

-6" Non-Perforated Wye

CLEANOUT TYPE C

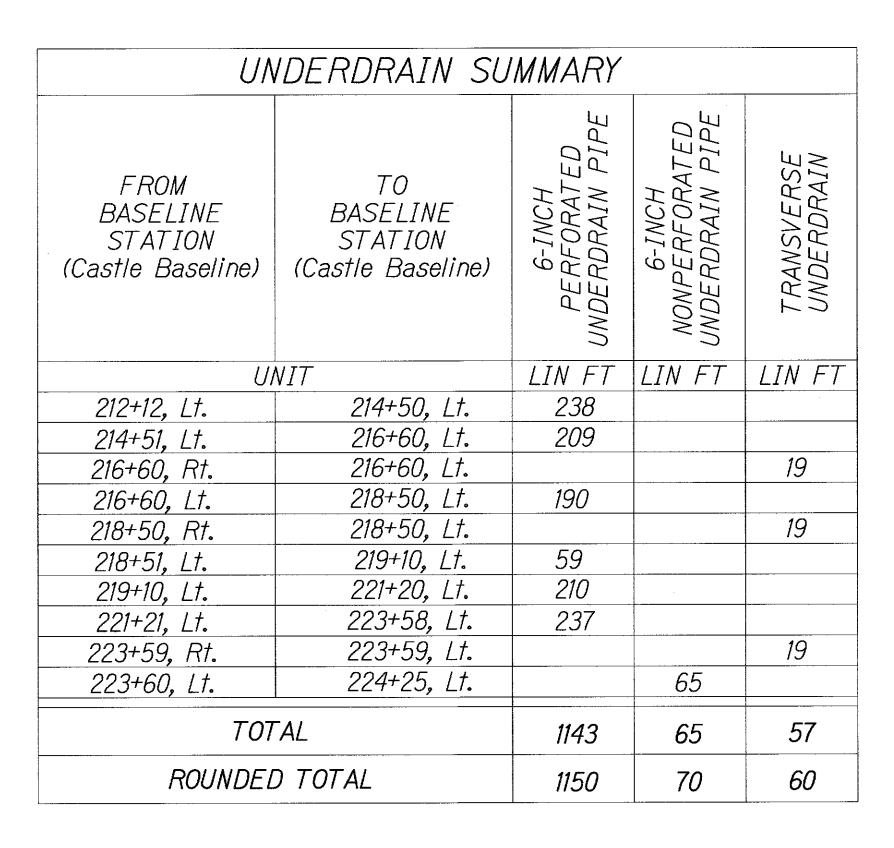
Not to Scale

SURVEY PLOT
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES I
CHECKED BY

Reference Point (Typ.)————————————————————————————————————	
	1. 1
1'-6" x 1'-6" x 6" Thick Conc. Block 9" 9" 6" Nonperforated 45° Elbow Underdra	атеа 'n Pipe

TYPICAL CLEANOUT PLAN

Not to Scale



	Varies As indicated on Roadway Construction Plans	• ·
Miter pipe to match graded slope 1'x1'x9" thick Class "B" Concrete	Finish Grade Slope	Roadway Shoulder Cleanout
Dumped Riprap 2' x 4' x 1' thick — Gradation:		6" Nonperforated Underdrain Pipe

FED. ROAD DIST. NO.

HAW.

PROJ. NO.

61C-01-04M

FISCAL SHEET TOTAL YEAR NO. SHEETS

2004 15

 $D_{100} = 12''$ $D_{85} = 10''$ $D_{50} = 6''$ $D_{15} = 3\frac{1}{2}''$ NOTE: Payment for Daylighting Underdrain in Graded Areas shall be considered incidental to 6-inch Nonperforated Underdrain Pipe.

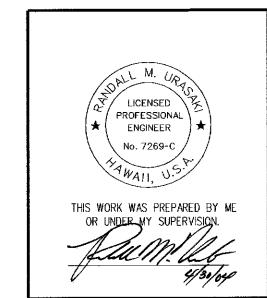
Gradation:

DAYLIGHTING UNDERDRAIN IN GRADED AREAS

Not to Scale

CLEAN	OUT SU	JMMAR)	/	
BASELINE STATION (Castle Baseline)	LOCATION	CLEANOUT TYPE A	CLEANOUT TYPE B	CLEANOUT TYPE C
UNIT		EACH	EACH	EACH
212+11	Lt.	1		
214+50	Lt.		1	
218+50	Lt.			1
221+20	Lt.		1	
223+58	Lt.		1	
223+59	Lt.			1
TOTAL		1	3	2

NOTE: Payment for Cleanout Types A, B, and C shall be paid under Pay Item No. 605.2000 Cleanout.



STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** ROADWAY CONSTRUCTION UNDERDRAIN DETAILS & SUMMARY

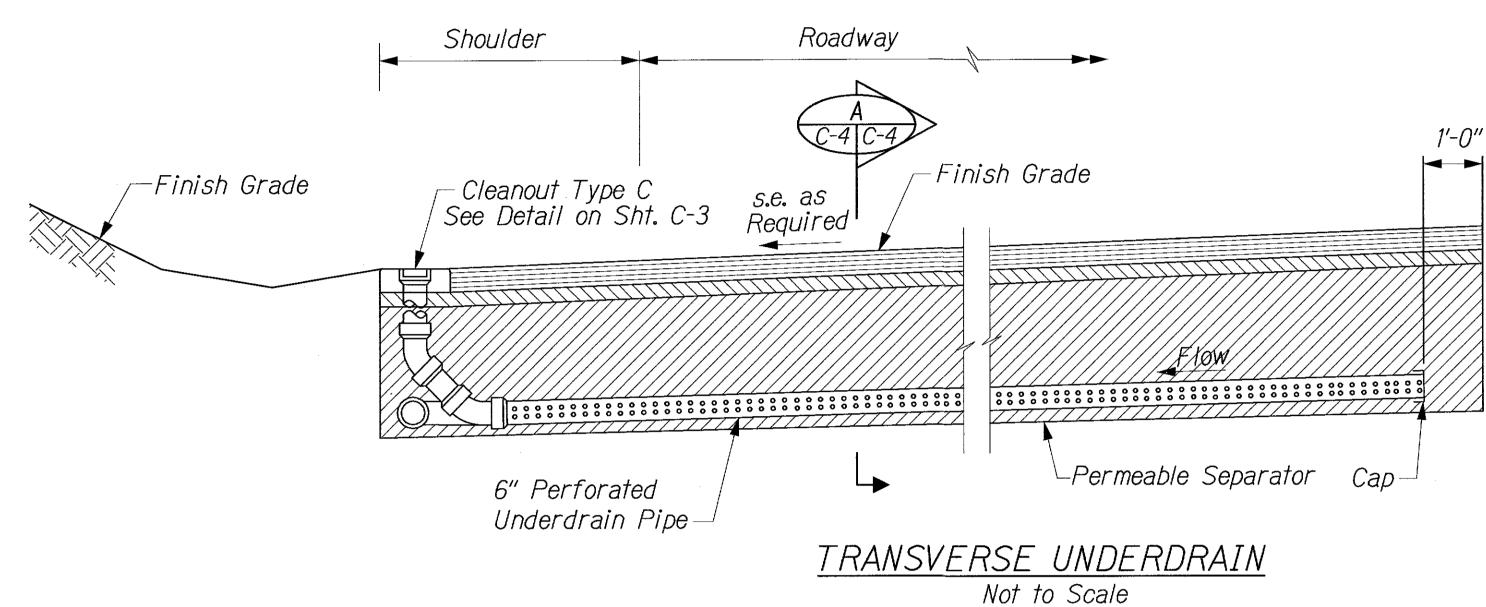
KALANIANAOLE HIGHWAY

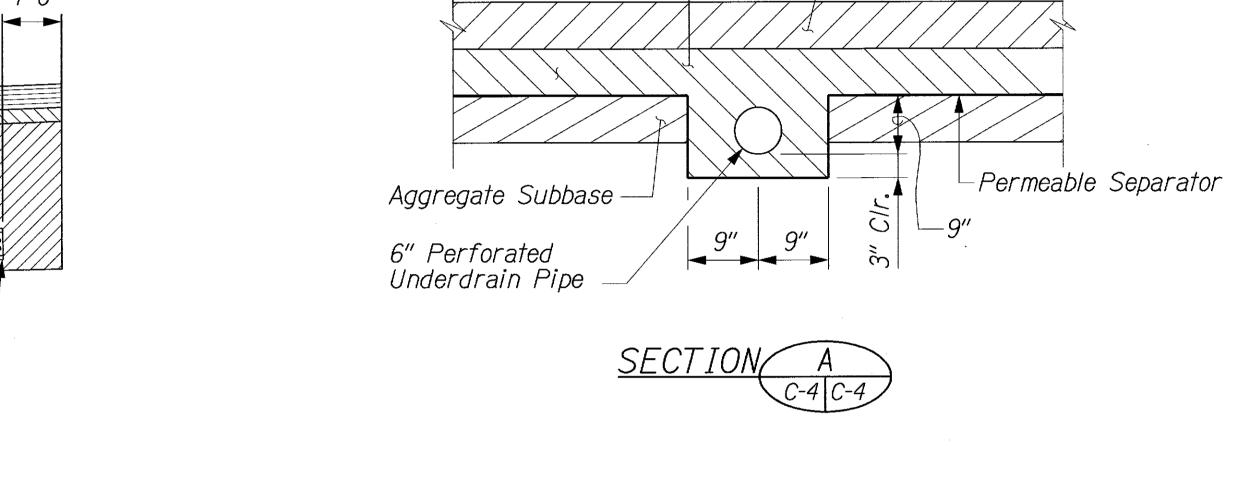
EMERGENCY LANDSLIDE REPAIRS AT CASTLE JUNCTION PROJECT NO. 61C-01-04M Scale: As Shown Date: Sept. 26, 2003

SHEET No. C-3 OF 12 SHEETS

15

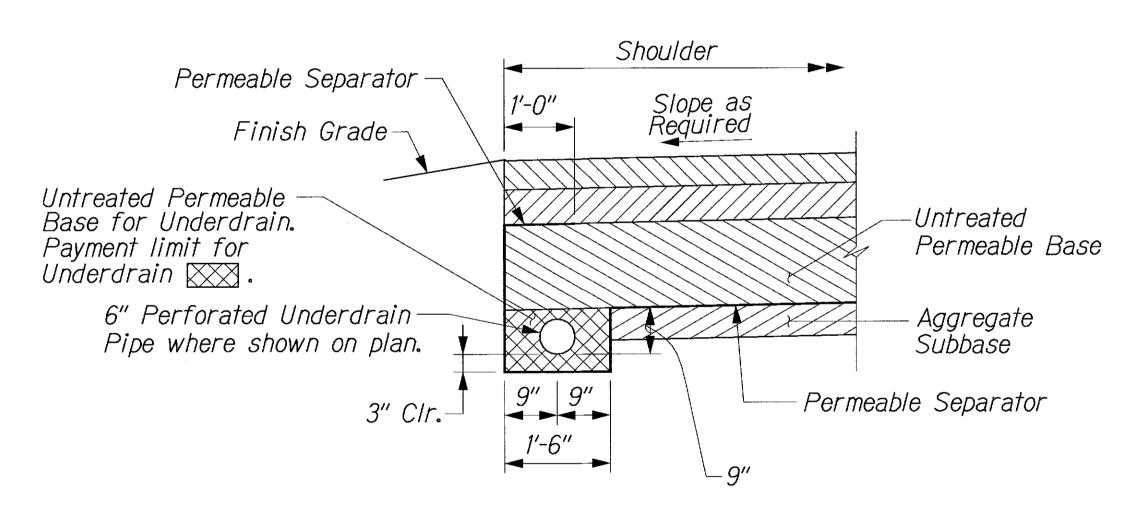
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61C-01-04M	2004	16	91





Untreated

Permeable Base

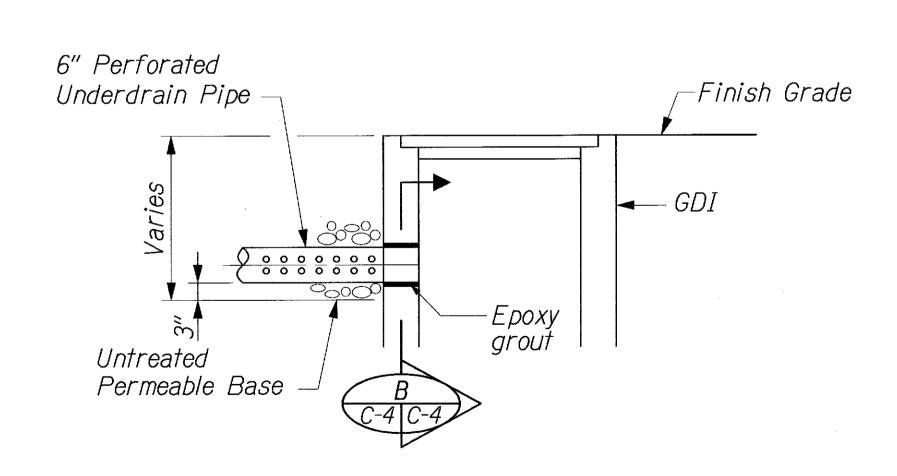


- AC Pavement

Base Course

— Glassphalt Concrete

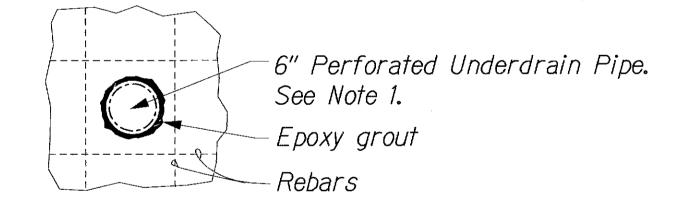




UNDERDRAIN CONNECTION DETAIL

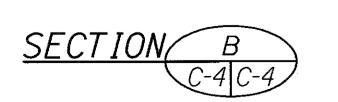
TO DRAINAGE STRUCTURES

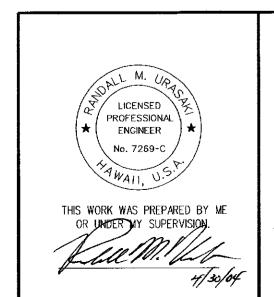
Not to Scale



NOTE:

- 1. The Contractor shall avoid cutting the rebars.
 In case the pipe opening interferes with the rebars, the opening shall be enlarged and the location of the pipe shall be adjusted to pass between the rebars as shown. The enlarged hole shall be patched with epoxy grout.
- 2. Payment for connection to drainage structures shall be considered incidental to 6-inch Perforated Underdrain Pipe.





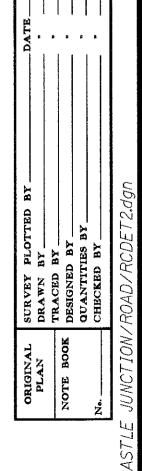
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY CONSTRUCTION
UNDERDRAIN DETAILS

KALANIANAOLE HIGHWAY

EMERGENCY LANDSLIDE REPAIRS AT CASTLE JUNCTION PROJECT NO. 61C-01-04M

Scale: As Shown Date: Sept. 26, 2003

SHEET No. C-4 OF 12 SHEETS



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