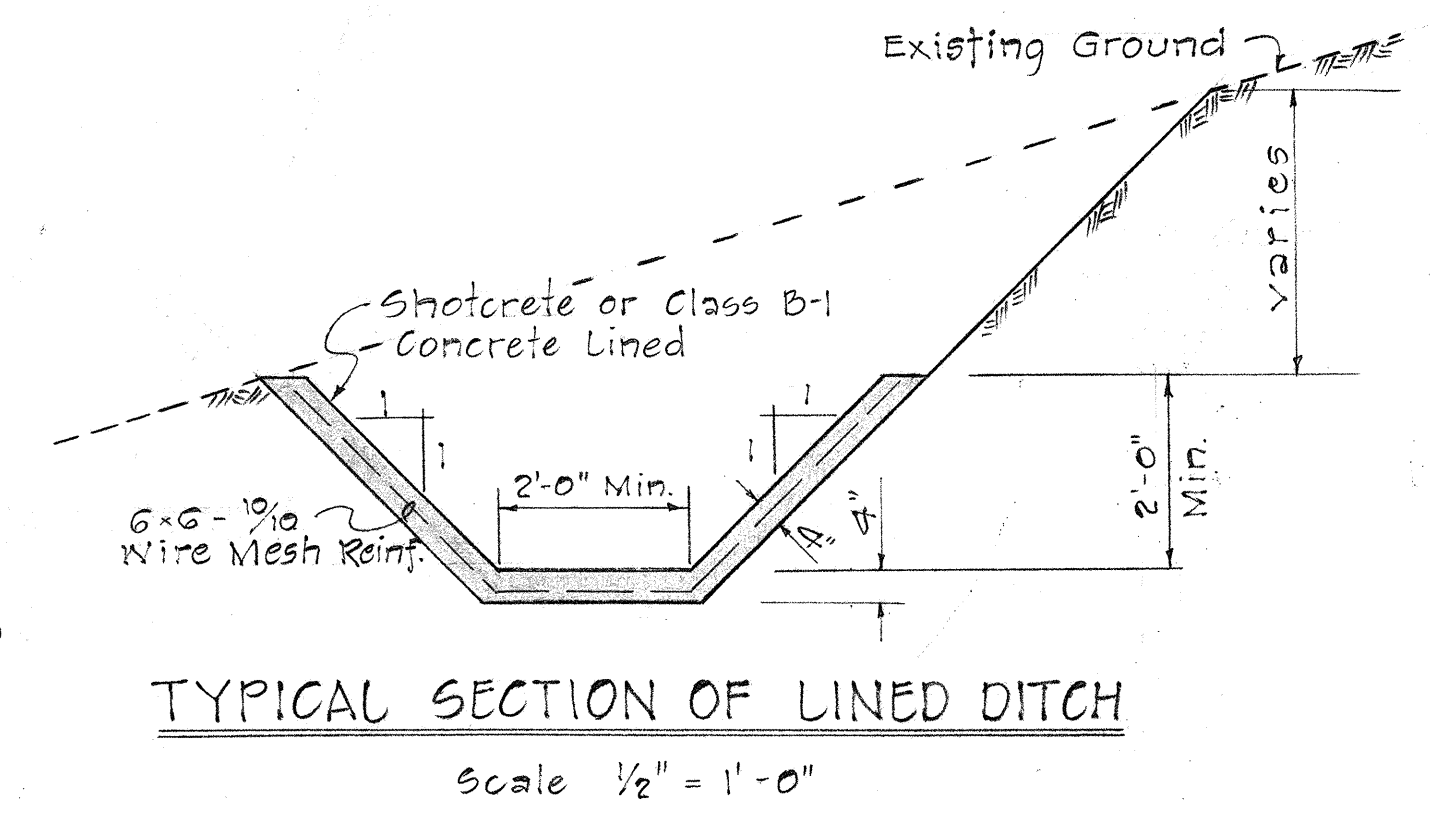
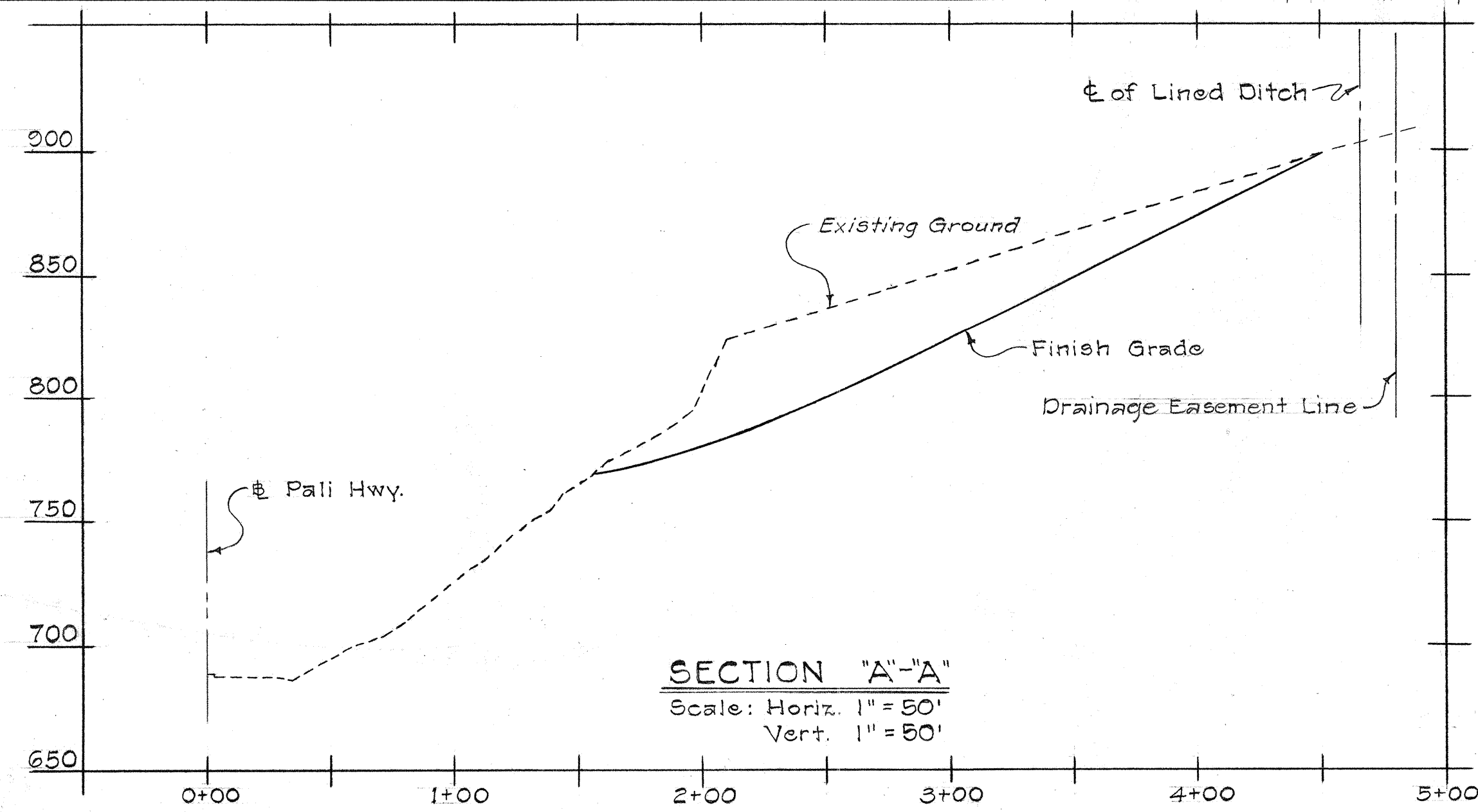
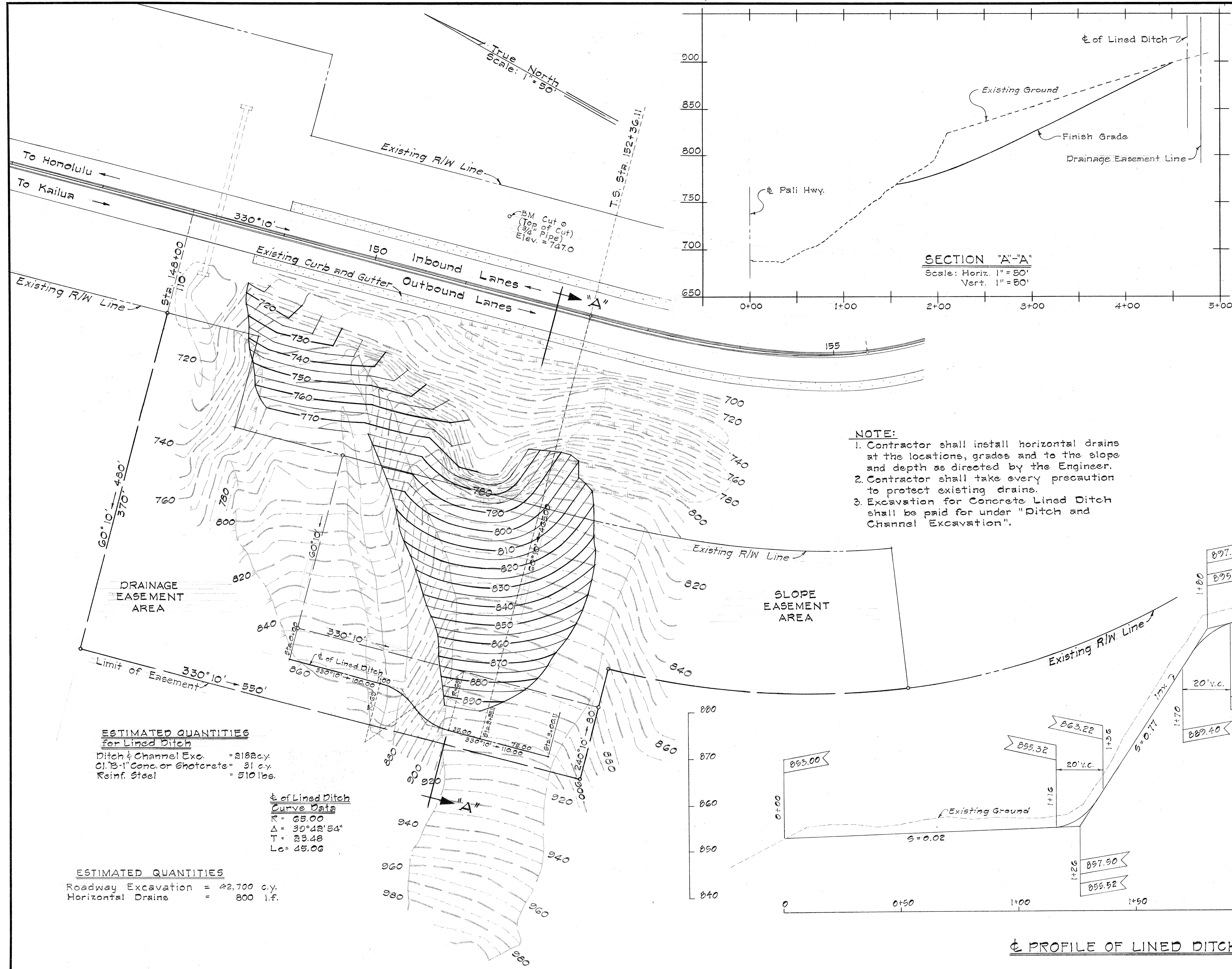


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(12)	1966	2	4

Revised 12/22/66



- NOTE:**
1. Contractor shall install horizontal drains at the locations, grades and to the slope and depth as directed by the Engineer.
 2. Contractor shall take every precaution to protect existing drains.
 3. Excavation for Concrete Lined Ditch shall be paid for under "Ditch and Channel Excavation".

ESTIMATED QUANTITIES for Lined Ditch

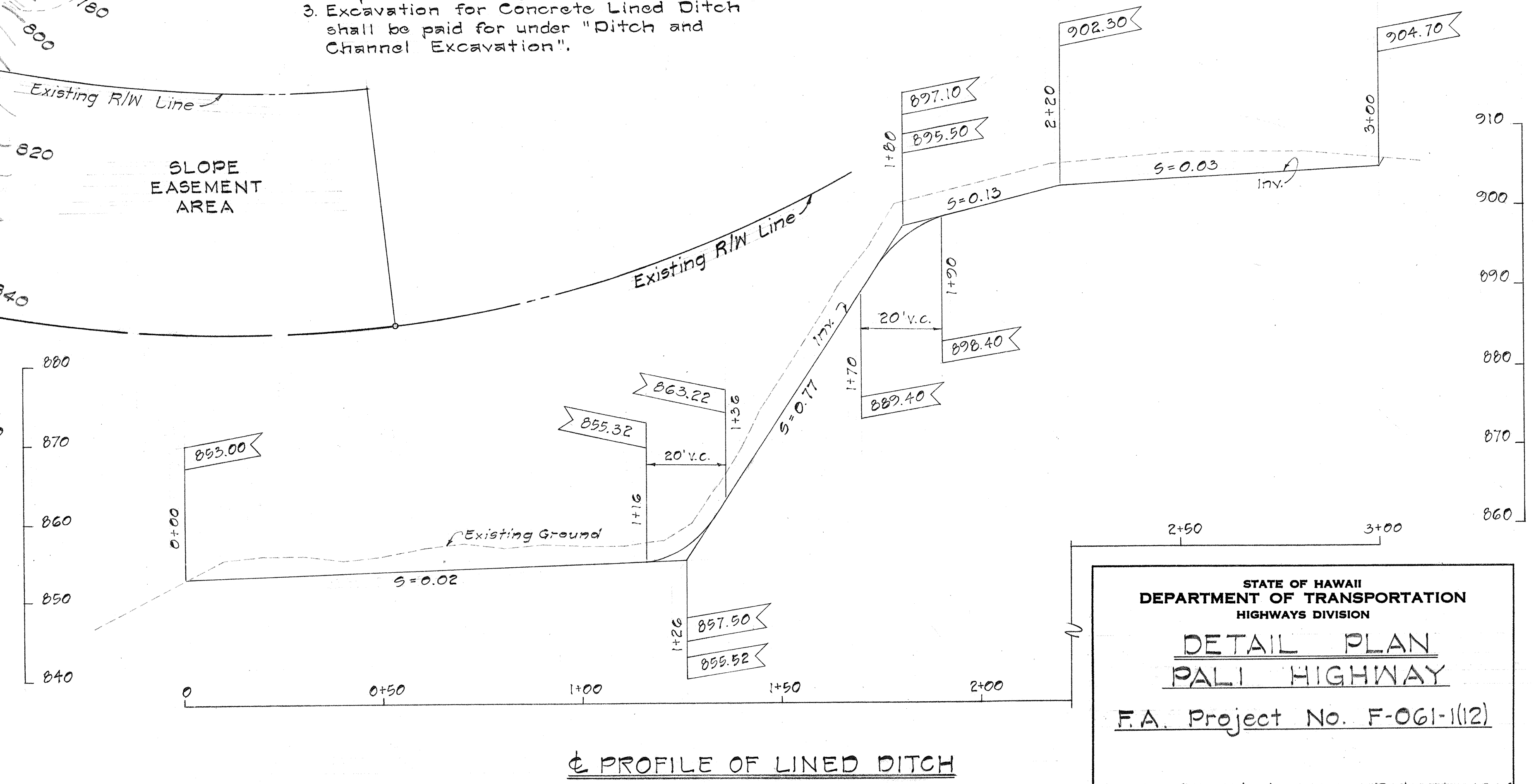
Ditch & Channel Exc. = 2182 c.y.
 01.15-1" Conc. or Shotcrete = 31 c.y.
 Reinf. Steel = 510 lbs.

& of Lined Ditch Curve Data

R = 69.00
 $\Delta = 30^\circ 42' 54''$
 T = 23.48
 Lc = 45.06

ESTIMATED QUANTITIES

Roadway Excavation = 42,700 c.y.
 Horizontal Drains = 800 l.f.



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETAIL PLAN
PALANI HIGHWAY

F.A. Project No. F-061-1(12)

Scale: As Noted Date: Nov. 1966

SHEET No. 1 OF 2 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(12)	1966	3	4

GENERAL NOTES

- Inverts for new inlets and outlets to be determined in the field by the Engineer.
- Connections to existing culverts, and excavation for new culverts and headwalls shall be incidental to the items for furnishing and installing the various sizes of culvert pipes.

@ Sta. 145+20 Right
 Extend existing 48" Culvert
 Construct Std. Conc. Headwall
 Estimated Quantities:
 48" Cl. III Reinf. Conc. Culvt. Pipe - 10 L.F.
 Class "B-1" Conc. - 4.66 Cu.Yd.
 Reinf. Steel - 78 lb.

@ Sta. 143+00 Right
 Extend existing 36" Culvert
 Construct Std. Conc. Headwall

Estimated Quantities:
 36" Cl. III Reinf. Conc. Culvt. Pipe - 24 L.F.
 Class "B-1" Conc. - 2.74 Cu. Yd.
 Reinf. Steel - 60 lb.

@ Sta. 143+70 Right
 Extend existing 24" Culvert

Estimated Quantities:
 24" Cl. III Reinf. Conc. Culvt. Pipe - 70 L.F.

AREA "A"

True North
 Scale: 1" = 50'

Note: Stationing from Proj. No. S-216(3)

Approximately 1,190 ft. to Intersection with Kamehameha Highway

@ Sta. 189+50 Right
 Extend existing Subdrain with
 35 ft of 8" 10 Gage Corrugated
 Galvanized metal Pipe (Incidental
 to Roadway Excavation)

@ Sta. 187+00 Right
 Extend existing 30" Culvert

Estimated Quantities:
 30" Cl. III Reinf. Conc. Culvt. Pipe - 40 L.F.

AREA "B"

True North
 Scale: 1" = 50'

Existing R/W Line
 Approximate Toe of Fill

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETAIL PLAN

PALI HIGHWAY
 F.A. Project No. F-061-1(12)

Scale: As Noted Date: Feb. 1, 1967

SHEET No. 2 OF 2 SHEETS