

ORIGINAL PLAN	DATE	SURVEY PLOTTED BY	_____
		DRAWN BY	_____
		TRACED BY	_____
		NOTED BY	_____
NOTE BOOK	No.	DESIGNED BY	_____
		CHECKED BY	_____
		_____	_____
		_____	_____

CAD by E DELA CRUZ, 95-52

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### HECO NOTES:

- 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.
- The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
- For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 543-7345 a minimum of 72 hours in advance.
- When trench excavation is adjacent to or beneath existing HECO structures or facilities, the Contractor shall be responsible for:
  - Sheeting and bracing the excavation to prevent slides, cave-ins and settlements.
  - Protecting existing structures or facilities with beams, struts or under-pinnings.
- Any work required to relocate HECO facilities shall be done by HECO and the Contractor shall be responsible for all coordination, and for possible costs if applicable.
- Should it become necessary to temporarily relocate any of HECO facilities to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocations will be done by HECO, or by the Contractor under HECO's supervision, with all costs borne by the Contractor.
- Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of HECO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor must notify HECO of the conflict a minimum of 30 days prior to the start of construction.
- Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at 543-7874.
- All HECO overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HECO facilities shall be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.

### HECO STANDARD DRAWING LIST

The following HECO Standard drawings are applicable to this contract:

DRAWING TITLE	HECO STANDARD DRAWING NO.
Handholes, Type 34 & 35V (3'-0" x 5'-0")	18841
Precast Handhole (3'-0" x 5'-0")	15501
Service Box, 1'-6" x 3'-6"	30-2005
Installation Details	
Underground	
Typical Duct Construction	30-1030
Installation Details	
Underground Details	
1'-6" x 3'-5 1/2" x 1'-0" DP	013310
Concrete Service Box Body	
1'-6" x 3'-5 1/2" x 0'-8" DP	011311
Concrete Service Box Extension	
Concrete Box Cover For 1'-6" x 3'-5 1/2"	011312
Service Box	

### HTCO NOTES:

- The location of GTE Hawaiian Telephone Company's existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of GTE Hawaiian Telephone Company facilities. The Contractor shall verify their locations and shall be liable for any damages to GTE Hawaiian Telephone Company facilities. Any damages shall be reported immediately to GTE Hawaiian Telephone Company's Repair Section at 483-8085 (normal working hours, Monday through Friday, except holidays).
- For underground cable locating and marking, five working days advance notice is required. Three working days advance notice is required for any inspection by a designated representative.
- The Contractor shall take necessary precaution not to damage any existing cables or conduits. Any work involving existing GTE Hawaiian Telephone Company cables or conduits, shall be done in the presence of a GTE Hawaiian Telephone Company inspector or designated representative.
- The Contractor shall obtain an excavation permit and toning request from GTE Hawaiian Telephone Company's Excavation Permit Section, located at 3239 Ualena Street, Third Floor, two weeks prior to the start of construction. Hours of business is 7:00 a.m. to 10:30 a.m. and 11:30 a.m. to 3:00 p.m. Monday through Friday, except holidays.
- The Contractor shall notify GTE Hawaiian Telephone Company's inspector or designated representative a minimum of 72 hours prior to excavation, bracing or backfilling of GTE Hawaiian Telephone Company's structures or facilities.
- When excavation is adjacent to or beneath GTE Hawaiian Telephone Company's existing structures or facilities, the Contractor shall:
  - Sheet and/or brace the excavation to prevent slides, cave-ins or settlements to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.
  - Protect existing structures and/or facilities with beams, struts or underpinning while excavating beneath them to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.
  - All excavation work shall comply with OSHA requirements.

### HTCO STANDARD DRAWING LIST

The following HTCO Standard drawings are applicable to this contract:

DRAWING TITLE	HTCO STANDARD DRAWING NO.
Standard Details for	34082
3660 TB Pullbox	

### OCEANIC CABLEVISION STANDARD DRAWING LIST

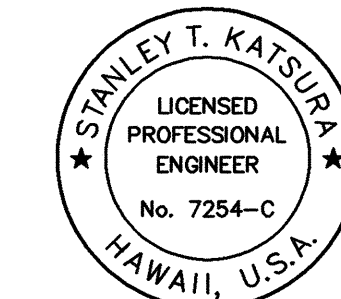
The following Oceanic Cablevision Standard drawings are applicable to this contract:

DRAWING TITLE	OCEANIC STANDARD DRAWING NO.
24" x 48" Pullbox	—

### WATER NOTES:

- Unless otherwise 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, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS" VOLUME 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, AND THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, and all subsequent amendments and additions.
- 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, drainage, etc., and other features of improvement shall not be the responsibility of the Board of Water Supply.
- The Contractor shall notify BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system.
- 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 of encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
- Re-approval shall be required if this project is not under construction within a period of two years.
- The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- Any adjustments to the existing water system required during construction to meet requirements of the Board of Water Supply Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.

Approved: Michael Jule 1/2/00  
Chief, Planning & Engineering Division, Date  
Board of Water Supply, City & County of Honolulu



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

Stanley Katsura

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-98	2000	22	46

- The Contractor shall have existing water mains toned before construction of work in vicinity of water mains, call the investigation section at 527-5296 for toning services. Guardrail post locations are to be kept to a minimum clear distance of 18 inches to any 2-1/2 inch water lines and meter boxes. No post driving will be allowed when post is to installed closer than 3 feet from water main. Excavated areas shall be restored to their original conditions.
- The Contractor shall verify all existing service lateral locations whether shown or not shown on the plans prior to commencing with any of the work and shall not assume that where no services are shown none exists.
- The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area. Prior to resurfacing, BWS will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be considered incidental to the various contract work items. Cost for referencing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/valve boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all cost of said additional work).
- At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all waterlines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to the Board of Water Supply.
- Maintain 3'-0' min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>UTILITY RELOCATION NOTES</b>	
KAMEHAMEHA HIGHWAY INTERSECTION IMPROVEMENTS AT PUPUKEA ROAD PROJECT NO. 83B-01-98	
SCALE: NONE	DATE: FEBRUARY 2000
SHEET NO. U1 OF 3 SHEETS	



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-98	2000	23	46

TRUE NORTH  
SCALE: 1 IN = 20 FT

PUPUKEA BEACH PARK  
TMK: 5-9-04:19

Sta. 165+94, 31' Lt.  
Relocated Pole by HECO  
Furnish & Install Light &  
Bracket Arm (L=14')

Sta. 167+40, 33' Lt.  
Relocate Exist. Area Light Pole onto New Pole Footing. For Detail, see Sht. C5.  
Reroute Exist. U/G Conduit & Conductors.  
Demolish Exist. Conc. Footing. This work shall be considered incidental to Contract Item 622.3010.

SUNSET BEACH FIRE STATION  
TMK: 5-9-04:29

Sta. 167+53, 31' Lt.  
Relocated Pole by HECO  
Furnish & Install Street Light &  
Bracket Arm (L=14')

Sta. 166+97, 34' Lt.  
Relocate Exist. Fire Beacon & Mastarm (L=30±) onto New Type "C" Concrete Base. For Detail, See Sht. TS5. Reroute Exist. U/G Conduit & Conductors.  
Demolish Exist. Conc. Base. This work shall be considered incidental to Contract Item 622.3020.

Sta. 162+60±, o/s 28± Lt.  
Contractor shall extend the existing 4" lateral and install Type III meter box and all appurtenances in accordance with BWS Standards to accommodate the relocation of the existing 1-1/2" meter. Contractor shall relocate the existing meter and reconnect to the existing property pipe.  
M/N 19746378  
P/D 1066417

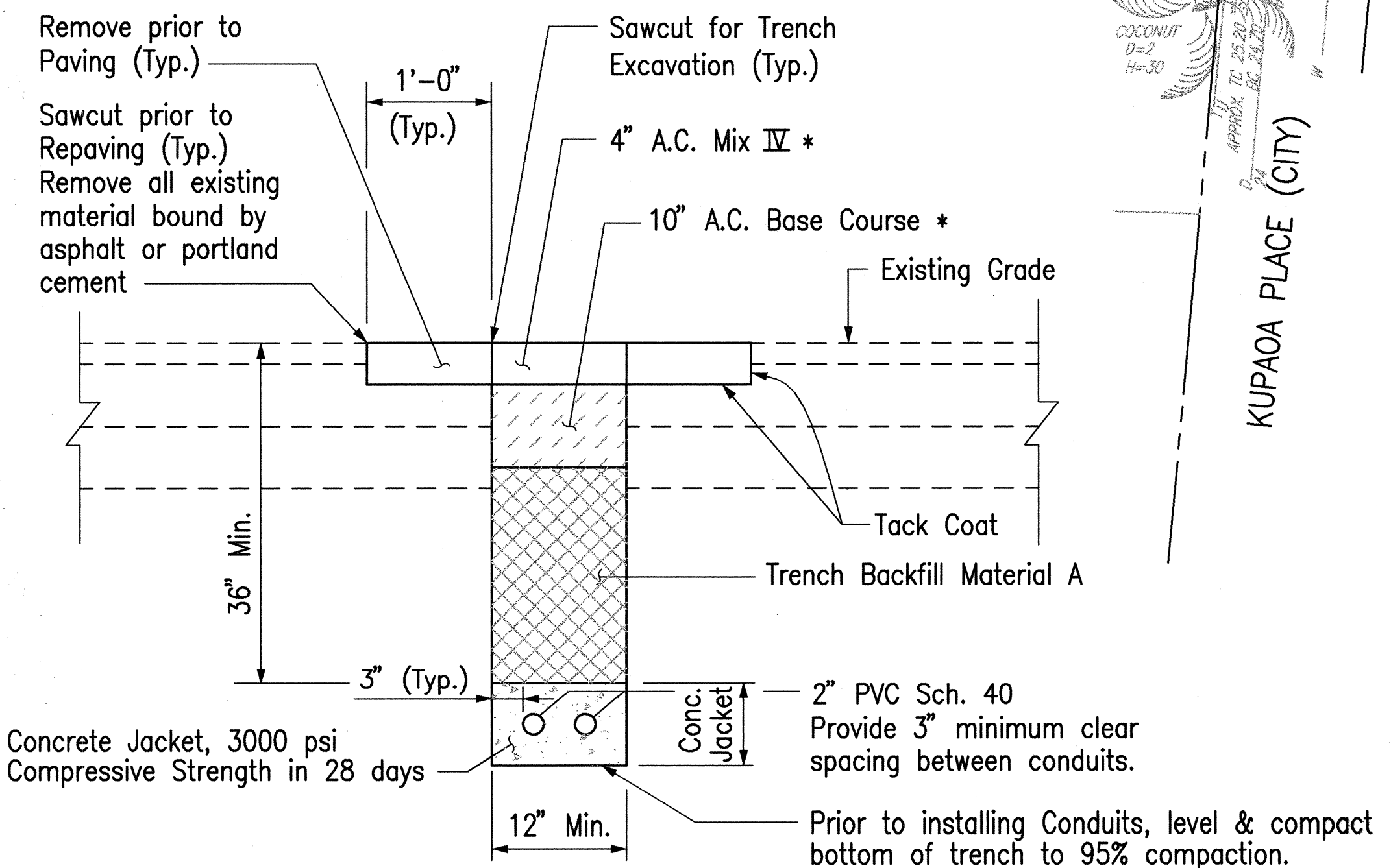
Sta. 164+28, 31' Lt.  
Relocated Pole by HECO  
Furnish & Install St. Light &  
Bracket Arm (L=14')

Sta. 162+95±, 23.5' Lt±  
Relocated Pole by HECO.  
Furnish & Install St. Light &  
Bracket Arm (L=12')

Furnish and install 1'-6" x 3'-5 1/2" HECO Service box, HECO Pullbox and 24" x 48" CATV Pullbox. Split duct approximately 10 LF of existing 2-2" HECO ducts. Intercept existing 1-3" HECO and 1-3" CATV ducts with HECO and CATV Pullboxes. Furnish and install 2-2" HECO, 1-3" HECO and 1-3" CATV ducts and risers to relocated pole by HECO.  
For Restoration of Exist. Pavement Due to Trench Excavation, See detail on this Sheet.

Furnish and install 3'-0" x 5'-0" HECO handhole. Split duct approximately 10LF of existing electric, telephone and CATV ducts. Connect 2-4" HECO, 1-2" HECO and 1-2" CATV to existing ducts. Furnish and install 2-4" HECO, 1-2" HECO and 1-2" CATV ducts and risers to relocated pole by HECO.  
For Restoration of Exist. Pavement Due to Trench Excavation, See detail on this Sheet.

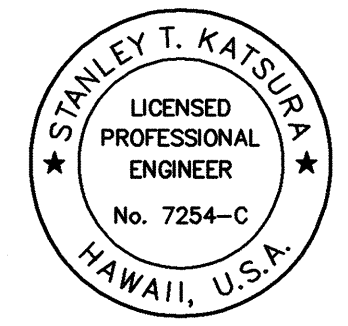
Sta. 167+44, o/s 10' Lt.  
Contractor shall install Type "D" lateral and all necessary fittings to accommodate the relocation of the existing 1-1/2" meter, Type III meter box and all appurtenances in accordance with BWS Standards. Contractor shall cut and plug the existing lateral at the existing main, relocate the existing meter and reconnect to the existing property pipe.  
M/N 96060088  
P/D 1066413



RESTORATION OF EXISTING PAVEMENT  
DUE TO TRENCH EXCAVATION  
Not to Scale

\* Minimum thickness or match existing whichever is greater

Approved: *Michael Fink*  
Chief, Planning & Engineering, BWS Date: 1/21/00



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Stanley T. Katsura*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

UTILITY RELOCATION

KAMEHAMEHA HIGHWAY  
INTERSECTION IMPROVEMENTS AT PUPUKEA ROAD  
PROJECT NO. 83B-01-98

SCALE: 1" = 20' DATE: FEBRUARY 2000

SHEET NO. U2 OF 3 SHEETS

Matchline Kamehameha Highway  
Sta. 168+50  
See Sheet No. U3

CAD BY E. DELA CRUZ, 55-52

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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-98	2000	24	46

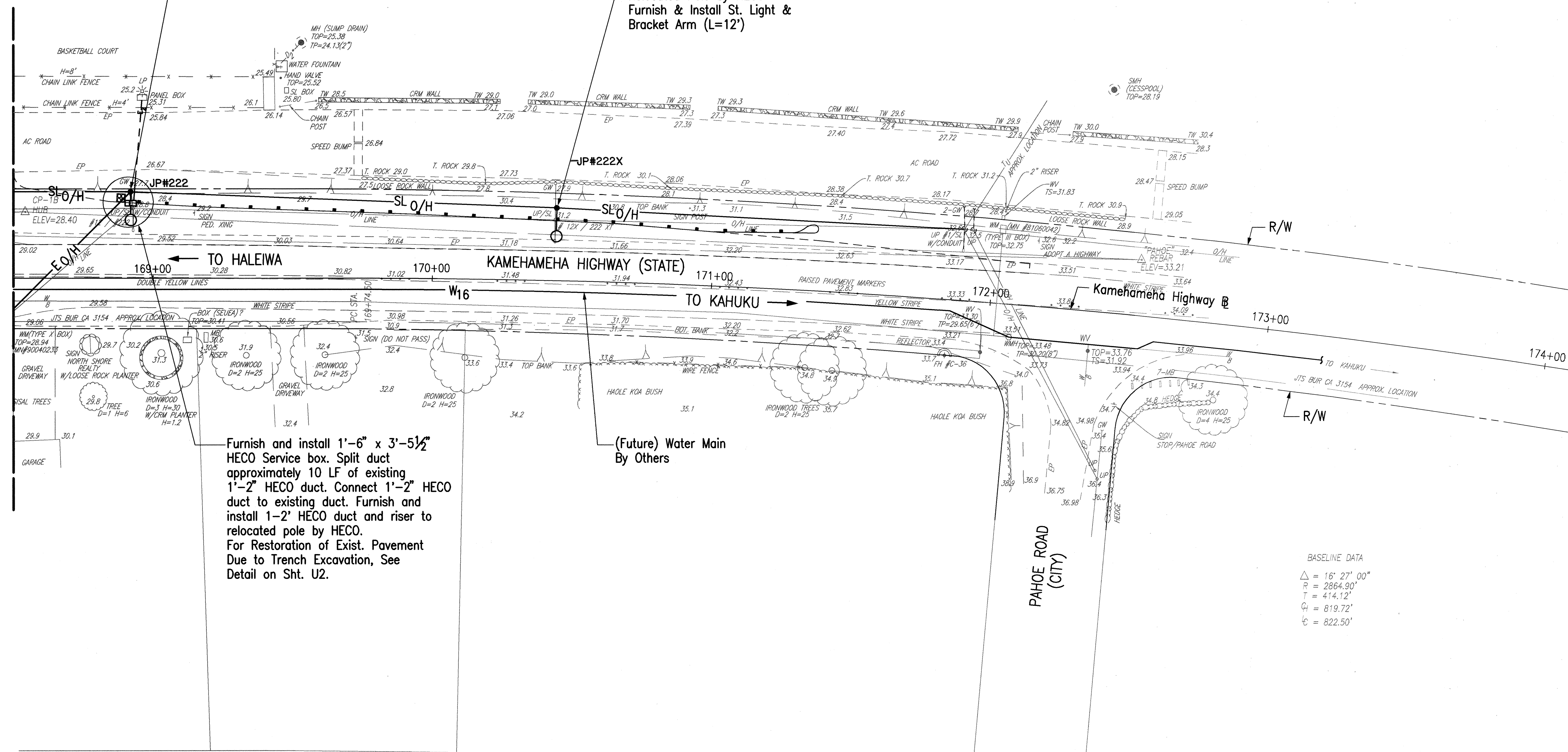
TRUE NORTH  
SCALE: 1 IN = 20 FT

PUPUKEA BEACH PARK  
TMK: 5-9-04:19

Sta. 168+92, 31' Lt.  
Relocated Pole by HECO  
Furnish & Install St. Light &  
Bracket Arm (L=14')

Sta. 170+44, 26' Lt.  
Relocated Pole by HECO  
Furnish & Install St. Light &  
Bracket Arm (L=12')

Matchline Kamehameha Highway  
Sta. 168+50  
See Sheet No. U2



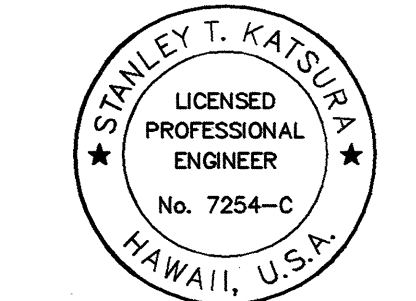
Furnish and install 1'-6" x 3'-5 1/2"  
HECO Service box. Split duct  
approximately 10 LF of existing  
1'-2" HECO duct. Connect 1'-2" HECO  
duct to existing duct. Furnish and  
install 1'-2" HECO duct and riser to  
relocated pole by HECO.  
For Restoration of Exist. Pavement  
Due to Trench Excavation, See  
Detail on Sht. U2.

(Future) Water Main  
By Others

BASELINE DATA  
Δ = 16° 27' 00"  
R = 2864.90'  
T = 414.12'  
G = 819.72'  
C = 822.50'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	QUANTITY BY	
	CHECKED BY	

CAD by E DELA CRUZ 95-52



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OR UNDER MY SUPERVISION.  
*Stanley T. Katsura*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**UTILITY RELOCATION**  
  
KAMEHAMEHA HIGHWAY  
INTERSECTION IMPROVEMENTS AT PUPUKEA ROAD  
PROJECT NO. 83B-01-98  
SCALE: 1" = 20'      DATE: FEBRUARY 2000  
SHEET NO. U3 OF 3 SHEETS