

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	378A-02-67	1967	5	17

IMPROVEMENT NO. 1

Length = ~~1150~~ ft. 1175
 B.C. Area = ~~1660~~ s.y. 1410
 Pav't Area = ~~1600~~ s.y. 1345
 Exc. = ~~451~~ c.y.
 Emb. = ~~710~~ c.y.

Culvert Summary

Station	Size	Lgth	CRM in c.y.	HW	D.I.
1+25	24"	12'	2.40		
5+67	48"	10'	8.40		
7+74	36"	14'	2.94		
10+18	36"	14'	2.94		

IMPROVEMENT NO. 2

Length = ~~1125~~ ft. 1140
 B.C. Area = ~~1321~~ s.y. 1376
 Pav't Area = ~~1258~~ s.y. 1213
 Exc. = ~~927~~ c.y.
 Emb. = ~~86~~ c.y.

Culvert Summary

Station	Size	Lgth	CRM in c.y.	HW	D.I.
0+00	36"	1'	3.08		
4+65	36"	18'	3.60		
7+46	48"	12'	3.07		

IMPROVEMENT NO. 3

Length = ~~625~~ ft. 690
 B.C. Area = ~~645~~ s.y. 740
 Pav't Area = ~~614~~ s.y. 707
 Exc. = ~~354~~ c.y.
 Emb. = ~~80~~ c.y.

Culvert Summary

Station	Size	Lgth	CRM in c.y.	HW	D.I.
5+30	48"	12'	4.15		

IMPROVEMENT NO. 4

Length = ~~775~~ ft. 797
 B.C. Area = ~~840~~ s.y. 932
 Pav't Area = ~~797~~ s.y. 890
 Exc. = ~~188~~ c.y.
 Emb. = ~~421~~ c.y.

Culvert Summary

Station	Size	Lgth	CRM in c.y.	HW	D.I.
1+20	48"	8'	5.07		

IMPROVEMENT NO. 5

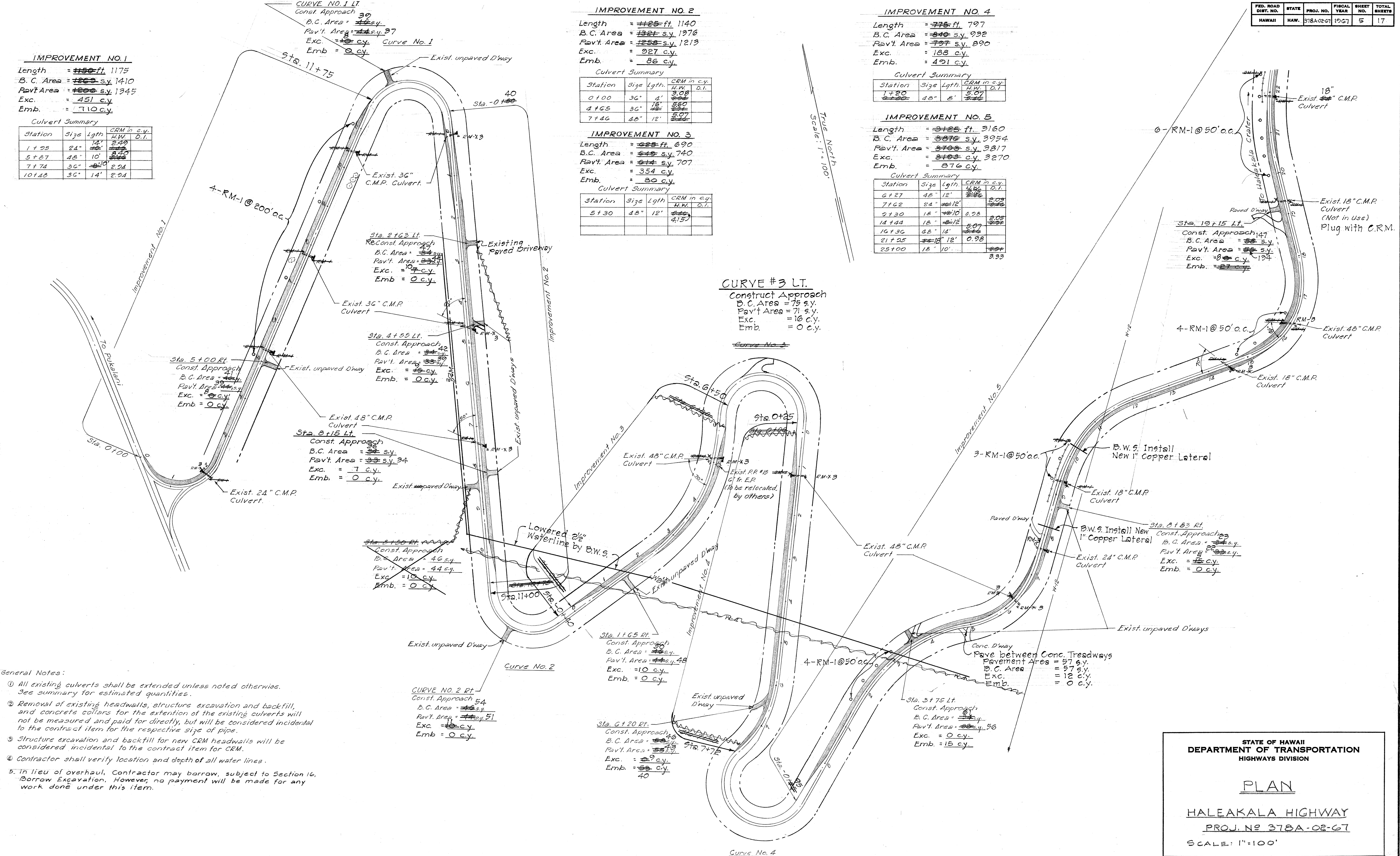
Length = ~~3125~~ ft. 3160
 B.C. Area = ~~3875~~ s.y. 3954
 Pav't Area = ~~3705~~ s.y. 3817
 Exc. = ~~3103~~ c.y. 3270
 Emb. = ~~876~~ c.y.

Culvert Summary

Station	Size	Lgth	CRM in c.y.	HW	D.I.
6+27	48"	12'	3.08		
7+62	24"	12'	2.40		
21+30	18"	10'	0.98		
14+44	18"	10'	0.98		
16+36	48"	12'	3.08		
21+25	18"	10'	0.98		
25+00	18"	10'	0.98		

CURVE #3 LT.

Construct Approach
 B.C. Area = 75 s.y.
 Pav't Area = 71 s.y.
 Exc. = 10 c.y.
 Emb. = 0 c.y.



- General Notes:
- All existing culverts shall be extended unless noted otherwise. See summary for estimated quantities.
 - Removal of existing headwalls, structure excavation and backfill, and concrete collars for the extension of the existing culverts will not be measured and paid for directly, but will be considered incidental to the contract item for the respective size of pipe.
 - Structure excavation and backfill for new CRM headwalls will be considered incidental to the contract item for CRM.
 - Contractor shall verify location and depth of all water lines.
 - In lieu of overhaul, Contractor may borrow, subject to Section 16, Borrow Excavation. However, no payment will be made for any work done under this item.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

PLAN

HALEAKALA HIGHWAY

PROJ. NO. 378A-02-67

SCALE: 1"=100'

SHEET No. 1 OF 2 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	378A-026	1967	6	17

CURVE NO. 5
Const. Approach
B.C. Area = ~~46~~ s.y.
Pav't. Area = ~~11~~ s.y. 23
Exc. = ~~10~~ c.y. 5
Emb. = 0 c.y.

IMPROVEMENT NO. 6
Length = 1840 ft.
B.C. Area = ~~222~~ s.y. 2175
Pav't. Area = ~~2122~~ s.y. 2079
Exc. = ~~222~~ c.y. 1458
Emb. = 304 c.y.

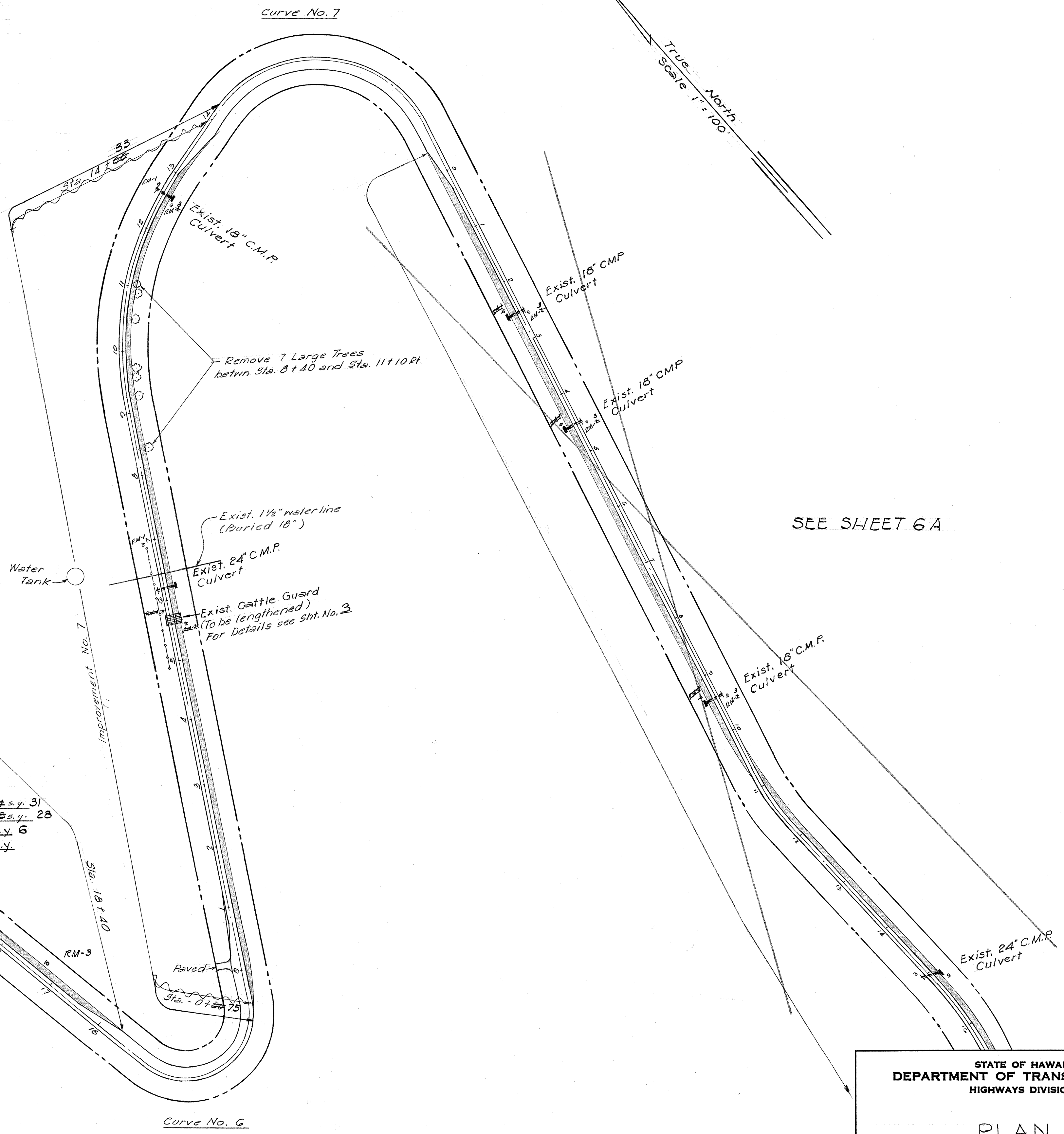
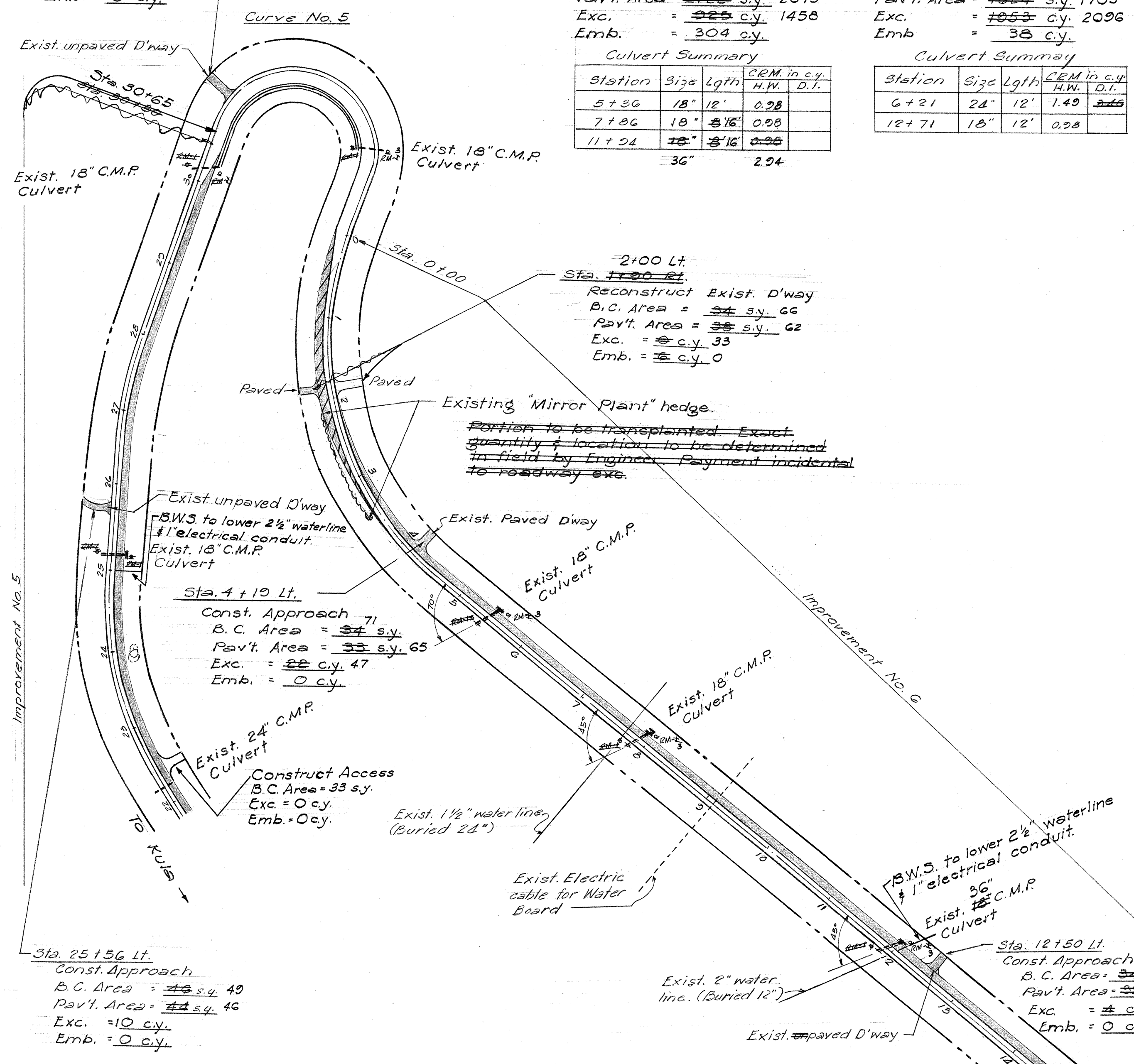
IMPROVEMENT NO. 7
Length = ~~1465~~ ft 1508
B.C. Area = ~~1102~~ s.y. 1736
Pav't. Area = ~~1022~~ s.y. 1703
Exc. = ~~1022~~ c.y. 2096
Emb. = 38 c.y.

Culvert Summary

Station	Size	Lgth	CEM in c.y.	H.W.	D.I.
5+36	18"	12'	0.28		
7+26	18"	8'16"	0.28		
11+04	18"	8'16"	0.28		
	36"		2.94		

Culvert Summary

Station	Size	Lgth	CEM in c.y.	H.W.	D.I.
6+21	24"	12'	1.49		
12+71	18"	12'	0.28		



SEE SHEET 6A

DATE	_____
DESIGNED BY	_____
DRAWN BY	_____
CHECKED BY	_____
NOTE BOOK	_____
NO.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN
HALEAKALA HIGHWAY
PROJ. NO 378A-02-67
SCALE: 1"=100'
SHEET No. 2 OF 2 SHEETS

CURVE NO. 5
 Const. Approach
 B.C. Area = 46 s.y.
 Pav't. Area = 44 s.y.
 Exc. = 10 c.y.
 Emb. = 0 c.y.

IMPROVEMENT NO. 6
 Length = 1840 ft.
 B.C. Area = 2224 s.y.
 Pav't. Area = 2122 s.y.
 Exc. = 225 c.y.
 Emb. = 304 c.y.

IMPROVEMENT NO. 7
 Length = 1483 ft.
 B.C. Area = 1706 s.y.
 Pav't. Area = 1624 s.y.
 Exc. = 1953 c.y.
 Emb. = 36 c.y.

IMPROVEMENT NO. 8
 Length = 1890 f.f. 1050
 B.C. Area = 2299 s.y. 2388
 Pav't. Area = 2128 s.y. 2203
 Exc. = 213 c.y.
 Emb. = 1022 c.y.

NOTE:
 1. Deflect pipe 22° at Sta. 15+04.
 2. Remove 2 trees

Culvert Summary

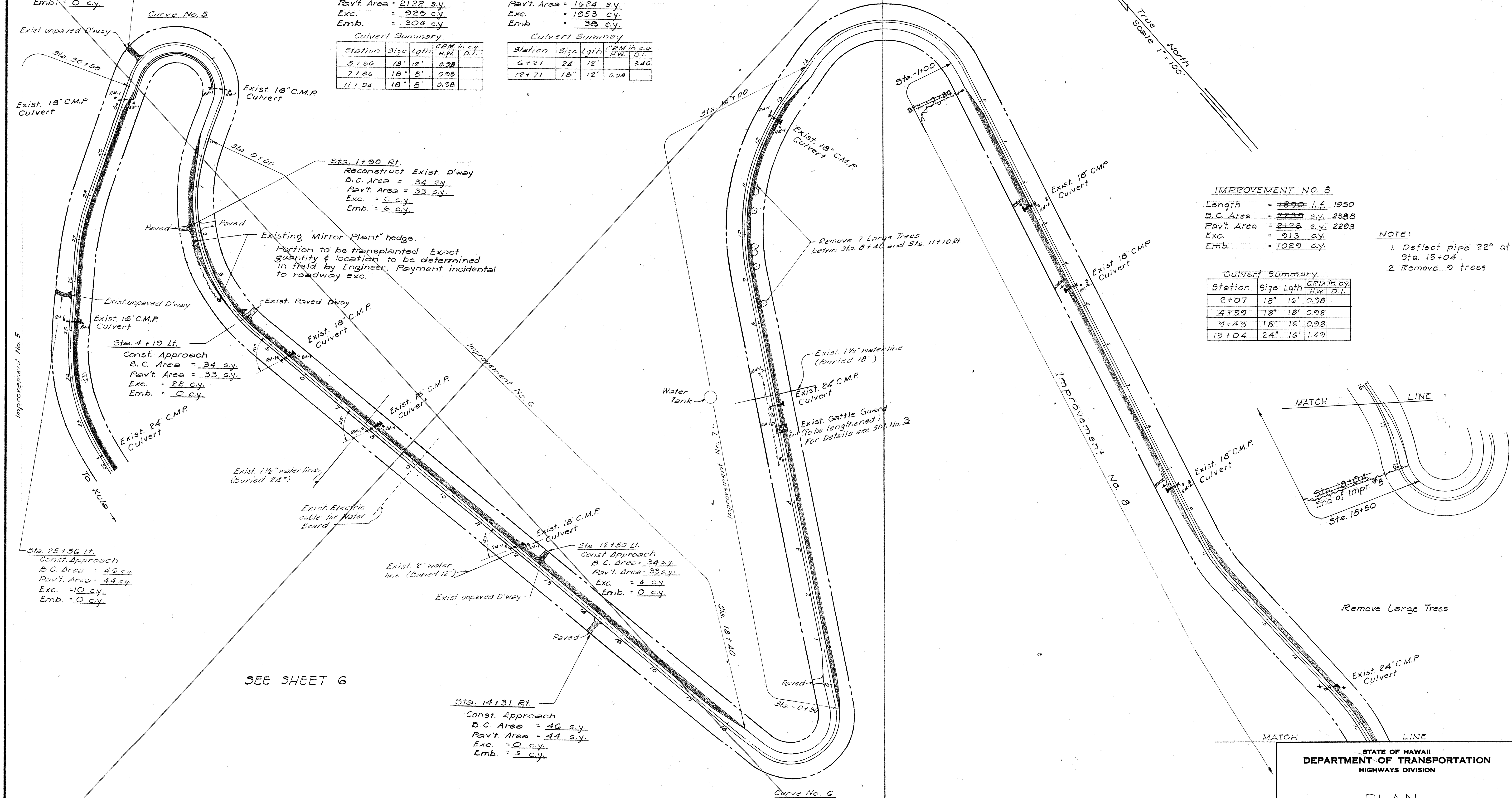
Station	Size	Lgth	C.M. in c.y.	
			H.W.	D.I.
5+36	18" 12'	0.98		
7+86	18" 8'	0.98		
11+24	18" 8'	0.98		

Culvert Summary

Station	Size	Lgth	C.M. in c.y.	
			H.W.	D.I.
6+21	24" 12'	3.40		
12+71	18" 12'	0.98		

Culvert Summary

Station	Size	Lgth	C.M. in c.y.	
			H.W.	D.I.
2+07	18" 16'	0.98		
4+59	18" 18'	0.98		
9+43	18" 16'	0.98		
15+04	24" 16'	1.49		



SEE SHEET 6

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN

HALEAKALA HIGHWAY
 PROJ. NO. 378A-02-67
 SCALE: 1"=100'

SHEET No. 2 OF 2 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL	
PLAN	
NOTE BOOK	
No.	