

ATTACHMENT 1
Montana Department of Environmental Quality
Environmental Specifications for the Proposed Keystone XL Project

Draft Environmental Specifications for the Keystone XL Project in Montana

March 2010

**STATE OF MONTANA
ENVIRONMENTAL SPECIFICATIONS FOR THE
KEYSTONE XL PIPELINE PROJECT IN MONTANA**

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DEFINITIONS

ACCESS EASEMENT: Any land area over which the OWNER has obtained an easement from a landowner allowing travel to and from the Project. Access easements may or may not include access roads.

ACCESS ROAD: Any travel course which is constructed by substantial recontouring of land and which is intended to permit passage by most four-wheeled vehicles.

ARM: Administrative Rules of Montana

BEGINNING OF CONSTRUCTION: Any project-related earthmoving or removal of vegetation (except for clearing of survey lines)

BLM: United States Department of Interior, Bureau of Land Management

BLM INSPECTOR:

BOR: United States Bureau of Reclamation

BOARD: Montana Board of Environmental Review

CERTIFICATE: Certificate of Compliance

CFR: Code of Federal Regulations

DOS: United States Department of State

DEQ: State of Montana, Department of Environmental Quality

DNRC: State of Montana, Department of Natural Resources and Conservation

ENVIRONMENTAL INSPECTOR: Persons hired by the OWNER who shall be responsible for monitoring and ensuring compliance with all mitigation measures required by the CERTIFICATE and these specifications, and other grants, permits, certificates, or other authorizing documents

FWP: State of Montana, Department of Fish, Wildlife, and Parks

INITIAL RECLAMATION: The clean-up, backfilling, recontouring, respreading of topsoil, repairing of damage to roads and property, seeding, and installation of erosion controls following installation of the facility.

LANDOWNER: The owner of private property or the managing agency for public lands

MCA: Montana Code Annotated

MDT: State of Montana, Department of Transportation

MOA: Memorandum of Agreement

NRCS: United States Department of Agriculture, Natural Resources Conservation Service

OWNER: The owner(s) of the facility, and its field representative or other agents.

PA: Programmatic Agreement

ROD: Record of Decision

ROW: Right-of-Way

SENSITIVE AREA: Areas which exhibit environmental characteristics that may make them susceptible to impact from construction of a pipeline facility. The extent of these areas is defined for each project but may include any of the areas listed in Circular MFSA-2 Sections 3.2(1)(d) and 3.4(1).

SHPO: State of Montana, Montana Historical Society, State Historic Preservation Office

STATE INSPECTOR: DEQ employee or DEQ's designee with the responsibility for monitoring the OWNER's and OWNER's contractor compliance with terms and conditions of the CERTIFICATE issued for the project.

SPECIAL USE SITES: Areas disturbed outside the construction right-of-way for a specific purpose including, but not limited to, staging areas, borrow pits, construction work camps, power lines less than 10 miles in length, storage or other building sites, and new sites for construction waste disposal.

INTRODUCTION

These environmental specifications have been developed by DEQ to minimize adverse environmental impacts and would be incorporated into the CERTIFICATE. Measures proposed by the OWNER in its Construction, Mitigation, and Reclamation Plan (CMRP) to minimize adverse environmental impacts are set forth in Appendix B of the EIS. If approved by DEQ, the measures proposed by the OWNER also would be incorporated by reference as enforceable provisions of the CERTIFICATE. Should there be a conflict between the environmental specifications developed by DEQ and the measures developed by the OWNER, the more environmentally protective provision would apply.

The purpose of these specifications is to mitigate potential environmental impacts during the construction and reclamation of the pipeline facility in Montana. These specifications are intended to be incorporated into the texts of contracts, plans, and Plan of Operations.

Appendices at the end of these specifications refer to individual topics of concern and to site-specific concerns. Some of the Appendices will be prepared by the OWNER working in consultation with DEQ prior to the start of construction and submitted for review and approval by DEQ. Other Appendices will be prepared by the agencies at the time a decision is made whether to approve the Project.

0.0 GENERAL SPECIFICATIONS

These specifications apply to all lands affected by the pipeline and associated facilities. The OWNER may contract with the LANDOWNER for revegetation or reclamation if the LANDOWNER wants different reclamation standards from those listed herein to apply on the LANDOWNER'S property, and if not reclaiming to the standards specified herein, would not adversely impact the public and other landowners. Where the LANDOWNER requests practices other than those listed in these specifications, DEQ may authorize such a change provided that the STATE INSPECTOR is notified in writing of the change and determines that the change will not be in violation of (1) the CERTIFICATE; (2) any conditions imposed by DEQ, and (3) DEQ's finding of minimum adverse impact.

On private or state land, these specifications will be enforced by the STATE INSPECTOR. On BLM or other federal lands, enforcement will be the joint responsibility of the STATE INSPECTOR and the BLM INSPECTOR.

0.1 ENVIRONMENTAL PROTECTION

The OWNER shall conduct all operations in a manner to protect the quality of the environment.

0.2 CONTRACT DOCUMENTS

It is the OWNER'S responsibility to ensure compliance with these specifications. If appropriate, the OWNER may incorporate by reference these specifications into contracts executed with its contractors or other agents. The OWNER is responsible for its agent's adherence to these specifications in performing the work.

0.3 BRIEFING OF EMPLOYEES

The OWNER shall ensure that its contractor(s) and all field supervisors are provided with a copy of these specifications and informed of the applicability of individual sections to specific procedures. It is the responsibility of the OWNER to ensure its contractor(s), subcontractor(s) and the contractor(s) and subcontractor(s) employees comply with these measures. The OWNER'S Project Supervisor shall ensure all employees are informed of and implement the applicable environmental specifications discussed herein prior to and during construction. Site-specific measures provided in the appendices attached hereto shall be incorporated into the design and construction specifications or other appropriate contract document. The OWNER will have regular contact and site supervision of its contractors and subcontractors to ensure compliance is maintained.

0.4 COMPLIANCE WITH REGULATIONS

The OWNER shall comply with the CERTIFICATE issued by DEQ and applicable local, state, and federal laws, regulations, and requirements. Pursuant to 75-20-401, MCA, state or local governmental agencies may not require approval, consent, permit, CERTIFICATE or other conditions for the construction, operation or maintenance of the pipeline following issuance of the CERTIFICATE. DEQ, however, retains authority to determine compliance with air and water quality standards. The OWNER is also required to comply with requirements of county weed control boards (7-22-2201, *et seq.*, MCA), state laws regarding use of water (85-1-101, *et seq.*, MCA), protection of employees, and easements or licenses authorizing the crossing of state-owned land and the beds of navigable streams or rivers.

The OWNER must:

- a) Request any proposed modification to the procedures and measures described in its application submitted pursuant to 75-20-101, *et seq.*, MCA or CERTIFICATE conditions in a written amendment application to DEQ pursuant to 75-20-219, MCA and ARM 17.20.1801 through 1804;
- b) Justify each modification relative to site-specific conditions; and
- c) Explain how that modification provides an equal or greater level of environmental protection than the original measure.

0.5 LIMITS OF LIABILITY

The OWNER is not responsible for correction of environmental damage or destruction of property caused by negligent acts of DEQ employees during construction, operation and maintenance, decommissioning, and reclamation of the Project.

The OWNER shall annually provide proof of liability insurance to DEQ (The amount of liability insurance will be addressed in the final version of this document).

0.6 DESIGNATION OF SENSITIVE AREAS

DEQ and the OWNER have designated areas along the ROW and associated facilities as SENSITIVE AREAS. The locations of these SENSITIVE AREAS are described in Appendix A. Additional sensitive areas may be added by DEQ after review of plans submitted pursuant to Sections 0.9, 1.1.2, 1.1.4, and 1.1.3. Special precautions specified in Appendix A and elsewhere in these specifications shall be taken in these areas during construction, operation, and maintenance.

Throughout these specifications DEQ refers to locations of sensitive areas and other features by mileposts. These mileposts were developed based on location of the facility as depicted in the environmental impact statement. The OWNER shall depict these SENSITIVE AREAS and features on the final designs required by Sections 1.1.2 and 1.1.3.

0.7 PERFORMANCE BOND

To ensure compliance with these specifications, the OWNER shall submit to DEQ or its authorized agent a bond pertaining specifically to INITIAL RECLAMATION. Post-construction monitoring by DEQ will determine compliance with these specifications and other mitigating measures included herein. At the time INITIAL RECLAMATION is complete and revegetation is progressing satisfactorily, the OWNER shall be released from its obligation for INITIAL RECLAMATION. At the time the OWNER is released, a portion of the bond shall be retained for five years or until monitoring by DEQ indicates that reclamation and revegetation are adequate. The amount and bonding mechanisms for this section shall be specified by DEQ in Appendix B and agreed to by the OWNER. The bond shall be submitted to DEQ at least two weeks prior to the start of construction. The OWNER may not start construction until DEQ approves the bond.

0.8 ACCESS

When easements for construction access are obtained, provision will be made by the OWNER to ensure that DEQ personnel and DEQ contractors will be allowed access to the right-of-way and to any off-right-of-way access roads used for construction during the term of the bonds. Liability for damage caused by providing such access for the STATE INSPECTOR shall be limited by section 0.5 Limits of Liability. The STATE INSPECTOR will inform the OWNER'S on-site representative prior to use of any on and off right-of-way access sites. The OWNER shall not prevent STATE INSPECTORS from carrying out their duties under 75-20-402, MCA.

0.9 DESIGNATION OF INSPECTORS

DEQ shall designate a STATE INSPECTOR or INSPECTORS to monitor the OWNER'S compliance with these specifications and any other project-specific mitigation measures adopted by DEQ. The STATE INSPECTOR shall be the OWNER's liaison with the State of Montana on construction, post-construction, and construction reclamation activities for the certified pipeline on all lands. The STATE INSPECTOR may coordinate monitoring with BLM. All communications to DEQ shall be submitted to the STATE INSPECTOR. The names of the INSPECTORS are in Appendix C. The STATE INSPECTOR(S) shall implement the monitoring plan described in Appendix D.

The OWNER shall employ a team of one or more ENVIRONMENTAL INSPECTORS per construction spread, or as may be established by DEQ. The ENVIRONMENTAL INSPECTORS shall be:

- a.) Responsible for monitoring and ensuring compliance with all mitigation measures required by the CERTIFICATE and other applicable state grants, permits, certificates, or other authorizing documents;
- b) Responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract and any other authorizing document;
- c) Empowered to order correction of acts that violate the environmental conditions of the CERTIFICATE and any other authorizing document;
- d) A full-time position, separate from all other activity inspectors;
- e) Responsible for documenting compliance with the environmental conditions of the CERTIFICATE; and
- f) Responsible for maintaining status reports on compliance with all mitigation measures required by the CERTIFICATE and these specifications and other grants, permits, certificates, or authorizing documents.

0.10 OTHER MEASURES

Adoption of other measures may be required for Project approval at the time of certification. These special measures shall be incorporated in Appendix A: SENSITIVE AREAS.

1.0 PRECONSTRUCTION PLANNING AND COORDINATION

1.1 PLANNING

1.1.1 Planning of all stages of construction and maintenance activities is essential to ensure that construction-related impacts will be kept to a minimum. Before commencement of construction, the OWNER shall plan the timing of construction, construction and maintenance access and requirements, location of special use sites, and location of associated facilities in order to reduce or minimize impacts to the environment.

1.1.2 At least 45 days before the start of construction, the OWNER shall submit a plan map(s) and an electronic version of the plan map(s) acceptable to DEQ depicting the location of the centerline of the pipeline; all ACCESS ROADS; and associated facilities such as pump stations, valves, power lines less than 10 miles in length, communication facilities, hydrostatic test discharge sites, variations in construction and operational ROW width (Appendix E), vehicle wash stations, and if known, other special use sites. The scale of the map(s) shall be 1:24,000 or larger. In addition the map(s) shall indicate the areas on range and pasture land where the ROW would be stripped of topsoil and areas where soil and vegetation on the working side of the trench would not be removed. These locations must be reviewed and approved by the STATE INSPECTOR prior to construction.

1.1.3 Within 45 days before the start of construction, the OWNER shall file an Implementation Plan, for the review and written approval of DEQ. The OWNER must file revisions to the plan as schedules change. The plan shall identify:

- a) How the OWNER will implement the construction procedures and mitigation measures described in its application, and supplemental mitigation measures identified in the Environmental Impact Statement for the project, and required by the CERTIFICATE;
- b) How the OWNER will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and ENVIRONMENTAL INSPECTORS;
- c) The number of the OWNER's ENVIRONMENTAL INSPECTORS assigned per spread and aboveground facility site, and how the OWNER will ensure that sufficient personnel are available to implement the environmental mitigation;

- d) Company personnel, including ENVIRONMENTAL INSPECTORS and contractors, who will receive copies of the appropriate materials in (a) and other communications from DEQ;
- e) The location and expected dates of the environmental compliance training the OWNER will give to all personnel involved with construction and restoration (including initial and refresher training as the Project progresses and personnel change);
- f) The company personnel (if known) and specific portion of the OWNER's organization responsible for compliance;
- g) The procedures (including use of contract penalties) the OWNER will follow if noncompliance occurs; and
- h) For each component of the facility (pipeline, valve, pump station, road crossing, stream crossing and associated power line), a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (1) the completion of all required surveys and reports;
 - (2) the environmental compliance training of onsite personnel;
 - (3) the start of construction; and
 - (4) the start and completion of INITIAL RECLAMATION and revegetation.

1.1.4 Construction is anticipated to occur in two consecutive construction seasons. Prior to the start of construction in each of the two years, the OWNER shall submit a Montana Hydrostatic Test Plan (Appendix F) to DEQ for approval. The plan shall identify a final list of all water sources that would be used in Montana for hydrostatic testing, horizontal directional drilling, vehicle washing and dust abatement along with associated withdrawal rates and volumes approved by DNRC, a final list of hydrostatic test water discharge points, volumes and rates of discharges, site specific measures that would be used to prevent rill and gully erosion, and a plan for monitoring the quality of water being discharged.

1.1.5 The OWNER shall submit detailed alignment maps/sheets and an electronic equivalent acceptable to DEQ at a scale not smaller than 1:24,000 identifying staging areas, pipe storage yards, and other areas that would be used or disturbed and have not been identified in plan map(s) required under 1.1.2 above. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by DEQ before construction in or near that area

1.1.6 If special use sites are not known at the time of submission of the plan map(s), no later than seven days prior to the start of construction the OWNER shall submit for review and approval supplemental map(s) showing the following information: communication facilities and special use sites, including staging areas, pump stations, safety valves, directional drilling sites and associated staging areas, horizontal boring

sites, batch plant sites, borrow pits, work camps, and storage or other buildings. This information shall be presented on a map with a scale of 1:24,000 or larger. The maps shall be accompanied by an electronic version acceptable to DEQ.

1.1.7 Changes or updates to the information submitted in Sections 1.1.2. and 1.1.3. shall be submitted to DEQ as they become available. Changes affecting SENSITIVE AREAS must be submitted to DEQ for review at least five working days before construction and approved before construction by the STATE INSPECTOR. DEQ shall make a good faith effort to complete its review as quickly as possible.

1.1.8 Long-term maintenance routes to all points on the pipeline and associated power lines must be planned before construction begins. Where known, new construction ACCESS ROADS intended to be maintained for permanent use shall be differentiated from temporary ACCESS ROADS on the plan map(s) required under 1.1.2 above.

1.1.9 Where requested by a LANDOWNER, at least 30 days prior to any construction on private or state land, the OWNER will conduct a survey to document the baseline condition and topography, plant community, soil type(s), forage density, forage type, a map showing the location and species of noxious weeds, riparian areas, fences, and trees (mature or otherwise). The report shall be prepared by a range scientist. The report shall include representative photographs of each such area prior to construction. A copy of the assessment shall be provided to DEQ and the LANDOWNER at no charge.

1.2 PRECONSTRUCTION CONFERENCE

1.2.1 Before commencement of any construction activities defined in 75-20-104(6) MCA, the OWNER shall hold a preconstruction conference. The STATE INSPECTOR shall be notified of the date and location for this meeting. One of the purposes of this conference shall be to brief the contractor and land management agencies regarding the content of these specifications and other DEQ-approved mitigating measures, and to make all parties aware of the roles of the OWNERS's ENVIRONMENTAL INSPECTOR(S) and STATE INSPECTOR.

1.2.2 The OWNER's representative, the contractor's representative, the OWNER's ENVIRONMENTAL INSPECTOR(S), STATE INSPECTOR, and representatives of affected state and federal agencies who have land management or permit and easement responsibilities shall be invited to attend the preconstruction conference.

1.3 PRECONSTRUCTION CONTACT WITH LOCAL OFFICIALS

1.3.1 The OWNER shall provide written notification to local public officials in Malta, Glasgow, Circle, Glendive, Terry and Baker at least 30 days prior to the

beginning of construction. The notice shall provide information on the temporary increase in population, when the increase is expected, and where the workers will be stationed. In the first year of construction, the OWNER shall hold a meeting for each construction spread to discuss potential temporary changes. The invited local officials shall include the county commissioners, city administrators, law enforcement officials, local fire departments, emergency service providers, and representatives of the Chambers of Commerce.

1.4 HISTORICAL, ARCHAEOLOGICAL AND PALEONTOLOGICAL

1.4.1 The OWNER shall implement the PA in Appendix G regarding cultural resources.

1.4.2 The OWNER shall implement the measures required by the Paleontological MOA in Appendix H in consultation with other state and federal agencies in Appendix G.

2.0 CONSTRUCTION OF FACILITIES

2.1 GENERAL

2.1.1 The preservation of the natural landscape contours and environmental features shall be an important consideration in the location and construction of all associated facilities. Construction of these associated facilities shall be planned and conducted so as to minimize destruction, scarring, or defacing of the natural vegetation and landscape. Any necessary earthmoving shall be planned and designed to be as compatible as possible with natural landforms.

2.1.2 Temporary special use areas shall be the minimum size necessary to accommodate the special use. The temporary special use areas shall be located where most environmentally compatible, considering slope, fragility of soils or vegetation, and risk of erosion.

2.1.3 The OWNER shall maintain all work areas in a neat, clean, and sanitary condition at all times. Trash or construction debris (in addition to solid wastes described in section 2.13) shall be regularly removed during construction, reclamation and revegetation of the affected areas.

2.1.4 In areas where mixing of soil horizons would lead to a significant reduction in soil productivity, increased difficulty in establishing permanent vegetation, or an increase in weeds; the OWNER shall segregate top soil from subsoil. Up to 12 inches of topsoil shall be salvaged unless otherwise requested by the LANDOWNER. The OWNER shall strip topsoil from the trench, the trench plus the stockpile area or the entire ROW as requested by the LANDOWNER. Soil salvage depths are identified in

Appendix I. Other areas where soil is to be stripped may be designated by the STATE INSPECTOR(S).

2.1.5 Vegetation such as trees, plants, shrubs, and grass on or adjacent to the ROW which do not interfere with the performance of construction work, or operation of the pipeline, shall be preserved.

2.1.6 The OWNER shall take all necessary actions to avoid adverse impacts to SENSITIVE AREAS listed in Appendix A. The STATE INSPECTOR(S) shall be notified two working days in advance of initial clearing or grading in these areas in their areas of jurisdiction. The OWNER shall mark or flag the clearing limits of disturbance in certain SENSITIVE AREAS as designated in Appendix A. All construction activities must be conducted within this marked area.

2.1.7 The OWNER shall acquire appropriate land rights and provide compensation for damages caused by construction, operation, maintenance, and decommissioning of the pipeline and associated facilities.

2.1.8 Flow in a stream course may not be permanently diverted. If temporary diversion is necessary, flow must be restored before a major runoff season or the next spawning season, as determined by the STATE INSPECTOR(S) in consultation with the managing agencies.

2.2 CONSTRUCTION MONITORING

2.2.1 Within one week of starting construction, the OWNER shall submit to DEQ weekly status reports until all construction and INITIAL RECLAMATION activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a) The construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
- b) A listing of all problems encountered and each instance of noncompliance observed by the ENVIRONMENTAL INSPECTORS during the reporting period (both for the conditions imposed by DEQ and any environmental conditions/permit requirements imposed by other federal or state agencies);
- c) A description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
- d) The effectiveness of all corrective actions implemented; and
- e) A description of any LANDOWNER complaints that may relate to compliance with the requirements of the CERTIFICATE, and the measures taken to satisfy the concerns.

2.2.2 The STATE INSPECTOR is responsible for implementing the monitoring plan contained in Appendix D. The plan specifies the type of monitoring data and activities required and terms and schedules of monitoring data collection, and assigns responsibilities for data collection, inspection reporting, and other monitoring activities.

2.2.3 The STATE and ENVIRONMENTAL INSPECTOR(S) may require mitigating measures or procedures at some sites beyond those listed in Appendices in order to minimize environmental damage due to unique circumstances that arise during construction, such as unanticipated discovery of a cultural site. The STATE INSPECTOR and the OWNER will attempt to rely upon a cooperative working relationship to reconcile potential problems relating to minimization of impacts. When construction activities will cause excessive environmental impacts due to seasonal field conditions or damage to sensitive features, the designated STATE INSPECTOR will discuss with the OWNER possible mitigating measures or minor construction rescheduling to avoid these impacts and may impose additional mitigating measures in the area of jurisdiction. The STATE INSPECTOR shall provide the OWNER with written documentation of the reasons for the additional mitigating measures within 24 hours of their imposition. All parties will attempt to adequately identify and address these areas and planned mitigation, to the extent practicable, during final design to minimize conflicts and delays during construction activities.

2.2.4 If these specifications are not being achieved, DEQ may take corrective action as described in 75-20-408, MCA.

2.3 TIMING OF CONSTRUCTION

2.3.1 Construction and motorized travel may be restricted or prohibited at certain times of the year in areas described in Appendix J. Exemptions to these timing restrictions may be granted by the STATE INSPECTOR in writing if the OWNER can clearly demonstrate that no substantial environmental impacts will occur as a result.

2.3.2 In order to prevent rutting and excessive damage to vegetation outside of wetlands, the OWNER shall not perform construction activities during periods of high soil moisture when construction vehicles will cause rutting deeper than four inches on a) ACCESS ROADS off the pipeline ROW b) where topsoil is not stripped from the construction ROW for the pipeline or other associated facilities or, c) where excessive soil mixing is occurring or would occur as a result of the rutting.

2.3.3 In order to reduce rutting and excessive damage to off-right-of-way ACCESS ROADS, vehicle travel shall be restricted during periods when there is a substantial buildup of mud on tires and cleats or formation of ruts deeper than four inches. The OWNER shall repair damage to public or private roads when conditions dry

sufficiently to effect repairs. Damage shall be repaired to a reasonably acceptable condition in consultation with the STATE INSPECTOR and the LANDOWNER.

2.4 PUBLIC SAFETY

2.4.1 All construction activities shall be done in compliance with existing health and safety laws.

2.4.2 After construction is complete, noise levels shall not exceed the following standards as a result of the operation of the facility and associated facilities. For the pipeline and associated facilities, the average annual noise levels, as expressed by an A-weighted day-night scale (Ldn), will not exceed 60 decibels at the fence line or property boundary, whichever is further from the pumps, unless the affected LANDOWNER waives this condition.

2.5 PROTECTION OF PROPERTY

2.5.1 Construction shall not take place over or upon the ROW of any railroad, public road, public trail, or other public property until negotiations and/or necessary approvals have been completed with the LANDOWNER. Where it is necessary to cross a trail with ACCESS ROADS, the trail corridor will be restored. All roads and trails designated by government agencies as needed for fire protection or other purposes shall be kept free of logs, brush, and debris resulting from operations under these specifications. Any such road or trail damaged by this Project shall be promptly restored to its original condition.

2.5.2 Reasonable precautions shall be taken to protect, in place, all public land monuments and private property corners or boundary markers. If any such land markers or monuments are destroyed, the marker shall be reestablished and referenced in accordance with the procedures outlined in the "Manual of Instruction for the Survey of the Public Land of the United States" or, in the case of private property, the specifications of the county engineer. Reestablishment will be at the expense of the OWNER.

2.5.3 Construction shall be conducted so as to prevent damage to existing property including, but not limited to, transmission lines, distribution lines, telephone lines, pipelines, railroads, ditches, irrigation canals, and private and public roads. If such property is damaged by construction, operation, or decommissioning, the OWNER shall repair such damage immediately to a reasonably satisfactory condition in consultation with the property owner.

2.5.4 In areas with livestock, the OWNER shall comply with the reasonable requests of LANDOWNERS regarding measures to control livestock or wildlife until the vegetation meets the standards established in Section 3.2.1(b) and Appendix A.

LANDOWNERS shall be compensated for lost grazing during reclamation. Where requested by LANDOWNERS, temporary gates shall be constructed of sufficiently high quality to withstand repeated opening and closing during construction, to the satisfaction of the LANDOWNER. Care shall be taken to ensure that all gates are left in the condition in which they are found upon entry. The LANDOWNER shall be compensated for any losses to personal property due to construction, operation, maintenance, or decommissioning activities. Gates shall be inspected and repaired when necessary during construction and decommissioning. Any gates installed by the OWNER shall be inspected and repaired when necessary during the operation and maintenance period. When wire fences are replaced, wire shall be stretched tight with a fence stretcher before stapling or securing to the fence posts.

2.5.5 During construction, operation and decommissioning, the OWNER must notify the STATE INSPECTOR and, if possible, the affected LANDOWNER within two working days of damage to land, crops, property, or irrigation facilities, contamination or degradation of water, or livestock injury caused by the OWNER's activities, and the OWNER shall restore any damaged resource or property or provide reasonable compensation to the affected party.

2.5.6 The OWNER shall install permanent gates as requested by a LANDOWNER to provide access for maintenance vehicles.

2.5.7 When facilities cross fences, the OWNER shall make reasonable effort to accommodate the landowner's wishes on gate location and width.

2.5.8 Any breaching of natural barriers to livestock movement by construction activities will require fencing sufficient to control livestock unless alternative arrangements are made with the affected LANDOWNER. Alternative arrangements shall be indicated on a line list or environmental worksheet describing these arrangements and submitted to the STATE INSPECTOR prior to construction.

2.5.9 During construction and operation, the OWNER shall preserve wind breaks where they would not interfere with operation of the pipeline unless otherwise requested by a LANDOWNER.

2.6 TRAFFIC CONTROL

2.6.1 Before beginning any construction within a state highway ROW, the OWNER shall consult with the appropriate MDT field office regarding the proposed occupancy and to resolve any problems. The OWNER shall provide DEQ with documentation that this consultation has occurred at least 30 days before the start of construction in each year of construction. This documentation shall identify measures recommended by MDT and to what extent the OWNER agrees to comply with these measures. In the event the OWNER does not agree to a measure recommended by MDT, DEQ shall resolve any disputes regarding state highways.

2.6.2 In areas where the construction creates a hazard, the OWNER shall control traffic according to the applicable MDT regulations. Safety signs advising motorists of construction equipment shall be placed on major state highways, as required by MDT. The installation of proper road signing will be the responsibility of the OWNER.

2.6.3 The managing agency shall be notified, as soon as practicable, when it is necessary to close public roads to public travel for short periods to provide safety during construction. If roads are closed to public travel for more than 30 minutes, a detour shall be provided.

2.6.4 Construction vehicles and equipment will be operated at speeds safe for existing road and traffic conditions.

2.6.5 Access for fire and emergency vehicles will be provided at all times.

2.6.6 Public travel through and use of active construction areas shall be limited at the discretion of the managing agency.

2.7 ACCESS ROADS AND VEHICLE MOVEMENT

2.7.1 Construction of new ACCESS ROAD(S) shall be held to the minimum reasonably required to construct and maintain the facility. State, county, and other existing roads shall be used for construction access wherever possible. ACCESS ROADS intended to be permanent should be appropriately designed. The location of ACCESS ROADS shall be established in consultation with affected LANDOWNERS and LANDOWNER concerns shall be accommodated where reasonably possible and not in contradiction to these specifications or other DEQ conditions.

2.7.2 All new roads to and from the pipeline construction ROW, both temporary and permanent, shall be constructed with the minimum possible clearing and soil disturbance to minimize erosion.

2.7.3 Where practical, all roads shall be designed to accommodate one-way travel of the largest piece of equipment plus pull-outs for passing. Road width shall be no wider than necessary.

2.7.4 Where practical, temporary ACCESS ROAD(S) shall be constructed on the most level land available. Where temporary roads cross flat land, they shall not be graded or bladed unless necessary, but will be flagged or otherwise marked to show their location and to prevent travel off the roadway.

2.7.5 The OWNER will maintain all permanent ACCESS ROADS, including drainage facilities, which are constructed for use during the period of construction. In

the event that a road would be left in place, the OWNER and LANDOWNER may enter agreements regarding maintenance for erosion control following construction.

2.7.6 All permanent ACCESS ROAD surfaces, including those under construction, will be prepared with the necessary erosion control practices as determined by the STATE INSPECTOR or the managing agency prior to the onset of winter.

2.7.7 Snow removal shall be done in a manner to preserve and protect road signs and culverts, to ensure safe and efficient transportation, and to prevent excessive erosion to roads, streams, and adjacent land.

2.7.8 At the conclusion of construction, final maintenance will be performed on all existing private roads used for construction access by the OWNER. These roads will be returned to a condition as good as when construction began.

2.8 EQUIPMENT OPERATION

2.8.1 During construction, unauthorized cross-country travel and the development of roads other than those approved shall be prohibited. The OWNER shall be liable for any damage, destruction, or disruption of private property and land caused by construction personnel and equipment as a result of unauthorized cross-country travel and/or road development.

2.8.2 To prevent excessive soil damage in areas where a graded roadway has not been constructed, the limits and locations of access for construction equipment and vehicles shall be marked or specified at each new site before any non-survey related equipment is moved to the site. Construction foremen and personnel shall be well versed in recognizing these markers and shall understand the restriction on equipment movement that is involved.

2.8.3 Work crew foremen shall be qualified and experienced in the type of work being accomplished by the crew they are supervising. Earthmoving equipment shall be operated only by qualified, experienced personnel.

2.8.4 Prior to the start of construction, final locations of cleaning stations and other conditions required by County Weed Control programs will be shown on environmental worksheets or an appended line list and indicated on appropriate project maps (See Section 2.1.1). Vehicles shall be cleaned and weed infested areas will be pre-treated. The OWNER shall submit copies of the revegetation plans approved by the county weed control boards pursuant to 7-22-2152, MCA, and comply with these plans. The approved plans shall be included in Appendix K.

2.8.5 Gravel/stone ramps will be installed at access points to paved public roads, as needed, to prevent or minimize the tracking of mud, dirt, sediment, or similar

materials on to the roadway. Deposits that have been tracked by vehicles or have been transported by wind or storm off the ROW will be promptly cleaned up..

2.9 RIGHT-OF-WAY CLEARING AND SITE PREPARATION

2.9.1 The STATE INSPECTOR shall be notified at least ten days prior to any timber clearing in Township 9 North, Range 57 East, Section 15.

2.9.2 For associated power lines, where no grading occurs during clearing of the construction ROW, shrubs shall be preserved to the greatest extent possible. Shrub removal shall be limited to crushing or cutting where necessary. Plants may be cut off at ground level, leaving roots undisturbed so that they may re-sprout.

2.9.3 Clearing on both the working side and the spoil side of the ROW shall be kept to the minimum necessary. Where clearing of trees is necessary, the ROW boundary shall be flagged to identify trees located outside the right-of-way.

2.9.4 During construction, care will be taken to avoid damage to trees and shrubs on the edge of the ROW that do not interfere with clearing requirements. Trees along the margin of the ROW that are of high value as determined by the LANDOWNER shall be wrapped with snow fence to protect them from damage.

2.9.5 Unless otherwise requested by the LANDOWNER, felling shall be directional in order to minimize damage to remaining trees. Maximum stump height shall be no more than 12 inches on the uphill side, or 1/3 the tree diameter, whichever is greater.

2.9.6 The OWNER shall identify prior to construction, in consultation with the NRCS and affected LANDOWNERS, all lands which are part of the United States Department of Agriculture Conservation Reserve Program (CRP). On CRP lands, the OWNER shall document the existing vegetative cover (in terms of species composition, state of development, and percent cover) on plan maps and submit this information to the STATE INSPECTOR prior to the start of grading on these lands. The OWNER shall be responsible for restoring all CRP areas disturbed during construction to their preconstruction vegetative cover condition within 5 years unless the land is removed from CRP and cultivated. If land is removed from CRP and cultivated, then revegetation requirements listed in section 3.3.2 shall be implemented.

2.9.7 The OWNER shall prevent significant amounts of soil from being contained in the piling and windrowing of material to be burned. The OWNER shall also minimize the destruction of ground cover in the piling and windrowing of material to be burned. The OWNER shall use non-mechanized methods if necessary to minimize soil erosion and vegetation disturbance. Piles shall be located so as to minimize danger to timber and damage to ground cover when burned.

2.10 EROSION AND SEDIMENT CONTROL

2.10.1 The OWNER shall comply with the erosion control measures described in the Storm Water Pollution Prevention Plan filed with DEQ.

2.10.2 The open-cut, wet method of constructing stream crossings is not allowed if water is present at the time of construction.

2.10.3 At least 60 days prior to the start of construction at a perennial stream crossing or at the crossing of a stream containing a fish species of special concern, the OWNER shall submit a site-specific stream crossing plan. At least 30 days prior to constructing the facility or associated facilities at a perennial stream crossing or stream containing a fish species of special concern, the STATE INSPECTOR shall conduct an on-site inspection of the crossing. The OWNER shall provide access to the stream crossing. The STATE INSPECTOR shall invite the OWNER, FWP, representatives of the local conservation district(s), and the LANDOWNER or land management agency to attend this inspection. The purpose of the inspection shall be to determine the final location of the crossing, the crossing method, width and depth of burial to be used and site-specific reclamation measures. The results of these inspections shall be included in Appendix L.

2.10.4 The OWNER shall install culverts or other structures in state waters in accordance with DEQ 318 permit conditions.

2.10.5 ACCESS ROAD(S) shall cross drainage bottoms at sharp or nearly right angles and level with the streambed whenever possible. Use of temporary bridges, fords, culverts, or other structures to avoid stream bank damage is required when water is present at the crossing of streams. A one-time crossing of the stream to install temporary crossings may be allowed if no access is readily available. No stream crossings will be allowed without proper water quality permits and written authorization from DEQ.

2.10.6 Streambed materials shall not be removed for use in backfill, embankments, road surfacing, or for other construction purposes except where removed from the trench at a stream crossing.

2.10.7 Trench breakers will be installed where necessary to control the flow of ground water along the trench.

2.10.8 Blasting may be allowed in or near streams if precautions are taken to protect the stream from debris and entry of nitrates or other contaminants into the stream, after applicable permits and authorizations are obtained. The OWNER shall obtain the written approval of the STATE INSPECTOR prior to conducting any blasting near streams.

2.10.9 The OWNER shall be responsible for the stability of all embankments created during construction. Embankments and backfills shall contain no stream sediments, frozen material, large roots, sod, or other materials which may reduce their stability.

2.10.10 Culverts, arch bridges, or other stream crossing structures shall be installed at all permanent crossings of flowing or dry watercourses where fill is likely to wash out during the life of an ACCESS ROAD. On ACCESS ROAD(S), all temporary culverts shall be sized to pass 2-year flood requirements and shall be removed after reclamation. The STATE INSPECTOR may approve exceptions. Permanent culverts shall be sized to pass the 100-year flood requirements. Culvert size shall be determined by standard procedures which take into account the variations in vegetation and climatic zones in Montana, the amount of fill, and the drainage area above the crossing. All culverts shall be installed at the time of ACCESS ROAD construction.

2.10.11 No perennial watercourses shall be permanently blocked or diverted.

2.10.12 Any accidental spills of oils, contaminants, or any other hazardous materials shall be cleaned up immediately per Appendix M. The STATE INSPECTOR shall be notified of spills of hazardous materials.

2.10.13 Point discharge of hydrostatic test water will be dispersed in a manner that prevents discharge to state waters unless appropriate permits are obtained.

2.10.14 Water used in embankment material processing, aggregate processing, concrete curing, foundation and concrete lift cleanup, and other waste water processes shall not be discharged into surface waters without a valid discharge permit from DEQ.

2.10.15 If trench dewatering is necessary, water will be discharged to the ground where adequate vegetative cover exists to prevent channeling and sediment transport, or into temporary dewatering structures constructed of silt fence and/or straw bales. No discharges to surface waters are allowed without a valid discharge permit from DEQ.

2.10.16 The OWNER shall collect a sample from each hydrostatic test water source, and water samples from the pipe will be taken prior to discharge of the hydrostatic test water. A report containing the results of this sampling shall be submitted to the STATE INSPECTOR. No discharge shall take place before the approval of the STATE INSPECTOR.

2.11 ARCHAEOLOGICAL, HISTORICAL, AND PALEONTOLOGICAL RESOURCES

2.11.1 All construction activities shall be conducted in accordance with the PA in Appendix G for Historic Properties and inadvertent discoveries. For Historic Properties where impacts cannot be avoided, a mitigation plan shall be developed per the PA in consultation with all interested parties.

2.11.2 Prior to and during construction activities, the OWNER shall handle paleontological resources in accordance with the MOA set forth in Appendix H .

2.11.3 In the event of inadvertent discovery of paleontological materials during construction activities, the OWNER shall follow the conditional requirements set forth in Appendix N in accordance with the MOA.

2.12 PREVENTION AND CONTROL OF FIRES

2.12.1 The OWNER shall comply with the Fire Prevention and Suppression plan set forth in Appendix O. These plans shall meet the requirements of the managing agency and/or the fire control agencies having jurisdiction. The STATE INSPECTOR shall be invited to attend all meetings with these agencies to discuss or prepare these plans.

2.12.2 The OWNER shall not burn refuse (including but not limited to trash, rags, tires, plastics, or other debris) except as permitted by the county, town, state, or governing municipality having jurisdiction per the burning plan and fire plan in Appendix P.

2.12.3 Prior to burning any refuse, the OWNER shall obtain the approval of the LANDOWNER and a Montana Open Burning Permit.

2.13 WASTE DISPOSAL

2.13.1 The OWNER shall use licensed solid waste disposal sites. Inert materials (Group III wastes) may be disposed of at Class III landfill sites; mixed refuse (Group II wastes) shall be disposed of at Class II landfill sites as required by ARM 17.50.504(2)(a).

2.13.2 Emptied pesticide containers or other chemical containers must be triple rinsed to render them acceptable for disposal in Class II landfills or for scrap

recycling pursuant to ARM 4.10.803. Names of Class II landfills in the counties crossed are listed below. Pesticide residue and pesticide containers shall be disposed of in accordance with ARM 4.10.805 and 806. Pesticide container rinse water shall be added to batches of pesticide for application.

Class II Landfills:

Fallon County-Coral Creek Landfill, Baker, MT. Ph (406) 778-7111

Valley County-Valley Co. Refuse District #1, Glasgow, MT. Ph (406) 228-6241

Custer County-Miles City Area Solid Waste District, Miles City, MT. Ph (406) 233-3325

Richland County-Richland County Solid Class II Landfill, Sidney, MT. Ph(406) 433-2407

2.13.3 All waste material that is a hazardous waste as defined in Section 75-10-403, MCA, and wastes containing any concentration of polychlorinated biphenyls must be transported to an approved designated hazardous waste management facility as defined in ARM 17.50.504 for treatment or disposal.

2.13.4 All used oil shall be hauled away and recycled or disposed of in a licensed Class II landfill authorized to accept liquid wastes or in accordance with Sections 2.13.2 and 2.13.3. There shall be no intentional release of oil or other toxic substances into streams or soil. The OWNER shall immediately report any accidental spill into a waterway to the STATE INSPECTOR. Any spill of refined petroleum products greater than 25 gallons must be reported to the State of Montana, Department of Military Affairs, Disaster and Emergency Services Division, at (406) 841-3911. All spills shall be cleaned up in accordance with the OWNER's Emergency Spill Response Plan.

2.13.5 All hazardous wastes and materials shall be stored in appropriate secondary containment structures until disposed of.

2.13.6 Self-contained toilets shall comply with applicable federal, state, and local health laws and regulations.

2.13.7 The OWNER shall not dispose of waste in any manner that causes it to reach state waters.

2.13.8 The OWNER shall maintain instream flow during diversion of hydrostatic test water so that instream flows do not fall below the following rates in streams where FWP holds water reservations to protect instream flows. Instream flow rates and volumes are indicated in the following table.

MONTANA FISH, WILDLIFE AND PARKS INSTREAM RESERVATIONS

STREAM	REACH	DATES	FLOW		
			CUBIC FEET/SECOND	ACRE FEET	ACRE FEET/YEAR
FRENCHMAN RIVER	INTERNATIONAL BOUNDARY TO MOUTH	JAN., FEB., MAR., DEC.	2.0	480	2,900
		APR. THROUGH NOV.	5.0	2,420	
ROCK CREEK	INTERNATIONAL BOUNDARY TO MOUTH	JAN., FEB., MAR., DEC.	2.0	480	4,352
		APR. THROUGH NOV.	8.0	3,872	
MISSOURI RIVER #8	MILK RIVER TO STATE LINE	YEAR-ROUND	5,178		3,748,500
REDWATER RIVER #1	CIRCLE TO EAST REDWATER CREEK	JAN., FEB., MAR., DEC.	2.0	480	1,932
		APR. THROUGH NOV.	3.0	1,452	
REDWATER RIVER #2	EAST REDWATER CREEK TO MOUTH	JAN., FEB., MAR., DEC.	2.0	480	2,416
		APR. THROUGH NOV.	4.0	1,936	
BOXELDER CREEK	ONE MILE WEST OF BELLTOWER TO STATE LINE	JAN., FEB., MAR., DEC.	4.0	960	4,348
		APR. THROUGH NOV.	7.0	3,388	
LITTLE BEAVER CREEK	RUSSELL CREEK TO STATE LINE	YEAR-ROUND	3.0	2,171	2,171

2.13.9 The OWNER shall implement the DEQ approved Montana Hydrostatic Test Plan (Appendix E).

3.0 POST-CONSTRUCTION CLEANUP AND RECLAMATION

3.1 CLEANUP

3.1.1 The OWNER shall remove all litter from the ROW, pipe yards, along ACCESS ROADS leading to the ROW, and all other areas affected by construction. Such litter shall be legally disposed of as soon as possible, but in no case later than within 60 days of completion of construction.

3.1.2 All signs of temporary construction facilities such as haul roads, work areas, buildings, foundations or temporary structures, stockpiles of excess or waste materials, and any other vestiges of construction shall be removed and the areas reclaimed, in consultation with the LANDOWNER.

3.2 RESTORATION, RECLAMATION, AND REVEGETATION

3.2.1 Restoration, reclamation, and revegetation of the ROW, ACCESS ROADS, borrow sites, gravel, fill, stone, or aggregate excavation, or any other disturbance shall be in accordance with the OWNER's Construction, Mitigation, and Reclamation Plan with the following exceptions:

- a) Seeding of affected lands shall be conducted during the first normal period for favorable planting conditions after final preparation. Any rills or gullies that would preclude successful establishment of vegetation shall be removed or stabilized. Only certified weed-free seed and mulch shall be used in revegetation; and
- b) The following standards for reclamation shall be used to determine reclamation bond release or to determine that expenditure of the reclamation bond is necessary to meet the requirements of the CERTIFICATE for the Project:
 - (i) in rangeland, coverage of desirable perennial plant species shall be 30% or more of that on adjacent rangeland or pastureland of similar slope and topography the year following seeding, and 80% or more of the coverage of adjacent rangeland or pastureland of similar slope and topography within five years following seeding;
 - (ii) on private lands, the OWNER may contract with the LANDOWNER for revegetation or reclamation which would release the OWNER from the reclamation bond performance on the property upon showing DEQ that

the LANDOWNER wants different reclamation standards from those specified in (i) applied on his property and that not reclaiming to the standards specified in (i) would not have adverse impacts on the public and other landowners; and

(iii) on public lands, the OWNER may contract with the affected land management agency for revegetation or reclamation which would release the OWNER from the reclamation bond performance on the property upon showing DEQ that the land management agency wants different reclamation standards from those specified in (i) and that not reclaiming to the standards specified in (i) would not have adverse impacts on the public and other landowners.

3.2.2 After construction is complete, and in cooperation with the LANDOWNER, temporary roads shall be closed, and unless specified by the LANDOWNER, revegetated as specified in (a) or (b) above. Permanent unsurfaced ACCESS ROADS not open to public use shall be revegetated as soon after use as possible unless specified otherwise by the LANDOWNER.

3.2.3 Earth next to the pipeline or ACCESS ROAD(S) that cross streams shall be replaced at slopes less than the normal angle of repose for the soil type involved.

3.2.4 Side-casting of waste materials from the construction of permanent ACCESS ROAD(S) may be allowed on slopes over 40 percent after approval by the LANDOWNER. Side-casting of waste material, however, shall not be allowed within the buffer strip established for stream courses, in areas of high or extreme soil instability, or in other SENSITIVE AREAS identified in Appendix A.

3.2.5 Seeding prescriptions, the seeding rate to be used in revegetation, and requirements for hydro seeding, fertilizing, and mulching shall be based on the input from the local NRCS office, the requirements of county weed boards, and the availability of seed at the time of reclamation. The OWNER shall submit its proposed seeding methodology to DEQ at least 30 days prior to the start of construction. The approved seeding methodology will be incorporated into the Revegetation Rehabilitation Plan set forth in Appendix I.

3.2.6 Excavated material not suitable or required for backfill shall be evenly distributed over the cleared area prior to spreading any topsoil unless otherwise required by the LANDOWNER. The size and quantity of large (greater than 3 inches) rocks and boulders on the surface of the ROW following final clean-up shall be similar to that present on adjacent undisturbed land. All rock removed from the ROW shall be disposed of as directed by the LANDOWNER.

3.2.7 The OWNER shall use specific seed mixes and techniques that address areas having saline, sodic, or saline and sodic soil characteristics, steep slopes, sandy or clayey textures, or acid soil conditions.

3.2.8 The OWNER shall alleviate soil compaction as proposed or where requested by the LANDOWNER; compaction may be alleviated on all lands traversed by construction equipment by plowing using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil shall be performed during suitable weather conditions, and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land.

3.2.9 If there is any dispute between the LANDOWNER and OWNER as to what areas need to be ripped or chiseled, the depth at which compacted areas should be ripped or chiseled, or the necessity or rates of lime and fertilizer application, the appropriate NRCS office shall be consulted. The OWNER shall retain a professional soil scientist or an appropriately qualified, licensed, professional engineer to conduct compaction tests. Copies of the results shall be provided to the LANDOWNER making claims for compensation for damages. If complete restoration is not possible, the OWNER shall compensate the LANDOWNER for lost productivity.

3.2.10 In the case of a claim for damages related to soil compaction, the OWNER shall retain a professional soil scientist who is also licensed by the State of Montana or an appropriately qualified licensed professional engineer to perform a soil survey for compaction using appropriate field equipment such as a soil penetrometer. Where there are row crops, samples shall be taken in the middle of the row, but not in rows where the drive wheels of farm equipment normally travel. Copies of the results of the above-described survey shall be provided to the LANDOWNER making such claim within 45 days of completion of the soil survey.

3.2.11 The OWNER shall develop and implement an environmental complaint resolution procedure. The procedure shall provide LANDOWNERS with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction and operation of the Project. Prior to construction, the OWNER shall mail the environmental complaint resolution procedure to each LANDOWNER whose property would be crossed by the Project:

- a) In the complaint resolution procedure, the OWNER shall:
 - (i) Provide a local contact that LANDOWNERS shall call first with their concerns and indicate how soon to expect a response;
 - (ii) Instruct LANDOWNERS that if they are not satisfied with the response, they should call the OWNER, provide a phone number for the OWNER and indicate how soon to expect a response; and
- b) In addition, during construction and reclamation the OWNER shall include in its weekly status report a table that contains the following information for each problem/concern:
 - (i) The identity of the caller and the date of the call;

- (ii) The identification number from the certificated alignment sheet(s) of the affected property and appropriate location by milepost;
- (iii) A description of the problem/concern; and
- (iv) An explanation of how and when the problem was resolved or will be resolved, or why it has not been resolved.

3.3 MONITORING

3.3.1 Upon notice by the OWNER, the STATE INSPECTOR will schedule initial post-construction field inspections following clean up and road closure. The STATE INSPECTOR will notify the OWNER of these inspections. Follow-up visits will be scheduled as required to monitor the effectiveness of erosion controls and reseeding measures. The OWNER will contact the LANDOWNER for post-construction access and to document the LANDOWNER'S satisfaction with the OWNER's restoration measures; such documentation shall be provided to the STATE INSPECTOR. The STATE INSPECTOR shall document observations for inclusion in monitoring reports regarding bond release or the success of mitigation measures.

3.3.2 Success of revegetation shall be based on criteria specified in Section 3.2.1 (i), (ii), or (iii).

3.3.3 Failure of the OWNER to adequately reclaim all disturbed areas in accordance with Section 3.2. of these specifications shall be cause for forfeiture of the bonds and/or penalties described in Section 0.7.

4.0 OPERATION AND MAINTENANCE

4.1 RIGHT-OF-WAY MANAGEMENT AND ROAD MAINTENANCE

4.1.1 Depressions, holes, cracks, uneven settling, or water drainage problems that develop over or near the trench that interfere with natural drainage or vegetation establishment, shall be repaired by the OWNER within 45 days (weather permitting) of being reported or observed. Depressions, holes, cracks, uneven settling, or water drainage problems that develop over or near the trench that interfere with land use shall be repaired as expediently as practicable but in no case more than 45 days later (weather permitting) of being reported or observed by the OWNER or, at the LANDOWNER'S request.

4.1.2 Vegetation that has been saved through the construction process and which does not pose a hazard or potential hazard to the pipeline, particularly that of value to fish and wildlife, shall be allowed to grow on the ROW.

4.1.3 Vegetative cover, water bars, cross drains, and the proper slope shall be maintained on permanent ACCESS ROADS and service roads in order to prevent soil erosion.

4.1.4 All permanent above-ground facilities shall be painted or treated to blend with their natural surroundings. The color shall be selected from colors similar to the standard environmental colors (BLM Rocky Mountain Five-State Interagency Committee) in consultation with the BLM and DEQ.

4.2 MAINTENANCE INSPECTIONS

4.2.1 The OWNER shall correct soil erosion or revegetation problems on the ROW or ACCESS ROADS. The OWNER may correct such problems through agreement with the LANDOWNER.

4.2.2 Operation and maintenance inspections using ground vehicles shall be timed so that routine maintenance shall be done when ACCESS ROADS are firm, dry, or frozen, wherever possible. On rangeland, maintenance vegetative clearing shall be conducted in a manner that encourages growth of shrubs up to three feet tall, including sage brush, on the ROW unless otherwise requested by a LANDOWNER. Shrubs may be removed along a 10-foot wide path within the ROW to allow for maintenance access.

4.3 CORRECTION OF LANDOWNER PROBLEMS

4.3.1 If the facility causes interference with radio, TV, or other stationary communication systems after the facility is operating, the OWNER shall correct the interference.

4.4 HERBICIDES AND WEED CONTROL

4.4.1 Weed control, including any application of herbicides in the right-of-way, will be in accordance with recommendations of the Montana Department of Agriculture and local weed control boards.

4.4.2 Herbicides will not be used in certain areas identified by DEQ and FWP, as listed in Appendix Q or as requested by the LANDOWNER.

4.4.3 Proper herbicide application methods will be used to keep drift and non-target damage to a minimum.

4.4.4 Herbicides must be applied according to label specifications and in accordance with 4.4.1. above. Only herbicides registered in compliance with applicable federal and state regulations may be applied.

4.4.5 In areas disturbed by the pipeline and associated facilities, the OWNER will cooperate with LANDOWNERS in control of noxious weeds and provide 48 hours notification before weed treatment is completed on private land.

4.4.6 All application of herbicides must be performed by an applicator with a valid Montana license.

4.4.7 During the second and third growing seasons following the completion of restoration and reseeded, the OWNER and STATE INSPECTOR shall inspect the ROW and ACCESS ROADS for newly established stands of noxious weeds. The OWNER shall provide access for the inspection. The county weed control supervisor shall be invited to attend this inspection. In the event that stands of weeds are encountered, appropriate control measures shall be taken by the OWNER.

4.5 OIL SPILL PREVENTION, CONTAINMENT, AND CONTROL PLAN

4.5.1 Appendix R will contain the final spill prevention, containment, and control plan. This plan must be approved by DEQ before the beginning of operation of the Project.

4.6 MONITORING

4.6.1 DEQ may continue to monitor operation and maintenance activities for the life of the Project in order to ensure compliance with the specifications in this section.

4.6.2 DEQ may require the OWNER to fund additional monitoring efforts to resolve problems which develop after release of the bonds described in Section 0.7. Such efforts would be limited to compliance with these specifications and other conditions adopted by DEQ.

5.0 DECOMMISSIONING

(Note to readers: DEQ is considering whether or not to require a bond or bonds for reclamation and revegetation at the end of the Project life)

5.1 PLAN AND NOTICE

5.1.1 At least 60 days prior to the start of construction in Montana, the OWNER shall develop and submit a decommissioning plan to DEQ for approval. The decommissioning plan shall address removal of above and below ground facilities;

reclamation of environmental resources including but not limited to: soil, vegetation, and restoration of land uses. The methods described in its application and these specifications shall be used to reclaim soil and vegetation and restore land uses. If additional soil or sub-soil is required to fill the trench, imported soil of a quality that is consistent with that of the property shall be used. The plan shall identify mitigation for compacted soils. Lands enrolled in CRP at the time of decommissioning, pastureland, rangeland, or their equivalent, shall be seeded with a mix selected by the LANDOWNER. The decommissioning plan shall also address disposal of waste materials pursuant to state law and regulations.

5.1.2 One year prior to the anticipated date for decommissioning of the certificated facility, the OWNER shall notify DEQ or its successor of the plans for decommissioning.

5.1.3 The OWNER shall be responsible to DEQ or its successor for complying with reclamation standards established at the time of Project approval, including applicable provisions of these specifications.

5.1.4 All water wells developed by the OWNER shall be conveyed or transferred to the LANDOWNER upon decommissioning of the pipeline.

Appendices

Appendix A: Sensitive Areas

Appendix B: Bonds

Appendix C: STATE INSPECTORS and OWNER'S Liaisons

Appendix D: Monitoring Plan

Appendix E: Variations in Right-of -Way Width

Appendix F: Hydrostatic Test Plan

Appendix G: Programmatic Agreement

Appendix H: Paleontological Memorandum of Understanding

Appendix I: Rehabilitation Plan Erosion Control, Reclamation, and Revegetation Plan

Appendix J: Areas Where Restrictions in the Timing of Construction Apply

Appendix K: Noxious Weed Management Plan

Appendix L: Requirements at Stream Crossings

Appendix M: Hazardous Materials Management Plan for construction and Spill Prevention, Containment and Countermeasure Plan for construction

Appendix N: Conditional Requirements Document

Appendix O: Fire Prevention and Suppression Plan

Appendix P: Burning Plan and Fire Plan

Appendix Q: Watersheds and Other Areas Where the use of Herbicides is Prohibited

Appendix R: Operational Spill Prevention, Containment, and Control Plan

Appendix A: Sensitive Areas

The following provisions shall be followed to assist in the protection of biological resources during construction and operations.

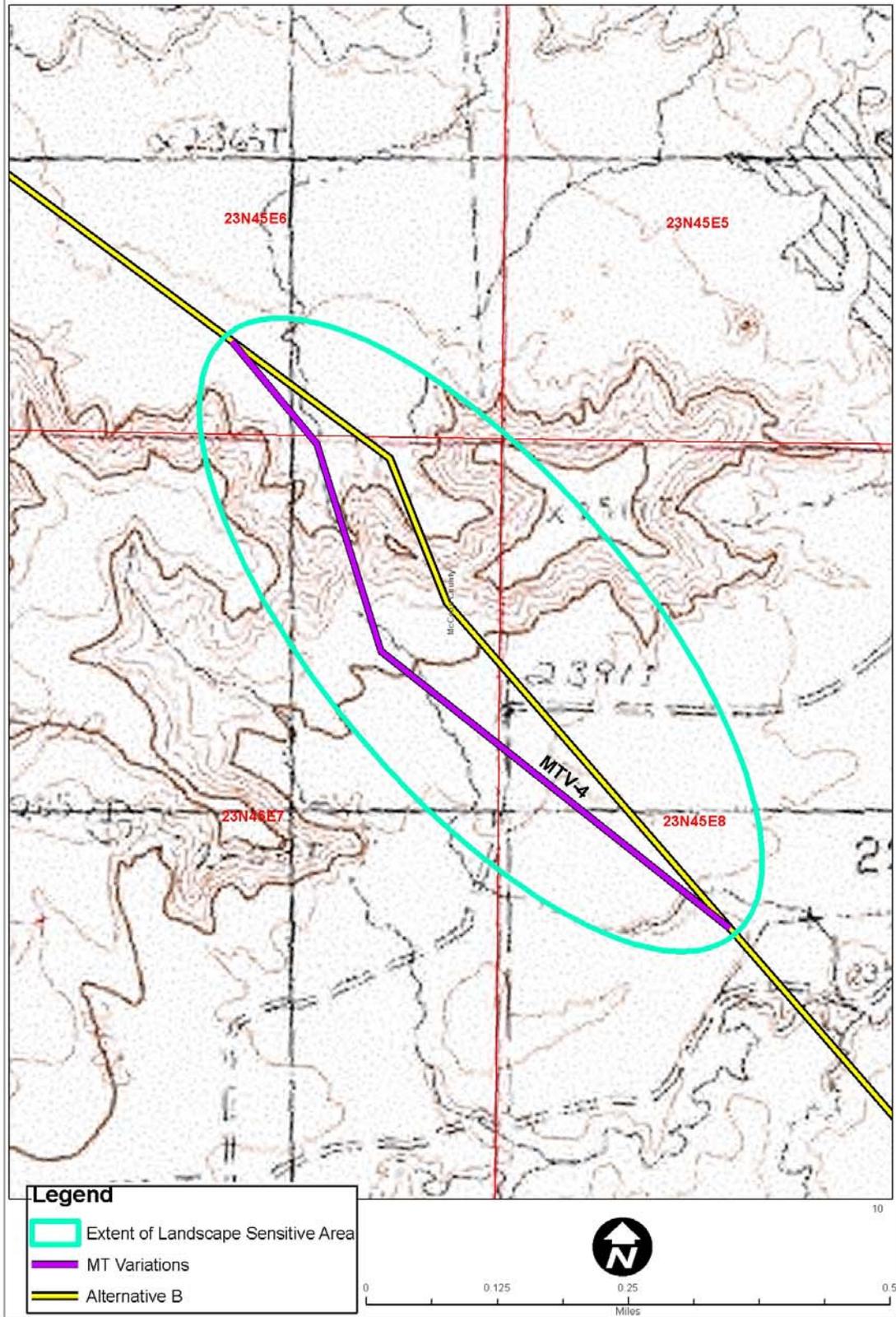
- Prior to the start of construction the OWNER shall conduct surveys to determine the locations of greater sage grouse leks and the peak number of males in attendance at these leks within four miles of the facility. The OWNER shall use survey methods approved by DEQ, FWP and BLM.
- Prior to the start of construction the OWNER shall also conduct surveys to determine the peak number of male sage grouse at leks identified by FWP and BLM more than four miles from the facility for use as a baseline in determining whether presence of the pipeline has affected sage grouse numbers;
- Construction within 4 miles of active greater sage-grouse leks from March 1 to June 15 is prohibited;
- The OWNER shall conduct surveys of sharp-tailed grouse leks prior to construction using methods approved by DEQ in consultation with FWP to detect leks within 2 miles of the edge of the construction ROW and associated power lines; and
- Construction within 2 miles of active sharp-tailed grouse leks from March 1 to June 15 is prohibited.
- The OWNER shall establish a compensatory mitigation fund to be used by DEQ, BLM and FWP to enhance and preserve sagebrush communities for greater sage-grouse and other sagebrush-obligate species in eastern Montana. The size of the fund will be based on the acreage of silver sagebrush and big sagebrush habitat disturbed during pipeline construction. For each acre disturbed the OWNER shall contribute \$600 dollars to the fund.
- The OWNER shall implement a study under the direction of DEQ, FWP, and BLM that would show whether presence of the facility has affected sage grouse numbers based on the peak number of male sage grouse in attendance at leks. For a period of 10 years, the OWNER shall annually monitor, compare, and report the peak number of male sage grouse at leks within 4 miles of the pipeline to those leks more distant than 4 miles and the numbers of males in attendance at leks within 4 miles of the facility before and after construction of the pipeline. At the end of this ten year period DEQ, FWP, and BLM will determine whether there has been a change in the number of male sage grouse in attendance. If there is a decrease, the OWNER will be required to increase the numbers of sage grouse elsewhere to offset the observed reductions. Documented sage grouse population increases as a result of expenditures from the compensatory mitigation fund above may be used to fulfill this requirement.
- The OWNER shall implement reclamation measures (e.g., application of mulch or compaction of soil after broadcast seeding, and reduced seeding rates for non-native grasses and forbs) that favor the establishment of silver sagebrush and big sagebrush in disturbed areas where compatible with the surrounding land use and habitats;
- Prior to construction, the OWNER shall conduct studies along the route to identify areas that support stands of big sagebrush and silver sagebrush and incorporate these data into reclamation activities to prioritize re-establishment of sagebrush communities as required above;

- In areas supporting stands of big sagebrush and silver sagebrush, the OWNER shall monitor establishment of sagebrush on reclaimed areas annually for at least 4 years to ensure that sagebrush plants become established at densities similar to densities in adjacent sagebrush communities and implement additional seeding or plantings of sagebrush if necessary unless otherwise requested by the landowner. Reports of this monitoring activity shall be submitted to the DEQ annually;
- The OWNER and DEQ shall establish criteria in conjunction with FWP and BLM to determine when reclamation of sagebrush communities has been successful based on pre- and post construction studies described above.
- The OWNER shall use locally adapted sagebrush seed, collected within 100 miles of the areas to be reclaimed;
- The OWNER shall contact BLM and FWP to determine what mitigation measures are needed for a lek found within the construction ROW and implement those measures;
- Unless otherwise requested by the landowner in writing, the DEQ and the OWNER shall monitor cover and densities of native perennial forbs and perennial grasses exclusive of noxious weeds on reclaimed areas and reseed with native forbs and grasses where densities and cover are not comparable to adjacent communities to achieve bond release per the criteria in Appendix B;
- The OWNER working in conjunction with the landowner shall restrict or appropriately manage livestock grazing of reclaimed areas until successful reclamation of sagebrush communities has been achieved as described above (i.e., at least 4 years of restrictions). During this time the OWNER shall compensate the landowner for lost grazing;
- The OWNER shall implement measures to reduce or eliminate colonization of reclaimed areas by noxious weeds and invasive annual grasses such as cheatgrass to the extent that these species do not exist in undisturbed areas adjacent to the right-of-way; and
- During construction, when trenches are open, conduct daily inspections to locate and remove animals that have been trapped in the open trench.
- Tree clearing will be minimized through a narrowing of the construction ROW and final centerline location in Township 9 North, Range 57 East, Section 15.

Landscape

The following sensitive area pertains to preservation of a topographic feature located as shown in the map below. The OWNER shall undertake a study to determine the feasibility of horizontally boring or directionally drilling below the feature to limit the amount of disturbance in the steep saddle between buttes. If this study shows that horizontally boring or directionally drilling is feasible then one of these methods shall be used in lieu of conventional open trench construction in this area.

Appendix A, Figure 1



Appendix B: Bonds

The amount of bond posted for performance during initial reclamation shall be \$_____. The amount of bond for performance during the reclamation and revegetation period shall be \$_____.

During initial reclamation the bond will be held to help ensure compliance with the terms of the DEQ CERTIFICATE and these Environmental Specifications. Should the OWNER fail to comply with terms of the CERTIFICATE or the Environmental Specifications the OWNER would be subject to penalties listed in 75-20-408 MCA and the DEQ would access and expend the initial reclamation bond for the purpose of ensuring that the conditions of the CERTIFICATE are met.

The following standards for reclamation and revegetation shall be used to determine release of the reclamation and revegetation bond or to determine that expenditure of the reclamation and revegetation bond is necessary to meet the requirements of the CERTIFICATE unless otherwise determined by the DEQ. In rangeland and pasture land erosion must be under control, any subsidence over the trench must be filled, water movement along the pipeline trench must not interfere with current land uses, and coverage of desirable perennial plant species excluding, specifically, species recognized as noxious weeds, shall be 30 percent or more of that on adjacent rangeland of similar slope and topography the year following revegetation, and 80 percent or more of the coverage of adjacent rangeland of similar slope and topography within 5 years following revegetation. Should the OWNER fail to comply with these reclamation and revegetation standards, the OWNER would be subject to penalties listed in 75-20-408 MCA and the DEQ could access the bond for the purpose of ensuring that the conditions are met or the OWNER would be required to repair areas damaged by erosion or settling and reseed areas not achieving 80 percent cover.

Appendix C: Names and Addresses of the STATE INSPECTORS and OWNER'S
Liaisons

The STATE INSPECTOR

Montana Department of Environmental Quality Fax: 406-444-1499
P.O. Box 200901, 1520 E. 6th Ave.
Helena, MT 59620-0901 E-mail address:
State Environmental Inspection Monitoring Contractors:

Owner's Environmental Inspector's Phone List

Spread 1
Spread 2
Spread 3
Spread 4

Appendix D: Monitoring Plan

The STATE INSPECTOR is responsible for implementing this monitoring plan required by 75-20-303(b) and (c), MCA, and for reporting whether terms of the CERTIFICATE and Environmental Specifications (including but not limited to adequacy of erosion controls, successful seed germination, and areas where weed control is necessary) are being met, along with any conditions in the MPDES General Permit for Storm Water Discharges Associated with Construction Activity. Additional mitigating measures may be identified by the STATE INSPECTOR on Federal lands in order to minimize environmental damage due to unique circumstances that arise during construction.

In addition to participating in preconstruction conferences, the INSPECTORS shall conduct on-site inspections during the period of construction. At a minimum the INSPECTORS will be present at the start of construction and during the initiation of construction in sensitive areas. Subsequently INSPECTORS shall strive to conduct on-site reviews of construction activities on at least a weekly schedule. More frequent monitoring may be necessary.

INSPECTORS shall record the dates of inspection, areas inspected, and instances where construction activities are not in conformance with Environmental Specifications or terms and conditions of the CERTIFICATE for the project. Inspection reports shall be submitted in a timely manner to the OWNER's Liaison who will see that corrections are made or that such measures are implemented in a timely manner.

When violations of the CERTIFICATE are identified, the STATE INSPECTOR shall report the violation in writing to the OWNER, who shall immediately take corrective action. If violations continue, civil penalties described in 75-20-408, MCA may be imposed.

Upon the completion of construction in an area, the INSPECTORS will determine that Environmental Specifications have been followed, and that activities described in OWNER's application have been completed and revegetation is progressing in a satisfactory manner.

In the event the DEQ determines that the OWNER is not correcting damage created during construction in a satisfactory manner or that initial revegetation is not progressing satisfactorily, DEQ may determine the amount and disposition of all or a portion of the reclamation bond to correct any damage that has not been corrected by the CERTIFICATE holder.

State Owned Parcels

On land owned by the state of Montana, the DEQ's environmental inspectors will help determine whether conditions contained in easements across state lands are followed. If conditions are not being met then DEQ inspectors will notify the appropriate DNRC regional office.

Weed Control

During the second and third growing season following the completion of restoration and reseeding, the OWNER and INSPECTORS will inspect the ROW and access roads for newly established stands of noxious weeds, to identify those areas where noxious weeds were not established prior to construction. The county weed control supervisor will be invited to attend this inspection. In the event that stands of weeds are encountered, appropriate control measures will be taken by the OWNER.

Spills

The following types of spills must be reported to DEQ or its successor: oil or hydraulic fluid spills greater than 25 gallons, spills that enter or may enter state water or a drainage that leads directly to surface water, spills that cause sludge or emulsion beneath the surface of the water or on stream banks or shorelines, spills that cause a film, "sheen", or change the color of the water, stream banks or shorelines, or releases or spills of any materials that would lower the quality of groundwater below water quality standards.

A STATE INSPECTOR will be named to coordinate DEQ response and monitoring. The STATE INSPECTOR will determine that recovery and cleanup efforts are complete, that impacts to the environment have been minimized when the nature and costs of various cleanup alternatives are considered, and that affected areas are adequately reclaimed. All DEQ monitoring costs shall be paid for by the OWNER.

Groundwater Monitoring Plan

In order to protect groundwater resources, the OWNER shall conduct pre- and post-construction monitoring of any wells or springs within 100 feet of the right-of-way. After the pipeline location has been approved, the OWNER would determine whether any wells or springs are within 100 feet of the right-of-way. The survey would be conducted by checking state well records, agency records, and personal communication with private landowners and field review. Baseline field surveys of each well or spring would include a visual estimate of flow and water clarity, and field-measured temperature, electrical conductivity, and pH. The results of required surveys would be filed with the agencies before construction commences near these wells and springs. After construction is complete, the wells and springs would be surveyed again for the same parameters to determine if construction has caused any impacts on the groundwater. If during construction any additional wells or springs are found within 100 feet of the right-of-way, the OWNER will sample these water sources as described above. In the unlikely event that post-construction monitoring shows that construction had an adverse effect on the groundwater, the OWNER shall provide for an emergency potable water source, if needed, and provide for the necessary repairs, replacement, and/or relocation of the affected wells and springs to restore the supply system to its former capacity. If it is

determined that there has been an impact on the quantity or quality of water available from a well or spring within 100 feet of the pipeline right-of-way as a result of pipeline construction or operation, then the OWNER will attempt to restore the well or spring to its original capacity as determined in the pre-construction survey using all reasonable efforts and typical well and/or spring restoration techniques.

If a well cannot be returned to its original quality or capacity using all reasonable efforts and typical restoration techniques, the OWNER will install a new well to the property owner's reasonable satisfaction with characteristics similar to the well lost. If a spring cannot be returned to its original quality or capacity using all reasonable efforts and typical restoration techniques, the OWNER will install a new well to replace the spring as determined by mutual agreement between the OWNER and the property owner and/or water right holder; and negotiate with the property owner and/or water right holder appropriate damages.

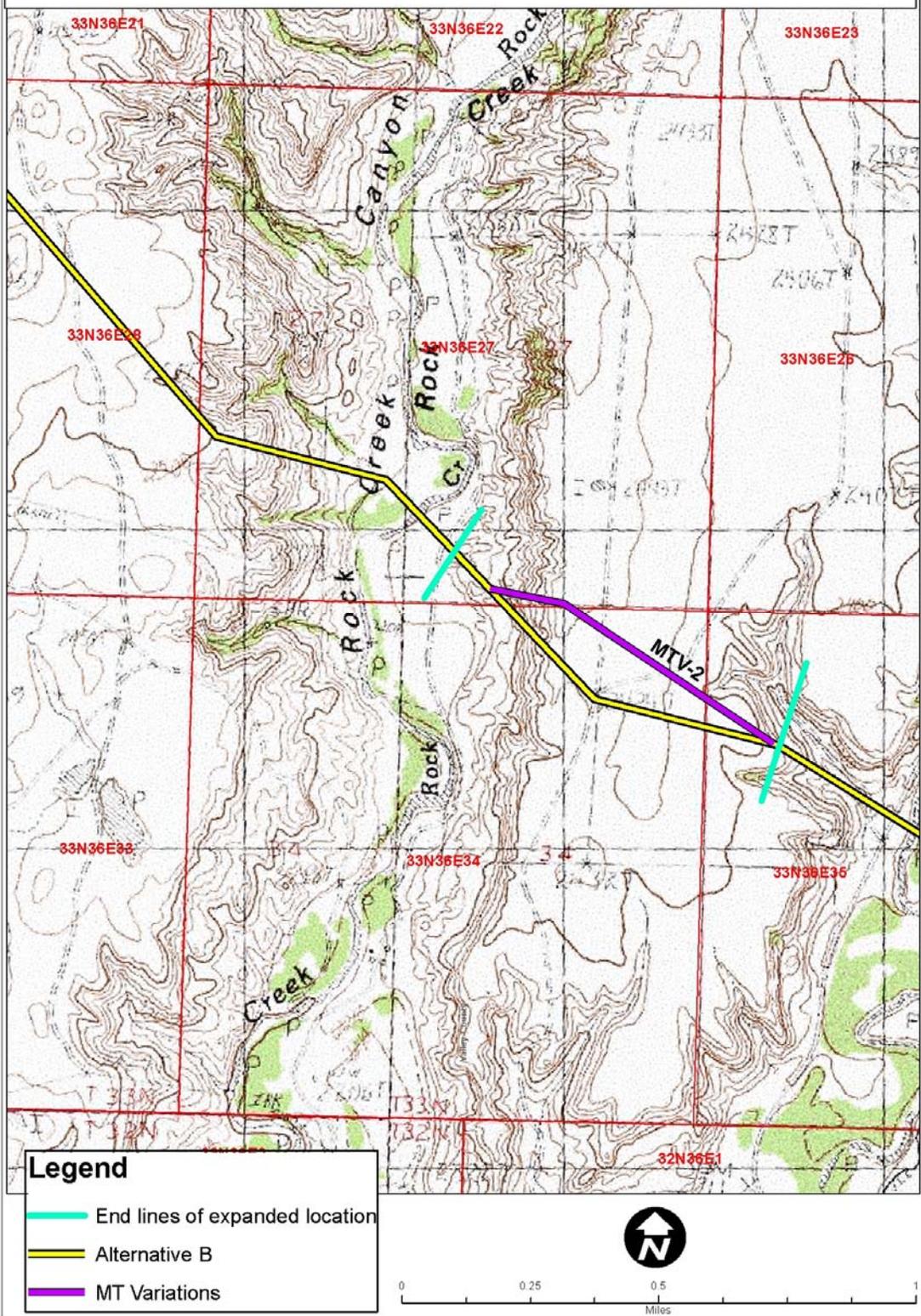
If it is not technically feasible after using all reasonable efforts to install a new well either at an existing or mutually agreeable alternate location, then the OWNER will negotiate with the property owner and/or water right holder appropriate damages to compensate for such loss.

Prior to commencement of construction the monitoring plan, including the ground water monitoring plan, must be approved by DEQ.

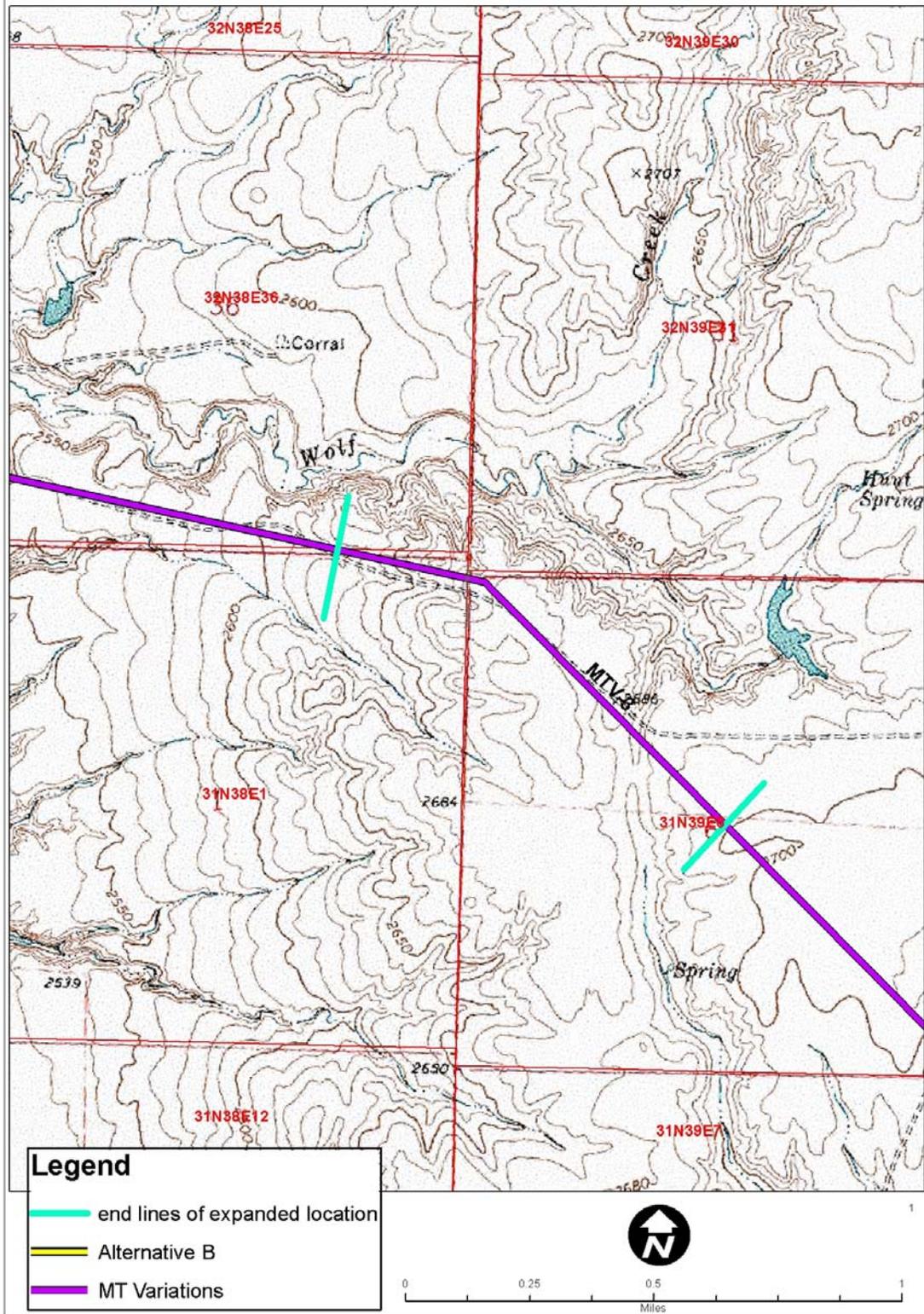
Appendix E: Variations in Approved Locations

The approved locations shall be 250 feet on either side for the referenced centerline indicated on the maps included with the CERTIFICATE. Construction activities shall be conducted in the minimum area necessary for safe and prudent construction in accordance with these specifications and indicated in TransCanada Keystone, L.P.'s (the OWNER) Major Facility Siting Act Application. In the areas indicated on the following maps, variations in the width of the approved location are allowed to reduce impacts. Construction of the project would occur within the areas shown on the attached maps.

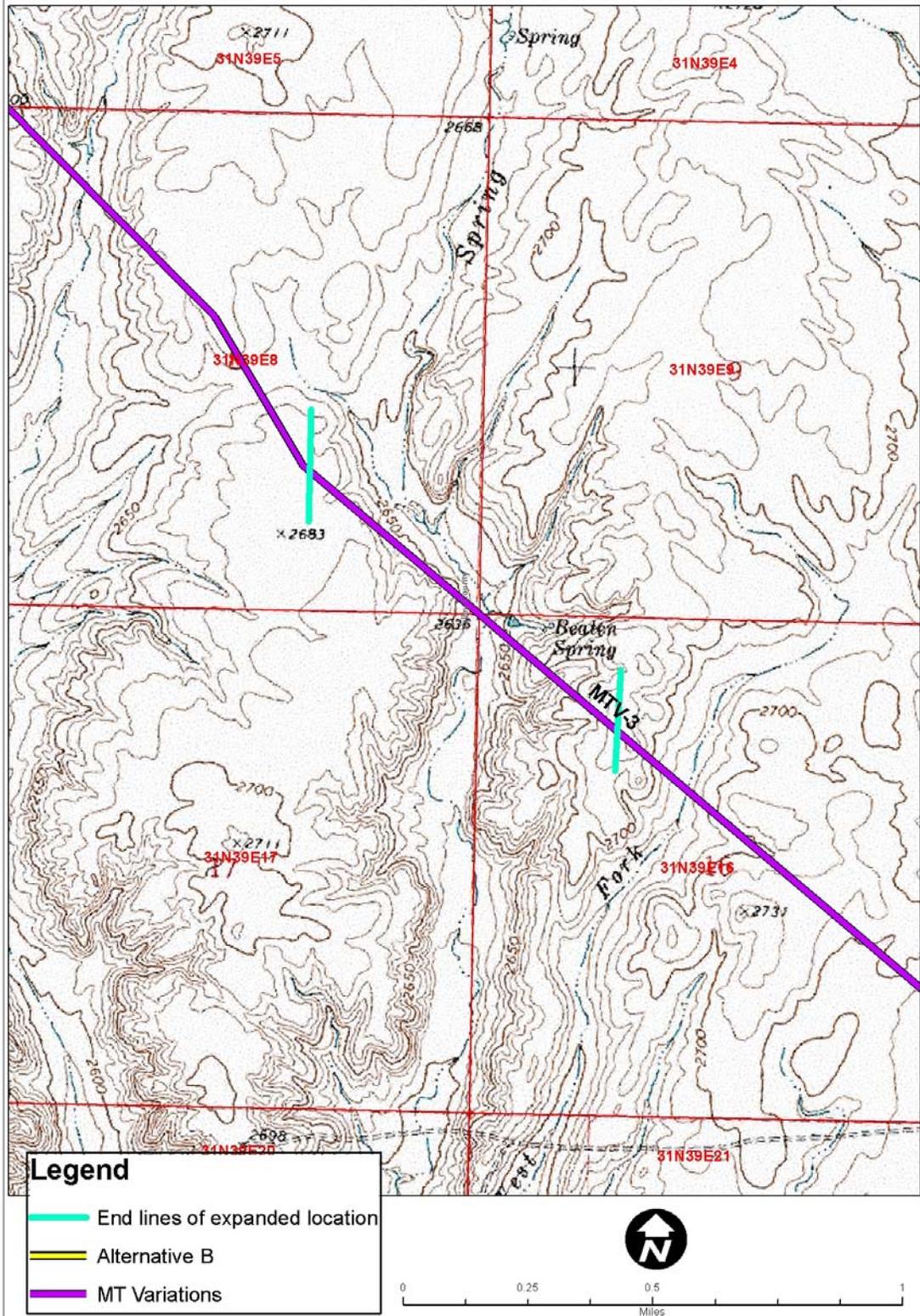
Appendix E, Figure 1: On the east side of the Rock Creek Canyon the approved location shall extend 700 feet north of Alternative B between the end lines shown to minimize side-hill construction.



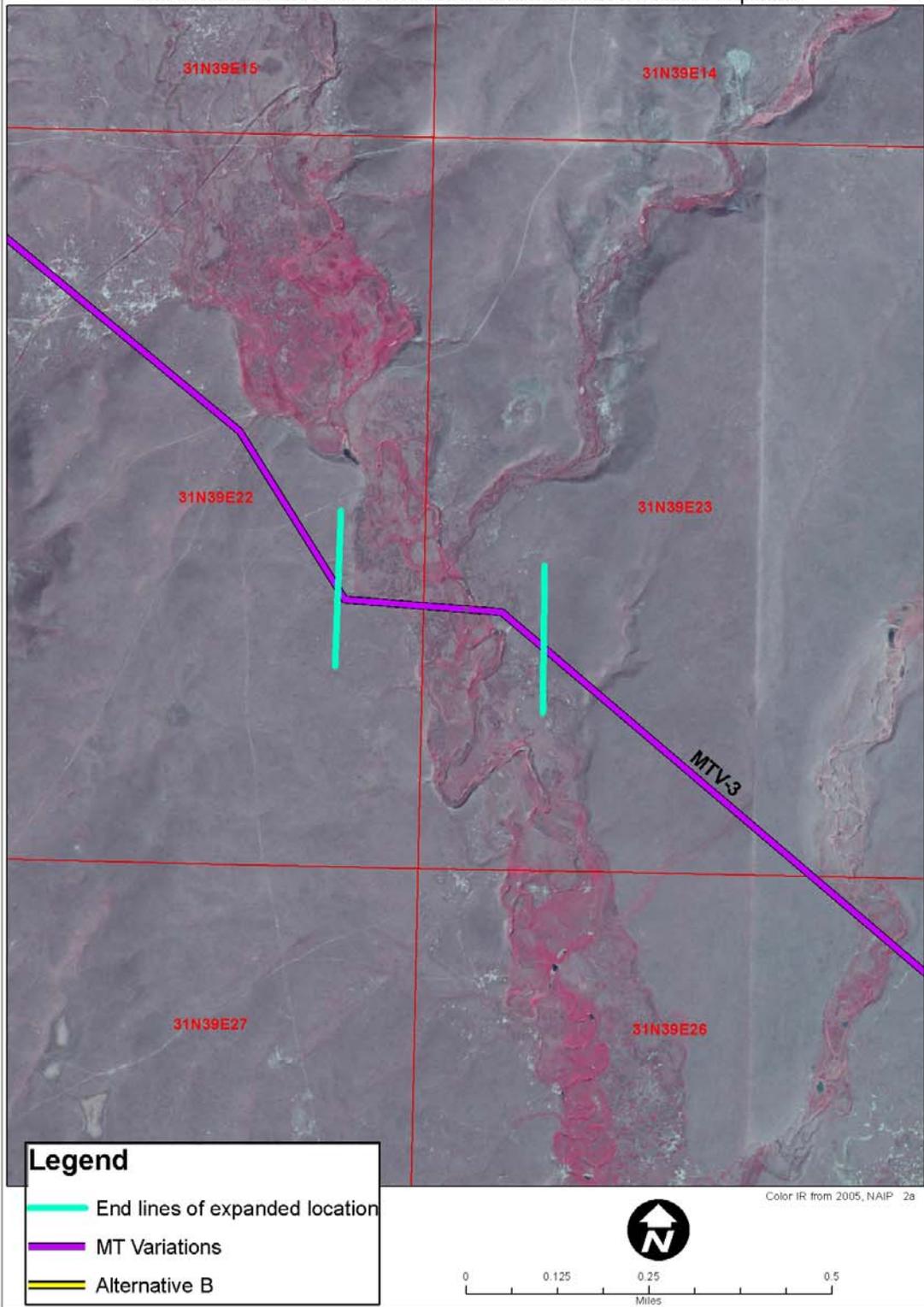
Appendix E, Figure 2: MTV-3 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid a resource concern.



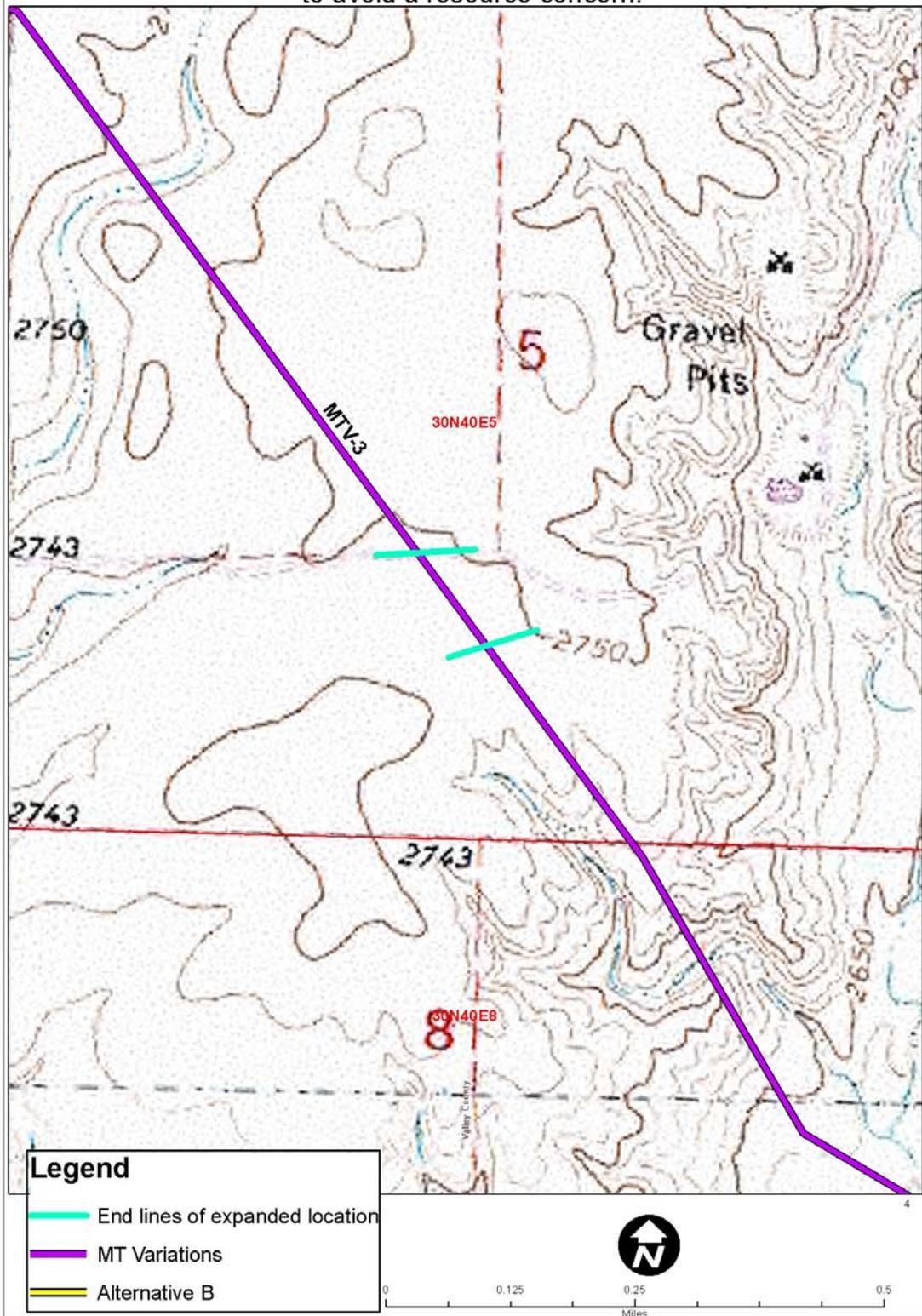
Appendix E, Figure 3: MTV-3 is provided a wider approved location of 1000 feet between the end lines on the south side of the variation shown, to allow for avoidance of challenging terrain and Beaten Spring.



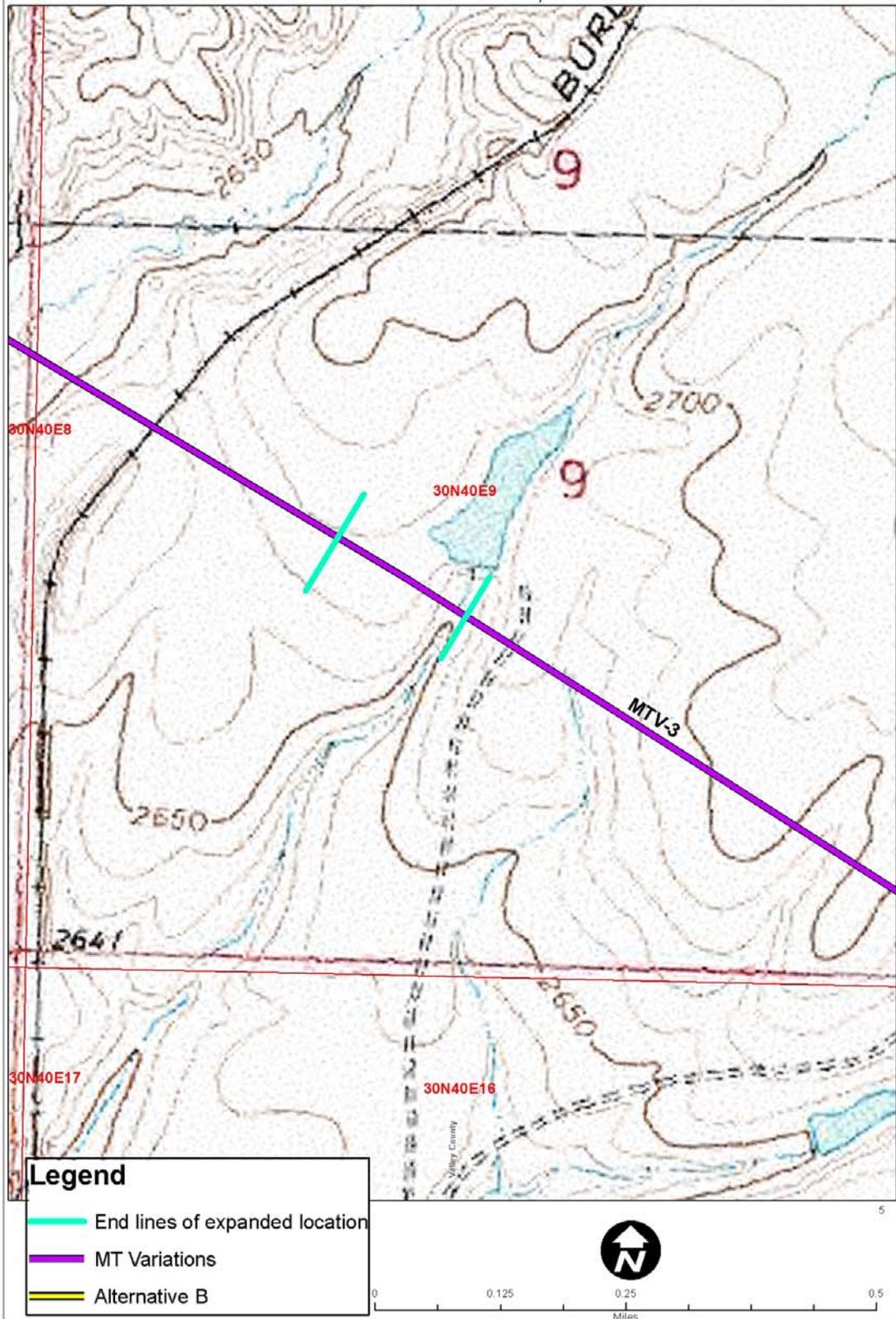
Appendix E, Figure 4: On both sides of Cherry Creek, the approved location shall encompass an area 1000 feet wide between the end lines shown and centered on the variation shown to allow a location that minimizes side-hill construction and minimizes wetland impacts.



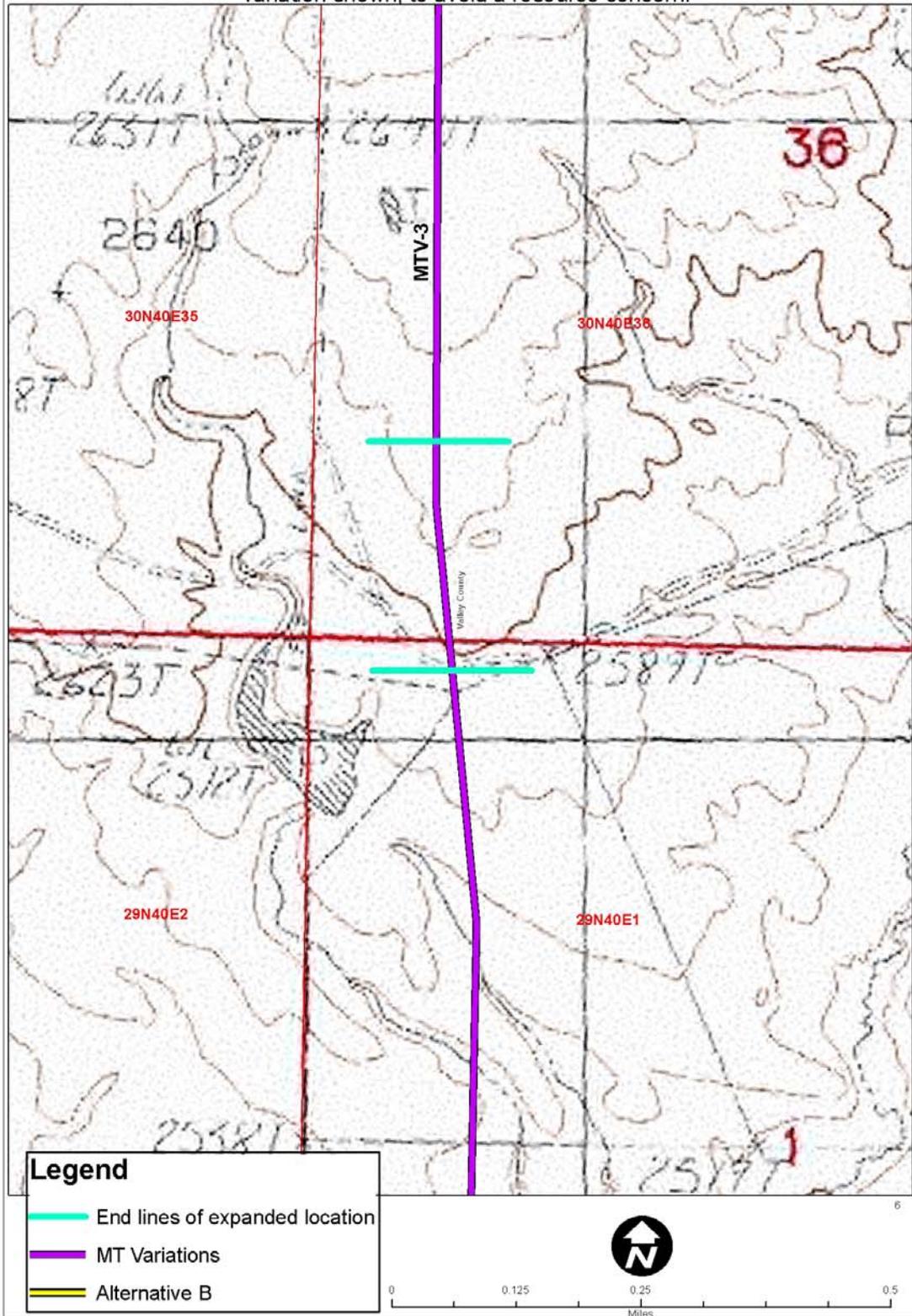
Appendix E, Figure 5: MTV-3 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid a resource concern.



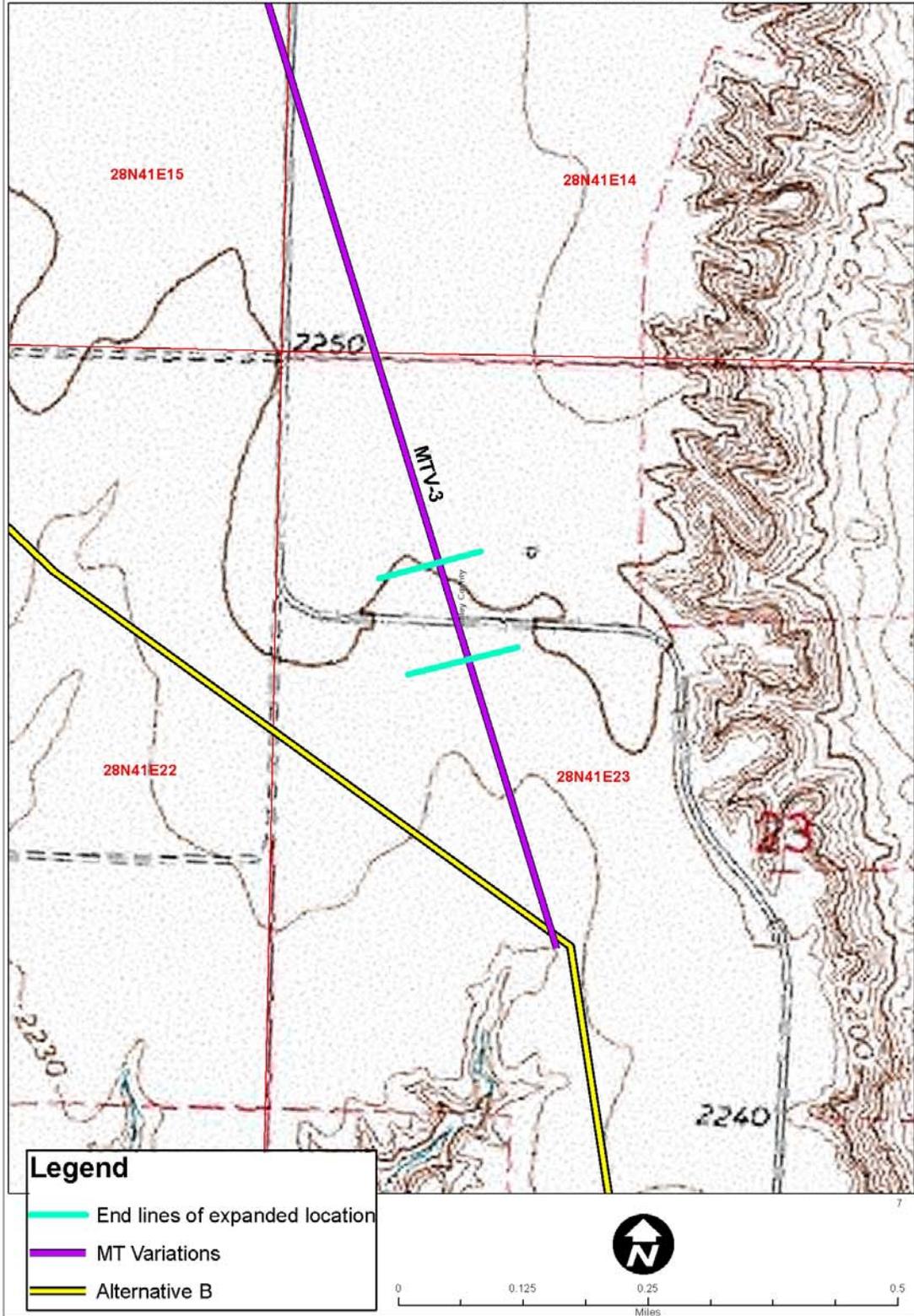
Appendix E, Figure 6: MTV-3 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid a resource concern.



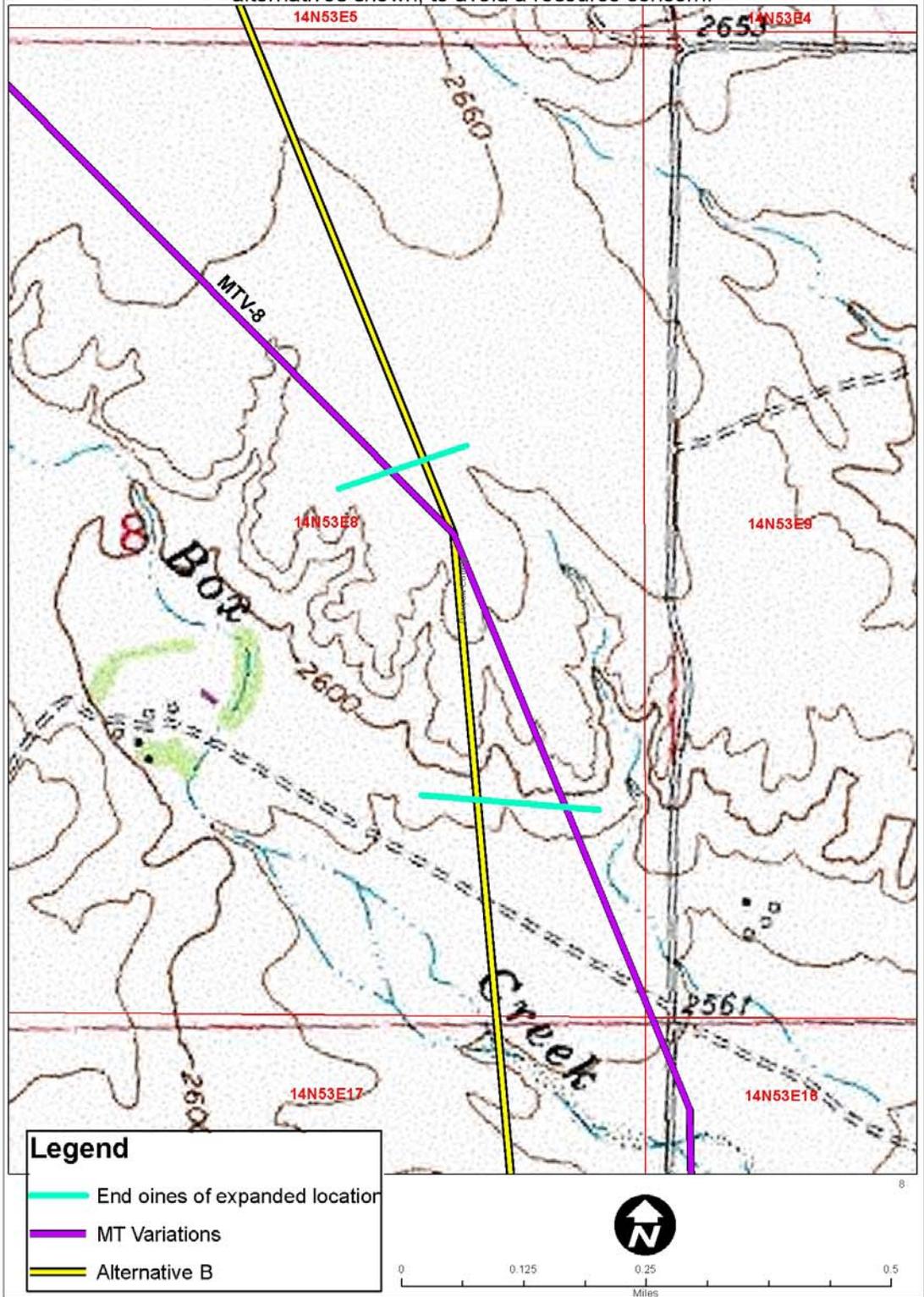
Appendix E, Figure 7: MTV-3 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid a resource concern.



Appendix E, Figure 8: MTV-3 is provided a wider approved location of 1000 between the end lines and feet centered on the variation shown, to avoid a resource concern.



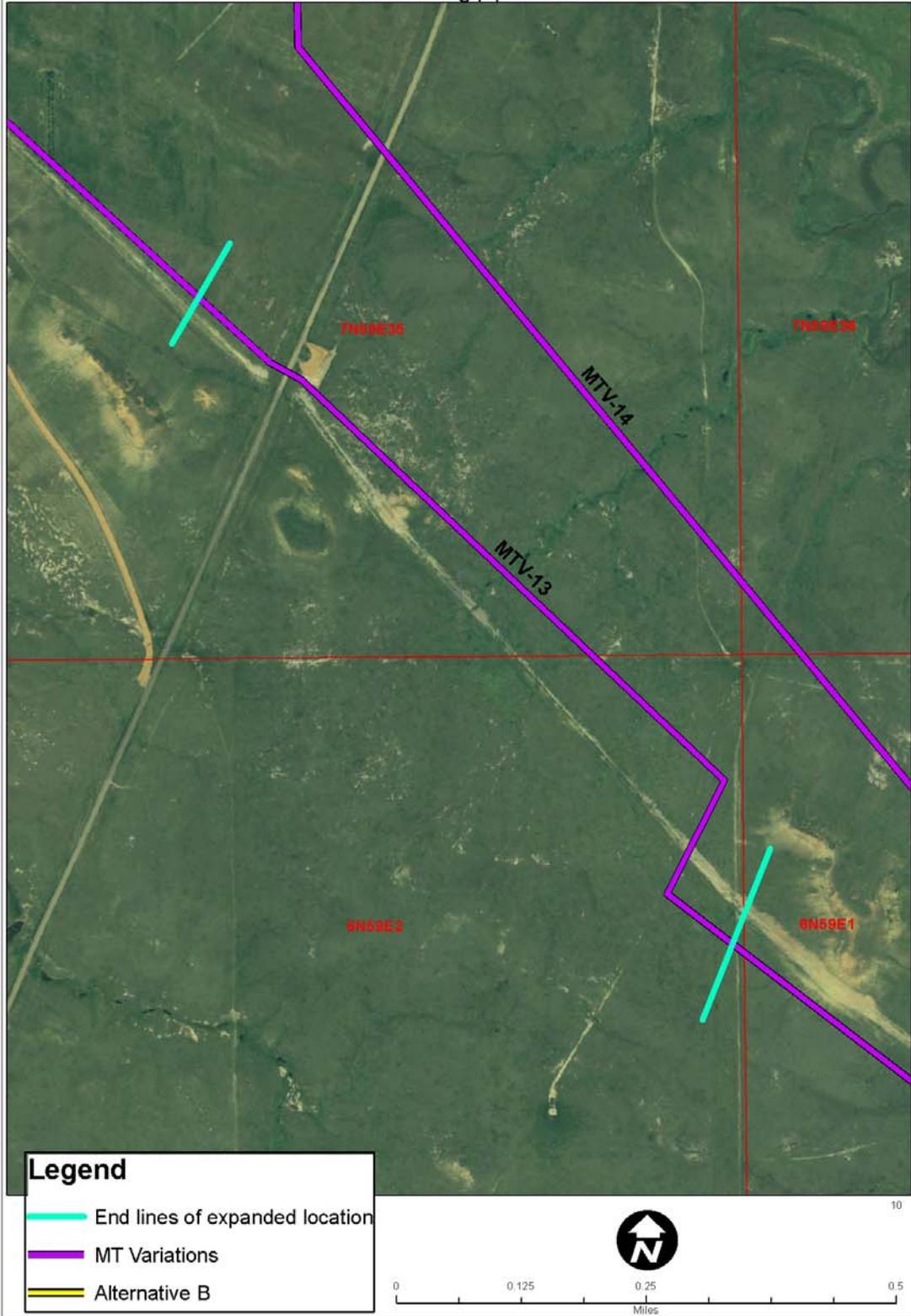
Appendix E, Figure 9: Depending on which alternative is chosen, Alternative B and MTV-8 are provided a wider approved location of 1000 feet between the end lines and centered on the alternatives shown, to avoid a resource concern.



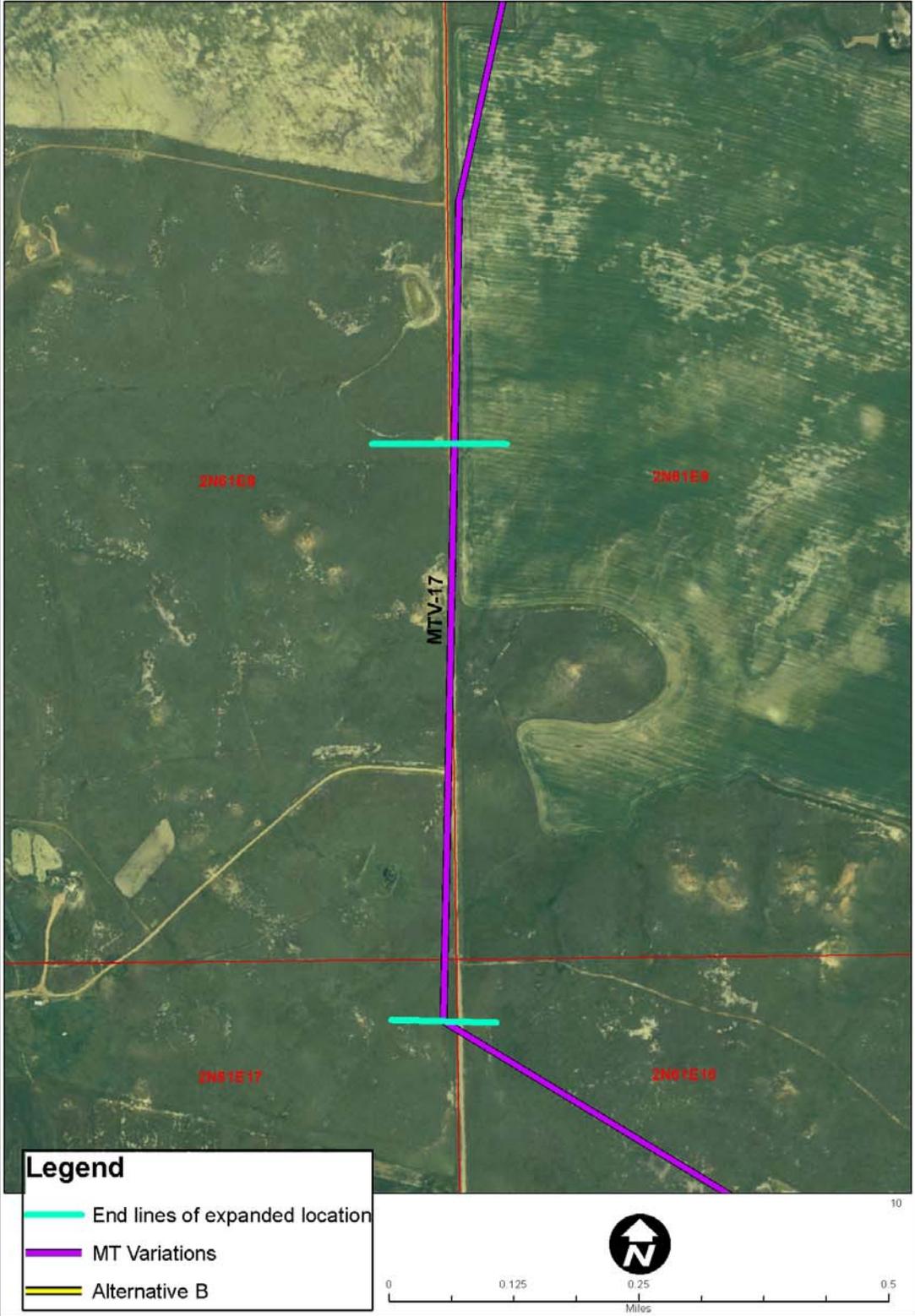
Appendix E, Figure 10: MTV-12 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to minimize disruption to badland topography.



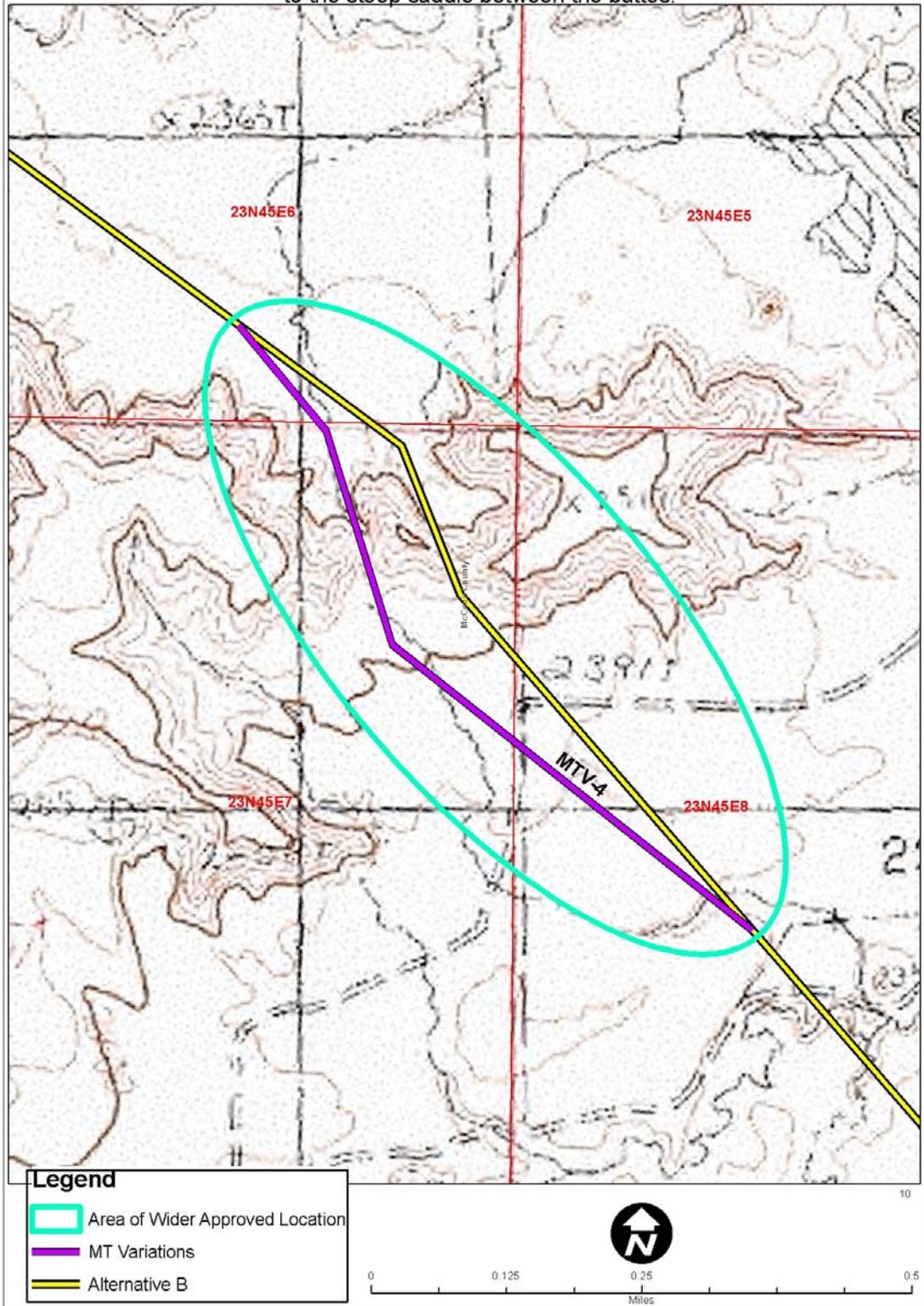
Appendix E, Figure 11: MTV-13 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid an existing pipeline and valve.



Appendix E, Figure 12: MTV-17 is provided a wider approved location of 1000 feet between the end lines and centered on the variation shown, to avoid disturbance to an existing road.



Appendix E, Figure 13: Depending on which alternative is chosen, Alternative B and MTV-4 are provided a wider approved location as depicted on the alternatives shown below, to avoid disturbance to the steep saddle between the buttes.



Appendix F: Hydrostatic Test Plan

(To be approved by DEQ prior to beginning of operations.)

APPENDIX G

Draft Programmatic Agreement

Among

The U.S. Department of State,
U.S. Bureau of Land Management,
U.S. Army Corps of Engineers,
U. S. Bureau of Reclamation,
National Park Service,
Western Area Power Administration,
U.S. Department of Agriculture Rural Utilities Service,
U.S. Department of Agriculture Natural Resources Conservation Service,
U.S. Department of Agriculture Farm Services Agency
U.S. Bureau of Indian Affairs
Montana Department of Natural Resources and Conservation,
Montana Department of Environmental Quality,
Advisory Council on Historic Preservation,
Montana State Historic Preservation Officer,
Kansas State Historic Preservation Officer,
Texas State Historic Preservation Officer,
Nebraska State Historic Preservation Officer,
Oklahoma State Historic Preservation Officer,
South Dakota State Historic Preservation Officer, and
Lower Brule Sioux Tribe
Basin Electric Power Cooperative
Regarding the Keystone XL Pipeline Project

WHEREAS, the U.S. Department of State (DOS) receives and considers applications for permits for cross border oil pipelines pursuant to the authority delegated by the President of the United States under Executive Order (EO) 13337 (69 Federal Register 25299); and

WHEREAS, on September 19, 2008, the DOS received an application for a Presidential Permit from TransCanada Keystone Pipeline, LP (Keystone) for the Keystone XL Pipeline Project (Keystone XL Project or the Project); and

WHEREAS, DOS has determined that issuance of a Presidential Permit for the Keystone XL Project triggers review under Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f, as amended) and its implementing regulations, "Protection of Historic Properties," (36 CFR Part 800); and

WHEREAS, the Project undertaking consists of construction of approximately 1,375 miles of new crude oil pipeline in the United States and utilizes 298 miles of the previously approved Keystone Cushing Extension, associated aboveground facilities (such as pump stations and transmission facilities and substations), and ancillary facilities (such as lateral pipeline, temporary workplace areas and pipe storage, access roads, and contractor yards); and

WHEREAS, the proposed Keystone XL Project pipeline alignment crosses Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas; and

WHEREAS, the proposed Keystone XL Project pipeline alignment crosses seven National Historic Trails: the Lewis and Clark National Historic Trail (LCNHT); Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails; the Santa Fe National Historic Trail; and El Camino Real de los Tejas National Historic Trail (ELTE). Each of these trails was designated by the U.S. Congress and have as their purpose “the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment;” (National Trails System Act, P.L. 90-543, as amended); and

WHEREAS, on (TBD), the Advisory Council on Historic Preservation (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 NHPA, had the potential to be met; and

WHEREAS, the United States Army Corps of Engineers (USACE) has determined that the approval for the Keystone XL Project to cross USACE administered lands (30 U.S.C. § 185) and to place structures in, under or over navigable waters of the United States, as defined under 33 CFR 329, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), and a permit for the placement of dredge or fill material in waters of the United States as part of the Keystone XL Project in accordance with Section 404 of the Clean Water Act (33 U.S.C. § 344; see 33 CFR 323), are federal actions related to the undertaking that require the USACE to comply with Section 106 of NHPA and 36 CFR Part 800; and

WHEREAS, the U.S. Bureau of Land Management (BLM) has determined the approval of the Keystone XL Project to cross Federal lands administered by the BLM would require authorization under Section 28 of the Mineral Leasing Act of 1920, as amended [(MLA) 30 USC 185]; and

WHEREAS, the U.S. Bureau of Land Management (BLM) has determined that Keystone will require access roads crossing public lands administered by BLM in support of the Keystone XL Pipeline Project and that the access roads will require authorization under Title V of the Federal Land Policy and Management Act, as amended [(FLMPA) 43 USC 1701] and

WHEREAS, the U.S. Bureau of Land Management (BLM) has determined that the Keystone XL Project will require electrical power from rural electrical cooperatives and that portions of the transmission lines will cross public lands administered by the BLM and that the transmission lines crossing public lands will require authorization under Title V of the Federal Land Policy and Management Act, as amended [(FLMPA) 43 USC 1701] and

WHEREAS, the U.S. Bureau of Reclamation (RECLAMATION) manages lands and facilities that will be crossed by the Keystone XL Project and this is a federal action related to the undertaking that requires RECLAMATION to comply with Section 106 of the NHPA and 36 CFR Part 800; and

WHEREAS, the Natural Resource Conservation Service (NRCS) has determined that it retains rights to a (TBD) acre parcel subject to the Wetlands Reserve Program (WRP) (16 U.S.C. 3837 et. seq.) easements in (TBD) and that the installation and maintenance of the Project pipeline on this WRP easement is a federal action associated with the undertaking that requires compliance with Section 106 of NHPA and 36 CFR Part 800; and

WHEREAS, the Farm Service Agency (FSA), manages private lands with federal easements along the Project APE as part of its Grasslands Reserve Program (jointly administered with the NRCS) as well as the Conservation Resource Program, and the Farmable Wetlands Program; and

WHEREAS, the FSA approval of the Project crossings in these areas constitutes an undertaking as per 36 CFR 800.16(y); and

WHEREAS, the Rural Utilities Service (RUS) has determined that the financial assistance it may provide to rural electric cooperatives and other entities for construction or modification of electrical transmission facilities (including transmission lines and substations) to power some Keystone XL Project pump stations, under USDA Rural Development's Utilities Programs, are Federal actions related to the undertaking that require RUS to comply with Section 106 of NHPA and 36 CFR Part 800; and

WHEREAS, the Bureau of Indian Affairs (BIA) has responsibility for approving any right-of-ways crossing Indian Trust lands and this is a federal action related to the undertaking that requires the BIA to comply with Section 106 of the NHPA and 36 CFR 800; and

WHEREAS, the Western Area Power Administration (WESTERN) has determined that the modification and construction of substations and transmission lines that WESTERN will own and that will provide power to the Keystone XL project, will require review under Section 106 of NHPA and 36 CFR Part 800, and has also determined that in order to maintain overall regional electrical power distribution system reliability as power is supplied to proposed Project pump stations in South Dakota over time, a new 230kV transmission line originating at the southern end of the Big Bend Dam on the Missouri River is required. This will include a new substation within the Lower Brule Sioux Reservation (Lower Brule Substation) and an interconnection to the existing Witten substation in Tripp County South Dakota and it is further determined that Western would design and construct that part of the proposed transmission line extending from the Big Bend Dam to the new Lower Brule Substation and would also design and construct the new Lower Brule Substation, and that the construction and operation of these components of the 230kV transmission line and its ancillary facilities represent connected actions under NEPA to the Project and therefore require review under Section 10d of the NHPA and 26 CFR Part 800; and

WHEREAS, Basin Electric Power Cooperative (BEPC) has participated in consultation and has been invited by DOS under 36 CFR 800. BEPC wishes to design and construct that part of the proposed 230kV transmission line that would extend from the new Lower Brule Substation to the existing Witten Substation in Tripp County, South Dakota, and also would take ownership and operational responsibility from Western for the new Lower Brule Substation, and that the

construction and operation of these components of the 230kV transmission line and its ancillary facilities represent connected actions under NEPA to the Project and therefore require review under Section 10d of the NHPA and 36 CFR Part 800; and

WHEREAS, the proposed 230kV electrical transmission line crosses the Reservation of the Lower Brule Sioux Tribe (LBST), a federally recognized Indian tribe that exercises its inherent governmental authority within the exterior boundaries of the Reservation; and

WHEREAS, the LBST have appointed the Director of Cultural Resources Office (LBST DCRO) as a designated representative to consult with the DOS regarding the Project and the potential for impacts to historic properties within the exterior boundaries of the LBST Reservation consistent with 36 CFR 800.2(c)(2)(i)(B); and

WHEREAS, the National Park Service (NPS) has been invited to consult with the DOS concerning the Project due to the potential for adverse effects to several National Historic Trails including the LCNHT and ELTE; and

WHEREAS, the Montana Department of Natural Resources and Conservation has participated in consultation and has been invited by DOS under 36 CFR 800.6(c) (2) to sign this PA as an invited signatory; and

WHEREAS, the Montana Department of Environmental Quality has participated in consultation and has been invited by DOS under 36 CFR 800.6(c) (2) to sign this PA as an invited signatory; and

WHEREAS, the USACE, BLM, RUS, BIA, NRCS, WESTERN, RECLAMATION, and FSA have designated the DOS as the lead federal agency for purposes of Section 106 of the NHPA in accordance with 36 CFR § 800.2(a)(2); and

WHEREAS, the Keystone XL Project area of potential effect (APE) includes: (1) in Montana – a 300 foot wide corridor, 150 feet on each side from the centerline; (2) in South Dakota – a 300 foot wide corridor, 150 feet on each side from the centerline; (3) in Nebraska – a 300 foot wide corridor, 150 feet from each side from the centerline; (4) in Kansas – all areas of disturbance related to the construction of two pump stations; (5) in Oklahoma – a 300 foot wide corridor, from centerline of outermost existing pipeline; and (6) in Texas - a 300 foot wide corridor, with 200 feet from the existing infrastructure feature centerline on the side where the proposed pipeline is to be collocated and 100 feet from the existing feature centerline on the opposite side, or, if the route is not collocated with existing infrastructure, then the survey area will be centered on the proposed pipeline (150 feet on each side). For transmission lines and access roads in each state, a 100 foot wide corridor centered on the Project centerline will be used. For pumping stations and other areas that are to be disturbed by construction related activities and ancillary facilities (including construction camps and pump stations), the APE will include all areas of disturbance and areas to be indirectly affected; and

WHEREAS, the DOS has determined that the construction of the Keystone XL Project may have an adverse effect on properties listed in or eligible for listing in the National Register of

Historic Places (NRHP), and has consulted with the Montana, South Dakota, Nebraska, Kansas, Oklahoma, and Texas State Historic Preservation Officers (SHPOs), Indian Tribes, and the ACHP, pursuant to 36 CFR Part 800; and

WHEREAS, the BLM will incorporate this Programmatic Agreement (PA) into its decisional process on any authorization under the MLA or FLPMA it may issue for the Keystone XL Project, and will include in any authorization it issues on the Keystone XL Project, a condition that Keystone will abide by its commitments in this PA; and

WHEREAS, in accordance with 36 CFR §§ 800.4(b)(2) and 800.5(a)(3), the DOS has elected to phase identification and evaluation of historic properties, and application of the criteria of adverse effect, respectively, because access to those areas identified in Attachment A has been restricted by property owners' refusal to grant Keystone permission to enter their private property; and

WHEREAS, pursuant to 36 CFR § 800.14(b), the DOS has elected to execute this PA for the Keystone XL Project because effects on historic properties cannot be fully determined prior to the issuance of a permit for the undertaking; and

WHEREAS, the DOS will incorporate this PA into its decisional process on any Presidential Permit that it may issue for the Keystone XL Project and will include in any permit it issues on the Keystone XL Project a condition that Keystone will abide by its commitments in this PA; and

WHEREAS, Keystone, which will construct the Keystone XL Project pipeline, has participated in consultation, has been invited by DOS under 36 C.F.R. §§ 800.2(c)(4) and 800.6(c)(2) to sign this agreement as an invited signatory and intends to sign this agreement as an invited signatory; and

WHEREAS, for the purposes of this agreement, "Indian tribes and Nations" shall have the same definition as "Indian tribes" which appears in Section 301(4) of the NHPA; and

WHEREAS, DOS invited the Indian tribes listed in Attachment B to participate in consultation; and

WHEREAS, the Absentee-Shawnee Tribe of Indians of Oklahoma; the Alabama-Coushatta Tribe of Texas, Blackfeet Tribe, Caddo Nation of Oklahoma, Cheyenne River Sioux, Cheyenne-Arapaho Tribe of Oklahoma, Chippewa-Cree Indians, Choctaw Nation of Oklahoma, Crow Tribe of Indians, Delaware Nation, Fort Peck Tribes, Gros Ventre and Assiniboine Tribe of Ft. Belknap, Ho-Chunk Nation of Wisconsin, Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Kaw Nation, Kialegee Tribal Town of the Creek Nation in Oklahoma, Kickapoo Tribe of Kansas, Kiowa Indian Tribe of Oklahoma, Lower Sioux Indian Community, Miami Tribe of Oklahoma, Mille Lacs Band of Ojibwe, Muscogee (Creek) Nation, Northern Arapaho Tribe, Northern Cheyenne Tribe, Northern Ute Tribe, Oglala Sioux Tribe, Osage Nation of Oklahoma, Pawnee Nation of Oklahoma, Ponca Tribe of Indians of Oklahoma, Ponca Tribe of Nebraska, Rosebud Sioux Tribe, Sac & Fox Nation of Oklahoma, Santee Sioux Tribe of Nebraska, Shoshone-Bannock Tribe, Sisseton-Wahpeton Oyate Sioux, Spirit Lake Tribe, Standing Rock Sioux Tribe, Three Affiliated Tribes, Tonkawa Tribe, Turtle Mountain Band of

Chippewa, Wichita and Affiliated Tribes, Winnebago Tribe, and Yankton Sioux have participated in consultation and have been invited to concur in this PA, in accord with 36 C.F.R. §§ 800.2(c)(2) and 800.6(c)(3);

NOW, THEREFORE, the DOS, USACE, BLM, RUS, BIA, FSA, NRCS, WESTERN, RECLAMATION, NPS, ACHP, BEPC, and the Montana, South Dakota, Nebraska, Kansas, Oklahoma, and Texas SHPOs agree that the following stipulations will be implemented in order to take into account the effect of the undertaking on historic properties and to satisfy all responsibilities under Section 106 of the NHPA.

STIPULATIONS

The DOS, BLM, RUS, BIA, FSA, NRCS, WESTERN, USACE, RECLAMATION, NPS, and BEPC as appropriate, will ensure that the following stipulations are carried out.

I. STANDARDS

- A. Identification and evaluation studies and treatment measures required under the terms of this PA will be carried out by or under the direct on-site supervision of a professional(s) who meets, at a minimum, the *Secretary of the Interior's Historic Preservation Professional Qualification Standards* (48 FR 44716, September 29, 1983).
- B. In developing scopes of work for identification and evaluation studies, and treatment measures required under the terms of this PA, Keystone and RUS applicants will take into account the following regulations and guidelines:
 - 1. the ACHP's guidance on conducting archaeology under Section 106 (2007);
 - 2. the ACHP's *Policy Statement Regarding the Treatment of Burial Sites, Human Remains and Funerary Objects* (February 23, 2007);
 - 3. applicable SHPO guidance;
 - 4. the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-42, September 29, 1983);
 - 5. the "*Treatment of Archaeological Properties*" (ACHP 1983);
 - 6. the *Guidelines for Reporting on Cultural Resources Investigations for Pipeline Projects*" (Federal Energy Regulatory Commission, Office of Energy Projects, December 2002);
 - 7. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403);
 - 8. Section 404 of the Clean Water Act (33 U.S.C. § 344);
 - 9. BLM 8110 Manual: Identifying and Evaluating Cultural Resources;
 - 10. Montana/Dakotas Cultural Resources Handbook 8110-1: Guidelines for Identifying Cultural Resources;
 - 11. The National Trails System Act (P.L. 90-543, as amended);
 - 12. Section 28 of the Mineral Leasing Act of 1920 (30 USC 185);
 - 13. Title V of the Federal Land Policy and Management Act of 1976 (43 USC 1701); and
 - 14. applicable LBST guidance or tribal code.

II. CONFIDENTIALITY

DOS, BLM, RUS, WESTERN, RECLAMATION, NPS and USACE will safeguard information about historic properties of religious and cultural significance to Indian tribes, including location information, or information provided by Indian tribes to assist in the identification of such properties, to the extent allowed by Section 304 of NHPA [16 U.S.C. 470w3] and other applicable laws.

III. THE RESPONSIBILITIES OF FEDERAL LAND MANAGEMENT AGENCIES

- A. The USACE will ensure that the requirements of this PA have been met for that part of the APE under its jurisdiction, pursuant to Section 10 and Section 404 permitting authority.
- B. The USACE will comply with Section 106 and its implementing regulations (36 CFR Part 800) for the issuance of permits for those actions under its jurisdiction.
- C. The BLM will ensure that the requirements of this PA have been met for that part of the APE under its jurisdiction, pursuant to the MLA authorization(s).
- D. The BLM will ensure that the requirements of this PA have been met for that part of the APE under its jurisdiction, pursuant to the FLPMA authorization(s).
- E. The BLM will comply with Section 106 and its implementing regulations (36 CFR Part 800) for the issuance of permits for those actions under its jurisdiction.
- F. RECLAMATION will review and comment on the evaluation and treatment of any historic properties managed by RECLAMATION.

IV. KEYSTONE XL PROJECT – CONSTRUCTION OR MODIFICATION OF ELECTRICAL TRANSMISSION FACILITIES

- A. Prior to granting approval of financial assistance to construct or modify electrical transmission facilities by rural electric cooperatives or other entities, RUS will complete the requirements of 36 CFR §§ 800.3 through 800.7.
- B. In implementing Stipulation IV.A, RUS may authorize an applicant to initiate Section 106 consultation in accordance with 36 CFR § 800.2(c) (4). In doing so, RUS may not delegate its responsibility to conduct government-to-government consultation with Indian tribes to an applicant. An applicant may consult with an Indian tribe only if RUS and that tribe agree, in writing, to conduct consultation in that manner.
- C. Prior to construction of the 230kV transmission line WESTERN will own, WESTERN will complete the requirements of 36 CFR 800.3 through 800.7. In implementing Stipulation IV.C., WETERN will serve as a signatory consulting party under the DOS Programmatic Agreement.

- D. RUS will ensure that the terms of Stipulation VI.B and Attachment D are incorporated into construction contracts to ensure that its applicants and construction contractors meet their responsibility for notification of any unanticipated discoveries.

V. KEYSTONE XL PROJECT – PIPELINE CONSTRUCTION

- A. The DOS has provided and will continue to offer consulting parties with an opportunity to provide their views on the identification and evaluation of historic properties (as defined in 36 CFR 800.16(l), including historic properties of religious and cultural significance to Indian tribes, and the treatment of affected historic properties, in connection with the construction of the Keystone XL Project as described in Stipulation V.C of this PA.
- B. DOS remains responsible for conducting government-to-government consultation with Indian tribes, unless the Indian tribe agrees, in writing, to consult directly with Keystone.
- C. Identification and Evaluation of Historic Properties

- 1. In consultation with the LBST DCRO, SHPOs and consulting parties, the DOS will make a reasonable and good faith effort to complete the identification and evaluation of historic properties within the APE for each construction spread prior to the initiation of construction of that spread, in accordance with 36 CFR § 800.4(a), (b) and (c). On federal lands, the scope of the identification effort will be determined by the appropriate federal land managing agency in consultation with the DOS, applicable SHPO, and consulting parties.
- 2. For the APE in Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas, DOS will make a reasonable and good faith effort to complete the identification and evaluation of historic properties, in accordance with 36 CFR § 800.4(a), (b) and (c), before Keystone initiates construction activities (including vegetative clearing to comply with the Migratory Bird Treaty Act if clearing is undertaken).
 - a. In the identification and evaluation of historic properties to which Indian tribes attach religious and cultural significance, the DOS will take into consideration information submitted by Indian tribes to DOS by (TBD).
 - b. In the event identification of historic properties cannot be completed for any construction spreads prior to construction, Keystone will develop and submit a Coordination Plan to DOS for review and approval pursuant to Stipulation V.E that describes the measures it will implement to complete the identification and evaluation of historic properties before such properties are adversely affected by vegetation clearing and construction activities related to that spread.

D. Treatment of Historic Properties

- 1. Whenever feasible, avoidance of adverse effects to historic properties will be the preferred treatment. In consultation with the DOS, LBST DCRO, ACHP, SHPOs,

THPOs, and consulting parties, Keystone may elect to consider and implement avoidance measures prior to completing the evaluation of historic properties.

2. When historic properties are identified in the APE pursuant to Stipulation IV.C, DOS will apply the criteria of adverse effect in accordance with 36 CFR § 800.5(a) in consultation with the LBST DCRO, ACHP, SHPO and other consulting parties. If DOS finds that historic properties might be adversely affected by actions covered under this PA and within the APE, DOS will consult with the LBST DCRO, ACHP, SHPO and other consulting parties to determine prudent and feasible ways to avoid adverse effects.
 - a. Once DOS approves avoidance measures, Keystone will implement those measures.
 - b. Keystone will notify DOS if Keystone finds that the implementation of such measures is not prudent and feasible. If DOS agrees the measures are not prudent and feasible, DOS will consider proposed alternatives to the avoidance measures in accordance with the terms of Stipulation V.C through H.
3. If DOS determines that the adverse effect cannot be avoided, DOS will consult with the LBST DCRO, ACHP, SHPO and other consulting parties to determine those measures to be implemented by Keystone to minimize and mitigate adverse effects on affected historic properties identified in the APE.
4. If, after consultation, DOS determines that the adverse effect cannot be avoided, Keystone will draft a comprehensive Treatment Plan that describes the measures identified by DOS under Stipulation V.D.3 to minimize and mitigate the adverse effect of pipeline construction activities on historic properties, the manner in which these measures will be carried out and a schedule for their implementation.
 - a. When mitigation consists of or includes data recovery, the Treatment Plan also will identify the specific research questions to be addressed by data recovery with an explanation of their relevance, the archaeological methods to be used, and provisions for public interpretation and education, subject to Stipulation II restrictions, if any.
 - b. Keystone will submit the draft Treatment Plan to the DOS, BLM, ACHP, LBST DCRO, SHPOs, MT DEQ (if applicable), MT DNRC (if applicable), and other consulting parties for a thirty (30) calendar day review. Keystone shall address timely comments and recommendations submitted by consulting parties in preparation of the Final Treatment Plan.
 - c. When it has addressed all of the timely comments and recommendations, Keystone will submit the Final Treatment Plan to DOS for review and approval. Keystone will also submit the Final Treatment Plan to BLM for review and approval when involving lands subject to Stipulation III.C through E. DOS and

BLM will approve the Treatment Plan within 30 calendar days. Once the Final Treatment Plan is approved by DOS (and the BLM if involving BLM-managed lands), copies of the Plan will be distributed to all consulting parties.

5. Keystone will make a reasonable and good faith effort to complete implementation of the Final Treatment Plan approved by DOS prior to beginning construction of any spread for which the Treatment Plan is required. If it is not possible to meet this schedule, Keystone will develop a Coordination Plan in accordance with Stipulation V.E that establishes how appropriate treatment will be determined and implemented during construction of the respective spread.

E. Coordination of Construction and Historic Preservation Activities

1. The DOS will make a reasonable and good faith effort to complete the identification and evaluation of historic properties, and the mitigation of adverse effects to them in accordance with Stipulations V.C. and V.D prior to the initiation of vegetative clearing if vegetative clearing is to be undertaken and construction on the Keystone XL spreads, including the Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas spreads.
2. If these DOS activities cannot be completed prior to the start of vegetative clearing and construction of these spreads, Keystone shall develop and provide to DOS a detailed plan describing how the requirements of Stipulations V.C and D – identification, evaluation and treatment of historic properties - will be completed in coordination with vegetative clearing and construction activities in such a way that historic properties will not be adversely affected prior to the implementation of any mitigation measures.
 - a. The Coordination Plan will include those measures developed by Keystone pursuant to Stipulations V.C and D to complete the identification and evaluation of historic properties, and, as appropriate, mitigation of adverse effects to them during and coordinated with vegetation clearing and construction activities. In addition, the plan will include a schedule for all proposed activities and recommended measures for the protection of unanticipated discoveries in accordance with Attachments C and D, as appropriate.
 - b. Keystone will submit the draft Coordination Plan for such spreads, including the Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas spreads, to the DOS, ACHP, LBST DCRO, SHPOs, THPOs, and consulting parties for thirty (30) calendar day review. Keystone shall address timely comments and recommendations submitted by consulting parties in preparation of the Final Coordination Plan. When it has addressed all of the comments and recommendations, Keystone will submit the Final Coordination Plan to DOS for review and approval. DOS shall approve the Coordination Plan within 30 calendar days. Following approval by DOS, the Final Coordination Plan will be distributed to all of the consulting parties.

3. Keystone will complete implementation of the Final Coordination Plan approved by DOS during construction of the Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas spreads.

F. Construction Monitoring

1. In consultation with the LBST DCRO, SHPOs and Indian tribes, Keystone will monitor construction in selected areas of the APE of each spread as a supplement to identification efforts. Any historic properties identified by Keystone will be treated in accordance with Stipulation VI.A and C.
2. Construction monitoring will be performed by a professional who either meets the qualification standards for archaeology established in Stipulation I.A or is under the on-site supervision of a such a professional. For tribal monitoring, other types of experience with construction monitoring and/or traditional cultural knowledge may be substituted for degrees required by the Standards at the discretion of the DOS. When the monitoring occurs on BLM managed lands, all monitors must have a valid Archaeological Resources Protection Act (ARPA) permit or be included on a BLM-approved ARPA permit.
3. Keystone shall consider information provided by Indian tribes in a timely manner when completing the identification of historic properties before construction begins under Stipulation V.C and in preparing a construction monitoring plan provided for under Stipulation V.F.4. Keystone shall provide Indian tribes a reasonable opportunity to participate as monitors during project construction.
4. Keystone has submitted a plan for construction monitoring for each spread to the DOS, ACHP, LBST DCRO, SHPO, THPOs, and consulting parties for review and comment prior to the signing of this Agreement. The monitoring plan is attached to this agreement in Attachment E.
5. Keystone will implement the Final Monitoring Plan for each spread that has been approved by DOS.

G. Construction

1. Environmental Inspector (EI): Prior to initiating vegetative clearing or construction, Keystone will employ an EI whose responsibilities will include ensuring compliance with the terms of this PA. In meeting this responsibility, the EI will rely on the technical expertise of on-site professionals who meet the standards established in Stipulation I.A.
 - a. The EI will monitor construction activities on-site and prepare a daily log reporting to Keystone on activities performed to implement the terms of this PA, as appropriate. Keystone will make the daily log available to the DOS and other consulting parties upon request.

- b. Keystone will ensure through the construction contract that the EI will possess the authority to stop construction in the event of an inadvertent discovery in accordance with Stipulation VI.A and Attachment C.
2. Training: Keystone will ensure that if the EI does not meet the professional qualification standards established in Stipulation I.A, the EI receives appropriate training in historic preservation from a professional who meets the standards established in Stipulation I.A in order to perform the requirements of this PA. Keystone also will provide an appropriate level of training in historic preservation conducted by a professional who meets the standards established in Stipulation I.A to all construction personnel (including new, added, replaced workers) so that PA requirements are understood and unanticipated discoveries quickly identified. Keystone will conduct this training prior to initiating vegetative clearing or construction activities on a spread, and conduct periodic refresher training during construction of the spread.
3. The DOS will make reasonable and good faith effort to ensure Indian tribes are afforded a reasonable opportunity to provide information in a timely manner about historic properties of religious and cultural significance to them during pipeline construction.
4. Construction Contract: Keystone will incorporate the terms of Stipulation VI.A and Attachment C into construction contracts to ensure that its EI and construction contractors meet their responsibility for notification of the unanticipated discoveries.

H. Scheduling

The DOS may authorize the start of vegetative clearing and construction for an individual spread when the plans prepared in accordance with Stipulations V.D.4, V.E and V.F as appropriate for that spread, have been submitted by Keystone and approved by DOS in accordance with the terms of this PA.

I. Distribution of GIS data

Before concluding pipeline construction, Keystone will distribute to the LBST DCRO, SHPOs, the BLM (when applicable), and other consulting parties descriptive information about identified archaeological sites and architectural resources, with respect to lands under their respective jurisdictions, in GIS format. The distribution of this information shall be subject to Stipulation II of this agreement.

VI. UNANTICIPATED DISCOVERIES DURING CONSTRUCTION OF THE KEYSTONE XL PROJECT

A. Pipeline Construction

1. “Applicable federal agency” is the federal agency with jurisdiction for the land on which construction is occurring or, in the absence of such an agency, DOS, as appropriate.
2. If previously unidentified historic properties are discovered unexpectedly as pipeline construction activities are carried out within the 110-foot-wide construction corridor, the construction contractor will immediately halt all construction activity within a one-hundred and fifty (150) foot radius of the discovery, notify Keystone’s EI of the discovery and implement interim measures to protect the discovery from looting and vandalism. Within forty-eight (48) hours of receipt of this notification of the discovery, the EI shall:
 - a. inspect the work site to determine the extent of the discovery and ensure that construction activities have halted;
 - b. clearly mark the area of the discovery;
 - c. implement additional measures other than those mentioned above, as appropriate, to protect the discovery from looting and vandalism; and
 - d. notify the applicable federal agency, the LBST DCRO, SHPO, the ACHP and other consulting parties, including Indian tribes, of the discovery.
3. The applicable federal agency will have seven (7) calendar days following notification provided in accordance with Stipulation VI.A.2 to determine the National Register eligibility of the discovery after considering the timely filed views of the LBST DCRO, SHPO, Keystone and other consulting parties. The applicable federal agency may assume the newly discovered property to be eligible for the National Register for the purposes of Section 106 pursuant to 36 CFR § 800.13(c).
4. For properties determined eligible or assumed to be eligible pursuant to Stipulation VI.A.3, the applicable federal agency will notify the LBST DCRO, SHPO, ACHP, THPO, and other consulting parties of those actions that it proposes to resolve adverse effects which may include a Treatment Plan as outlined in Stipulation V.D.
 - a. Consulting parties will have forty-eight (48) hours to provide their views on the proposed actions.
 - b. The applicable federal agency will ensure that the timely filed recommendations of consulting parties are taken into account prior to granting approval of the measures that Keystone will implement to resolve adverse effects.
 - c. Keystone will carry out the approved measures prior to resuming construction activities in the location of the discovery.
5. Dispute Resolution: The applicable federal agency will seek and take into account the recommendations of the ACHP in resolving any disagreements that may arise regarding resolution of adverse effects. The applicable federal agency will use the contact information provided in Attachment C or D in order to notify the ACHP. Within seven (7) calendar days of receipt of such a written request, the ACHP will provide the applicable federal agency with recommendations on resolving the dispute.

The applicable federal agency will take into account any timely filed recommendations provided by the ACHP in making a final decision about how to proceed.

B. Construction or Modification of Electrical Transmission Facilities

1. If previously unidentified historic properties are discovered unexpectedly during construction or modification of transmission facilities funded by RUS, the RUS applicant's construction contractor will immediately halt all construction activity within a one-hundred and fifty (150) foot radius of the discovery, notify the RUS applicant of the discovery and implement interim measures to protect the discovery from looting and vandalism. Within forty-eight (48) hours of receipt of this notification of the discovery, the RUS applicant shall:
 - a. notify the RUS FPO;
 - b. inspect the work site to determine the extent of the discovery and ensure that construction activities have halted;
 - c. clearly mark the area of the discovery; and
 - d. implement additional measures, as appropriate, to protect the discovery from looting and vandalism.
2. Upon receipt of such notification RUS will immediately notify the LBST DCRO, SHPO and other consulting parties, including Indian tribes of the discovery.
3. RUS will have seven (7) calendar days following notification provided in accordance with Stipulation VI.B.1 to determine the National Register eligibility of the discovery in consultation with the LBST DCRO, SHPO, the applicant and other consulting parties. RUS may assume the newly discovered property to be eligible for the National Register for the purposes of Section 106 pursuant to 36 CFR § 800.13(c).
4. For properties determined eligible or assumed to be eligible pursuant to Stipulation VI.B.3, RUS will notify the LBST DCRO, SHPO and other consulting parties of those actions that it proposes to resolve adverse effects. Consulting parties will provide their views on the proposed actions within forty-eight (48) hours. RUS will ensure that the timely filed recommendations of the LBST DCRO, SHPO and other consulting parties are taken into account prior to granting approval of those actions that the applicant will implement to resolve adverse effects. Once RUS approval has been granted, its applicant will carry out the approved measures prior to resuming construction activities in the location of the discovery.
5. Dispute Resolution: RUS will seek and take into account the recommendations of the ACHP in resolving any disagreements that may arise regarding the resolution of adverse effects. The applicable federal agency will use the contact information provided in Attachment D in order to notify the ACHP. Within seven (7) calendar days of receipt of such a written request, the ACHP will provide RUS with its recommendations for resolving the dispute. RUS will take into account any

recommendations provided by the ACHP in making a final decision about how to proceed.

6. Reporting: No later than six (6) months following the resumption of construction within the location of the discovery, RUS will submit a final report to the LBST DCRO, SHPO and other consulting parties describing implementation of the actions taken in accordance with Stipulation VI.B and, as appropriate, the analysis and interpretation of recovered information.

C. Unanticipated Discovery of Human Burials and Remains, and Funerary Objects

1. When Native American human remains or funerary objects or objects of cultural patrimony are unexpectedly discovered during construction of the Keystone XL Project on federal or tribal lands within the APE, Keystone or a RUS applicant, as appropriate, will notify immediately the federal agency responsible for compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) [25 U.S.C. 3001 et. seq.] and its implementing regulations, 43 C.F.R. Part 10.
2. Non-Native American human burials and remains, and funerary objects discovered on federal lands within the APE will be treated by the federal agency having jurisdiction of the remains in accordance with applicable federal law, taking into account the ACHP's *Policy Statement on the Treatment of Burial Sites, Human Remains and Funerary Objects* (February 23, 2007).
3. DOS and RUS will treat human burials and remains discovered on non-federal land in accordance with the provisions of Attachments C and any applicable laws. In those instances where the USACE has jurisdiction under Section 10 or 404 permitting authority for non-federal lands in the APE, the applicable Federal agencies will ensure that Keystone complies with the provisions of Attachment C acting in the place of the DOS. In determining appropriate actions to be carried out, DOS, RUS, and/or other Federal Agencies will be guided by the ACHP's *Policy Statement on the Treatment of Burial Sites, Human Remains and Funerary Objects* (February 23, 2007).

VII. CURATION

- A. Federal agencies will curate any artifacts, materials or records resulting from archaeological identification and mitigation conducted on federal lands under their jurisdiction in accordance with 36 CFR Part 79, “*Curation of Federally-Owned and Administered Archaeological Collections.*” Federal agencies with jurisdiction over the federal lands will consult with Indian tribes as required in 36 CFR 79.

- B. Keystone and RUS applicants will return all artifacts recovered from private lands to the respective landowner after analysis is complete, unless applicable state law requires otherwise. Keystone and RUS applicants will encourage and assist landowners in donating any returned artifacts to a local curation facility identified by the respective SHPO and/or LBST DCRO. Keystone and RUS applicants shall pay all required curation fees associated with the donation of artifacts to the local curation facility.

- C. On federally controlled or owned properties, Federal agencies will determine the disposition of human burials, human remains and funerary objects in accordance with applicable federal and state law.

VIII. REPORTING

- A. Within three months of completion of pipeline construction of a spread, Keystone will submit a comprehensive draft report to DOS describing the results and findings of the implementation of the actions and plans specified in Stipulations V.C through G, VI.A, including Attachment C.

- B. Keystone will submit a draft comprehensive report for each spread to the DOS, LBST DCRO, SHPO(s) and consulting parties for thirty (30) day review and comment. Keystone shall address timely comments and recommendations submitted by consulting parties in preparation of the Final Comprehensive Report for that spread. Keystone will submit the final report to DOS for review and approval. The final comprehensive report will be provided by DOS to the consulting parties once approved.

IX. MONITORING IMPLEMENTATION OF THE PA

Each quarter following the execution of this PA until it expires or is terminated, the DOS with the assistance of the USACE, BLM, RUS, FSA, NRCS, BIA, and RECLAMATION as necessary will provide the consulting parties to this PA a progress report summarizing the work carried out pursuant to its terms. Such report will include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the efforts to carry out the terms of this PA. DOS will maintain and update a list of the current contact for the consulting parties and will be distributed in each quarterly report.

X. DISPUTE RESOLUTION

- A. “Appropriate federal agency” refers to the DOS, BLM, RUS, RECLAMATION, and USACE, or other federal land managing and/or permitting agency as applicable.
- B. Should any signatory or concurring party to this PA object at any time to any actions proposed or the manner in which the terms of this PA are implemented, the appropriate federal agency will consult with such party to resolve the objection. If the appropriate federal agency determines that such objection cannot be resolved, the appropriate federal agency will:
1. Forward all documentation relevant to the dispute, including the applicable federal agency’s proposed resolution, to the ACHP. The ACHP will provide the appropriate federal agency with its advice on the resolution of the objection within thirty (30) calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the appropriate federal agency will prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The appropriate federal agency will then proceed according to its final decision.
 2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) calendar day time period, the applicable federal agency may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the appropriate federal agency will prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the PA, and provide them and the ACHP with a copy of such written response.
- C. The appropriate federal agency's responsibility is to carry out all other actions subject to the terms of this PA that are not the subject of the dispute.

XI. DURATION

This PA will be null and void if all of its stipulations have not been carried out within five (5) years from the date of its execution. At such time, and prior to work continuing on the Keystone XL Project, the DOS, USACE, BLM, RUS, WESTERN, RECLAMATION and NPS will either (a) execute a Memorandum of Agreement (MOA) or PA pursuant to 36 CFR §§ 800.6 or 800.14(b), respectively, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR. § 800.7. Prior to such time, the DOS may consult with the other signatories to reconsider the terms of the PA and amend it in accordance with Stipulation X. The DOS, USACE, BLM, RUS, WESTERN, RECLAMATION and NPS will notify the signatories and concurring parties as to the course of action they will pursue.

XII. AMENDMENT

Any signatory party to this PA may propose in writing to the other signatory parties that it be amended. The signatory parties will consult in an effort to reach agreement on an amendment. Any amendment will be effective on the date it is signed by all of the signatories and filed with the ACHP.

XIII. TERMINATION

- A. If any signatory to this PA determines that its terms will not or cannot be carried out, that party will immediately consult with the other parties to attempt to develop an amendment per Stipulation XII. If within thirty (30) calendar days an amendment cannot be reached, any signatory may terminate its participation in the PA upon written notification to the other signatories.
- B. Termination by an individual SHPO or the LBST shall only terminate the application of this agreement within the jurisdiction of the SHPO or the LBST.
- C. If the PA is terminated in its entirety, and prior to work continuing on the undertaking, the DOS shall request, take into account, and respond to the comments of the ACHP in accordance with 36 CFR § 800.7(a). Following consultation with the ACHP, the DOS will notify the signatories and concurring parties as to the course of action it will pursue.

XIV. SCOPE OF THE PA

This Agreement is limited in scope to actions that will facilitate the construction of the Keystone XL Project and related facilities, and is entered into solely for that purpose.

EXECUTION of this PA by the DOS, ACHP, BLM, RUS, WESTERN, USACE, RECLAMATION, NPS, NRCS, FSA, BIA, LBST DCRO, the Montana SHPO, South Dakota SHPO, Nebraska SHPO, Kansas SHPO, Oklahoma SHPO, and Texas SHPO, and BEPC implementation of its terms evidence that the DOS, WESTERN, BLM, RUS, NRCS, FSA, BIA, USACE, RECLAMATION, and NPS have taken into account the effects of the Keystone XL Project on historic properties and afforded the ACHP an opportunity to comment.

ATTACHMENT A

Tables showing properties for which Keystone had been denied access to conduct identification and evaluation studies: Information to be provided in next draft.

Table 1: Areas Not Surveyed along Mainline Route					
State	County	From Milepost	To Milepost	Status	Miles

ATTACHMENT B

List of Indian Tribes Invited by the Department of State to Participate in Consultation:

Absentee-Shawnee Tribe of Indians of Oklahoma, Alabama Quassarte Tribal Town, Alabama-Coushatta Tribe of Texas, Apache Tribe, Blackfeet Nation, Caddo Nation of Oklahoma, Cherokee Nation, Cheyenne River Sioux, Cheyenne-Arapaho Tribe of Oklahoma, Chickasaw Nation of Oklahoma, Chippewa-Cree Indians, Choctaw Nation of Oklahoma, Citizen Potawatomi Nation, Comanche Nation, Confederated Salish and Kootenai Tribes of the Flathead Indian Nation, Crow Creek Reservation, Crow Creek Sioux Tribe, Crow Tribe of Indians, Delaware Nation, Delaware Tribe of Indians, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe, Eastern Shoshone Tribe, Flandreau Santee Sioux Tribe, Forest County Potawatomi Community of Wisconsin Potawatomi Indians, Fort Berthold Reservation, Fort Peck Tribes, Fort Sill Apache Tribe, Gros Ventre and Assiniboine Tribe of Ft. Belknap, Gun Lake Potawatomi, Hannahville Indian Community of Michigan, Ho-Chunk Nation of Wisconsin, Huron Potawatomi Nation, Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Jena Band of Choctaw Indians, Jicarilla Apache Tribe, Kaw Nation, Kialegee Tribal Town of the Creek Nation of Oklahoma, Kickapoo Traditional Tribe of Texas, Kickapoo Tribe of Kansas, Kickapoo Tribe of Oklahoma, Kiowa Indian Tribe of Oklahoma, Lower Brule Sioux Tribe, Lower Sioux Indian Community, Miami Tribe of Oklahoma, Mille Lacs Band of Ojibwe, Modoc Tribe of Oklahoma, Muscogee Creek Nation, Nez Perce, Northern Arapaho Tribe, Northern Cheyenne Tribe, Northern Ute Tribe, Oglala Sioux, Omaha Tribe of Nebraska, Osage Nation, Otoe-Missouri Tribe, Ottawa Tribe of Oklahoma, Pawnee Nation of Oklahoma, Peoria Indian Tribe of Oklahoma, Poarch Band of Creek Indians, Pokagon Band of Potawatomi Indians of Michigan, Ponca Tribe of Indians of Oklahoma, Ponca Tribe of Nebraska, Prairie Band of Potawatomi Indians, Prairie Island Indian Community, Quapaw Tribal Business Committee, Quapaw Tribe, Red Lake Band of Chippewa Indians of Minnesota, Rosebud Sioux Tribe, Sac & Fox Nation of Oklahoma, Sac & Fox Nation of Missouri in Kansas and Nebraska, Sac & Fox Tribe of the Mississippi in Iowa, Santee Sioux Tribe of Nebraska, Seminole Nation, Seneca-Cayuga Tribe of Oklahoma, Shakopee Mdewakanton Sioux, Shawnee Tribe, Shoshone-Bannock Tribe, Sisseton-Wahpeton Oyate Sioux, Sisseton-Wahpeton Oyate Wahpekutze, Southern Ute Indian Tribe, Spirit Lake Tribe, Standing Rock Sioux Tribe, Stockbridge-Munsee Tribe, Thlopthlocco Tribal Town, Three Affiliated Tribes, Tonkawa Tribe, Trenton Indian Service Area, Turtle Mountain Band of the Chippewa, United Keetoowah Band of Cherokee Indians, Upper Sioux -Pezihutazizi Kapi, Ute Mountain Tribe, White Earth Band of Minnesota Chippewa, Wichita and Affiliated Tribes, Winnebago Tribe, Wyandotte Nation, Yankton Sioux, Ysleta del Sur Pueblo

ATTACHMENT C

STATE-BY-STATE PLANS FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS OR BURIALS ON NON-FEDERAL LANDS DURING CONSTRUCTION OF THE KEYSTONE XL PROJECT PIPELINE

I. For construction of the Keystone XL Project pipeline in Montana, Keystone will implement the following measures:

1. When an unmarked human burial or unregistered grave is encountered during construction activities, Keystone will comply with Human Skeletal Remains and Burial Site Protection Act (Montana Code Ann. §22-3-801 through §22-3-811).
2. Upon encountering an unmarked human burial or unregistered grave during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's Environmental Inspector. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
3. Immediately following receipt of such notification, the Environmental Inspector will ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery and assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed.
4. The Environmental Inspector will notify the county coroner, the Department of State (DOS), the Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and other consulting parties, including Indian tribes, within forty-eight (48) hours of the discovery.
5. Within seventy-two (72) hours after notification the county coroner will determine jurisdiction. If the coroner refers the matter to the SHPO, the SHPO will determine the treatment, including mitigation and disposition of the unmarked human burial or unregistered grave in accordance with Montana Code Ann. §22-3-801 through §22-3-811. Keystone will implement the treatment and disposition measures deemed appropriate by the SHPO.
6. Keystone will resume construction activities in the area of the discovery upon receipt of written authorization from either the county coroner or the Montana SHPO, whoever has jurisdiction under state law.

II. For construction of the Keystone XL Project pipeline in Kansas, Keystone will implement the following measures:

1. When unmarked human burial sites or human skeletal remains are encountered during construction activities, Keystone will comply with Kansas' Unmarked Burial Sites Preservation Act (KSA 75-2741 to 75-2754) and its implementing regulations (KAR 126-1-1 through 126-1-2).

2. Upon encountering unmarked human burial or unregistered grave during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's EI. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
3. Immediately following receipt of such notification, the Environmental Inspector will
 - a. ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery;
 - b. implement additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed; and
 - c. notify the appropriate county sheriff's office, the chairperson of the Unmarked Burial Sites Preservation Board (Kansas State Archaeologist), the DOS, the ACHP, the SHPO and other consulting parties, including Indian tribes, of the discovery.
4. If Keystone determines that disturbance to the unmarked burial site or human remains cannot be avoided, Keystone will consult with the DOS, the SHPO and other consulting parties to develop a detailed work plan for treatment of the burial site or human remains that includes provisions for the removal, treatment and disposition of human remains. In accordance with state law, Keystone will submit this work plan to the Unmarked Burial Sites Preservation Board as part of its request for a permit under KAR 126-1-2.
5. Keystone will resume construction activities in the area of the discovery once implementation of the measures authorized under the permit has been completed.

III. For construction of the Keystone XL Project pipeline in Nebraska (Cushing Extension), Keystone will implement the following measures:

1. When unmarked human skeletal remains or burial goods are discovered during construction activities, Keystone will comply with Nebraska Rev. Stat. § 12-1201 through § 12-1212, et seq. and § 28-1301.
2. Upon encountering unmarked human skeletal remains or burial goods during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's EI. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
3. Immediately following receipt of such notification, the EI will ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery and assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed.

4. Keystone will notify the local law enforcement officer in the county, the DOS, the ACHP, the SHPO, and other consulting parties, including Indian tribes, within forty-eight (48) hours of the discovery.
5. If local law enforcement determines that the remains are not associated with a crime, Keystone will determine if it is prudent and feasible to avoid disturbing the remains. If Keystone determines that disturbance cannot be avoided, the Nebraska State Historical Society will notify the Commission on Indian Affairs in writing and seek associated tribes or kin.
6. Keystone will resume construction activities in the area of the discovery when the human skeletal remains or burial goods have been accepted by the Nebraska State Historical Society for the purposes of disposition.

IV. For construction of the Keystone XL Project pipeline in Texas, Keystone will implement the following measures:

1. When unmarked human burials or human remains are discovered during construction activities, Keystone will comply with Antiquities Code (Texas Code Ann. §191); Health and Safety (Texas Code Ann. §711.004).
2. Upon encountering unmarked human burials or human remains during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's Environmental Inspector. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
3. Immediately following receipt of such notification, the Environmental Inspector will
 - a. ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery;
 - b. implement additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed; and
 - c. notify the local law enforcement agency, the Department of State (DOS), the Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO)/Texas Historical Commission (THC), other consulting parties, including Indian tribes, and the State Department of Health of the discovery.
4. If local law enforcement determines that the remains are not associated with a crime, Keystone will determine if it is prudent and feasible to avoid disturbing the remains. If Keystone determines that disturbance cannot be avoided, Keystone will remove and reinter the human remains in accordance with rules adopted by the SHPO and the State Health Department.
5. Keystone will resume construction activities in the area of the discovery once implementation of the measures required by the SHPO/THC and State Health Department has been completed.

V. For construction of the Keystone Project pipeline in Oklahoma (Cushing Extension), Keystone will implement the following measures:

1. When a burial ground, human remains or burial furniture is discovered during construction activities, Keystone will comply with Okla. Stat. Ann. 21 §1161-1168.7 (Oklahoma Burial Law).
2. Upon encountering a burial ground, human remains or burial furniture during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's EI. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
3. Immediately following receipt of such notification, the Environmental Inspector will
 - a. ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery;
 - b. implement additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed; and
 - c. notify the appropriate law enforcement officer in the county in which the remains have been discovered, the Chief Medical Examiner, the DOS, the ACHP, the SHPO and other consulting parties, including Indian tribes and the landowner, of the discovery.
4. Upon learning that remains are not associated with a crime, Keystone has fifteen (15) calendar days within which to notify the SHPO and the Oklahoma State Archaeologist. If the remains have a direct historical relationship to a tribe, the State Archaeologist notifies the SHPO and consults with the tribal leader within fifteen (15) calendar days. If Keystone determines that disturbance cannot be avoided, Keystone will treat the burial site or human remains in accordance with procedures established by the SHPO, the Oklahoma State Archaeologist, and consultation with the tribal leader.
5. Keystone will resume construction activities in the area of the discovery upon completion of the measures authorized by the SHPO and Oklahoma state archaeologist.

VI. For construction of the Keystone XL Pipeline Project in South Dakota, Keystone will implement the following measures:

1. When unmarked human skeletal remains and/or funerary objects are discovered during construction activities, Keystone will comply with South Dakota State Law Chapter 34-27.
2. Upon encountering an unmarked human skeletal remains and/or funerary objects during ground disturbing construction activities, the construction contractor will immediately stop work within a one-hundred and fifty (150) foot radius from the point of discovery and notify Keystone's EI. The construction contractor will implement interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.

3. Immediately following receipt of such notification, the EI will ensure that construction activities have halted within a one-hundred and fifty (150) foot radius from the point of discovery and assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed.
4. The Environmental Inspector will notify the local law enforcement agency, the DOS, the ACHP, the SHPO, the South Dakota State Archaeologist and other consulting parties, including Indian tribes, within forty-eight (48) hours of the discovery.
5. If local law enforcement determines that the remains are not associated with a crime, Keystone will determine if it is prudent and feasible to avoid disturbing the remains. If Keystone determines that disturbance cannot be avoided, Keystone will consult with the South Dakota State Archaeologist and other consulting parties, including Indian tribes, to determine acceptable procedures for the removal, treatment and disposition of the human skeletal remains and funerary objects within five calendar days. Keystone will implement the plan for removal, treatment, and disposition of the human skeletal remains and funerary objects as authorized by the South Dakota State Archaeologist.
6. Keystone may resume construction activities in the area of the discovery upon completion of the plan authorized by the state archaeologist.

VII. For construction of the Transmission line that will supply a Project pumping station and increase reliability on the Lower Brule Sioux Reservation, WESTERN will implement the following measures:

Additional consultation with the LBST is necessary prior to completion of this section.

ATTACHMENT D

A. CONTACTS

Department of State

Elizabeth A. Orlando, Esq.
U.S. Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
202-647-4284
fax: 202-647-1052
cell: 240-723-3157
orlandoea2@state.gov

Advisory Council on Historic Preservation

Don L. Klima
Director
Office of Federal Agency Programs
1100 Pennsylvania Avenue, NW
Suite #803
Washington, D.C. 20004
dklima@achp.gov

Charlene Dwin Vaughn
Assistant Director
Office of Federal Agency Programs
1100 Pennsylvania Avenue, NW
Suite #803
Washington, D.C. 20004
cvaughn@achp.gov

U.S. Bureau of Land Management

Elaine Raper
Manager, Miles City District
Department of the Interior
Bureau of Land Management
111 Garryowen Road
Miles City, MT 59301
406-233-2827
Fax: 406-233-2857
mraper@blm.gov

National Park Service

Dan Wiley
Chief of Resources Stewardship, Lewis and Clark Historic Trail
601 Riverfront Drive
Omaha, NE 68102
402-661-1830
Dan_Wiley@nps.gov

U.S. Army Corps of Engineers

Cathy Juhas
Project Manager Billings Regulatory Office
2602 1st Avenue N.
Suite 309
PO BOX 2256
Billings, MT 59103
406-657-5910
Fax 406-657-5911

U.S. Department of Agriculture Rural Utilities Service

Mark S. Plank
Director, Engineering and Environmental Staff
1400 Independence Avenue, SW
Mail Stop 1571, Room 2240
Washington, DC 20250
Phone: 202-720-1649
Fax: 202-720-0820
E-mail: mark.plank@wdc.usda.gov

U.S. Department of Agriculture Natural Resources Conservation Service

Claude Ross
Soil Conservationist
WR Poage Federal Building
101 South Main Street
Temple, TX 76501
254-742-9822

U.S. Department of Agriculture Farm Services Agency

Bennett Horter
Federal Preservation Officer
USDA/FSA/CEPD
Mail Stop 0513
1400 Independence Ave., SW
Washington, DC 20250
202-690-1164

U.S. Bureau of Indian Affairs

Diane Rosen
Regional Director
Midwest Region Office
Bishop Henry Whipple Federal Building
One Federal Drive, Room 550
Ft. Snelling, MN 55111-4007
612-713-4400

Western Area Power Administration

Nick Stas
Environmental Manager
Upper Great Plains Region
P.O. Box 35800
Billings, MT 59107
406-247-7405

U.S. Bureau of Reclamation

Brad Coutant
Regional Archaeologist
P.O. Box 36900
Billings, MT 59107
406-247-7751

Lower Brule Sioux Tribe

Clair Green
Cultural Resource Officer
187 Oyate Circle
Lower Brule, SD 57548
605-473-8037
clairisgreen@yahoo.com

Kansas Historical Society

Bob Hoard
Kansas State Archaeologist
Kansas State Historical Society
6425 SW 6th Avenue
Topeka, KS 66615-1099
785-272-8681 ext. 269
rhoard@kshs.org

Jennie Chinn
State Historic Preservation Officer
Kansas State Historical Society
6425 SW Sixth Avenue
Topeka, Kansas 66615-1099
785-272-8681 ext. 205
fax 785-272-8682
jchinn@kshs.org

Nebraska State Historical Society

Terry L. Steinacher
State Historic Preservation Office
Nebraska State Historical Society
P.O. Box 283
Fort Robinson Museum
Crawford, Nebraska 69339
308-665-2918
fax 308-665-2917

Gayle Carlson
State Archaeologist
Nebraska State Historical Society
Department of Archeology
P.O. Box 82554
Lincoln, Nebraska 68501
402-471-4790
fax 402-471-3100

Oklahoma Historical Society

Charles Wallis
Historical Archeologist/
Section 106 Program Coordinator
State Historic Preservation Office
Oklahoma History Center
2401 N. Laird Avenue
Oklahoma City, OK 73105-7914
405-521-6249

Robert L. Brooks
State Archaeologist
Oklahoma Archeological Survey
111 E. Chesapeake, Room 102
Norman, OK 73019-5111
405-325-7211
fax 405-325-7604

South Dakota State Historic Preservation Office

Jay D. Vogt
State Historic Preservation Officer
900 Governors Drive
Pierre, South Dakota 57501-2217
605-773-3458

Jim Haug
State Archaeologist
PO Box 1257
Rapid City, SD 57709-1257
605-394-1936

Texas Historical Commission

Mark Wolfe
P.O. Box 12276
Austin, Texas 78711
512-463-6096

Montana Historical Society

Mark Baumler, Ph. D.
State Historic Preservation Officer
225 N. Roberts
P.O. Box 201201
Helena, MT 59620-1201
406-444-7717

Montana Department of Environmental Quality

James Strait
1520 E. Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
Environmental Science Specialist
406-444-6765

Montana Department of Natural Resources and Conservation

Patrick Rennie
Trust Lands Archaeologist
1625 11th Avenue
Helena, MT 59620
406-444-2882
prennie@mt.gov

Basin Electric Power Cooperative

Lyle Witham
Manager of Environmental Services
1717 East Interstate Ave.
Bismarck, ND 58503
701-202-5473
LWitham@bepc.com

B. CONSULTING TRIBES

Note: The following list of tribes responded to DOS requests for consultation on the Keystone XL Project.

1. Absentee-Shawnee Tribe of Indians of Oklahoma
2. Alabama-Coushatta Tribe of Texas
3. Blackfeet Nation
4. Caddo Nation of Oklahoma
5. Cheyenne River Sioux Tribe
6. Cheyenne-Arapaho Tribe of Oklahoma
7. Chippewa-Cree Indians
8. Choctaw Nation of Oklahoma
9. Crow Tribe of Indians
10. Delaware Nation
11. Fort Peck Tribes
12. Gros Ventre and Assiniboine Tribe of Ft. Belknap
13. Ho-Chunk Nation of Wisconsin
14. Iowa Tribe of Kansas and Nebraska
15. Iowa Tribe of Oklahoma
16. Kaw Nation
17. Kialegee Tribal Town of the Creek Nation of Oklahoma
18. Kickapoo Tribe of Kansas
19. Kiowa Indian Tribe of Oklahoma
20. Lower Sioux Indian Community
21. Miami Tribe of Oklahoma
22. Mille Lacs Band of Ojibwe
23. Muscogee (Creek) Nation
24. Northern Arapaho Tribe
25. Northern Cheyenne Tribe
26. Northern Ute Tribe
27. Oglala Sioux Tribe
28. Osage Nation of Oklahoma
29. Pawnee Nation of Oklahoma
30. Ponca Tribe of Indians of Oklahoma
31. Ponca Tribe of Nebraska
32. Rosebud Sioux Tribe
33. Sac & Fox Nation of Oklahoma
34. Santee Sioux Tribe of Nebraska
35. Shoshone-Bannock Tribe
36. Sisseton-Wahpeton Oyate Sioux
37. Spirit Lake Tribe
38. Standing Rock Sioux Tribe
39. Three Affiliated Tribes
40. Tonkawa Tribe
41. Turtle Mountain Band of Chippewa
42. Wichita and Affiliated Tribes
43. Winnebago Tribe
44. Yankton Sioux

Appendix H: Paleontological Memorandum of Understanding

**MEMORANDUM OF UNDERSTANDING
FOR PALEONTOLOGICAL RESOURCE INVESTIGATIONS
ON THE MONTANA PORTION OF THE KEYSTONE XL PIPELINE PROJECT**

WHEREAS, in February 2010, the Montana Department of Environmental Quality (DEQ) received a complete application for a certificate of compliance from TransCanada Keystone Pipeline, LP (Keystone) for the portion of the Keystone XL Pipeline Project that is proposed to be constructed in Montana, hereinafter referred to as the Project. Keystone is required to obtain a certificate of compliance from DEQ prior to construction of the Project under the Major Facility Siting Act (MFSa); and

WHEREAS, the Area of Potential Effects (APE) for the Project includes a 300-foot-wide construction corridor for each proposed pipeline alternative and local routing option. The APE also includes a 100-foot-wide construction corridor centered on the centerline of each powerline alternative and access road alternative for the Project that are associated facilities under MFSa. Finally, the APE includes all areas that are directly or indirectly affected by construction of proposed pumping stations, stockpile yards, and other associated facilities; and

WHEREAS, the U.S. Department of State (DOS) is the lead federal agency responsible for administering the National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act; and

WHEREAS, DEQ is the lead state agency responsible for administering the Montana Environmental Policy Act and MFSa prior to issuance of a certificate of compliance; and

WHEREAS, the Montana Department of Natural Resources and Conservation (DNRC), in accordance with the Montana State Antiquities Act (22-3-421 et seq. M.C.A.), is required, in part, to assess and mitigate potential adverse effects to paleontological remains on agency managed state land; and

WHEREAS, the Bureau of Land Management (BLM), in accordance with the Public Land Management Act (PLMA 2009), is required to assess and mitigate potential impacts to paleontological resources under BLM guide IM 2009-011; and

WHEREAS, DEQ has consulted with the BLM, the Montana Department of Natural Resources and Conservation (DNRC), the Montana State Historic Preservation Office (SHPO) and Keystone to secure concurrence with the terms of this Memorandum of Understanding; and

WHEREAS, the Bureau of Reclamation, National Park Service and the U.S. Corps of Engineers were invited to consult in the development of this Memorandum of Agreement and have declined to participate;

NOW THEREFORE, the following terms and conditions will govern the consideration of paleontological materials that may be affected by the Project.

STIPULATIONS AND METHODS OF INVESTIGATION:

- 1) Keystone shall secure the services of a qualified paleontologist (BLM guide IM 2009-011: IV.C.) to gather and evaluate information concerning the existence and location of paleontological resources in the APE.
- 2) Keystone shall submit a written request under ARM 17.20.804(2) to conduct a literature and file search with the Montana SHPO for a one (1) mile wide area (.5 mile on either side of the centerline) for each proposed alternative, local routing option and associated power line corridor. DEQ would approve this request. Keystone shall conduct a concurrent file search with the appropriate field offices of the BLM and with the DNRC for state owned lands.
- 3) The literature and file search analysis will address the issues defined in “CIRCULAR MFSA-2 Application Requirements for Linear Facilities” as specified at Sections 3.4(1)f-g and s-t, 3.4(10)a-d, 3.7(10)h(x-xi), and 3.7(13 and 14).
- 4) Keystone shall obtain a BLM Paleontological Resources Use Permit and any other permits required under federal law.
- 5) Keystone shall conduct a pedestrian survey for those portions of the APE assigned a moderate to high probability (3-5) based on the Potential Fossil Yield Classification System. Areas of low probability (1-2) will not be pedestrian surveyed. Existing access roads that have been “crowned and ditched” do not need to be surveyed;
- 6) Keystone shall conduct the pedestrian survey at an intensity required under BLM guide IM 2009-011.
- 7) Keystone shall record and evaluate paleontological resources located in the APE on the forms and within the standards specified in the Montana SHPO Planning Bulletin No. 21.
- 8) Keystone shall evaluate paleontological resources located within the APE for significance as outlined in the BLM guide IM 2009-011.
- 9) If DEQ approves the project, the certificate of compliance shall require Keystone to comply with the requirements set forth in the Environmental Specifications Appendix N. This section of the Environmental Specifications outlines DEQ’s requirements for additional mitigation efforts when significant paleontological resources are inadvertently discovered in Montana during construction of the Project.
- 10) Keystone will draft a comprehensive Paleontological Treatment Plan that describes the measures identified by the BLM, SHPO, DEQ, DNRC and DOS to minimize and mitigate the adverse effect of pipeline construction activities on paleontological resources, the manner in which these measures will be carried out and a schedule for their implementation.

a. When mitigation consists of or includes data recovery, the Paleontological Treatment Plan also will identify the specific research questions to be addressed by data recovery with an explanation of their relevance, the archaeological methods to be used, and provisions for public interpretation and education, subject to confidential restrictions, if any.

b. Keystone will submit the draft Paleontological Treatment Plan to the BLM, SHPO, DEQ, DNRC and DOS for a fifteen (15) working day review. Keystone shall address timely comments and recommendations submitted by consulting parties in preparation of the Final Paleontological Treatment Plan.

c. When it has addressed all of the comments and recommendations, Keystone will submit the Final Paleontological Treatment Plan to all cooperating agencies for review and approval. Copies of the Plan will be distributed to all cooperating parties.

d. Keystone will make a reasonable and good faith effort to complete implementation of the Final Treatment Plan approved by the cooperating agencies prior to beginning construction of any spread. If it is not possible to meet this schedule, Keystone will develop a Coordination Plan that establishes how appropriate treatment will be determined and implemented during construction of the respective spread.

- 11) Some Native American Tribes regard paleontological resources as having Traditional Cultural Property (TCP) significance. Keystone will notify the Department of State regarding the presence of such materials. The Department of State is responsible for informing and consultation with any interested Tribes. Tribal Historic Preservation Officers will not be consulted in matters of scientific significance of paleontological materials unless the pipeline or associated facilities cross reservation or trust lands, and then, only in regards to paleontological resources identified on said lands.
- 12) BLM, DEQ, SHPO, DNRC and DOS will provide information, if available, regarding paleontological materials in their possession to aid the other agencies in satisfaction of their respective responsibilities.
- 13) All parties to this agreement will have jurisdiction for paleontological materials identified on lands which they manage. All parties to this agreement will be invited to comment on all paleontological resources identified as a result of this agreement.

Execution of this Memorandum of Understanding by BLM, SHPO, DEQ, DNRC, DOS and Keystone evidences that all parties have reviewed and commented upon the terms and conditions guiding the cultural resource investigation for the Keystone XL Pipeline Project within the state of Montana.

U.S. Bureau of Land Management

Date

U.S. Department of State

Date

TransCanada Keystone XL Pipeline, L.P.

Date

Montana State Historic Preservation Office

Date

Montana Dept. of Environmental Quality

Date

Montana Dept. of Natural Resources and Conservation

Date

APPENDIX A

Conditional Requirements for the Treatment of Inadvertently Discovered Significant Paleontological Resources for the Keystone XL Pipeline.

(Appendix N in Montana Department of Environmental Quality's Environmental
Specifications)

Appendix I: Rehabilitation Plan
Erosion Control, Reclamation, and Revegetation Plan

The erosion control, reclamation, and revegetation procedures to be followed by Keystone XL are detailed in the Montana Storm Water Pollution Prevention Plan for Keystone XL Pipeline construction activities.

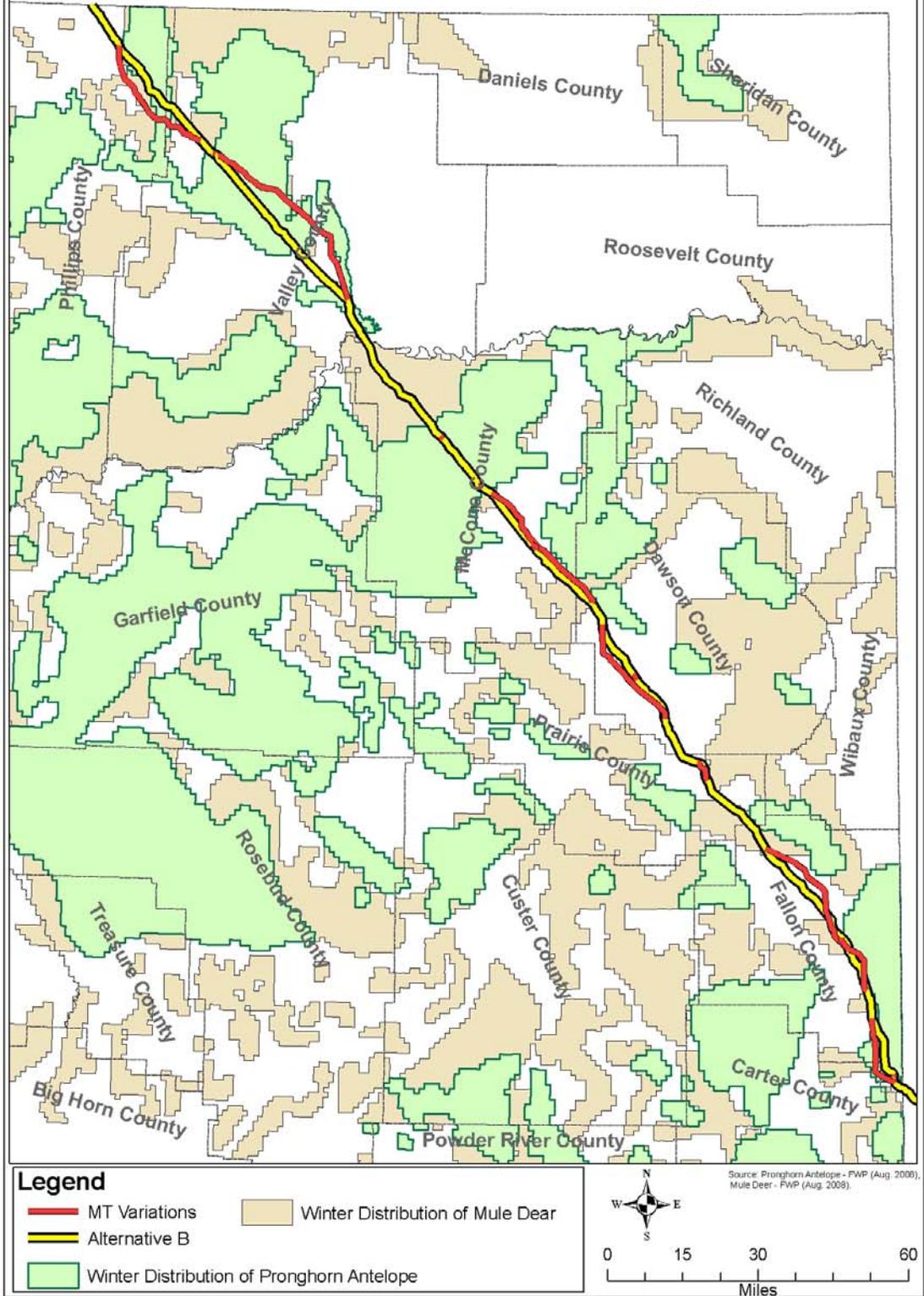
Appendix J: Areas Where Restrictions in the Timing of Construction Apply.

Restrictions on the timing of construction activities at stream crossings will be specified following onsite inspections.

Within big game winter ranges shown on Figure 1, the STATE INSPECTOR may impose timing restrictions if construction activities extend beyond November 15. In these areas the STATE INSPECTOR will determine the need for restrictions based upon severity of winter conditions and consultation with FWP biologists.

Other restrictions on the timing of construction are required in Section 2.3.2 and 2.3.3 of these specifications for excessively wet conditions.

Appendix J, Figure 1: Pronghorn and Mule Deer winter ranges



Appendix K: Noxious Weed Management Plan

Final locations of cleaning stations will be indicated below after a route is selected by DEQ.

Table E-1. Noxious Weed Wash Station Sites and Potential Water Sources in Montana

Cleaning Station	Location	Milepost	Direction of Work	Water Sources

Appendix L: Requirements at Stream Crossings

No construction shall begin at each crossing of perennial streams and streams containing fish species of special concern until site-specific detailed Construction Drawings of stream crossings are submitted to DEQ and approved by DEQ.

At stream crossings the OWNER shall calculate the depth of scour based on a 100 year flood event and the size of sediment found at the crossing. The OWNER shall bury the pipeline below this calculated depth to ensure that floods and lateral channel movement do not expose the pipeline over its lifetime. The scour depth calculation method shall be approved in advance by DEQ. The burial depth shall be extended laterally as approved by DEQ after field inspection of the crossing site.

Appendix M: Hazardous Materials Management Plan

(To be approved by DEQ prior to beginning of operations.)

Appendix N: Conditional Requirements Document

Conditional Requirements for the Treatment of Inadvertently Discovered Significant Paleontological Resources for the Keystone XL Pipeline

Keystone is required to obtain a certificate of compliance authorizing construction of the Keystone XL pipeline from the Montana Department of Environmental Quality (DEQ) under Montana's Major Facility Siting Act (MFSA). DEQ's issuance of the certificate of compliance must be based on substantive findings under Montana Code Annotated (MCA) Section 75-20-301(1), including the location criteria listed in Circular MFSA-2. Issuance of the certificate of compliance is a state action for which MDEQ is required to comply with Montana Environmental Policy Act (MEPA). DEQ is Montana's lead state agency for compliance with MEPA.

For the purposes of the environmental specifications, the term "significant" paleontological resource is as defined by the BLM (BLM, 2008a). As a conditional requirement for the issuance of the certificate of compliance, the following actions are designed to guide mitigation efforts when significant paleontological resources are inadvertently discovered on lands under the jurisdiction of the State of Montana or a federal agency and on private land during the construction period of the Keystone XL pipeline. The discovery of significant paleontological resources is of interest to the general and local public, as well as the scientific community. Mitigation efforts conducted in response to the inadvertent discovery of significant paleontological resources on public lands should benefit U.S. citizens.

Treatment Plan

As per the Paleontological MOU (Appendix H) Keystone shall draft a comprehensive Paleontological Treatment Plan incorporating measures identified by the Department of State (DOS), Bureau of Land Management (BLM), Montana State Historic Preservation Office (SHPO), Montana Department of Natural Resources and Conservation (DNRC) and DEQ that are designed to minimize and mitigate the adverse effect of pipeline construction activities on significant paleontological materials.

Paleontological Monitor

Keystone shall provide a paleontological monitor for each construction spread in Montana that includes areas assigned moderate to high probability (3-5) based on the Potential Fossil Yield Classification (PFYC) system (BLM, 2007). The paleontological monitor must satisfy the qualifications established by the BLM required for permit approval on federal lands. The paleontological monitor shall be responsible for the identification, recordation and treatment of significant paleontological resources inadvertently discovered during construction of the pipeline.

Curation Procedures for Paleontological Materials Discovered on Private Lands

Under the Paleontological Treatment Plan, federal and state agencies are responsible for curating significant paleontological resources recovered from their respective lands during the construction of the Keystone XL pipeline under 36 CFR 79. Curation of any paleontological resources recovered from state or federal lands shall be curated with the Museum of the Rockies (MoR) in Bozeman, MT. Curation of any donated paleontological resources by private landowners is the responsibility of Keystone and will be governed by an agreement reached between the landowner and Keystone and a museum to be selected by the landowner. At a minimum, however, Keystone shall follow the curation procedures outlined by the BLM. Should the landowner's selected museum refuse the materials, Keystone shall request the landowner to select another museum.

In the event of private donation of recovered paleontological resources, Keystone is responsible for:

- a) notifying the receiving museum;
- b) providing sufficient funds to the receiving museum to properly store, curate and display the materials;
- c) coordinating removal of the paleontological resource with the landowner;
- d) providing sufficient funds for removal of the paleontological resource; and
- e) transporting the paleontological resource to the receiving museum(s) within six (6) months of the discovery.

The curating museum may establish a gift agreement with any private landowner that donates paleontological materials. Tax deductions earned by private individuals who choose to donate fossil materials may be calculated by the curator, at their discretion, or the receiving museum as appropriate. It is the responsibility of the private landowner to request the information. It is not the responsibility of Keystone or any state or federal agency to determine the fair market value of any paleontological materials.

Local Benefit

In the event that significant paleontological resources are recovered from federal or state lands, DEQ seeks to ensure that the collected materials result in a positive impact to local communities. To facilitate this, Keystone shall fund the exhibit of said significant paleontological resources from the MoR to designated museums near the Keystone XL corridor. To qualify, the museum shall meet the following criteria:

- a) meet the requirements as determined by the MoR and if applicable, the BLM, to display paleontological materials;
- b) be required to possess sufficient infrastructure to securely house the materials for period of two (2) years;
- c) retain sufficient staff to exhibit the materials for a minimum of 20 hours a week; and
- d) be able to provide local advertisement promoting Keystone as the benefactor of the exhibit.

Should the chosen museum(s) fail to meet the minimum requirements, Keystone may select another museum or provide the museum with sufficient funds to enable the museum to meet the established criteria for a period of one (1) year. Funds endowed to the MoR (see Funding) may be used for this purpose. The BLM, DNRC, SHPO, and DEQ, in consultation with the MoR, reserve the right to disqualify any potential receiving museum(s) that does not comply with required federal or state regulations.

Specifications relating to the local display of paleontological materials shall be subject to the agreement established by the MoR with the receiving museum. If materials with BLM jurisdiction are utilized for this purpose, an additional assistance agreement with the BLM will be required. In addition, because the federal specimens are held in trust for the citizens of the United States, prohibitive museum admission charges and other restrictive measures shall be avoided and stipulated with any material loan agreement.

Funding

In the event that significant paleontological resources are identified during construction of the Keystone XL pipeline, Keystone will fund these conditional requirements. To ensure sufficient funds are available to meet the requirements for this agreement, Keystone will establish an endowment in the amount of \$50,000. All funds directed toward this endowment will be utilized for:

- a) curator and local museum administrative costs;
- b) supplemental curation costs directly related to the exhibit;
- c) exhibit transportation.

The curator and the museum may negotiate additional funds at the establishment of the endowment as deemed necessary by evaluation of independent auditor as relevant to the amount and types of significant materials identified during the pipeline construction. At the end of three (3) years, Keystone may request an independent audit to ensure all funds from the endowment were properly spent. Funds remaining in the endowment at the end of three (3) years are to be returned to Keystone.

This endowment is not to be used for research, programs, events or activities not related to significant paleontological resources recovered during the construction of the Keystone XL Pipeline. The endowment is not to be used in relation to recovery activities outlined in the Paleontological Treatment Plan.

References

Baumler, M., and A. Olsen, 2003

Consulting with the Montana SHPO: Guidelines and Procedures for Cultural Resource Review and Consultation under the National Historic Preservation Act and the Montana State Antiquities Act. Montana State Historic Preservation Office Planning Bulletin no. 21. Montana State Historic Preservation Office, Helena, MT.

Bureau of Land Management (BLM), 2008a

Instruction Memorandum (IM) No. 2009-011. Assessment and Mitigation of Potential Impacts to Paleontological Resources.

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2009/IM_2009-011.html

2008b

H-8270-1: General Procedural Guidance for Paleontological Resource Management (Chapter III.B) [also available at the above link].

2007

IM 2008-009. Potential Fossil Yield Classification system (PFYC)

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2008/im_2008-009.html

Appendix O: Fire Prevention and Suppression Plan

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1.0 INTRODUCTION -

This plan identifies measures to be taken during pipeline construction, operation, and maintenance to ensure that fire prevention and suppression techniques are carried out in accordance with federal, state, and applicable local regulations.

2.0 PURPOSE

The risk of fire danger during pipeline construction is related to operating vehicles and other equipment off roadways; burning slash material and other open burning; welding activities; and the use of explosive materials and flammable liquids. This plan establishes standards and practices which will minimize the risk of fire danger and, in case of fire, provide for immediate suppression.

3.0 RESPONSIBILITIES AND COORDINATION

The Fire Prevention and Suppression Plan will be implemented by the OWNER. The OWNER will be responsible for providing all necessary fire-fighting equipment on the Project site to its employees, and operating under the requirements of the Plan. In addition, the OWNER will contact the following authorities prior to construction to establish communication, obtain permits (if applicable), and/or fulfill other obligations as directed by the fire control authorities:

Table G-1: Fire Control Authorities

County	Authority	Fire Management Officer/ Contact	Phone Number
Phillips	BLM: Malta County	Mitch Maycox	(406) 538-1986
Valley	BLM: Miles City County	Scott McAvoy	(406) 233-2875
McCone	BLM: Miles City County	Scott McAvoy	(406) 233-2875
Prairie	BLM: Miles City County	Scott McAvoy	(406) 233-2875
Fallon	BLM: Miles City County	Scott McAvoy	(406) 233-2875

In the event of an uncontrolled fire, the OWNER will immediately notify local fire control agencies by phoning 911 if pipeline personnel do not extinguish it quickly.

In the event that open-cut trenches cross a road, the OWNER will provide a schedule of road closures to all local fire control agencies. Typically, roads will be closed for at least six hours during the open-cut construction procedure. A by-pass will be constructed prior to open-cut installation of a road crossing unless a convenient detour can be established

on existing roads. By-passes will be constructed within the approved right-of-way or additional temporary work space.

4.0 PERFORMANCE REQUIREMENTS

The fire prevention and suppression measures plan are only in effect from June 1 to October 31 each year. The STATE INSPECTOR or county fire authorities may change the dates of this period by advance written notice if justified by unusual weather or other conditions. However, required tools and equipment will be kept in serviceable condition and be immediately available for fire suppression at all times.

5.0 PERMITS

The OWNER will notify the STATE INSPECTOR prior to conducting any burning. Burning will be conducted in accordance with the requirements and restrictions of the STATE INSPECTOR and air quality permits. In addition, no burning will be conducted on federal lands without prior written authorization from the BLM Fire Management Officer.

6.0 FIRE PREVENTION

The following discussion addresses methods and procedures which will be implemented prior to and during the construction period to minimize the risk of fire. Key areas of concern relate to equipment, personnel, and construction procedures.

In order to reduce fire hazard, small trees and brush cut during construction should be chipped, burned, and/or scattered. Slash 3 inches in diameter or greater may be scattered in quantities of up to 1.5 tons/acre unless otherwise requested by the landowner. Tops, limbs, and brush less than 3 inches in diameter and 3 feet in length may be left in quantities less than 3 tons per acre except on cropland and residential land or where otherwise specified by the landowner. In certain cases, the STATE INSPECTOR will authorize chipping and scattering of tops, limbs, and brush in excess of 3 tons per acre as an erosion control measure. Merchantable timber should be decked and removed at the direction of the landowner or managing agency.

6.1 Equipment

During construction, operation, maintenance, and termination of the right-of-way, all equipment with an internal combustion engine will be equipped with spark arresters. However, spark arresters are not required on trucks, buses, and passenger vehicles (excluding motorcycles) which are equipped with an unaltered muffler. In addition, each motorized unit will be equipped with a minimum of one fire extinguisher having an

Underwriter Laboratories (UL) rating of at least 5 B or C, one long handled shovel size “0” or larger, and one double bit axe or pulaski (three pounds or larger).

The OWNER will provide basic fire-fighting equipment at all times, including fire extinguishers, shovels, axes, and other tools in sufficient number so that each employee can assist in the event of a fire-fighting operation. One backpack pump, long handled shovel size “0” or larger, and double-bit axe or pulaski (three pounds or larger), will be required in the vicinity of welding sites. A water truck will also be available for use. All equipment will be kept in a serviceable condition and readily available.

6.2 Personnel

The OWNER will designate one person as a fire guard for each construction spread who is physically able, vigilant, and suitably trained to detect fires and use required fire-fighting equipment. The fire guard may perform other functions during pipeline construction in addition to his/her fire guard responsibilities. The fire guard will be identified by a decal on his/her hardhat and/or other appropriate designation. The fire guard will be responsible for establishing and maintaining contact with fire control agencies. He/she will be equipped with a radio or cellular telephone so immediate contact with local fire control agencies can be made. An alternate or back-up fire guard will be designated to assume responsibility if the primary guard becomes unable to perform his/her duties.

The OWNER will inform each construction crew member of fire dangers, locations of extinguishers and equipment, and individual responsibilities for fire prevention and suppression during regular safety briefings. All support and employee vehicles will be parked and stored in cleared, open areas within the approved work limits. No additional areas will be cleared for parking. Personnel will not be allowed to start or maintain open fires for cooking or warming.

6.3 Construction Procedures

The OWNER will restrict operations during conditions of extreme fire danger as directed by the STATE INSPECTOR, local land management agencies or local fire control agencies. All welding activities will be curtailed during “red flag” conditions (or high burning index) as requested by federal, state or local agencies. When red flag conditions are forecast, the fire guard will contact local fire control agencies and/or the BLM Fire Management Officer for a determination as to when welding activity must cease. During a red flag condition, the OWNER must obtain approval from fire control agencies or the BLM Fire Management Officer to proceed with construction if acceptable precautions are implemented.

7.0 FIRE SUPPRESSION

All available resources will be employed to ensure that uncontrolled range, forest, or structure fires are suppressed immediately with minimum property damage.

In the event of an uncontrollable fire, the local fire control agency, STATE INSPECTOR, property owner, tenant, or land management agency will be contacted immediately. The OWNER will maintain an up-to-date list of land owners/managers and agency contacts along each segment of the pipeline right-of-way.

8.0 MONITORING

The OWNER's Environmental Inspectors and STATE INSPECTORS will inspect the job site and the OWNER's operations for compliance with all provisions of the Fire Prevention and Suppression Plan. In addition, federal, state, and local fire control agencies have the right to perform inspections in areas under their jurisdiction.

Appendix P: Burning Plan and Fire Plan

(To be approved prior to beginning of operations per conditions of the CERTIFICATE.)

Appendix Q: Watersheds and Other Areas Where the use of Herbicides are Prohibited

The DEQ has identified no areas where the use of herbicides is prohibited. Herbicides shall be applied in accordance with label instructions and county weed control plans.

Appendix R: Operational Spill Prevention, Containment, and Control Plan

(To be approved by DEQ prior to beginning of operations.)