

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 080505

FEDERAL AID PROJECT NO. STPB-0023(50)

GREENBRIER CREEK STR. & APPRS. (S)

STATE HIGHWAY 225 SECTION 1

IN FAULKNER 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. 080505
Greenbrier Creek Str. & Apprs. (S)
Route 225 Section 1
Faulkner County

Transmitted herewith is the requested Soil Survey test results for the above referenced job. The project consists of replacing the bridge crossing Greenbrier Creek on Highway 225. Samples were obtained in the existing travel lanes, and ditch line. Due to utility conflicts a bulk sample was not obtained. An estimated R-Value of 10 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 Greenbrier.
2. Asphalt Concrete Hot Mix

<u>Type</u>	<u>Asphalt Cement %</u>	<u>Mineral Aggregate %</u>
Surface Course	5.2	94.8
Binder Course	4.4	95.6
Base Course	3.9	96.1


Michael C. Benson
Materials Engineer

MCB:pt:bjj
Attachment

cc: State Constr. Eng. – Master File Copy
District 8 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	- 12/07/16	SEQUENCE NO.	- 1
JOB NUMBER	- 080505	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	- 23
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- GREENBRIER CREEK STR. & APPRS. (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- FAULKNER, COUNTY	DATE SAMPLED	- 11/29/16
SAMPLED BY	- THORNTON / BATES	DATE RECEIVED	- 12/01/16
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 12/06/16
MATERIAL DESC.	- SOIL SURVEY PAVEMENT SOUNDINGS		

LAB NUMBER	- 20163952	- 20163953	- 20163954
SAMPLE ID	- S483	- S484	- S485
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 108+90	- 108+90	- 109+50
LOCATION	- 05RT	- 15RT	- 05LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 14 15.30	- 35 14 14.90	- 35 14 15.60
LONGITUDE DEG-MIN-SEC	- 92 24 13.50	- 92 24 13.90	- 92 24 12.80
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	100
	3/8 IN. - 100	100	98
	NO. 4 - 95	99	92
	NO. 10 - 88	95	82
	NO. 40 - 77	86	73
	NO. 80 - 60	69	51
	NO. 200 - 50	56	37
LIQUID LIMIT	- 24	- 21	- ND
PLASTICITY INDEX	- 10	- 08	- NP
AASHTO SOIL	- A-4(2)	- A-4(1)	- A-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 7.0	- 11.0	- 8.9
ACHMSC (IN)	- 2.25W	-	- 3.0W
AGG.BASE CRS CL-7 (IN)	- 8.0	-	- 8.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
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	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 12/07/16 SEQUENCE NO. - 2
JOB NUMBER - 080505 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 - 23
SUPPLIER NAME - STATE DISTRICT NO. - 08
NAME OF PROJECT - GREENBRIER CREEK STR. & APPRS. (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - FAULKNER, COUNTY DATE SAMPLED - 11/29/16
SAMPLED BY - THORNTON / BATES DATE RECEIVED - 12/01/16
SAMPLE FROM - TEST HOLE DATE TESTED - 12/06/16
MATERIAL DESC. - SOIL SURVEY PAVEMENT SOUNDINGS

LAB NUMBER	-	20163955	-	-
SAMPLE ID	-	S486	-	-
TEST STATUS	-	INFORMATION ONLY	-	-
STATION	-	109+50	-	-
LOCATION	-	17LT	-	-
DEPTH IN FEET	-	0-5	-	-
MAT'L COLOR	-	BROWN	-	-
MAT'L TYPE	-		-	-
LATITUDE DEG-MIN-SEC	-	35 14 15.80	-	-
LONGITUDE DEG-MIN-SEC	-	92 24 12.90	-	-
% PASSING	2	IN.	-	-
	1 1/2	IN.	-	-
	3/4	IN.	-	100
	3/8	IN.	-	99
	NO. 4		-	93
	NO. 10		-	87
	NO. 40		-	79
	NO. 80		-	50
	NO. 200		-	33
LIQUID LIMIT	-	ND	-	-
PLASTICITY INDEX	-	NP	-	-
AASHTO SOIL	-	A-2-4(0)	-	-
UNIFIED SOIL	-		-	-
% MOISTURE CONTENT	-	11.8	-	-
	-		-	-
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REMARKS - W=MULTIPLE LAYERS

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AASHTO TESTS : T24 T88 T89 T90 T265

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