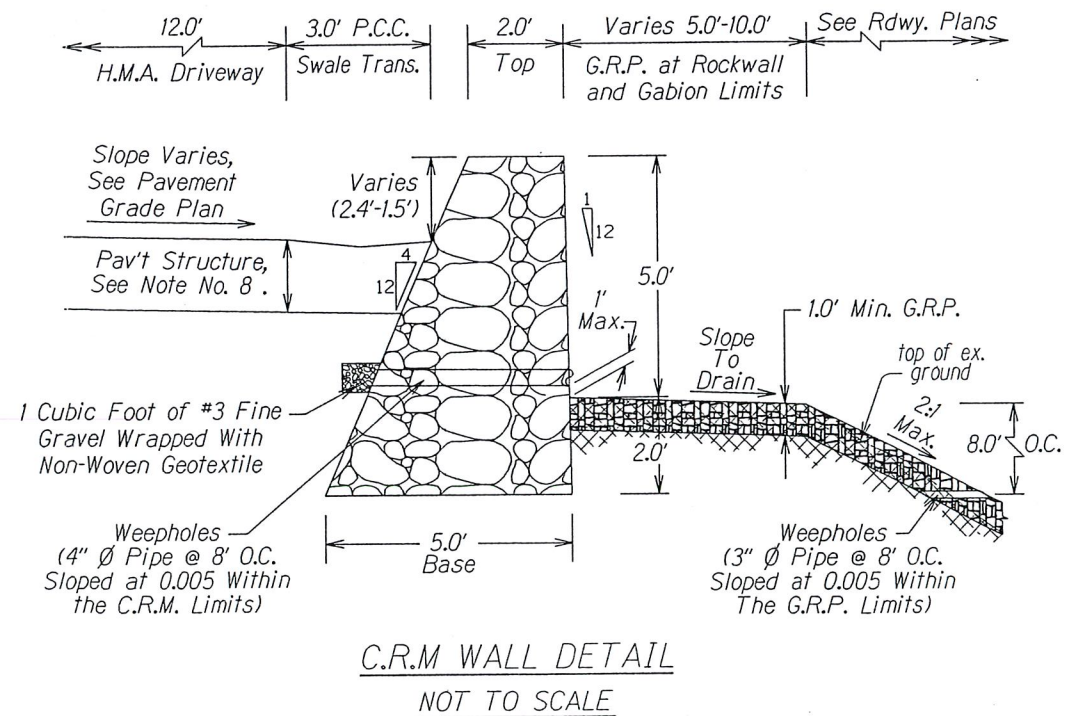
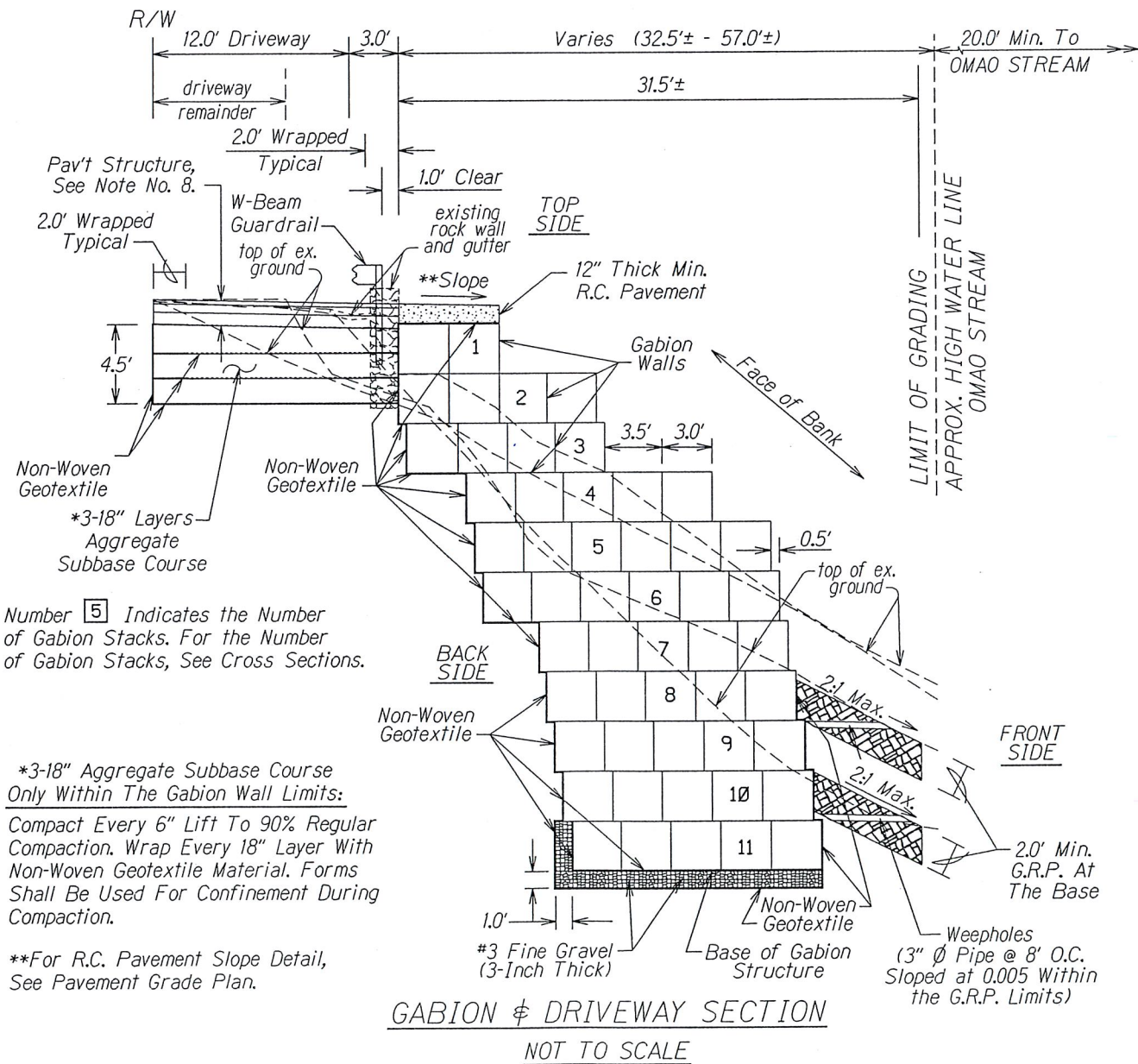
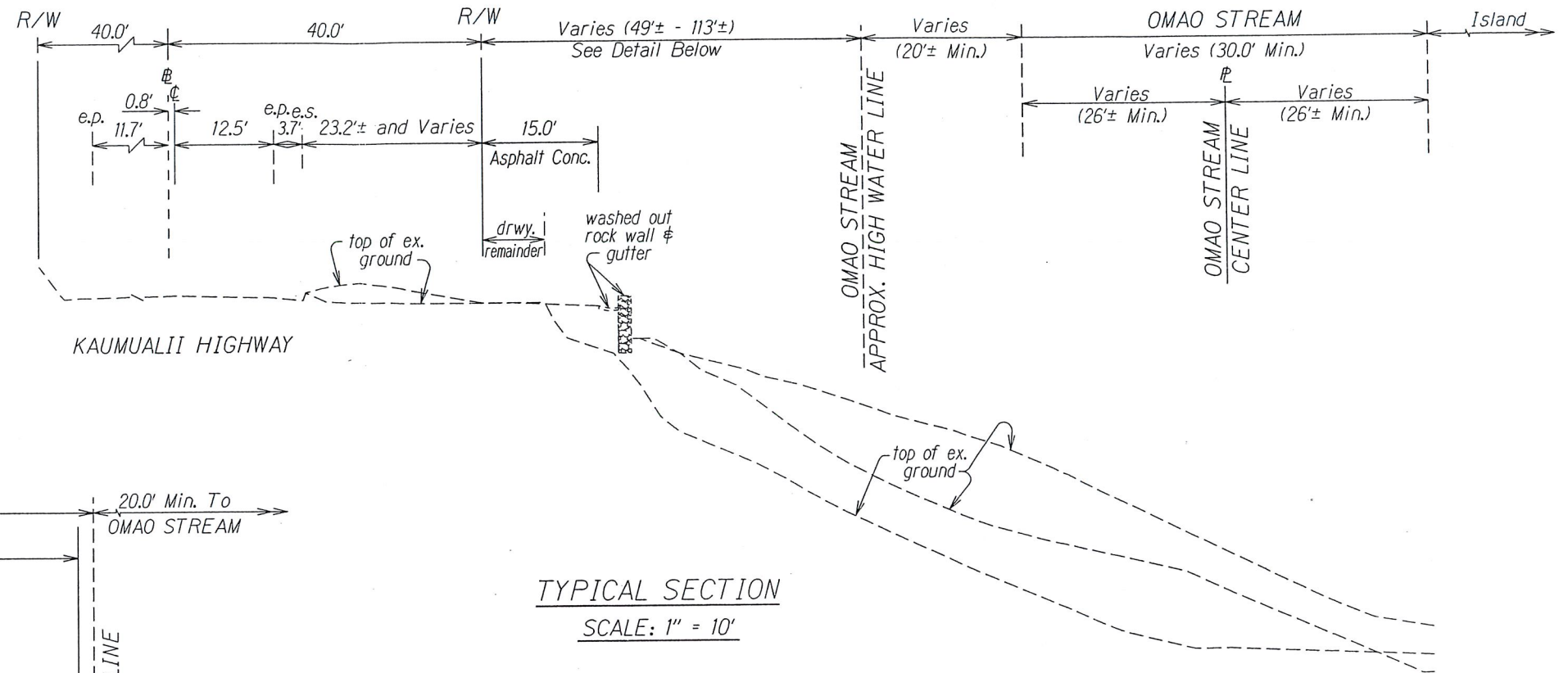
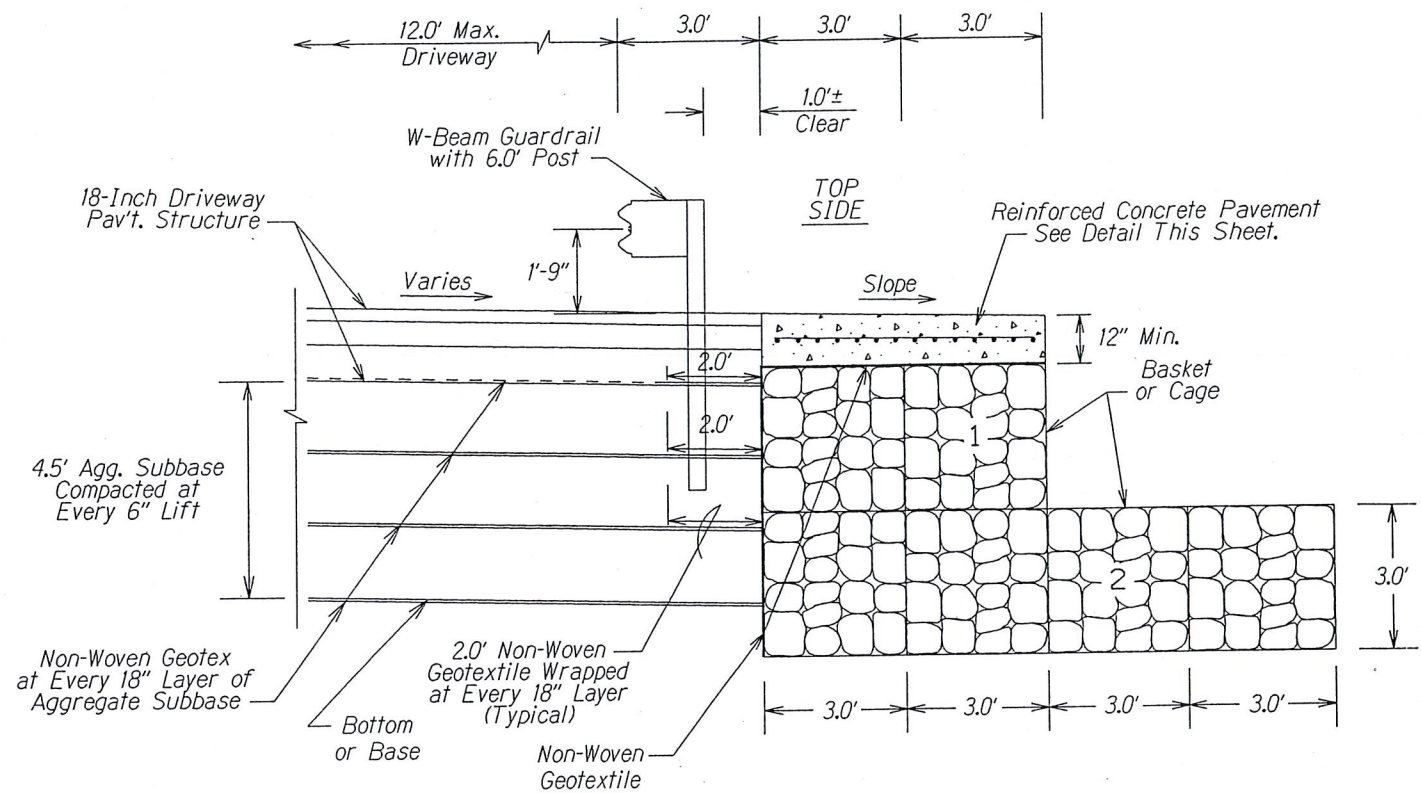


NOTES:

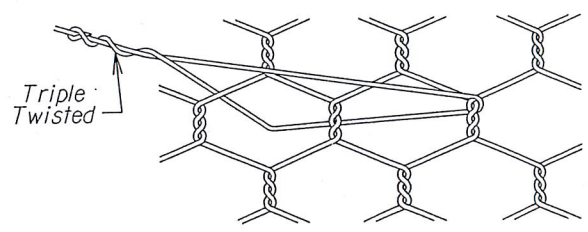
1. Remove and Dispose of Existing Gutter and Rock Wall Within the Limits of the Gabion Wall.
2. Except For the Exposed Face of Bank, Install and Anchor Continuous Non-woven Geotextile Material for All Sides of the Gabion Structure. All Non-woven Geotextile Material Seams shall be overlapped not less than 6 inches.
3. Install Lacing In Each Basket or Cage.
4. The Lid of the Lower Tier of Gabion Shall Form the Base of the Upper Gabion.
5. For The Number of Gabion Stacks and Grouted Rubble Paving (G.R.P.) Limits, See Roadway Plan.
6. For R.C. Pavement Reinforcement, See Plan Sheet No. 7.
7. Weepholes Shall Be: 3-Inch Diameter Pipe At 8 Feet On Center Within the G.R.P. Limits and 4-Inch Diameter Pipe At 8 Feet On Center for the C.R.M. Wall.
8. The New Driveway Pavement Structure Shall Consist of: 3-Inch HMA Pavement, Mix No. IV; 6-Inch Aggregate Base Course; and 9-Inch Aggregate Subbase Course.
9. For New Driveway and Guardrail Locations, See Roadway Plan.



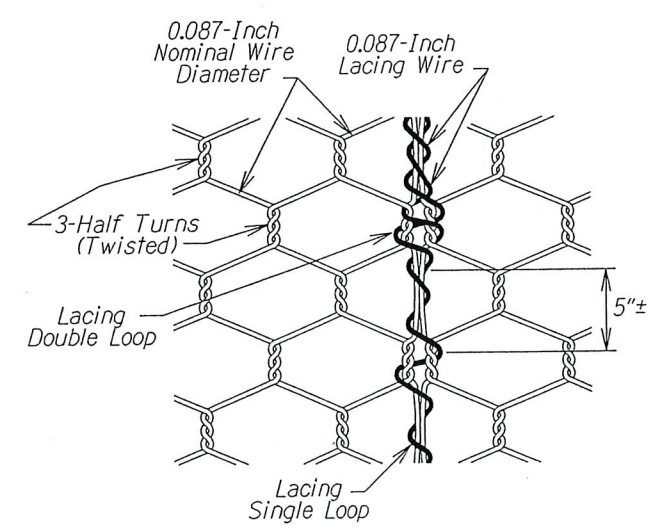
1/07/08	Replaced Sheet for Clarity.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
TYPICAL SECTION & DETAILS	
KAUMUALII HIGHWAY SLOPE STABILIZATION AT PUNEE ROAD	
FEDERAL-AID PROJECT NO.: ER-14(3)	
Scale As Noted	Date: Sept, 2007
SHEET No. 1 OF 2 SHEETS	



GUARDRAIL & GABION DETAIL
NOT TO SCALE



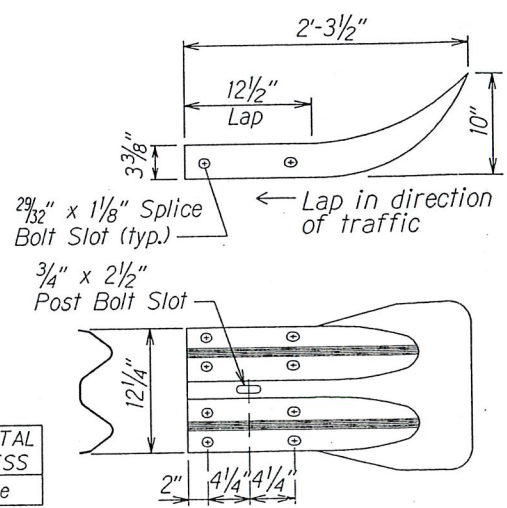
CELL CONNECTING WIRES DETAIL
NOT TO SCALE



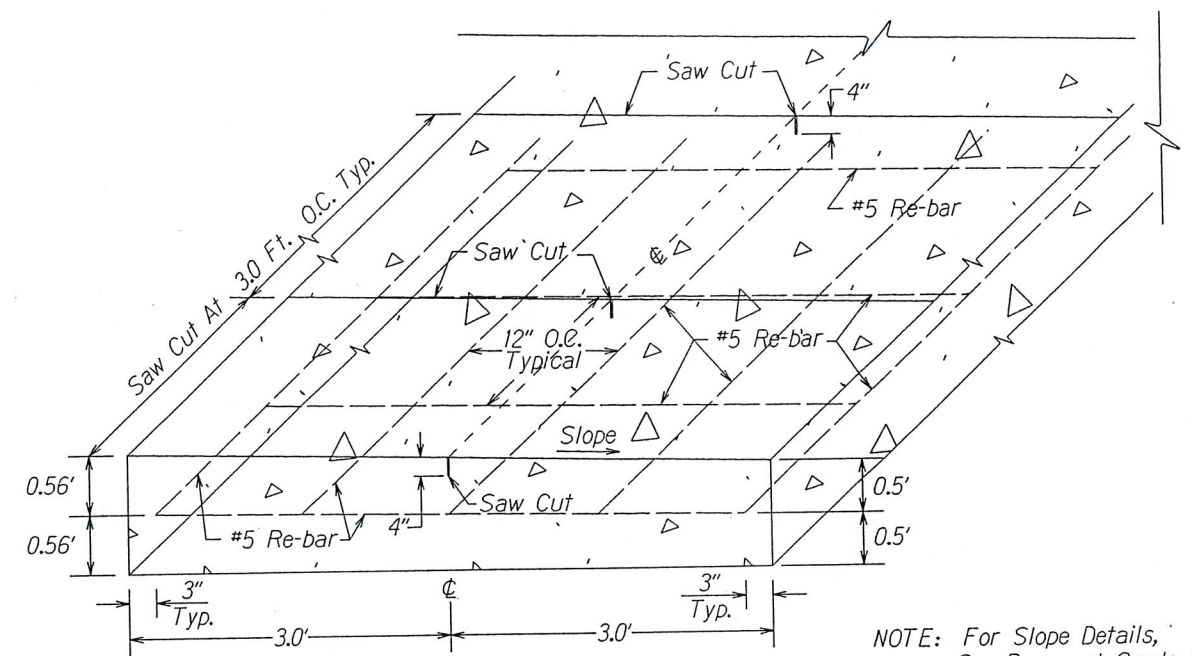
MESH & LACING DETAIL
NOT TO SCALE

The cross-sectional dimensions for this part are to fit over part RWM02a on the approach end and under part RWM02a on the trailing end.

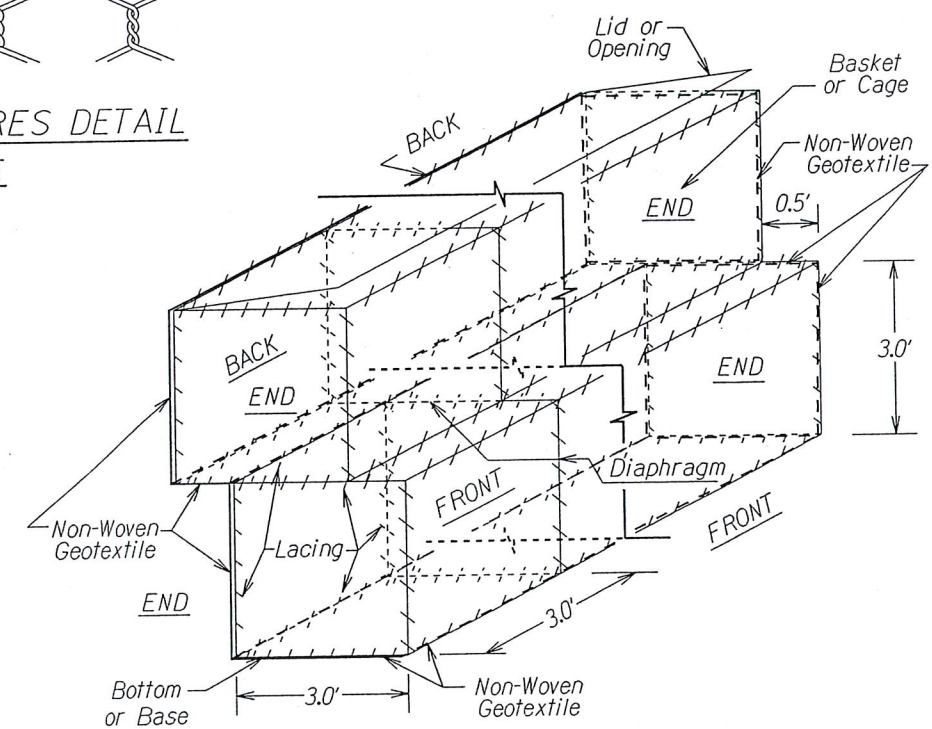
DESIGNATOR	BASE METAL THICKNESS
RWE01a	12 Gauge



W-BEAM END SECTION (FLARED RWE01a)
NOT TO SCALE



REINFORCED CONCRETE PAVEMENT DETAIL
NOT TO SCALE



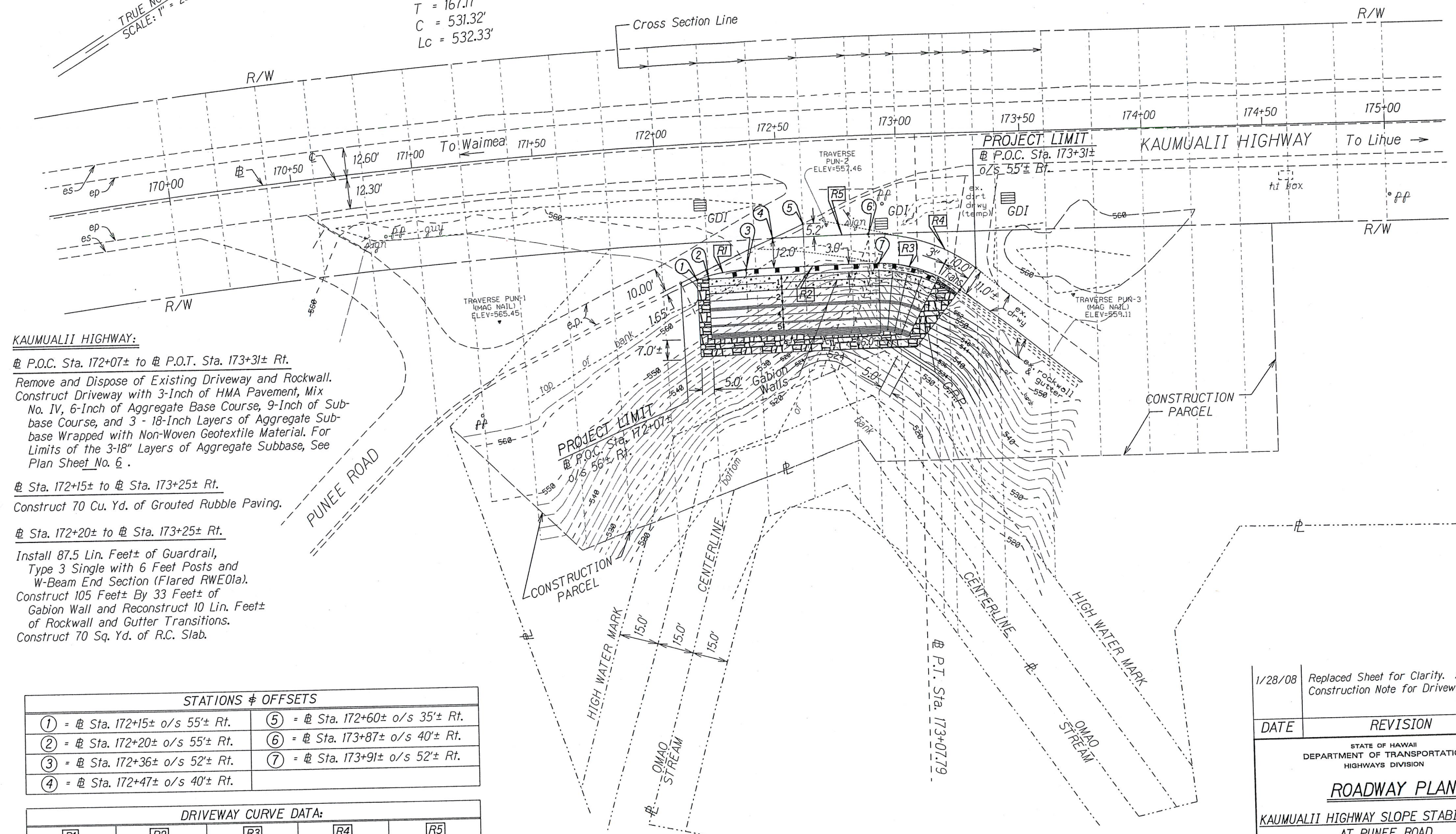
BASKET or CAGE DETAIL
NOT TO SCALE

1/07/08	Replaced Sheet for Clarity. Revised Detail Title to Read, "W-Beam End Section (Flared RWE01a)."
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
TYPICAL SECTION & DETAILS	
KAUAI HIGWAY SLOPE STABILIZATION AT PUNEE ROAD	
FEDERAL-AID PROJECT NO.: ER-14(3)	
Scale As Noted	Date: Sept, 2007
SHEET No. 2 OF 2 SHEETS	

DATE	09/27/07
DESIGNED BY	WJ
DRAWN BY	WJ
CHECKED BY	WJ
NOTED BY	WJ
QUANTITIES BY	WJ
ORIGINAL PLAN	WJ

TRUE NORTH
SCALE: 1" = 20'

CURVE DATA:
 $\Delta = 12^\circ 12' 00.00''$
 $R = 2,500.00'$
 $T = 167.17'$
 $C = 531.32'$
 $Lc = 532.33'$



KAUMUALII HIGHWAY:

From P.O.C. Sta. 172+07± to P.O.T. Sta. 173+31± Rt.

Remove and Dispose of Existing Driveway and Rockwall. Construct Driveway with 3-Inch of HMA Pavement, Mix No. IV, 6-Inch of Aggregate Base Course, 9-Inch of Sub-base Course, and 3 - 18-Inch Layers of Aggregate Sub-base Wrapped with Non-Woven Geotextile Material. For Limits of the 3-18" Layers of Aggregate Subbase, See Plan Sheet No. 6.

From Sta. 172+15± to Sta. 173+25± Rt.

Construct 70 Cu. Yd. of Grouted Rubble Paving.

From Sta. 172+20± to Sta. 173+25± Rt.

Install 87.5 Lin. Feet± of Guardrail, Type 3 Single with 6 Feet Posts and W-Beam End Section (Flared RWE01a). Construct 105 Feet± By 33 Feet± of Gabion Wall and Reconstruct 10 Lin. Feet± of Rockwall and Gutter Transitions. Construct 70 Sq. Yd. of R.C. Slab.

STATIONS & OFFSETS

① = Sta. 172+15± o/s 55'± Rt.	⑤ = Sta. 172+60± o/s 35'± Rt.
② = Sta. 172+20± o/s 55'± Rt.	⑥ = Sta. 173+87± o/s 40'± Rt.
③ = Sta. 172+36± o/s 52'± Rt.	⑦ = Sta. 173+91± o/s 52'± Rt.
④ = Sta. 172+47± o/s 40'± Rt.	

DRIVEWAY CURVE DATA:

R1	R2	R3	R4	R5
$\Delta = 23^\circ 48' 21''$	$\Delta = 01^\circ 16' 09''$	$\Delta = 39^\circ 43' 49''$	$\Delta = 38^\circ 31' 27''$	$\Delta = 00^\circ 55' 05''$
R = 66.60'	R = 2,448.00'	R = 51.32'	R = 70.00'	R = 2,460.00'
T = 14.03'	T = 27.12'	T = 18.54'	T = 24.46'	T = 19.70'
Lc = 27.65'	Lc = 54.23'	Lc = 35.59'	Lc = 47.07'	Lc = 39.40'

NOTE:
For Drainage Structures, See Drainage Plans.

1/28/08 Replaced Sheet for Clarity. Added Construction Note for Driveway Limits.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
KAUMUALII HIGHWAY SLOPE STABILIZATION
AT PUNEE ROAD

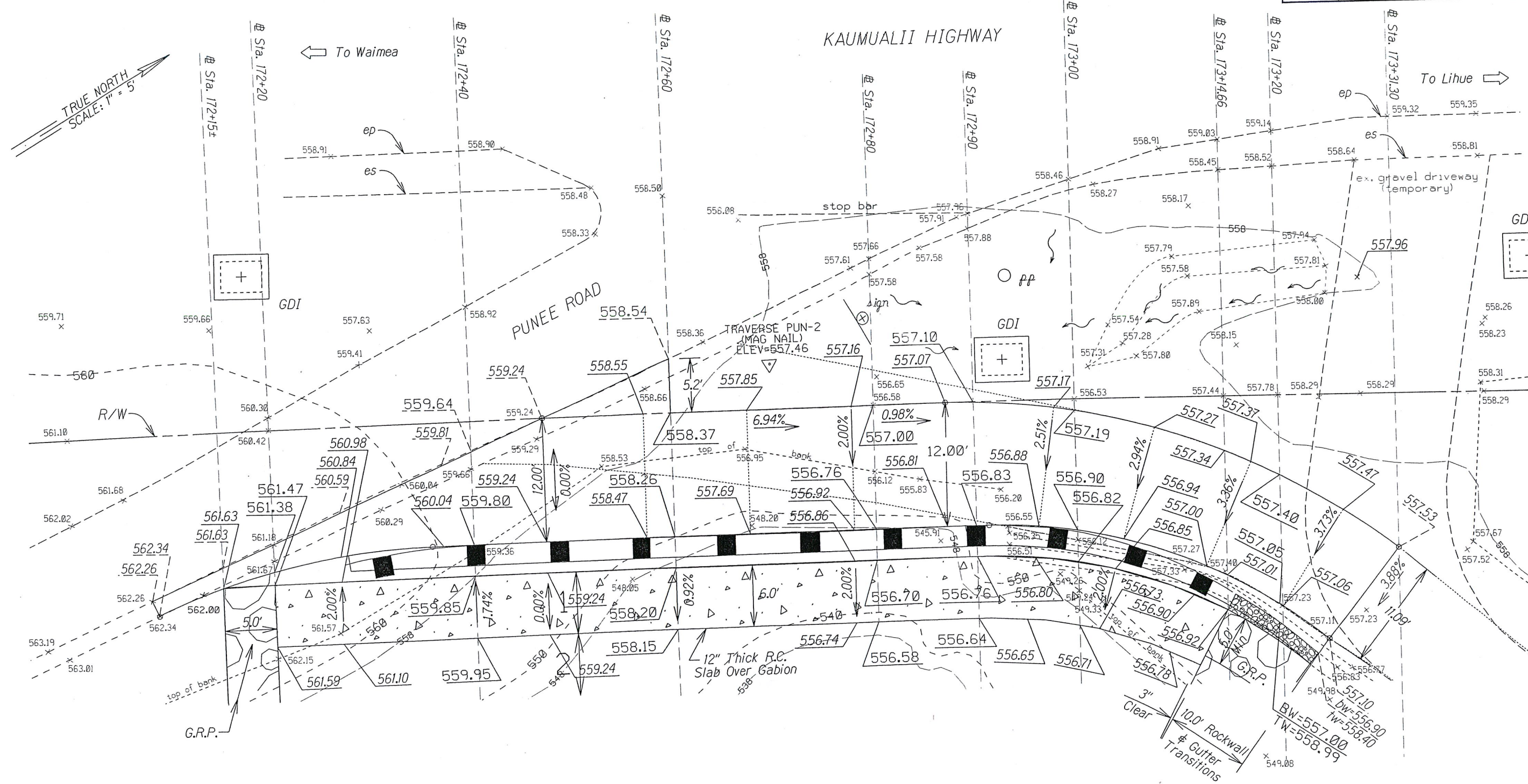
FEDERAL-AID PROJECT NO.: ER-14(3)

Scale: 1" = 20' Date: Sept, 2007

SHEET No. 1 OF 1 SHEETS

ADD. 8

DATE 09/27/07
 SURVEY PLOTTED BY 104.16
 DRAWN BY 104.16
 DESIGNED BY 104.16
 CHECKED BY 104.16
 ORIGINAL PLAN
 NOTE BOOK
 104.16
 104.16
 104.16



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	10/05/07	
NOTE BOOK	DRAWN BY	
	10/25/07	
QUANTITIES BY	DESIGNED BY	
	10/25/07	
CHECKED BY		

1/07/08 Replaced Sheet for Clarity.

DATE	REVISION
------	----------

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT GRADE PLAN

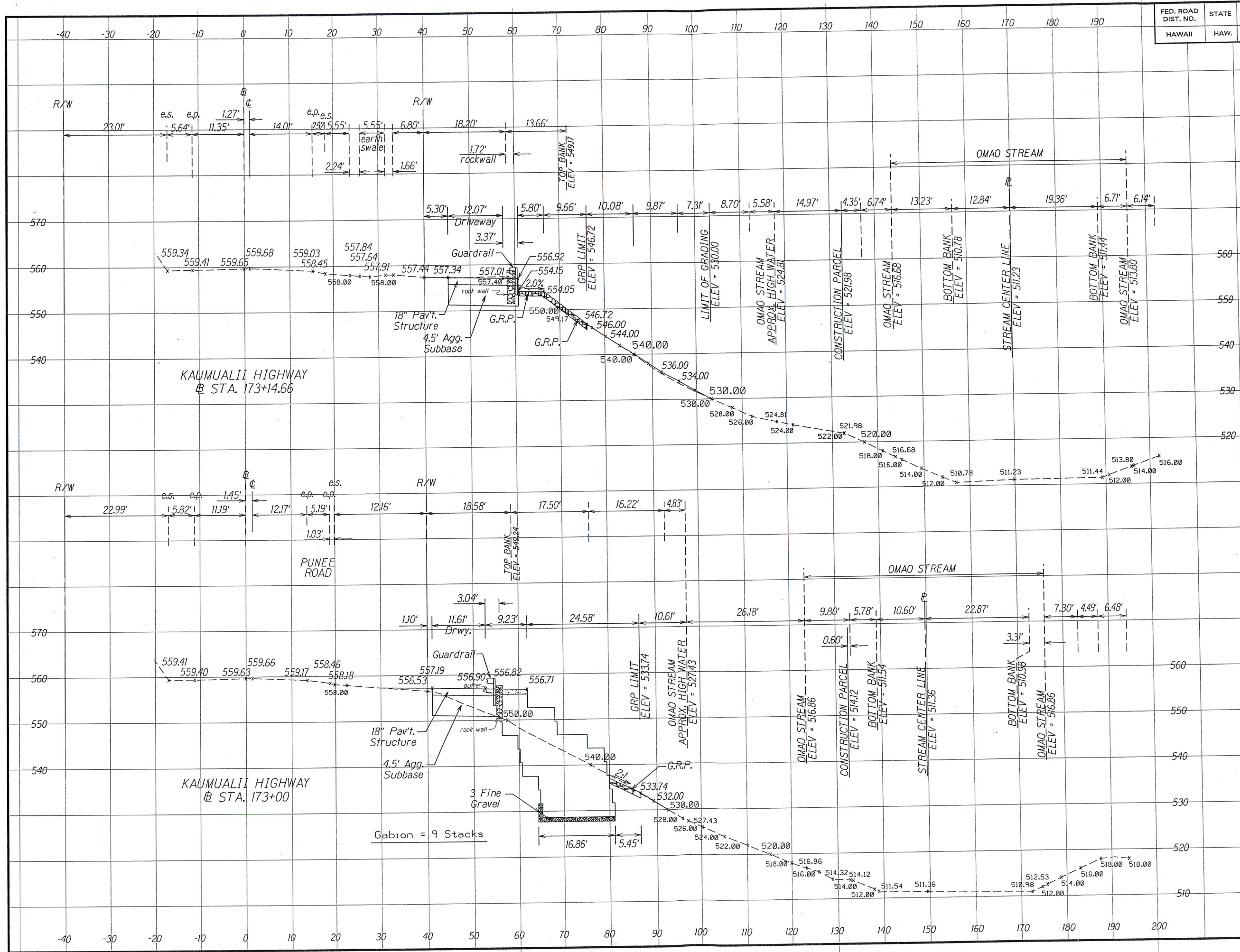
KAUMUALII HIGHWAY SLOPE STABILIZATION
AT PUNEE ROAD

FEDERAL-AID PROJECT NO.: ER-14(3)

Scale: 1" = 5' Date: Sept, 2007

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-14(3)	2008	ADD. 13	18



Rdwy Ex = 41 Cu Yd
Struc Ex = 90 Cu Yd

Rdwy Ex = 20 Cu Yd
Struc Ex = 119 Cu Yd

Scale: 1" = 10' Hor.
1" = 10' Ver.

1/07/08 Replaced Sheet for Clarity.

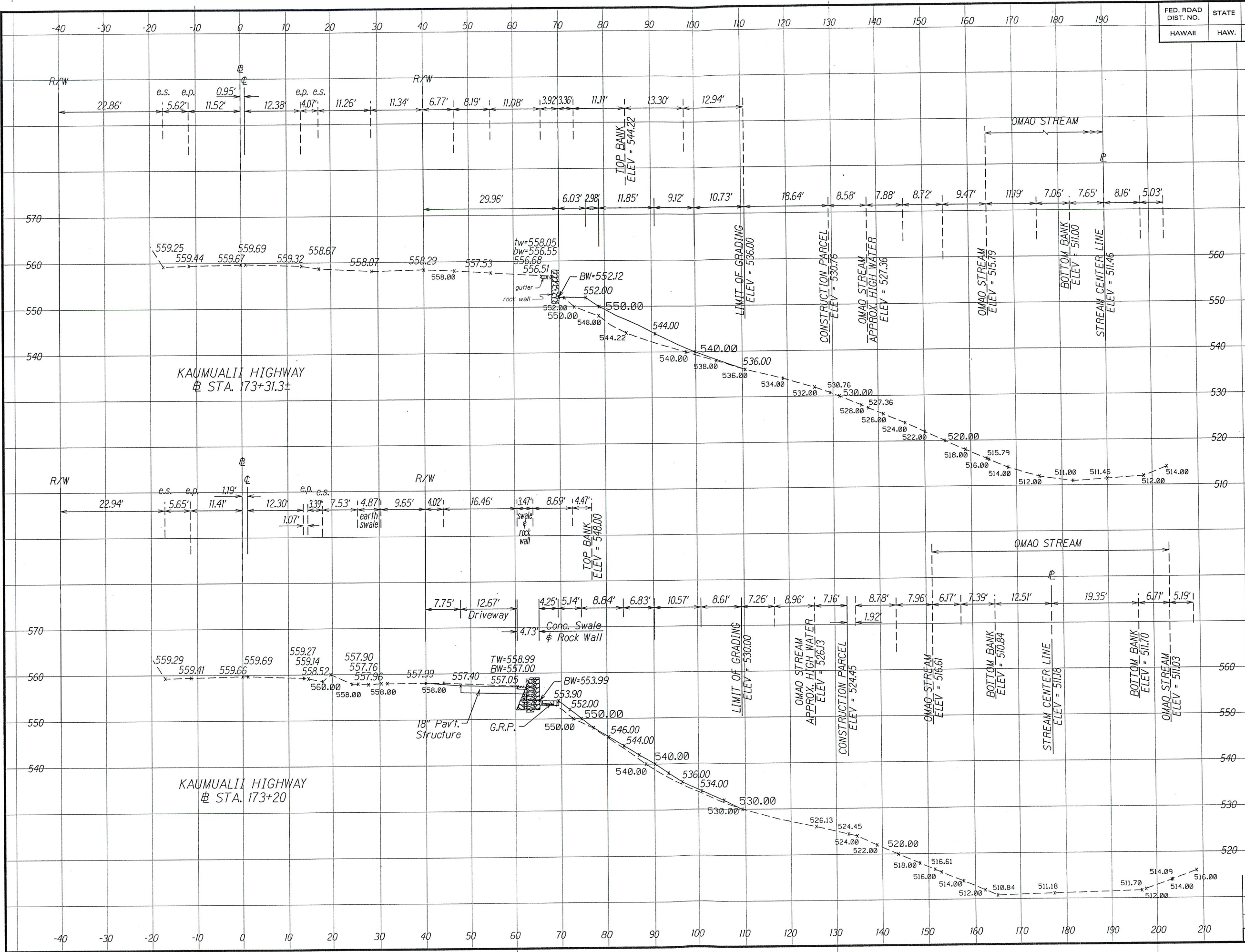
DATE	REVISION
SHEET No. 4 OF 6	SHEETS

ADD. 13

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DATE 08/09/07
10/27/06
10/27/06
10/27/06
10/27/06

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-14(3)	2008	ADD. 14	18



Rdwy Ex = 6 Cu Yd
Struc Ex = 2 Cu Yd

Rdwy Ex = 14 Cu Yd
Struc Ex = 3 Cu Yd

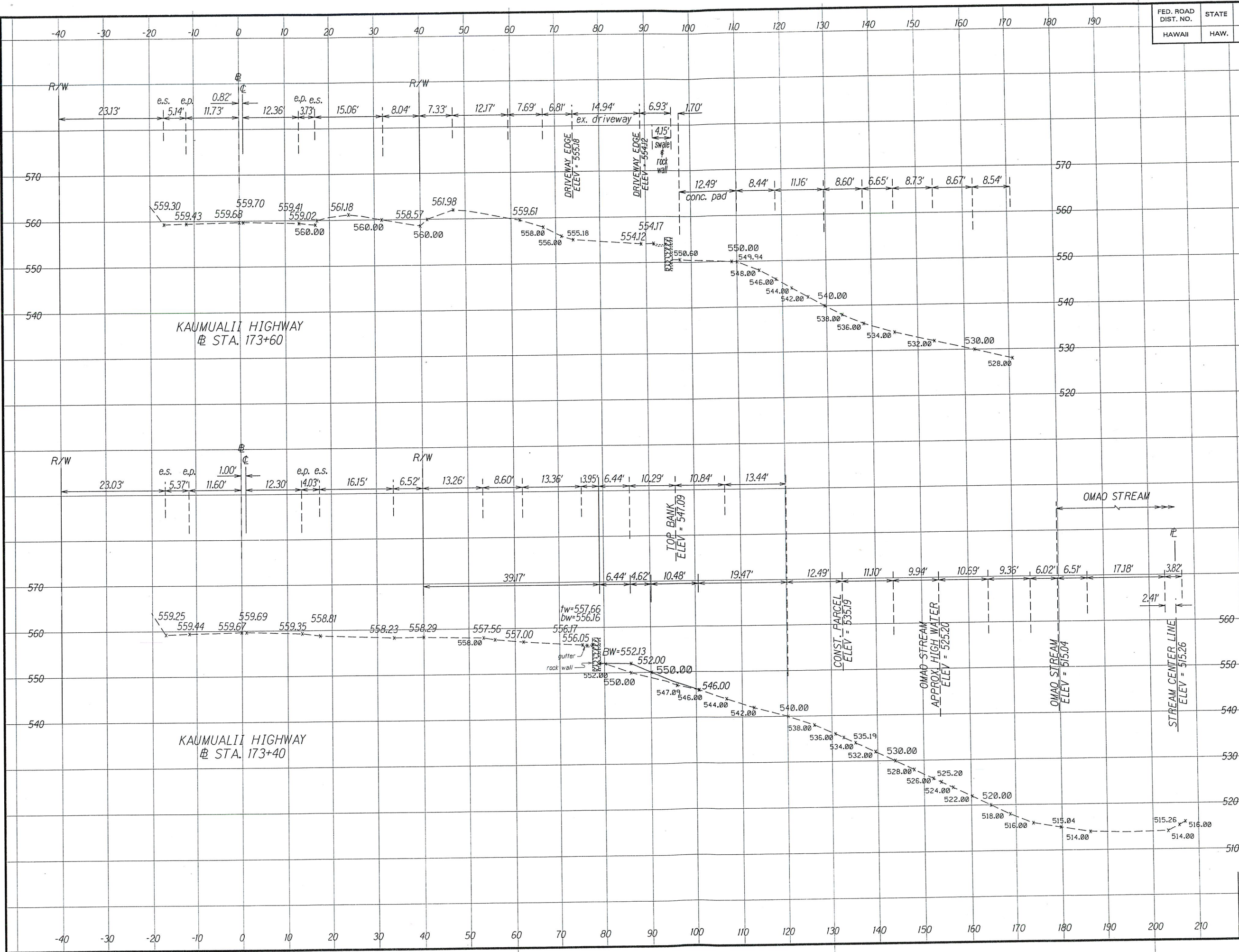
Scale: 1" = 10' Hor.
1" = 10' Ver.

11/07/08 Replaced Sheet for Clarity.

DATE	REVISION
SHEET No. 5	OF 6 SHEETS

ORIGINAL PLAN
DATE 08/08/07
DRAWN BY J.S.M.
CHECKED BY J.S.M.
NOTE BOOK
QUANTITIES BY J.S.M.
CHECKED BY J.S.M.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-14(3)	2008	ADD. 15	18



Rdwy Exc = 0 Cu Yd
Struc Exc = 0 Cu Yd

Rdwy Exc = 1 Cu Yd
Struc Exc = 0 Cu Yd

Scale: 1" = 10' Hor.
1" = 10' Ver.

1/07/08 Replaced Sheet for Clarity.

DATE	REVISION
SHEET No. 6	OF 6 SHEETS

ORIGINAL PLAN
DATE 08/12/07
DRAWN BY J.S.M.
NOTED BY M.Q.
CHECKED BY J.S.M.
DESIGNED BY J.S.M.

ADD. 15