

ALISOS AVE. BRIDGE DROP STRUCTURE REPLACEMENT

PN: 98R047

Project Purpose:

- Protect bridge piles and abutments by installing a Grade Stabilization structure in Happy Canyon Creek beneath the bridge.
- Reduce scour erosion of Happy Canyon Creek in the vicinity of the bridge in the upstream and downstream directions.

TEAM MEMBERS:

Dave Rickard, Disaster Recovery Manager

Rob Tyzzer, Project Engineer

Jared Hart, Environmental

Tim Wong, Project Manager

Major scour and erosion resulted from the storms of 1995 and 1998.



The channel bottom of Happy Canyon Creek has degraded approximately 12 vertical feet since bridge construction in 1969.

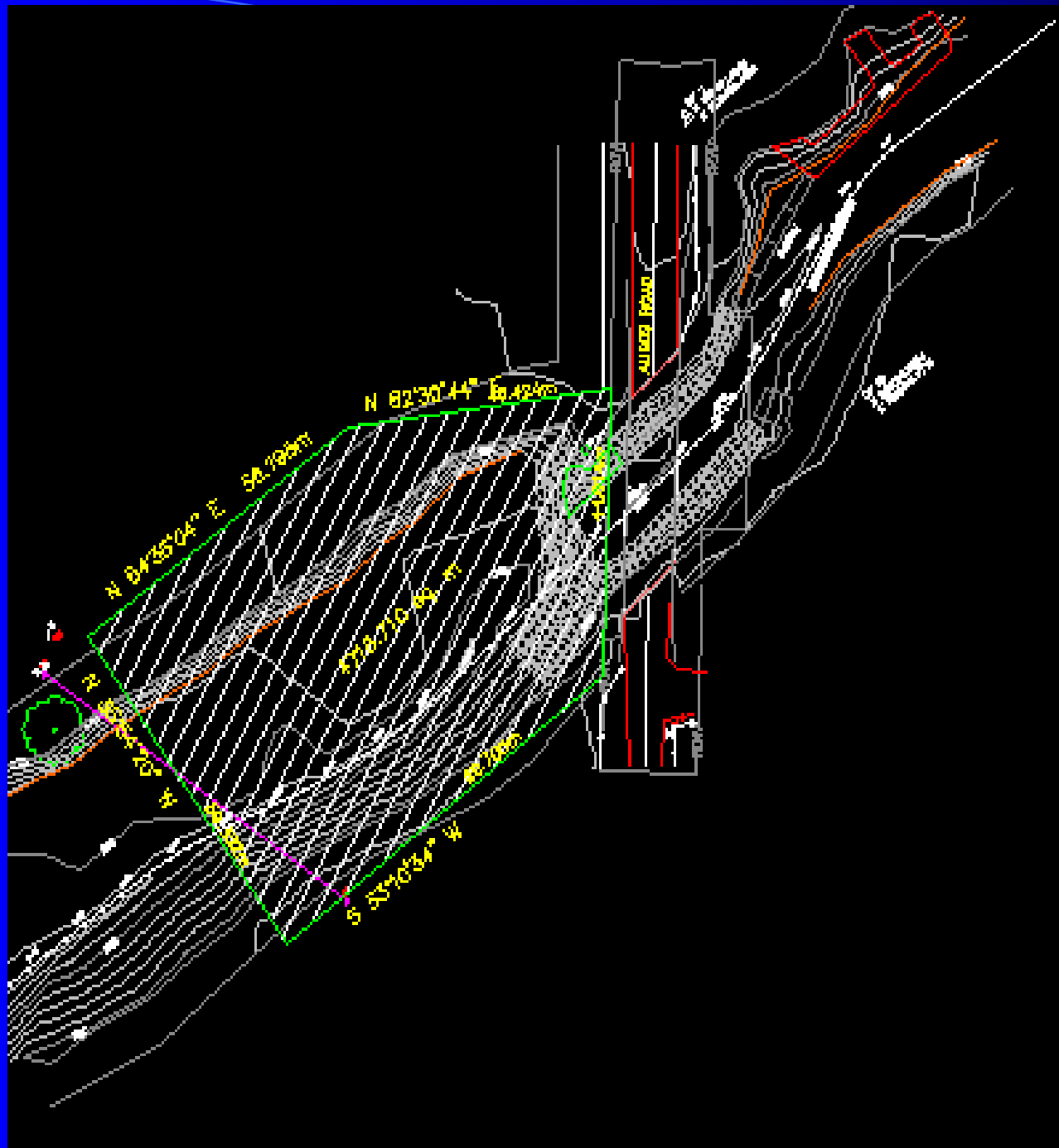
Extensive lateral erosion downstream of the bridge occurred during high flow events in 1995 and 1998.

Emergency repairs after the '95 and '98 storms consisted of placing large rock and grouted rock slope protection to restore stream bed elevation beneath the bridge.



PROJECT MILESTONES

- PRECUREMENT OF REAL PROPERTY EASEMENT
- ENVIRONMENTAL PERMITTING



Real Property Easement

ENVIRONMENTAL PERMITTING

National Marine Fisheries Service unexpectedly designated Happy Canyon Creek habitat for the Endangered Species *Southern Steelhead*.

New requirements for fish passage required substantial changes to project design.

ENTRIX

**STEELHEAD HABITAT EVALUATION
HAPPY CANYON CREEK**

Prepared for:

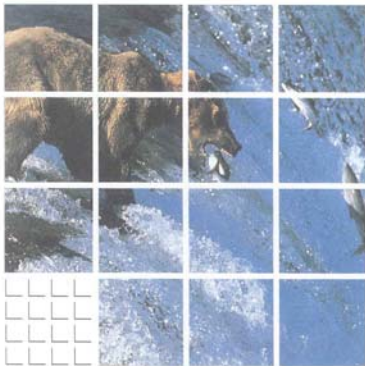
**COUNTY OF SANTA BARBARA PUBLIC WORKS
TRANSPORTATION DIVISION**
123 East Anapamu Street
Santa Barbara, CA 93101

Prepared by:

ENTRIX, INC.
Ventura, CA

Project No. 304301

August 2, 2002



**Steelhead Habitat
Evaluation ordered by
County Engineering
Section.**

**Resulted in lifting of
steelhead habitat
designation and removal
of fish passage
requirements.**

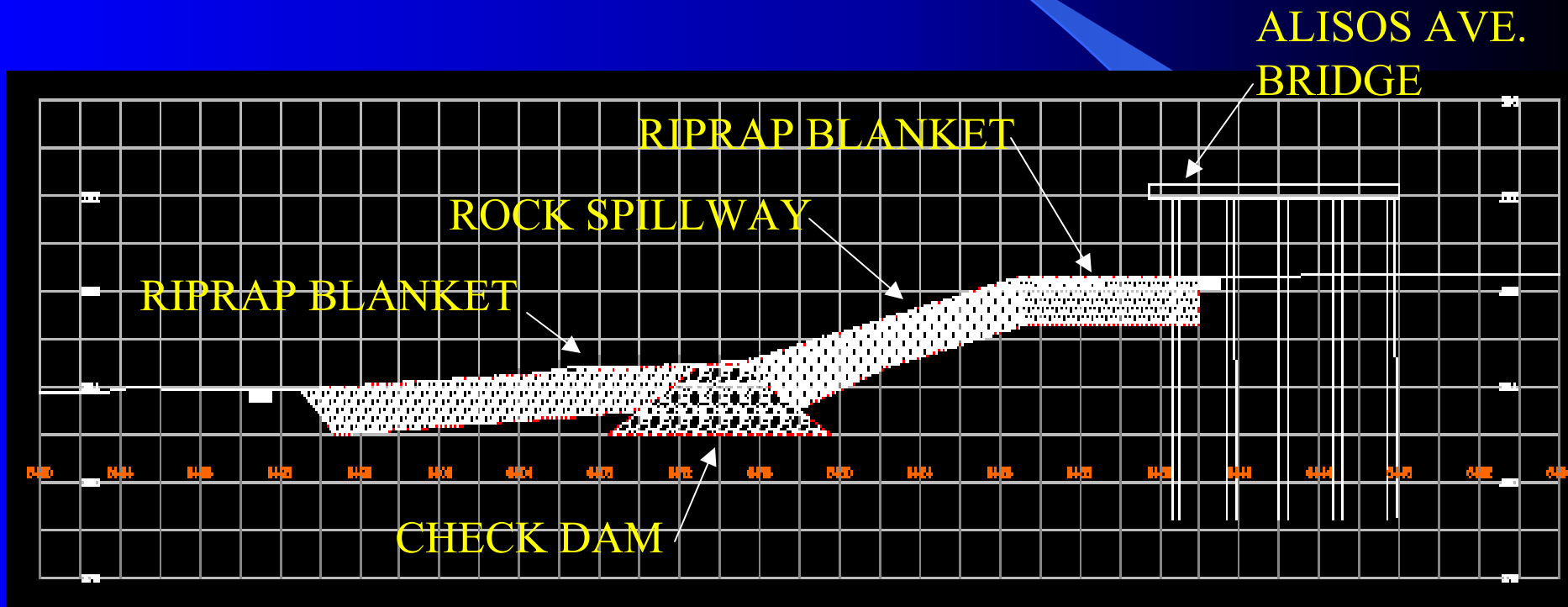
Grade Stabilization Design Considerations

Aesthetic Values

Costs

Reducing lateral erosion of creek banks

Grade Stabilization Structure



PROFILE VIEW

Project Status:

Awarded to Granite Const. \$225,767

Construction Phase began 12/09/02.

Construction complete 1/17/03 (est.)

Project Funding:

- Disaster Recovery Initiative (DRI) Grant
(Department of Housing and Community
Development) Hazard Mitigation Program
 - Construction Costs \$290,000
 - Activity Delivery \$25,000
- State OES
 - 25% of DRI Grant



Thank You!