

GOLDEN GATE NATIONAL RECREATION AREA



 **GOLDEN GATE NATIONAL RECREATION AREA
MANAGED LANDS**

 **PRESIDIO TRUST
MANAGEMENT BOUNDARY**

 Golden Gate National Recreation Area
Legislative Boundary

 Golden Gate National Recreation Area
Offshore Areas



March 2013









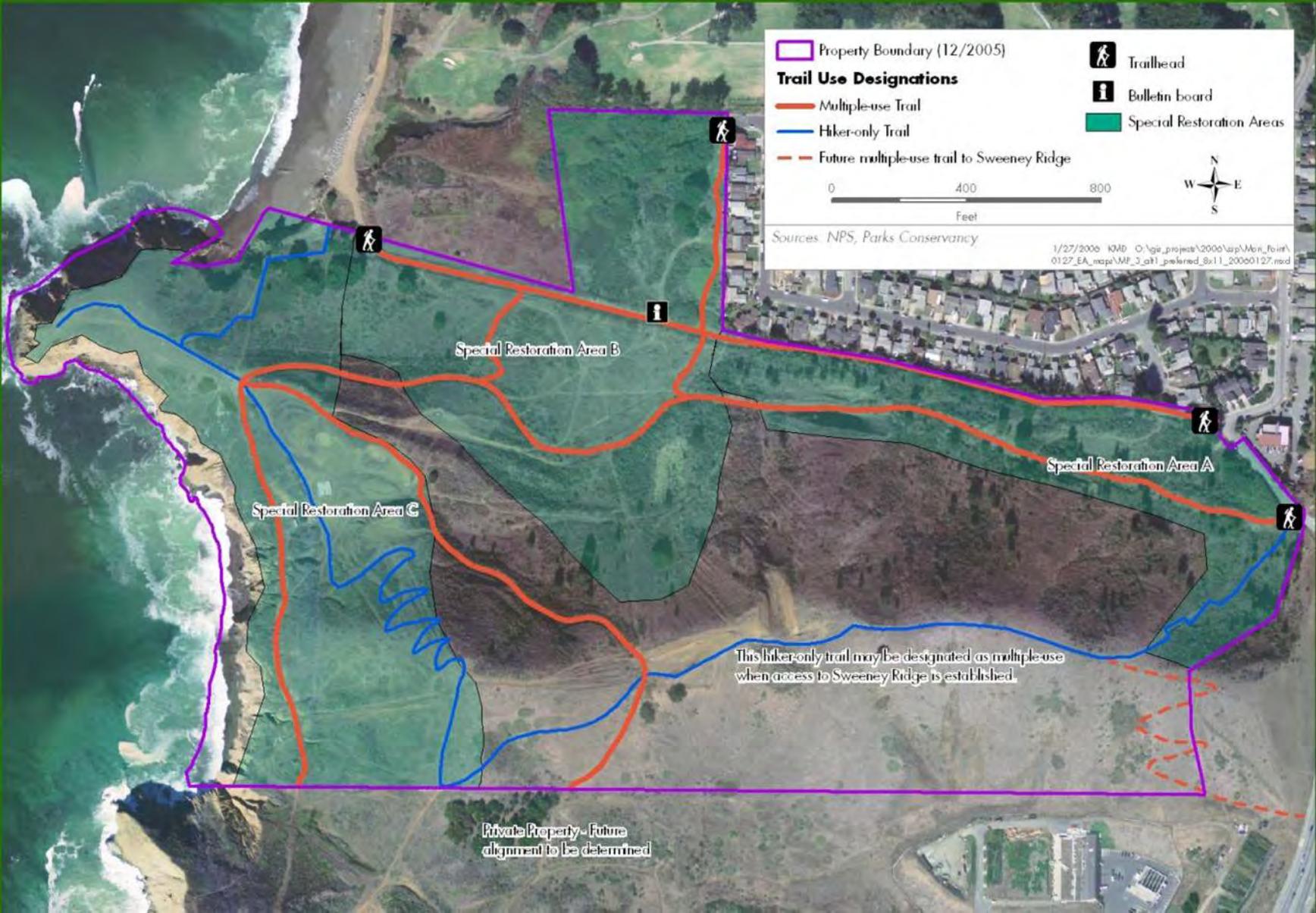








DRAFT MAP
for planning
purposes only



Property Boundary (12/2005)

Trail Use Designations

- Multiple-use Trail
- Hiker-only Trail
- Future multiple-use trail to Sweeney Ridge

- Trailhead
- Bulletin board
- Special Restoration Areas



Sources: NPS, Parks Conservancy

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Special Restoration Area B

Special Restoration Area A

Special Restoration Area C

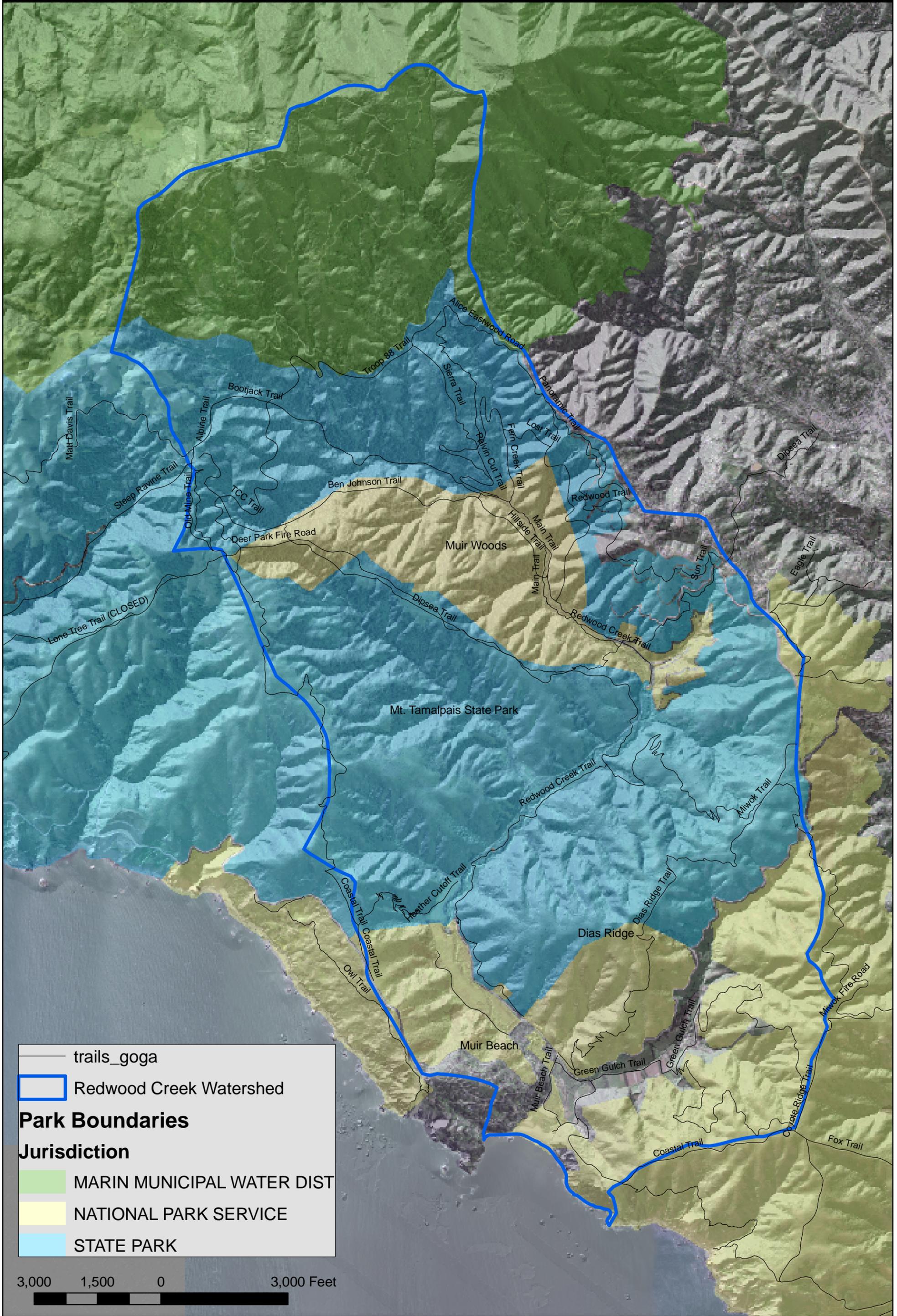
This hiker-only trail may be designated as multiple-use when access to Sweeney Ridge is established.

Private Property - Future alignment to be determined

Redwood Creek Watershed Signage

Watershed and Management Boundaries

REFERENCE MAP



ST-6 Box Step



Box steps consist of a stacked series of 3-sided step structures, typically wooden timbers fastened together to create box structures that are stacked one-by-one. Box steps are typically used to gain elevation, dry-out wet areas and go over rough ground. Box steps are not constrained by stringers (and straight runs) as are other step structures; box steps allow the trail to sweep around curves in the trail alignment, adding a simple organic elegance to the constructed trail corridor.

MATERIALS:

- 10"X ½" lag screws, hot dip galvanized
- 3"X ½" lag screws, hot dip galvanized
- ½" washers, hot dip galvanized
- Simpson HL-33, hot dip galvanized. Or equivalent dimension and gauge angle bracket
- #5 5/8" Rebar, cut to 2' minimum - 4' maximum length. 2' lengths for rocky/stable soil, 4' lengths for loamy unstable soil
- Fill Material: 1½"-2" drain rock
- Tread Material: Brown shale (1"-). Or equivalent tread materials as determined by PM
- Copper Naphtenate. Or equivalent fungi/insecticide wood preservative treatment

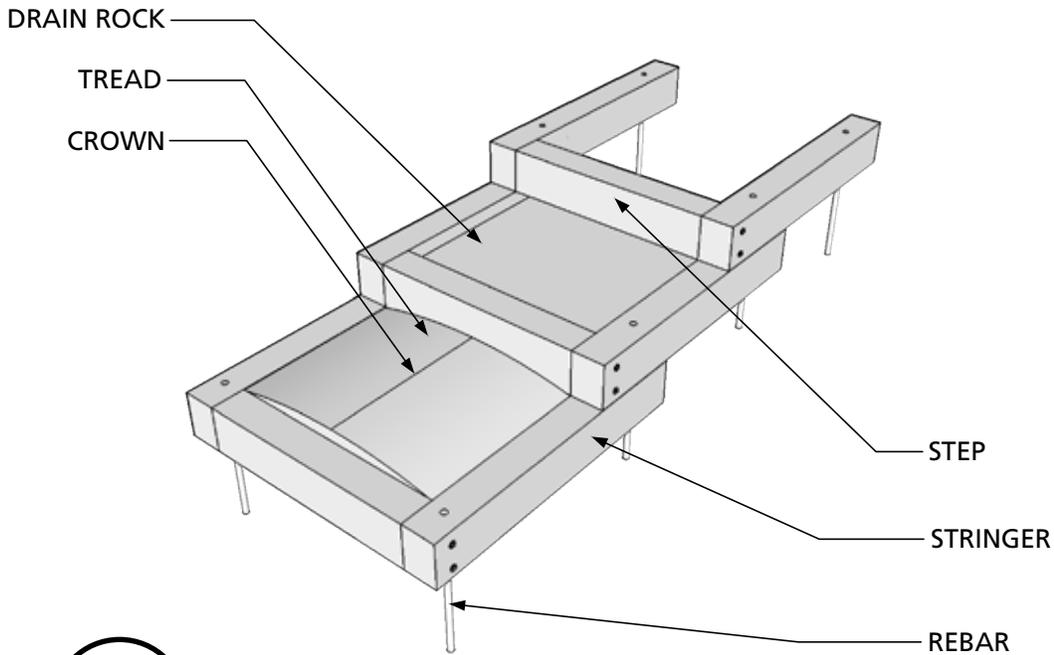
CONSTRUCTION:

- All cut lumber ends are to be treated with Copper Naphtenate or equivalent Fungi/insecticide.
- #5 rebar may be required to be longer or shorter dependent on terrain and soil type.
- Cut joints in lumber must be flush with outside faces and tops, allowing no fill material to escape.
- Tread material will be installed in two separate 3"-4" lifts (watered and compacted). The completed tread surface will have a high crowned center that allows water to shed off the structure.
- The maximum rise is 8" and the minimum run is 12". The number of stacked box steps is determined by the grade and location of the trail segment. The structure should be recessed into the hillside as much as possible.

ADDITIONAL INFORMATION:

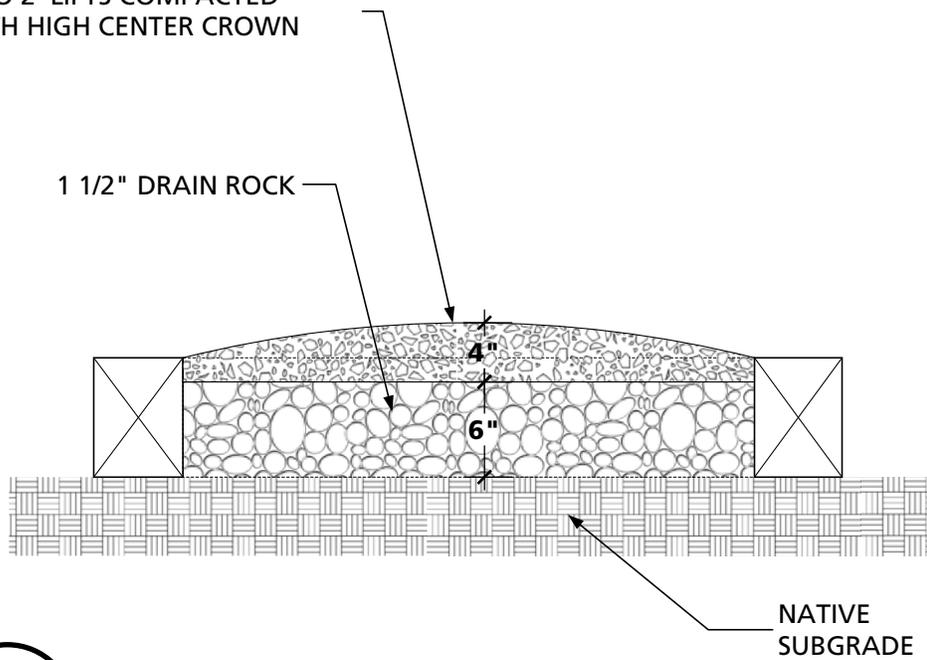
MAINTENANCE:

Annual inspection of the structure and clearing of adjacent drainage features. Replacement of structure components (lumber, hardware, fill materials) as needed. Steps may need to be weeded periodically if they are not well used.



1 **Box Step: Perspective**
scale: NTS

TREAD:
TWO 2" LIFTS COMPACTED
WITH HIGH CENTER CROWN



2 **Fill Cross Section**
scale: NTS