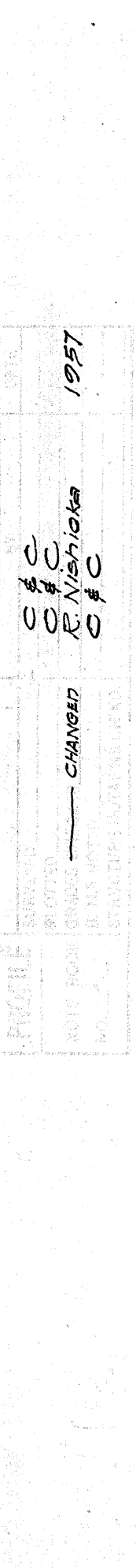


[illegible][illegible]

For Profile of 30 Cor. Galv. Metal Pipes
See Sheet 5914.16

For Profile of 24" Corrugated Metal Pipe

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	5-0630(3)	1958	4	93



SIGNAL CORPS CABLE

(TO BE INSTALLED BY OTHERS)

LEGEND

— SCC	Proposed buried cable to be installed by others
--- SCC ---	Existing Signal Corps Cable
— SCC	Relocated Signal Corps Cable, To be done by others
=====	Proposed Conduit for Cables, To be built by others
— [] —	Proposed Fullbox To be built by others

B.L. CURVE DATA

$\Delta = 10^{\circ} 27' 30''$
 $\frac{1}{2}\Delta = 5^{\circ} 13' 45''$
 $D = 1.4324^{\circ}$
 $R = 4000.0'$
 $T = 566.08'$
 $C = 729.12'$
 $L_0 = 780.13'$
 $E = 16.72'$
 $NL \text{ Runoff} = 150'$
 $SL \text{ Runoff} = 100'$
 $SE = 0.04$

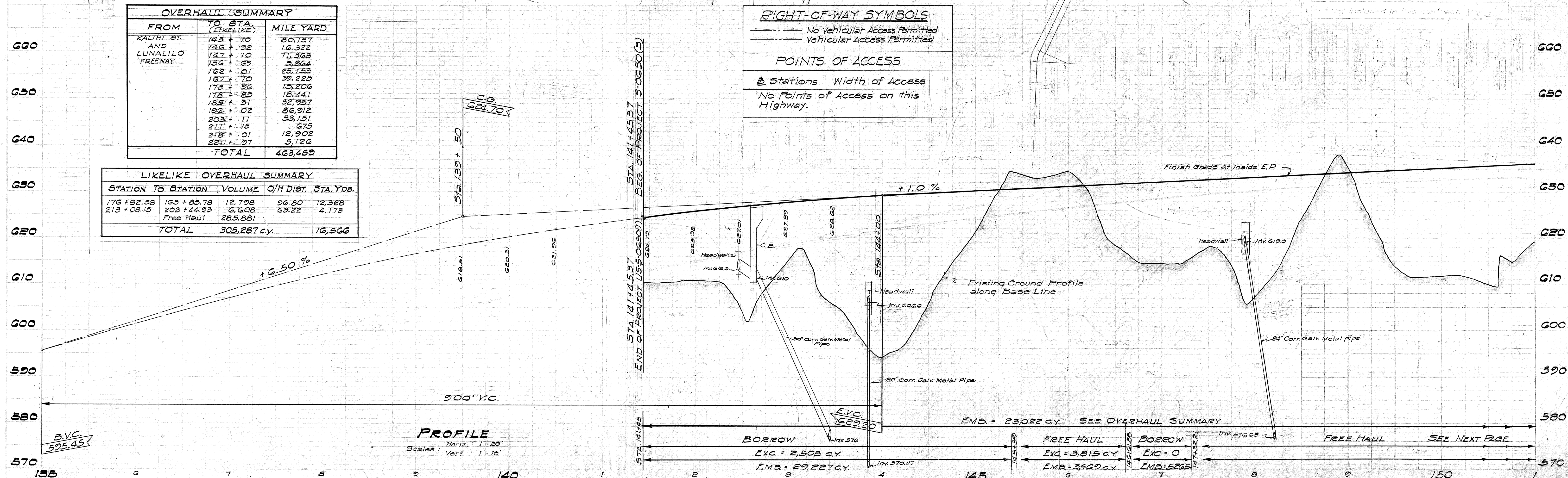
OVERHAUL SUMMARY		
FROM	TO STA. (LTKELIKE)	MILE YARD
KALITI ST. AND LUNALILO FREEWAY	143 + 70	80,157
	146 + 98	16,322
	147 + 70	71,368
	156 + 69	2,864
	162 + 01	25,153
	167 + 70	39,225
	173 + 36	15,206
	178 + 85	18,441
	185 + 31	32,257
	192 + 02	86,912
	203 + 11	53,151
	211 + 75	675
218 + 01	12,902	
221 + 97	5,126	
TOTAL		463,459

LIKELIKE OVERHAUL SUMMARY				
STATION TO STATION		VOLUME	Q/H DIST.	STA. YDS.
176 + 82.58	165 + 85.78	12,798	36.80	12,388
213 + 08.15	202 + 44.93	6,608	63.22	4,178
Free Haul		285,881		
TOTAL		305,287 c.y.		16,566

<u>RIGHT-OF-WAY SYMBOLS</u>	
=====	No Vehicular Access Permitted
-----	Vehicular Access Permitted
<u>POINTS OF ACCESS</u>	
<u>B</u> Stations	Width of Access
No Points of Access on this Highway.	

SUMMARY OF DITCHES			
	Ditch Exc.	C- Conc	Reinf Steel
Sta. 141+45 To 144+60	200 cy	36 cy	1220 lbs.
Sta. 144+60 To 146+55	55 cy		
Sta. 146+55 To 148+25	187 cy	19 cy	836 lbs.
Sta. 148+25 To 149+25	46 cy		
Sta. 149+25 To 152+50	219 cy	36 cy	1512 lbs.

SUMMARY OF SIGNS		
TYPE	MESSAGE	QUANT.
R-102C(R)	45 MPH	* 12
R-21	No Stopping or Standing	36
* Not included in this contract		



PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	C. H. C.	
NO.	ALIGNMENT CHECKED	C. H. C.	
	INT. OF WAY CHECKED	R. Nishioaka	8-57

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	C. F. C.	
	GRADES ENGINEER CHANGED	C. F. C.	1957
NO.	R. M. S. NOTED	R. Nishikawa	
	STRUCTURE NOTATIONS CH'KD.	C. F. C.	

Assumed existing
ground line.
Excavate and/or
backfill as required.

FEDERAL AID SECONDARY PROJECT No. US-S-0630(1)

 Proposed buried cable
to be installed by others
 Existing Signal Corps Cable
 Relocated Signal Corps Cable,
To be done by others
 Proposed Conduit for Cables,
To be built by others
 Proposed Pullbox
To be built by others

B.M. ELEV. - 612.92
 a Cut on rock
 (13' 9/8 L. @ 142+36 ±)

$$\begin{aligned}\Delta &= 10^{\circ} 27' 30'' \\ \frac{1}{2}\Delta &= 5^{\circ} 13' 45'' \\ D &= 1.4324^{\circ} \\ R &= 4000.0' \\ T &= 300.08' \\ C &= 729.12' \\ L_c &= 730.13' \\ E &= 16.72' \\ NL \text{ Runoff} &= 150' \\ SL \text{ Runoff} &= 100' \\ SE &= 0.04\end{aligned}$$

NO
STOPPING
OR
STANDING
↔
R-21

N.L. P.T.
B.L. P.T. 142+40.65
S.L. P.T.

Sta.	141+45	To 144+60	200 cy.	3G cy.	1220 lb
Sta. <td>144+60</td> <td>To 146+55</td> <td>55 cy. <td></td> <td></td> </td>	144+60	To 146+55	55 cy. <td></td> <td></td>		
Sta. <td>146+55</td> <td>To 148+25</td> <td>187 cy.</td> <td>19 cy.</td> <td>636 lb</td>	146+55	To 148+25	187 cy.	19 cy.	636 lb
Sta. <td>148+25</td> <td>To 149+25</td> <td>46 cy.</td> <td></td> <td></td>	148+25	To 149+25	46 cy.		
Sta. <td>149+25</td> <td>To 152+50</td> <td>219 cy.</td> <td>3G cy.</td> <td>1212 lb</td>	149+25	To 152+50	219 cy.	3G cy.	1212 lb

B.M. ELEV. = 619.33
 Cut on Rock
 (9' 9" L. @ 147+63)

TYPE	MESSAGE	QUANTITY
R-102C(R)	45 MPH	* 12
R-21	No Stopping or Standing	36
* Not included in this contract		

FROM	TO STA. (LIKE LIKE)	MILE YARD
KALIHI ST.	143 + 70	80,157
AND	146 + 32	16,322
LUNALILO	147 + 10	71,368
FREEWAY	156 + 69	5,864
	162 + 01	25,153
	167 + 70	39,222
	173 + 26	15,206
	178 + 85	19,441
	189 + 31	32,957
	192 + 02	86,912
	203 + 11	53,151
	211 + 15	675
	218 + 01	12,902
	221 + 27	5,126
	TOTAL	463,459

STATION TO STATION	VOLUME	O/H DIST.	STA. YDS.
176 + 82.58	12,798	96.80	12,388
213 + 08.15	6,608	63.22	4,178
Free Haul	285.881		
TOTAL	305,287 c.y.		16,566

- No Vehicular Access Permitted
- Vehicular Access Permitted

2 Stations Width of Access
No Points of Access on this Highway.

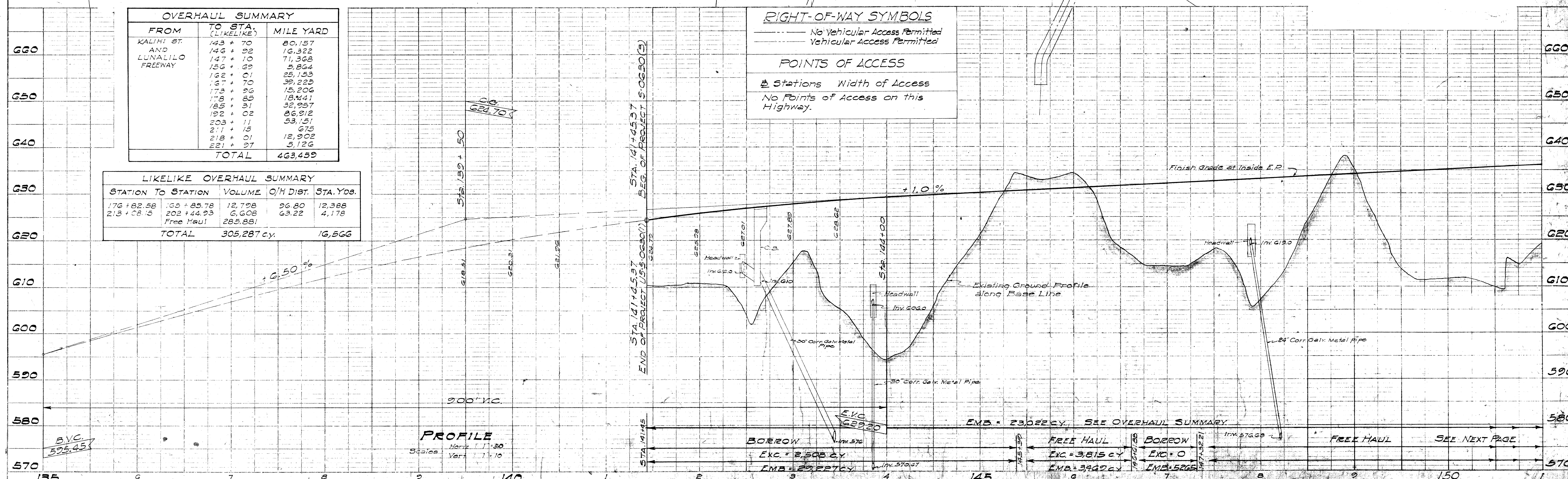


PLATE 1-PLAN-PROFILE OF P. R. & R. E. STANDARD

5914.4

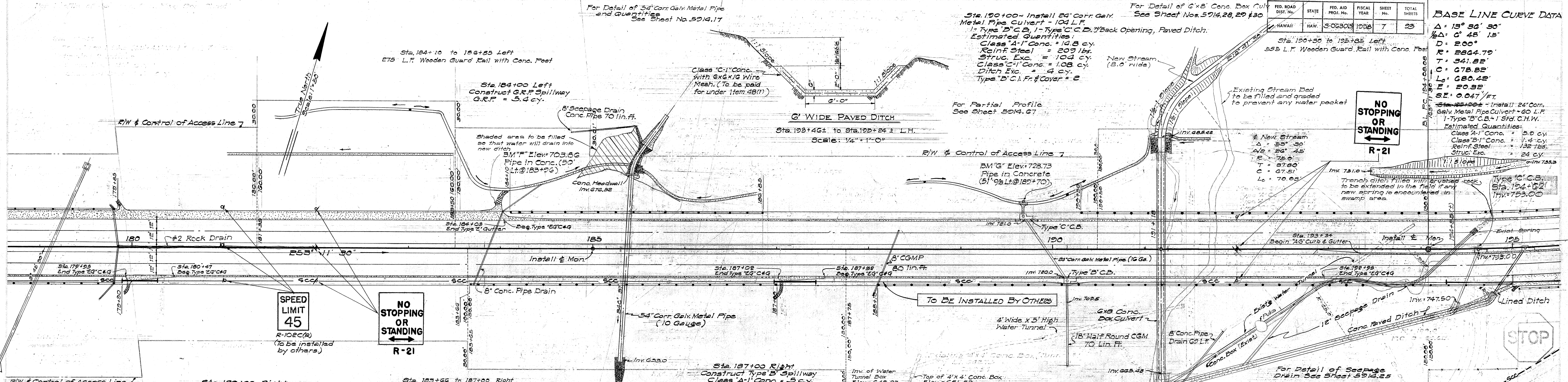
For Detail of 34" Corrugated Metal Pipe
and Quantities
See Sheet No. 5914.17

Sta. 190+00- Install 24" Corrugated
Metal Pipe Culvert - 104 L.F.
1- Type "B" C.C.B. 1- Type "C" C.D. Back Opening, Paved Ditch.
Estimated Quantities:
Class "A-1" Conc. = 142.8 cy.
Reinf. Steel = 209 lbs.
Struct. Exc. = 104 cy.
Class "C-1" Conc. = 108 cy.
Ditch Exc. = 4 cy.
Type "B" C.C. Fr. & Cover = 2

For Detail of 6'x8' Conc. Box Culvert
See Sheet Nos. 5914.28, 29 & 30

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S-06303	1958	7	23

BASE LINE CURVE DATA
 $\Delta = 15^\circ 30' 30''$
 $\frac{1}{2}\Delta = 7^\circ 45' 15''$
 $D = 200'$
 $R = 2864.79'$
 $T = 341.85'$
 $C = 378.82'$
 $L = 680.42'$
 $E = 20.32'$
 $P = 0.047'/ft.$
 For Detail of 24" Corrugated Metal Pipe Culvert - 60 L.F.
 1- Type "B" C.C.B. 1- Type "C" C.D. Back Opening, Paved Ditch.
 Estimated Quantities:
 Class "A-1" Conc. = 5.0 cy.
 Class "B-1" Conc. = 1.4 cy.
 Reinf. Steel = 12 lbs.
 Struct. Exc. = 24 cy.



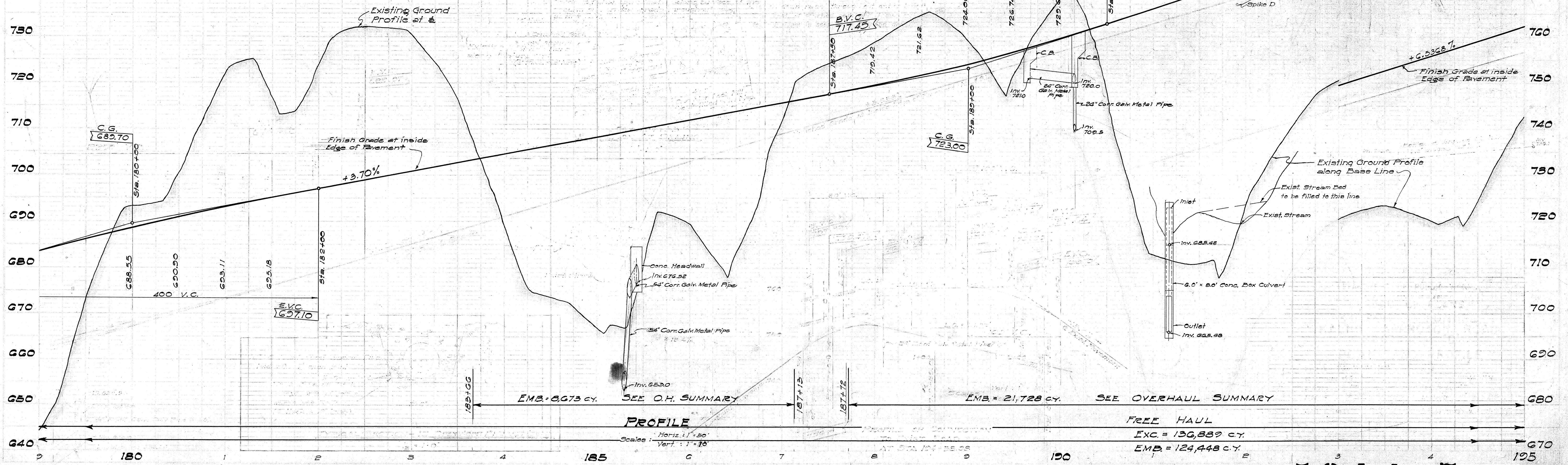
SUMMARY OF DITCHES

Ditch No.	Stationing	Excavation	Reinf. Steel
1	Sta. 181+58 to 184+26	45 cy.	27 cy.
2	Sta. 184+26 to 186+86	147 cy.	984 lbs.
3	Sta. 188+35 to 190+30	45 cy.	27 cy.
4	Sta. 190+30 to 191+75	37 cy.	15 cy.
5	Sta. 192+45 to 193+28	207 cy.	44 cy.
6	Sta. 191+22 to 194+77 (RT)	155 cy.	33 cy.
7	Sta. 181+03 to 183+48	37 cy.	15 cy.

Notes: 1- Ditch Exc. "C" Conc. Reinf. Steel
2- Ditch Exc. "A-1" Conc. = 5 cy.
3- Ditch Exc. "B-1" Conc. = 5 cy.
4- Ditch Exc. "C-1" Conc. = 5 cy.
5- Ditch Exc. "A-1" Conc. = 5 cy.
6- Ditch Exc. "B-1" Conc. = 5 cy.
7- Ditch Exc. "C-1" Conc. = 5 cy.

B.M. ELEV. = 696.824

PLAN

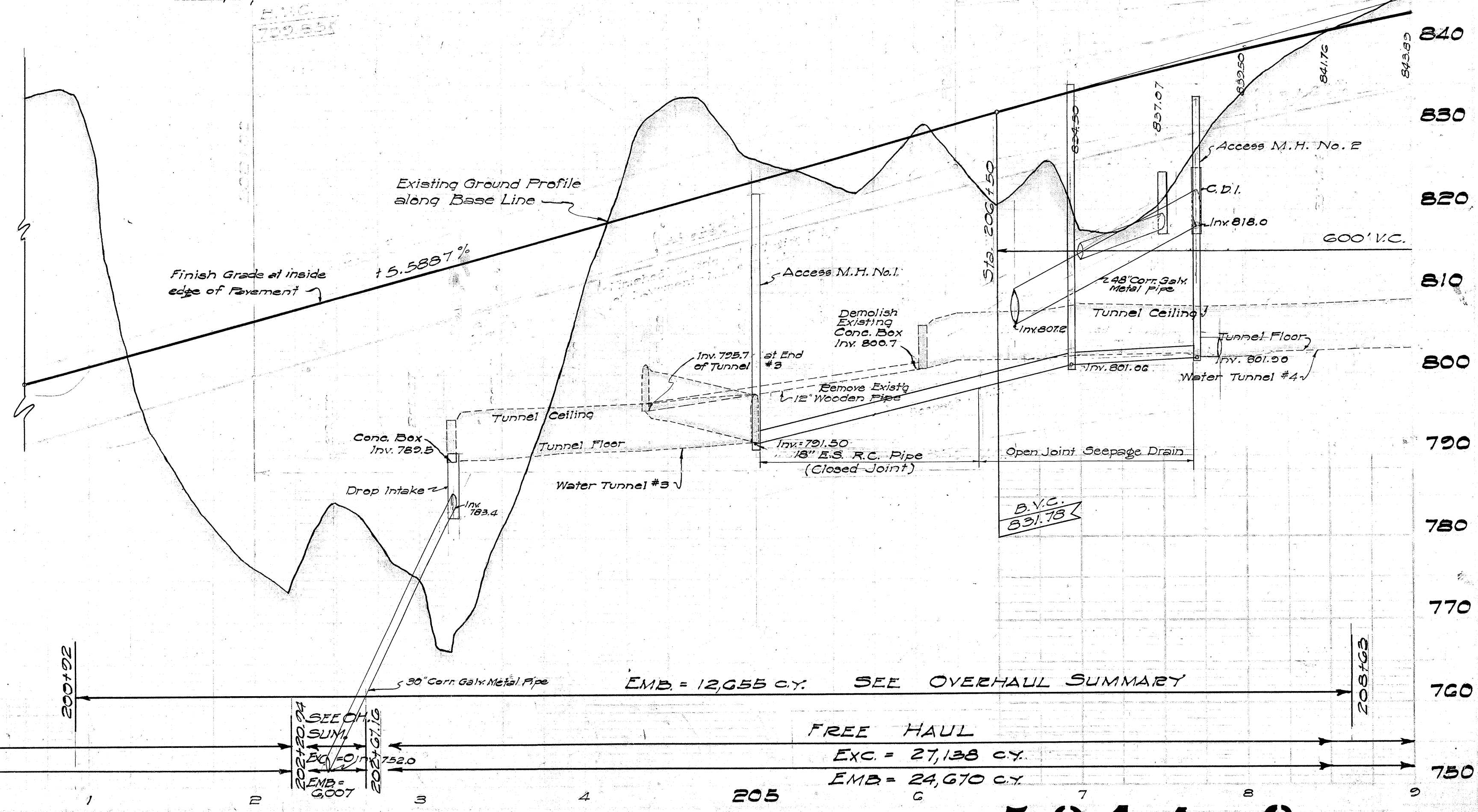
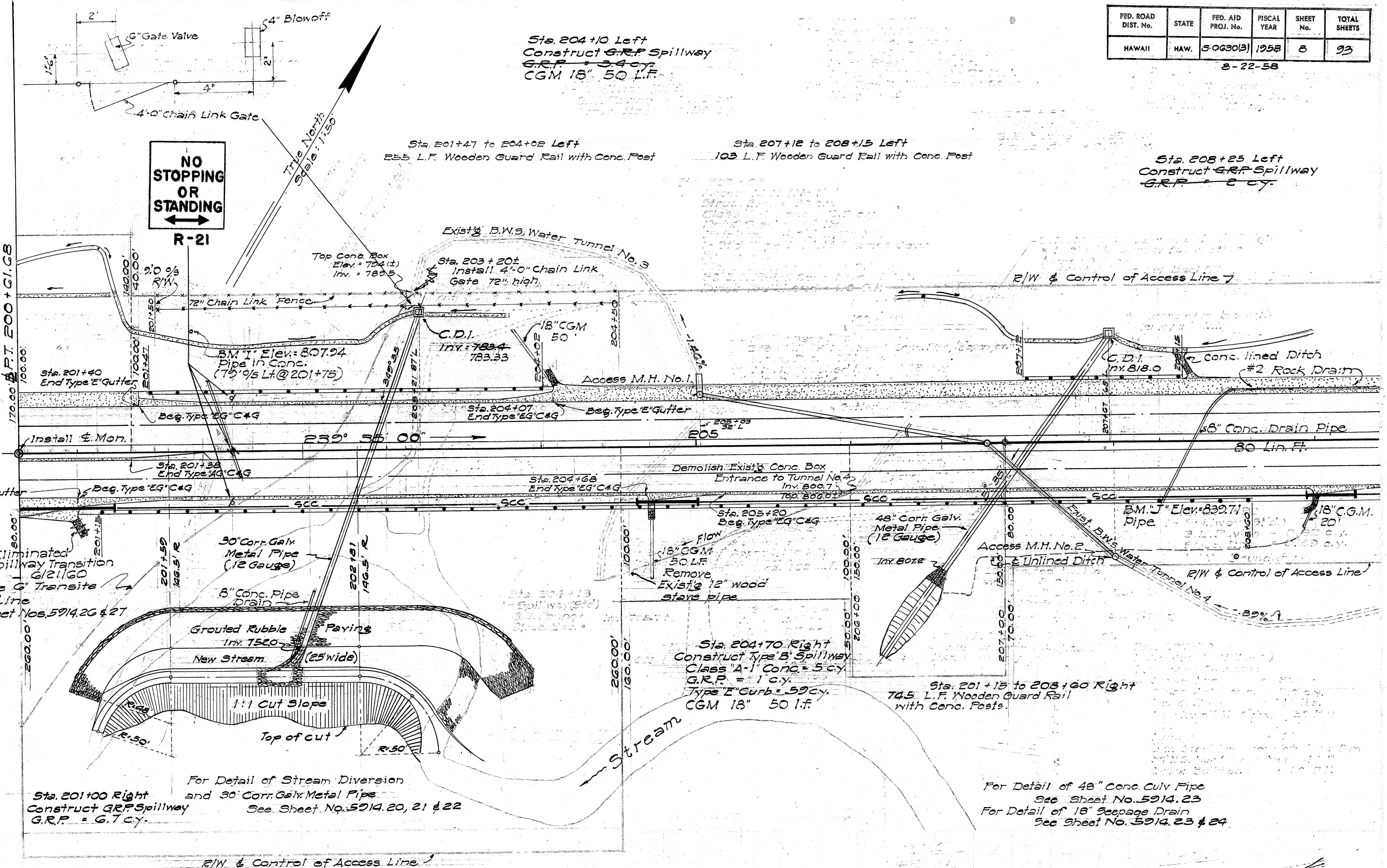
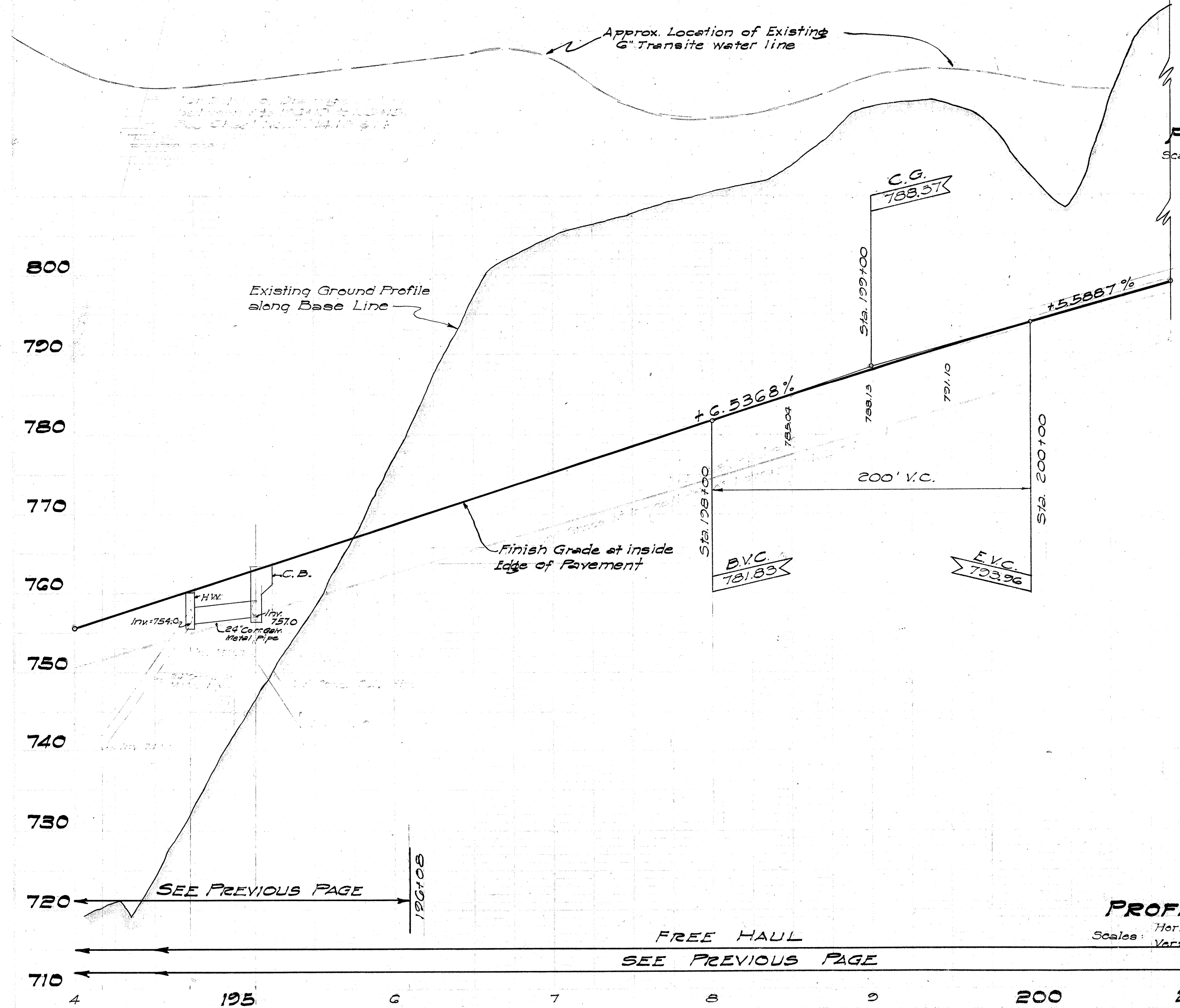
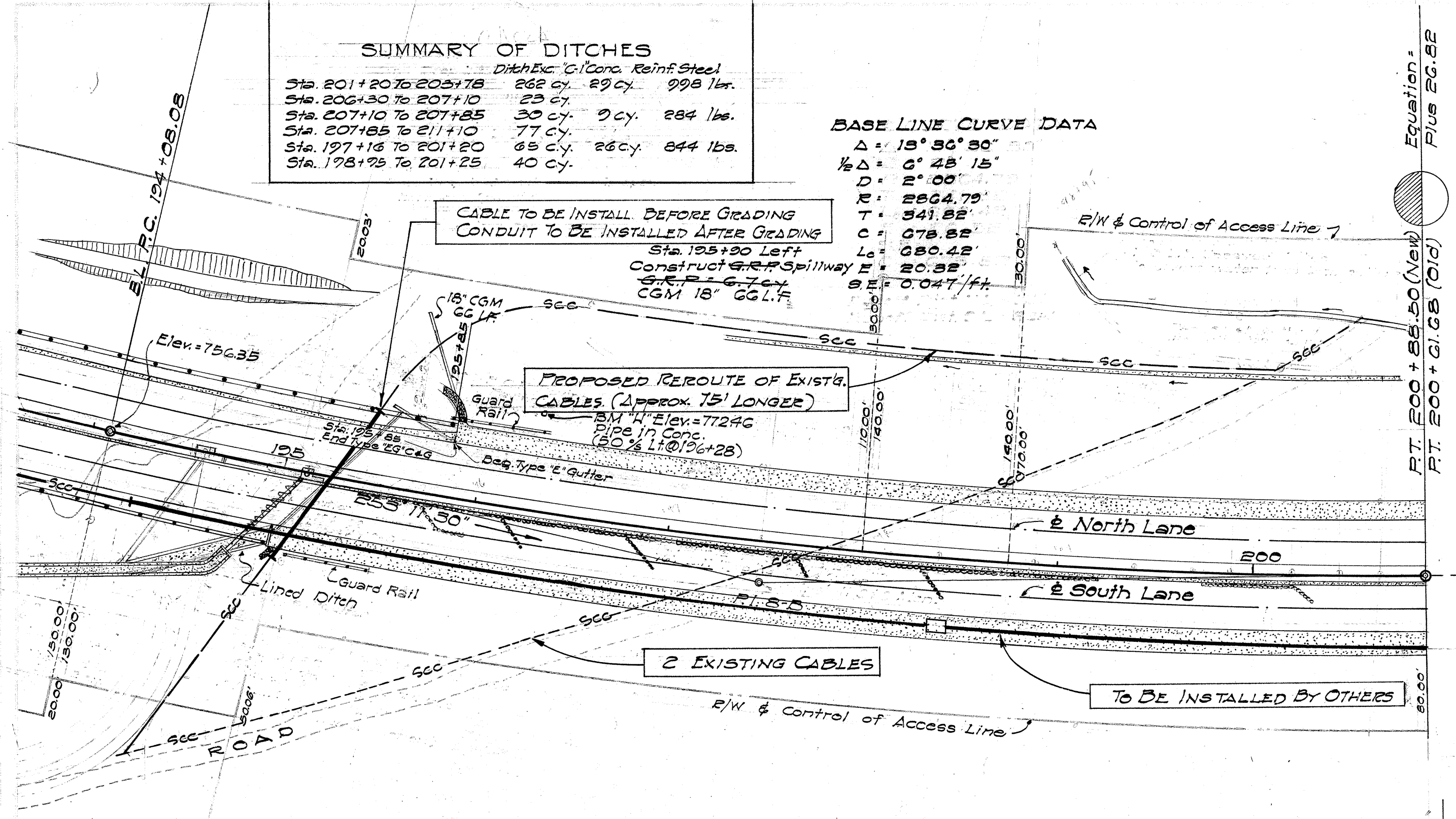


5914.7

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	5-0630(8)	1958	8	23

SUMMARY OF DITCHES		
Sta. 201+20 to 205+18	Ditch Exc. 1" Conc. Reinf. Steel	
Sta. 206+30 to 207+10	282 cy. 29 cy. 998 lbs.	
Sta. 207+10 to 207+85	30 cy. 9 cy. 284 lbs.	
Sta. 207+85 to 211+10	77 cy.	
Sta. 197+15 to 201+20	65 cy. 26 cy. 244 lbs.	
Sta. 198+25 to 201+25	40 cy.	

BASE LINE CURVE DATA	
$\Delta = 18^\circ 30' 20''$	
$\frac{1}{2}\Delta = 9^\circ 15' 10''$	
$D = 2^\circ 00'$	
$R = 2864.79'$	
$C = 341.82'$	
$L = 678.82'$	
$E = 280.42'$	
$S = 20.85'$	
$B = 0.047/fh$	



5914.8

