DRILL RIG Mobile B-24 CFA	SURFACE ELEVATION 275 feet	LOGGED BY TC
DEPTH TO GROUND WATER 16 feet	BORING DIAMETER 4-inch	DATE DRILLED 10/28/14

DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE	DEPTH (FEET) ELEVATION	SAMPLER TYPE	N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
CLAY (CL), brown, silty, with sand(fine- to medium-grained), trace gravel(fine, angular), dry to damp.	very stiff		0 / 275		25	9	103	6.1	
CLAY (CH), orange red brown with white mottles, silty, with to sandy(fine- to medium-grained), some calliche, dry to damp.	hard		5 / 270		33	17	112	7.4	
CLAY(CL)/SAND(SC), brown, sandy(fine- to medium-grained), silty, dry to damp.	very stiff		10 / 265		30	15	112	4.6	
Trace small siltstone fragments, damp.	hard		15 / 260		30/6"	16	116		
SAND (SC), mottled gray brown, fine- to coarse-grained, gravelly(fine, angular to subangular), with clay and silt, dry to damp.	very dense		20 / 255		50/6"				
Drilling refused at 22', gravels up to 2" diameter.					36/2"				
Bottom of Boring = 22.2 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			25 / 250 30 / 245						

EDR LABORATORY BORING LOG (By GROUP) STEVFRNE STEVFRNE BAILEY.GDT 1/16/14

Stevens, Ferrone & Bailey Engineering Company, Inc.
1600 Willow Pass Court
Concord, CA 94523
Tel: 925-688-1001

EXPLORATORY BORING LOG

SAN JOAQUIN VALLEY NATIONAL CEMETERY
Santa Nella, CA

PROJECT NO.	DATE	BORING NO.
361-19	November 2014	B-1

DRILL RIG Mobile B-24 CFA	SURFACE ELEVATION 273 feet	LOGGED BY TC
DEPTH TO GROUND WATER 17 feet	BORING DIAMETER 4-inch	DATE DRILLED 10/28/14

DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE	DEPTH (FEET) ELEVATION	SAMPLER TYPE	N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
CLAY (CL), brown, silty, with to sandy(fine- to medium-grained), dry.	stiff		0 / 270		51	14	104		
CLAY (CL), mottled red brown, silty, with sand(fine- to medium-grained), dry to damp. Change color to orange brown.	hard		5 / 265		45/11"	20	106		
CLAY (CH), reddish brown with white mottles, silty, with to sandy(fine- to medium-grained), some calliche, dry to damp.	hard								
SAND (SC), mottled gray reddish brown, fine- to coarse-grained, clayey, gravelly(fine, subangular to subrounded), with silt, dry to damp. Harder drilling below 14'.	very dense		10 / 260		30/6"				
GRAVEL (GC), mottled gray brown, fine, angular to subrounded, sandy(fine- to coarse-grained), with clay and silt, dry to damp. Gravels up to 3" diameter, wet. Drilling refused at 20'.	very dense		15 / 255		36/4"				
Bottom of Boring = 20 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			20 / 250 25 / 245 30 / 240		50/0"				

EDR LABORATORY BORING LOG (By GROUP) STEVFRNE STEVFRNE BAILEY.GDT 1/16/14

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EXPLORATORY BORING LOG

SAN JOAQUIN VALLEY NATIONAL CEMETERY
Santa Nella, CA

PROJECT NO.	DATE	BORING NO.
361-19	November 2014	B-2

DRILL RIG Mobile B-24 CFA	SURFACE ELEVATION 272 feet	LOGGED BY TC
DEPTH TO GROUND WATER 17.5 feet	BORING DIAMETER 4-inch	DATE DRILLED 01/28/14

DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE	DEPTH (FEET) ELEVATION	SAMPLER TYPE	N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
CLAY (CL), mottled red brown, silty, with to sandy(fine- to coarse-grained), dry to damp.	stiff very stiff		0 / 270		31	77	99		At 2': Liquid Limit = 26 Plasticity Index = 14 Fine gravel = 1% Coarse Sand = 1% Medium Sand = 5% Fine Sand = 24% Silt = 40% Clay = 29%
GRAVEL (GC), mottled gray brown, fine to coarse, angular to subangular, clayey, with sand(fine- to coarse-grained), dry to damp.	very dense		5 / 265		60/3"				
CLAY(CL)/SAND(SC) brown, sandy(fine- to medium-grained), silty, dry to damp.	hard		10 / 260		48				
SAND (SP), mottled gray brown, fine- to medium-grained, some coarse-grained, with gravel(fine, angular to subangular), trace silt, dry. Gravels below 16'.	very dense		15 / 255		30/6"				
CLAY (CL), mottled gray yellowish brown, silty, with sand(fine- to medium-grained), damp to moist.	hard		20 / 250		60/5"				
GRAVEL (GC), mottled gray brown, fine, subangular to subrounded, clayey, sandy(fine- to coarse-grained), moist.	very dense								
CLAY (CL), brown, silty, with sand(fine- to medium-grained), trace gravel(fine, subangular), moist.	hard		25 / 245		35				
Bottom of Boring = 28.5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			30 / 240						

EDR LABORATORY BORING LOG (By GROUP) STEVFRNE STEVFRNE BAILEY.GDT 1/16/14

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EXPLORATORY BORING LOG

SAN JOAQUIN VALLEY NATIONAL CEMETERY
Santa Nella, CA

PROJECT NO.	DATE	BORING NO.
361-19	November 2014	B-3

CONSTRUCTION DOCUMENTS

GENERAL NOTES

1. REFER TO SHEET D–1 FOR APPROXIMATE TEST PIT LOCATIONS.
2. BORING LOG LOCATIONS AND INFORMATION ARE PROVIDED FOR REFERENCE ONLY AND ARE BASED ON THE GEOTECHNICAL INVESTIGATION PROVIDED BY STEVENS, FERRONE, & BAILEY ENGINEERING COMPANY INC., DATED NOVEMBER 2014.

CONSTRUCTION DOCUMENTS

Revisions:	Date

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Drawing Title: BORING LOGS

Approved: Project Director

Project Title: SAN JOAQUIN VALLEY NATIONAL CEMETERY PRE-PLACED CRYPTS IN SECTION 21

Location: SAN JOAQUIN VALLEY NATIONAL CEMETERY SANTA NELLA, CALIFORNIA

Date: 09/28/2015 | Checked: MIS | Drawn: RJM

Project Number: 913CM3012

Building Number:

Drawing Number: D-2

Dwg. 7 of 25

NATIONAL CEMETERY ADMINISTRATION DESIGN AND CONSTRUCTION SERVICE

Department of Veterans Affairs

VA FORM 08–6231

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