

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-90M	1990	ADD.3	5

GENERAL NOTES

REPAIR NOTES:

- Face of exist. concrete
Hatched area denotes approx. damaged area from which loose or unsound concrete has been partially removed.
Limits of conc. removal or conc. patch (see detail on sh. S-1). Apply bonding agent immediately before placing mortar or conc.
- All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed as shown and repaired with hand placed mortar or shotcrete.
- Provide min. 2" conc. cover over reinforcement or welded wire fabric. See specifications for welded wire fabric requirements.
- Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be strengthened as shown on Repair Splice Detail, on sheet S-1.
- Efflorescence shall be inspected and repaired as directed by the Engineer.
- The Engineer shall determine all areas to be repaired and the limits of repair at each area.

INCIDENTAL ITEMS:

The following items shall be considered incidental to the various pay items of repairs & will not be paid for separately.

- Expansion bolts & other miscellaneous hardware including hot-dipped galvanized and welded wire fabric.
- Cleaning of all exposed, corroded reinforcing steel to sound metal.
- Reinforcing bars of repair splice for strengthening corroded or damaged bars.
- Safety equipment and appurtenances including temporary barricade.

GENERAL:

- All reinforcing steel to be ASTM A615 Grade 40.
- All welding shall be done in accordance with the current edition of the Reinforcing Steel Welding Code AWS D1.4.
- All concrete shall be class A conc. unless otherwise noted. 104.04 & sub-section 676.03(A).
- The stationline of the existing roadway is shown on the plans to designate approximate locations of work to be done and determine approximate quantities. The exact limits & quantities of work to be done will be determined in the field by the engineer.
- The exact location & limits of the CRM wall shall be determined by the Engineer. Height of new CRM wall shall vary from height of existing wall to 2 feet.
- The exact location & limits of the earth ditch shall be determined by the Engineer.

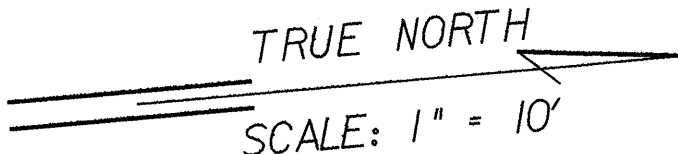
SYMBOLS & ABBREVIATIONS:

- Spall or unsound surface area.
- Exposed reinf. bars where occurs.
- S.S. - Surface spall (Concrete)
- sq. ft.; S.F. - Square feet
- L.F. - Linear feet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
HANA HIGHWAY
WAIKANI BRIDGE REPAIR
PROJ. No. 360A-01-90M

Scale As Shown
Date: May 1990



Sta. 0+73± o/s 10' Lt.
Construct: Type A-9 GDI
(For details, see Plan sh. No. 4)
Install: 24" RCP, Cl. III

ESTIMATED QUANTITIES

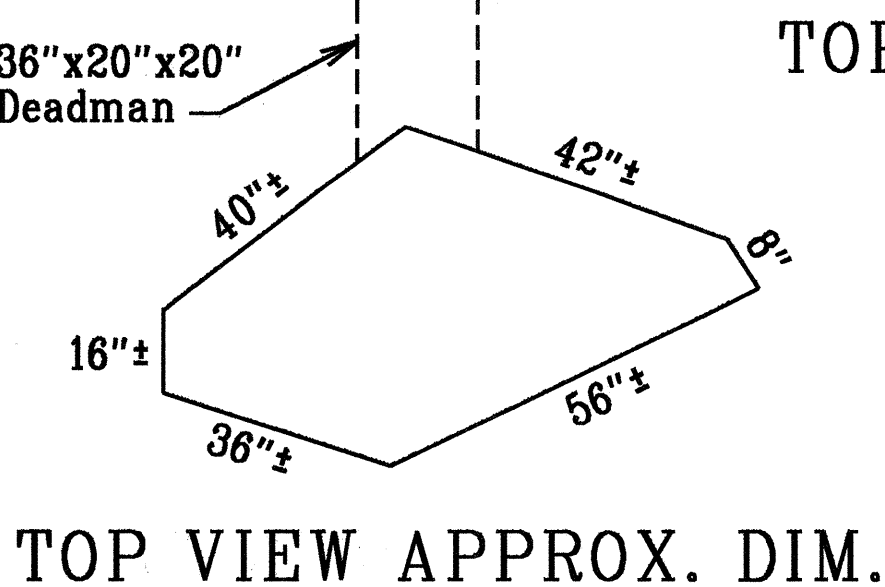
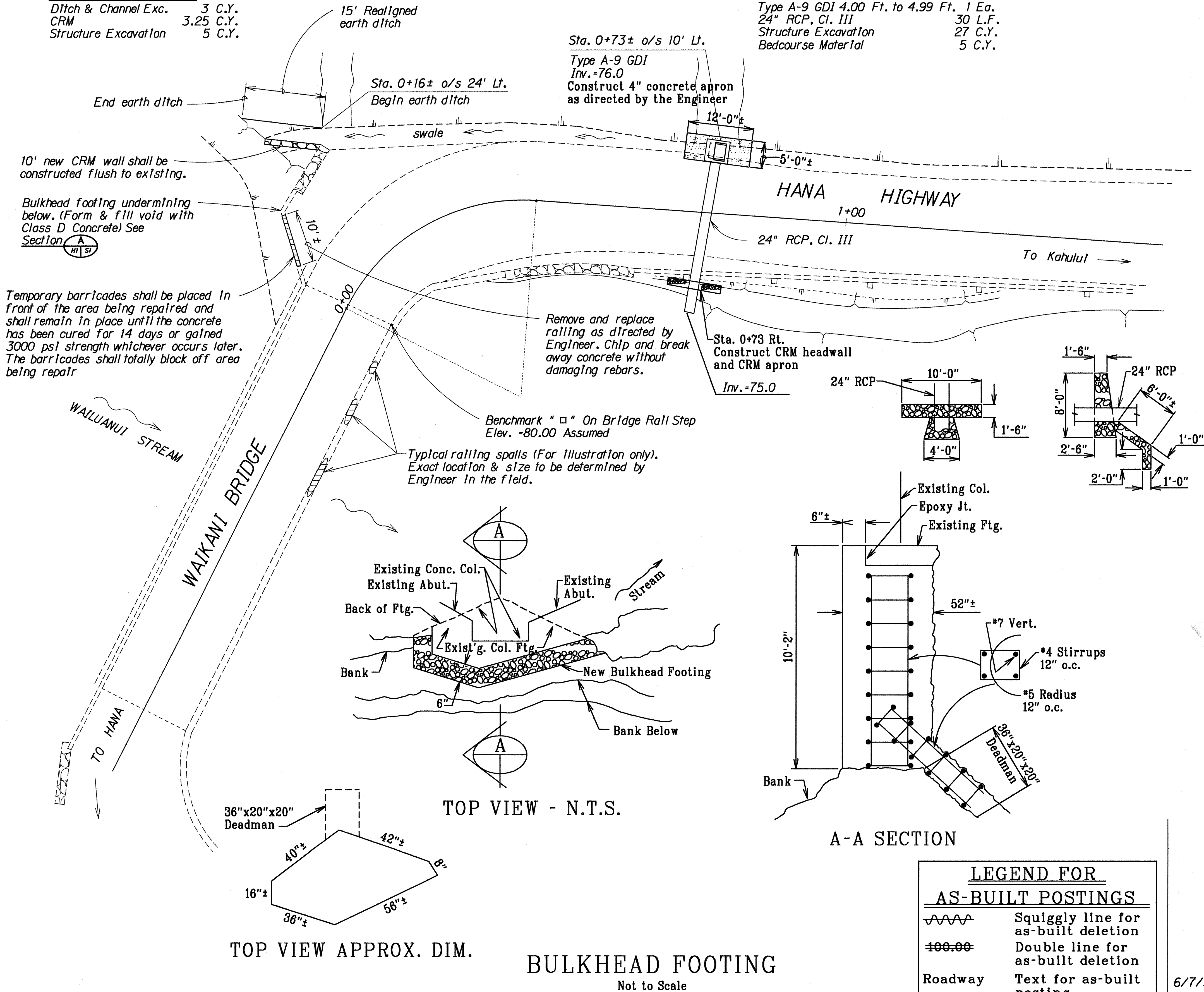
Type A-9 GDI 4.00 Ft. to 4.99 Ft. 1 Ea.
24" RCP, Cl. III 30 L.F.
Structure Excavation 27 C.Y.
Bedcourse Material 5 C.Y.

Sta. 0+73± o/s 10' Lt.
Type A-9 GDI
Inv. =76.0
Construct 4" concrete apron
as directed by the Engineer

Sta. 0+16± o/s 24' Lt.
Construct: CRM wall, earth ditch
(For typical, see Plan sh. No. 4)

ESTIMATED QUANTITIES

Ditch & Channel Exc. 3 C.Y.
CRM 3.25 C.Y.
Structure Excavation 5 C.Y.



TOP VIEW APPROX. DIM.

BULKHEAD FOOTING
Not to Scale

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

6/7/90	Added Assumed Benchmark Note
DATE	REVISION