ARKANSAS DEPARTMENT OF TRANSPORTATION

SUBSURFACE INVESTIGATION

STATE JOB NO. 061442

FEDERAL AID PROJECT NO. HSIP-0062(39)

GARLAND CO. LINE - BENTON (SAFETY IMPVTS.) (S)

STATE HIGHWAY 5 **SECTION** 7

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

February 23, 2016

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 061442
Garland Co. Line - Benton (Safety Impvts) (S)
Route 5 Section 7
Saline County

Transmitted herewith are the requested Soil Survey, Strength Data, and Resilient Modulus test results for the above referenced job. The project consists of making safety improvements and curve realignment of Highway 5 in seven locations from the Garland County Line to Benton. Samples were obtained in the existing travel lanes, shoulder, ditch line and along the new alignment. Sample locations were measured from centerline of the existing roadway and is noted as such on the logs.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of moderately plastic sandy clay with varying amounts of shale fragments and gravel. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction. Rock was encountered at stations 1054+00 200 feet right of centerline at a depth of 3.0 feet; and at 1087+00 30 feet right of centerline at a depth of 1.0 foot.

Section 1

Between stations 152+45 to 154+00 is a proposed cut right of centerline with an approximate depth of 34 feet. It is recommended that the slope be constructed on a 2:1 configuration. The remaining embankment and cut slopes are acceptable as shown in the cross sections.

Section 2

Between stations 506+89 to 508+00 and 511+00 to 512+00 are proposed cuts of approximately 70 feet and 65 feet respectively. The cut slope may be constructed on a 2:1 configuration with 10 foot wide bench every 25 vertical feet. An alternative to the cut slope is to construct a soil nail wall at these locations. The wall could be constructed on a ¼:1 configuration with a 10 foot bench every 20 vertical feet. This option would require less right of way, clearing, and excavation. It would serve as protection for slides that could occur during construction, as well as in the long term. An extensive subsurface investigation would be required if this option is selected to determine rock locations and soil properties. Each configuration is shown on select cross-sections within the station limits and illustrated in Figure 1.

The cross-sections for sections 3, 4, and 5 are acceptable as shown.

Section 6

Between stations 1045+76 to 1048+00 and 1049+91 to 1055+00 are proposed cuts of approximately 57 feet and 77 feet respectively. The cut slope may be constructed on a 2:1 configuration with 10 foot wide bench every 25 vertical feet. An alternative to the cut slope is to construct a soil nail wall at these locations. The wall could be constructed on a ¼:1 configuration

with a 10 foot bench every 20 vertical feet. This option would require less right of way, clearing, and excavation. It would serve as protection for slides that could occur during construction, as well as in the long term. An extensive subsurface investigation would be required if this option is selected to determine rock locations and soil properties. Each configuration is shown on select cross-sections within the station limits and illustrated in Figure 1.

Section 7

At station 1085+79 is a cut of approximately 24 feet. The cut slope may be constructed on a 2:1 configuration. The remaining cut slopes and embankments are acceptable as shown.

The maximum embankment height within the project limits is approximately 17 feet. The embankments may be constructed with locally available unspecified material utilizing the 3:1 slope configuration shown in the currently available cross-sections. Rock from the cuts may be used to construct the embankments on a 2:1 slope configuration if the slopes are plated with rip rap.

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 in the vicinity of Bryant.

2. Asphalt Concrete Hot Mix

Type	Asphalt Cement %	Mineral Aggregate %
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

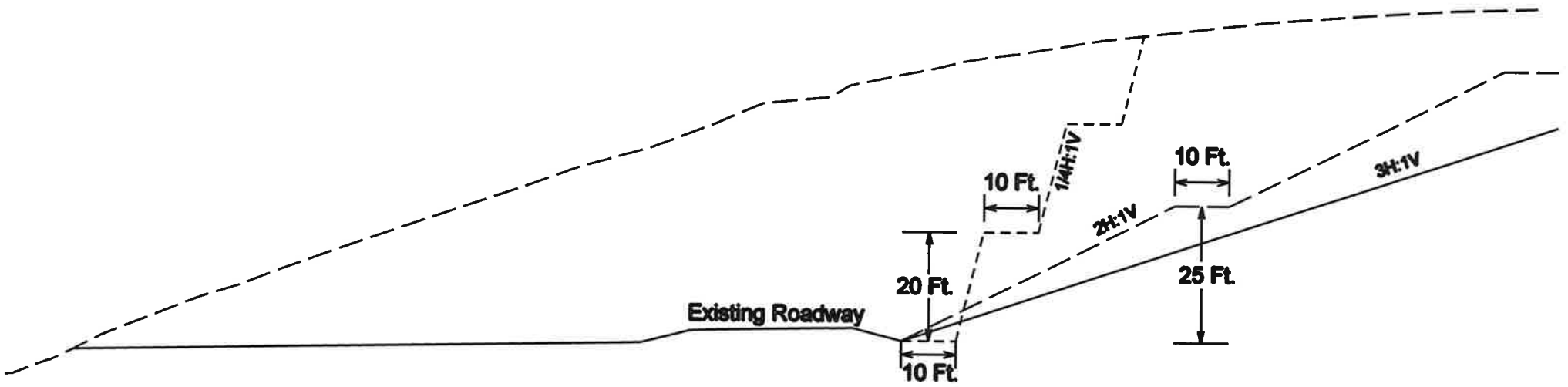

Figure 1 - Alternative Slope Configurations

Proposed 3H:1V Cut Slopes

Soil Nail Wall Alternative - 10 Ft. Catchment basin at the bottom, 1/4H:1V cut slopes with a 10 Ft. wide bench every 20 vertical feet.

2H:1V Alternative - Cuts on a 2H:1V slope with a 10 Ft. wide bench every 25 vertical feet.

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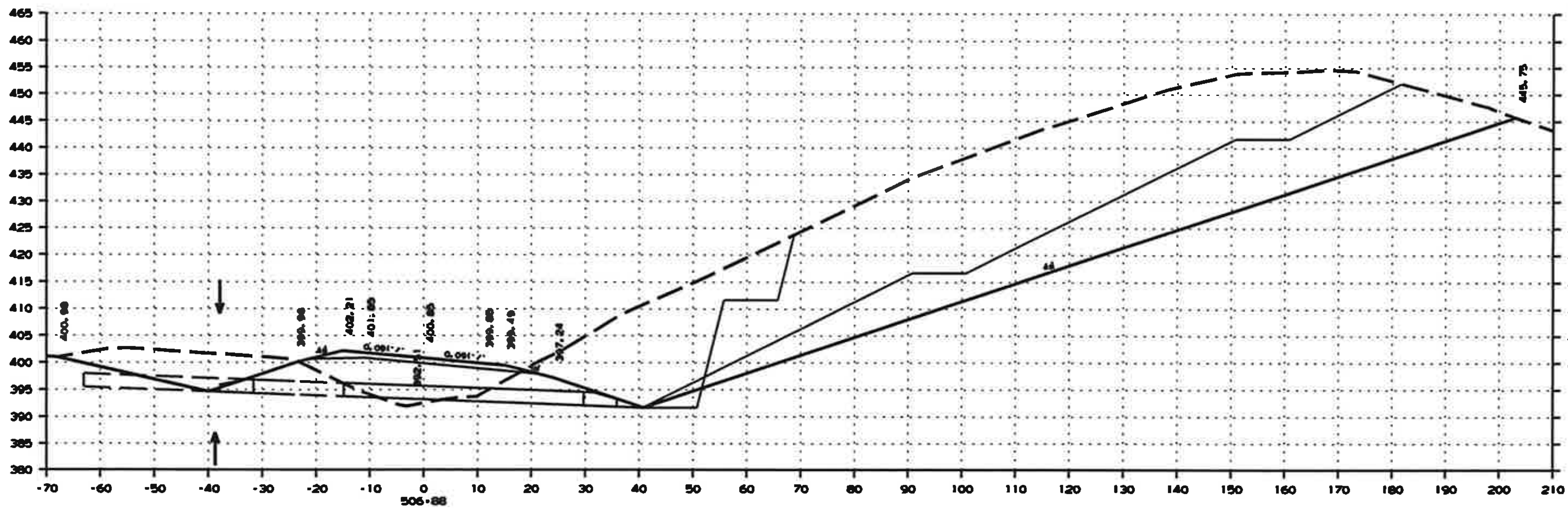
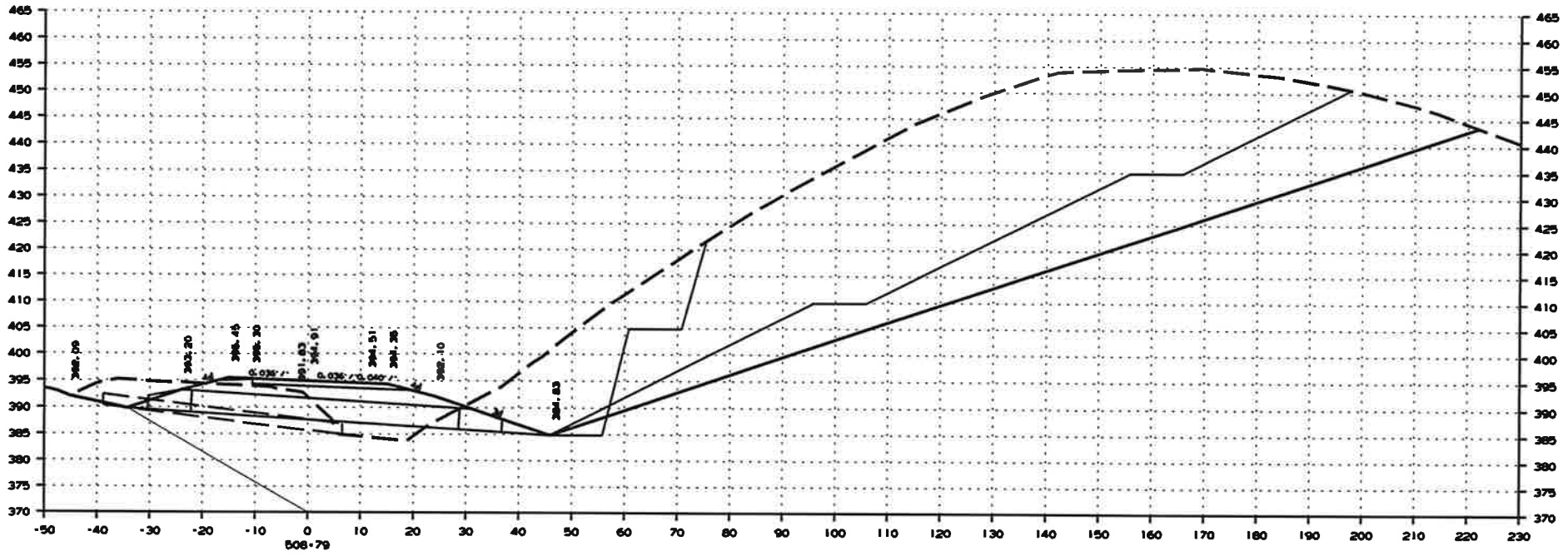
				6	ARK.			
				JOB NO.	061442			

(2) CROSS SECTIONS



CROSS SECTION STA. 506+88 TO STA. 506+88



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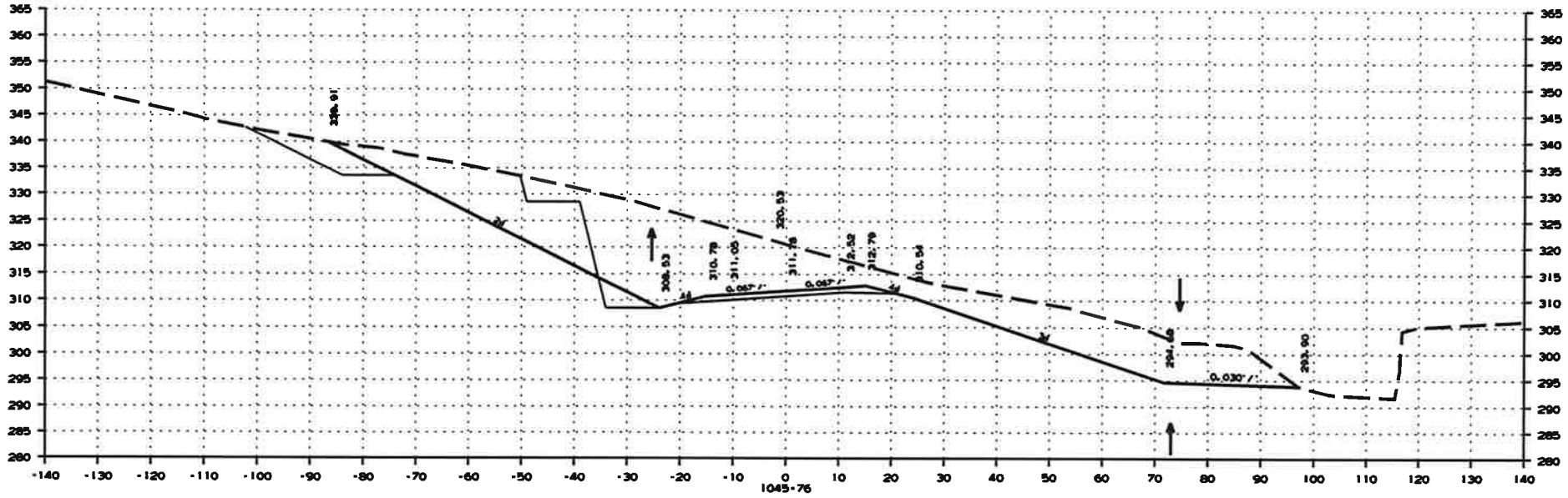
				6	ARK.			
					JOB NO.	051442		

② CROSS SECTIONS



CROSS SECTION STA. 1045+76 TO STA. 1045+76

1/6/2006

051442.DGN

					6	ABR.		
						JOB NO.	061442	

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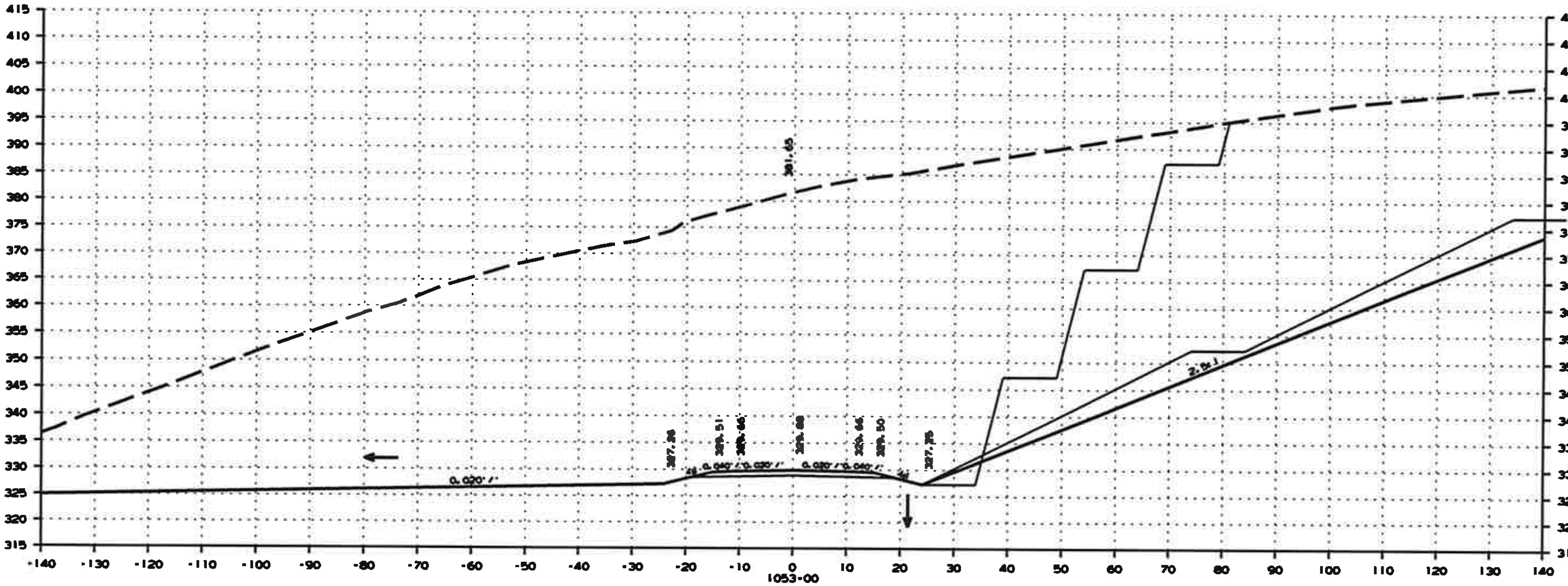

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R061442.DGN 1/8/2016

				6				
					051442			

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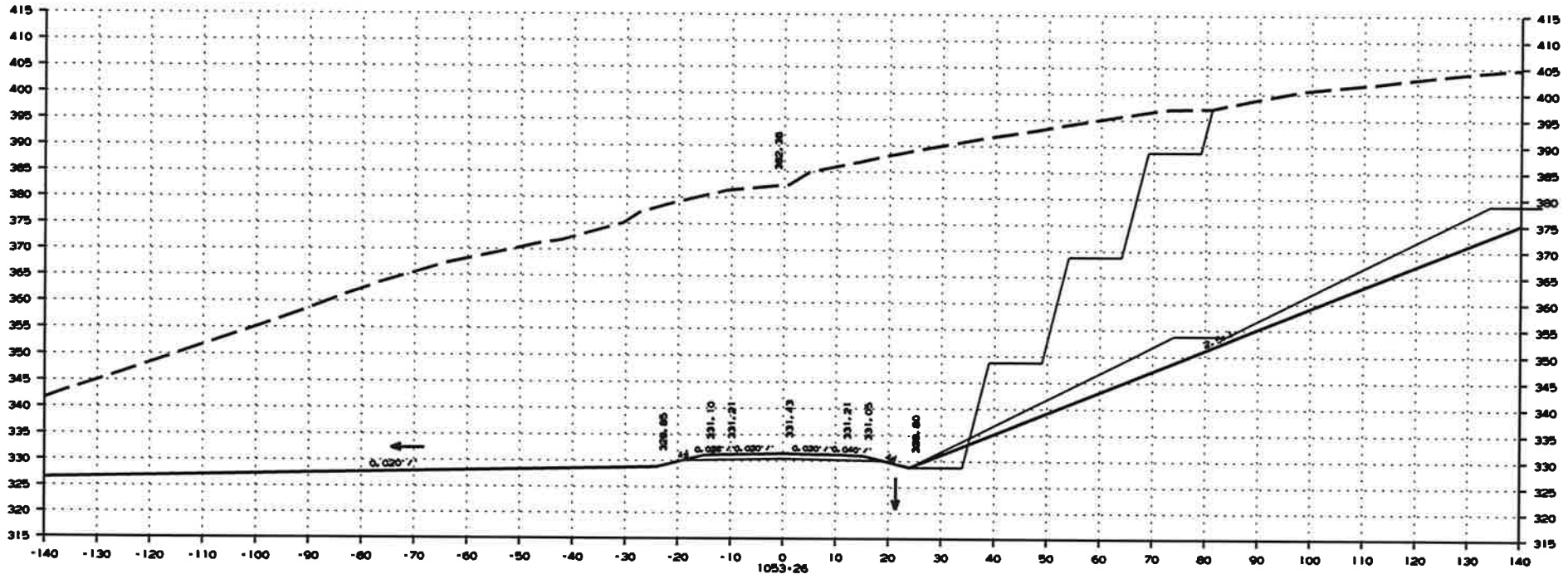

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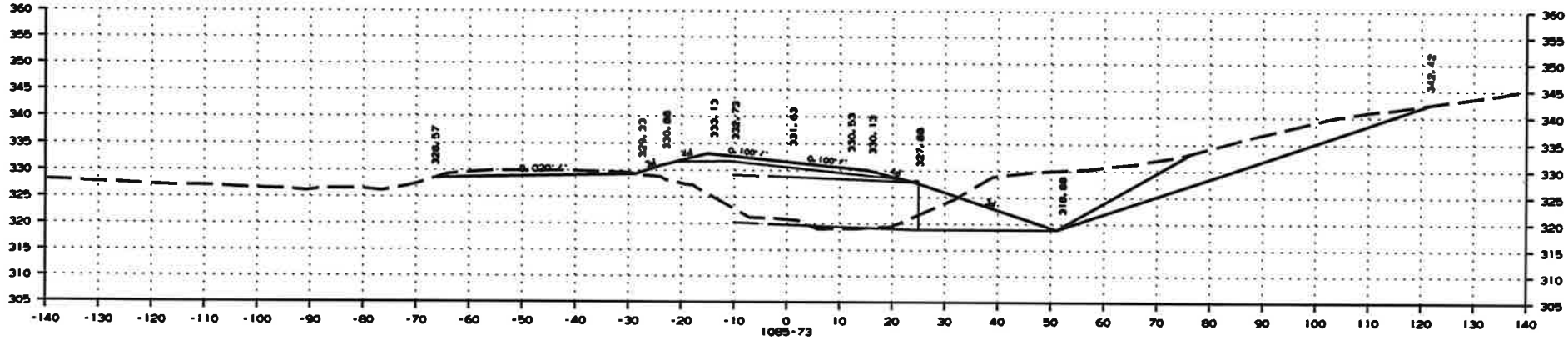
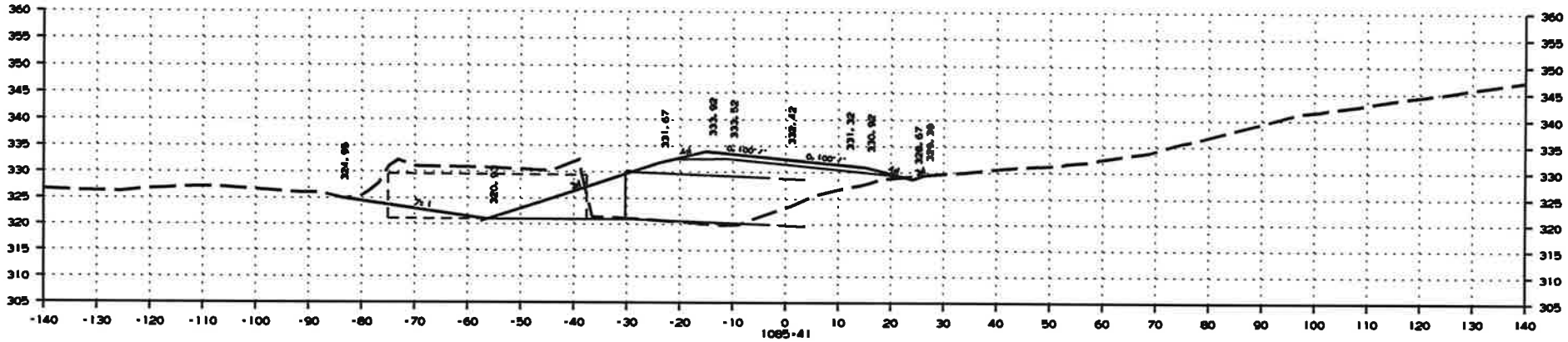
1/8/2015

R0051+2.DGN





CROSS SECTION STA. 1085+41 TO STA. 1085+73

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION
MICHAEL BENSON, MATERIALS ENGINEER
*** SOIL SURVEY STRENGTH TEST REPORT ***

DATE - 02/17/2016
JOB NUMBER - 061442

SEQUENCE NO. - 1
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06

JOB NAME - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)

STATION LIMITS	R-VALUE AT 240 psi
BEGIN JOB - STA.775	LESS THAN 5
STA.775 - END JOB	10
RESILIENT MODULUS	
STA.146+00	6530
STA.518+00	7262
STA.534+00	7642
STA.731+00	5159
STA.765+00	4924

REMARKS - STA.1062+00 5691
- STA.1094+00 7075

AASHTO TESTS : T190

JOB: 061442

JOB NAME: GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)

COUNTY NO. 62 **DATE TESTED** 2/10/2016

Arkansas State Highway Transporation Department

Materials Division

Michael Benson, Materials Engineer

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E S					
0146+0	18' RT	0-5	BR/GR	74	55	33	26	22	ND	NP	A-1-B(0)	RV972	
0518+0	18' LT	0-5	BROWN	96	89	77	69	60	23	05	A-4(1)	RV973	
0534+0	20' RT	0-5	BROWN	86	75	65	60	55	31	11	A-6(4)	RV974	
0731+0	20' RT	0-5	BROWN	90	84	75	70	65	33	11	A-6(5)	RV975	
0765+0	20' LT	0-5	GRAY	94	85	73	66	59	32	11	A-6(4)	RV976	
1062+0	19' LT	0-5	BROWN	83	67	41	32	27	29	05	A-2-4(0)	RV977	
1094+0	22' LT	0-5	BROWN	90	82	69	63	48	29	10	A-4(2)	RV978	
0146+0	06' RT	0-5	BR/GR	92	82	65	56	49	32	12	A-6(3)	S919	20.3
0146+0	13' RT	0-5	BROWN	94	82	63	55	49	30	10	A-4(2)	S920	9.9
0146+0	18' RT	0-5	BR/GR	95	81	56	45	39	35	15	A-6(2)	S921	18.4
0162+0	06' RT	0-5	BROWN	93	88	78	74	70	34	16	A-6(9)	S922	19.5
0162+0	13' RT	0-5	BROWN	89	81	71	67	64	34	15	A-6(7)	S923	16.2
0162+0	22' RT	0-5	BROWN	93	85	77	74	72	39	18	A-6(12)	S924	17.2
0503+0	06' RT	0-5	BROWN	91	80	68	64	61	30	12	A-6(5)	S925	11.9
0503+0	13' RT	0-5	BROWN	89	76	65	60	54	31	13	A-6(4)	S926	12.2
0503+0	17' RT	0-5	BROWN	98	92	81	76	67	28	13	A-6(6)	S927	22.2
0518+0	06' LT	0-5	BROWN	97	88	76	70	63	37	19	A-6(10)	S928	24.9
0518+0	13' LT	0-5	BROWN	94	88	80	74	64	29	11	A-6(5)	S929	19.5
0518+0	18' LT	0-5	BROWN	95	86	74	67	56	26	11	A-6(3)	S930	19.3
0534+0	06' RT	0-5	BROWN	95	87	78	72	67	33	17	A-6(9)	S931	23.5
0534+0	13' RT	0-5	BROWN	88	79	70	65	60	26	10	A-4(3)	S932	22.1
0534+0	20' RT	0-5	BROWN	93	85	76	71	67	33	16	A-6(8)	S933	19
0542+0	19' RT	0-5	BROWN	98	92	81	73	64	27	11	A-6(4)	S934	28.2
0550+0	06' LT	0-5	BROWN	96	87	74	68	63	35	15	A-6(7)	S935	26.1
0550+0	13' LT	0-5	BROWN	85	72	58	53	47	31	13	A-6(3)	S936	18.2
0550+0	30' LT	0-5	BROWN	84	74	61	51	41	24	7	A-4(0)	S937	15.9

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

Friday, February 12, 2016

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E S					
0715+0	06' RT	0-5	BROWN	100	100	100	100	92	48	24	A-7-6(24)	S938	21.5
0715+0	13' RT	0-5	BROWN	100	100	100	100	96	53	26	A-7-6(29)	S939	22.7
0715+0	21' RT	0-5	BROWN	92	89	87	86	82	42	18	A-7-6(15)	S940	21.2
0723+0	06' LT	0-5	BROWN	97	95	92	90	86	49	28	A-7-6(25)	S941	26.8
0723+0	13' LT	0-5	BROWN	99	97	92	89	84	52	30	A-7-6(27)	S942	23.8
0723+0	21' LT	0-5	BROWN	81	70	61	57	52	40	22	A-6(8)	S943	16.9
0731+0	06' RT	0-5	BROWN	96	89	79	75	70	37	14	A-6(9)	S944	20.4
0731+0	13' RT	0-5	BROWN	99	97	91	89	86	41	18	A-7-6(16)	S945	23.7
0731+0	20' RT	0-5	BROWN	98	95	88	81	75	33	12	A-6(8)	S946	9.7
0757+0	06' RT	0-5	GRAY	98	96	92	88	81	25	8	A-4(4)	S947	20
0757+0	13' RT	0-5	BROWN	96	90	84	80	74	28	11	A-6(6)	S948	15.4
0757+0	20' RT	0-5	GRAY	97	93	84	79	72	29	11	A-6(6)	S949	18.9
0765+0	06' LT	0-5	GRAY	97	93	85	81	73	31	14	A-6(8)	S950	19.2
0765+0	13' LT	0-5	GRAY	93	87	80	76	68	30	12	A-6(6)	S951	21.1
0765+0	20' LT	0-5	GRAY	97	89	81	75	67	31	12	A-6(6)	S952	20.5
0771+0	24' RT	0-5	BROWN	96	92	84	80	72	31	11	A-6(6)	S953	21.7
0775+0	06' LT	0-5	BROWN	100	97	90	87	83	41	21	A-7-6(17)	S954	26.7
0775+0	13' LT	0-5	BROWN	98	91	84	82	76	37	18	A-6(12)	S955	21.7
0775+0	21' LT	0-5	BR/GR	96	86	64	60	56	31	14	A-6(5)	S956	20.3
1038+0	06' RT	0-5	BROWN	95	83	68	62	57	28	9	A-4(3)	S957	18.4
1038+0	13' RT	0-5	BROWN	94	81	66	61	56	31	10	A-4(3)	S958	17.1
1038+0	22' RT	0-5	BROWN	98	88	67	59	53	33	10	A-4(3)	S959	14.6
1044+0	25' LT	0-5	BROWN	87	76	61	54	46	32	10	A-4(2)	S960	17.1
1054+0	200' RT	0-3Z	BROWN	90	80	63	58	54	32	8	A-4(2)	S961	22.6
1062+0	06' LT	0-5	BROWN	97	88	69	60	54	25	6	A-4(1)	S962	32.4
1062+0	13' LT	0-5	BROWN	95	87	73	68	59	29	7	A-4(2)	S963	29.1
1062+0	19' LT	0-5	BROWN	76	59	38	29	23	29	8	A-2-4(0)	S964	27.6
1077+0	06' RT	0-5	BROWN	94	86	71	65	59	33	14	A-6(6)	S965	10.5

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

Friday, February 12, 2016

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				SIEVE				SIZE					
1077+0	13' RT	0-5	BR/GR	80	68	55	50	47	31	10	A-4(2)	S966	12.8
1077+0	22' RT	0-5	BROWN	95	83	66	58	51	27	8	A-4(1)	S967	15.8
1087+0	30' RT	0-1Z	BROWN	69	60	49	41	31	25	7	A-2-4(0)	S968	13.2
1094+0	06' LT	0-5	BROWN	94	87	76	71	57	35	18	A-6(7)	S969	20.5
1094+0	13' LT	0-5	BROWN	97	91	82	75	61	33	18	A-6(8)	S970	16.5
1094+0	22' LT	0-5	BROWN	98	93	84	77	59	34	15	A-6(6)	S971	23.3

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

JOB: 061442

JOB NAME: GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)

COUNTY NO. 62

Arkansas State Highway Transporation Department
Materials Division
Michael Benson, Materials Engineer

DATE TESTED
2/10/2016

PAVEMENT SOUNDINGS

STA.#	LOC.				
0146+00	13' RT	ACHMSC	ACHMBC	PCCP	
		7.5W	**1.5**	**---**	
0146+00	18' RT	ACHMSC	ACHMBC	PCCP	
		---	**---**	**---**	
0146+00	06' RT	ACHMSC	ACHMBC	PCCP	
		4.5W	**---**	**6.0**	
0162+00	06' RT	ACHMSC	ACHMBC	PCCP	
		6.0WX	**---**	**6.0**	
0162+00	13' RT	ACHMSC	ACHMBC	PCCP	
		5.0W	**5.0W**	**---**	
0162+00	22' RT	ACHMSC	ACHMBC	PCCP	
		---	**---**	**---**	
0503+00	06' RT	CHIP SEAL	ACHMSC	ACHMBC	PCCP
		.25	**3.25W**	**--**	**6.0**
0503+00	13' RT	CHIP SEAL	ACHMSC	ACHMBC	PCCP
		--	**5.5**	**3.5**	**---**
0503+00	17' RT	CHIP SEAL	ACHMSC	ACHMBC	PCCP
		---	**---**	**---**	**---**
0518+00	06' LT	ACHMSC	ACHMBC	PCCP	
		5.5W	**---**	**5.5**	
0518+00	13' LT	ACHMSC	ACHMBC	PCCP	
		2.5	**4.5**	**---**	
0518+00	18' LT	ACHMSC	ACHMBC	PCCP	
		---	**---**	**---**	
0534+00	06' RT	ACHMSC	PCCP		
		4.25WX	**5.25**		
0534+00	13' RT	ACHMSC	PCCP		
		9.5W	**---**		
0534+00	20' RT	ACHMSC	PCCP		
		---	**---**		
0542+00	19' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7	
		---	**---**	**--**	
0550+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7	
		2.0	**4.0**	**7.0**	

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

Friday, February 12, 2016

0550+00	13' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7	
		2.0	**4.0**	**7.0**	
0550+00	30' LT	ACHMSC	PCCP		
		---	---		
0715+00	06' RT	ACHMSC	PCCP		
		3.25W	**6.5**		
0715+00	13' RT	ACHMSC	PCCP		
		9.0	---		
0715+00	21' RT	ACHMSC	PCCP	AGG.BASE CRS CL-7	
		---	---	--	
0723+00	06' LT	ACHMSC	PCCP	AGG.BASE CRS CL-7	
		4.0WX	**6.0**	--	
0723+00	13' LT	ACHMSC	PCCP	AGG.BASE CRS CL-7	
		7.0W	---	**7.0**	
0723+00	21' LT	ACHMSC	PCCP		
		---	---		
0731+00	20' RT	ACHMSC	ACHMBC	PCCP	AGG.BASE CRS CL-7
		---	---	---	--
0731+00	06' RT	ACHMSC	PCCP		
		5.0W	**6.5**		
0731+00	13' RT	ACHMSC	PCCP		
		7.5W	---		
0757+00	06' RT	ACHMSC	ACHMBC	PCCP	AGG.BASE CRS CL-7
		3.5WX	---	**6.0**	--
0757+00	13' RT	ACHMSC	ACHMBC	PCCP	AGG.BASE CRS CL-7
		2.5	**6.0**	---	**7.0**
0757+00	20' RT	ACHMSC	ACHMBC	PCCP	
		---	---	---	
0765+00	06' LT	ACHMSC	ACHMBC	PCCP	
		4.0	---	**6.0**	
0765+00	13' LT	ACHMSC	ACHMBC	PCCP	
		2.0	**5.5**	---	
0765+00	20' LT	ACHMSC	PCCP		
		---	---		
0771+00	24' RT	ACHMSC	PCCP		
		---	---		
0775+00	06' LT	ACHMSC	PCCP		
		4.0W	**6.0**		

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

0775+00	13' LT	ACHMSC	PCCP
		9.0W	---
0775+00	21' LT	ACHMSC	PCCP
		---	---
1038+00	06' RT	ACHMSC	PCCP
		3.5W	**7.0**
1038+00	13' RT	ACHMSC	
		5.0W	
1038+00	22' RT	ACHMSC	

1044+00	25' LT	ACHMSC	

1054+00	200' RT	ACHMSC	PCCP
		---	---
1062+00	06' LT	ACHMSC	PCCP
		5.5W	**6.0**
1062+00	13' LT	ACHMSC	PCCP
		7.0WX	---
1062+00	19' LT	ACHMSC	PCCP
		---	---
1077+00	06' RT	ACHMSC	PCCP
		5.0W	**6.0**
1077+00	13' RT	ACHMSC	PCCP
		3.9W	---
1077+00	22' RT	ACHMSC	PCCP
		---	---
1087+00	30' RT	ACHMSC	PCCP
		---	---
1094+00	22' LT	ACHMSC	AGG.BASE CRS CL-7
		---	--
1094+00	06' LT	ACHMSC	PCCP
		4.0W	**6.0**
1094+00	13' LT	ACHMSC	AGG.BASE CRS CL-7
		5.5WX	**8.0**

comments: W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
ALL LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	1/20/16	**Station No.:**	146+00
Date Tested:	January 20, 2016	**Location:**	18' RT
Name of Project:	GARLAND CO. LINE - BENTON (SAFETY IMPVTS) (S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	DICKERSON	**Depth:**	0-5'
Lab No.:	20154193	**AASHTO Class:**	A-1-B(0)
Sample ID:	RV972	**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	3.96
Middle	3.93
Bottom	3.93
Average	3.94
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	8.04
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.04
Initial Area, Ao (sq. in):	12.12
Initial Volume, AoLo (cu. in):	97.48

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3197.60

4. Soil Properties:

Optimum Moisture Content (%):	14.0
Maximum Dry Density (pcf):	113.7
95% of MDD (pcf):	108.0
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3197.60
Compaction Moisture content (%):	13.6
Compaction Wet Density (pcf):	124.99
Compaction Dry Density (pcf):	110.02
Moisture Content After Mr Test (%):	13.6

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

7. Resilient Modulus, Mr: 9066(Sc)^-0.27257(S3)^0.32112

8. Comments _____

9. Tested By: C.GARRETT **Date:** January 20, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	1/20/16	**Station No.:**	146+00
Date Tested:	January 20, 2016	**Location:**	18' RT
Name of Project:	GARLAND CO. LINE - BENTON (SAFETY IMPVTS) (S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	DICKERSON	**Depth:**	0-5'
Lab No.:	20154193	**AASHTO Class:**	A-1-B(0)
Sample ID:	RV972	**Material Type (1 or 2):**	2
LATITUDE:		**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	24.8	22.1	2.7	2.0	1.8	0.2	0.00110	0.00014	13,347
Sequence 2	6.0	4.0	46.5	43.8	2.7	3.8	3.6	0.2	0.00254	0.00032	11,449
Sequence 3	6.0	6.0	68.5	65.0	3.5	5.7	5.4	0.3	0.00412	0.00051	10,460
Sequence 4	6.0	8.0	91.4	85.4	6.0	7.5	7.0	0.5	0.00592	0.00074	9,570
Sequence 5	6.0	10.0	114.6	106.1	8.5	9.4	8.8	0.7	0.00772	0.00096	9,110
Sequence 6	4.0	2.0	24.6	21.9	2.7	2.0	1.8	0.2	0.00120	0.00015	12,134
Sequence 7	4.0	4.0	45.8	43.1	2.7	3.8	3.6	0.2	0.00288	0.00036	9,917
Sequence 8	4.0	6.0	66.3	63.5	2.7	5.5	5.2	0.2	0.00485	0.00060	8,685
Sequence 9	4.0	8.0	88.8	83.8	5.1	7.3	6.9	0.4	0.00683	0.00085	8,131
Sequence 10	4.0	10.0	112.5	104.9	7.5	9.3	8.7	0.6	0.00883	0.00110	7,883
Sequence 11	2.0	2.0	24.4	21.7	2.7	2.0	1.8	0.2	0.00143	0.00018	10,034
Sequence 12	2.0	4.0	44.9	42.2	2.7	3.7	3.5	0.2	0.00347	0.00043	8,057
Sequence 13	2.0	6.0	64.5	61.7	2.8	5.3	5.1	0.2	0.00581	0.00072	7,043
Sequence 14	2.0	8.0	85.9	81.5	4.3	7.1	6.7	0.4	0.00811	0.00101	6,665
Sequence 15	2.0	10.0	108.6	101.8	6.8	9.0	8.4	0.6	0.01034	0.00129	6,530

TESTED BY C.GARRETT DATE January 20, 2016

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.	061442	**Material Code**	SSRVPS
Date Sampled:	1/20/16	**Station No.:**	146+00
Date Tested:	January 20, 2016	**Location:**	18' RT
Name of Project:	GARLAND CO. LINE - BENTON (SAFETY IMPVTS) (S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	DICKERSON	**Depth:**	0-5'
Lab No.:	20154193	**AASHTO Class:**	A-1-B(0)
Sample ID:	RV972	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

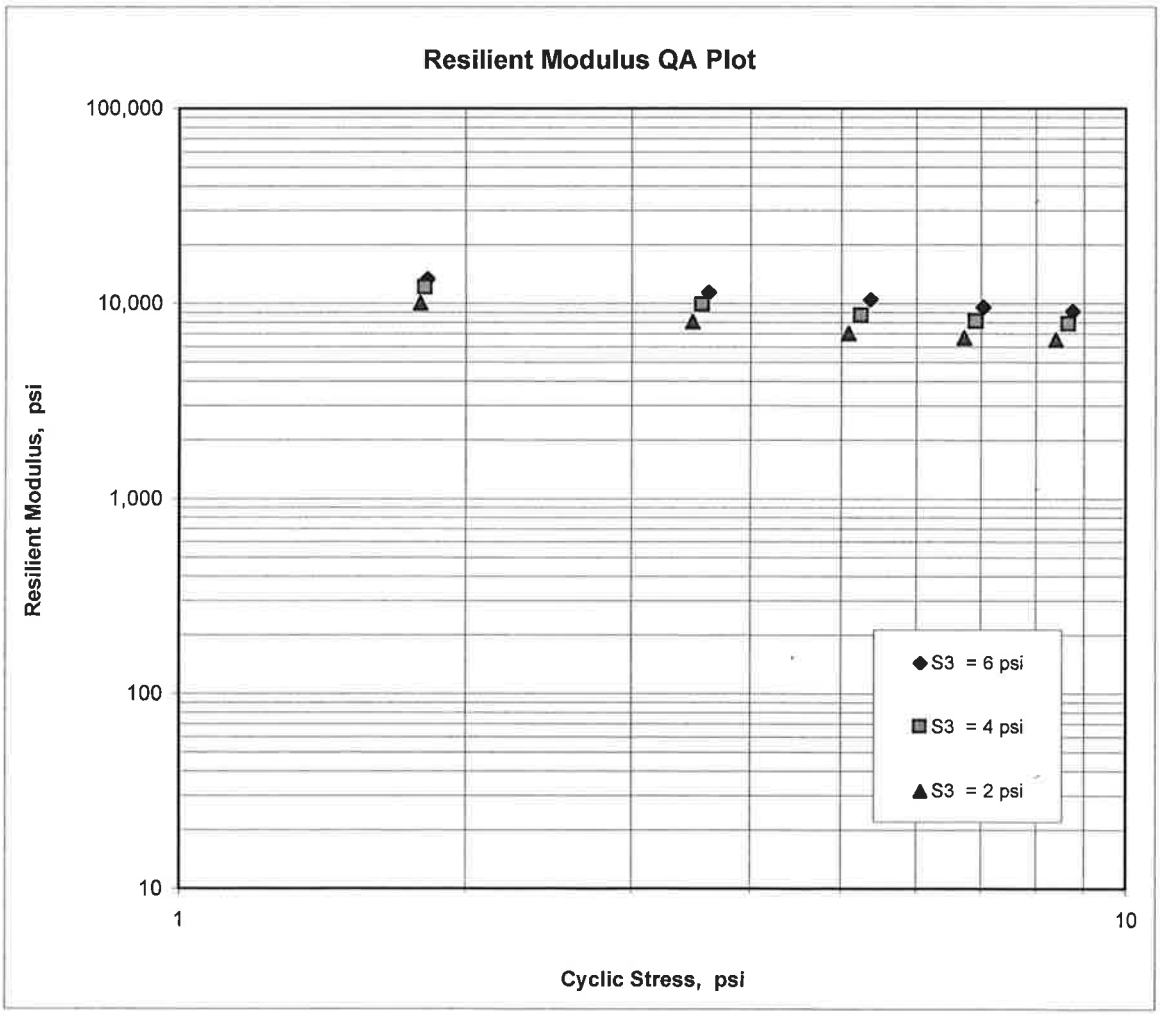
$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 = 9,066

K2 = -0.27257

K5 = 0.32112

R^2 = 0.99



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	518+00
Date Tested:	February 9, 2016	**Location:**	18' LT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154194	**AASHTO Class:**	A-4(1)
Sample ID:	RV973	**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	3.95
Average	3.95
Membrane Thickness (in):	0.00
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):	12.23
Initial Volume, AoLo (cu. in):	98.11

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3262.40

4. Soil Properties:

Optimum Moisture Content (%):	13.6
Maximum Dry Density (pcf):	115.3
95% of MDD (pcf):	109.5
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3262.40
Compaction Moisture content (%):	13.6
Compaction Wet Density (pcf):	126.70
Compaction Dry Density (pcf):	111.53
Moisture Content After Mr Test (%):	12.8

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

7. Resilient Modulus, Mr: 8353(Sc)^-0.22065(S3)^0.41138

8. Comments

9. Tested By: RC **Date:** February 9, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	518+00
Date Tested:	February 9, 2016	**Location:**	18' LT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154194	**AASHTO Class:**	A-4(1)
Sample ID:	RV973	**Material Type (1 or 2):**	2
LATITUDE:		**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	24.8	22.1	2.8	2.0	1.8	0.2	0.00098	0.00012	14,821
Sequence 2	6.0	4.0	46.8	44.0	2.8	3.8	3.6	0.2	0.00209	0.00026	13,801
Sequence 3	6.0	6.0	68.9	65.2	3.7	5.6	5.3	0.3	0.00333	0.00042	12,825
Sequence 4	6.0	8.0	91.1	85.0	6.2	7.4	6.9	0.5	0.00483	0.00060	11,528
Sequence 5	6.0	10.0	113.1	104.4	8.6	9.2	8.5	0.7	0.00639	0.00080	10,717
Sequence 6	4.0	2.0	24.7	21.9	2.8	2.0	1.8	0.2	0.00113	0.00014	12,718
Sequence 7	4.0	4.0	45.5	42.6	2.8	3.7	3.5	0.2	0.00253	0.00032	11,027
Sequence 8	4.0	6.0	65.5	62.6	2.8	5.4	5.1	0.2	0.00414	0.00052	9,915
Sequence 9	4.0	8.0	88.1	82.9	5.3	7.2	6.8	0.4	0.00572	0.00071	9,498
Sequence 10	4.0	10.0	110.1	102.2	7.8	9.0	8.4	0.6	0.00738	0.00092	9,079
Sequence 11	2.0	2.0	24.1	21.3	2.7	2.0	1.7	0.2	0.00136	0.00017	10,298
Sequence 12	2.0	4.0	43.6	40.8	2.8	3.6	3.3	0.2	0.00316	0.00039	8,453
Sequence 13	2.0	6.0	62.3	59.4	2.9	5.1	4.9	0.2	0.00511	0.00064	7,621
Sequence 14	2.0	8.0	83.0	78.5	4.5	6.8	6.4	0.4	0.00699	0.00087	7,359
Sequence 15	2.0	10.0	104.6	97.6	7.0	8.5	8.0	0.6	0.00881	0.00110	7,262

TESTED BY RC DATE February 9, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

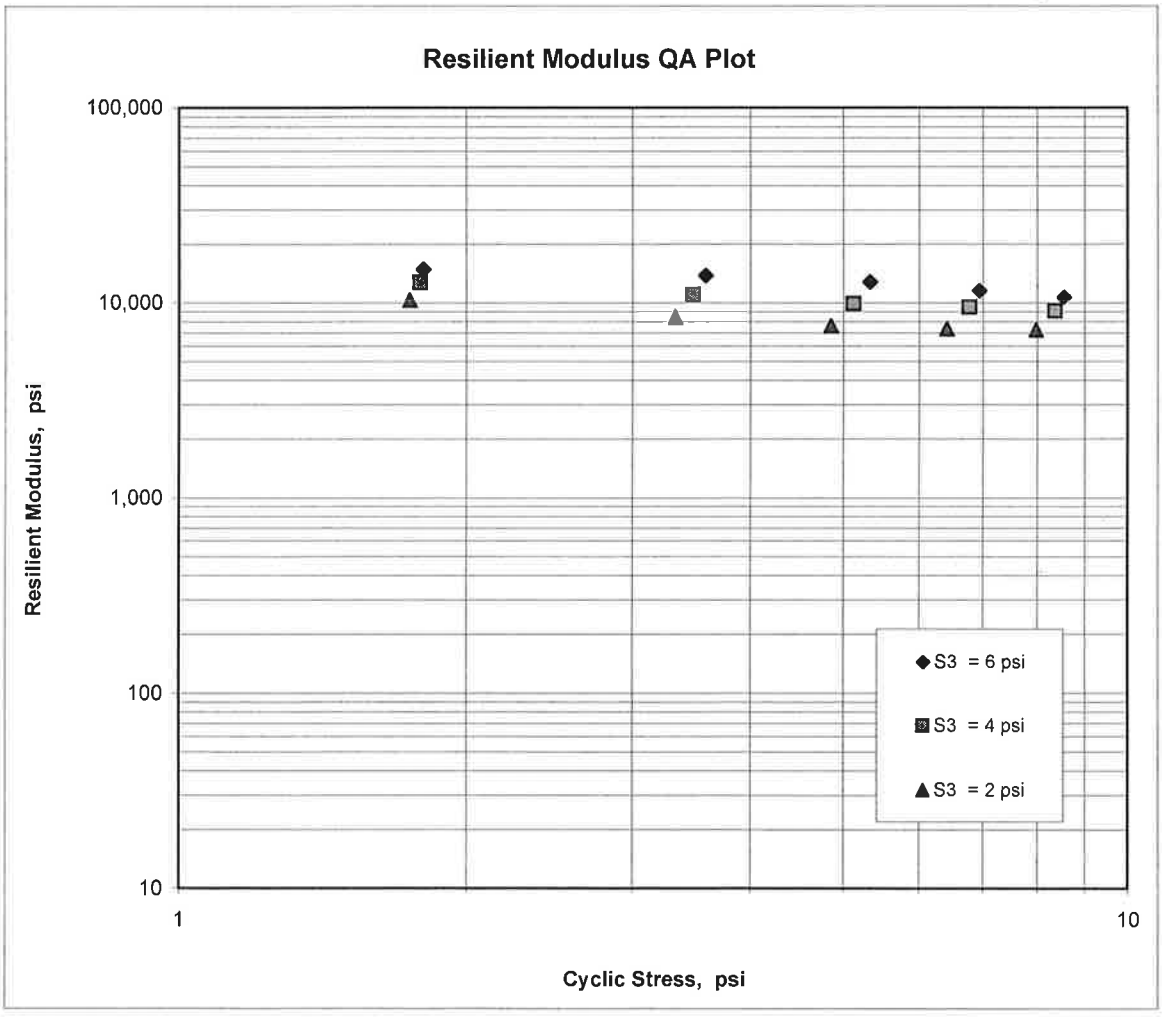
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	518+00
Date Tested:	February 9, 2016	**Location:**	18' LT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154194	**AASHTO Class:**	A-4(1)
Sample ID:	RV973	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 = 8,353
K2 = -0.22065
K5 = 0.41138
R^2 = 0.98



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0534+00
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154195	**AASHTO Class:**	A-6(4)
Sample ID:	RV974	**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	3.96
Middle	3.95
Bottom	3.95
Average	3.95
Membrane Thickness (in):	0.00
Height of Specimen, Cap and Base (in):	8.03
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.03
Initial Area, Ao (sq. in):	12.27
Initial Volume, AoLo (cu. in):	98.57

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3095.20

4. Soil Properties:

Optimum Moisture Content (%):	15.7
Maximum Dry Density (pcf):	110
95% of MDD (pcf):	104.5
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3095.20
Compaction Moisture content (%):	15.8
Compaction Wet Density (pcf):	119.65
Compaction Dry Density (pcf):	103.32
Moisture Content After Mr Test (%):	15.4

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

7. Resilient Modulus, Mr: 11674(Sc)^-0.28715(S3)^0.29641

8. Comments _____

9. Tested By: DEB **Date:** February 9, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0534+00
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154195	**AASHTO Class:**	A-6(4)
Sample ID:	RV974	**Material Type (1 or 2):**	2
LATITUDE:		**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	25.3	22.6	2.7	2.1	1.8	0.2	0.00093	0.00012	15,912
Sequence 2	6.0	4.0	47.6	44.8	2.8	3.9	3.6	0.2	0.00198	0.00025	14,776
Sequence 3	6.0	6.0	70.0	66.4	3.6	5.7	5.4	0.3	0.00326	0.00041	13,305
Sequence 4	6.0	8.0	92.7	86.6	6.1	7.6	7.1	0.5	0.00505	0.00063	11,210
Sequence 5	6.0	10.0	115.0	106.5	8.5	9.4	8.7	0.7	0.00698	0.00087	9,980
Sequence 6	4.0	2.0	25.3	22.7	2.7	2.1	1.8	0.2	0.00106	0.00013	14,010
Sequence 7	4.0	4.0	47.0	44.3	2.7	3.8	3.6	0.2	0.00231	0.00029	12,524
Sequence 8	4.0	6.0	68.1	65.4	2.7	5.5	5.3	0.2	0.00384	0.00048	11,124
Sequence 9	4.0	8.0	90.8	85.6	5.2	7.4	7.0	0.4	0.00562	0.00070	9,975
Sequence 10	4.0	10.0	112.8	105.2	7.7	9.2	8.6	0.6	0.00756	0.00094	9,094
Sequence 11	2.0	2.0	24.9	22.3	2.6	2.0	1.8	0.2	0.00123	0.00015	11,902
Sequence 12	2.0	4.0	46.2	43.5	2.7	3.8	3.5	0.2	0.00276	0.00034	10,291
Sequence 13	2.0	6.0	66.4	63.7	2.7	5.4	5.2	0.2	0.00457	0.00057	9,113
Sequence 14	2.0	8.0	87.8	83.5	4.3	7.2	6.8	0.4	0.00659	0.00082	8,290
Sequence 15	2.0	10.0	109.5	102.7	6.8	8.9	8.4	0.6	0.00879	0.00109	7,642

TESTED BY DEB DATE February 9, 2016

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.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0534+00 -
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154195	**AASHTO Class:**	A-6(4)
Sample ID:	RV974	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

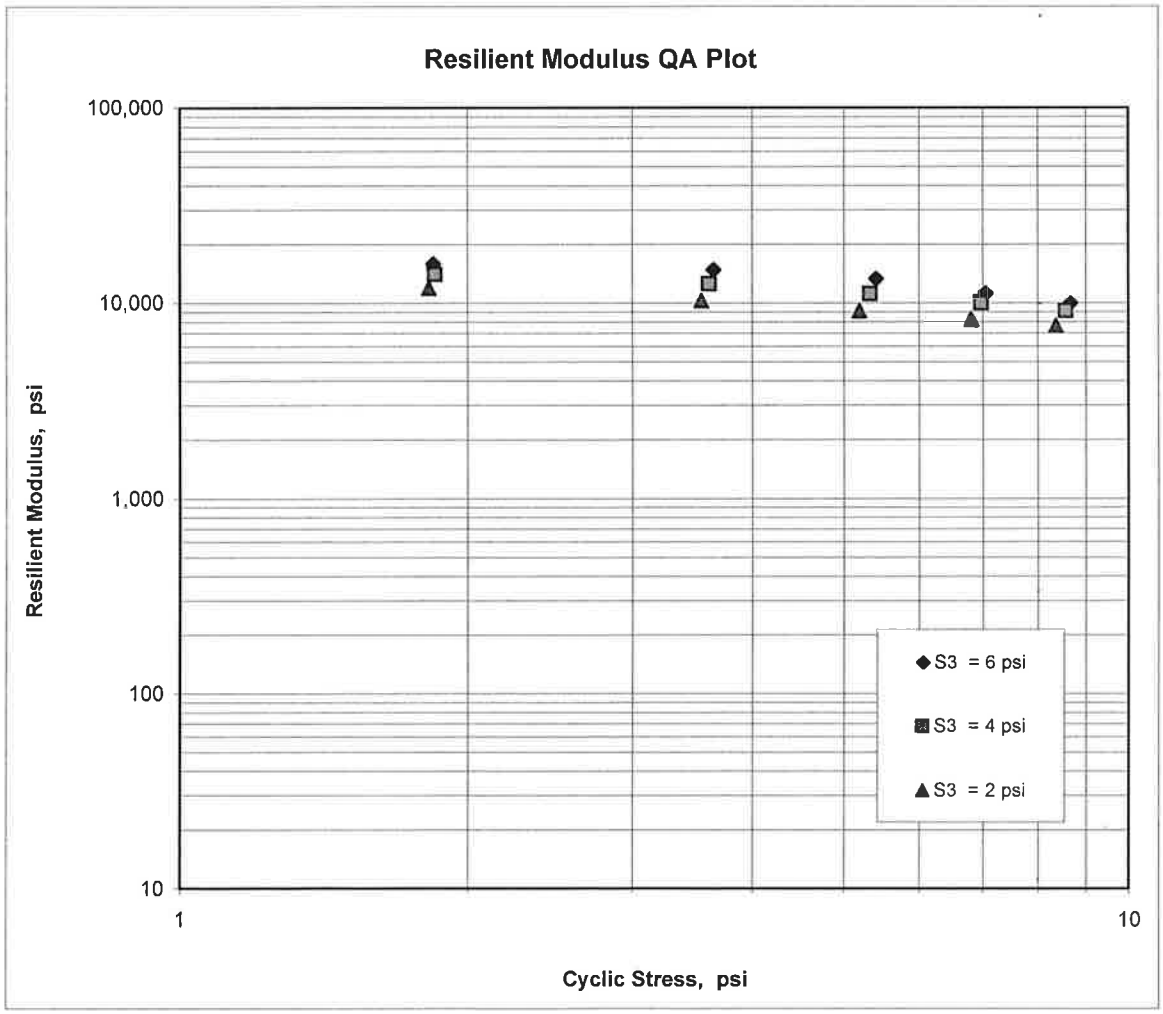
$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 = 11,674

K2 = -0.28715

K5 = 0.29641

R^2 = 0.96



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0731+00
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154196	**AASHTO Class:**	A-6(5)
Sample ID:	RV975	**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	3.96
Middle	3.95
Bottom	3.94
Average	3.95
Membrane Thickness (in):	0.00
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):	12.25
Initial Volume, AoLo (cu. in):	98.28

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3047.30

4. Soil Properties:

Optimum Moisture Content (%):	18.2
Maximum Dry Density (pcf):	106.3
95% of MDD (pcf):	101.0
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3047.30
Compaction Moisture content (%):	18.0
Compaction Wet Density (pcf):	118.14
Compaction Dry Density (pcf):	100.12
Moisture Content After Mr Test (%):	17.5

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

7. Resilient Modulus, Mr: 9785(Sc)^-0.38483(S3)^0.24420

8. Comments _____

9. Tested By: GW **Date:** February 9, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0731+00
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154196	**AASHTO Class:**	A-6(5)
Sample ID:	RV975	**Material Type (1 or 2):**	2
LATITUDE:		**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	25.1	22.4	2.7	2.0	1.8	0.2	0.00128	0.00016	11,439
Sequence 2	6.0	4.0	47.0	44.2	2.8	3.8	3.6	0.2	0.00300	0.00037	9,637
Sequence 3	6.0	6.0	68.9	65.3	3.6	5.6	5.3	0.3	0.00511	0.00064	8,369
Sequence 4	6.0	8.0	91.3	85.1	6.2	7.4	6.9	0.5	0.00766	0.00096	7,270
Sequence 5	6.0	10.0	113.3	104.6	8.7	9.2	8.5	0.7	0.01039	0.00130	6,588
Sequence 6	4.0	2.0	25.0	22.3	2.7	2.0	1.8	0.2	0.00137	0.00017	10,665
Sequence 7	4.0	4.0	46.4	43.6	2.8	3.8	3.6	0.2	0.00333	0.00042	8,564
Sequence 8	4.0	6.0	66.4	63.6	2.8	5.4	5.2	0.2	0.00579	0.00072	7,195
Sequence 9	4.0	8.0	88.6	83.3	5.3	7.2	6.8	0.4	0.00860	0.00107	6,335
Sequence 10	4.0	10.0	111.3	103.6	7.7	9.1	8.5	0.6	0.01142	0.00142	5,935
Sequence 11	2.0	2.0	24.9	22.2	2.7	2.0	1.8	0.2	0.00155	0.00019	9,401
Sequence 12	2.0	4.0	45.8	43.0	2.7	3.7	3.5	0.2	0.00382	0.00048	7,377
Sequence 13	2.0	6.0	64.9	62.1	2.8	5.3	5.1	0.2	0.00661	0.00082	6,146
Sequence 14	2.0	8.0	85.8	81.3	4.5	7.0	6.6	0.4	0.00969	0.00121	5,494
Sequence 15	2.0	10.0	108.1	101.1	7.1	8.8	8.2	0.6	0.01282	0.00160	5,159

TESTED BY GW DATE February 9, 2016

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.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0731+00
Date Tested:	February 9, 2016	**Location:**	20' RT
Name of Project:	GARLAND CO.LINE - BENTON (SAFETY IMPROVEMENTS)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	T.FRAZIER	**Depth:**	0-5
Lab No.:	20154196	**AASHTO Class:**	A-6(5)
Sample ID:	RV975	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

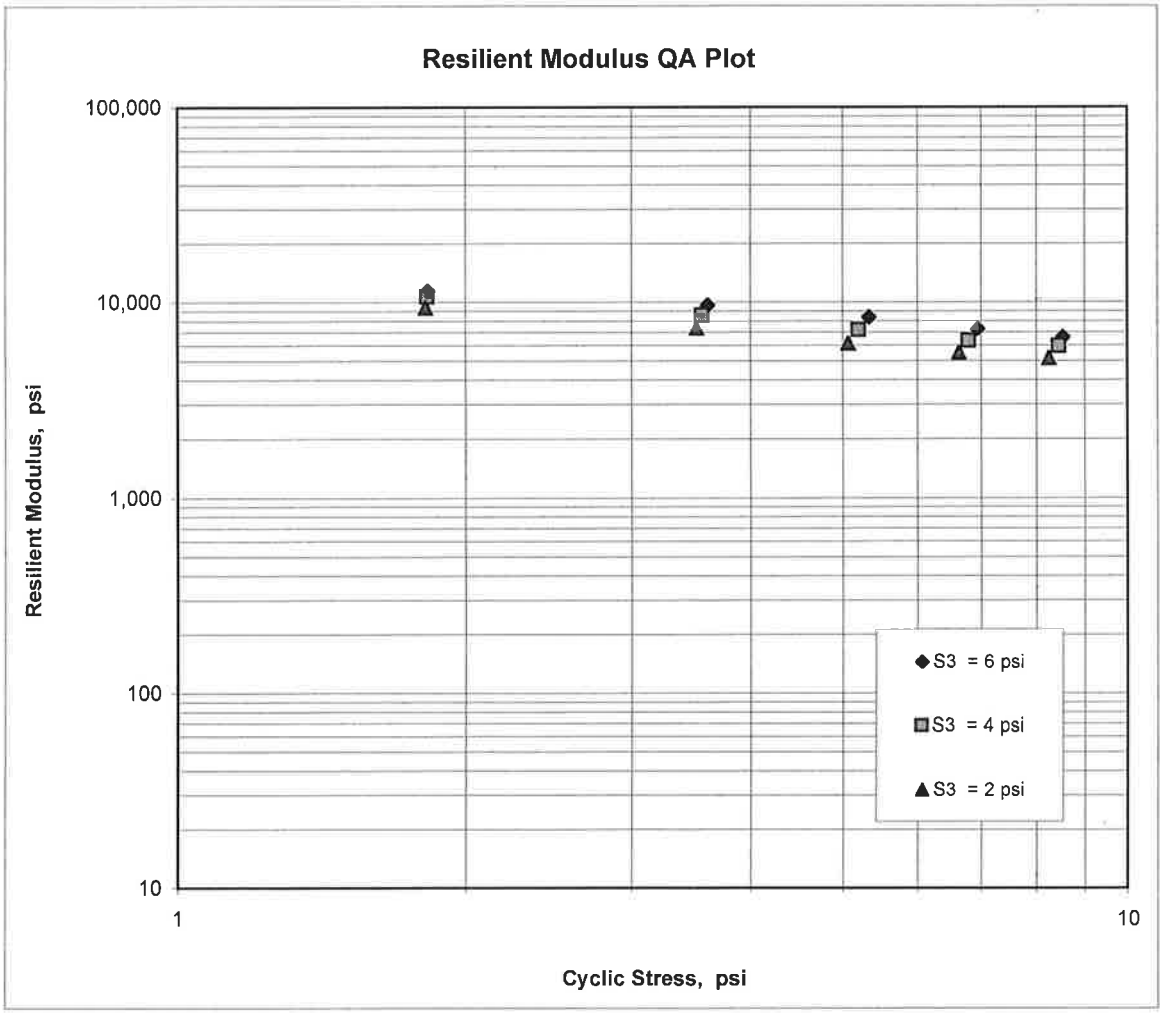
$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 = 9,785

K2 = -0.38483

K5 = 0.24420

R^2 = 0.99



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0765+00
Date Tested:	February 10, 2016	**Location:**	20'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154197	**AASHTO Class:**	A-6(4)
Sample ID:	RV976	**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	3.95
Bottom	3.96
Average	3.95
Membrane Thickness (in):	0.00
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):	12.27
Initial Volume, AoLo (cu. in):	98.44

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3174.40

4. Soil Properties:

Optimum Moisture Content (%):	17.1
Maximum Dry Density (pcf):	107.8
95% of MDD (pcf):	102.4
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3174.40
Compaction Moisture content (%):	16.8
Compaction Wet Density (pcf):	122.86
Compaction Dry Density (pcf):	105.19
Moisture Content After Mr Test (%):	16.5

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

7. Resilient Modulus, Mr: 5842(Sc)^-0.26466(S3)^0.47400

8. Comments _____

9. Tested By: GW **Date:** February 10, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0765+00
Date Tested:	February 10, 2016	**Location:**	20'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154197	**AASHTO Class:**	A-6(4)
Sample ID:	RV976	**Material Type (1 or 2):**	2
LATITUDE:		**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	25.2	22.3	2.9	2.1	1.8	0.2	0.00128	0.00016	11,404
Sequence 2	6.0	4.0	47.1	44.2	2.9	3.8	3.6	0.2	0.00279	0.00035	10,362
Sequence 3	6.0	6.0	68.9	65.0	3.8	5.6	5.3	0.3	0.00462	0.00058	9,199
Sequence 4	6.0	8.0	91.1	84.8	6.3	7.4	6.9	0.5	0.00676	0.00084	8,195
Sequence 5	6.0	10.0	113.2	104.3	8.8	9.2	8.5	0.7	0.00899	0.00112	7,585
Sequence 6	4.0	2.0	24.9	22.1	2.9	2.0	1.8	0.2	0.00152	0.00019	9,461
Sequence 7	4.0	4.0	45.8	42.9	2.9	3.7	3.5	0.2	0.00353	0.00044	7,933
Sequence 8	4.0	6.0	65.5	62.6	3.0	5.3	5.1	0.2	0.00573	0.00071	7,135
Sequence 9	4.0	8.0	87.9	82.4	5.5	7.2	6.7	0.4	0.00809	0.00101	6,656
Sequence 10	4.0	10.0	109.4	101.5	8.0	8.9	8.3	0.6	0.01044	0.00130	6,348
Sequence 11	2.0	2.0	24.3	21.4	2.9	2.0	1.7	0.2	0.00194	0.00024	7,203
Sequence 12	2.0	4.0	43.5	40.6	2.9	3.5	3.3	0.2	0.00451	0.00056	5,878
Sequence 13	2.0	6.0	61.6	58.5	3.0	5.0	4.8	0.2	0.00733	0.00091	5,220
Sequence 14	2.0	8.0	81.7	77.0	4.6	6.7	6.3	0.4	0.01009	0.00126	4,989
Sequence 15	2.0	10.0	103.0	95.9	7.1	8.4	7.8	0.6	0.01273	0.00159	4,924

TESTED BY GW DATE February 10, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

MATERIALS DIVISION

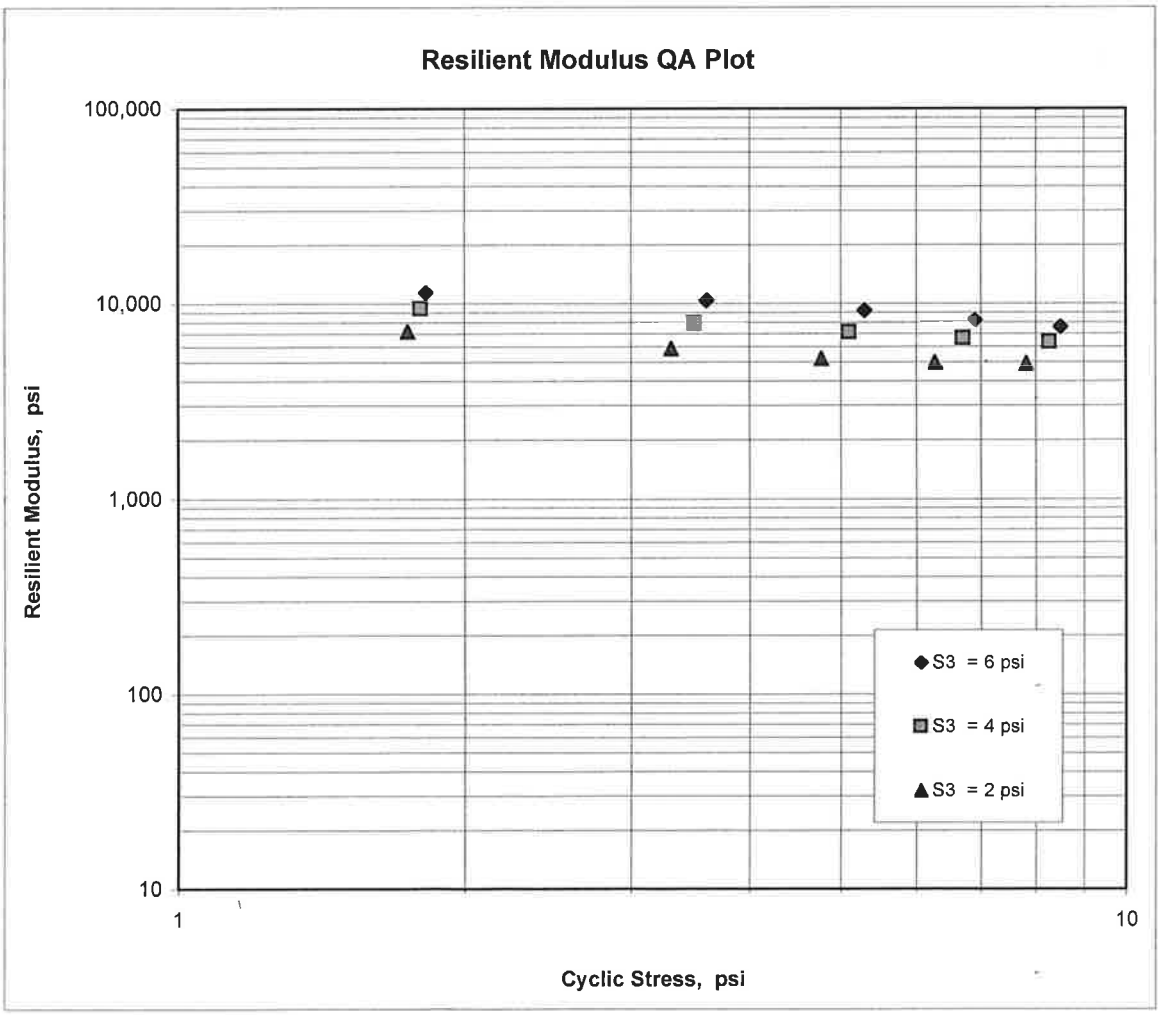
AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS

RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	0765+00
Date Tested:	February 10, 2016	**Location:**	20'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154197	**AASHTO Class:**	A-6(4)
Sample ID:	RV976	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 =	5,842
K2 =	-0.26466
K5 =	0.47400
R^2 =	0.99



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1062+00
Date Tested:	February 10, 2016	**Location:**	19'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154198	**AASHTO Class:**	A-2-0(0)
Sample ID:	RV977	**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	3.97
Middle	3.95
Bottom	3.95
Average	3.96
Membrane Thickness (in):	0.00
Height of Specimen, Cap and Base (in):	8.03
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.03
Initial Area, Ao (sq. in):	12.30
Initial Volume, AoLo (cu. in):	98.73

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3118.00

4. Soil Properties:

Optimum Moisture Content (%):	15.1
Maximum Dry Density (pcf):	110.5
95% of MDD (pcf):	105.0
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3118.00
Compaction Moisture content (%):	15.1
Compaction Wet Density (pcf):	120.33
Compaction Dry Density (pcf):	104.54
Moisture Content After Mr Test (%):	14.7

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

7. Resilient Modulus, Mr: 6951(Sc)^-0.24648(S3)^0.40844

8. Comments _____

9. Tested By: GW **Date:** February 10, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1062+00
Date Tested:	February 10, 2016	**Location:**	19'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154198	**AASHTO Class:**	A-2-0(0)
Sample ID:	RV977	**Material Type (1 or 2):**	2
LATITUDE:		**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	25.2	22.4	2.8	2.0	1.8	0.2	0.00119	0.00015	12,301
Sequence 2	6.0	4.0	47.7	45.0	2.8	3.9	3.7	0.2	0.00274	0.00034	10,738
Sequence 3	6.0	6.0	70.6	67.0	3.7	5.7	5.4	0.3	0.00453	0.00056	9,658
Sequence 4	6.0	8.0	95.0	88.8	6.2	7.7	7.2	0.5	0.00652	0.00081	8,887
Sequence 5	6.0	10.0	119.3	110.6	8.6	9.7	9.0	0.7	0.00834	0.00104	8,661
Sequence 6	4.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00136	0.00017	10,787
Sequence 7	4.0	4.0	47.1	44.3	2.8	3.8	3.6	0.2	0.00335	0.00042	8,631
Sequence 8	4.0	6.0	68.8	65.9	2.8	5.6	5.4	0.2	0.00559	0.00070	7,702
Sequence 9	4.0	8.0	93.0	87.7	5.3	7.6	7.1	0.4	0.00787	0.00098	7,278
Sequence 10	4.0	10.0	117.9	110.2	7.8	9.6	9.0	0.6	0.00999	0.00124	7,201
Sequence 11	2.0	2.0	25.0	22.3	2.7	2.0	1.8	0.2	0.00175	0.00022	8,332
Sequence 12	2.0	4.0	45.9	43.2	2.8	3.7	3.5	0.2	0.00427	0.00053	6,601
Sequence 13	2.0	6.0	66.8	64.0	2.8	5.4	5.2	0.2	0.00712	0.00089	5,870
Sequence 14	2.0	8.0	89.9	85.5	4.4	7.3	7.0	0.4	0.00981	0.00122	5,691
Sequence 15	2.0	10.0	114.8	107.9	6.9	9.3	8.8	0.6	0.01223	0.00152	5,759

TESTED BY GW DATE February 10, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

MATERIALS DIVISION

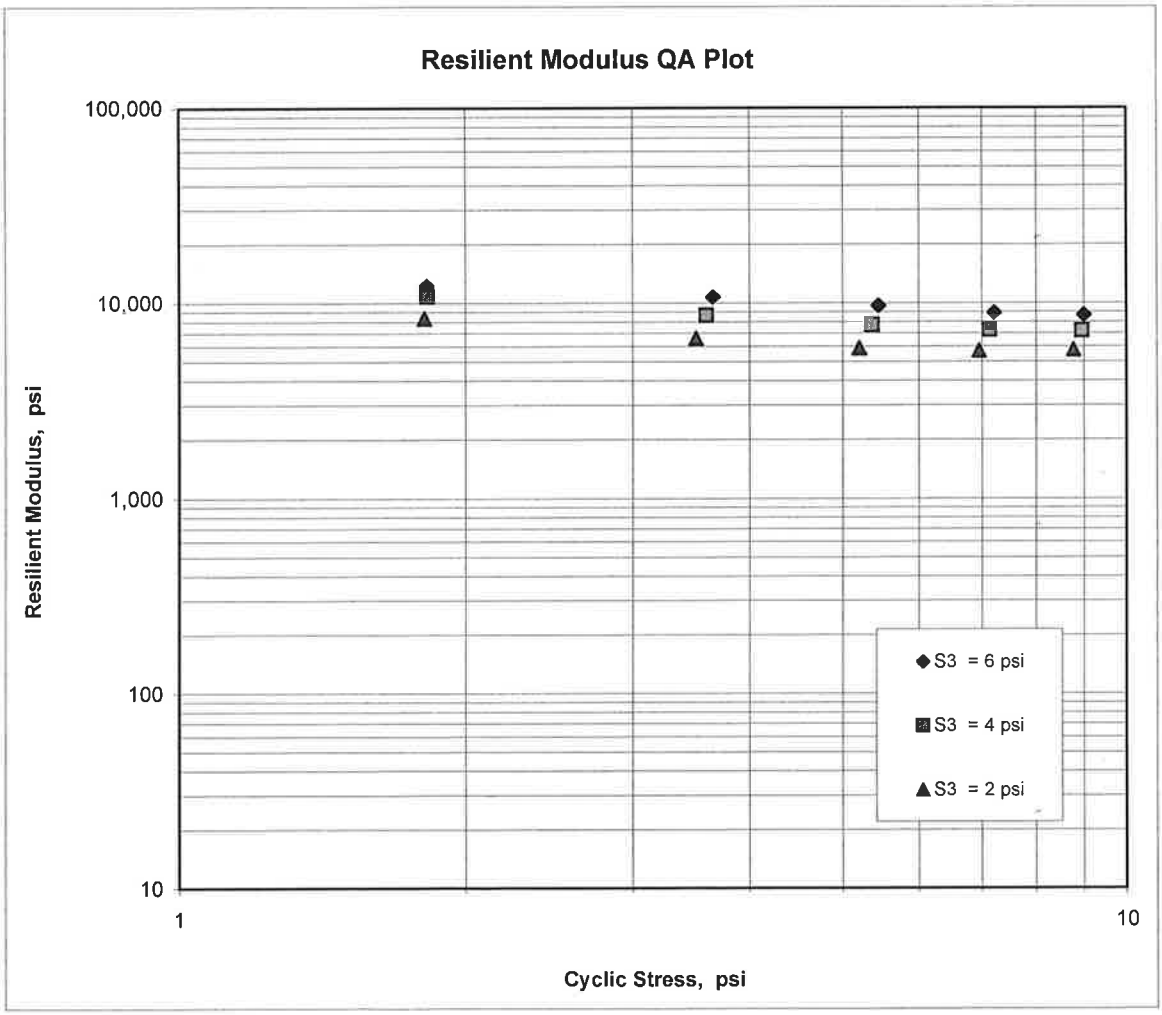
AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS

RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1062+00
Date Tested:	February 10, 2016	**Location:**	19'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154198	**AASHTO Class:**	A-2-0(0)
Sample ID:	RV977	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 =	6,951
K2 =	-0.24648
K5 =	0.40844
R^2 =	0.98



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1094+00
Date Tested:	February 10, 2016	**Location:**	22'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154199	**AASHTO Class:**	A-4(2)
Sample ID:	RV978	**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	3.97
Middle	3.95
Bottom	3.95
Average	3.96
Membrane Thickness (in):	0.00
Height of Specimen, Cap and Base (in):	8.03
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.03
Initial Area, Ao (sq. in):	12.30
Initial Volume, AoLo (cu. in):	98.73

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3141.30

4. Soil Properties:

Optimum Moisture Content (%):	16.6
Maximum Dry Density (pcf):	107.1
95% of MDD (pcf):	101.7
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3141.30
Compaction Moisture content (%):	16.9
Compaction Wet Density (pcf):	121.23
Compaction Dry Density (pcf):	103.70
Moisture Content After Mr Test (%):	16.3

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

7. Resilient Modulus, Mr: 12369(Sc)^-0.33925(S3)^0.25777

8. Comments

9. Tested By: GW **Date:** February 10, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1094+00
Date Tested:	February 10, 2016	**Location:**	22'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154199	**AASHTO Class:**	A-4(2)
Sample ID:	RV978	**Material Type (1 or 2):**	2
LATITUDE:		**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	25.2	22.5	2.7	2.0	1.8	0.2	0.00096	0.00012	15,341
Sequence 2	6.0	4.0	47.3	44.5	2.8	3.8	3.6	0.2	0.00213	0.00027	13,615
Sequence 3	6.0	6.0	69.7	66.0	3.7	5.7	5.4	0.3	0.00354	0.00044	12,181
Sequence 4	6.0	8.0	91.8	85.7	6.1	7.5	7.0	0.5	0.00551	0.00069	10,159
Sequence 5	6.0	10.0	113.7	105.0	8.7	9.2	8.5	0.7	0.00767	0.00096	8,940
Sequence 6	4.0	2.0	25.1	22.4	2.7	2.0	1.8	0.2	0.00107	0.00013	13,672
Sequence 7	4.0	4.0	46.6	43.9	2.7	3.8	3.6	0.2	0.00246	0.00031	11,640
Sequence 8	4.0	6.0	67.4	64.6	2.8	5.5	5.3	0.2	0.00413	0.00051	10,214
Sequence 9	4.0	8.0	89.8	84.6	5.2	7.3	6.9	0.4	0.00613	0.00076	9,021
Sequence 10	4.0	10.0	111.5	103.8	7.8	9.1	8.4	0.6	0.00835	0.00104	8,116
Sequence 11	2.0	2.0	25.0	22.3	2.7	2.0	1.8	0.2	0.00122	0.00015	11,920
Sequence 12	2.0	4.0	46.3	43.6	2.7	3.8	3.5	0.2	0.00283	0.00035	10,044
Sequence 13	2.0	6.0	66.2	63.4	2.8	5.4	5.2	0.2	0.00476	0.00059	8,701
Sequence 14	2.0	8.0	87.2	82.7	4.4	7.1	6.7	0.4	0.00696	0.00087	7,761
Sequence 15	2.0	10.0	108.5	101.7	6.9	8.8	8.3	0.6	0.00938	0.00117	7,075

TESTED BY GW DATE February 10, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

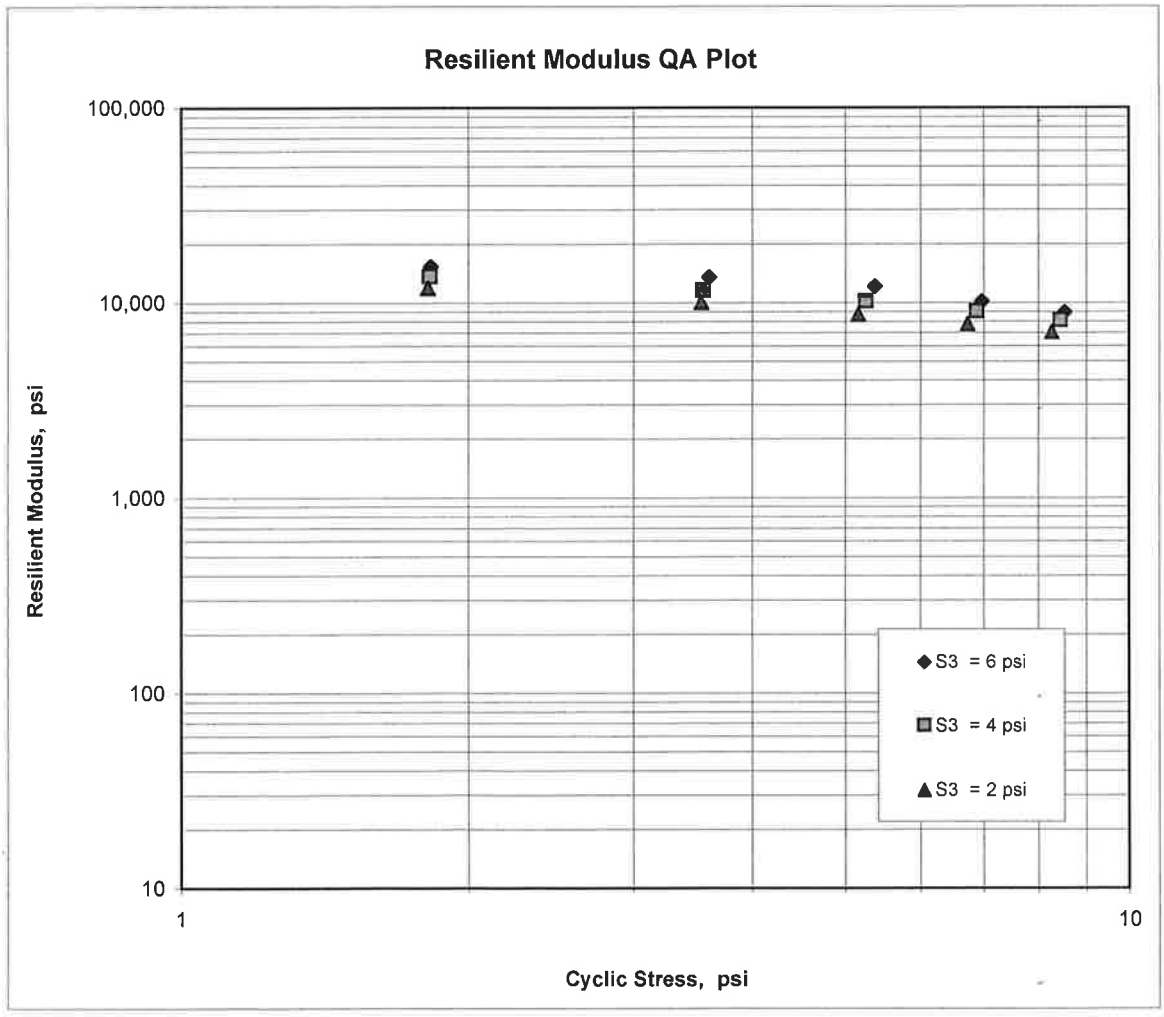
MATERIALS DIVISION

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

Job No.	061442	**Material Code**	SSRVPS
Date Sampled:	12/3/15	**Station No.:**	1094+00
Date Tested:	February 10, 2016	**Location:**	22'LT
Name of Project:	GARLAND CO. LINE - (SAFETY IMPVTS.)(S)		
County:	**Code:** 62 **Name:** SALINE		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20154199	**AASHTO Class:**	A-4(2)
Sample ID:	RV978	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\,(S_C)^{K2}\,(S_3)^{K5}$$

K1 = 12,369
K2 = -0.33925
K5 = 0.25777
R^2 = 0.96



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION
MICHAEL BENSON, MATERIALS ENGINEER
*** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***

DATE	- 02/11/16	SEQUENCE NO.	- 1
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20154140	- 20154141	- 20154142
SAMPLE ID	- S919	- S920	- S921
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 0146+00	- 0146+00	- 0146+00
LOCATION	- 06' RT	- 13' RT	- 18' RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BR/GR
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 34 37 15.40	- 34 37 15.40	- 34 37 15.30
LONGITUDE DEG-MIN-SEC	- 92 52 26.10	92 52 26.10	92 52 26.10
% PASSING 2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	- 100	- 100
3/8 IN.	- 98	- 99	- 99
NO. 4	- 92	- 94	- 95
NO. 10	- 82	- 82	- 81
NO. 40	- 65	- 63	- 56
NO. 80	- 56	- 55	- 45
NO. 200	- 49	49	39
LIQUID LIMIT	- 32	- 30	- 35
PLASTICITY INDEX	- 12	- 10	- 15
AASHTO SOIL	- A-6(3)	- A-4(2)	- A-6(2)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 20.3	9.9	18.4
ACHMSC (IN)	- 4.5W	- 7.5W	- ---
ACHMBC (IN)	- ---	- 1.5	- ---
PCCP (IN)	- 6.0	- ---	- ---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 2
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154143	20154144	20154145
SAMPLE ID	S922	S923	S924
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0162+00	0162+00	0162+00
LOCATION	06' RT	13' RT	22' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 21.90	34 37 21.90	34 37 21.80
LONGITUDE DEG-MIN-SEC	92 52 8.90	92 52 8.90	92 52 8.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	99	95	98
NO. 4	93	89	93
NO. 10	88	81	85
NO. 40	78	71	77
NO. 80	74	67	74
NO. 200	70	64	72
LIQUID LIMIT	34	34	39
PLASTICITY INDEX	16	15	18
AASHTO SOIL	A-6(9)	A-6(7)	A-6(12)
UNIFIED SOIL			
% MOISTURE CONTENT	19.5	16.2	17.2
ACHMSC (IN)	6.0WX	5.0W	---
ACHMBC (IN)	---	5.0W	---
PCCP (IN)	6.0	---	---

REMARKS - W=MULITPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 3
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154146	20154147	20154148
SAMPLE ID	S925	S926	S927
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0503+00	0503+00	0503+00
LOCATION	06' RT	13' RT	17' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 4.20	34 37 4.10	34 37 4.10
LONGITUDE DEG-MIN-SEC	92 45 51.90	92 45 51.90	92 45 51.80
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	
3/8 IN.	99	99	100
NO. 4	91	89	98
NO. 10	80	76	92
NO. 40	68	65	81
NO. 80	64	60	76
NO. 200	61	54	67
LIQUID LIMIT	30	31	28
PLASTICITY INDEX	12	13	13
AASHTO SOIL	A-6(5)	A-6(4)	A-6(6)
UNIFIED SOIL			
% MOISTURE CONTENT	11.9	12.2	22.2
CHIP SEAL (IN)	.25	--	---
ACHMSC (IN)	3.25W	5.5	---
ACHMBC (IN)	--	3.5	---
PCCP (IN)	6.0	---	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 4
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154149	20154150	20154151
SAMPLE ID	S928	S929	S930
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0518+00	0518+00	0518+00
LOCATION	06' LT	13' LT	18' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 11.50	34 37 11.70	34 37 11.70
LONGITUDE DEG-MIN-SEC	92 45 34.80	92 45 34.90	92 45 34.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	
3/8 IN.	100	99	100
NO. 4	97	94	95
NO. 10	88	88	86
NO. 40	76	80	74
NO. 80	70	74	67
NO. 200	63	64	56
LIQUID LIMIT	37	29	26
PLASTICITY INDEX	19	11	11
AASHTO SOIL	A-6(10)	A-6(5)	A-6(3)
UNIFIED SOIL			
% MOISTURE CONTENT	24.9	19.5	19.3
ACHMSC (IN)	5.5W	2.5	---
ACHMBC (IN)	---	4.5	---
PCCP (IN)	5.5	---	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAYS

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	- 02/11/16	SEQUENCE NO.	- 5
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154152	20154153	20154154
SAMPLE ID	S931	S932	S933
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0534+00	0534+00	0534+00
LOCATION	06' RT	13' RT	20' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 13.10	34 37 13.10	34 37 13.00
LONGITUDE DEG-MIN-SEC	92 45 18.80	92 45 18.80	92 45 18.80
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	99	98	97
NO. 4	95	88	93
NO. 10	87	79	85
NO. 40	78	70	76
NO. 80	72	65	71
NO. 200	67	60	67
LIQUID LIMIT	33	26	33
PLASTICITY INDEX	17	10	16
AASHTO SOIL	A-6(9)	A-4(3)	A-6(8)
UNIFIED SOIL			
% MOISTURE CONTENT	23.5	22.1	19.0
ACHMSC (IN)	4.25WX	9.5W	---
PCCP (IN)	5.25	---	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXTISTING HIGHWAYS

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 6
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154155	20154156	20154157
SAMPLE ID	S934	S935	S936
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0542+00	0550+00	0550+00
LOCATION	19' RT	06' LT	13' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 11.20	34 37 5.10	34 37 5.10
LONGITUDE DEG-MIN-SEC	92 45 9.40	92 45 3.30	92 45 3.10
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	94
NO. 4	98	96	85
NO. 10	92	87	72
NO. 40	81	74	58
NO. 80	73	68	53
NO. 200	64	63	47
LIQUID LIMIT	27	35	31
PLASTICITY INDEX	11	15	13
AASHTO SOIL	A-6(4)	A-6(7)	A-6(3)
UNIFIED SOIL			
% MOISTURE CONTENT	28.2	26.1	18.2
ACHMSC (IN)	---	2.0	2.0
ACHMBC (IN)	---	4.0	4.0
AGG.BASE CRS CL-7 (IN)	--	7.0	7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/11/16	SEQUENCE NO.	- 7
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20154158	- 20154159	- 20154160
SAMPLE ID	- S937	- S938	- S939
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 0550+00	- 0715+00	- 0715+00
LOCATION	- 30' LT	- 06' RT	- 13' RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 34 37 5.20	- 34 36 47.30	- 34 36 47.30
LONGITUDE DEG-MIN-SEC	- 92 45 3.00	92 42 9.20	92 42 9.30
% PASSING 2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	-	-
3/8 IN.	- 92	-	-
NO. 4	- 84	- 100	- 100
NO. 10	- 74	- 100	- 100
NO. 40	- 61	- 100	- 100
NO. 80	- 51	- 100	- 100
NO. 200	- 41	92	96
LIQUID LIMIT	- 24	- 48	- 53
PLASTICITY INDEX	- 7	- 24	- 26
AASHTO SOIL	- A-4(0)	- A-7-6(24)	- A-7-6(29)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 15.9	21.5	22.7
ACHMSC (IN)	- ---	- 3.25W	- 9.0
PCCP (IN)	- ---	- 6.5	- ---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/11/16	SEQUENCE NO.	- 8
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20154161	- 20154162	- 20154163
SAMPLE ID	- S940	- S941	- S942
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 0715+00	- 0723+00	- 0723+00
LOCATION	- 21' RT	- 06' LT	- 13' LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 34 36 47.30	- 34 36 42.70	- 34 36 42.80
LONGITUDE DEG-MIN-SEC	- 92 42 9.40	92 42 1.30	92 42 1.30
% PASSING 2 IN.	-	-	-
1 1/2 IN.	- 100	-	-
3/4 IN.	- 93	-	-
3/8 IN.	- 93	- 100	- 100
NO. 4	- 92	- 97	- 99
NO. 10	- 89	- 95	- 97
NO. 40	- 87	- 92	- 92
NO. 80	- 86	- 90	- 89
NO. 200	- 82	86	84
LIQUID LIMIT	- 42	- 49	- 52
PLASTICITY INDEX	- 18	- 28	- 30
AASHTO SOIL	- A-7-6(15)	- A-7-6(25)	- A-7-6(27)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 21.2	26.8	23.8
ACHMSC (IN)	- ---	- 4.0WX	- 7.0W
PCCP (IN)	- ---	- 6.0	- ---
AGG.BASE CRS CL-7 (IN)	- --	- --	- 7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 9
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154164	20154165	20154166
SAMPLE ID	S943	S944	S945
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0723+00	0731+00	0731+00
LOCATION	21' LT	06' RT	13' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 36 42.80	34 36 41.40	34 36 41.40
LONGITUDE DEG-MIN-SEC	92 42 1.20	92 41 51.50	92 41 51.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	91	100	100
NO. 4	81	96	99
NO. 10	70	89	97
NO. 40	61	79	91
NO. 80	57	75	89
NO. 200	52	70	86
LIQUID LIMIT	40	37	41
PLASTICITY INDEX	22	14	18
AASHTO SOIL	A-6(8)	A-6(9)	A-7-6(16)
UNIFIED SOIL			
% MOISTURE CONTENT	16.9	20.4	23.7
ACHMSC (IN)	---	5.0W	7.5W
PCCP (IN)	---	6.5	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/11/16	SEQUENCE NO.	- 10
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS

LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20154167	- 20154168	- 20154169
SAMPLE ID	- S946	- S947	- S948
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 0731+00	- 0757+00	- 0757+00
LOCATION	- 20' RT	- 06' RT	- 13' RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- GRAY	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 34 36 41.40	- 34 36 47.70	- 34 36 47.60
LONGITUDE DEG-MIN-SEC	- 92 41 51.70	92 41 20.90	92 41 20.90
% PASSING 2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	- 100	-
3/8 IN.	- 99	- 99	- 100
NO. 4	- 98	- 98	- 96
NO. 10	- 95	- 96	- 90
NO. 40	- 88	- 92	- 84
NO. 80	- 81	- 88	- 80
NO. 200	- 75	81	74
LIQUID LIMIT	- 33	- 25	- 28
PLASTICITY INDEX	- 12	- 8	- 11
AASHTO SOIL	- A-6(8)	- A-4(4)	- A-6(6)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 9.7	20.0	15.4
ACHMSC (IN)	- ---	- 3.5WX	- 2.5
ACHMBC (IN)	- ---	- ---	- 6.0
PCCP (IN)	- ---	- 6.0	- ---
AGG.BASE CRS CL-7 (IN)	- --	- --	- 7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEARSURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 11
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154170	20154171	20154172
SAMPLE ID	S949	S950	S951
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0757+00	0765+00	0765+00
LOCATION	20' RT	06' LT	13' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	GRAY	GRAY	GRAY
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 36 47.60	34 36 50.10	34 36 50.10
LONGITUDE DEG-MIN-SEC	92 41 20.90	92 41 13.10	92 41 13.10
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	100
3/8 IN.	100	99	98
NO. 4	97	97	93
NO. 10	93	93	87
NO. 40	84	85	80
NO. 80	79	81	76
NO. 200	72	73	68
LIQUID LIMIT	29	31	30
PLASTICITY INDEX	11	14	12
AASHTO SOIL	A-6(6)	A-6(8)	A-6(6)
UNIFIED SOIL			
% MOISTURE CONTENT	18.9	19.2	21.1
ACHMSC (IN)	---	4.0	2.0
ACHMBC (IN)	---	---	5.5
PCCP (IN)	---	6.0	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 12
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154173	20154174	20154175
SAMPLE ID	S952	S953	S954
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0765+00	0771+00	0775+00
LOCATION	20' LT	24' RT	06' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	GRAY	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 36 50.20	34 36 49.60	34 36 47.10
LONGITUDE DEG-MIN-SEC	92 41 13.20	92 41 5.90	92 41 2.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	
3/8 IN.	99	98	
NO. 4	97	96	100
NO. 10	89	92	97
NO. 40	81	84	90
NO. 80	75	80	87
NO. 200	67	72	83
LIQUID LIMIT	31	31	41
PLASTICITY INDEX	12	11	21
AASHTO SOIL	A-6(6)	A-6(6)	A-7-6(17)
UNIFIED SOIL			
% MOISTURE CONTENT	20.5	21.7	26.7
ACHMSC (IN)	---	---	4.0W
PCCP (IN)	---	---	6.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/11/16	SEQUENCE NO.	- 13
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154176	20154177	20154178
SAMPLE ID	S955	S956	S957
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0775+00	0775+00	1038+00
LOCATION	13' LT	21' LT	06' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 36 47.30	34 36 47.30	34 35 56.30
LONGITUDE DEG-MIN-SEC	92 41 2.40	92 41 2.40	92 36 10.60
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	99
NO. 4	98	96	95
NO. 10	91	86	83
NO. 40	84	64	68
NO. 80	82	60	62
NO. 200	76	56	57
LIQUID LIMIT	37	31	28
PLASTICITY INDEX	18	14	9
AASHTO SOIL	A-6(12)	A-6(5)	A-4(3)
UNIFIED SOIL			
% MOISTURE CONTENT	21.7	20.3	18.4
ACHMSC (IN)	9.0W	---	3.5W
PCCP (IN)	---	---	7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 14
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154179	20154180	20154181
SAMPLE ID	S958	S959	S960
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	1038+00	1038+00	1044+00
LOCATION	13' RT	22' RT	25' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 35 56.20	34 35 56.20	34 35 51.50
LONGITUDE DEG-MIN-SEC	92 36 10.60	92 36 10.60	92 36 8.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		100
3/8 IN.	99	100	97
NO. 4	94	98	87
NO. 10	81	88	76
NO. 40	66	67	61
NO. 80	61	59	54
NO. 200	56	53	46
LIQUID LIMIT	31	33	32
PLASTICITY INDEX	10	10	10
AASHTO SOIL	A-4(3)	A-4(3)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	17.1	14.6	17.1
ACHMSC (IN)	5.0W	---	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/10/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 15
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154182	20154183	20154184
SAMPLE ID	S961	S962	S963
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	1054+00	1062+00	1062+00
LOCATION	200' RT	06' LT	13' LT
DEPTH IN FEET	0-3Z	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 35 43.60	34 35 36.90	34 35 36.80
LONGITUDE DEG-MIN-SEC	92 36 1.80	92 35 56.50	92 35 56.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	96	100	100
NO. 4	90	97	95
NO. 10	80	88	87
NO. 40	63	69	73
NO. 80	58	60	68
NO. 200	54	54	59
LIQUID LIMIT	32	25	29
PLASTICITY INDEX	8	6	7
AASHTO SOIL	A-4(2)	A-4(1)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	22.6	32.4	29.1
ACHMSC (IN)	---	5.5W	7.0WX
PCCP (IN)	---	6.0	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 16
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154185	20154186	20154187
SAMPLE ID	S964	S965	S966
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	1062+00	1077+00	1077+00
LOCATION	19' LT	06' RT	13' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 35 37.10	34 35 26.50	34 35 26.40
LONGITUDE DEG-MIN-SEC	92 35 56.50	92 35 40.60	92 35 40.70
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	87	99	88
NO. 4	76	94	80
NO. 10	59	86	68
NO. 40	38	71	55
NO. 80	29	65	50
NO. 200	23	59	47
LIQUID LIMIT	29	33	31
PLASTICITY INDEX	8	14	10
AASHTO SOIL	A-2-4(0)	A-6(6)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	27.6	10.5	12.8
ACHMSC (IN)	---	5.0W	3.9W
PCCP (IN)	---	6.0	---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/11/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 17
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154188	20154189	20154190
SAMPLE ID	S967	S968	S969
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	1077+00	1087+00	1094+00
LOCATION	22' RT	30' RT	06' LT
DEPTH IN FEET	0-5	0-1Z	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 35 26.30	34 35 21.10	34 35 14.10
LONGITUDE DEG-MIN-SEC	92 35 40.70	92 35 35.30	92 35 36.80
% PASSING 2 IN.			
1 1/2 IN.		100	
3/4 IN.	100	92	100
3/8 IN.	99	77	98
NO. 4	95	69	94
NO. 10	83	60	87
NO. 40	66	49	76
NO. 80	58	41	71
NO. 200	51	31	57
LIQUID LIMIT	27	25	35
PLASTICITY INDEX	8	7	18
AASHTO SOIL	A-4(1)	A-2-4(0)	A-6(7)
UNIFIED SOIL			
% MOISTURE CONTENT	15.8	13.2	20.5
ACHMSC (IN)	---	---	4.0W
PCCP (IN)	---	---	6.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/11/16	SEQUENCE NO.	- 18
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06

NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20154191	20154192
SAMPLE ID	S970	S971
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY
STATION	1094+00	1094+00
LOCATION	13' LT	22' LT
DEPTH IN FEET	0-5	0-5
MAT'L COLOR	BROWN	BROWN
MAT'L TYPE		
LATITUDE DEG-MIN-SEC	34 35 14.10	34 35 14.10
LONGITUDE DEG-MIN-SEC	92 35 36.70	92 35 36.70
% PASSING 2 IN.		
1 1/2 IN.		
3/4 IN.		
3/8 IN.	100	100
NO. 4	97	98
NO. 10	91	93
NO. 40	82	84
NO. 80	75	77
NO. 200	61	59
LIQUID LIMIT	33	34
PLASTICITY INDEX	18	15
AASHTO SOIL	A-6(8)	A-6(6)
UNIFIED SOIL		
% MOISTURE CONTENT	16.5	23.3
ACHMSC (IN)	5.5WX	---
AGG.BASE CRS CL-7 (IN)	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

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 - 02/12/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 1
MATERIAL CODE - RV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

LAB NUMBER	20154193	20154194	20154195
SAMPLE ID	RV972	RV973	RV974
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0146+00	0518+00	0534+00
LOCATION	18' RT	18' LT	20' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 37 15.30	34 37 11.70	34 37 13.00
LONGITUDE DEG-MIN-SEC	92 52 26.10	92 45 34.90	92 45 18.80
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		100
3/8 IN.	87	100	93
NO. 4	74	96	86
NO. 10	55	89	75
NO. 40	33	77	65
NO. 80	26	69	60
NO. 200	22	60	55
LIQUID LIMIT	ND	23	31
PLASTICITY INDEX	NP	05	11
AASHTO SOIL	A-1-B(0)	A-4(1)	A-6(4)
UNIFIED SOIL			
% MOISTURE CONTENT			

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURE FROM CENTERLINE OF EXISTING HIGHWAY

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 - 02/12/16
JOB NUMBER - 061442
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
SEQUENCE NO. - 2
MATERIAL CODE - RV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 62
DISTRICT NO. - 06
NAME OF PROJECT - GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - SALINE, COUNTY
SAMPLED BY - D.DICKERSON
SAMPLE FROM - TEST HOLE
DATE SAMPLED - 12/03/15
DATE RECEIVED - 12/10/15
DATE TESTED - 02/10/16
MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

LAB NUMBER	20154196	20154197	20154198
SAMPLE ID	RV975	RV976	RV977
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	0731+00	0765+00	1062+00
LOCATION	20' RT	20' LT	19' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	GRAY	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	34 36 41.40	34 36 50.20	34 35 37.10
LONGITUDE DEG-MIN-SEC	92 41 51.70	92 41 13.20	92 35 56.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	97	99	90
NO. 4	90	94	83
NO. 10	84	85	67
NO. 40	75	73	41
NO. 80	70	66	32
NO. 200	65	59	27
LIQUID LIMIT	33	32	29
PLASTICITY INDEX	11	11	05
AASHTO SOIL	A-6(5)	A-6(4)	A-2-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT			

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

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	- 02/12/16	SEQUENCE NO.	- 3
JOB NUMBER	- 061442	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	- 62
SUPPLIER NAME	- STATE	DISTRICT NO.	- 06
NAME OF PROJECT	- GARLAND CO.LINE - BENTON (SAFETY IMPRVTS.)(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- SALINE, COUNTY	DATE SAMPLED	- 12/03/15
SAMPLED BY	- D.DICKERSON	DATE RECEIVED	- 12/10/15
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/10/16

MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

LAB NUMBER	20154199
SAMPLE ID	RV978
TEST STATUS	INFORMATION ONLY
STATION	1094+00
LOCATION	22' LT
DEPTH IN FEET	0-5
MAT'L COLOR	BROWN
MAT'L TYPE	
LATITUDE DEG-MIN-SEC	34 35 14.10
LONGITUDE DEG-MIN-SEC	92 35 36.70
% PASSING 2 IN.	
1 1/2 IN.	
3/4 IN.	100
3/8 IN.	97
NO. 4	90
NO. 10	82
NO. 40	69
NO. 80	63
NO. 200	48
LIQUID LIMIT	29
PLASTICITY INDEX	10
AASHTO SOIL	A-4(2)
UNIFIED SOIL	
% MOISTURE CONTENT	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL
- ALL LOCATIONS MEASURED FROM CENTERLINE OF EXISTING HIGHWAY

AASHTO TESTS : T24 T88 T89 T90 T265