

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(7)	2004	64	138

BORING LOG						W.O. 99-3144
BORING NO. B28 (STA 256+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/19/99		
SURFACE ELEV. 32.4±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
			38	98	13	Silty SAND (SM) - Mottled brown, moist, dense, with gravel.
5			9	80	22	Medium dense from 4 feet.
			13	99	12	
			9	79	14	Sandy SILT (ML-CL) - Brown, moist, medium stiff.
10			25/No	Penetration		Silty SAND (SM) - Brown, moist, medium dense.
			10/6"	104	17	
15						End boring at 14.5 feet.
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Plate B28

BORING LOG						W.O. 99-3144
BORING NO. B31 (STA 275+50)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/18/99		
SURFACE ELEV. 22.7±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
			34	99	17	Clayey SILT (ML-CL) - Brown, moist, stiff, with sand and gravel.
5			40	96	29	
			25/6"	96	20	MODERATELY WEATHERED BASALT (WM) - Gray, hard.
10						Begin NX coring at 10 feet. 100% Recovery from 10 to 15 feet. RQD = 100%
15						End boring at 15 feet.
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Plate B31

BORING LOG						W.O. 99-3144
BORING NO. B29 (STA 266+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/18/99		
SURFACE ELEV. 27.6±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
			35	93	21	Silty SAND (SM) - Mottled brown, moist, dense.
			28	91	14	
5			14	95	12	Medium dense from 5 feet.
			16	98	7	
10			14	76	41	Sandy SILT (ML-CL) - Brown, moist, medium stiff, with gravel.
15			4/6" 26/6"	79	47	Stiff at 15 feet. End boring at 15.5 feet.
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Plate B29

BORING LOG						W.O. 99-3144
BORING NO. B32 (STA 286+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/18/99		
SURFACE ELEV. 15.8±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
			44	89	15	Sandy SILT (ML-CL) - Brown, moist, stiff, with gravel.
			40/6"	61	50	SLIGHTLY WEATHERED BASALT (WS) - Gray, hard.
5						Begin NX coring at 5 feet. 89% Recovery from 5 to 10 feet. RQD = 80%
10						95% Recovery from 10 to 15 feet. RQD = 95%
15						End boring at 15 feet.
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Plate B32

BORING LOG						W.O. 99-3144
BORING NO. B30 (STA 270+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/18/99		
SURFACE ELEV. 25.0±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
			16	83	14	Sandy SILT (ML-CL) - Brown, moist, medium stiff.
			9	76	21	
5			12	77	17	Boulder from 5 to 6 feet.
			47	89	17	Cobble from 8 to 8.5 feet. Stiff from 9 feet.
10			30	96	25	
			20	95	24	
15						End boring at 15.5 feet.
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Plate B30

Note:

- Boring Logs and Locations Reproduced From the "Soils Investigation" Report for Puunene Avenue/Mokulele Highway Widening Project, Puunene, Maui, Hawaii for Sato & Associates, Inc., By Ernest K. Hirata & Associates, Inc., W.O. 99-3144, Dated October 1, 1999.
- The Boring Logs Indicate the Approximate Subsurface Soil Conditions Encountered Only At Those Times and Locations Where Borings Were Made, and May Not Represent Conditions At Other Times and Locations.
- The Boring Logs are for Design Purposes Only, and are Not Intended for Use in Developing Cost Estimates By The Contractor.

ORIGINAL PLAN	NO.	DATE	SURVEY PLOTTED BY	DESIGNED BY	CHECKED BY

DANIEL S. MIYASATO
LICENSED PROFESSIONAL ENGINEER
No. 3443-C
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
04/30/04
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS
MOKULELE HIGHWAY WIDENING
Vicinity of Kealahou Bridge
To
Vicinity of Kealahou Pond Driveway
Federal - Aid Project No. NH-A311(7)
Scale: AS NOTED Date: August 2003
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(7)	2004	65	138

BORING LOG						W.O. 99-3144
BORING NO. B33 (STA 299+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/17/99		
SURFACE ELEV. 14.7±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Silty SAND (SM) - Brown, moist, dense, with gravel.
			35	85	29	
			10/No	Penetration		SLIGHTLY WEATHERED BASALT (WS) - Gray, hard.
5						Begin NX coring at 5 feet. 100% Recovery from 5 to 10 feet. RQD = 100%
10						100% Recovery from 10 to 15 feet. RQD = 85%
15						End boring at 15 feet.
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Plate B33

BORING LOG						W.O. 99-3144
BORING NO. B34 (STA 307+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/17/99		
SURFACE ELEV. 16.4±		DROP 30 in.		WATER LEVEL None		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Sandy SILT (ML-CL) - Brown, moist, medium stiff.
						SLIGHTLY WEATHERED BASALT (WS) - Gray, hard.
5						Begin NX coring at 5 feet. 98% Recovery from 5 to 10 feet. RQD = 65%
10						100% Recovery from 10 to 15 feet. RQD = 100%
15						End boring at 15 feet.
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Plate B34

BORING LOG						W.O. 99-3144
BORING NO. B35 (STA 318+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/17/99		
SURFACE ELEV. 8.8±		DROP 30 in.		WATER LEVEL 7.5 feet		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Silty SAND (SM) - Brown, moist, medium dense.
			21	84	10	
5			15	85	15	Sandy SILT (ML-CL) - Brown, moist, medium stiff.
10			17	82	23	
15			2	59	68	Clayey SILT (ML) - Gray, soft.
			3	Tip Recovery		
						End boring at 15.5 feet.
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Plate B35

BORING LOG						W.O. 99-3144
BORING NO. B36 (STA 324+00)		DRIVING WT. 140 lb.		DATE OF DRILLING 2/17/99		
SURFACE ELEV. 14.3±		DROP 30 in.		WATER LEVEL 12.7 feet		
DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Sandy SILT (ML-CL) - Brown, moist, medium stiff.
			18	69	42	
			3/8"	78	17	Firm to medium stiff from 3 feet.
			10/No	Penetration		Boulder from 3.5 to 4.5 feet.
5			9	76	35	
10			7	79	21	
15			5	81	42	
						End boring at 15.5 feet.
20						
25						
30						

Plate B36

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

DANIEL S. MIYASATO
LICENSED PROFESSIONAL ENGINEER
No. 3443-C
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
BORING LOGS
MOKULELE HIGHWAY WIDENING
Vicinity of Kolaloa Bridge
To
Vicinity of Kealia Pond Driveway
Federal - Aid Project No. NH-A311(7)
Scale: AS NOTED Date: August 2003
SHEET No. 2 OF 2 SHEETS