

APPENDIX I
FRAMEWORK FLAGGING, FENCING, AND
SIGNAGE PLAN

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ACRONYMS

Applicant	TransWest Express LLC, also TransWest
BLM	Bureau of Land Management
BMP	Best Management Practice
CIC	Compliance Inspection Contractor
DEIS	Draft Environmental Impact Statement
NTP	Notice to Proceed
Plan	Flagging, Fencing, and Signage Plan
POD	Plan of Development
Project	TransWest Express Transmission Project, also TWE Project
ROD	Record of Decision
ROW	right-of-way
TransWest	TransWest Express LLC, also Applicant
TWE Project	TransWest Express Transmission Project, also Project
USFS	United States Forest Service

I1.0 INTRODUCTION

This framework Flagging, Fencing, and Signage Plan (Plan) describes the methods that will be used in the field by TransWest Express LLC (TransWest or Applicant) and its Construction Contractor(s) to delineate the TransWest Express Transmission Project (TWE Project or Project) limits of disturbance and protect sensitive environmental and cultural resources during Project construction. These methods are intended to ensure TransWest personnel, Construction Contractor(s), Bureau of Land Management (BLM), U.S. Forest Service (USFS), Compliance Inspection Contractor (CIC), and environmental investigators and monitors on the Project construction sites stay on approved access routes and within approved work areas. The measures described in this Plan are an integral part of the environmental compliance program for avoiding and minimizing impacts on sensitive resources.

I2.0 PLAN PURPOSE

The purpose of this Plan is to describe the methods that will be used in the field to delineate the Project limits of disturbance and protect sensitive environmental and cultural resources during Project construction. The objective of this Plan is to provide information on the field markings (i.e., flagging, fencing, and signage) that will be used to identify approved Project travel and work areas, as well as environmentally sensitive areas where construction or travel is to be excluded.

I3.0 PLAN UPDATES

This Plan will be updated for the Record of Decision (ROD) Plan of Development (POD) and will include updated signage standards (Table II) based on the selected Agency Preferred Alternative. The Plan for the Notice to Proceed (NTP) POD will be updated as needed based on final design and engineering. The Construction Contractor(s) will be responsible for preparing and implementing the final Plan.

I4.0 REGULATORY REQUIREMENTS

No federal, state or local laws, rules or regulations specifically address flagging, fencing, and signage protocols for construction projects. However, some of the mitigation measures identified in the Draft Environmental Impact Statement (DEIS) for the Project are dependent on adequate field marking of work areas and/or of sensitive resource areas to avoid and minimize impacts to environmental resources. These mitigation measures include flagging or fencing requirements to help protect vegetative cover, water quality, cultural resources, and special status species and minimize the spread of noxious weeds.

I5.0 METHODS

I5.1 Demarcating Project Facilities

Standard survey flags and stakes will be installed before the start of Project construction. Structure sites (e.g., transmission structure locations, anchor points and reference points) will be marked by the Construction Contractor(s). Designated Project access roads, parking areas and pullout areas will be marked to facilitate travel to and from the right-of-way (ROW). Temporary work areas at structure sites, wire pulling/tensioning/splicing sites, material storage yards, fly yards/staging areas, and batch plants will be demarcated as necessary to indicate the limits of approved work areas. The Construction Contractor(s) will stake the boundaries of the maximum area needed for work areas and will provide the dimensions to the CIC. If the delineated work areas exceed the approved dimensions for the Project facilities, the Construction Contractor(s) will coordinate with the CIC for approval and a variance may be required.

15.2 Environmental Exclusion Areas

Signs, flags and/or fencing will be used to establish exclusion areas to protect sensitive environmental resources (e.g., biological, cultural, wetland, and paleontological resources) in the vicinity of construction activities. A system of standardized and simplified exclusion markings will be used to reduce potential confusion during construction and minimize the risk of highlighting types of sensitive resources that could be targeted by vandals (e.g., if exclusion areas protecting archaeological sites were marked differently than those protecting sensitive natural resource areas, the sites would be at a higher risk of unauthorized artifact collecting or other disturbances). In extremely sensitive areas identified by the BLM Authorized Officer, the work area limits may be flagged or fenced for protection of the resource from destruction, harassment or pillaging.

15.2.1 Signage

Signs will be used to help identify TWE Project facilities such as approved access roads and temporary work areas. Signs will be a minimum of 8.5 inches by 11 inches on laminated color paper. Signs will be installed on metal posts and wooden stakes or attached to exclusion fencing/roping as appropriate. Background colors will vary to enhance sign recognition from a distance.

Table I1 provides standards for marking Project features that will be needed during construction. The attachments at the end of this Plan framework show the size and configuration of typical sign layouts. Signs for sensitive resource areas will be oriented for visibility from both directions of likely travel. Table I1 may be updated, changed, or revised in future revisions of this Plan.

TABLE I1 SIGNAGE STANDARDS

FEATURE	FLAGGING OR SIGN COLOR	SIGN TEXT	WHAT TO DO
Project access roads	To be determined by Construction Contractor(s)	Project Access Road – Road No. (e.g., Road 3) – TransWest Express Transmission Project	To be located at points of intersection, additional intermittent flagging may be required. Construction Contractor(s) to verify that right-of-entry has been obtained before marking these areas.
Temporary work areas (structure sites, material yards, etc.)	To be determined by Construction Contractor(s)	Not applicable	Construction Contractor(s) to verify that right-of-entry has been obtained before marking these areas.
Protected animals/plants or sensitive environmental areas.	Yellow	Sensitive Resource Area Keep Out	Avoid these items/areas – do not drive vehicles or equipment near flagging or within flagged areas.
Reclamation project areas	Brown	Restoration in Progress – No Vehicle Traffic Allowed	Avoid these items/areas – do not drive vehicles or equipment near flagging or within flagged areas.
Noxious weed cleaning stations	Blue	Weed Cleaning Station	Signs will be posted at entry points into weed cleaning stations.
Proposed structure locations	To be determined by Construction Contractor(s)	Not applicable	Do not disturb survey stakes.
Structure offsets	To be determined by Construction Contractor(s)	Not applicable	Do not disturb survey stakes.
Outside edge of permitted ROW or centerline	To be determined by Construction Contractor(s)	Not applicable	Do not drive vehicles or equipment outside of designated corridor.

FEATURE	FLAGGING OR SIGN COLOR	SIGN TEXT	WHAT TO DO
Cadastral survey monument	To be determined by Construction Contractor(s)	Not applicable	Protect in place.
Non-authorized access roads	To be determined by Construction Contractor(s)	Do Not Enter Not An Authorized Access Road	Do not drive vehicles or equipment on unauthorized roads.
Existing and Temporary Gates	To be determined by Construction Contractor(s)	Close Gate	Post at appropriate locations along the ROW in coordination with the appropriate land management agency or landowner.

NOTES:

- Staking, flagging and signage will be conducted by the Construction Contractor(s) and verified by the CIC, including sensitive resource areas and exclusion areas.
- Construction Contractor(s) shall stake all proposed tower center hub and footer locations, structure locations and associated reference points and mark the centerline with inter-visible stakes not to exceed 500 feet and at all road crossings.
- Construction Contractor(s) shall use staking intervals appropriate to the conditions observed in the field. For example, areas of rough terrain or dense vegetation may require staking intervals less than 500 feet. In all cases, field staking intervals shall be done at a frequency such that each adjacent stake can be easily discernable.
- Maintain, refurbish and replace staking as necessary over time as conditions require.

15.2.2 Flagging

Survey flagging (i.e., surveyor’s ribbon tied to wooden stakes, metal posts or appropriate vegetation) will be used to delineate the disturbance limits of temporary work areas, access roads, etc., unless existing fencing or other features clearly indicate the limits of the area. Survey flagging may be used to demarcate sensitive resource locations situated a safe distance from planned construction activities but generally will not be used to define resource exclusion areas close to planned construction activities due to concerns about the visibility and stability of flagging during construction.

The BLM and USFS Authorized Officers or CIC, as needed, will determine whether flagging or fencing is the appropriate marking and protection device for a given location. Flagging color will conform to the requirements of Table II.

15.2.3 Fencing

To delineate the limits of construction near sensitive resources requiring a high level of protection from Project disturbance, a combination of one or more of the following fencing materials will be installed by the Construction Contractor(s):

- Rope (0.25 inch in diameter colored yellow or orange),
- Plastic or fabric tape; and/or
- Safety fencing (plastic orange or red mesh at least 24 inches wide and at least 18 inches off the ground to facilitate travel by small animals).

Rope with periodic marking by exclusionary signs or lengths of tape is a highly visible and effective exclusion device. Rope, tape, and safety fence will be installed using metal posts for increased durability and in areas with compact or rocky soils. If construction within a wetland is necessary, the boundaries of the approved disturbance areas will be demarcated so impacts are limited to the area authorized. In most cases, it is anticipated the exclusion device will be installed at the boundaries of the sensitive resource (including any required buffers), rather than at the edge of the work area. If a buffer zone encroaches into

the work area, only the portions that overlap with the work area will be delineated and signed as an exclusion zone.

16.0 INSTALLATION, MONITORING, AND MAINTENANCE

The objectives of this Plan are dependent on the proper installation, monitoring, and maintenance of protective devices. The Construction Contractor(s) will be responsible for the installation and maintenance of the field marking of Project features as described above. These markings will be installed in advance of construction activities in the area, maintained during the course of construction (as necessary), and removed after Project cleanup and reclamation activities. Environmental exclusion signs, flags and fencing will be installed by the Construction Contractor(s) in coordination with the CIC and with the assistance of appropriate environmental inspectors and monitors (e.g., botanists, biologists, archaeologists). These environmental exclusions will be installed prior to the start of construction within a Project work area. The CIC will be consulted if there is uncertainty as to the type or location of needed exclusion devices for botanical, wildlife, wetlands, streams or archaeological sites.

Routine Project monitoring by the CIC and Construction Contractor's environmental inspectors and monitors will include an on-going assessment of the need for replacement or repair of exclusionary signs, flagging or fencing. Maintenance needs related to exclusionary devices will either be corrected at the time of observation by the CIC or will be documented as a future maintenance need. If maintenance of an exclusionary device is needed within an active construction area, corrective action will be taken within one workday. Maintenance of signs, flagging and fencing within inactive work areas will be implemented as necessary.

17.0 DESIGN FEATURES AND BEST MANAGEMENT PRACTICES

In addition to applicable design and operational standards and designation of sensitive ecological areas, the following design features and Best Management Practices (BMPs) have been identified. Note that the Construction, Operation and Maintenance Plan will be a part of the NTP POD.

TWE-10: The area of limits of construction activities will normally be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.

TWE-15: The NTP POD Plan will include a Clean-up Work Management Plan and a Flagging, Fencing, and Signage Plan. Except for permanent survey markers and material that locate proposed facilities, stakes, pins, rebar, spikes, and other material will be removed from the surface and within the top 15 inches of topsoil as a part of final clean-up. The Applicant will adhere to BLM fencing standards where required. Fences on ROW will be removed where necessary and replaced to the original condition or better when the work is finished. Where existing fences are removed to facilitate the work, temporary fence protection for lands adjacent to the ROW will be provided at all times during the continuation of the Contract. Such temporary fence protection will be adequate to prevent public access to restricted areas. Temporary fencing constructed on the ROW will be removed by the Contractor as part of the clean-up operations prior to final acceptance of the completed work.

TWE-33: Prior to the start of construction, the Applicant will provide training to all Contractor and Subcontractor personnel and others involved in construction activities where/if there is a known occurrence of protected species or habitat in the construction area. Sensitive areas will be considered avoidance areas. Prior to any construction activity, avoidance areas will be marked on the ground and maintained through the duration of the Contract. The Applicant will remove markings during or following final inspection of the Project.

TWE-43: The NTP POD Plan will include a Flagging, Fencing, and Signage Plan. The Applicant will adhere to BLM fencing standards where required. Fences and gates will be repaired or replaced to their original pre-disturbed condition as required by the landowner or the land management agency if they are damaged or destroyed by construction activities. Temporary gates will be installed only with the permission of the landowner or the land management agency, and will be restored to their original pre-disturbed condition following construction. Cattle guards will be installed where new permanent access roads cut through fences, at the request of the land management agency.

Project
Access Road
Road No.

Sensitive
Resource Area

Keep Out

Restoration In
Progress – No
Vehicle Traffic
Allowed

No Refueling
Within 100 Feet of
Wetlands and
Streambanks

Do Not Enter
Not an
Authorized
Access Road

Weed Cleaning
Station No.