

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 061500

FEDERAL AID PROJECT NO. NHPP-0062(43)

CREEK AT L.M. 4.65 STR. & APPRS. (S)

STATE HIGHWAY 5 SECTION 8

IN SALINE COUNTY

The information contained herein was obtained by the Department for design and estimating purposes only. It is being furnished with the express understanding that said information does not constitute a part of the Proposal or Contract and represents only the best knowledge of the Department as to the location, character and depth of the materials encountered. The information is only included and made available so that bidders may have access to subsurface information obtained by the Department and is not intended to be a substitute for personal investigation, interpretation and judgment of the bidder. The bidder should be cognizant of the possibility that conditions affecting the cost and/or quantities of work to be performed may differ from those indicated herein.

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT**

December 15, 2016

**TO:** Mr. Trinity Smith, Engineer of Roadway Design

**SUBJECT:** Job No. 061500  
Creek at L.M. 4.65 Str. & Apprs. (S)  
Route 5 Section 8  
Saline County

Transmitted herewith is the requested Soil Survey test results for the above referenced job. The project consists of replacing a bridge at Log mile 4.65 on Highway 5, near Bryant. Samples were obtained in the existing travel lanes and ditch line. There were no paved shoulders within the project. Due to utility conflicts a bulk sample was not obtained. An estimated R-Value of less than 5 is recommended for the subgrade materials.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of moderately plastic sandy clay. Cross sections are not currently available, but it is assumed the construction grade line will closely match that of the existing roadway. The subgrade soils are expected to provide a stable working platform with normal drying and compactive efforts, if the weather is favorable during construction.

Additional earthwork requirements will be made upon request when plans are further developed.

Listed below is the additional information requested for use in developing the plans:

1. The Qualified Products List (QPL) indicates that Aggregate Base Course (Class CL-7) is available from commercial producers located near Bryant.
2. Asphalt Concrete Hot Mix

<u>Type</u>	<u>Asphalt Cement %</u>	<u>Mineral Aggregate %</u>
Surface Course	4.9	95.1
Binder Course	4.2	95.8
Base Course	3.8	96.2

  
Michael C. Benson  
Materials Engineer

MCB:pt:bjj  
Attachment

cc: State Constr. Eng. – Master File Copy  
District 6 Engineer  
System Information and Research Div.  
G. C. File

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE - 12/14/16 SEQUENCE NO. - 1  
JOB NUMBER - 061500 MATERIAL CODE - SSPS  
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014  
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1  
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 62  
SUPPLIER NAME - STATE DISTRICT NO. - 06  
NAME OF PROJECT - CREEK AT L.M. 4.65 STR. & APPRS.(S)  
PROJECT ENGINEER - NOT APPLICABLE  
PIT/QUARRY - ARKANSAS  
LOCATION - SALINE, COUNTY DATE SAMPLED - 11/29/16  
SAMPLED BY - D. THORNTON DATE RECEIVED - 11/29/16  
SAMPLE FROM - TEST HOLE DATE TESTED - 12/06/16  
MATERIAL DESC. - SOIL SURVEY PAVEMENT SOUNDINGS

LAB NUMBER	-	20163945	-	20163946	-
SAMPLE ID	-	S480	-	S481	-
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-
STATION	-	109+60	-	110+30	-
LOCATION	-	06RT	-	06LT	-
DEPTH IN FEET	-	0-5	-	0-5	-
MAT'L COLOR	-	BROWN	-	BROWN	-
MAT'L TYPE	-		-		-
LATITUDE DEG-MIN-SEC	-	34 37 50.30	-	34 37 51.00	-
LONGITUDE DEG-MIN-SEC	-	92 29 17.40	-	92 29 16.90	-
% PASSING	2	IN.	-		-
	1 1/2	IN.	-		-
	3/4	IN.	-		-
	3/8	IN.	-	100	-
	NO. 4		-	98	-
	NO. 10		-	95	-
	NO. 40		-	92	-
	NO. 80		-	88	-
	NO. 200		-	47	-
LIQUID LIMIT	-	44	-	38	-
PLASTICITY INDEX	-	29	-	24	-
AASHTO SOIL	-	A-7-6(9)	-	A-6(5)	-
UNIFIED SOIL	-		-		-
% MOISTURE CONTENT	-	24.7	-	18.7	-
ACHMSC	(IN)	7.0	-	1.5W	-
PCCP	(IN)	8.0	-	7.0	-
			-		-
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			-		-

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265

**JOB: 061500**

*Arkansas State Highway Transportation Department*

**JOB NAME: CREEK AT L.M. 4.65 STR. & APPRS.(S)**

*Materials Division*

**COUNTY NO. 62 DATE TESTED 12/6/2016**

*Michael Benson, Materials Engineer*

STA.#	LOC.	DEPTH	COLOR						L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				#4	#10	#40	#80	#200					
				S	I	E	V	E	S				
109+60	06RT	0-5	BROWN	98	95	92	88	47	44	29	A-7-6(9)	S480	3.2
110+30	06LT	0-5	BROWN	98	93	87	82	42	38	24	A-6(5)	S481	43.2

*comments:* W=MULTIPLE LAYERS

Tuesday, December 13, 2016