BOLINAS LAGOON WYE WETLANDS

30% DESIGN

BOLINAS, CALIFORNIA

STATEMENT OF PURPOSE

This project will enhance hydrologic function of Lewis Gulch Creek including restoring interaction between surface and groundwater in the Bolinas Lagoon Wetlands. It will restore a transition zone to accommodate sea level rise, improve roadway safety, reduce flooding and enhance fish passage and ecological function of riparian and wetland habitat.

REGULATORY CONTEXT

Project goals and the design of the project have been developed under the guidance of Marin County Open Space District and Golden Gate National Parks Conservancy.

The project is subject to approval and restrictions from the following agencies:
- US Army Corps of Engineers
- US Fish and Wildlife Service
- California Department of Fish and Wildlife
- California Regional Water Quality Control Board
- NOAA National Marine Fisheries Service
- Marin County
- The California Coastal Commission

CHARACTERIZATION OF THE PROJECT

This project will reconnect Lewis Gulch Creek to its former floodplain by removing the existing crossover road, building a new bridge, realigning a portion of Olema-Bolinas road, and creating a new channel through the Bolinas Lagoon Wetland.

The new Olema-Bolinas road bridge will allow for steelhead trout to access upper reaches of the watershed and convey the 100-year flood with at least 2 feet of freeboard.

Large woody material will be incorporated into the channels to provide enhanced cover, forage, velocity refuge and hydraulic complexity to the system.

An emergency repair along SR1 performed by Caltrans in 2019 will be enhanced with additional grading, footer loss, rootwash toe protection, soil lifts, willow plantings, and brush layering.

PROJECT SCHEDULE

The design is intended to be constructed during two summer low flow construction season (May through October 1st).

SURVEY CONTROL

Horizontal Datum: NSRS 2011, California State Plane Zone III, U.S. Survey feet
Vertical Datum: NAVD88, U.S. Survey feet

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SHEET INDEX

G-1.0 TITLE SHEET
V-1.0 EXISTING CONDITIONS
C-1.1 SITE PLAN
C-2.0 GRADING PLAN
C-2.1 GRADING PLAN
C-2.2 PROFILE
C-2.3.1 SECTIONS
C-4.0 DETAIL
G-1.0 BRIDGE GENERAL NOTES
X-1 BRIDGE TYPICAL SECTIONS
D-1.0 DEMOLITION PLAN
L-1.0 LAYOUT
P-1.0 PROFILE
S-1.0 GENERAL PLAN
L-2.0 PLANTING PLAN
L-3.0 EROSION CONTROL DETAILS
L-3.1 EROSION CONTROL DETAILS

LOCATION PLAN

NOT TO SCALE

BOLINAS LAGOON WYE WETLANDS

PROJECT SITE

BEFORE

EXISTING LEWIS GULCH CREEK CHANNEL TO REMAIN

REALIGN CHANNEL AND INSTALL BIOENGINEERING STABILIZATION TREATMENT

NEW CROSSOVER ROAD

PROPOSED ROAD

PROPOSED OLEMA-BOLINAS ROAD (STATE ROUTE 3 INTERSECTION)

PROPOSED OLEMA-BOLINAS ROAD

PROPOSED BRIDGE

PROPOSED FLOODPLAIN

PROPOSED CROSSOVER ROAD

PROPOSED ROAD ALIGNMENT

PROPOSED HOOD STRUCTURE

PROPOSED CHANNEL ALIGNMENT

EXISTING LEWIS GULCH CREEK CHANNEL TO REMAIN

REALIGN CHANNEL AND INSTALL BIOENGINEERING STABILIZATION TREATMENT

NEW CROSSOVER ROAD

PROPOSED ROAD

PROPOSED OLEMA-BOLINAS ROAD (STATE ROUTE 3 INTERSECTION)
1. TYPICAL LOG STRUCTURE SECTION VIEW

2. BANK STABILIZATION SECTION DETAIL

3. BOULDER DETAIL
OLEMA BOLINAS RD PROFILE

Horiz SCALE: 1" - 40'
Vert SCALE: 1" - 8'

BOLINAS, CALIFORNIA

NOT FOR CONSTRUCTION
1. TRENCHED FIBER ROLLS SPACED EQUALLY ALONG SLOPE

2. INSTALLATIONS SHOWN IN THE PERSPECTIVES ARE FOR SLOPE INCLINATION OF 10:1 AND STEEPER.

MIN

STAKE NOTCH DETAIL

MIN

1'-0" 1'-6" 2'-0" 6"

NOTCH

4"

6'-6" BELOW GRADING CONFORM

5'-0" TO 10'-0"

NOTES:

RNSP H51 DATED APRIL 3, 2009 SUPERSEDES NSP H51 DATED DECEMBER 1, 2006

THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.