

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-91	1992	6	13

WATER NOTES:

1. All work shall conform to the Water System Standards, Vol. 1, 1985 and approved material list and standard details for Water System Construction, Vol. 2, 1985.
2. The Contractor shall inform the County of Hawaii, Dept. of Water Supply Engineering, seventy-two (72) hours prior to beginning work on the waterline.
3. All waterline shall be ductile iron pipe (class 52) with push-on joints unless otherwise noted.
4. All fittings (Class 250) and gate valves (Class 200) shall be cast iron or ductile iron with mechanical joints unless otherwise noted.
5. All work and materials furnished by the Dept. of Water Supply shall be paid for by the Contractor unless otherwise noted.
6. All connection to existing main shall be done by the Dept. of Water Supply and paid for by the Contractor. The Contractor shall do all excavation, backfill, furnish all materials, construct reaction blocks, provide flagmen when necessary and all necessary equipment to complete hook-up.
7. The water system shall be tested at 225 psi minimum by the Contractor under the supervision of Dept. of Water Supply personnel, just prior to paving.
8. Chlorination of the water system shall be done by a firm licensed to chlorinate in the State of Hawaii and paid for by the Contractor.
9. Minimum vertical clearance between waterlines and other utilities shall be 1'-0" with concrete jackets. Waterlines shall be above other utilities except where conditions absolutely forbid it. Minimum horizontal clearance shall be 8 feet.
10. All service lateral taps shall be separated by a minimum distance of 1'-6".
11. The location of existing utilities are from the latest available data. However the Contractor shall be responsible to verify their exact location and depth in the field.
12. Any damage to the existing water system shall be the responsibility of the Contractor and he shall bear all costs incurred.
13. Water shut-off shall not exceed 3 hours on any given day. Should the 3 hour period be exceeded, the Contractor shall install a by-pass line at his expense.
14. Solder and flux used shall contain no more than 0.2% lead.
15. All service laterals shall be 1 1/4" Type "C" unless otherwise noted. Meter box covers shall be cast iron.
16. The minimum bury of the D.I. waterline finish grade to invert of pipe shall be 32 inches for 8" D.I. pipe, 27 inches for 6" D.I. pipe and 22 inches for 4" D.I. pipe.

APPROVAL:

MANAGER, DEPT. OF WATER SUPPLY
DATE: 05/11/92

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

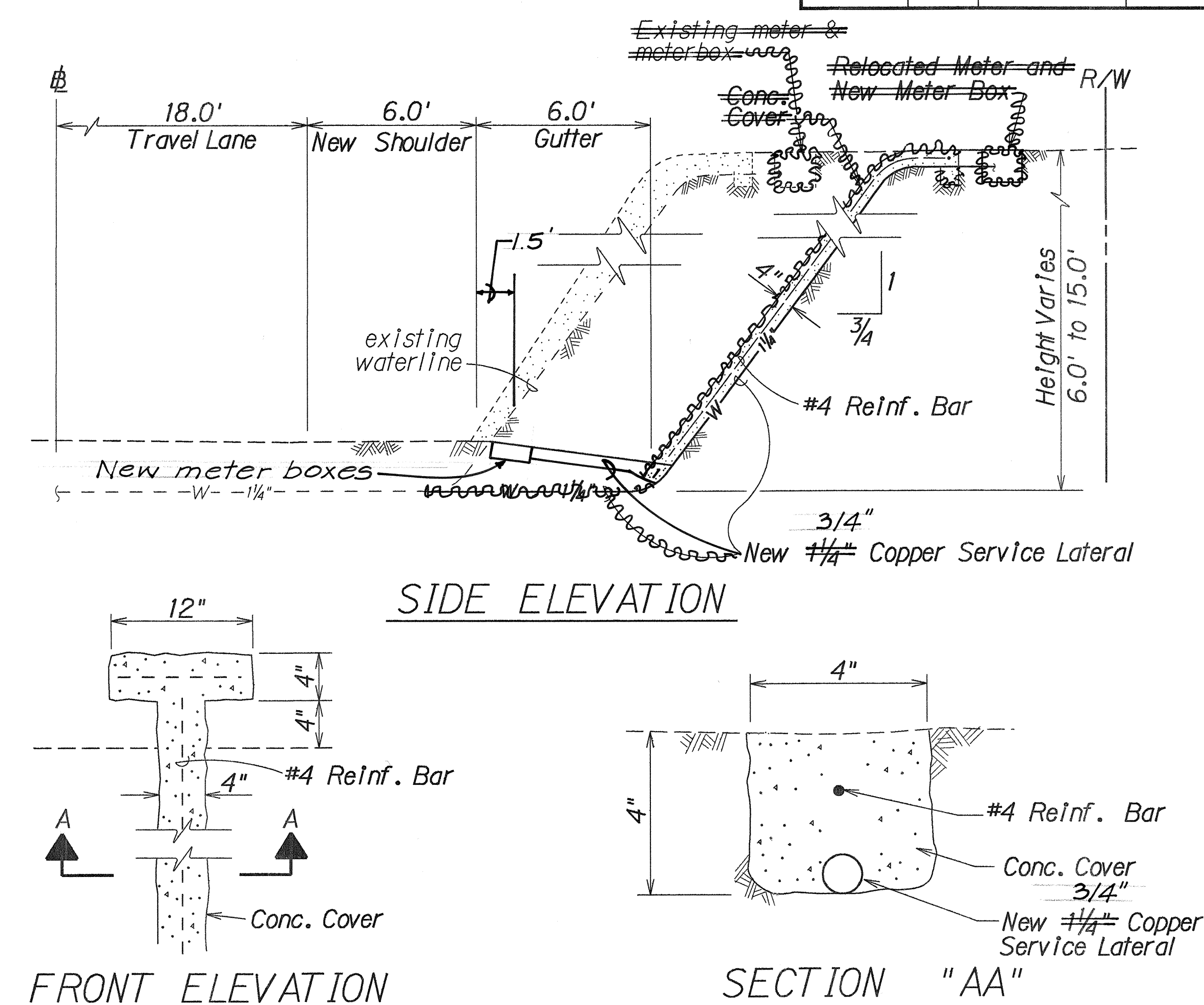
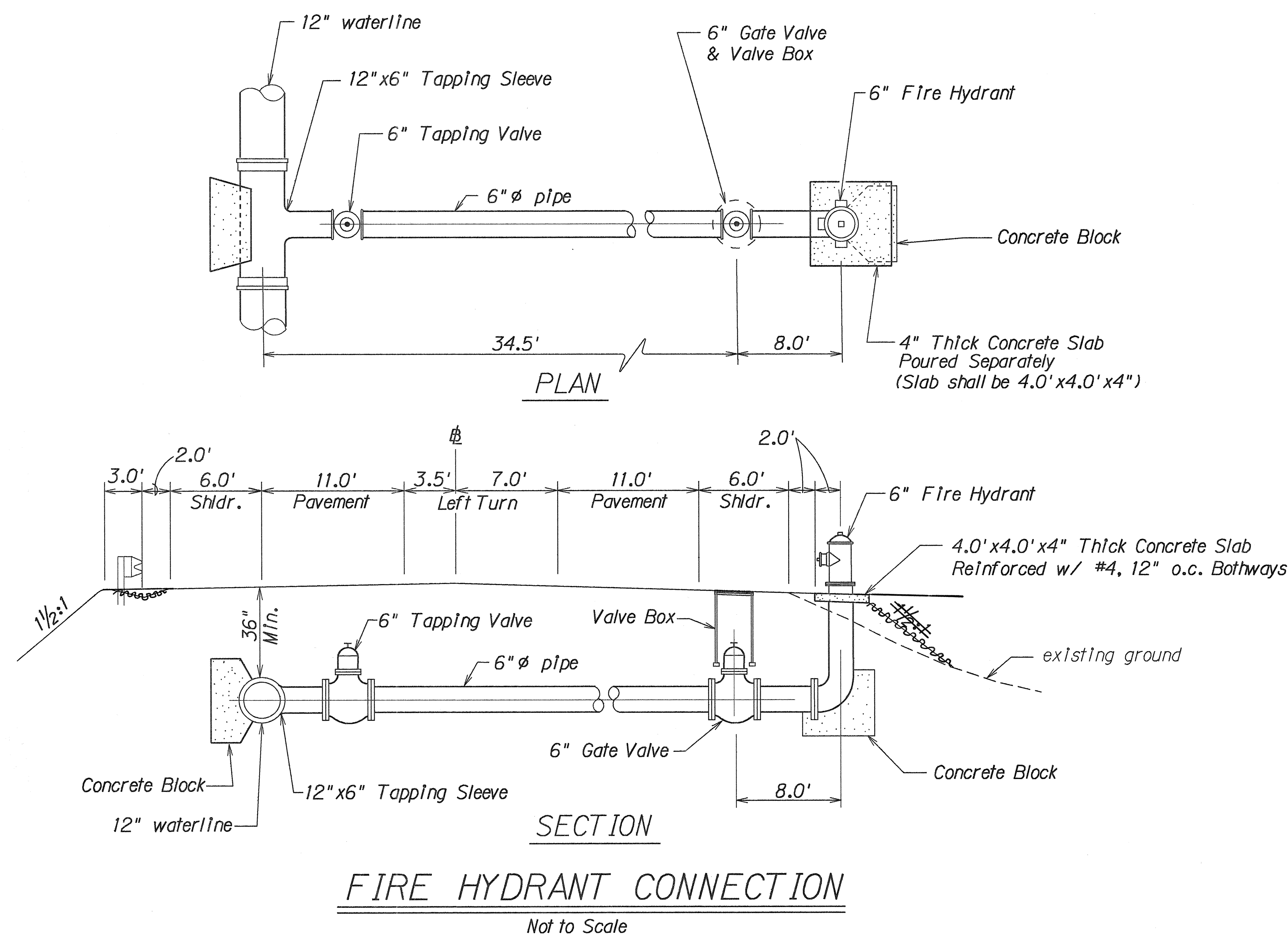
WATER NOTES

MAMALAHOA HIGHWAY INTERSECTION
Improvements at Matsuyama Store
and Kona Palisades Subdivision
Project No. 190B-02-91

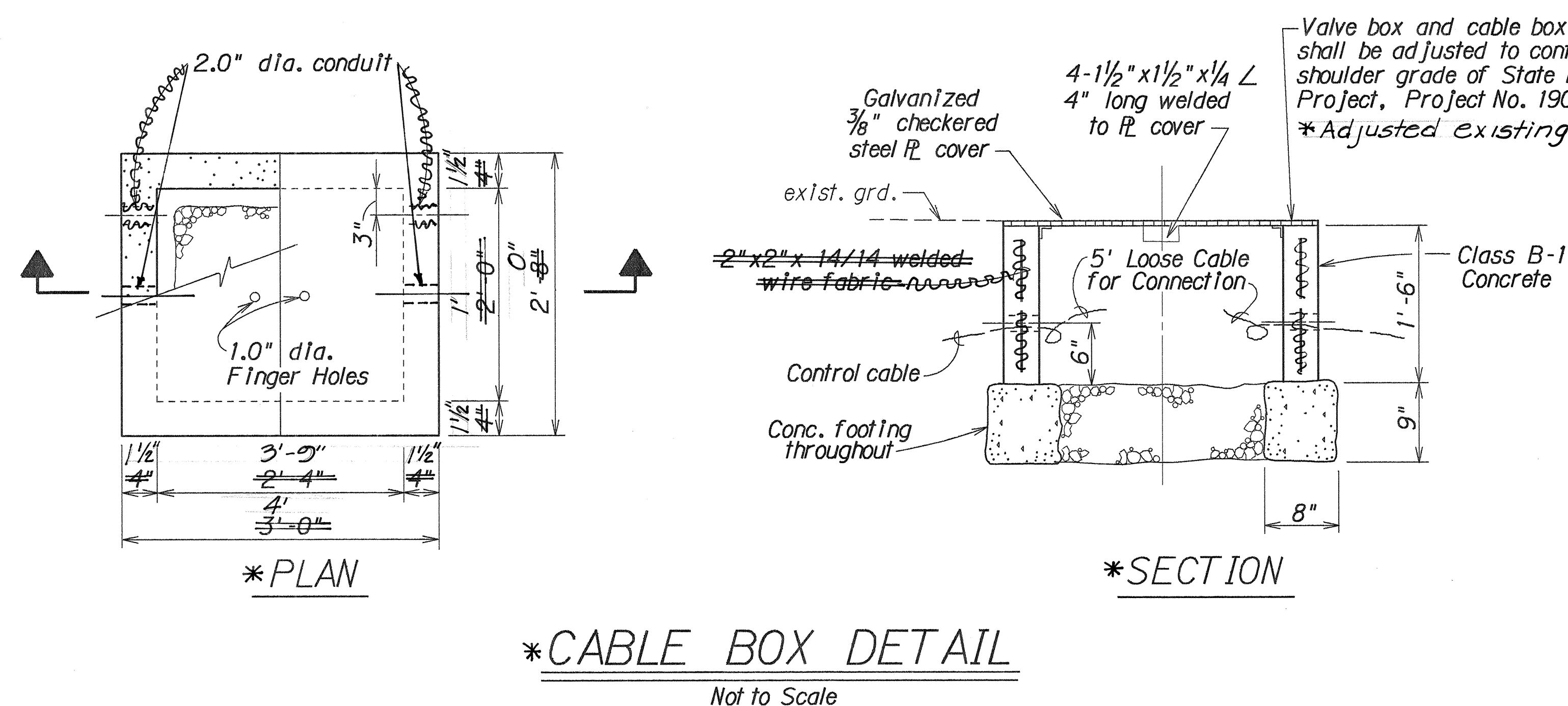
Scale: As Shown Date: Nov. 1991

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
HAWAII	HAW.	190B-02-91	1992	7	13



(Sta. 148+90 and Sta. 149+20)
TYPICAL SERVICE LATERAL DETAIL ON CUT
Not to Scale



APPROVAL: *James S. Krawinkel* 05/11/92
MANAGER: DEPT. OF WATER SUPPLY DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER DETAILS

MAMALAHOA HIGHWAY INTERSECTION
Improvements at Matsuyama Store
and Kona Palisades Subdivision
Project No. 190B-02-91

Scale: As Shown Date: Nov., 1991

SHEET No. 1 OF 1 SHEETS

AS-BUILT

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