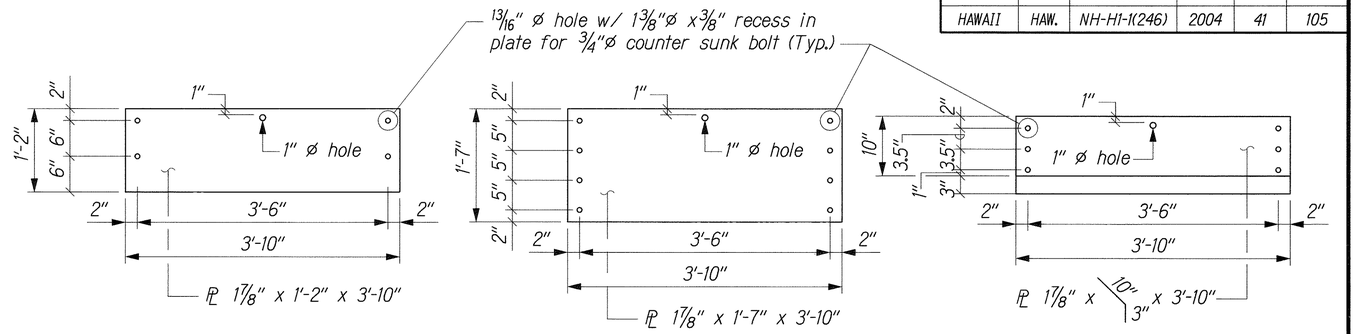
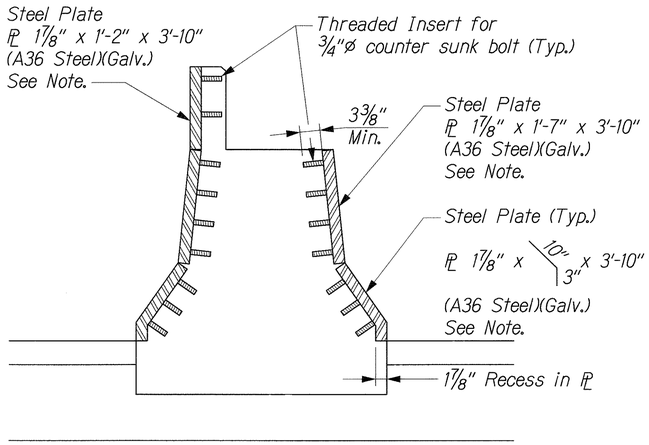
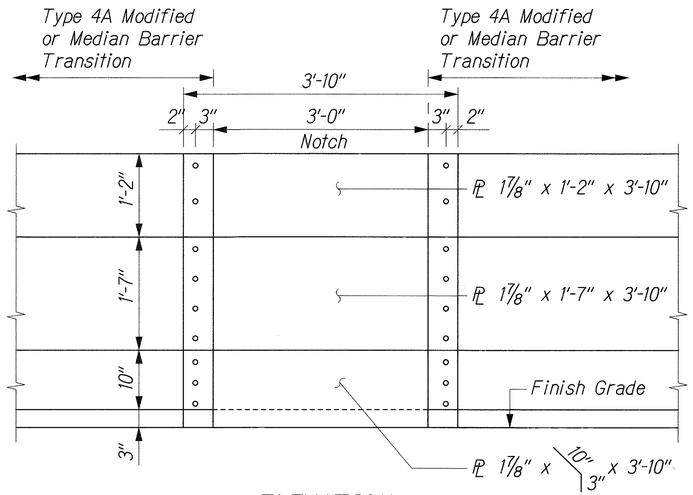
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(246)	2004	41	105



STEEL PLATE COVER DETAILS



TYPICAL SECTION



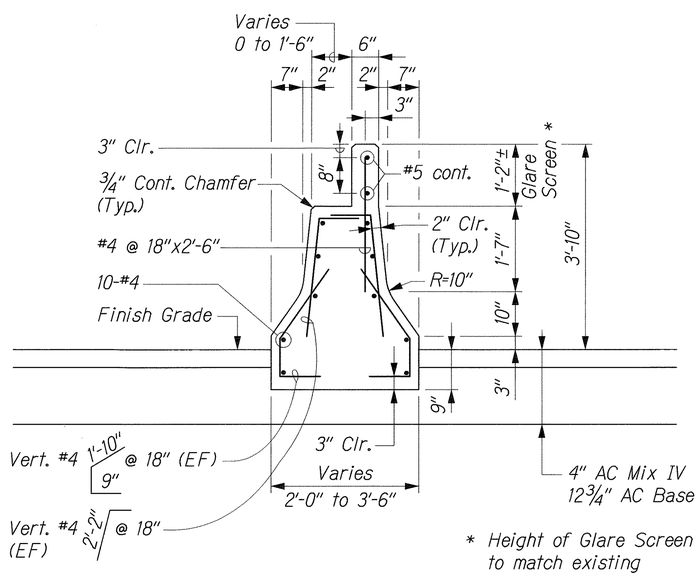
ELEVATION

METAL PLATE CONNECTION DETAILS

Scale: 1" = 1'-0"

NOTE:

Steel Cover Plate, Counter Sunk Bolts, and inserts will be considered incidental to the various items of the contract.



* Height of Glare Screen to match existing

GUARDRAIL TYPE 4A MODIFIED

Scale: 3/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
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No.	CHECKED BY	

J:\ZIPPER EXTENSION\ROAD\RCDET-01.dgn

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PERRY M. SMALL
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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1 ZIPPER LANE EXTENSION
RADFORD DRIVE OVERPASS TO KEEHI INTERCHANGE
FEDERAL AID PROJECT NO. NH-H1-1(246)

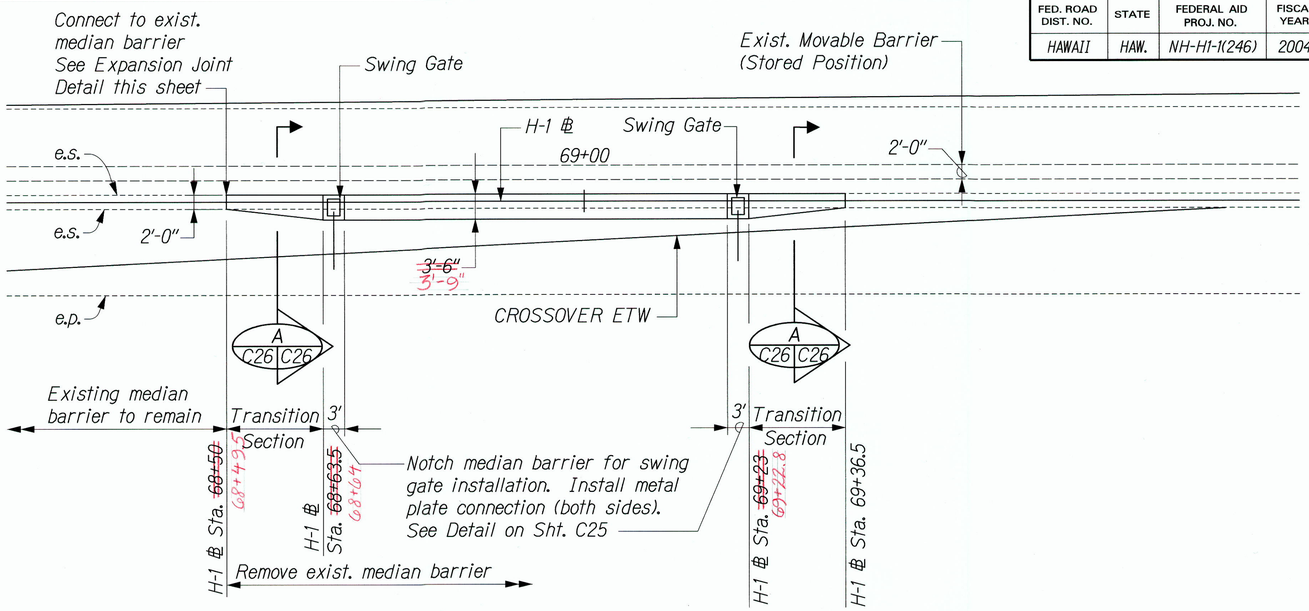
Scale: As Shown Date: Mar. 2, 2004

SHEET No. C25 OF 29 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(246)	2004	42	105

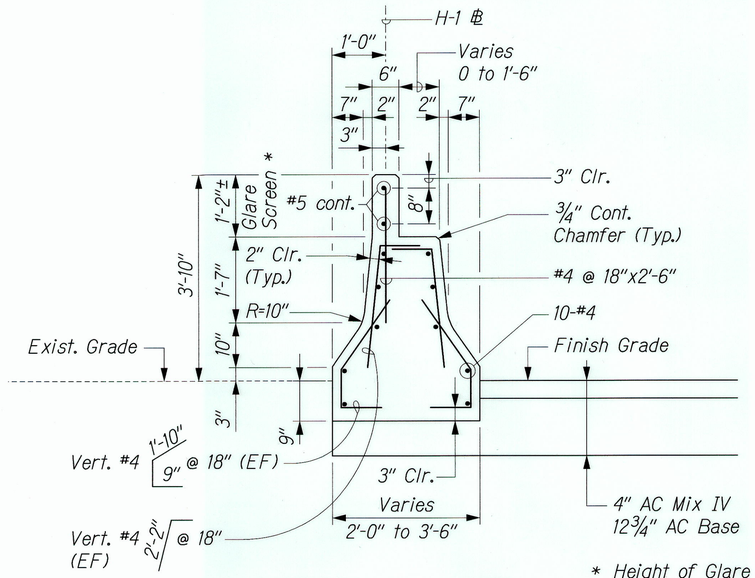
NOTES:

1. For spacing and details of expansion and control joints, see Standard Plan TE-63.
2. The holes for dowels shall be drilled perpendicular to the existing concrete surfaces. When the drill contacts any existing rebar, the hole shall be filled with epoxy grout and a replacement shall be drilled so that the spacing of dowels will be maintained. Contractor shall avoid cutting existing rebar.
3. Control joints shall be placed between expansion joints at thirty feet (30 ft.) maximum.
4. Payment for Expansion Joints shall be considered incidental to the various items of the contract.



MEDIAN BARRIER TRANSITION FOR SWING GATES

Scale: 1" = 10'

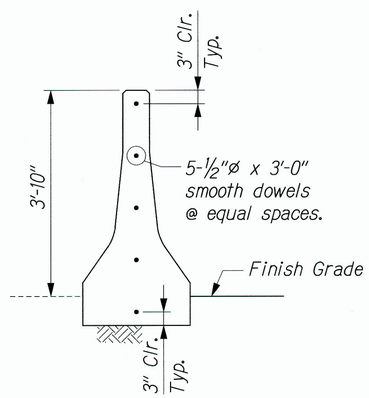


SECTION

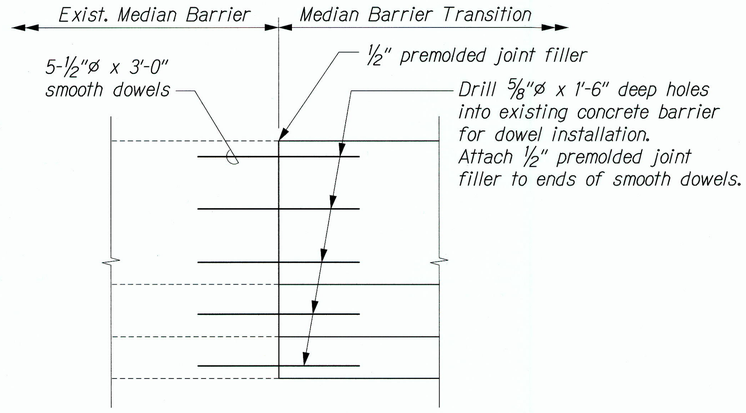
A C26 C26

Scale: 3/4" = 1'-0"

* Height of Glare Screen to match existing



TYPICAL SECTION



ELEVATION

EXPANSION JOINT DETAIL

Scale: 3/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

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PERRY M. SMALL LICENSED PROFESSIONAL ENGINEER No. 8627-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

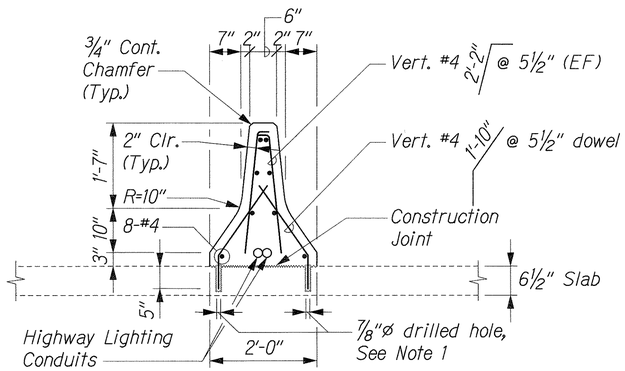
INTERSTATE ROUTE H-1 ZIPPER LANE EXTENSION
RADFORD DRIVE OVERPASS TO KEEHI INTERCHANGE
FEDERAL AID PROJECT NO. NH-HI-1(246)

Scale: As Shown Date: Mar. 2, 2004

SHEET No. C26 OF 29 SHEETS

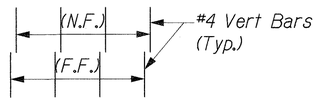
"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(246)	2004	43	105



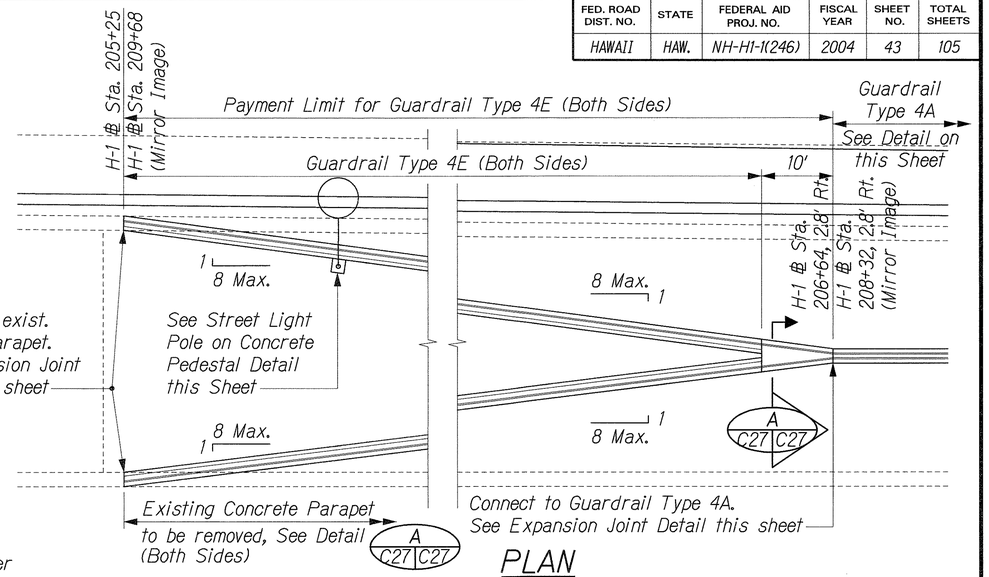
GUARDRAIL TYPE 4A

Scale: 3/4" = 1'-0"



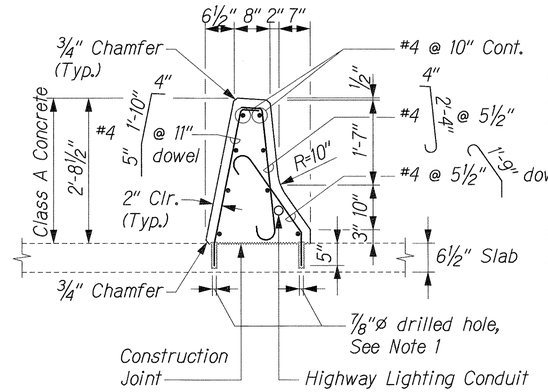
VERTICAL BAR ARRANGEMENT

Not to Scale



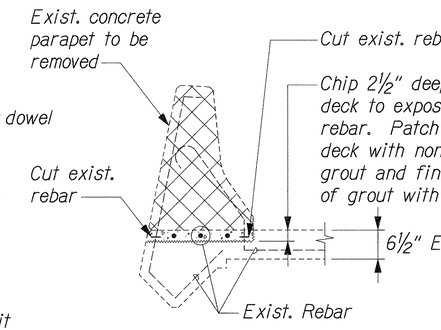
PLAN

Scale: 1" = 10'



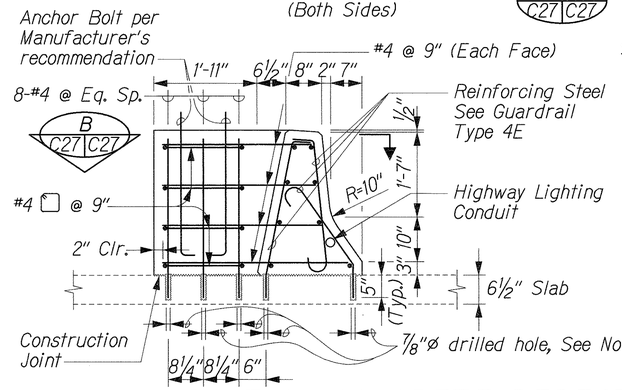
GUARDRAIL TYPE 4E

Scale: 3/4" = 1'-0"



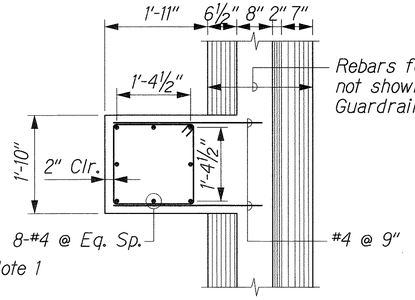
DETAIL A (C27 | C27)

Scale: 3/4" = 1'-0"



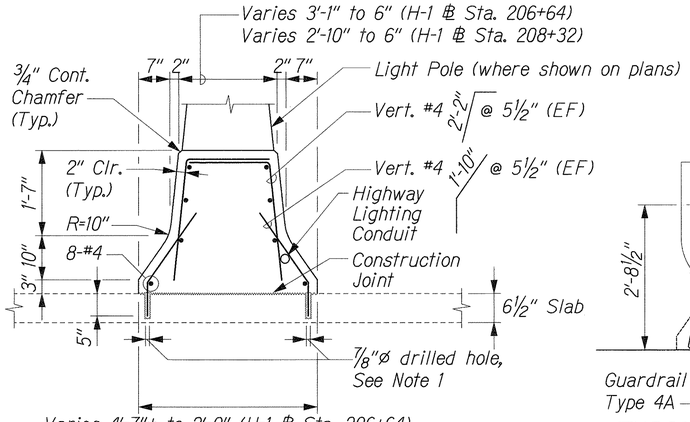
STREET LIGHT POLE ON CONCRETE PEDESTAL

Scale: 3/4" = 1'-0"



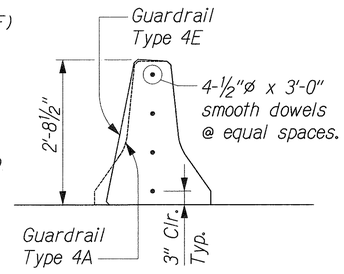
SECTION B (C27 | C27)

Scale: 3/4" = 1'-0"

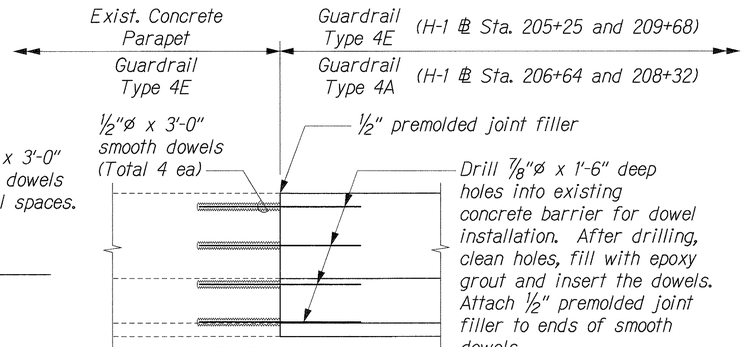


SECTION A (C27 | C27)

Scale: 3/4" = 1'-0"



TYPICAL SECTION



ELEVATION

EXPANSION JOINT DETAIL

Scale: 3/4" = 1'-0"

NOTE:

1. Drill 7/8"ø x 5" deep holes @ 6" oc into existing concrete. Drill holes perpendicular to the existing concrete surface and avoid cutting the existing rebars. A rebar detecting device may be used prior to drilling. After drilling, clean holes, fill with epoxy grout and insert the dowels.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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NOTE BOOK	TRACED BY	
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

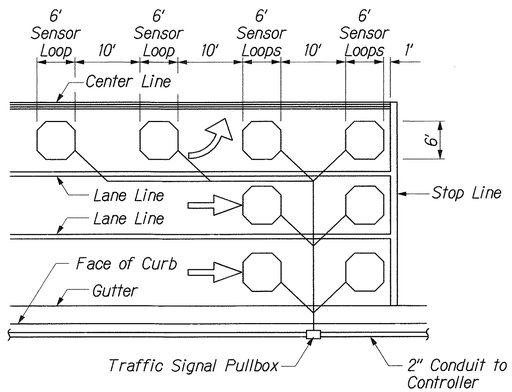
MISCELLANEOUS DETAILS EMERGENCY CROSSOVER

INTERSTATE ROUTE H-1 ZIPPER LANE EXTENSION
RADFORD DRIVE OVERPASS TO KEEHI INTERCHANGE
FEDERAL AID PROJECT NO. NH-H1-1(246)

Scale: As Shown Date: Mar. 2, 2004

SHEET No. C27 OF 29 SHEETS

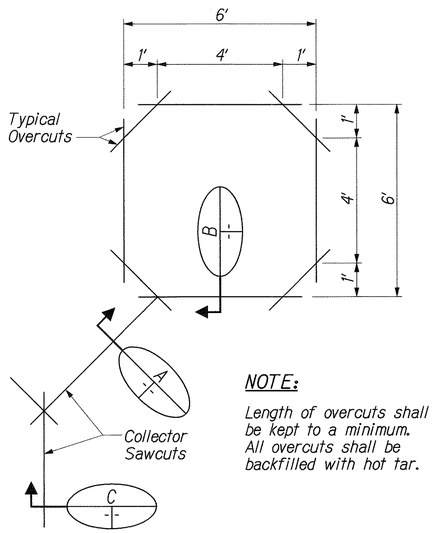
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(246)	2004	43A	105



NOTES:

1. Center sensor loops in lanes.
2. Collector Cables shall be twisted 2 turns per foot.
3. Number of loops and locations vary. See project plans.
4. Number and locations of Collector Sawcuts may be varied in the field.

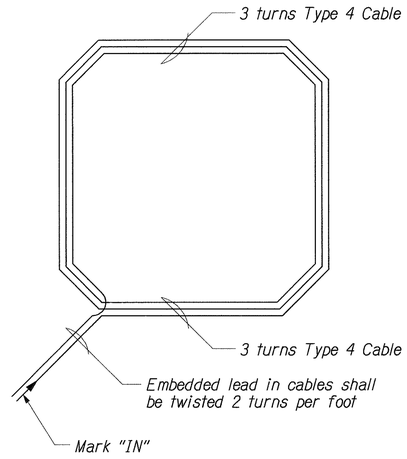
TYPICAL SENSOR LOOP LAYOUT



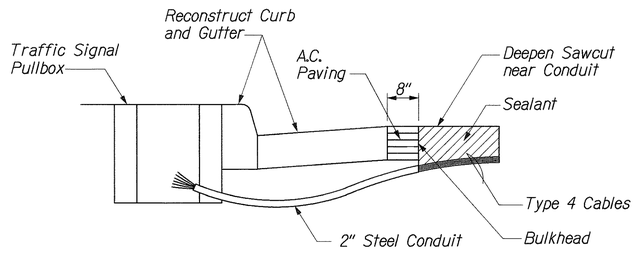
NOTE:

Length of overcuts shall be kept to a minimum. All overcuts shall be backfilled with hot tar.

TYPICAL SENSOR LOOP SAWCUT DETAIL



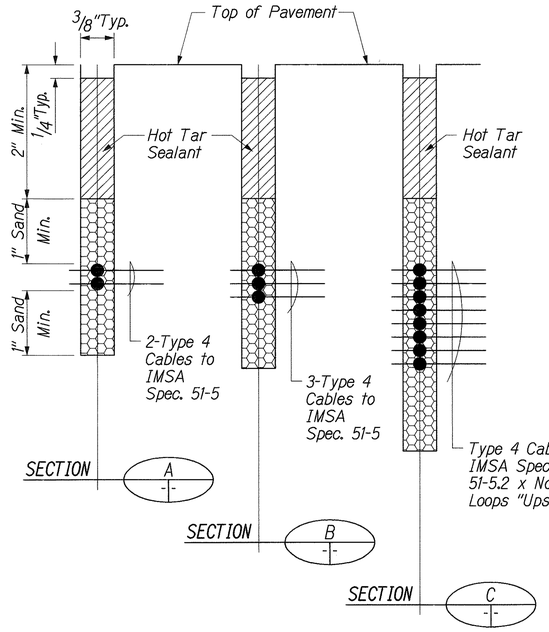
TYPICAL SENSOR LOOP WIRING DIAGRAM



NOTES ON CONSTRUCTION AT END OF SAWCUT:

1. Seal roadway end of conduit after installation of conductors.
2. Install bulkhead across conduit trench.
3. Place hot har in sawcut.
4. Backfill over conduit with New A.C.
5. Reconstruct curb and gutter as required

DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY



TYPICAL SECTION THROUGH SENSOR LOOP

ORIGINAL PLAN
NOTE BOOK
No.
SURVEY PLOTTED BY
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1 ZIPPER LANE EXTENSION
RADFORD DRIVE OVERPASS TO KEEHI INTERCHANGE
FEDERAL AID PROJECT NO. NH-HI-1(246)

Scale: NONE Date: Mar. 2, 2004

SHEET No. C27A OF 29 SHEETS