

"FOR INFORMATION ONLY"

"AS-BUILT PLAN"
(BRIDGE LAYOUT)

GENERAL NOTES

DESIGN LOAD: HS20-44
DESIGN SPECIFICATIONS:
AASHTO Specifications for Highway Bridges (8th Edition with subsequent additions and modifications).
DESIGN STRESSES:
R.C. Beams and Slabs. Except as otherwise noted, see AASHTO Specifications and the Special Provisions.

$f_c = 1,200$ p.s.i.
 $n = 10$
 $f_s = 20,000$ p.s.i.
PRESTRESSED BEAMS:
 $f'_c = 5,500$ p.s.i.
 $f'_ci = 4,000$ p.s.i.
 $\frac{1}{2}$ " ϕ 7 wire strands.
Tension Load = 25,200 lbs.
Design Load = 20,160 lbs.

- MATERIALS:
- All concrete shall be Class A-1, except as otherwise noted on the plans. See Special Provisions for concrete for prestressed beams.
 - See Special Provisions for Admixture in concrete.
 - Neoprene Pads shall be incidental to prestressed beams and will not be paid for separately.
- CONSTRUCTION METHOD:
- See Standard Specifications and Special Provisions.
 - Over excavation beyond the elevations indicated on the plans for the bottom of footings shall be backfilled with a minimum of Class D concrete at the Contractor's expense and as directed by the Engineer.
 - Roadway embankment at abutments shall be placed uniformly and simultaneously around the structure, up to the bottom of the abutment cap, and shall be complete in place before the abutment cap is placed. Unequal earth pressure on the abutment columns shall be kept to a minimum.
 - The prestressed girders shall not be placed on the abutments until the embankment and fill behind wingwalls are complete in place.
 - See Special Provisions for concrete finish. Concrete Seats and Creep Blocks shall be poured monolithically with abutment sections. Seats shall be finished, level and true to elevations.
 - Forms for prestressed concrete beams shall be removed and the beams inspected before the strands are cut.
 - Neoprene Pads shall be secured against displacement by adhesives, approved by the Engineer.

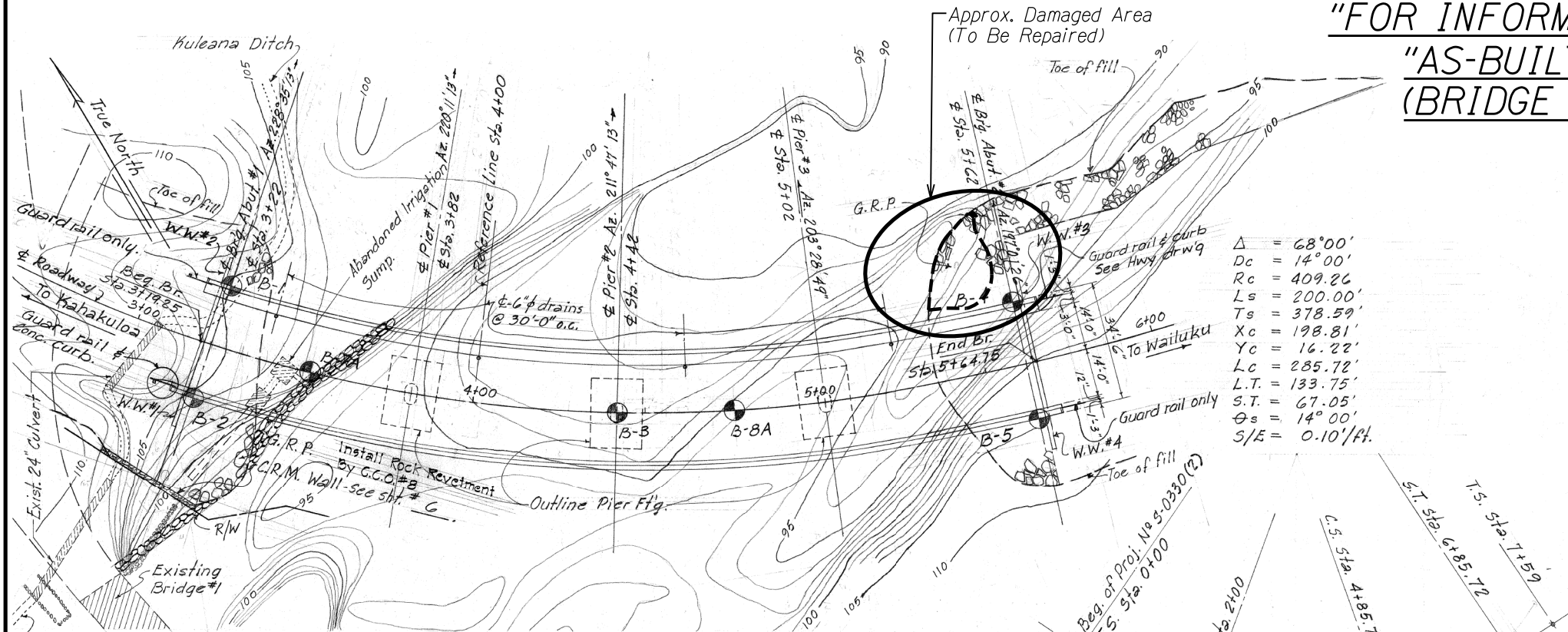
ESTIMATED QUANTITIES			
Class A-1 Concrete	Lump Sum	765.5	c.y.
Reinf. Steel	Lump Sum	183,855	lbs.
Structural Excavation		973.4	c.y.
G.R.P.		266.42	c.y.
Metal Railing		486	lin. ft.
Prestressed Girder		1,195	lin. ft.
C.R.M.		27.07	c.y.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIHEE RIVER BRIDGE
KAHEKILI HIGHWAY
WAIHEE RIVER FLOOD REPAIRS
AT WAIHEE BRIDGE
Project No. 340C-01-18M

Date: March, 2020

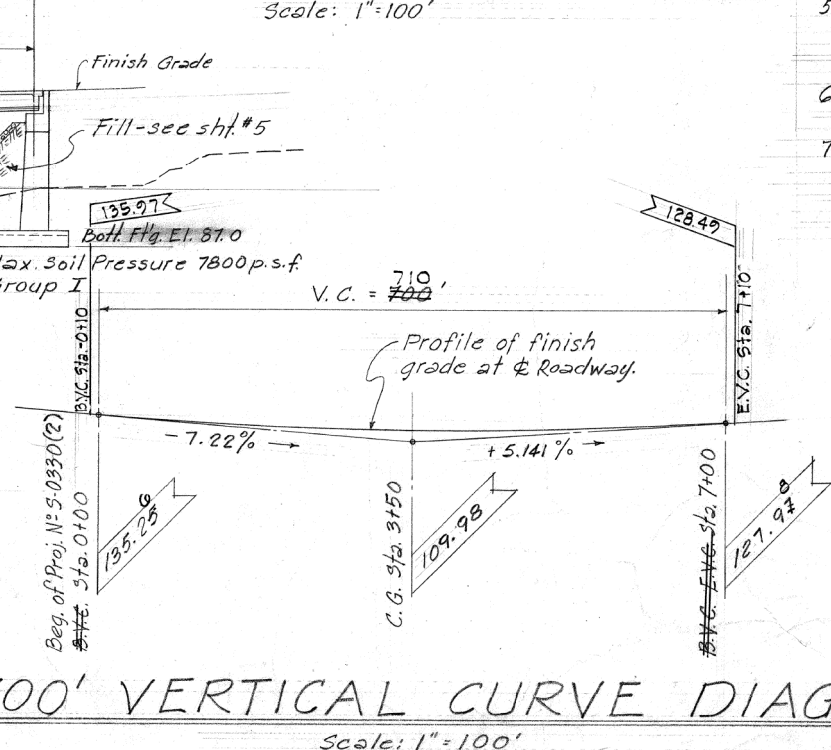
SHEET No. 2 OF 3 SHEETS



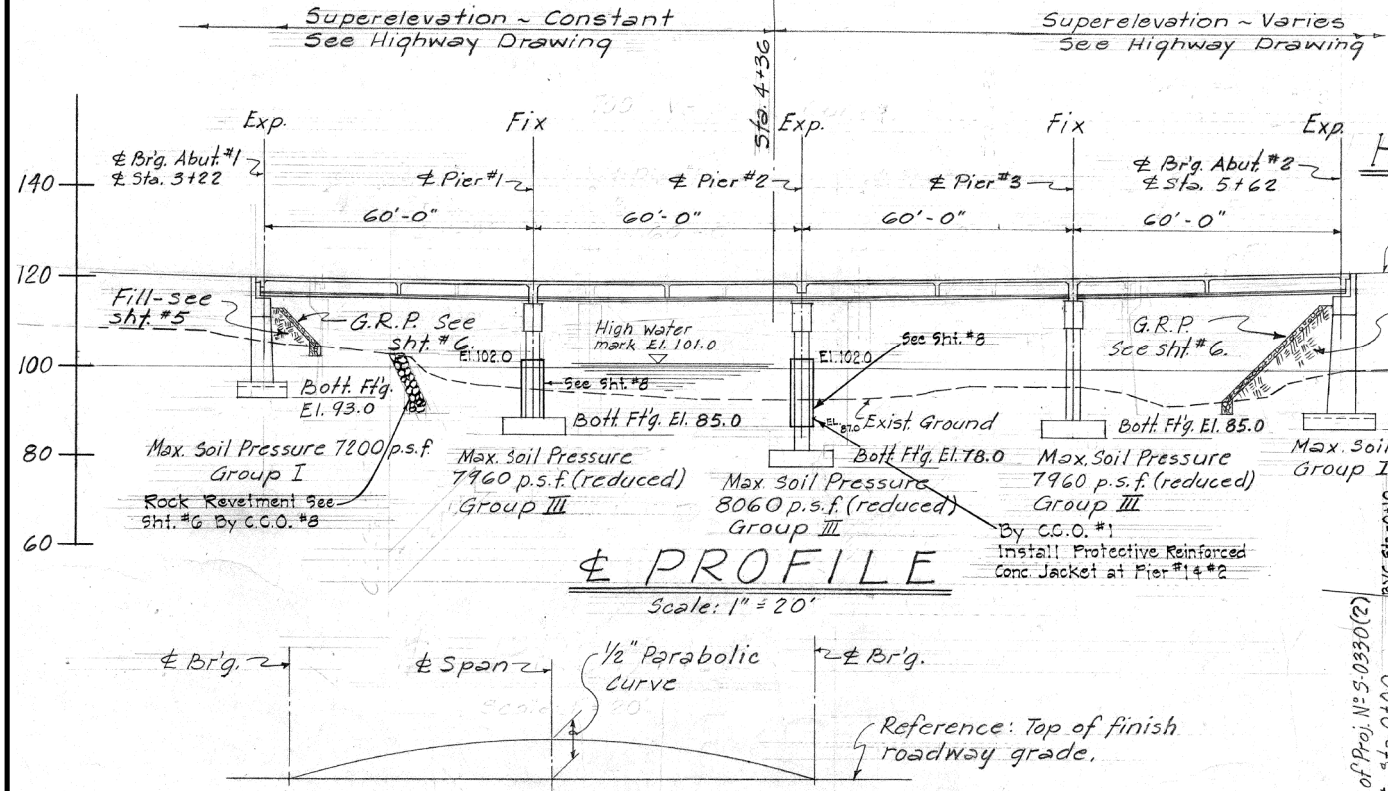
LAYOUT PLAN
Scale: 1" = 20'

- Notes:
- For "Boring Log" see sht. #15.
 - For G.R.P. Limits & details, see sht. #6.

HORIZONTAL CURVE DATA



700' VERTICAL CURVE DIAGRAM
Scale: 1" = 100'



SLAB CAMBER DIAGRAM
EACH SPAN
No Scale

SURVEY PLOTTED BY: DATE: 2/18
DRAWN BY: CO
DESIGNED BY: CO
QUANTITIES BY: me/lay
CHECKED BY: z/trim/ldgn