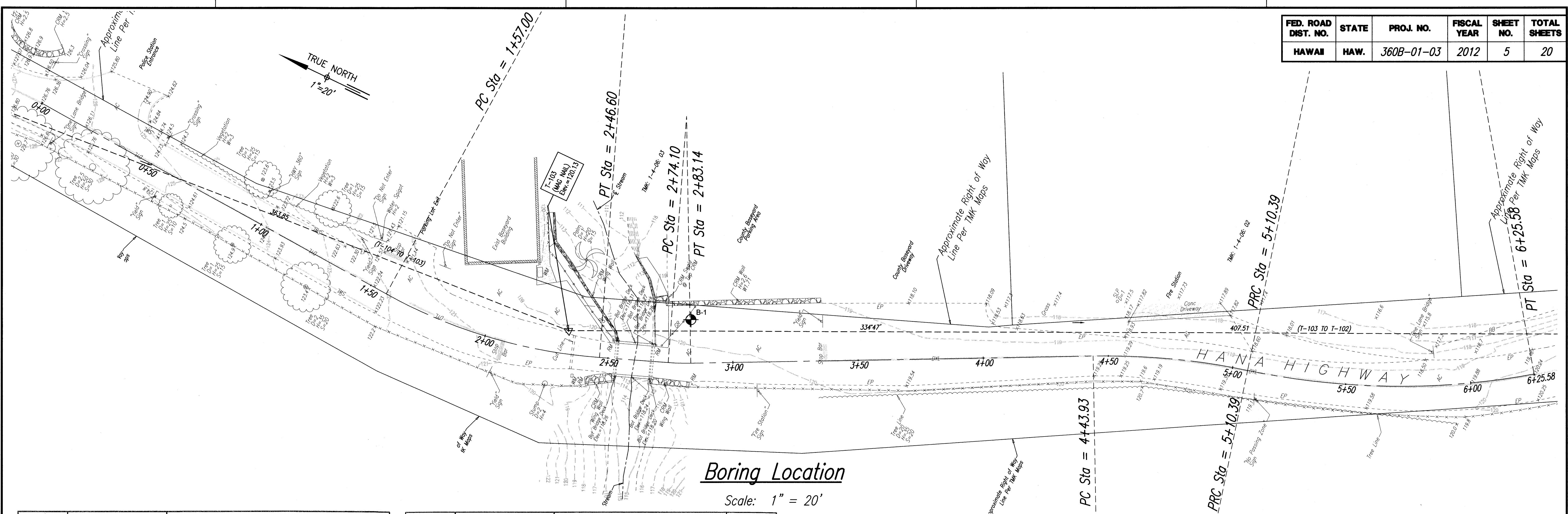


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-03	2012	5	20



Boring Location
Scale: 1" = 20'

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Log Legend

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)		
MAJOR DIVISIONS	USCS	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS	GRAVELS	CLEAN GRAVELS LESS THAN 5% FINES GW
		POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES GP
		SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES GM
	SANDS	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES GC
		WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES SW
		POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES SP
FINE-GRAINED SOILS	SANDS WITH FINES 50% OR MORE OF COARSE FRACTION PASSING THROUGH NO. 4 SIEVE	SANDS WITH FINES SM
		SANDS WITH FINES SC
		CLAYEY SANDS, SAND-CLAY MIXTURES ML
	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY CL
		INORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY OL
		INORGANIC SILT, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS MH
		INORGANIC CLAYS OF HIGH PLASTICITY CH
	SILTS AND CLAYS LIQUID LIMIT 50 OR MORE	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS OH
		PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS PT
		HIGHLY ORGANIC SOILS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

LEGEND
[Symbol] (2-INCH) O.D. STANDARD PENETRATION TEST
[Symbol] (3-INCH) O.D. MODIFIED CALIFORNIA SAMPLE
[Symbol] SHELBY TUBE SAMPLE
[Symbol] GRAB SAMPLE
[Symbol] CORE SAMPLE
LL LIQUID LIMIT
PI PLASTICITY INDEX
TV TORVANE SHEAR (lbf)
PEN POCKET PENETROMETER (lbf)
UC UNCONFINED COMPRESSION (psi)
[Symbol] WATER LEVEL OBSERVED IN BORING

Plate
A

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HANA HIGHWAY IMPROVEMENTS
UAKA ROAD TO KEAWA PLACE
HANA, MAUI, HAWAII

Log of Boring
1

Laboratory				Field				Approximate Ground Surface Elevation (feet MSL): 119.5'	Description
Other Tests	Moisture Content (%)	Dry Density (pcf)	Comp. Recovery (%)	RQD (%)	Penetration (blows/foot)	Pocket Pen. (lbf)	Depth (feet)		
UC= 23069	63				14		5	1-inch ASPHALTIC CONCRETE Brown CLAYEY SILT with gravel, very stiff, moist (fill) Gray to brown SILTY SAND AND COBBLES with gravel, medium dense, moist (clinker and ashly fill)	
	46				15				
UC= 14821	40	65			50/6" Ref.		10	Gray vugular BASALT, moderately fractured, unweathered to slightly weathered, very hard (a'a basalt)	
							15		
					95	75	20	Brownish gray GRAVEL AND COBBLES (BASALTIC), medium dense, moist (clinker) Boring terminated at 22 feet * Elevation estimated from Preliminary Topographic Survey transmitted by M&E Pacific, Inc. on 4/22/08.	
					55	0	25		

Date Started: May 29, 2008
Date Completed: May 29, 2008
Logged By: S. Latronic
Total Depth: 22 feet
Work Order: 5305-00

Water Level: [Symbol] Not Encountered
Drill Rig: MOBILE B-53
Drilling Method: 4" Auger & HQ Coring
Driving Energy: 140 lb. wt., 30 in. drop

Plate
A - 1

LEGEND
[Symbol] BORING LOCATION
B-1 BORING NUMBER

DAIME Y. KODAMA
LICENSED PROFESSIONAL ENGINEER
No. 8688-C
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING INFORMATION
ROUTE 360 HANA HIGHWAY
IMPROVEMENTS
UAKA ROAD TO KEAWA PLACE
Project No. 360B-01-03
Scale: 1" = 20' Date: December 2011

SHEET No. 5 OF 13 SHEETS