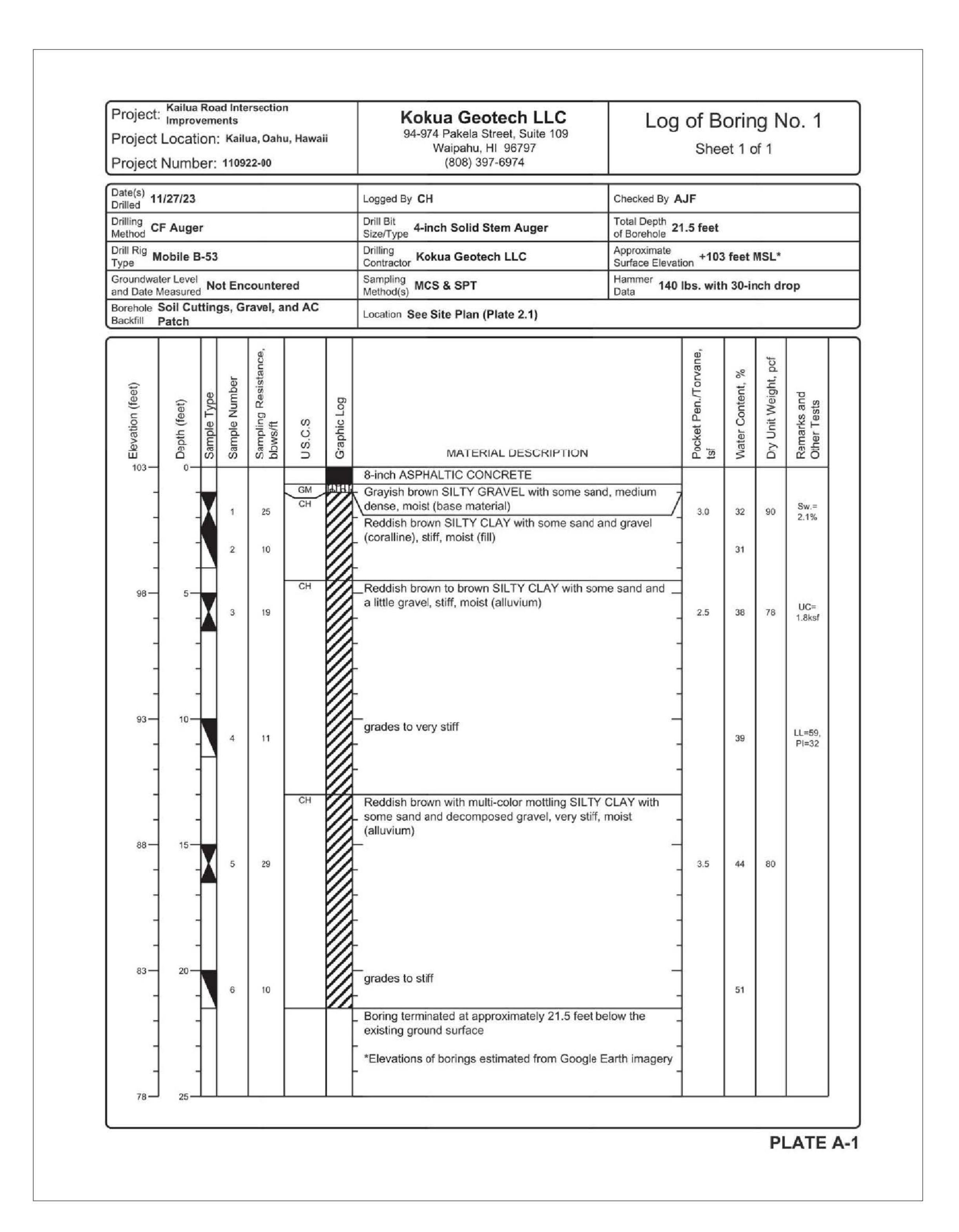
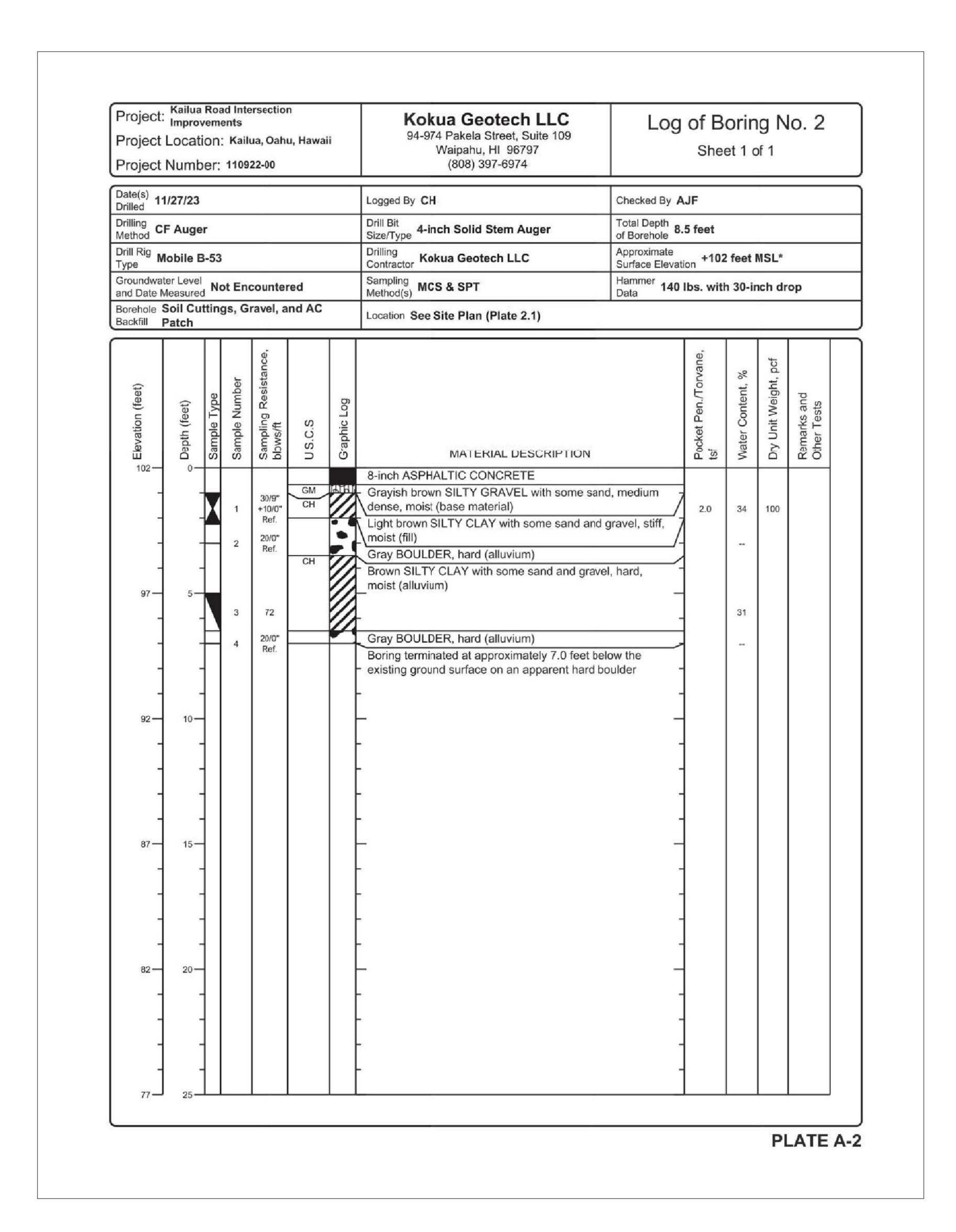
GEOTECHNICAL NOTES:

- 1. A geotechnical engineering technical memorandum entitled "Kailua Road Intersection Improvements Vicinity of Uluoa Street and Ulumanu Drive" dated December 1st, 2023 has been prepared by Kokua Geotechincal LLC. A copy of the report is on file at the office of the Engineer for review by the Contractor.
- 2. For boring locations, see Sheets 7 ₱ 8 of the report.
- 3. The information presented in the logs of borings depict the subsurface conditions encountered at that specified location and at the time of the field exploration only. Variations of subsoil conditions from those depicted in the logs of borings may occur between and beyond the borings.

Project.	Improv _ocati		lua, Oah			Kokua Geotech LLC 94-974 Pakela Street, Suite 109 Waipahu, HI 96797 (808) 397-6974			Key to Log of Borings Sheet 1 of 1				
Elevation (feet)	Depth (feet)	Sample Type Sample Number	Sampling Resistance, blows/ft	U.S.C.S	Graphic Log	M	ATERIAL DESCRIPTION		Pocket Pen./Torvane, tsf	Water Content, %	Dry Unit Weight, pcf	Remarks and Other Tests	
1	2	3 4	5	6	7		8		9	10	11	12	
3 Samp show 4 Samp 5 Samp samp using 6 U.S.C 7 Graph encou	ole Type n. ole Num oling Re oler one the ha c.S: Type ic Log untered ERIAL (e: Type nber: Sa esistance foot (or mmer id pe of ma : Graphi I. DESCRI	of soil sample ide e, blows/ distance entified e terial en c depicti	entification of the bounter on of the	ground surface of lected at the decided at the deci	epth interval advance dr g interval aterial	percentage of dry Init Weight, measured in laborated Remarks and Other	weight of samp pcf: Dry weight gratory, in pound	ole. per unit vo Is per cub	olume	of soil		
Ba	ompac ne-dim d Limit, AL GRA	ction test nensional percent APHIC S	l consoli SYMBOL te (AC)	dation t			PI: Plasticity Index, page 18 Sieve analysis (UC: Unconfined con WA: Wash sieve (pege 19 Silty GRAVEL)	percent passing pressive streng Notes of Passing Notes of	th test, Quio. 200 Sie	u, in ks eve)	sf		
Bo	oulders						Silty SAND (S	avı)					
TYPICAL	SAME	PLER G	RAPHIC	SYMB	DLS			OTHER GRA	APHIC SY	MBOL	<u>.s</u>		
Bulk S 3-inch brass	rings Sample	alifornia er	w/	HQ C 3-incl Califo	Sample oring n OD Modified ornia w/ brass liner er Sample	ners	PQ Coring Probing w/Pointed Tip 2-inch-OD unlined split spoon (SPT) Shelby Tube (Thin-walled fixed head)	Minor ch √ stratum — Inferred/	vel (after wa ange in ma gradational	aiting) terial pr	opertie:	s within a	
gradual. Fi	eld desc tions on	criptions r these log	may have is apply o	been mo	dified to reflect re specific boring lo	sults of lab to	escriptions and stratum lines ests. at the time the borings were a			2075	235	27/2	

- 4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.
- 5. The data given is for general information only. Bidders shall examine the site and the boring data and draw their own conclusions therefrom as to the character of materials to be encountered. The Engineer will not assume responsibility for variations of subsoil quality or conditions other than at the boring locations shown and at the time the borings were taken.





2

KAILUA ROAD INTERSECTION IMPROVEMENTS Vicinity of Uluoa Street and Ulumanu Drive Project No. 61D-01-23 Scale: N/A A Replaced Boring Logs REVISION No. 1

Date: DEC, 2023

SHEETS

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

BORING LOG -

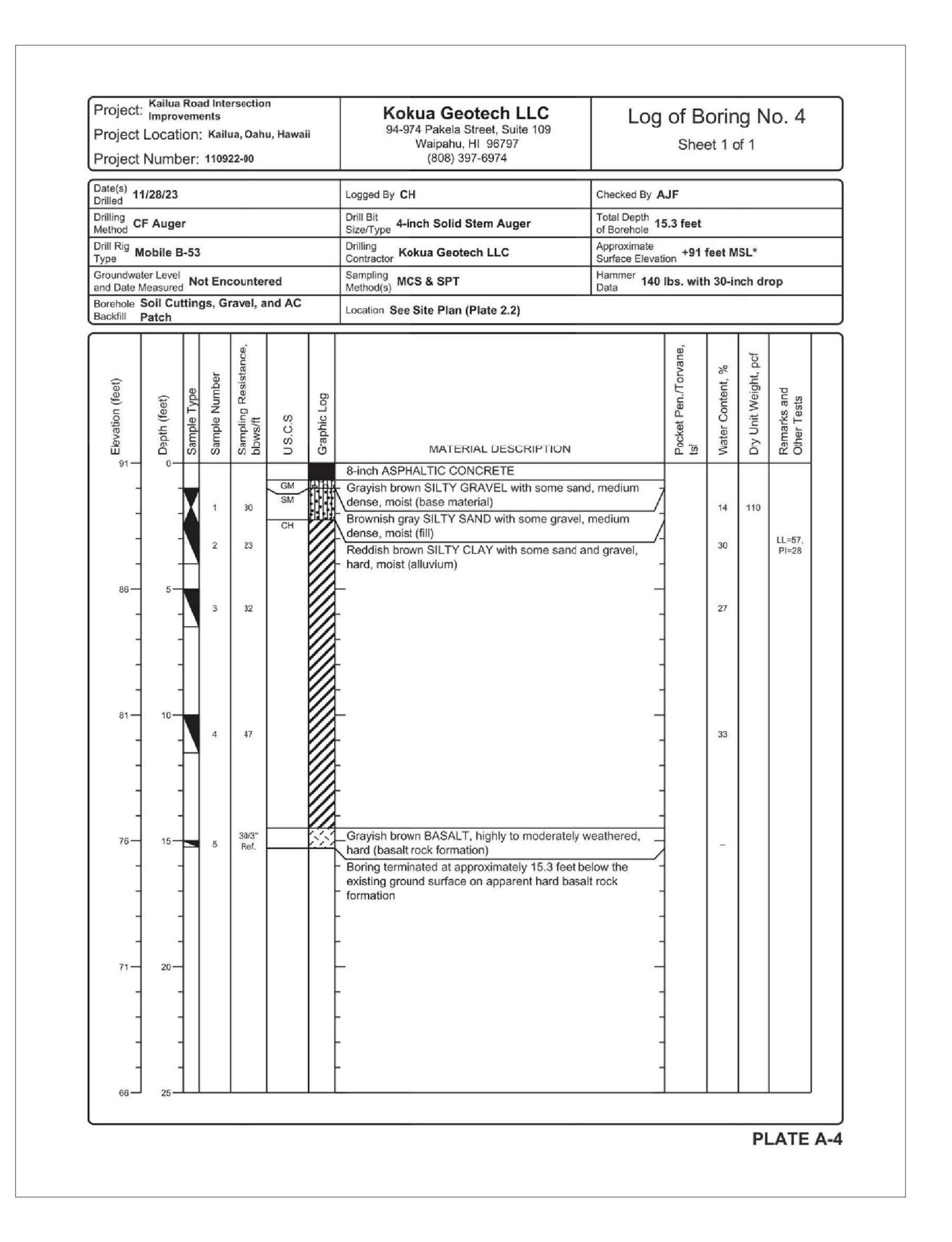
GEOTECHNICAL NOTES:

FED. ROAD STATE DIST. NO. PROJ. NO. 2024 ADD.68 87 HAWAII HAW. 61D-01-23

- 1. A geotechnical engineering technical memorandum entitled "Kailua Road Intersection Improvements Vicinity of Uluoa Street and Ulumanu Drive" dated December 1st, 2023 has been prepared by Kokua Geotechincal LLC. A copy of the report is on file at the office of the Engineer for review by the Contractor.
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Project: Kailua Road Intersection Improvements Project Location: Kailua, Oahu, Hawaii Project Number: 110922-00						ii	Kokua Geotech LLC 94-974 Pakela Street, Suite 109 Waipahu, HI 96797 (808) 397-6974			of Boring No. 3 Sheet 1 of 1				
Date(s) Drilled							Logged By CH	JF						
Drilling Method CF Auger							Drill Bit Size/Type 4-inch Solid Stem Auger	3.5 feet						
Drill Rig Type Mobile B-53							Drilling Contractor Kokua Geotech LLC	Approximate Surface Elevati	±99 foot MCI *					
Groundwater Level and Date Measured Not Encountered							Sampling Method(s) MCS & SPT	lbs. with 30-inch drop						
Borehole Backfill		tting	s, G	ravel, a	nd AC		Location See Site Plan (Plate 2.2)							
Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	US.C.S	Graphic Log	MATERIAL DESCRIPTION		Pocket Pen./Torvane,	Water Content, %	Dry Unit Weight, pcf	Remarks and Other Tests		
83-	5-	X	1 2	34 25 9	SM CH		8-inch ASPHALTIC CONCRETE Grayish brown SILTY GRAVEL with some sand dense, moist (base material) Brownish tan SILTY SAND with some gravel, modense, moist (fill) Brownish tan SILTY CLAY with some sand, grace-cobbles, very stiff, moist (fill) Brown SILTY CLAY with some sand and a little moist (alluvium)	vel, and	1.5	8 14 26	131	Sw.= 8.9%		
78—	10-		4	31			Grayish brown BASALT, moderately weathered (basalt rock formation)	l, hard		21				
73—	20 —		5	10/0" Ref.			Boring terminated at approximately 13.5 feet be existing ground surface on apparent hard basal—formation							
63—	25 —							-						

- 4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.
- 5. The data given is for general information only. Bidders shall examine the site and the boring data and draw their own conclusions therefrom as to the character of materials to be encountered. The Engineer will not assume responsibility for variations of subsoil quality or conditions other than at the boring locations shown and at the time the borings were taken.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

BORING LOG - 2

KAILUA ROAD INTERSECTION IMPROVEMENTS Vicinity of Uluoa Street and Ulumanu Drive Project No. 61D-01-23

A Replaced Boring Logs REVISION

Scale: N/A SHEET No. 2 OF

Date: DEC, 2023 SHEETS

ADD. 68