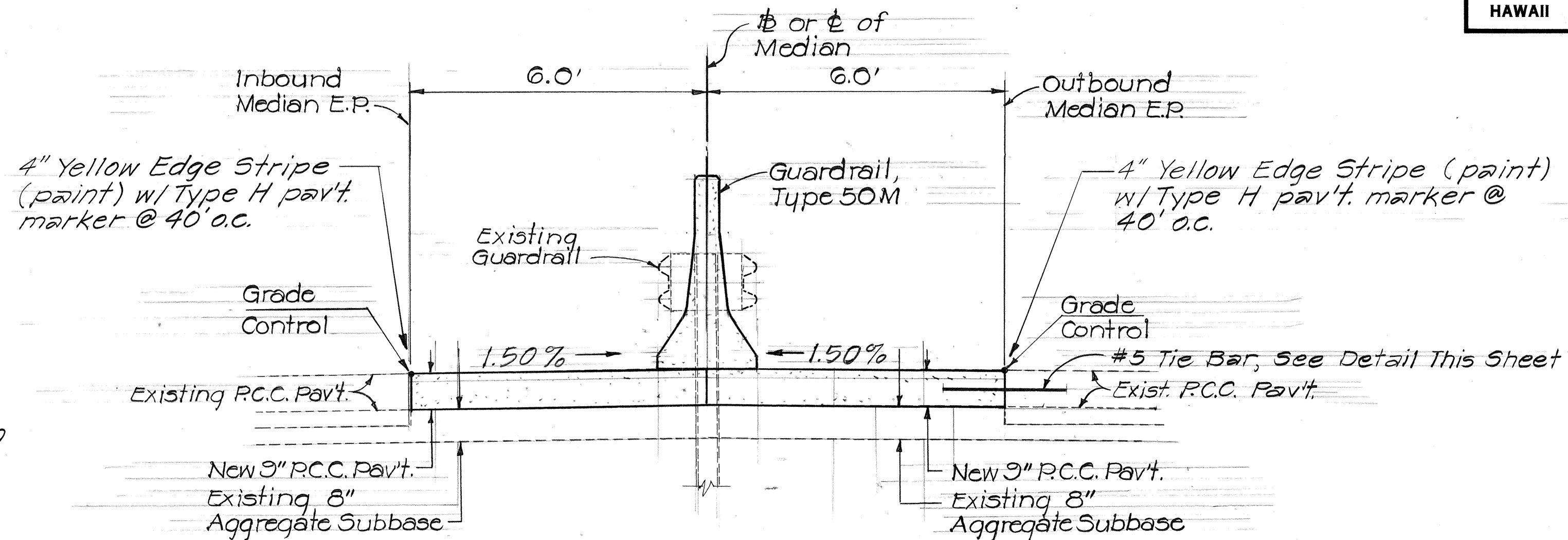


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1R-HI-1(197)	1986	2	38

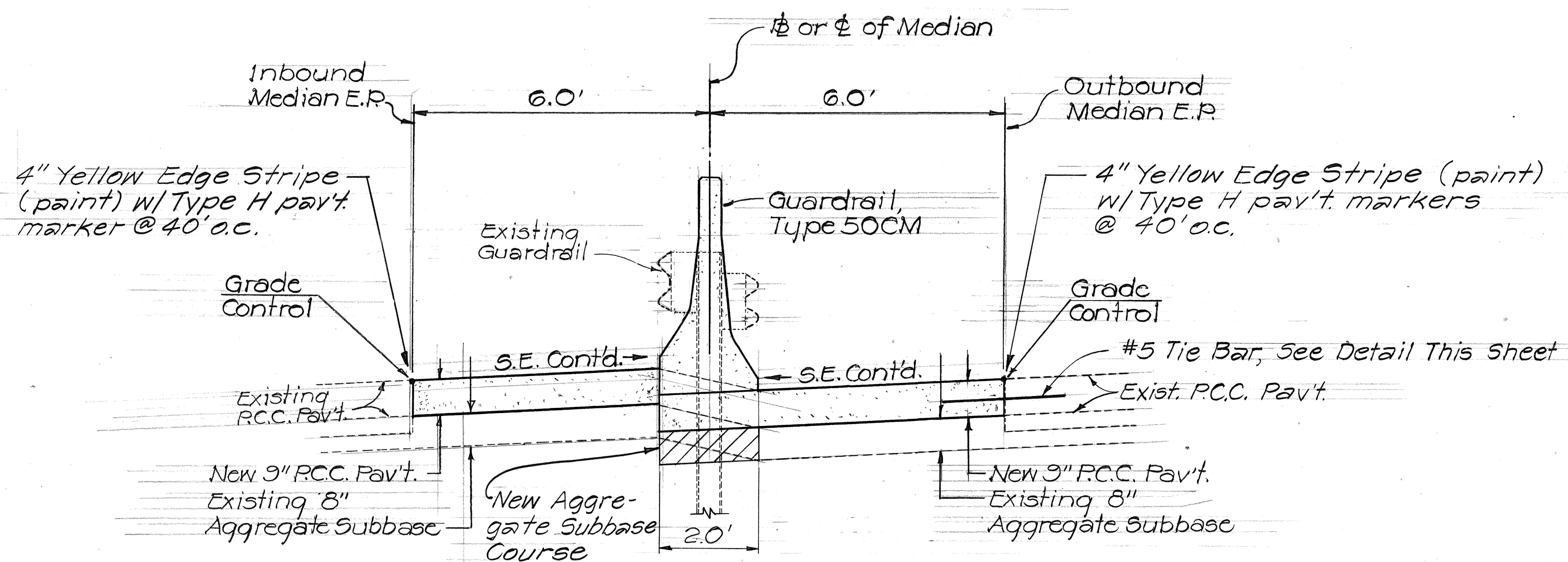
## GENERAL NOTES

- Project begins at Sta. 108+50 ± at Koko Head Ave. and ends at Sta. 144+50 ± at the Waiālae Viaduct. Scope of work for this project consists of removing the existing Median Metal Guard Rails, Excavating, Constructing Concrete Median Barrier and Flush P.C.C. Pavement, Adjusting Manhole Frame and Covers, Striping, Modifying Drainage Structures, Installing Pavement Markings, and Installing Metal Guardrails, Reconstruction of Weakened Pavement Areas, Resurfacing, and Modifying Highway Lighting Bases
- The State will furnish Portable Concrete Barrier for his operation when doing work in the median. The quantity of State-furnished Portable Concrete Guard Rails shall be indicated in the Proposal Schedule. Additional Concrete Barrier beyond those as specified therein shall be borne by the Contractor. See Sheet No. 6 for placement of Portable Concrete Barriers, temporary pavement markings and striping.



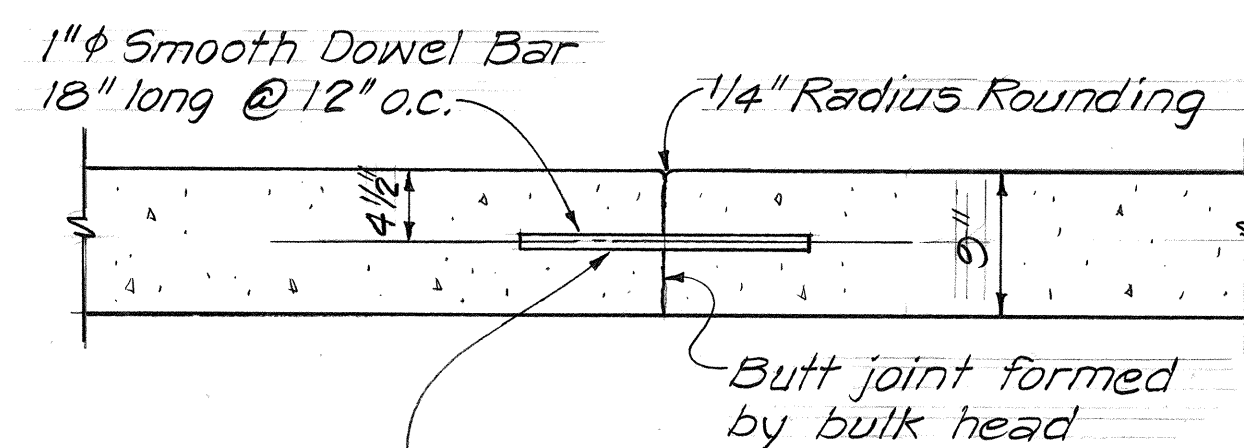
## TYPICAL TANGENT SECTION

Scale: 1/2" = 1'-0"



## TYPICAL SUPERELEVATION SECTION

Scale: 1/2" = 1'-0"

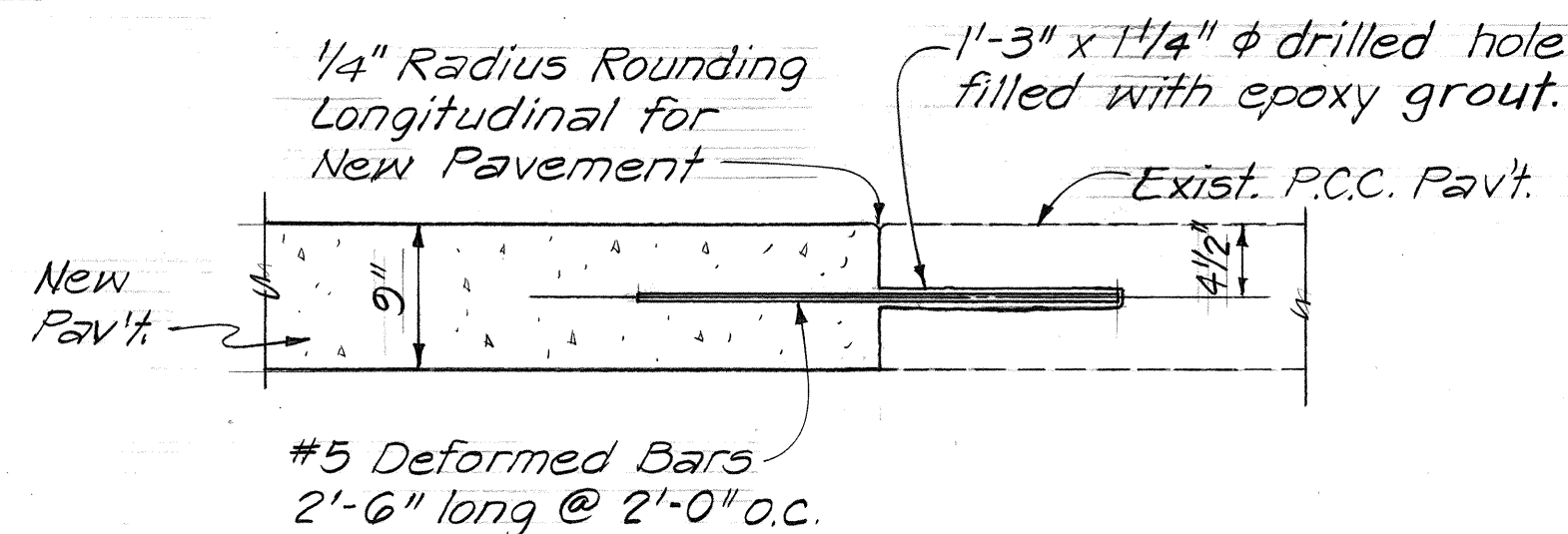


Dowels shall be positioned in place parallel to the pavement surface prior to paving and the ends of the dowels shall not deviate more than 0.02' from the parallel.

## P.C.C. PAVEMENT TRANSVERSE CONSTRUCTION JOINT (INBOUND & OUTBOUND)

Scale: 1" = 1'-0"

For additional P.C.C. Pavement Joint Details See Sheet No. 10.



## P.C.C. PAVEMENT LONGITUDINAL CONSTRUCTION JOINT (OUTBOUND ONLY)

Scale: 1" = 1'-0"

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>TYPICAL SECTION</b>	
INTERSTATE ROUTE H-1 SAFETY IMPROVEMENTS	
KOKOHEAD AVE. TO WAIĀLAE VIADUCT F.A.I. PROJ. NO. 1R-HI-1(197)	
SCALE:	DATE: July, 1985
SHEET NO.	OF SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(197)	1986	3	38

UTILITY GENERAL NOTES

GAS COMPANY (GASCO) NOTES

1. The Gasco, Inc. gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
2. Prior written clearance must be obtained from Gasco, Inc. at least five working days before starting excavation near these gas pipelines.

Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call Gasco, Inc. a minimum of 48 hours before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 547-3575 during business hours, and 526-0066 after hours

3. For relocation of any gas pipeline, the Contractor shall notify Gasco, Inc. five working days before starting work. The Contractor shall provide the necessary excavation and backfill, arrange for traffic permits, and restore pavement, sidewalks, or other facilities. Any relocation of gas facilities shall be performed by Gasco, Inc.
4. The Contractor shall notify Gasco, Inc. immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. Repair work on such damage shall be done by Gasco, Inc., with payment for this work to be borne by the Contractor.
5. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by Gasco, Inc.
6. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

WASTEWATER MANAGEMENT (SEWER) NOTES

1. All construction shall be performed in accordance with the City's STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, May 1975 and THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, September, 1984, and THE REVISED ORDINANCES OF HONOLULU, 1978, as amended.
2. The Contractor shall notify the Division of Wastewater Management (7) seven days prior to the commencement of sewer work and submit (4) four sets of approved construction plans.
3. Location of existing sewer appurtenances shown on the plans are approximate only. The exact location shall be verified in the field.

BOARD OF WATER SUPPLY (BWS) NOTES

1. Unless other wise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 1985, as amended, of the Hawaii Highways Division, Department of Transportation.

2. The BWS Standard Details, Figures 1 to G2 inclusive, bound in the "Water System Standards" of the BWS, dated March 1977, as amended, are applicable to this project.

3. Prior to excavating for new drain, sewer, and other utility lines, the Contractor shall verify in the field the location of existing water mains and appurtenances.

Where the installation of new drain, sewer, and other utility lines are to cross over or under existing water mains, the Contractor shall expose the existing water mains prior to trenching. Excavation around water mains shall be done by hand.

4. The minimum clearance between fire hydrants and utility poles or light standards shall be 3.0 feet.
5. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system. Contact the Superintendent of Maintenance Section, Field Operations Division, at 527-6169.
6. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings etc., and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
7. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities.

8. Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.

9. The Contractor shall adjust all valve boxes and manhole frames and covers that are in the areas to be paved. Prior to paving operations, BWS will mark all water manholes and valve boxes involved with this project. The Contractor shall be responsible for referencing, and adjusting all BWS appurtenances. Referencing of BWS facilities shall be incidental to the various contract items. Any additional work required of BWS to locate and reference BWS facilities, subsequent to paving operations, will be at the Contractor's expense. BWS will bill Contractor for said additional work.

10. Reapproval shall be required if this project is not under construction within a period of one year.

HAWAIIAN ELECTRIC COMPANY (HECO) NOTES

1. The location of HECO's overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown.

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.

2. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
3. The Contractor shall obtain an excavation permit from HECO's Mapping and Records Division located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction.

4. For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 548-7325 a minimum of 72 hours in advance.

5. When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:
  - a) Sheet piling and bracing the excavation to prevent slides, cave-ins and settlements.
  - b) Protecting existing structures or facilities with beams, struts, or underpinning.

6. Any work required to relocate HECO facilities shall be done by HECO and the Contractor shall be responsible for all coordination, and for costs if applicable.

7. The Contractor shall be liable for any damages to HECO facilities and shall immediately report such damages to HECO's Trouble Dispatcher at 548-7961.

HAWAIIAN TELEPHONE COMPANY (HTCO) NOTES

1. The location of existing Hawaiian Telephone Company underground facilities are approximate only. The Contractor shall verify their location and depth of the facilities. Any damages to the underground facilities as a result of his operations shall be repaired and paid by the Contractor.

The Contractor shall notify Hawaiian Telephone Company 72 hours prior to the start of excavation for field location of Hawaiian Telephone Company underground facilities.

APPROVED:

*R. Reyes*  
CHIEF, PLANNING & ENGINEERING, BWS

9-16-85  
DATE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b>UTILITY GENERAL NOTES</b>
<u>INTERSTATE ROUTE H-1</u> <u>SAFETY IMPROVEMENTS</u> <u>Koko Head Ave. to Waialae Viaduct</u> <u>F.A.I. PROJECT NO. IR-HI-1(197)</u>
SHEET No. OF SHEETS