

GENERAL NOTES:

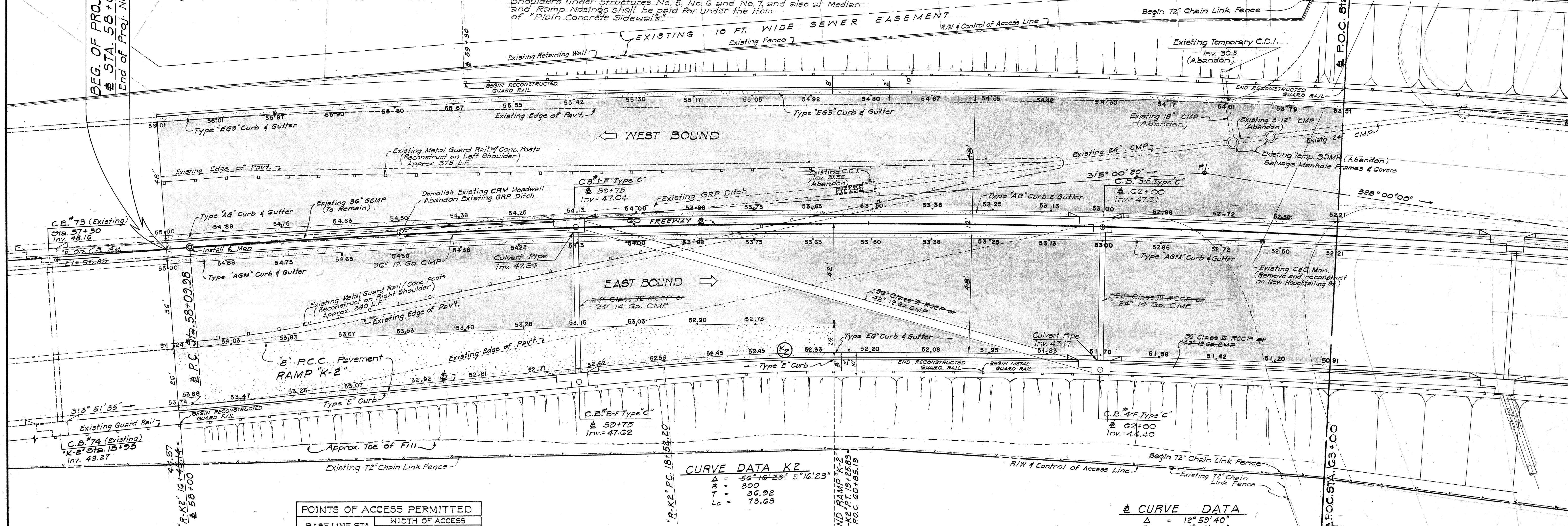
1. Azimuths and Coordinates referred to Punchbowl Trig Station.
2. Bench Mark referred to Mean Sea Level Datum.
3. For location of Bench Marks, See 50' Scale Roadway Plans.
4. All ends of abandoned drainage culverts shall be sealed with Brick Wall (set in cement mortar) of thickness equal to at least 1/2 the pipe diameter or 1/2 the box height. Brick Wall for sealing culverts will not be paid for separately, but shall be considered as incidental to the various contract pay items of culverts.
5. All existing Lava Rock and Precast Concrete Curbs shall be salvaged and neatly stockpiled within the project site as directed by the Engineer. (Stockpiling incidental to salvaging existing curbs)
6. Where concrete curbs change from one type to another type, the heights and faces of the concrete curbs, shall have transitions of not less than 20 feet, unless otherwise noted.
7. Top slab of catch basins shall be in line with the adjacent curbs and shall be sloped to the finished grade of sidewalk, shoulder, or median strip.

8. Electric and Telephone Poles in way of construction operation are to be moved by the respective owners.
9. For Profile of Private Driveways, see sheet No. 49 and 50
10. Salvaged 24" CMP Pipe will be paid for under Item G1, Remove, Clean and Relay Existing Culvert Pipe.
11. Buildings numbered thus (A) to (H) inclusive are to be demolished. See Special Provisions.
12. Existing road or other area paved with concrete or bituminous material which will underlie unpaved finish grade or area called for sodding or planting shall be scarified. The cost of scarifying shall be considered as incidental to the item of "Roadway Excavation."
13. When called for on plans or ordered by the Engineer, end of drainage culvert or opening provided in wall of drainage structure for culvert but to be left unconnected temporarily due to construction stages, shall be plugged with mortared cement brick wall of thickness equal to not less than 1/2 of the diameter or height of the culverts. Materials and work involved in constructing and removing of such brick wall plugs will not be paid for separately, but shall be considered incidental to and paid for under the respective item of culverts so plugged.
14. 4" P.C.C. as shown to be constructed on the Freeway Median and Shoulders under Structures No. 5, No. 6 and No. 7, and also at Median and Ramp Nosings shall be paid for under the item of "Plain Concrete Sidewalk."

NOTE:

The unfinished portion of the flashing compound on the existing retaining wall along the northeast R/W Line (constructed under Project No. U-072-1(7), Unit 3) between the beginning of this project to end of the wall (Sta. 58+00 to Sta. 62+55) shall be completed as directed by the Engineer. This item will not be paid for separately, but shall be considered as incidental to Item No. 46C "Concrete in Retaining Walls."

BEG. OF PROJ. No. U-072-1(3)
STA. 58+00
End of Proj. No. U-072-1(3)



CURVE DATA K2	
Δ	56°16'23" 5°16'23"
R	800
T	30.92
Lc	73.63

CURVE DATA	
Δ	12°59'40"
D	1°00'30"
R	3819.72
T	435.01
Lc	866.30

NOTE:

The existing 24" CMP between Sta. 61+00 to Sta. 67+00 to be salvaged and relaid elsewhere on the project as indicated on the plans or abandoned & plugged. See Section G1 of Special Provisions.

LEGEND:

Smooth Connection of A.C. Pavement

POINTS OF ACCESS PERMITTED		
BASE LINE STA.	WIDTH OF ACCESS	
	LEFT	RIGHT
64 + 90.26	80'	80'
71 + 64	17'	
73 + 85		18'
82 + 77		20'
86 + 50	40'	
91 + 43	27'	
94 + 51	18'	
94 + 63		78'
95 + 38	78'	
96 + 52	50'	
106 + 41		12'
106 + 45		12'
109 + 05	56'	
112 + 20	84'	
120 + 86	18'	
124 + 44.80	95'	58'

FARRINGTON HIGH SCHOOL

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII
DETAIL PLAN OF ROADWAY

STA. 58+00 to STA. 63+00
LUNALILO FREEWAY U-072-1(3)

Scale: 1" = 20'

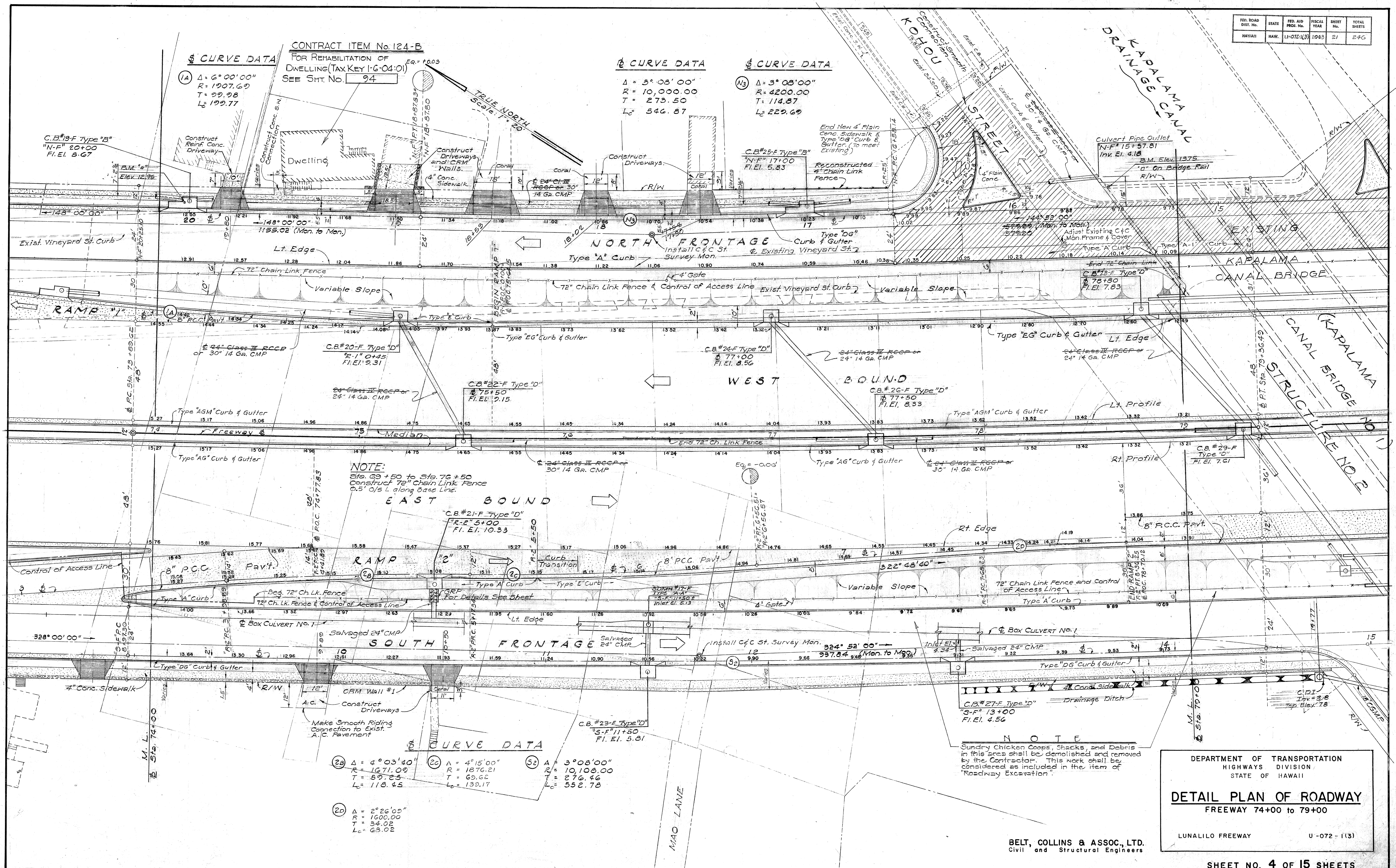
1963

SHEET NO. 1 OF 15 SHEETS

U07210300.18

21

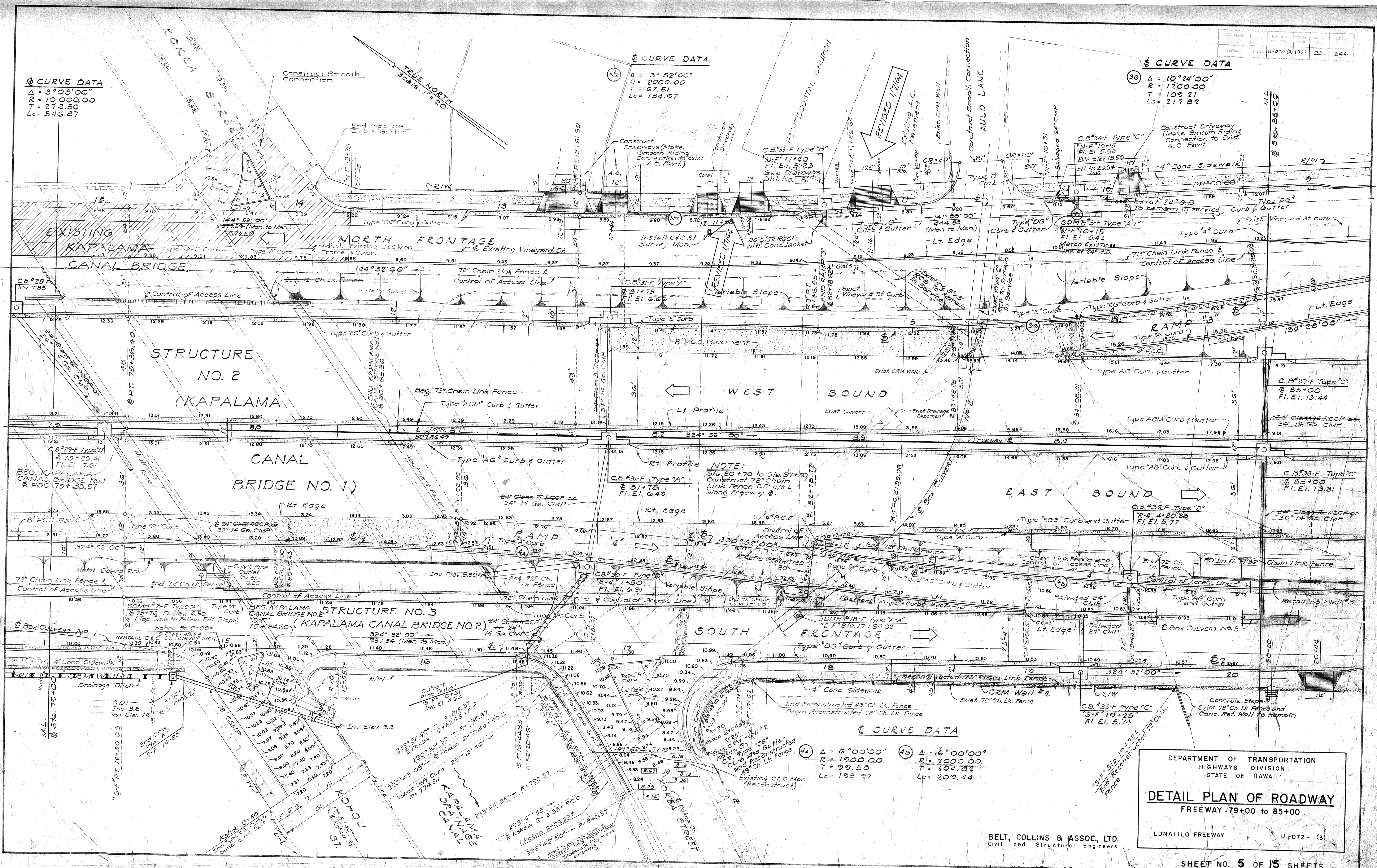
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAU.	U-072-1(3)	1963	21	246



10 CURVE DATA
 $\Delta = 3^{\circ}08'00''$
 $R = 10,000.00$
 $T = 273.50$
 $Lc = 546.87$

11 CURVE DATA
 $\Delta = 3^{\circ}52'00''$
 $R = 2000.00$
 $T = 67.51$
 $Lc = 134.97$

12 CURVE DATA
 $\Delta = 10^{\circ}24'00''$
 $R = 1200.00$
 $T = 109.21$
 $Lc = 217.82$



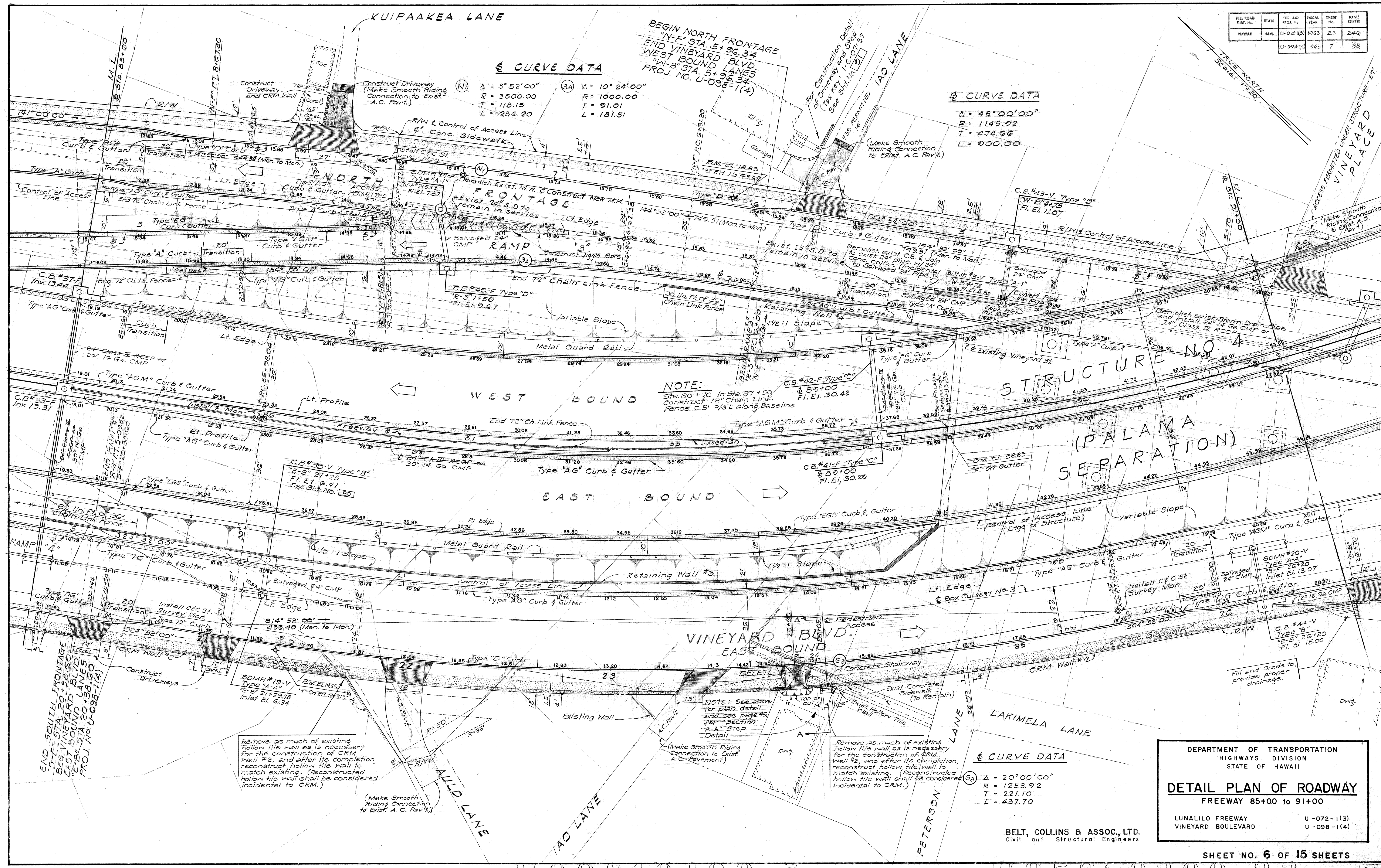
DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 STATE OF HAWAII

DETAIL PLAN OF ROADWAY
 FREEWAY 79+00 TO 85+00

LUNALILO FREEWAY U-072-113

BELT, COLLINS & ASSOC., LTD.
 Civil and Structural Engineers

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-072(3)	1963	23	249
		U-098(4)	1963	7	38



DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 QUANTITIES CHECKED BY: _____
 DATE: _____

DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 STATE OF HAWAII

DETAIL PLAN OF ROADWAY
 FREEWAY 85+00 to 91+00

LUNALILO FREEWAY U-072-1(3)
 VINEYARD BOULEVARD U-098-1(4)

BELT, COLLINS & ASSOC., LTD.
 Civil and Structural Engineers

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	RAV.	U-072-1(3)	1963	24	246
		U-098-1(4)	1963	8	88

LOCATION OF FIELD OFFICE
(SEE ARTICLE 6.0 OF THE SPECIAL PROVISION)

CONTRACT ITEM No. 124-S
FOR REHABILITATION OF OPEN AUTO
SHED AND CERTAIN IMPROVEMENTS AT
LIKELIKE SCHOOL (Tax Key: 1-2-08-21)
SEE SHEET 110

SDMH #5-F Type "A-1"
Palama St. 3+30
E.I. El. 20.34

SDMH #10-F
Type "A"
26+03
E.I. El. 21.50
Top El. 23.50

STRUCTURE NO. 4 (PALAMA SEPARATION)

NOTE:
The existing Banyan and Monkey Red Trees located
approx. 60 ft. right of Base Line Stations 95+10
and 96+13 shall be cut and removed 1.5 ft. below
top of existing ground grade.
Circular pits 1.5 ft. deep and of diameters equal
to "tree diameter plus 6 ft." shall be excavated,
and after removal of trees, be backfilled with
suitable material approved by the Engineer and
topped with 6" minimum thickness of top soil.
The above mentioned work shall not be paid for
separately, but shall be considered as included in
the item of "Roadway Excavation."

NOTE "A":
New A.C. Pavement section at reconstructed median
nosing at Vineyard Blvd. Sta. 87+00 shall have
12" selected Borrow, 8" untreated Base, and 4" A.C.
Pavement consisting of 2 1/2" Leveling Course Mix No.
II, and 1 1/2" surface Course Mix No. V

CURVE DATA		LEFT EDGE CURVE DATA	
54	Δ = 20°00'00" R = 600.00 T = 105.80 Lc = 209.44	55	Δ = 20°00'00" R = 300.00 T = 52.90 Lc = 104.72

CURB RETURN DATA	
5	Δ = 93°26'30" R = 50.00 T = 53.10 Lc = 31.54
6	Δ = 83°36'00" R = 50.00 T = 44.71 Lc = 72.96

CURVE DATA		CURVE DATA	
1	Δ = 45°00'00" R = 1145.92 T = 474.66 Lc = 900.00	2	Δ = 10°32'10" R = 1900.00 T = 175.19 Lc = 349.39

LEGEND:
Smooth connection of A.C. Pavement

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DETAIL PLAN OF ROADWAY
FREEWAY 91+00 to 96+50
LUNALILO FREEWAY U-072-1(3)
VINEYARD BOULEVARD U-098-1(4)

REVISED SEPT. 25, 1963

BELT, COLLINS & ASSOC. LTD.
Civil and Structural Engineers

SHEET NO. 7 OF 15 SHEETS

REVISED TRACING

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FED. AID DIST. NO.	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-072(1)	1063	25	246

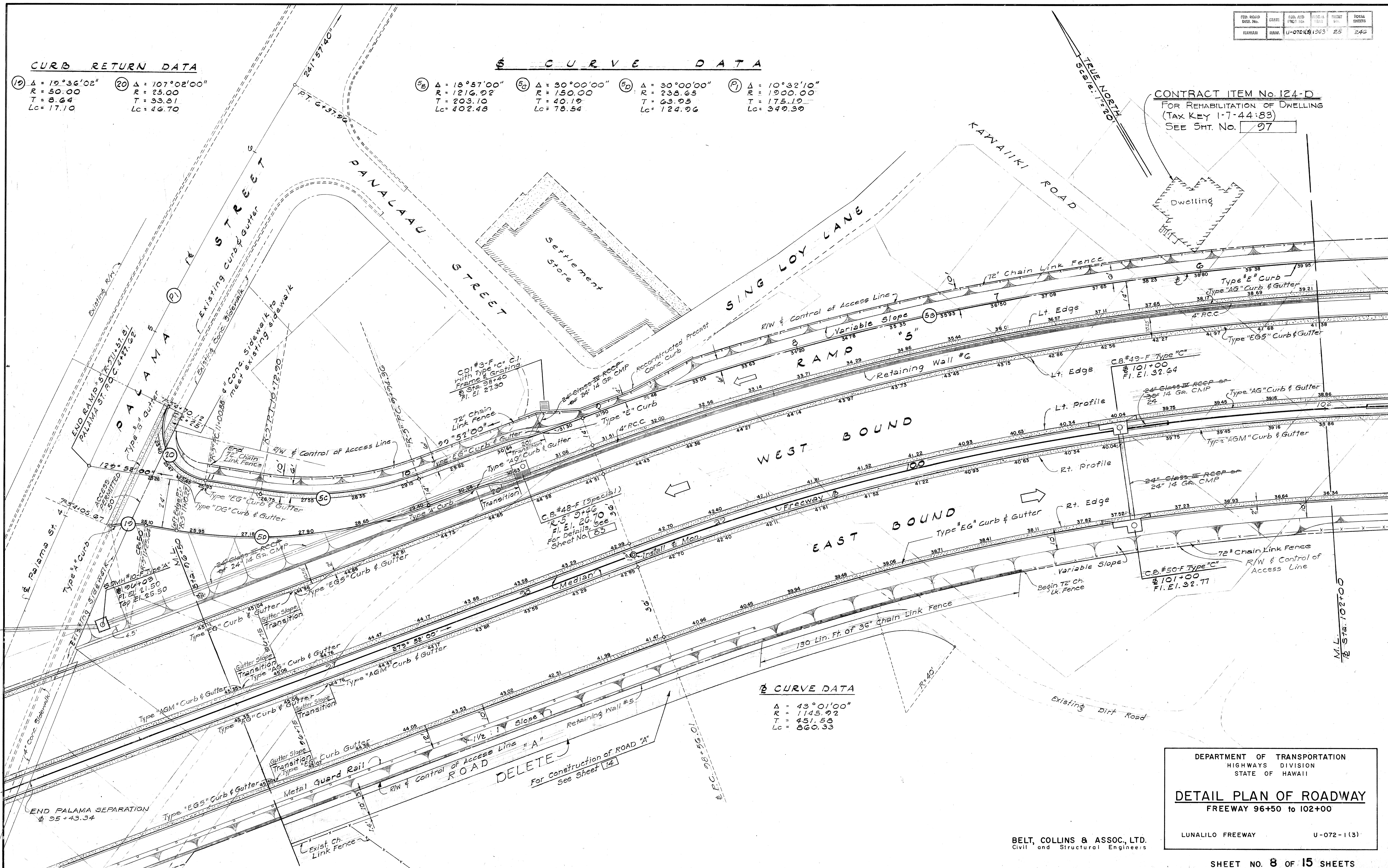
CURB RETURN DATA

⑩ $\Delta = 12^{\circ}36'02"$ $R = 50.00$ $T = 8.64$ $Lc = 17.10$	⑪ $\Delta = 107^{\circ}02'00"$ $R = 25.00$ $T = 33.81$ $Lc = 46.70$
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CURVE DATA

⑫ $\Delta = 18^{\circ}57'00"$ $R = 1216.92$ $T = 203.10$ $Lc = 402.48$	⑬ $\Delta = 30^{\circ}00'00"$ $R = 150.00$ $T = 40.19$ $Lc = 78.54$	⑭ $\Delta = 30^{\circ}00'00"$ $R = 238.65$ $T = 43.05$ $Lc = 124.96$	⑮ $\Delta = 10^{\circ}32'10"$ $R = 1900.00$ $T = 175.19$ $Lc = 340.39$
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CONTRACT ITEM No. 124-D
FOR REHABILITATION OF DWELLING
(TAX KEY 1-7-44:83)
SEE SHT. NO. 97



CURVE DATA

$\Delta = 43^{\circ}01'00"$ $R = 1145.92$ $T = 451.56$ $Lc = 860.33$

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DETAIL PLAN OF ROADWAY
FREEWAY 96+50 to 102+00

LUNALILO FREEWAY U-072-1(3)

BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

U07210300.25

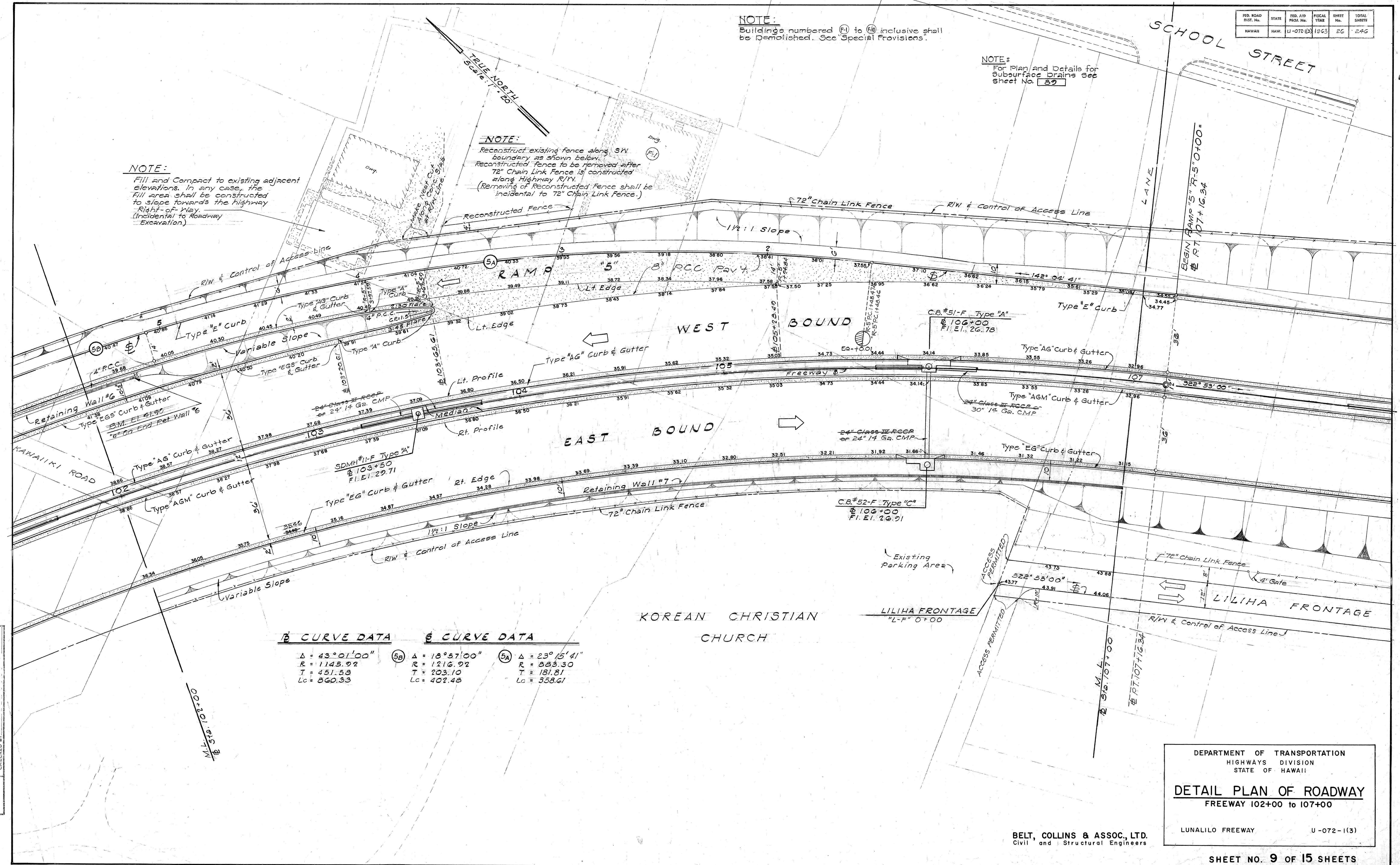
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	LI-072-1(3)	1963	26	246

NOTE:
Buildings numbered (F1) to (F4) inclusive shall be demolished. See "Special Provisions".

NOTE:
For Plan and Details for Subsurface Drains See Sheet No. 89

NOTE:
Fill and Compact to existing adjacent elevations. In any case, the fill area shall be constructed to slope towards the highway Right-of-Way (Incidental to Roadway Excavation)

NOTE:
Reconstruct existing fence along SW boundary as shown below.
Reconstructed fence to be removed after 72" Chain Link Fence is constructed along Highway R/W.
(Removing of Reconstructed Fence shall be incidental to 72" Chain Link Fence.)



B CURVE DATA			C CURVE DATA		
$\Delta = 43^{\circ} 01' 00"$	$R = 1145.92$	$T = 451.53$	$\Delta = 18^{\circ} 57' 00"$	$R = 1216.92$	$T = 203.10$
$Lc = 860.33$			$Lc = 402.43$		

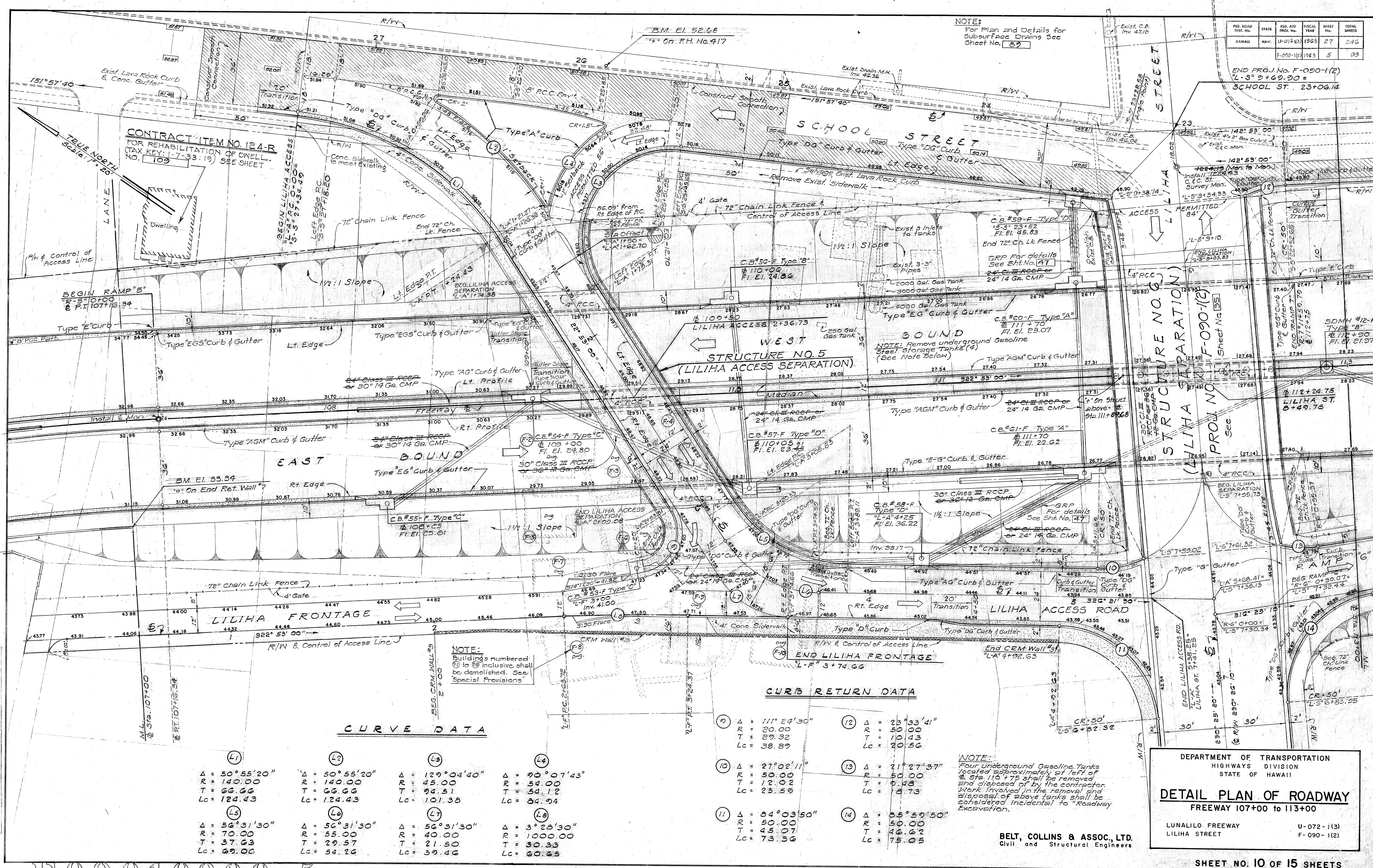
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DETAIL PLAN OF ROADWAY
FREEWAY 102+00 to 107+00

LUNALILO FREEWAY U-072-1(3)

BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

U07210300.26



NOTE:
For Plan and Details for
Subsurface Drains See
Sheet No. 69

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	U-072-1(3)	1963	27	246	
				5	93

END PROJ. NO. F-090-1(2)
L-3" 2+62.90 =
SCHOOL ST. 23+06.14

CONTRACT ITEM NO. 124-R
FOR REHABILITATION OF DWELL.
(TAX KEY: 1-7-33:19) SEE SHEET
NO. 109

NOTE:
Buildings numbered
(1) to (6) inclusive shall
be demolished. See
Special Provisions

CURB RETURN DATA

①	$\Delta = 111^{\circ}24'30''$ $R = 20.00$ $T = 89.32$ $Lc = 38.89$	⑫	$\Delta = 23^{\circ}33'41''$ $R = 50.00$ $T = 10.43$ $Lc = 20.56$
⑩	$\Delta = 27^{\circ}02'11''$ $R = 50.00$ $T = 12.02$ $Lc = 23.59$	⑬	$\Delta = 21^{\circ}27'37''$ $R = 50.00$ $T = 9.48$ $Lc = 18.73$
⑪	$\Delta = 84^{\circ}03'50''$ $R = 50.00$ $T = 45.07$ $Lc = 73.36$	⑭	$\Delta = 85^{\circ}59'50''$ $R = 50.00$ $T = 46.62$ $Lc = 75.05$

NOTE:
Four underground Gasoline Tanks
located approximately at left of
E. St. 110+75 shall be removed
and disposed of by the contractor.
Work involved in the removal and
disposal of above tanks shall be
considered incidental to "Roadway
Excavation."

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DETAIL PLAN OF ROADWAY
FREEWAY 107+00 to 113+00

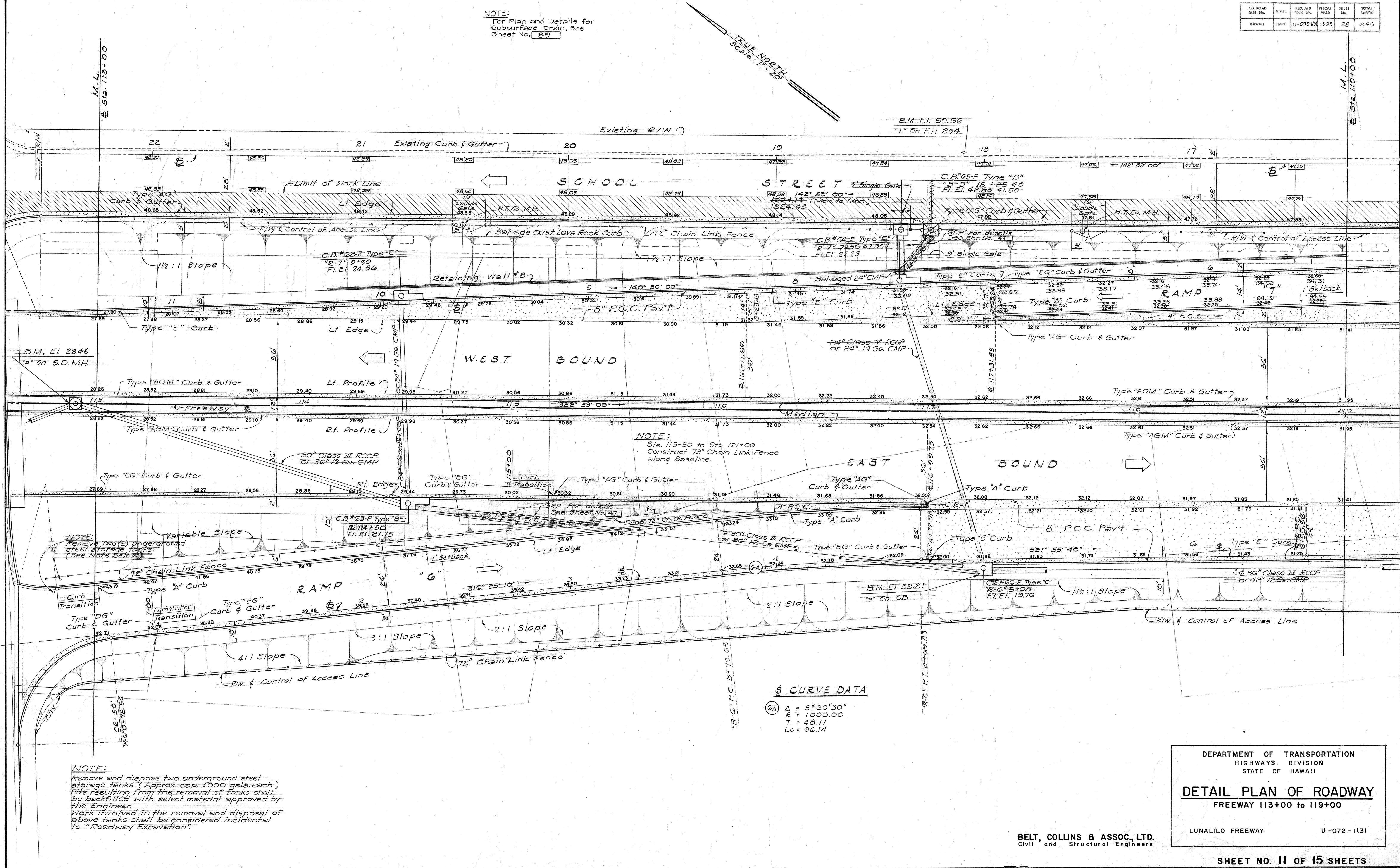
LUNALILO FREEWAY
LILIA STREET

U-072-1(3)
F-090-1(2)

DATE
DESIGNED BY
CHECKED BY
TRACED BY
QUANTITIES BY
NOTED BY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-072-1(3)	1953	23	246

NOTE:
For Plan and Details for
Subsurface Drain, See
Sheet No. 89



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

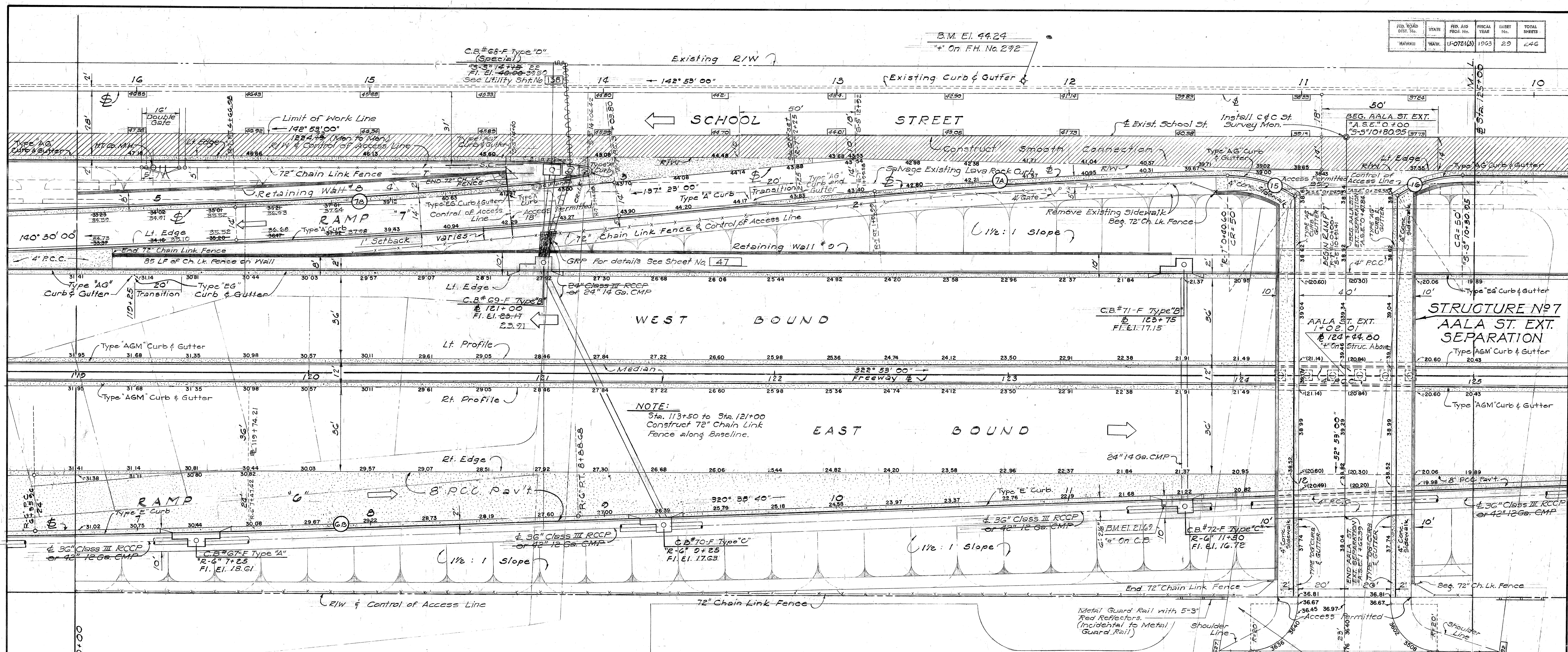
DETAIL PLAN OF ROADWAY
FREWAY 113+00 to 119+00

LUNALILO FREEWAY U-072-1(3)

BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

U07210300.28

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-0721(3)	1963	23	246



CURVE DATA

0°00"
00.00
36
71

(7A)

$\Delta = 5^\circ 30' 00''$
 $R = 2000.00$
 $T = 06.07$
 $L_c = 101.29$

(7B)

$\Delta = 3^\circ 07' 00''$
 $R = 3000.00$
 $T = 81.61$
 $L_c = 163.19$

CURB RETURN DATA

(15)

$\Delta = 35^\circ 13' 08''$
 $R = 50.00$
 $T = 15.87$
 $L_c = 30.73$

(16)

$\Delta = 34^\circ 03' 21''$
 $R = 50.00$
 $T = 15.31$
 $L_c = 29.72$

NOTE:
Typical Section of Temporary Connection shall be 2" A.C. Mix No. V over 6" Const. Base.

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

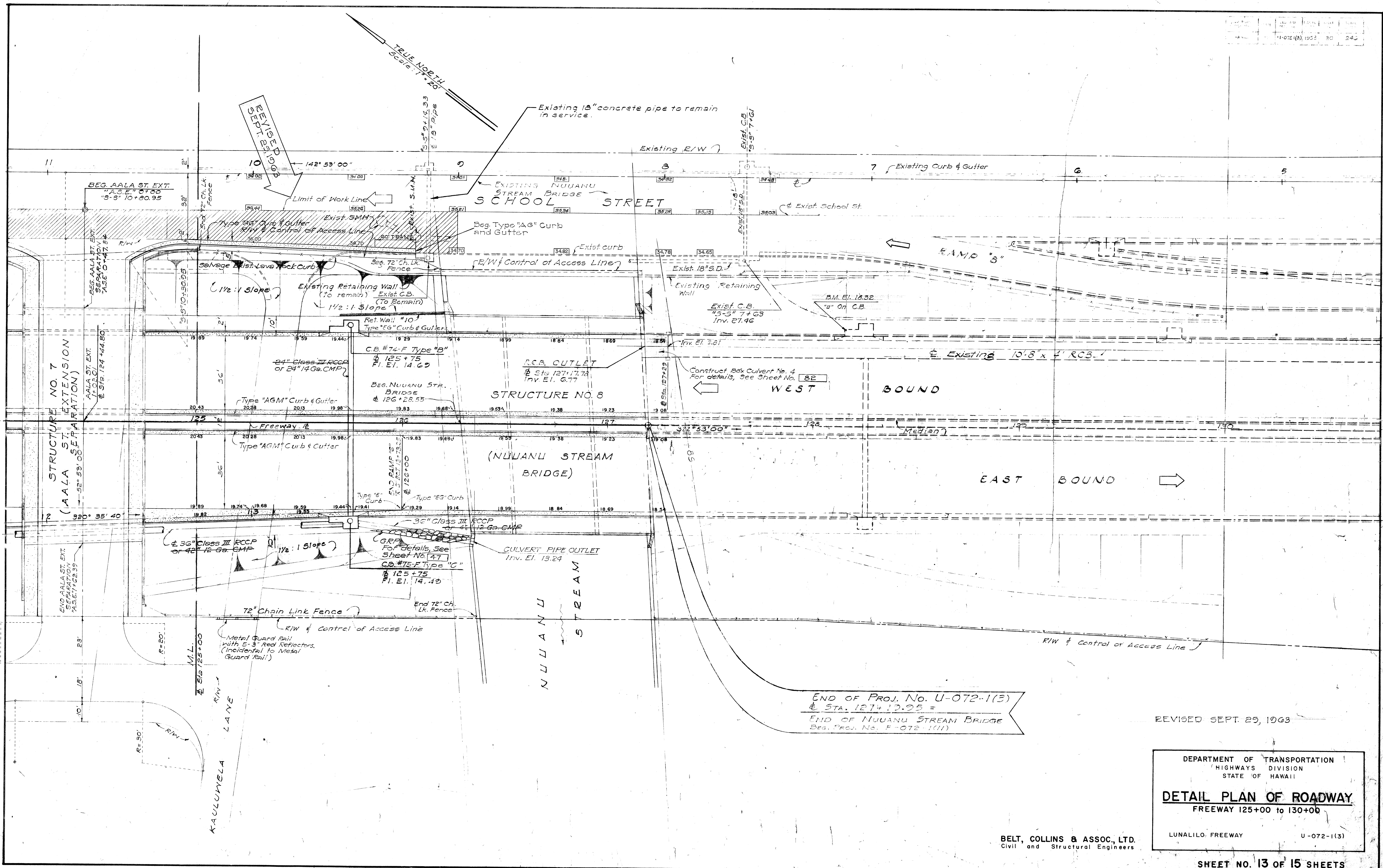
DETAIL PLAN OF ROADWAY
FREeway 119+00 to 125+00

LUNALILO FREEWAY U-072-1(3)

BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

DATE	11/1/63
DESIGNED BY	W. J. COLLINS
DRAWN BY	W. J. COLLINS
CHECKED BY	W. J. COLLINS
ORIGINAL PLAN	11/1/63
NOTE BOOK	11/1/63

DATE	11-07-11	BY	10/27/83	NO.	30	243
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END OF PROJ. No. U-072-1(3)
 & STA. 127+12.25 =
 END OF NUUANU STREAM BRIDGE
 Beg. Proj. No. U-072-1(1)

REVISED SEPT. 25, 1963

DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 STATE OF HAWAII

DETAIL PLAN OF ROADWAY
 FREEWAY 125+00 to 130+00
 LUNALILO FREEWAY
 U-072-1(3)

BELT, COLLINS & ASSOC., LTD.
 Civil and Structural Engineers