

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 110650

FEDERAL AID PROJECT NO. STPC-9448(44)

HWY. 70 – SOUTHLAND DR. (WEST MEMPHIS) (S)

STATE HIGHWAY 38 SECTION 10

IN CRITTENDEN 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 DEPARTMENT OF TRANSPORTATION

ARDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

MATERIALS DIVISION

11301 West Baseline Road | P.O. Box 2261 | Little Rock, AR 72203-2261 | Phone: 501.569.2185 | Fax: 501.569.2368

June 4, 2018

TO: Mr. Trinity Smith, Engineer of Roadway Design
SUBJECT: Job No.110650
Beatty St. – Southland Dr. (West Memphis) (S)
Route 38 Section 10
Crittenden County

Transmitted herewith is the requested Soil Survey, strength data and Resilient Modulus test results for the above referenced job. The project consists of reconstructing approximately 0.8 miles of Highway 38 between Highway 70 and Southland Drive. Samples were taken in the existing travel lanes, shoulders and ditch line.

Based on laboratory results of samples obtained, the subgrade soils consist of non-plastic sands to highly plastic clays. Cross-sections are not currently available, but it is assumed the construction grade line will closely match that of the existing roadway. The presence of high moisture content and high plasticity subgrade materials will likely require significant rehabilitation for full depth pavement reconstruction. It is recommended that 2 feet of Stone Backfill placed on Type 10 separation fabric be planned for any area where full depth pavement is removed. Due to the project location and extreme heavy truck volume, it is recommended that a concrete overlay in conjunction with cold milling be considered for this project.

Additional earthwork recommendations will be made upon request when plans are further developed and cross-sections become available.

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 at the river port in West Memphis.

- 2. Asphalt Concrete Hot Mix

Table with 3 columns: Type, Asphalt Cement %, Mineral Aggregate %. Rows include Surface Course, Binder Course, and Base Course.

Handwritten signature of Michael C. Benson, Materials Engineer

MCB:pt:bjj
Attachment

cc: State Constr. Eng. – Master File Copy
District 1 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 STRENGTH TEST REPORT ***

DATE - 05/02/2018
JOB NUMBER - 110650

SEQUENCE NO. - 1
MATERIAL CODE - SSRV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 18
DISTRICT NO. - 01

JOB NAME - BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)

* STATION LIMITS R-VALUE AT 240 psi *

BEGIN JOB - END JOB	LESS THAN 5
RESILIENT MODULUS	
STA. 105+00	6415

REMARKS -
-
AASHTO TESTS : T190

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS
RECOMPACTED SAMPLES**

Job No.	110650	Material Code	SSRVPS
Date Sampled:	3/21/18	Station No.:	105+00
Date Tested:	May 1, 2018	Location:	36'RT
Name of Project:	BEATTY ST. - SOUTHLAND DR. (WEST MAMPHIS)(S)		
County:	Code: 18	Name:	CRITTENDEN
Sampled By:	THORNTON/BATES	Depth:	0-5
Lab No.:	20180674	AASHTO Class:	A-6 (6)
Sample ID:	RV 165	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

1. Testing Information:

Preconditioning - Permanent Strain > 5% (Y=Yes or N= No)	N
Testing - Permanent Strain > 5% (Y=Yes or N=No)	N
Number of Load Sequences Completed (0-15)	15

2. Specimen Information:

Specimen Diameter (in):	
Top	3.95
Middle	3.94
Bottom	3.93
Average	3.94
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	8.02
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.02
Initial Area, Ao (sq. in):	12.12
Initial Volume, AoLo (cu. in):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3034.70
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4. Soil Properties:

Optimum Moisture Content (%):	17.5
Maximum Dry Density (pcf):	104
95% of MDD (pcf):	98.8
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3034.70
Compaction Moisture content (%):	17.6
Compaction Wet Density (pcf):	118.98
Compaction Dry Density (pcf):	101.17
Moisture Content After Mr Test (%):	17.3

6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable):

#VALUE!

7. Resilient Modulus, Mr:

6109(S_c)^{-0.09219}(S₃)^{0.31915}

8. Comments

9. Tested By:

GW _____

Date: May 1, 2018

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS
RECOMPACTED SAMPLES**

Job No. 110650 **Material Code** SSRVPS
Date Sampled: 3/21/18 **Station No.:** 105+00
Date Tested: May 1, 2018 **Location:** 36'RT

Name of Project: BEATTY ST. - SOUTHLAND DR. (WEST MAMPHIS)(S)

County: Code: 18 **Name:** CRITTENDEN

Sampled By: THORNTON/BATES

Lab No.: 20180674

Sample ID: RV 165

LATITUDE:

Depth: 0-5

AASHTO Class: A-6 (6)

Material Type (1 or 2): 2
LONGITUDE:

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied Max. Axial Load	Actual Applied Cyclic Load	Actual Applied Contact Load	Actual Applied Max. Axial Stress	Actual Applied Cyclic Stress	Actual Applied Contact Stress	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
DESIGNATION	S ₃	S _{cyclic}	P _{max}	P _{cyclic}	P _{contact}	S _{max}	S _{cyclic}	S _{contact}	H _{avg}	ε _r	M _r
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	in	in/in	psi
Sequence 1	6.0	2.0	24.7	22.0	2.7	2.0	1.8	0.2	0.00143	0.00018	10,191
Sequence 2	6.0	4.0	46.7	43.8	2.8	3.9	3.6	0.2	0.00288	0.00036	10,061
Sequence 3	6.0	6.0	68.9	65.3	3.6	5.7	5.4	0.3	0.00434	0.00054	9,968
Sequence 4	6.0	8.0	91.7	85.7	6.0	7.6	7.1	0.5	0.00625	0.00078	9,070
Sequence 5	6.0	10.0	113.9	105.4	8.5	9.4	8.7	0.7	0.00831	0.00104	8,394
Sequence 6	4.0	2.0	24.7	21.8	2.8	2.0	1.8	0.2	0.00162	0.00020	8,892
Sequence 7	4.0	4.0	46.0	43.2	2.9	3.8	3.6	0.2	0.00342	0.00043	8,345
Sequence 8	4.0	6.0	67.1	64.2	2.9	5.5	5.3	0.2	0.00534	0.00067	7,953
Sequence 9	4.0	8.0	90.4	85.2	5.2	7.5	7.0	0.4	0.00718	0.00090	7,846
Sequence 10	4.0	10.0	113.1	105.4	7.7	9.3	8.7	0.6	0.00928	0.00116	7,514
Sequence 11	2.0	2.0	24.5	21.7	2.8	2.0	1.8	0.2	0.00204	0.00025	7,050
Sequence 12	2.0	4.0	45.5	42.7	2.8	3.8	3.5	0.2	0.00414	0.00052	6,820
Sequence 13	2.0	6.0	66.0	63.2	2.8	5.4	5.2	0.2	0.00626	0.00078	6,682
Sequence 14	2.0	8.0	87.5	83.2	4.3	7.2	6.9	0.4	0.00855	0.00107	6,440
Sequence 15	2.0	10.0	110.8	104.1	6.7	9.1	8.6	0.6	0.01074	0.00134	6,415

TESTED BY _____ DATE _____
 REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS
RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	110650	Material Code	SSRVPS
Date Sampled:	3/21/18	Station No.:	105+00
Date Tested:	May 1, 2018	Location:	36'RT
Name of Project:	BEATTY ST. - SOUTHLAND DR. (WEST MAMPHIS)(S)		
County:	Code: 18	Name:	CRITTENDEN
Sampled By:	THORNTON/BATES	Depth:	0-5
Lab No.:	20180674	AASHTO Class:	A-6 (6)
Sample ID:	RV 165	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

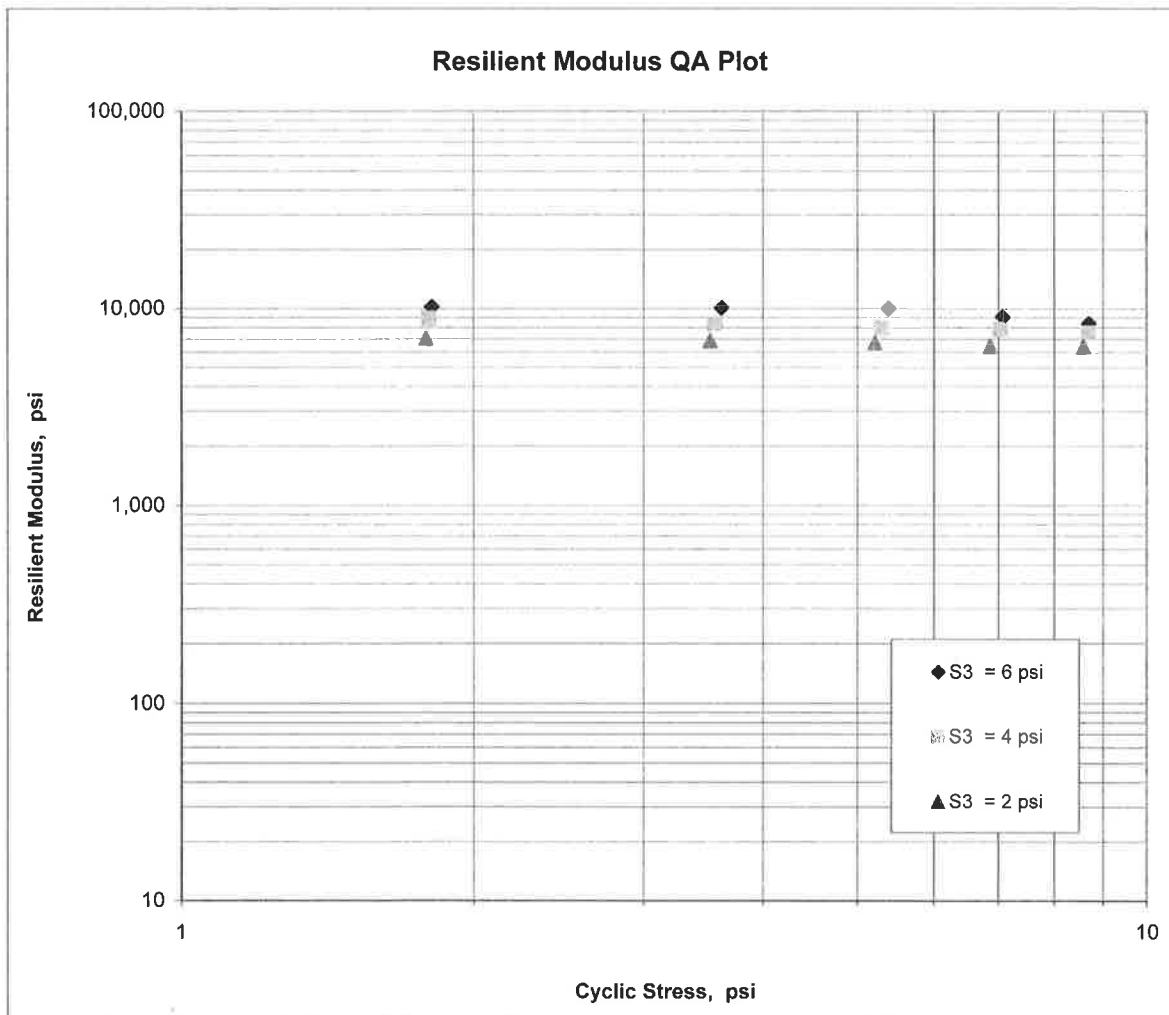
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = \underline{6,109}$$

$$K_2 = \underline{-0.09219}$$

$$K_5 = \underline{0.31915}$$

$$R^2 = \underline{0.96}$$



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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/08/18	SEQUENCE NO.	- 1
JOB NUMBER	- 110650	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 18
SUPPLIER NAME	- STATE	DISTRICT NO.	- 01
NAME OF PROJECT - BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY	- ARKANSAS		
LOCATION	- CRITTENDEN, COUNTY	DATE SAMPLED	- 03/21/18
SAMPLED BY	- THORNTON/BATES	DATE RECEIVED	- 03/23/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/02/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	- 20180660	- 20180661	- 20180662
SAMPLE ID	- S151	- S152	- S153
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 105+00	- 105+00	- 115+00
LOCATION	- 24RT	- 36RT	- 33LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- GRAY	- BR/GR	- BR/GR
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 8 50.60	- 35 08 50.70	- 35 9 .20
LONGITUDE DEG-MIN-SEC	- 90 08 25.80	- 90 08 25.60	- 90 08 23.30
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	- 100	-
3/8 IN.	- 100	- 95	- 100
NO. 4	- 98	- 94	- 99
NO. 10	- 94	- 91	- 99
NO. 40	- 89	- 87	- 96
NO. 80	- 82	- 79	- 61
NO. 200	- 76	- 74	- 33
LIQUID LIMIT	- 33	- 62	- ND
PLASTICITY INDEX	- 17	- 33	- NP
AASHTO SOIL	- A-6(11)	- A-7-6(26)	- A-2-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 28.9	- 35.8	- 12.1
ACHMSC (IN)	- 1.25	- ---	- ---
ACHMBC (IN)	- 9.5W	- ---	- 9.5W
AGG. BASE CRS CL-7 (IN)	- 5.0	- ---	- ---
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - W=MULTIPLE LAYERS
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-
-
-

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 - 05/02/18 SEQUENCE NO. - 2
 JOB NUMBER - 110650 MATERIAL CODE - SSRVPS
 FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014
 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 18
 SUPPLIER NAME - STATE DISTRICT NO. - 01
 NAME OF PROJECT - BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)
 PROJECT ENGINEER - NOT APPLICABLE
 PIT/QUARRY - ARKANSAS
 LOCATION - CRITTENDEN, COUNTY DATE SAMPLED - 03/21/18
 SAMPLED BY - THORNTON/BATES DATE RECEIVED - 03/23/18
 SAMPLE FROM - TEST HOLE DATE TESTED - 05/02/18
 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20180663	- 20180664	- 20180665
SAMPLE ID	- S154	- S155	- S156
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 115+00	- 115+00	- 123+00
LOCATION	- 37LT	- 49LT	- 37RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BR/GR	- GRAY
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 9 .30	- 35 09 .30	- 35 9 7.30
LONGITUDE DEG-MIN-SEC	- 90 08 23.40	- 90 08 23.50	- 90 08 18.60
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	-
	3/8 IN. - 99	- 98	- 100
	NO. 4 - 99	- 93	- 99
	NO. 10 - 98	- 91	- 98
	NO. 40 - 96	- 79	- 93
	NO. 80 - 67	- 47	- 76
	NO. 200 - 36	- 25	- 64
LIQUID LIMIT	- ND	- ND	- 28
PLASTICITY INDEX	- NP	- NP	- 10
AASHTO SOIL	- A-4 (0)	- A-2-4 (0)	- A-4 (4)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 11.8	- 12.2	- 39.8
ACHMSC (IN)	- 2.5	- ---	- 2.0
ACHMBC (IN)	- ---	- ---	- 11.0W
AGG. BASE CRS CL-7 (IN)	- 3.0	- ---	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/08/18	SEQUENCE NO.	- 3
JOB NUMBER	- 110650	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 18
SUPPLIER NAME	- STATE	DISTRICT NO.	- 01
NAME OF PROJECT	- BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CRITTENDEN, COUNTY	DATE SAMPLED	- 03/21/18
SAMPLED BY	- THORNTON/BATES	DATE RECEIVED	- 03/23/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/02/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180666	- 20180667	- 20180668
SAMPLE ID	- S157	- S158	- S159
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 123+00	- 123+00	- 132+00
LOCATION	- 47RT	- 57RT	- 30LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- GRAY	- GRAY	- GRAY
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 9 7.30	- 35 09 7.20	- 35 9 15.60
LONGITUDE DEG-MIN-SEC	- 90 08 18.50	- 90 08 18.40	- 90 08 14.50
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	-
	3/8 IN. - 100	-	- 100
	NO. 4 - 99	- 100	- 99
	NO. 10 - 99	-	- 99
	NO. 40 - 98	-	- 98
	NO. 80 - 93	-	- 96
	NO. 200 - 89	- 91	- 85
LIQUID LIMIT	- 44	- 52	- 44
PLASTICITY INDEX	- 30	- 36	- 27
AASHTO SOIL	- A-7-6(27)	- A-7-6(34)	- A-7-6(23)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 30.5	- 33.4	- 34.8
ACHMSC (IN)	- 2.0	- ---	- 3.0
PCCP (IN)	- ---	- ---	- 8.5
AGG. BASE CRS CL-7 (IN)	- 4.0	- ---	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

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	- 05/08/18	SEQUENCE NO.	- 4
JOB NUMBER	- 110650	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 18
SUPPLIER NAME	- STATE	DISTRICT NO.	- 01
NAME OF PROJECT	- BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CRITTENDEN, COUNTY	DATE SAMPLED	- 03/21/18
SAMPLED BY	- THORNTON/BATES	DATE RECEIVED	- 03/23/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/02/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180669	- 20180670	- 20180671
SAMPLE ID	- S160	- S161	- S162
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 132+00	- 132+00	- 141+00
LOCATION	- 42LT	- 55LT	- 28RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- GRAY	- GRAY
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 9 15.60	- 35 09 15.70	- 35 9 23.50
LONGITUDE DEG-MIN-SEC	- 90 08 14.60	- 90 08 14.70	- 90 08 9.30
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	-
	3/8 IN. - 100	-	-
	NO. 4 - 99	- 100	- 100
	NO. 10 - 99	-	-
	NO. 40 - 99	-	-
	NO. 80 - 94	-	-
	NO. 200 - 78	- 90	- 96
LIQUID LIMIT	- 38	- 53	- 37
PLASTICITY INDEX	- 23	- 34	- 24
AASHTO SOIL	- A-6(16)	- A-7-6(33)	- A-6(23)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 34.8	- 41.2	- 40.6
ACHMSC	(IN) - 3.0	- ---	- 3.5
PCCP	(IN) - ---	- ---	- 8.5
AGG. BASE CRS CL-7	(IN) - 2.0	- ---	- 2.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/08/18 SEQUENCE NO. - 5
JOB NUMBER - 110650 MATERIAL CODE - SSRVPS
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 18
SUPPLIER NAME - STATE DISTRICT NO. - 01
NAME OF PROJECT - BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CRITTENDEN, COUNTY DATE SAMPLED - 03/21/18
SAMPLED BY - THORNTON/BATES DATE RECEIVED - 03/23/18
SAMPLE FROM - TEST HOLE DATE TESTED - 05/02/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20180672	-	20180673	-
SAMPLE ID	-	S163	-	S164	-
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-
STATION	-	141+00	-	141+00	-
LOCATION	-	37RT	-	49RT	-
DEPTH IN FEET	-	0-5	-	0-5	-
MAT'L COLOR	-	GRAY	-	GRAY	-
MAT'L TYPE	-		-		-
LATITUDE DEG-MIN-SEC	-	35 9 23.50	-	35 09 23.40	-
LONGITUDE DEG-MIN-SEC	-	90 08 9.20	-	90 08 9.10	-
% PASSING	2	IN.	-		-
	1 1/2	IN.	-		-
	3/4	IN.	-		-
	3/8	IN.	-		-
	NO. 4	100	-	100	-
	NO. 10		-	99	-
	NO. 40		-	99	-
	NO. 80		-	94	-
	NO. 200	90	-	85	-
LIQUID LIMIT	-	48	-	38	-
PLASTICITY INDEX	-	34	-	25	-
AASHTO SOIL	-	A-7-6(31)	-	A-6(20)	-
UNIFIED SOIL	-		-		-
% MOISTURE CONTENT	-	40.6	-	40.2	-
ACHMSC	(IN)	2.25	-	---	-
AGG. BASE CRS CL-7	(IN)	3.0	-	---	-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-
			-		-

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	-	05/02/18	SEQUENCE NO.	-	1
JOB NUMBER	-	110650	MATERIAL CODE	-	RV
FEDERAL AID NO.	-	TO BE ASSIGNED	SPEC. YEAR	-	2014
PURPOSE	-	SOIL SURVEY SAMPLE	SUPPLIER ID.	-	1
SPEC. REMARKS	-	NO SPECIFICATION CHECK	COUNTY/STATE	-	18
SUPPLIER NAME	-	STATE	DISTRICT NO.	-	01
NAME OF PROJECT	-	BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS) (S)			
PROJECT ENGINEER	-	NOT APPLICABLE			
PIT/QUARRY	-	ARKANSAS			
LOCATION	-	CRITTENDEN, COUNTY	DATE SAMPLED	-	03/21/18
SAMPLED BY	-	THORNTON/BATES	DATE RECEIVED	-	03/23/18
SAMPLE FROM	-	TEST HOLE	DATE TESTED	-	05/02/18
MATERIAL DESC.	-	SOIL SURVEY - RESISTANCE R-VALUE	ACTUAL RESULTS		

LAB NUMBER	-	20180674	-	-	-
SAMPLE ID	-	RV165	-	-	-
TEST STATUS	-	INFORMATION ONLY	-	-	-
STATION	-	105+00	-	-	-
LOCATION	-	36RT	-	-	-
DEPTH IN FEET	-	0-5	-	-	-
MAT'L COLOR	-	BROWN	-	-	-
MAT'L TYPE	-		-	-	-
LATITUDE DEG-MIN-SEC	-	35 8 50.70	-	-	-
LONGITUDE DEG-MIN-SEC	-	90 08 25.60	-	-	-
% PASSING	2	IN.	-	-	-
	1 1/2	IN.	-	-	-
	3/4	IN.	-	100	-
	3/8	IN.	-	99	-
	NO. 4		-	97	-
	NO. 10		-	96	-
	NO. 40		-	93	-
	NO. 80		-	88	-
	NO. 200		-	59	-
LIQUID LIMIT	-	34	-	-	-
PLASTICITY INDEX	-	14	-	-	-
AASHTO SOIL	-	A-6(6)	-	-	-
UNIFIED SOIL	-		-	-	-
% MOISTURE CONTENT	-		-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-
			-	-	-

REMARKS - W=MULTIPLE LAYERS

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:-
:-
:-

AASHTO TESTS : T24 T88 T89 T90 T265

:-

JOB: 110650

Arkansas State Highway Transportation Department

DATE TESTED

JOB NAME: BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS)(S)

5/2/2018

COUNTY NO. 18

Michael Benson, Materials Engineer

STA.# LOC.

PAVEMENT SOUNDINGS

105+00	24RT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		1.25	9.5W	5.0
105+00	36RT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		---	---	---
115+00	33LT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		---	9.5W	---
115+00	37LT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		2.5	---	3.0
115+00	49LT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		---	---	---
123+00	37RT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
		2.0	11.0W	---
123+00	47RT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		2.0	---	4.0
123+00	57RT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		---	---	---
132+00	30LT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		3.0	8.5	---
132+00	42LT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		3.0	---	2.0
132+00	55LT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		---	---	---
141+00	28RT	ACHMSC	PCCP	AGG. BASE CRS CL-7
		3.5	8.5	2.0
141+00	37RT	ACHMSC	AGG. BASE CRS CL-7	
		2.25	3.0	
141+00	49RT	ACHMSC	AGG. BASE CRS CL-7	
		---	---	

comments: W=MULTIPLE LAYERS

Wednesday, May 23, 2018

JOB: 110650

Arkansas State Highway Transportation Department

JOB NAME: BEATTY ST. - SOUTHLAND DR. (WEST MEMPHIS)(S)

Materials Division

COUNTY NO. 18 DATE TESTED 5/2/2018

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				
105+00	36RT	0-5	BROWN	97	96	93	88	59	34	14	A-6(6)	RV165	
105+00	24RT	0-5	GRAY	98	94	89	82	76	33	17	A-6(11)	S151	28.9
105+00	36RT	0-5	BR/GR	94	91	87	79	74	62	33	A-7-6(26)	S152	35.8
~115+00	33LT	0-5	BR/GR	99	99	96	61	33	ND	NP	A-2-4(0)	S153	12.1
~115+00	37LT	0-5	BROWN	99	98	96	67	36	ND	NP	A-4(0)	S154	11.8
115+00	49LT	0-5	BR/GR	93	91	79	47	25	ND	NP	A-2-4(0)	S155	12.2
-123+00	37RT	0-5	GRAY	99	98	93	76	64	28	10	A-4(4)	S156	39.8
123+00	47RT	0-5	GRAY	99	99	98	93	89	44	30	A-7-6(27)	S157	30.5
123+00	57RT	0-5	GRAY	100				91	52	36	A-7-6(34)	S158	33.4
132+00	30LT	0-5	GRAY	99	99	98	96	85	44	27	A-7-6(23)	S159	34.8
132+00	42LT	0-5	BR/GR	99	99	99	94	78	38	23	A-6(16)	S160	34.8
132+00	55LT	0-5	GRAY	100				90	53	34	A-7-6(33)	S161	41.2
141+00	28RT	0-5	GRAY	100				96	37	24	A-6(23)	S162	40.6
141+00	37RT	0-5	GRAY	100				90	48	34	A-7-6(31)	S163	40.6
141+00	49RT	0-5	GRAY	100	99	99	94	85	38	25	A-6(20)	S164	40.2

comments: W=MULTIPLE LAYERS

Wednesday, May 23, 2018