

GENERAL NOTES:

1. Azimuths are referred to various Triangulation Stations as noted on the plans.
2. BM's are referred to Mean Sea Level Datum.
3. Install & Monuments as shown on the plans and as staked out by the Engineer.
4. The type of Pipe Culverts to be used shall be determined prior to awarding of the contract. For Estimated Quantities, see summary on Sheet No. 23.
5. The Contractor has the option to use either Galvanized Steel or Aluminum Guard Rails. See Section 800 of the Special Provisions.
6. Where the existing water lines are disturbed by the new construction, they shall be relocated and/or lowered as shown on the plans or as directed by the Engineer.
7. All Utility Poles to be relocated by others.

OVERHAUL SUMMARY

FROM STA.	TO STA.	NET DIST.	VOLUME	STA. YD.	M. YD.
404+87.34	476+32.39	1.2 MI.	248		1,138
405+57.74	452+64.30	0.7 MI.	3,204		2,243
438+66.01	428+59.63	0.1 STA.	79	0	
439+22.41	451+71.76	2.5 STA.	1,120	2,800	
464+01.27	474+28.61	1.0 STA.	881	881	
495+97.60	622+24.47	2.2 MI.	3,955		3,701
510+22.21	621+44.90	1.9 MI.	5,000		3,500
512+44.29	595+56.06	1.4 MI.	11,685		16,359
531+04.40	545+15.00	4.1 STA.	3,241	13,288	
564+00.96	547+62.69	6.4 STA.	4,435	28,384	
577+40.17	590+76.37	3.4 STA.	1,879	6,389	
608+33.28	620+50.10	2.2 STA.	8,775	19,305	
623+73.80	676+30.85	7.4 STA.	10,031	74,229	
717+55.75	706+38.20	1.2 STA.	689	827	
718+74.56	746+79.37	0.3 MI.	15,071		4,521
796+11.68	781+77.93	4.5 STA.	35,446	152,418	
799+22.37	756+43.43	0.6 MI.	8,818		5,291
802+73.82	656+56.81	2.6 MI.	9,213		23,954
804+08.78	815+40.80	1.3 STA.	2,156	11,503	
833+74.58	817+58.94	6.2 STA.	2,367	58,075	
836+26.72	876+20.29	0.6 MI.	6,538		3,923
845+68.03	861+62.05	5.7 STA.	2,440	14,005	
320+24.34	Waste		7,749		
403+31.74	Waste		6,970		
486+72.73	Waste		61		
803+48.07	Waste		627		
FREE HAUL			351,343		
TOTAL			518,726	382,512	75,630

SUMMARY OF REGULATORY AND WARNING SIGNS

TYPE	R-1	W-6	W-19	REMARKS
MESSAGE STOP	See Sht. No. 49			
ROAD NARROWS				
392+00 Lt.				
397+50 Rt.				
402+00 R/L	2			
406+50 Lt.				
876+00 Rt.				
880+27.36 R/L	2			Relocated signs
Rt. Conn. 1+30	1			
888+00 Lt.				
Totals New Signs	3	4	1	

NOTE:
20,503 c.y. Excavation not shown in Overhaul Summary

Note:
Exterior wire and 2"x6 or 2"x8 are on inside of posts on Salvage gates and timber. Fence post material free from Parker Ranch (Contractor to cut and haul.)

RIGHT-OF-WAY SYMBOLS

----- Vehicular access permitted.
----- No Vehicular access permitted.

POINTS OF ACCESS

Station	Width of Access		Station	Width of Access	
	Left	Right		Left	Right
391+50	50'		732+75	50'	50'
394+50		50'	733+25	50'	40'
395+50	50'	50'	739+30	40'	40'
396+20	50'		745+00	40'	40'
424+50	50'	50'	751+20	50'	40'
442+50	50'	50'	753+50	50'	40'
484+00	50'	50'	757+50	50'	40'
492+00	50'	50'	762+50	50'	50'
509+25	50'	50'	768+50	50'	50'
518+00	50'	50'	769+30	50'	50'
525+25	50'	50'	778+00	50'	50'
536+00	50'	50'	794+00	50'	50'
543+00	50'	50'	799+50	50'	50'
551+50	50'	50'	809+00	50'	50'
571+25	50'	50'	813+50	50'	50'
587+00	50'	50'	820+50	50'	50'
610+50	50'	50'	824+33	50'	50'
635+50	50'	50'	832+00	50'	50'
670+50	50'	50'	840+34	50'	50'
690+00	50'	50'	849+30	50'	50'
712+75	50'	50'	858+00	50'	50'
			862+50	50'	50'
			872+00	50'	50'

NOTE TO CONTRACTOR

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The State will not be responsible for the data shown on these sheets.

± CURVE DATA
Δ = 5°
R = 1300'
T = 56.76
L = 113.45
C = 113.41

Sta 391+50 Lt. Construct smooth and easy riding approach. Est. Quant.
Pav't Area = 59 sq. y.
B.C. Area = 58 sq. y.
S.B. = 78 Tons
Exc. = 18 c.y.

± CURVE DATA P.I. 'A'
Δ = 3°55'00"
R = 0°30'00"
D = 11439.16
T = 893.47
L = 1781.33
C = 2614.14

Sta. 400+71 & Lt. Conn. Sta. 0+89.32
Construct Concrete Ditch Covers.
For details and quantities, see Sht. Nos. 30 & 31.

FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FO-10-10	1961	4	127

L. C. A.W. 8559-B, Ap. 2 to W. C. LUNALILO

Sta. 403+25 to 424+43 Lt. Construct 2114 L.F. of Woven Wire Fence with Wood Posts.

Concrete Open Ditch?

Sta. 402+10 to 403+25 Lt. Reconstruct 180 L.F. of Existing Wire Fence along New R/W.

GENERAL LEASE 3037 to CARL MEYER (Transferred to Wm. M. Paiva.)

Sta. 402+67 to 424+43 Rt. Construct 2177 L.F. of Woven Wire Fence with Wood Posts.

WILLIAMA
8139.78 N
9955.89 E
Waimea E. Base

Revised & superseded
Re: 3/9/62 Memo.

GENERAL NOTES:

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2. B.M.'s are referred to Mean Sea Level Datum.
3. Install & Monuments as shown on the plans and as staked out by the Engineer.
4. The type of Pipe Culverts to be used shall be determined prior to awarding of the contract. For Estimated Quantities, see summary on Sheet No. 23.
5. The Contractor has the option to use either Galvanized Steel or Aluminum Guard Rails. See Section 800 of the Special Provisions.
6. Where the existing water lines are disturbed by the new construction, they shall be relocated and /or lowered as shown on the plans or as directed by the Engineer.
7. All Utility Poles to be relocated by others.

OVERHAUL SUMMARY

FROM STA.	TO STA.	NET DIST.	VOLUME STA. YD.	M.I. YD.
404+37.34	424+32.39	1.2 MI.	948	1,138
405+57.74	424+32.39	0.7 MI.	3,204	2,243
438+66.01	424+32.39	0.1 STA.	79	0
439+22.41	424+32.39	2.5 STA.	1,120	2,800
446+01.27	424+32.39	1.0 STA.	881	881
425+97.60	424+32.39	2.2 MI.	3,955	8,701
510+22.51	424+32.39	1.9 MI.	5,000	9,500
512+49.29	424+32.39	1.4 MI.	11,685	16,359
531+04.40	424+32.39	4.1 STA.	3,241	13,288
564+00.94	424+32.39	6.4 STA.	4,435	28,384
577+40.17	424+32.39	3.4 STA.	1,879	6,389
608+33.28	424+32.39	2.2 STA.	8,775	12,305
623+73.80	424+32.39	7.4 STA.	10,031	74,229
717+55.75	424+32.39	1.2 STA.	689	827
718+74.56	424+32.39	0.3 MI.	1,071	4,521
796+11.68	424+32.39	4.3 STA.	35,442	152,418
799+23.37	424+32.39	0.6 MI.	8,518	5,291
802+73.82	424+32.39	2.6 MI.	9,213	23,954
804+08.78	424+32.39	1.3 STA.	2,156	11,903
833+74.58	424+32.39	6.2 STA.	2,367	58,075
836+26.22	424+32.39	0.6 MI.	6,338	3,923
845+68.03	424+32.39	5.7 STA.	2,440	14,003
320+24.34	Waste		7,749	
403+31.74	Waste		670	
486+72.73	Waste		61	
803+48.07	Waste		627	
FREE HAUL			35,134	
TOTAL			518,726	382,512

SUMMARY OF REGULATORY AND WARNING SIGNS

TYPE	R-1	N-6	N-19	REMARKS
MESSAGE	STOP	See Sht. No. 49	ROAD NARROWS	
392+00 LT.				
397+50 RT.				
402+00 R/L				
406+50 LT.				
876+00 RT.				Replaced with R-11
880+99.36 R/L				
Rt Conn. 1+30				
885+00 LT.				Replaced with R-11
Totals	3	4	1	

4" 5" R=1300' T=56.76 L=113.45 C=113.41

4" 5" R=1300' T=56.76 L=113.45 C=113.41

Sta 391+50 Lt. Construct smooth and easy riding approach. Est. Quant. Pavt. Area = 1.55 sy. B.C. Area = 1.55 sy. S.D. = 2.35 c.y. Exc. = 1.55 c.y.

CARL MEYER (OWNER)

4" CURVE DATA R=1300' D=0'55.00' R=11459.16 T=893.47 L=1723.33 S=1721.93 Se=6014.14

Sta 400+71 + Lt Conn. Sta 0+89.32 Construct Concrete Ditch Covers. For details and quantities, see Sht. Nos. 30 & 31.

Sta 403+25 to 424+43 Lt Construct 21.4 L.F. of Woven Wire Fence with Wood Posts.

Sta 402+10 to 403+25 Lt. Reconstruct 180 L.F. of Existing Wire Fence along New R/W.

GENERAL LEASE 3037 to CARL MEYER (Transferred to Wm. M. Paiva.)

Sta 402+67 to 424+43 Rt Construct 27.7 L.F. of Woven Wire Fence with Wood Posts.

S.A. Conn. Sta 0+80 Relocate 42 L.F. of existing 3" Galvanized Steel Water Line

Revised 3/9/02 Supersedes Sht. No. 4 Revised 1/10/03 Letter #12-1700 Revised Memo 7/23/02

POINTS OF ACCESS

Station	Width of Access	Station	Width of Access
391+50	50'	732+73	50'
394+50	50'	733+18	50'
395+50	50'	735+00	40'
		735+00	40'
		735+00	40'
396+50	50'	737+50	50'
424+50	50'	737+50	50'
428+00	50'	737+50	50'
442+00	50'	737+50	50'
442+00	50'	737+50	50'
442+00	50'	737+50	50'
492+00	50'	737+50	50'
509+25	50'	737+50	50'
518+00	50'	737+50	50'
525+25	50'	809+00	50'
536+00	50'	813+50	50'
543+00	50'	820+50	50'
551+50	50'	824+23	50'
571+25	50'	832+00	50'
587+00	50'	840+94	50'
610+50	50'	850+75	50'
635+50	50'	858+00	50'
670+50	50'	862+50	50'
690+00	50'	878+00	50'
712+75	50'		

NOTE TO CONTRACTOR

The Soil Profile Data shown on these sheets are for design purposes only and are intended for the convenience of the Engineer in the control of earthwork. The borings were carefully made and are believed to be reliable, but the Engineer does not guarantee the accuracy of same. The Contractor is hereby advised and will be presumed to have made his own investigation on the site prior to submission of his bid. The State will not be responsible for the data shown on these sheets.

RIGHT-OF-WAY SYMBOLS

----- Vehicular access permitted.
----- No vehicular access permitted.

Note: Exterior wire and 2" 6" or 8" 8" are inside on inside of posts. Corral Salvage gates and timber. Fence post material free from Papeete Ranch (Contractor to cut and haul)

FENCE POST Not to Scale

RELOCATED CORRAL

Scale: 1"=20'

800 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

200 V.C.

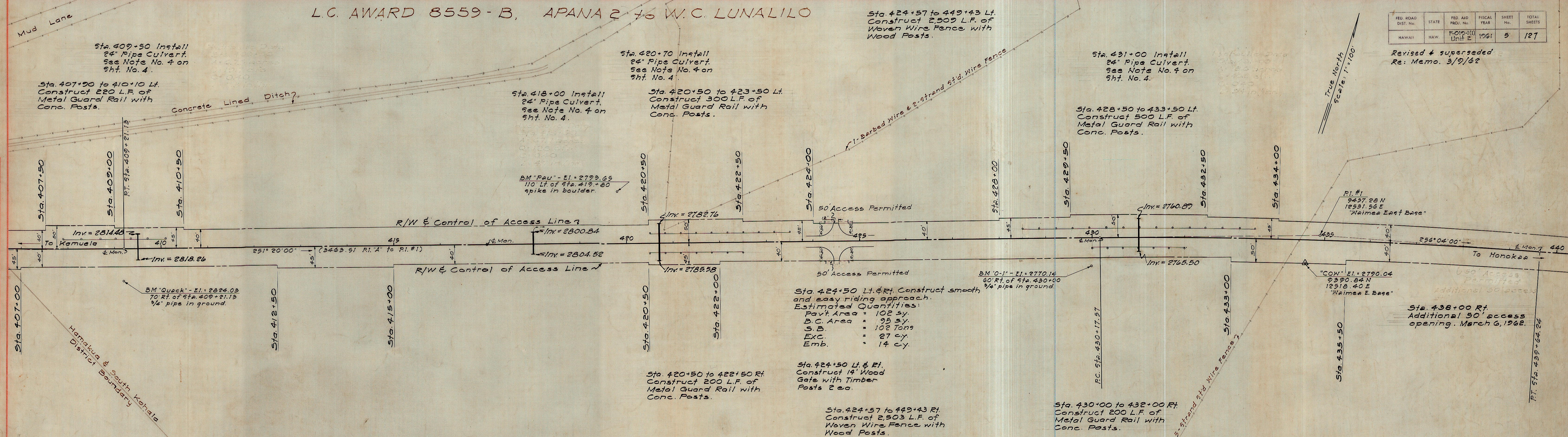
200 V.C.

L.C. AWARD 8559-B, APANA 2 1/2 W.C. LUNALILO

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FOIP-101 Unit 2	1961	5	127

Revised & superseded
Re: Memo. 3/9/62

PLAN	DATE	BY
SURVEYED		
NOTE BOOK		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		
NO.		

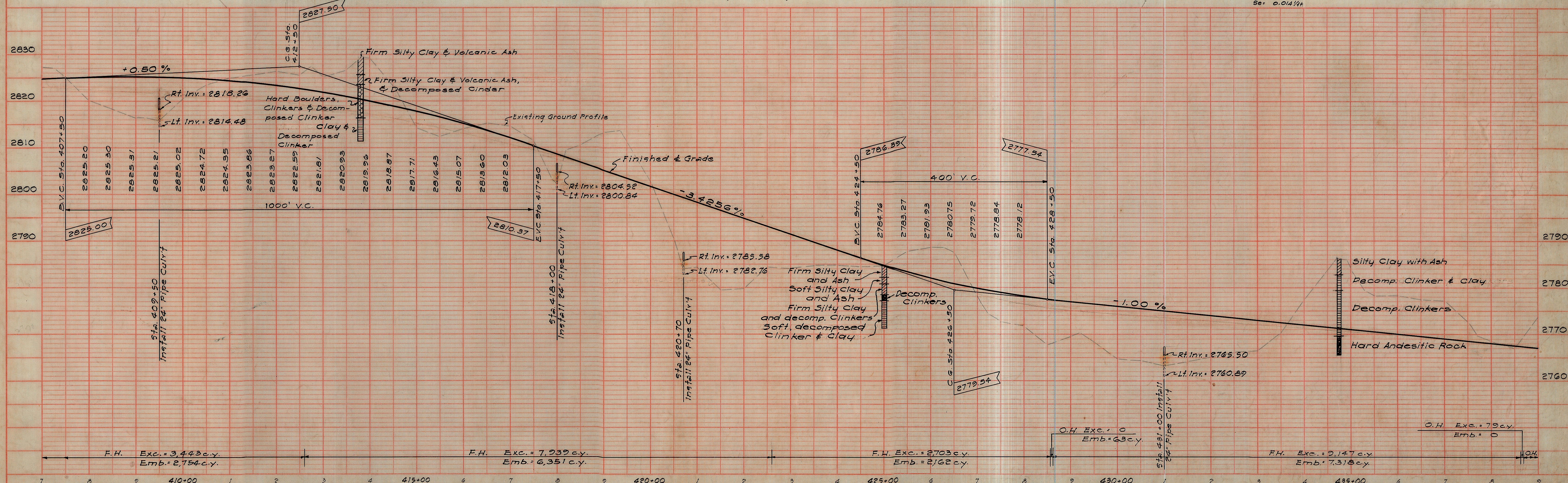


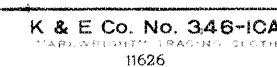
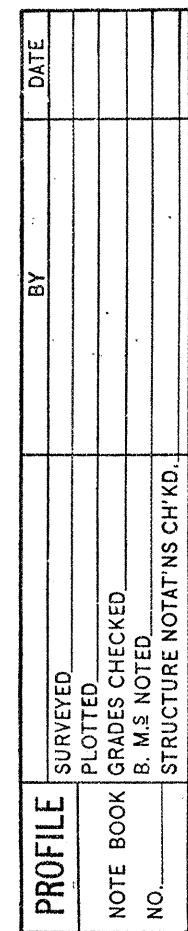
GEORGE VIERRA L/I
J.T. BAKER TR. ESTATE (OWNERS)

± CURVE DATA P.I. #1

Δ	4° 44' 00"
D	0° 30' 00"
R	11459.16
T	473.60
L	946.67
C	946.40
Se	0.014 1/4 ft

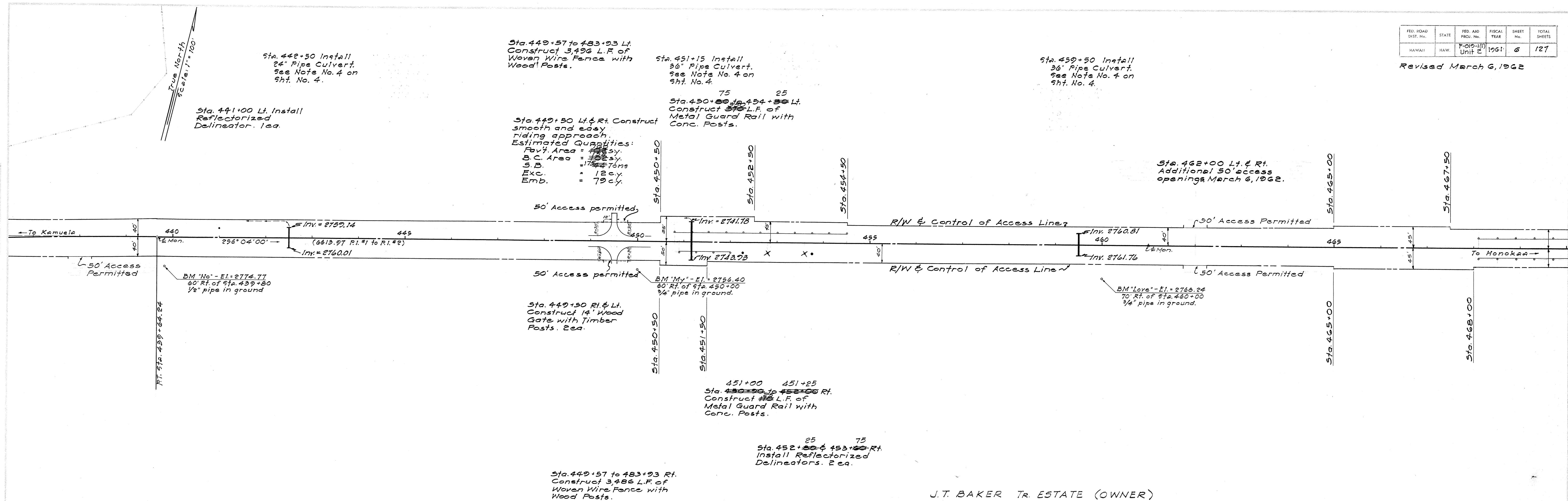
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SURVEYED		
NOTED		
NOTE BOOK		
STRUCTURE NOTATIONS CHECKED		
NO.		



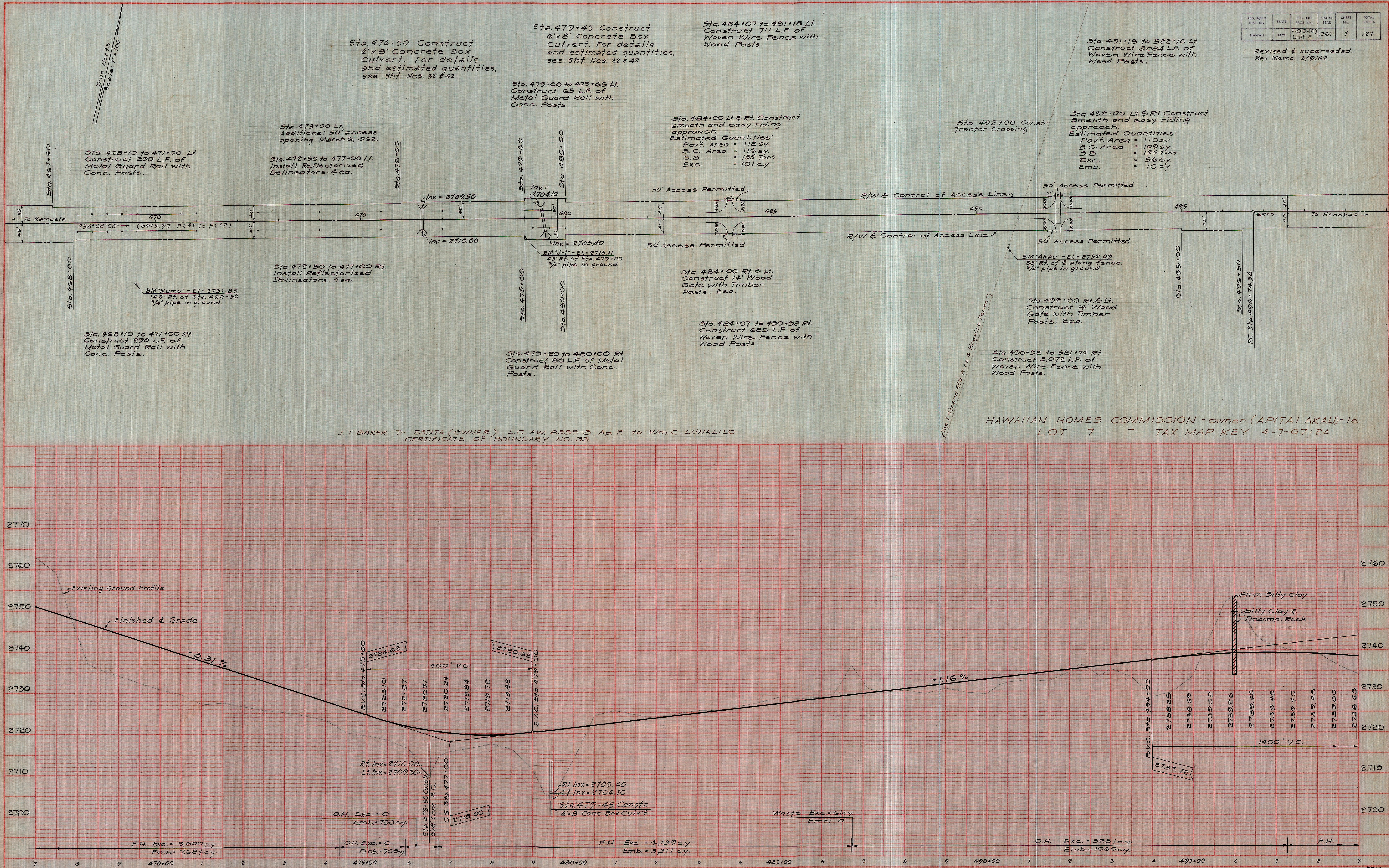


FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-019-1(1) Unit 2	1961	6	127

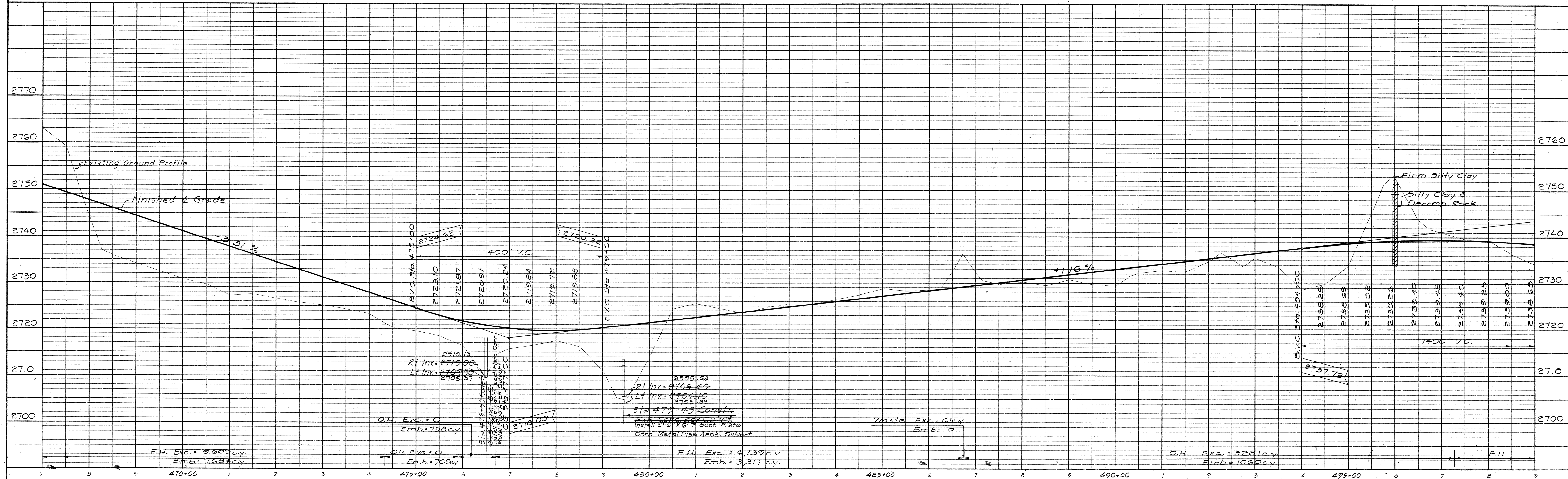
Revised March 6, 1962



Revised & superseded.
Re: Memo. 3/9/62



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	GRADES CHECKED		
NO.	B. M.'S NOTED		
	STRUCTURE NOTATIONS CH'KD.		



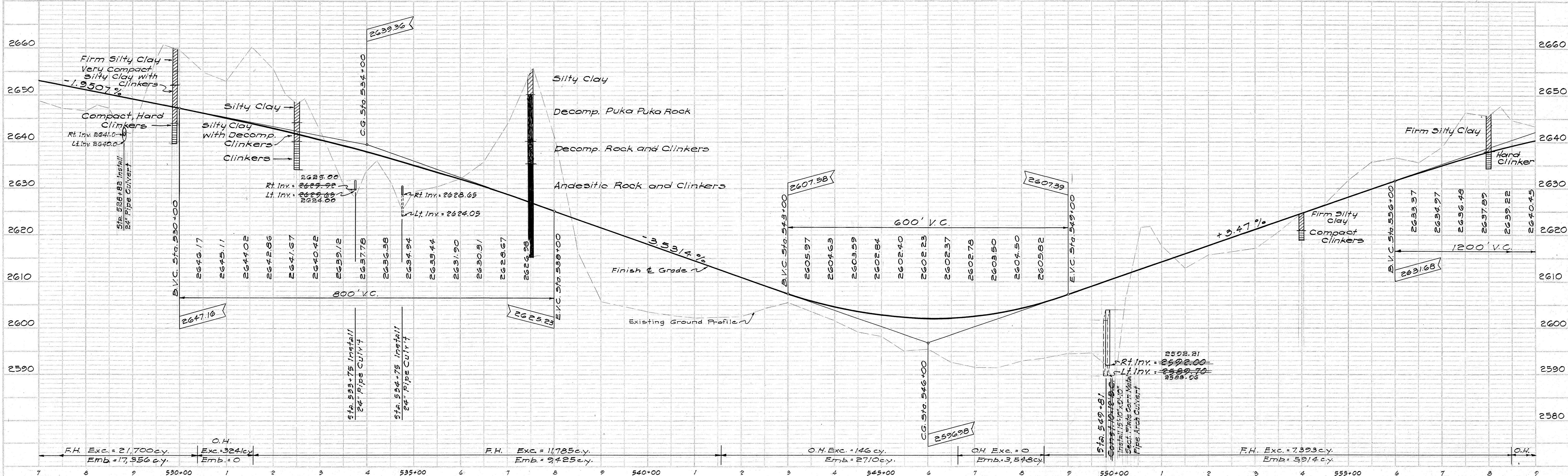
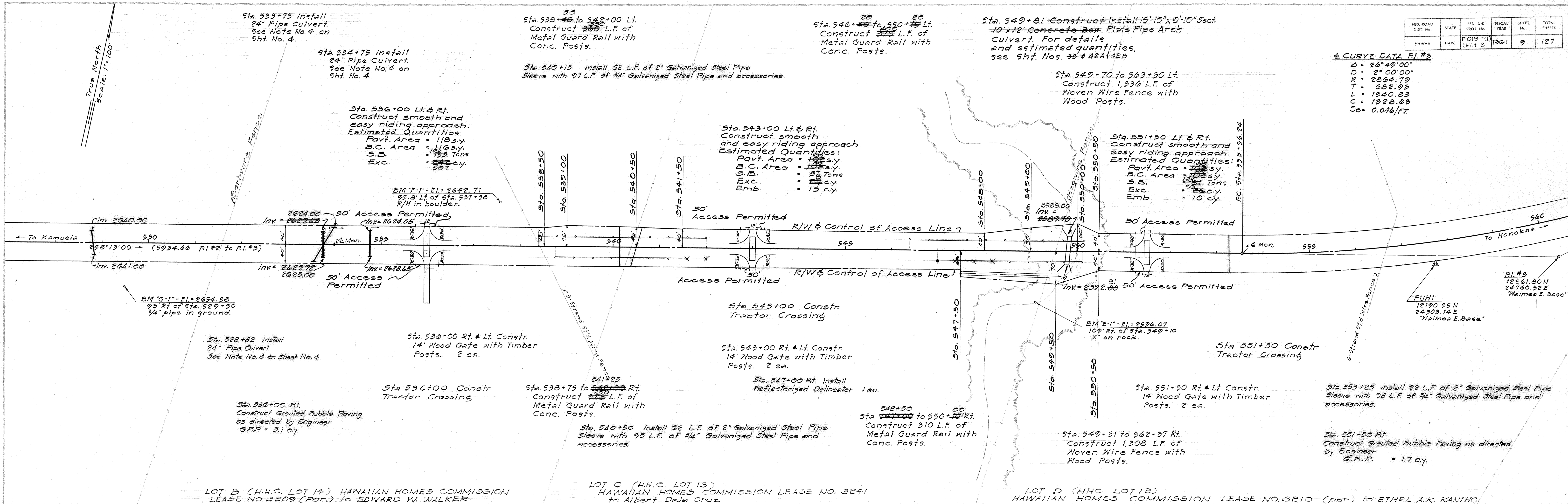
PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PLAN	DATE
DESIGNED	
CHECKED	
NOTED	
BY	

PROFILE	DATE
DESIGNED	
CHECKED	
NOTED	
BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FO19-10	1961	9	127

± CURVE DATA R.I. #3
 D = 26°49'00"
 R = 2564.79
 T = 682.93
 L = 1340.83
 C = 1328.63
 Se = 0.046/ft

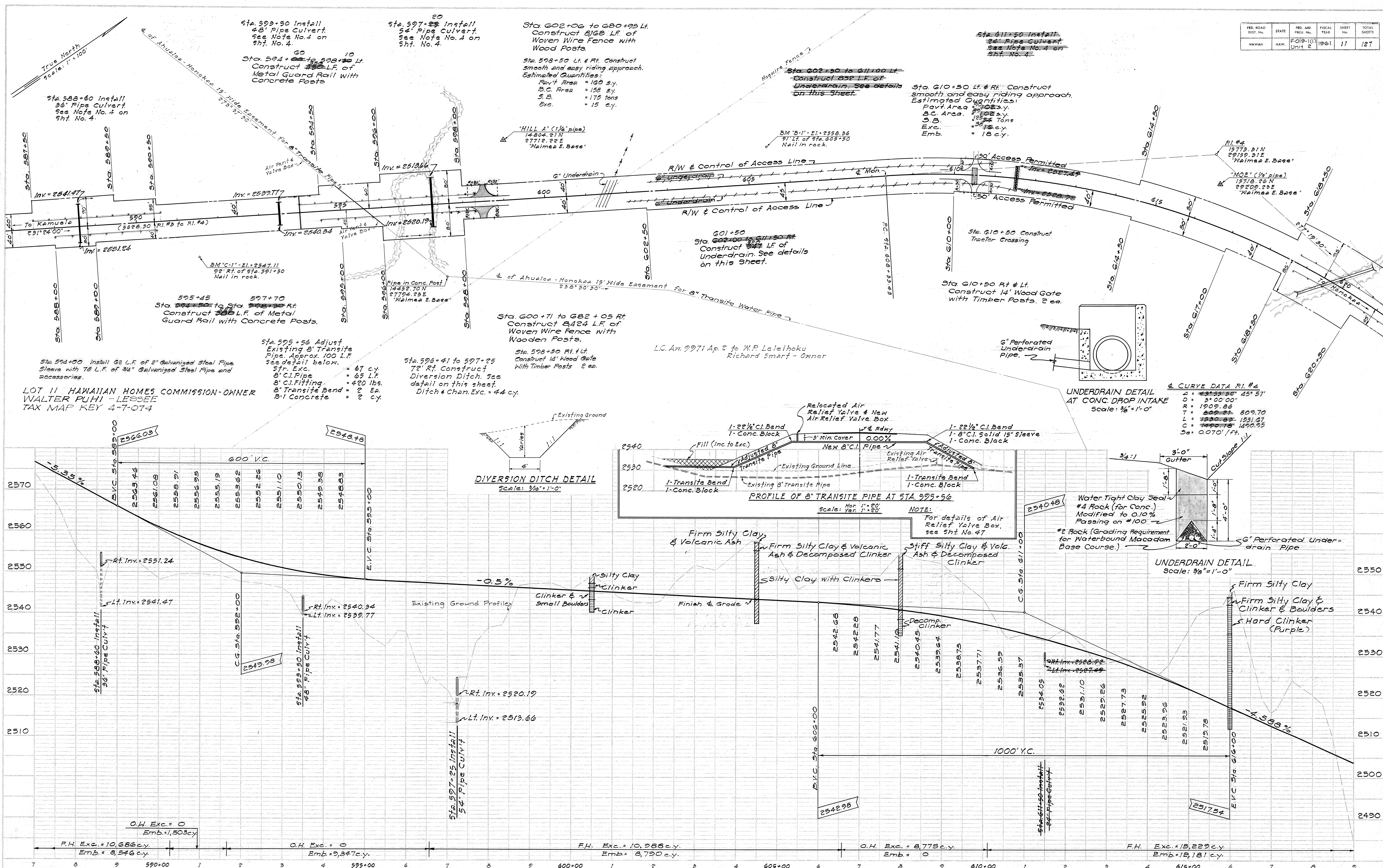


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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	FO-19-1(1) Unit 2	1961	11	127

PLAN	DATE	BY
DESIGNED		
DRAWN		
CHECKED		
IN CHARGE		

PROFILE	DATE	BY
DESIGNED		
DRAWN		
CHECKED		
IN CHARGE		



PLAN PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PLAN	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	

PROFILE	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-019-1(1)	1961	13	127

CURVE DATA R.I. #5
 $\Delta = 31^\circ 22' 00''$
 $D = 2^\circ 00' 00''$
 $R = 2864.79$
 $T = 2804.36$
 $L = 1968.39$
 $C = 1542.82$
 $S_e = 0.046'/ft.$

Sta. 655+96 Construct
 Double 15" Concrete Box Culvert
 and estimated quantities,
 see Sht. Nos. 36 & 42B

Sta. 661+00 Install
 36" Pipe Culvert
 see Note No. 4 on
 Sht. No. 4.

Sta. 665+00 to 667+50 Lt.
 Construct 100 L.F. of
 Metal Guard Rail
 With Conc. Posts.

Sta. 666+00 Install
 24" Pipe Culvert
 see Note No. 4 on
 Sht. No. 4.

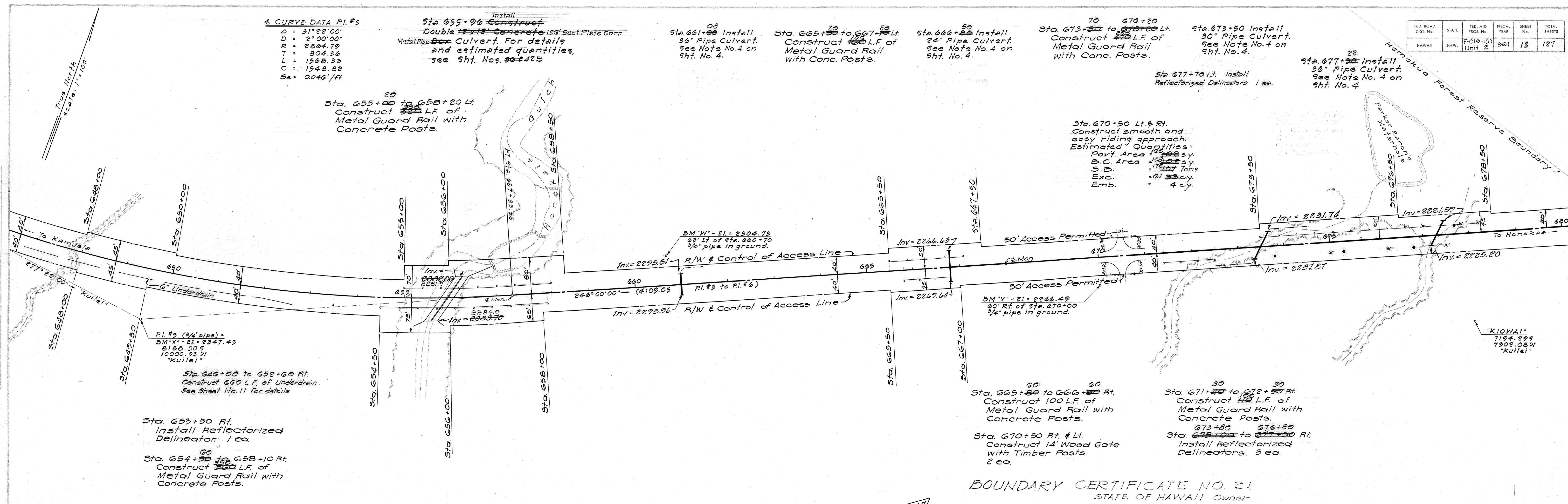
Sta. 673+00 to 675+00 Lt.
 Construct 100 L.F. of
 Metal Guard Rail
 With Conc. Posts.

Sta. 673+50 Install
 30" Pipe Culvert
 see Note No. 4 on
 Sht. No. 4.

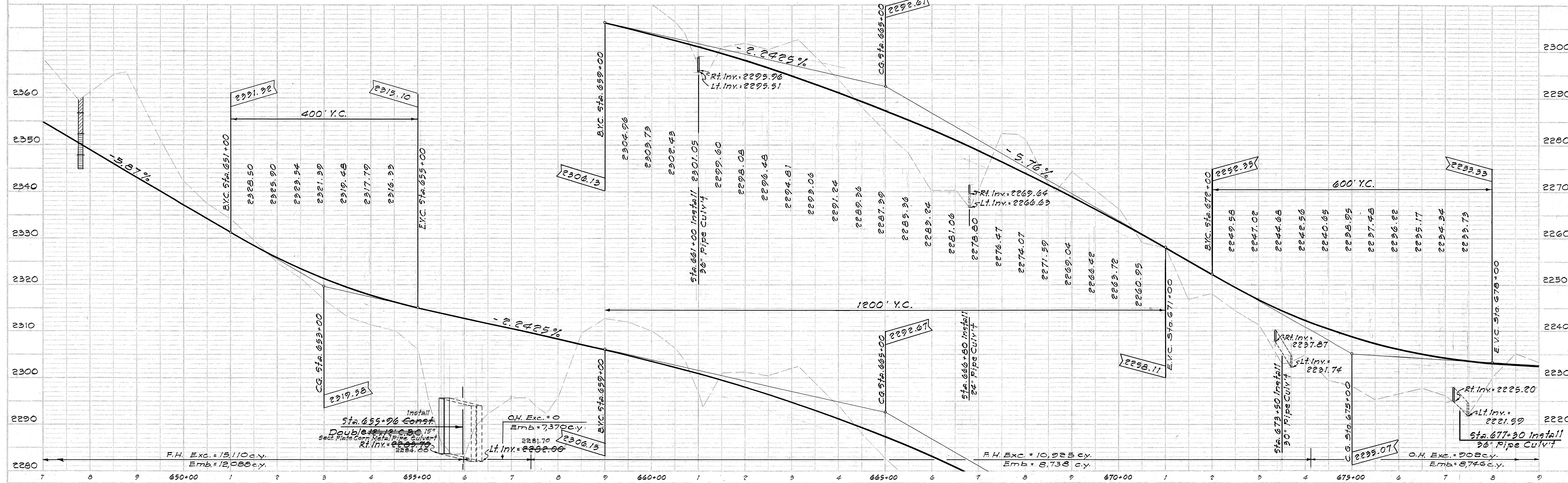
Sta. 677+00 Install
 36" Pipe Culvert
 see Note No. 4 on
 Sht. No. 4.

Sta. 677+70 Lt. Install
 ReflectORIZED Delineators 1 ea.

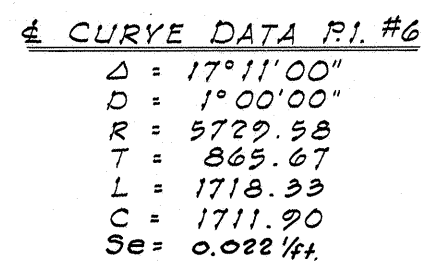
Sta. 670+50 Lt. & Rt.
 Construct smooth and
 easy riding approach.
 Estimated Quantities:
 Pavt. Area 1000 sq. y.
 B.C. Area 1000 sq. y.
 S.D. 1000 Tons
 Exc. 1000 c.y.
 Emb. 4 c.y.



BOUNDARY CERTIFICATE NO. 21
 STATE OF HAWAII Owner

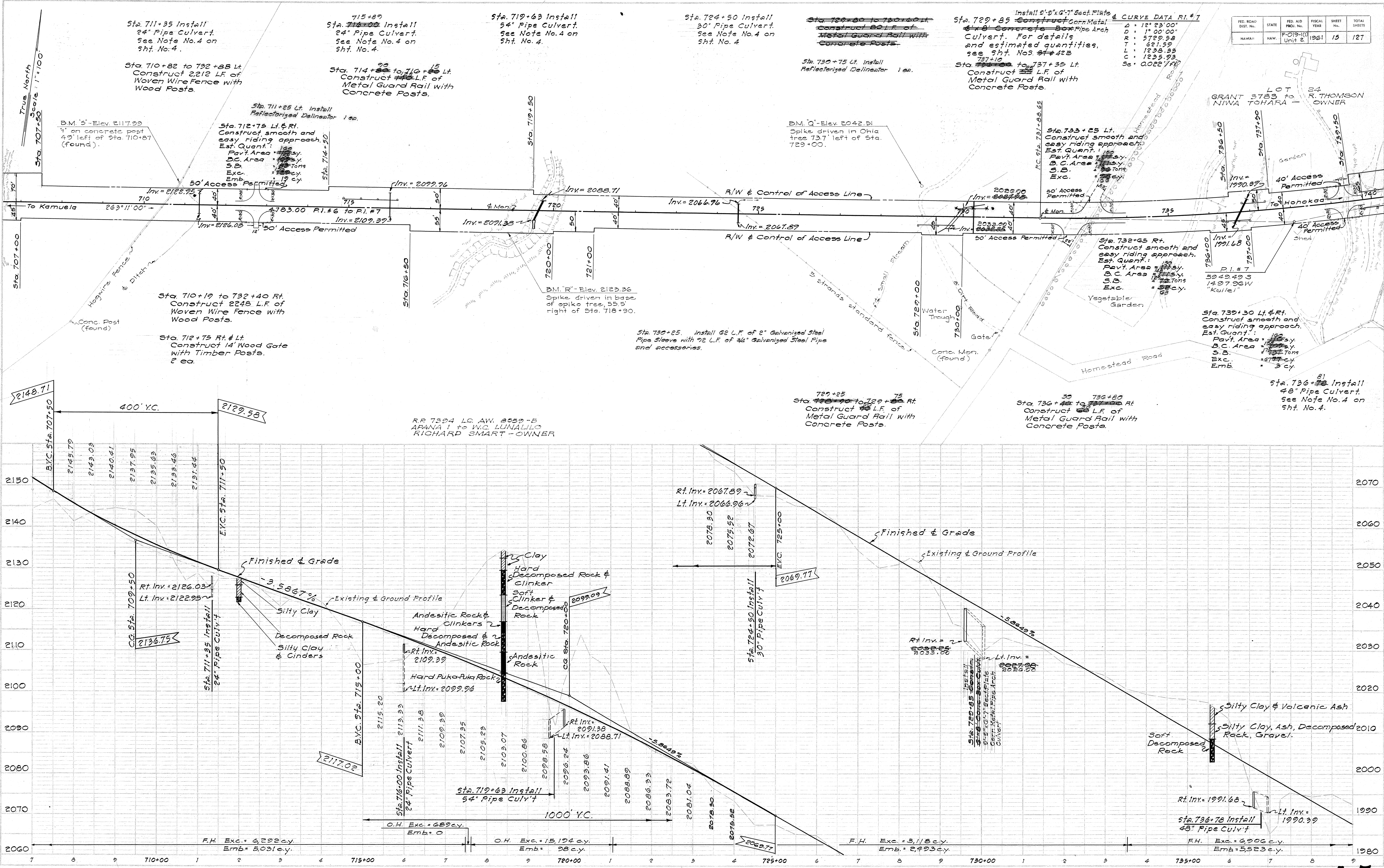


Sta. 706+~~57~~⁵⁰ Install
54" Pipe Culvert.
See Note No. 4 on
Sht. No. 4.



PLAN	DATE
SURVEYED	
PLOTTED	
CHECKED	
NO. OF SHEETS	15
NO. OF SHEETS CHECKED	127

PROFILE	DATE
LOCAL	
NOTE BOOK	
NO. OF SHEETS	15
NO. OF SHEETS CHECKED	127

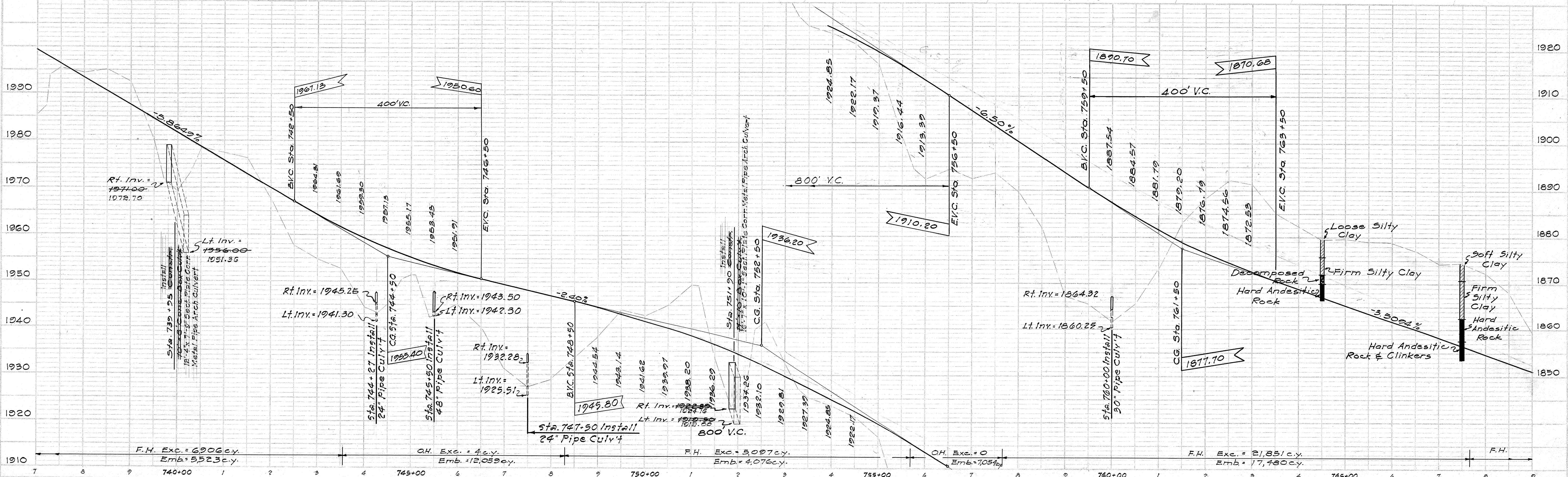
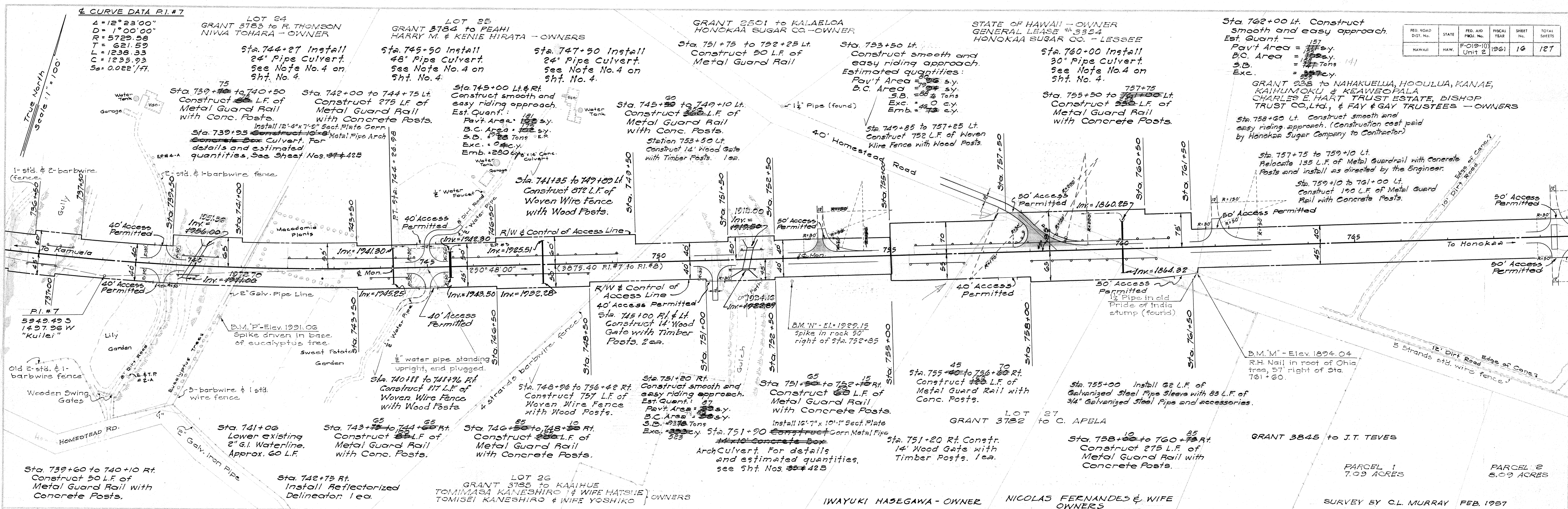


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-019-1(1)	1961	15	127

PLAN
 5949.493
 1497.96 W
 "Kulei"

NOTES
 1. ALL DIMENSIONS ARE IN FEET AND INCHES.
 2. ALL ANGLES ARE IN DEGREES AND MINUTES.
 3. ALL CURVES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.
 4. ALL DISTANCES ARE TO BE MEASURED ALONG THE CENTERLINE OF THE ROAD.
 5. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
 6. ALL GRADES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.
 7. ALL GRADES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.
 8. ALL GRADES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.
 9. ALL GRADES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.
 10. ALL GRADES ARE TO BE RUN BY THE METHOD OF TANGENT AND CHORDS.

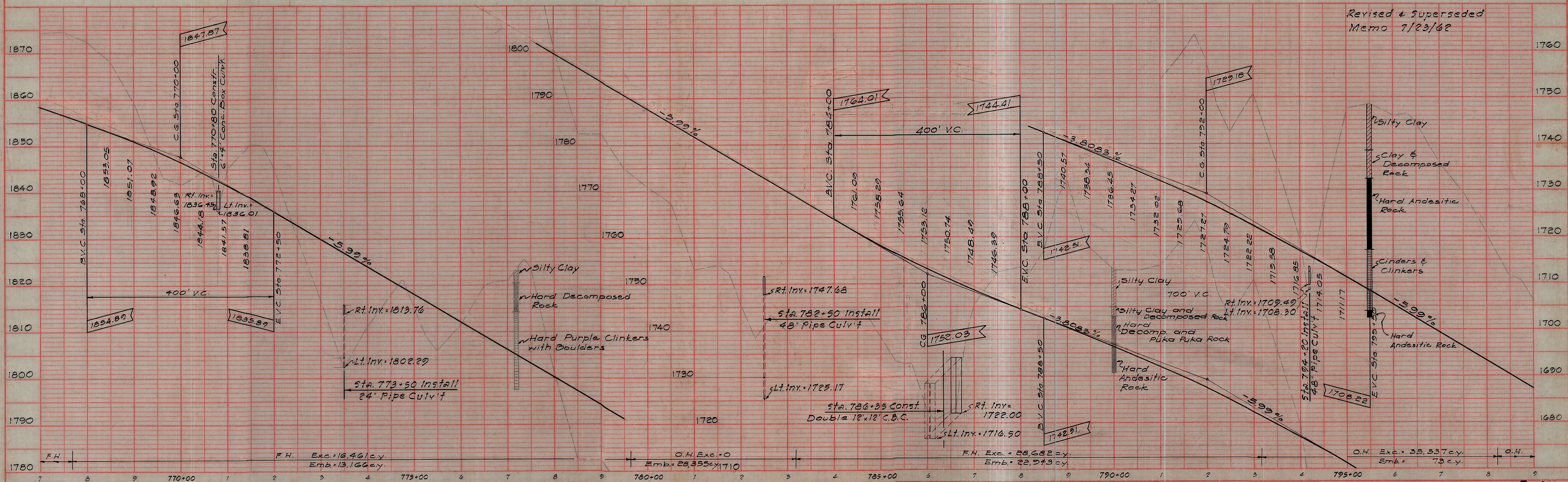
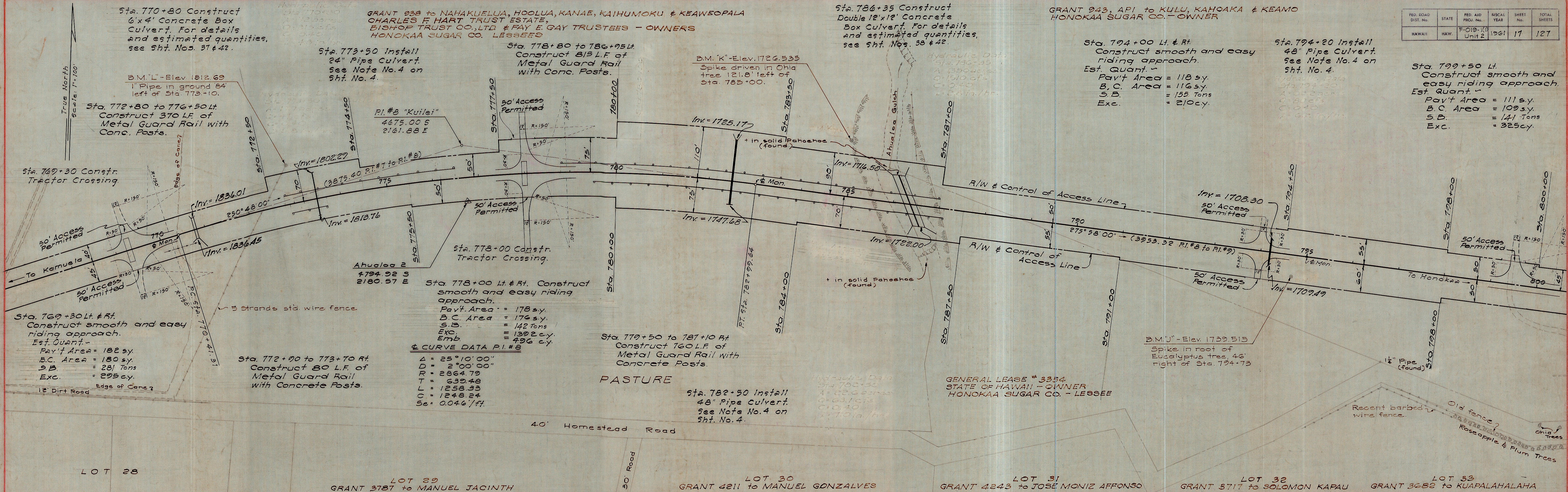
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-019-10	1961	16	127



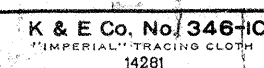
DATE
BY
SURVEYED
NOTE BOOK
ALIGNMENT CHECKED
RT. OF WAY CHECKED
PLAN

DATE
BY
SURVEYED
NOTE BOOK
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTING CH. NO.
PROFILE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-013-10	1961	17	127



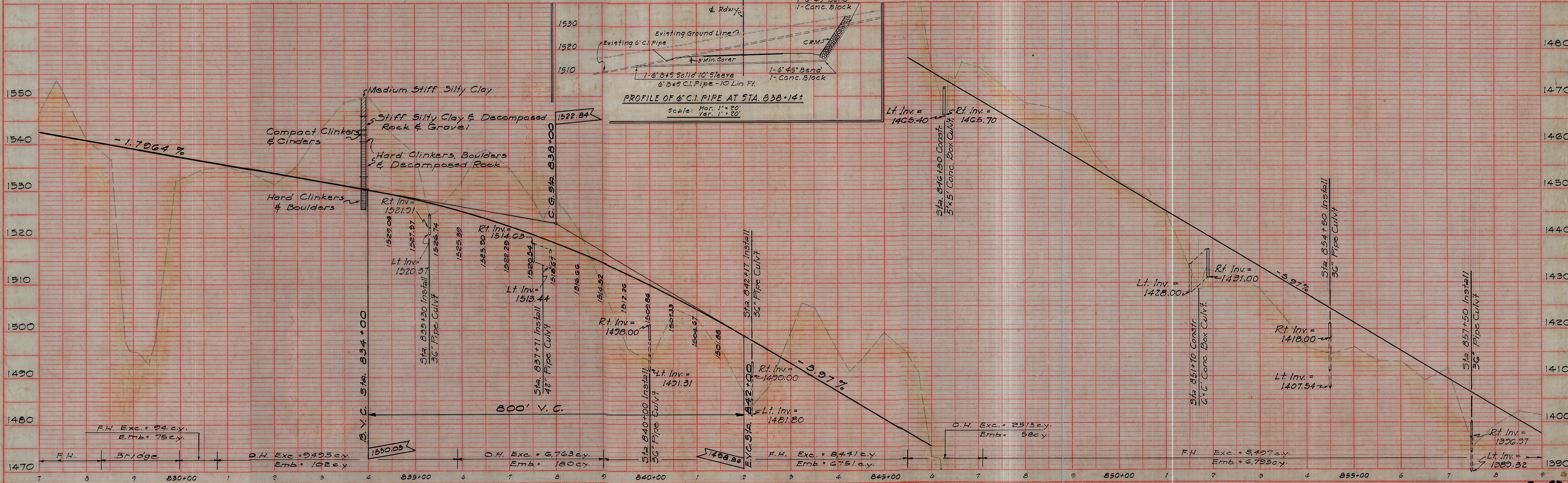
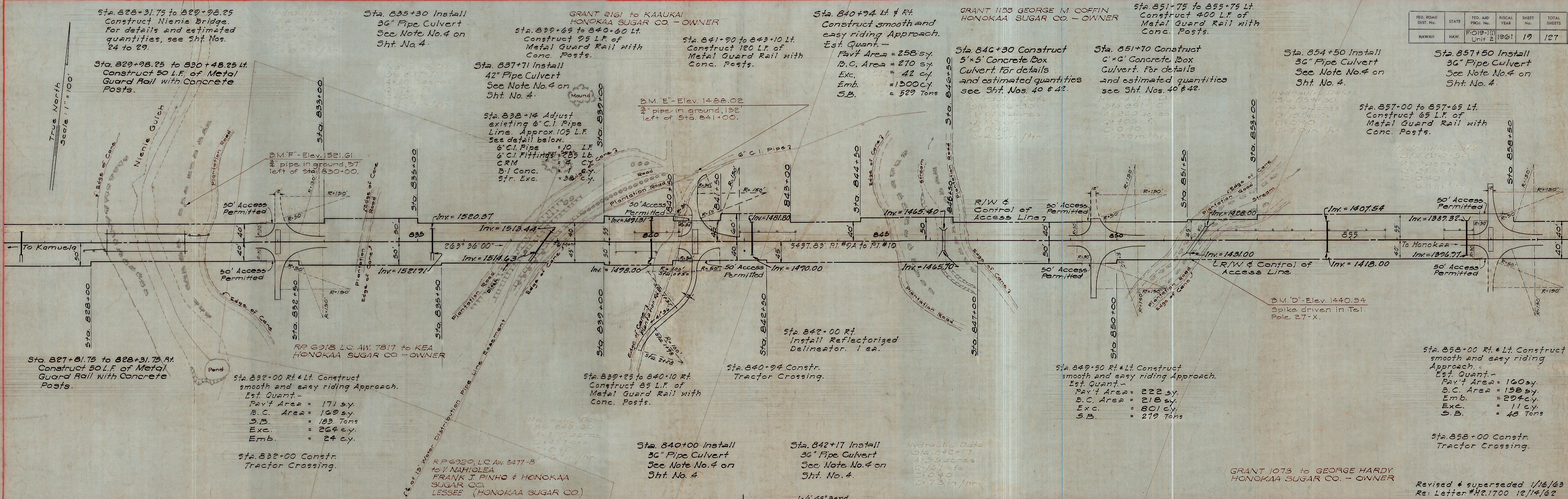
PROFILE		BY	DATE
	SURVEYED		
	PLOTTED		
	GRADES CHECKED		
	B. M.'S NOTED		
NO.	STRUCTURE NOTATIONS CHWD.		



PLAN	DATE	BY
DESIGNED		
CHECKED		
NOTED		
NO.		

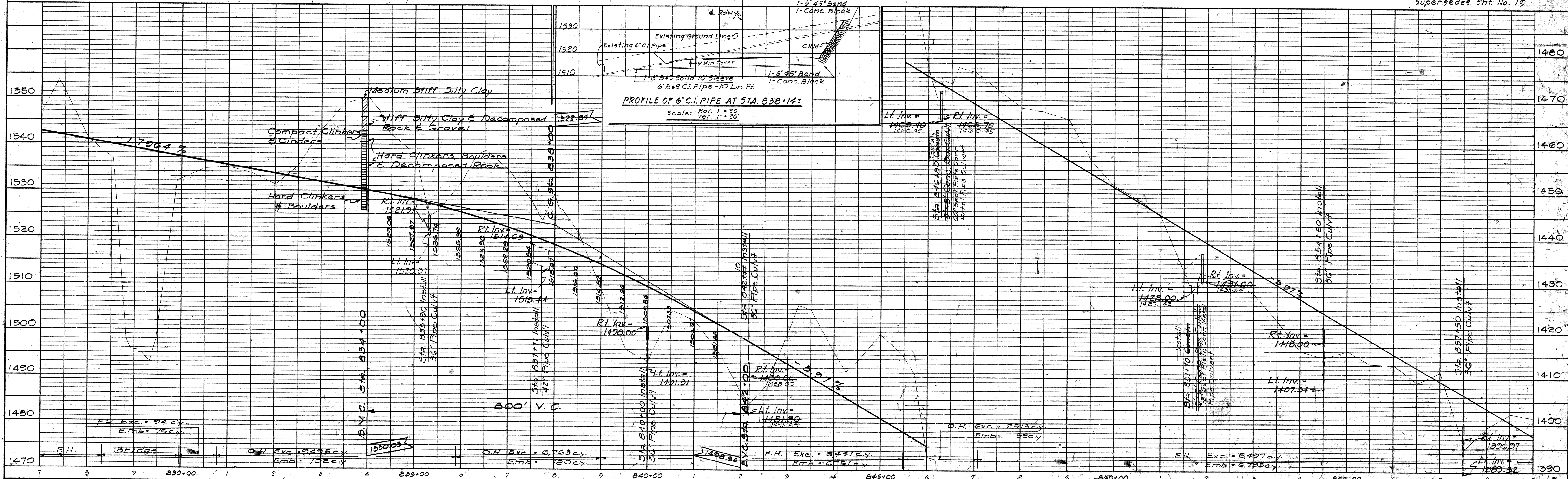
PROFILE	DATE	BY
DESIGNED		
CHECKED		
NOTED		
NO.		

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	FO19-10	1961	19	127



PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	GRADES CHECKED		
NO.	B. M.'S NOTED		
	STRUCTURE NOTAT'NS CH'ND.		



PLAN	SURVIVED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

