed) where the supplicant stands or sits; might be lined with small stones identified as a *caŋgléška wakaŋ* (sacred hoop) or *hócoka* (circle)
Unnamed	Large wooden posts demarcating the four cardinal directions, referred to as *ṫiyóṗa wákaŋ (*sacred door-entrance), and small *caŋ cékiya* (prayer sticks)
*wílecala (*crescent moon altar)	Stone crescent at the end of a radiating spoke found at *caŋgléška wakaŋ* (sacred hoop medicine wheel) sites
iníkaġa wókeya (sweat lodge) *Išnátipi* (dwelling alone)	Brush structure encircling a small, shallow pit feature or rock pit; structure is dome-shaped willows of prescribed size and type, large enough to accommodate several individuals, circular or square fire pit on the west or east side, small mound of dirt or prayer altar in front of the west entry
Wiwaŋyaŋk wacíṗi (sun dance)	A central cottonwood tree; a small dugout or owaŋḱa wakaŋ (sacred place) that serves as the ceremonial altar area for the ceremony; if not present, it is often substituted by constructing a *taṫé ṫob kiŋ* (four-winds altar); a Sun Dance lodge or arbor with a prescribed number of posts in the walls and superstructure; might be associated with nearby rock effigies of males, females, turtles, or buffalo, or medicine wheels and stone-ring lodges
Caŋgléška wakaŋ (sacred hoop medicine wheel)	Circular stone alignments; small sites have a minimum of four radiating spokes, while large sites have a minimum of eight radiating spokes; the number of stones used and size are specifically prescribed; central altar or alters at the end of a radiating spoke
*Iŋyaŋ wakáġa (*rock image)	Stones are arranged to depict both animal and human figures; turtles images are common, but buffalo and snakes are also depicted; humans are gender specific

Hekti (lodge-what is past) and *Wágle wóšŋaṗi* (altar)	A square or rounded flat-topped pedestal 10 to 30 centimeters in diameter and 30 centimeters or more high; feature surrounded by additional stones; can have the appearance of a cairn; size variable from six stones to hundreds of them; may be associated with cultural offerings
Wówapetogtoŋṗi (sacred marks)	Precisely incised or painted images depicting animal or human figures or geometric patterns of spiritual significance
Wicágnaḱaṗi (scaffold burial) and *Owícaḣe* (grave)	Scaffold burials take two forms, one an actual wood scaffold and the other where the body is placed in the crook of a tree; once decomposed, the bones were buried in a cylindrical or bell-shaped pit beneath the scaffold, which was covered with stones; prescribed scaffold construction; historic burials typically outlined with stones and may include multiple burials
Wanáǧitiṗi (dwelling of the spirits) and *Caŋ oṫila* (little tree dweller spirit lodge)	Natural features where Lakota went to pray and make sacrifices; extremely difficult for a non-Lakota to identify
Cultural Feature (Offering Places)	**Physical Attributes**
Wágna wosnapi (altar of sacrifice)	Typically a natural boulder with a flat surface or bowl-shaped depression that bears the natural impressions of handprints, footprints, or animal tracks; the boulders are natural features but might be encircled with smaller stones; could be associated with cultural offerings
Owáuŋyaŋṗi (acts of sacrifice) and *Hékṫaḱiya níicú* (give back)	Mostly natural features such as trees or stones where offerings are placed; might be a constructed three-poled wooden structure called *wanáǧitipi* (spirit lodge) used to support a spirit bundle
Cultural Feature (Gathering Places)	**Physical Attributes**
Wakámna (gathering)	Gathering places have no constructed features; these are named for the resource being acquired