

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-04-69	1969	2	11

APPROVED:

S. Kowalewski 4/9/6
CHIEF, ENGINEERING DIV., B.W.S. DATE

for Kenneth R. Thong 4/18/69
TRAFFIC ENGINEER, DEPT. OF TRAFFIC DATE

HAWAIIAN ELECTRIC CO. INC.

HAWAIIAN TELEPHONE CO.	DATE
------------------------	------

BEG. OF PROJ. NO. 72B-04-69
 STA. ~~89 + 40.78~~
 90 + 75 ±

E.P. CURVE DATA

$\Delta = 0^{\circ} 47'$
 $4\alpha = 0^{\circ} 23' 30''$
 $R = 10,000.00$
 $T = 68.36$
 $Lc = \cancel{130.63}$
 $\quad \quad 130.78$

Edge of Pav't, P.O.
Sta 07 + 31 64

dge of Pav't P.T.
ita. ~~98+68.36~~
99+36.72

Shopping Center

T.S. Sta. 101 + 30.64

Remove Exist. Curb
and Gutter

See General
Note 5. (Sheet 3)

END OF PROJ. NO. 72B-04-6
CS 767
14 + 19.07

E.P. CURVE DATA

$\Delta = 0^{\circ} 47'$
 $\Delta_{\frac{1}{2}} = 0^{\circ} 23' 30''$
 $\pi = 8,000.00'$
 $T = 54.69$
 $L_c = 70$
 $\quad \quad \quad 09.37$

Pay't. p.
 + 52.48
 50.15

Edge of Pav't. P.C.

Edge of Pav't. P.T.
Sta. 90 + 58.48
50.15

2. SPIRAL CURVE DATA

$$\begin{aligned}\Delta &= 38^{\circ} 30' \\ \Delta_c &= 30^{\circ} 06' \\ T_s &= 807.52' \\ L_s &= 280.00' \\ \theta_s &= 4^{\circ} 12'\end{aligned}$$

2 CURVE DATA

$$\begin{aligned}\Delta &= 38^{\circ} 30' \\ \Delta c &= 30^{\circ} 06' \\ \Delta \varphi_2 &= 15^{\circ} 03' \\ R_c &= 1909.86 \\ T_c &= 513.52 \\ L_c &= 1003.33 \\ D_c &= 3^{\circ} 00'\end{aligned}$$

200° 12' →
Edge of Pavt. P.C.
Sta. 106 + 88.97

PLAN

TRAFFIC SIGNAL SYSTEM

NOT INSTALLED
OMITTED FROM
THE CONTRACT

TYPICAL SECTION CONCRETE ENCASED CONDUIT

E.P. CURVE DATA

$$\begin{aligned}\Delta &= 21^{\circ} 45' \\ A/2 &= 10^{\circ} 52' 30'' \\ R &= 1777.35' \\ T &= 341.46 \\ C &= 670.05 \\ I_c &= 674.70\end{aligned}$$

LEGEND

TYPE "A" PULLBOX
TYPE "B" PULLBOX WITH 2-2"
GALV. STEEL CONDUITS ENCASED
IN CONC.
NEW ST. LIGHT ON JOINT POLE
EXIST. JOINT POLE WITH ANCHOR
EXIST. ST. LIGHT ON JOINT POLE
EXIST. CONDUIT
EXIST. ST. LIGHT OVERHEAD LINE
UNDERGROUND SERVICE
AREA TO BE PAVED

NOTE:
THE EXIST. JOINT POLES MARKED ON THE PLAN
IS APPROXIMATE LOCATION ONLY.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PROJ. NO. 72B-04-69

Scale: 1" = 40' Feb. 1969

SHEET No. 1 OF 2 SHEETS

A D D 2

DD-C-6-7

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	"
	TRACED BY	"
	DESIGNED BY	"
	QUANTITIES BY	"
	CHECKED BY	"

WATER NOTES

1. The Contractor shall notify the Board of Water Supply in writing Ten (10) working days prior to commencing work on the water system.
2. Asterisk (*) indicates work to be performed by B.W.S. Materials to be furnished by the Contractor unless specified as "relocate".
3. All excavation and backfill shall be done by the Contractor, including excavation for the relocation and lowering of existing main and excavation for meter to house service connections.
4. The minimum clearance between fire hydrants and utility poles or light standards shall be 30 feet.
5. The locations of existing water mains and appurtenances shown on plans are approximate only. Any adjustments to the water mains and appurtenances whether shown on the construction plans or not shall be made and paid for by the project.
6. Prior to final inspection, all fire hydrants shall be cleaned of all oil, grease, dirt or other loose material and given one coat of an approved red lead and one coat of an approved aluminum hydrant paint.
7. All Fire Hydrants shall be raised with 4 1/2" Outlet 6" above guard rail. (Work to be done by B.W.S.)

Reconstruct Existing Handhole

to Manhole (To be done by H.T.Co.)
see if this Handhole may

TYPICAL SECTION

✓ Rub Rail shall be installed where indicated on the plan or directed by the Engineer.

GENERAL NOTES

- All relocations and adjustments of Hawaiian Electric Company and Hawaiian Telephone Company's facilities shall be done by the respective Utility Company and/or their contractor.
- The Contractor shall notify the Utility Company at least 72 hours prior to commencement of installation of Guardrail in the areas where the Utility Company's underground facilities are located.

- The Contractor shall exercise extreme caution when installing guardrail in areas where the Utility Company's underground cables are located. The Contractor shall verify location of all underground cables. Any damage to existing cables shall be repaired at the expense of the Contractor.
- Location of guardrail shall be determined at the project site by the Engineer.

- Existing Pole to be relocated by Utility Company. Contractor shall adjust City and County of Honolulu Street Lighting Units to accommodate relocation.
- The Contractor shall notify the City and County Traffic Department three (3) days prior to relocating the Street Lighting Units.
- The Contractor shall notify Hawaiian Electric Co. and Hawaiian Telephone Co. ten (10) days prior to commencing work on this project.

E.P. CURVE DATA

Δ = 0° 47'
 ΔE = 0° 23' 30"
 R = 8,000.00'
 T = 54.69'
 Lc = 111.70'

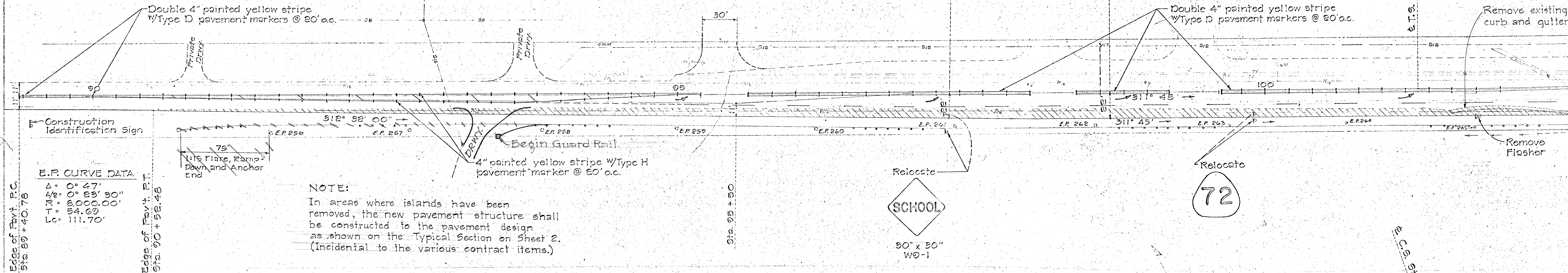
Edge of Pavt. P.T.
 Sta. 97 + 51.64

E.P. CURVE DATA

Δ = 0° 47'
 ΔE = 0° 23' 30"
 R = 8,000.00'
 T = 54.69'
 Lc = 111.70'

Edge of Pavt. P.T.
 Sta. 98 + 62.96

NO.	ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
72B-04-69	1969	3	11			

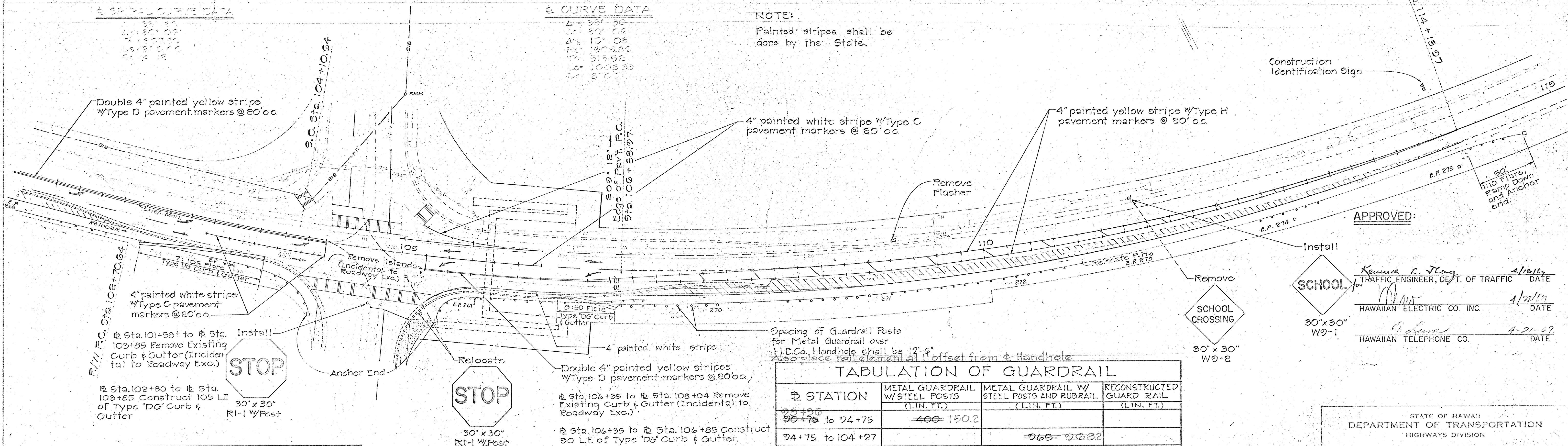


NOTE:

In areas where islands have been removed, the new pavement structure shall be constructed to the pavement design as shown on the Typical Section on Sheet 2. (Incidental to the various contract items.)

NOTE:

Painted stripes shall be done by the State.



SUMMARY OF RAISED PAVEMENT MARKERS		
Type	Description	Quantity
C	Red - Clear Reflective	66 ea.
D	2-Way Yellow Reflective	56 ea.
H	One-Way Yellow Reflective	123 ea.

Signs and Flashers to be removed shall be cleaned and delivered to the District Baseyard 781 Kelikoi St. Cost incidental to various contract items.

Spacing of Guardrail Posts for Metal Guardrail over H.E.Co. Handhole shall be 12'-6". Also place rail element at 1' offset from Handhole.

TABULATION OF GUARDRAIL

STATION	METAL GUARDRAIL W/ STEEL POSTS (LIN. FT.)	METAL GUARDRAIL W/ STEEL POSTS AND RUBRAIL (LIN. FT.)	RECONSTRUCTED GUARD RAIL (LIN. FT.)
97+50 to 97+75	400-150.2		
97+75 to 104+27		965-2682	
105+35 to 105+50	25-25.7		
106+57 to 107+07			50
107+07 to 108+73	164-174.8		
108+73 to 109+23		50	
109+23 to 114+65	541-542.8		

APPROVED:

Install
 SCHOOL
 30" x 30" W9-1
 4/21/69
 HAWAIIAN ELECTRIC CO. INC.
 DATE
 4/21/69
 HAWAIIAN TELEPHONE CO.
 DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN

PROJ. NO. 72B-04-69

Scale: 1" = 40' APRIL, 1969
 SHEET No. 2 OF 2 SHEETS

ADD. 3