ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

IN		WHITE	COUNTY
STATE HIGHWAY	36	SECTION	3
		JOY – SEARCY (S)	
FEDERAL AID PROJEC	CT NO	NHPP-HSIP-0073(60)	
STATE JOB NO.		050280	
CTATE IOD NO		050200	

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

April 4, 2016

TO:

Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT:

Job No. 050280

Joy - Searcy (Safety Impvts.)(S)

Route 36 Section 3 White 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 to three sections of Highway 36. Samples were obtained in the existing travel lanes, paved shoulder and ditch line.

Based on laboratory results of samples obtained, the subgrade soils primarily consist of low plasticity sandy clay. 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 several locations within the project limits, Table 1 below list the location and depth to rock.

Table 1 Depth of Rock

Station	Location from Centerline (ft.)	Depth (ft.)
129+00	6, 13, 21 Rt	4.3, 3.5, 1.8
145+00	6 Rt	1.25
201+00	6 Lt	3.0

Based on currently available cross sections, the construction grade line closely matches that of the existing roadway. The maximum cut depth is approximately 8 feet; the 3:1 cut slope configuration is acceptable as shown. The maximum embankment height is approximately 6 feet. The proposed embankments extend into the existing ditch line. All soft unstable organic material in the ditch should be undercut, anticipated to be no more than 2 feet, prior to embankment construction. The embankment may be constructed with locally available unspecified material utilizing the proposed 3:1 slope configuration.

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 Judsonia.
- 2. Asphalt Concrete Hot Mix

TypeAsphalt Cement %Mineral Aggregate %Surface Course5.394.7Binder Course4.395.7Base Course4.096.0

Michael C. Benson Materials Engineer

MCB:pt:bjj Attachment

cc: State

State Constr. Eng. – Master File Copy

District 5 Engineer

System Information and Research Div.

G. C. File

MICHAEL BENSON, MATERIALS ENGINEER

*** SOIL SURVEY STRENGTH TEST REPORT ***

DATE = 04/01/2016 SEQUENCE NO. - 1

JOB NUMBER - 050280 MATERIAL CODE - SSRV

SPEC. YEAR - 2014

SUPPLIER ID. - 1

COUNTY/STATE - 73 DISTRICT NO. - 05

JOB NAME - JOY - SEARCY (SAFETY IMPVTS.) (S)

BEGIN JOB - END JOB 18

RESILIENT MODULUS

161+00 5883 318+00 7025

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. Date Sampled:	050280 3/29/16	Material Code Station No.:	SSRVPS 161+00
Date Tested:	March 29, 2016	Location:	24'RT
Name of Project:	JOY - SEARCY (SAFETY IMPVTS.) (S)		
County:	Code: 73 Name: WHITE		
Sampled By:	D.DICKERSON	Depth:	0-5
Lab No.:	20160882	AASHTO Class:	A-4(0)
Sample ID:	RV176	Material Type (1 o	r 2): 2
LATITUDE:		LONGITUDE:	
1. Testing Inform	nation:		
g	Preconditioning - Permanent Strain > 5% (Y=	Yes or N= No)	N
	Testing - Permanent Strain > 5% (Y=Yes or N	•	N
	Number of Load Sequences Completed (0-15))	15
2. Specimen Info	armation:		
z. Specimen inic	Specimen Diameter (in):		
	Top		3.95
	Middle		3.96
	Bottom		3.96
	Average		3.96
	Membrane Thickness (in):		0.00
	Height of Specimen, Cap and Base (in):		8.01
	Height of Cap and Base (in):		0.00
	Initial Length, Lo (in):		8.01
	Initial Area, Ao (sq. in):		12.30
	Initial Volume, AoLo (cu. in):		98.49
3. Soil Specimer	ı Weight:		
	Weight of Wet Soil Used (g):		3213.20
4. Soil Properties			
	Optimum Moisture Content (%):		14.2
	Maximum Dry Density (pcf):		112.7
'	95% of MDD (pcf):		107.1
	In-Situ Moisture Content (%):		N/A
5. Specimen Pro	-		
	Wet Weight (g):		3213.20
	Compaction Moisture content (%):		14.3
	Compaction Wet Density (pcf):		124.31
	Compaction Dry Density (pcf):		108.76
	Moisture Content After Mr Test (%):		14.1
6. Quick Shear T	est (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	762	24(Sc)^-0.27210(S3)^0.39909
0.0			
8. Comments			
9. Tested By:	G WENDI AND	Data: March 20, 2016	
a. Testeu by.	<u>G.WENDLAND</u>	Date: March 29, 2016	

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

SSRVPS 161+00 24'RT

Material Code Station No.: Location: JOY - SEARCY (SAFETY IMPVTS.) (S) March 29, 2016 050280 3/29/16 Name of Project: Date Sampled: Date Tested: Job No.

County: Code: 73 Name: WHITE Sampled By: D.DICKERSON Lab No.: 20160882 Sample ID: RV176 LATITUDE:

Material Type (1 or 2): 2 LONGITUDE:

A-4(0)

AASHTO Class:

Depth:

0-5

	Chamber	Nominal	Actual	Actual	Actual	Actual	Actual	Actual	Average	Resilient	Resilient
	Confining	Maximum	Applied	Applied	Applied	Applied	Applied	Applied	Recov Def.	Strain	Modulus
PARAMETER	Pressure	Axial	Max. Axial	Cyclic Load	Contact	Мах.	Cyclic	Contact	LVDT 1		
		Stress	Load		Load	Axial	Stress	Stress	and 2		
						Stress					
DESIGNATION	လိ	Scyclic	P _{max}	P _{cyclic}	P _{contact}	S _{max}	Scyclic	Scontact	Havg	ઝે	M
LINO	psi	psi	sql	sql	sql	psi	psi	psi	i	in/in	psi
Sequence 1	0.9	2.0	25.4	22.6	2.8	2.1	1.8	0.2	0.00113	0.00014	13,017
Sequence 2	0.9	4.0	47.8	44.9	2.9	3.9	3.7	0.2	0.00261	0.00033	11,187
Sequence 3	0.9	0.9	7.07	6.99	3.8	5.7	5.4	0.3	0.00429	0.00054	10,145
Sequence 4	6.0	8.0	94.4	88.1	6.3	7.7	7.2	0.5	0.00625	0.00078	9,183
Sequence 5	6.0	10.0	118.2	109.5	8.7	9.6	8.9	0.7	0.00820	0.00102	8,695
Sequence 6	4.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00129	0.00016	11,296
Sequence 7	4.0	4.0	47.0	44.2	2.9	3.8	3.6	0.2	0.00313	0.00039	9,186
Sequence 8	4.0	0.9	68.1	65.2	2.9	5.5	5.3	0.2	0.00528	0.00066	8,049
Sednence 9	4.0	8.0	91.8	86.4	5.4	7.5	7.0	0.4	0.00747	0.00093	7,530
Sequence 10	4.0	10.0	116.0	108.1	7.9	9.4	8.8	9.0	0.00952	0.00119	7,396
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.0	1.8	0.2	0.00162	0.00020	8,897
Sequence 12	2.0	4.0	45.7	42.8	2.9	3.7	3.5	0.2	0.00395	0.00049	7,059
Sequence 13	2.0	0.9	65.7	62.7	3.0	5.3	5.1	0.2	0.00652	0.00081	6,269
Sequence 14	2.0	8.0	87.8	83.3	4.5	7.1	6.8	0.4	0.00917	0.00114	5,920
Sequence 15	2.0	10.0	111.8	104.5	7.2	9.1	8.5	9.0	0.01158	0.00145	5,883

DATE	DATE
: WENDLAND	
TESTED BY	REVIEWED BY

March 29, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

Job No.

050280

Material Code SSRVPS

Date Sampled:

3/29/16

Station No.: 161+00

Date Tested:

Location: 24'RT

Name of Project: JOY - SEARCY (SAFETY IMPVTS.) (S)

March 29, 2016

County:

Code: 73

Name: WHITE

Sampled By:

D.DICKERSON

Depth: 0-5

Lab No.:

AASHTO Class: A-4(0)

Sample ID:

20160882 RV176

Material Type (1 or 2): 2

LATITUDE:

LONGITUDE:

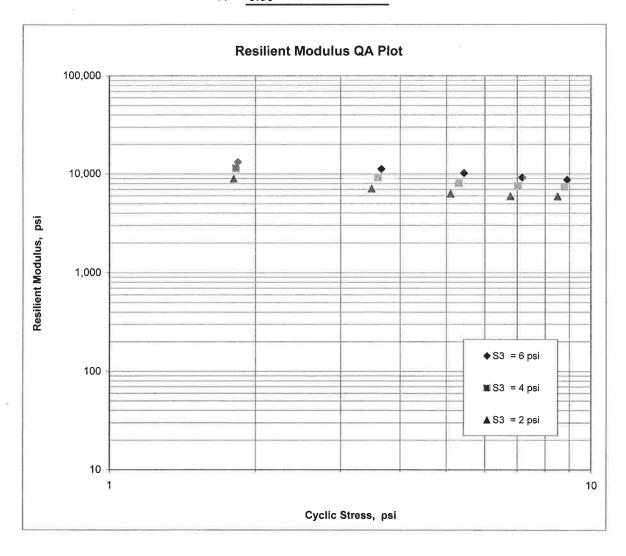
$$M_R = K1 (S_C)^{K2} (S_3)^{K5}$$

$$K1 = 7,624$$

$$K2 = -0.27210$$

$$K5 = 0.39909$$

$$R^2 = 0.99$$



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

Job No. Date Sampled: Date Tested: Name of Project:	050280 3/29/16 March 29, 2016 JOY - SEARCY (SAFETY IMPVTS.) (S)	Material Code Station No.: Location:	SSRVPS 318+00 21'RT	
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 73 Name: WHITE D.DICKERSON 20160883 RV177	Depth: AASHTO Class: Material Type (1 o LONGITUDE:	r 2):	0-5 A-4(0) 2
1. Testing Inform	nation:			
	Preconditioning - Permanent Strain > 5% (Y=Y) Testing - Permanent Strain > 5% (Y=Yes or N=N) Number of Load Sequences Completed (0-15)			N N 15
2. Specimen Info	ormation:			
Soil Specimer Soil Propertie	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in): Weight: Weight of Wet Soil Used (g):			3.94 3.94 3.94 0.00 8.02 0.00 8.02 12.19 97.78 3245.20
	In-Situ Moisture Content (%):			N/A
5. Specimen Pro	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):			3245.20 13.8 126.46 111.12 13.8
6. Quick Shear T	est (Y=Yes, N=No, N/A=Not Applicable):			#VALUE!
7. Resilient Mod	ulus, Mr:	83	26(Sc)^-0.22673	3(S3)^0.39789
8. Comments				
9. Tested By:	C.GARRETT D	ate: March 29, 2016		

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

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

SSRVPS 318+00

21'RT

Material Code Station No.: Location: JOY - SEARCY (SAFETY IMPVTS.) (S) March 29, 2016 050280 3/29/16 Date Sampled: Date Tested: Job No.

WHITE Name: **D.DICKERSON** Code: 73 20160883 Name of Project: Sampled By: Lab No.: County:

RV177 LATITUDE: Sample ID:

A-4(0)

AASHTO Class:

Depth:

Material Type (1 or 2): 2 LONGITUDE:

0-5

		_			_	_	_			_			_		_				_	_
Resilient Modulus				Mr	psi	14,331	13,065	11,998	11,011	10,416	12,754	10,627	9,565	8,989	8,913	9,998	8,221	7,339	7,041	7 025
Resilient Strain				3	in/in	0.00013	0.00028	0.00045	0.00065	0.00085	0.00014	0.00033	0.00055	0.00078	0.00098	0.00018	0.00042	0.00069	0.00096	0.00120
Average Recov Def.	LVDT 1	and 2		Havg	.⊑	0.00102	0.00222	0.00361	0.00518	0.00679	0.00114	0.00269	0.00441	0.00623	0.00784	0.00144	0.00338	0.00554	0.00769	0.00965
Actual Applied	Contact	Stress		Scontact	psi	0.2	0.2	0.3	0.5	0.7	0.2	0.2	0.2	0.4	9.0	0.2	0.2	0.2	0.4	90
Actual Applied	Cyclic	Stress		Scyclic	psi	1.8	3.6	5.4	7.1	8.8	1.8	3.6	5.3	7.0	8.7	1.8	3.5	5.1	6.8	8.57
Actual Applied	Мах.	Axial	Stress	S _{max}	psi	2.0	3.8	5.7	7.6	9.5	2.0	3.8	5.5	7.4	9.3	2.0	3.7	5.3	7.1	0 6
Actual Applied	Contact	Load		Pcontact	sql	2.8	2.8	3.6	6.1	8.5	2.7	2.8	2.8	5.1	7.7	2.7	2.8	2.8	4.3	6.7
Actual Applied	Cyclic Load			P _{cyclic}	sql	22.2	44.1	65.8	86.6	107.6	22.1	43.4	64.2	85.1	106.2	21.8	42.2	61.9	82.3	103.1
Actual Applied	700	Load		P _{max}	sql	25.0	46.9	69.4	92.7	116.1	24.9	46.2	67.0	90.3	113.9	24.5	45.0	64.6	86.7	109 B
Nominal Maximum	Axial	Stress		S _{cyclic}	psi	2.0	4.0	0.9	8.0	10.0	2.0	4.0	6.0	8.0	10.0	2.0	4.0	0.9	8.0	10.0
Chamber Confining	Pressure			တ်	psi	6.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
	PARAMETER			DESIGNATION	UNIT	Sequence 1	Sequence 2	Sequence 3	Sequence 4	Sequence 5	Sequence 6	Sequence 7	Sequence 8	Sequence 9	Sequence 10	Sequence 11	Sequence 12	Sequence 13	Sequence 14	Sequence 15

March 29, 2016	
DATE	DATE
C.GARRETT	
TESTED BY	REVIEWED BY

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

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

Job No.

050280

Material Code SSRVPS

Date Sampled:

3/29/16

Station No.: 318+00

Date Tested:

March 29, 2016

Location: 21'RT

Name of Project: JOY - SEARCY (SAFETY IMPVTS.) (S)

County:

Code: 73

Name: WHITE

Sampled By:

D.DICKERSON

Depth: 0-5

Lab No.:

20160883

AASHTO Class: A-4(0)

Sample ID:

RV177

Material Type (1 or 2): 2

LATITUDE:

LONGITUDE:

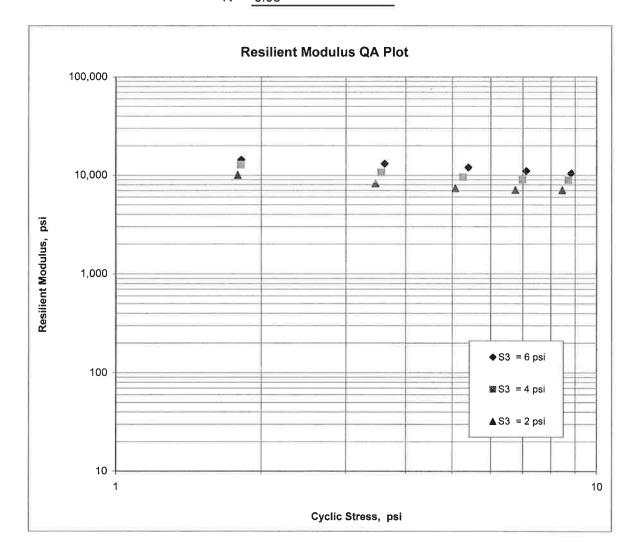
$$M_R = K1 (S_C)^{K2} (S_3)^{K5}$$

K1 = 8,326

K2 = -0.22673

K5 = 0.39789

 $R^2 = 0.98$



JOB: 050280

Arkansas State Highway Transporation Department

JOB NAME: JOY - SEARCY (SAFETY IMPVTS.)(S)

Materials Division

COUNTY NO. 73 **DATE TESTED** 3/29/2016

Michael Benson, Materials Engineer

STA.#	LOC. 1	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	<i>P.I.</i>	SOIL CLASS	<i>LAB</i> #: 9	%MOISTURE
161+00	24' RT	0-5	BROWN	99	96	92	91	84	ND	NP	A-4(0)	RV176	
318+00	21' RT	0-5	BROWN	97	91	83	79	73	24	5	A-4(2)	RV177	
113+00	06' RT	0-5	BROWN	99	96	93	89	76	21	5	A-4(1)	S135	23.3
113+00	13' RT	0-5	BROWN	99	91	89	84	80	21	5	A-4(1)	S136	18.9
113+00	20' RT	0-5	BROWN	99	98	94	90	79	25	5	A-4(4)	S137	22
121+00	06' LT	0-5	BROWN	99	96	92	90	81	24	8	A-4(4)	S138	17
121+00	13' LT	0-5	BROWN	94	88	83	80	70	23	5	A-4(1)	S139	14.4
121+00	21' LT	0-5	BROWN	99	97	93	91	83	29	10	A-4(7)	S140	23.2
129+00	06' RT	0-4.3Z	BROWN	99	95	87	85	77	27	9	A-4(5)	S141	9.6
129+00	13' RT	0-3.5Z	BROWN	95	91	86	84	78	28	11	A-6(7)	S142	10.1
129+00	21' RT	0-1.8Z	BROWN	99	94	86	83	72	28	12	A-6(6)	S143	9.3
137+00	06' LT	0-5	BROWN	99	97	92	90	85	26	8	A-4(5)	S144	13.9
137+00	13' LT	0-5	BROWN	98	96	92	88	77	23	6	A-4(2)	S145	16.3
145+00	06' RT	0-1.25Z	BROWN	99	99	96	94	87	29	12	A-6(9)	S146	16.3
153+00	06' LT	0-5	BROWN	96	92	87	84	78	25	8	A-4(4)	S147	15.4
153+00	13' LT	0-5	BROWN	95	87	79	74	62	ND	NP	A-4(5)	S148	16.5
153+00	19' LT	0-5	BROWN	97	93	87	85	76	22	4	A-4(1)	S149	16.4
161+00	06' RT	0-5	BROWN	97	93	88	84	75	24	8	A-4(4)	S150	14.2
161+00	13' RT	0-5	BROWN	96	94	88	78	71	22	5	A-4(1)	S151	8.7
161+00	18' RT	0-5	BROWN	99	96	92	88	80	25	8	A-4(4)	S152	13.8
169+00	06' LT	0-5	BROWN	96	89	83	81	74	25	7	A-4(3)	S153	15.3
169+00	13' LT	0-5	BROWN	95	89	82	79	71	25	7	A-4(3)	S154	18.6
169+00	21' LT	0-5	BROWN	96	92	86	82	71	25	7	A-4(3)	S155	18.4
177+00	06' RT	0-5	BROWN	97	94	89	87	81	24	7	A-4(4)	S156	19.9
185+00	06' LT	0-5	BROWN	99	96	93	91	88	30	10	A-4(8)	S157	21.5
185+00	13' LT	0-5	BROWN	96	88	83	81	77	26	8	A-4(4)	S158	20.8

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200 E S	L.L.	P.I.	SOIL CLASS	<i>LAB</i> #:	%MOISTURE
185+00	18' LT	0-5	BROWN	94	86	76	71	65	24	7	A-4(2)	S159	14.9
193+00	06' RT	0-5	BROWN	99	97	87	84	81	34	14	A-6(10)	S160	18.3
201+00	06' LT	0-3.0Z	BROWN	98	94	90	88	83	25	8	A-4(5)	S161	22.8
201+00	13' LT	0-5	BROWN	99	96	93	91	88	35	18	A-6(15)	S162	11.8
201+00	19' LT	0-5	BROWN	98	94	84	80	73	27	8	A-4(4)	S163	18.4
209+00	06' RT	0-5	BROWN	98	95	92	90	87	26	8	A-4(5)	S164	18.9
209+00	13' RT	0-5	BROWN	99	92	84	81	74	24	7	A-4(3)	S165	19
209+00	28' RT	0-5	BROWN	100	100	100	100	95	26	5	A-4(4)	S166	20.5
303+00	06' RT	0-5	BROWN	96	89	85	78	60	ND	NP	A-4(0)	S167	17
303+00	13' RT	0-5	BROWN	96	91	86	81	70	23	5	A-4(1)	S168	15.8
303+00	19' RT	0-5	BROWN	98	95	89	84	78	26	6	A-4(3)	S169	22.2
311+00	06' LT	0-5	BROWN	98	94	86	74	61	26	8	A-4(2)	S170	13.5
318+00	06' RT	0-5	BROWN	99	96	91	88	83	26	7	A-4(4)	S171	16.9
318+00	13' RT	0-5	BROWN	98	93	86	83	79	29	9	A-4(6)	S172	15.7
318+00	21' RT	0-5	BROWN	99	92	80	76	68	26	5	A-4(2)	S173	19.1
327+00	06' LT	0-5	BROWN	99	98	92	80	70	33	12	A-6(7)	S174	14
327+00	13' LT	0-5	BROWN	99	97	93	91	85	26	8	A-4(5)	S175	14.6

Arkansas State Highway Transporation Department

DATE TESTED 3/29/2016

Materials Division

 $JOB\ NAME$: JOY - SEARCY (SAFETY IMPVTS.)(S)

73

COUNTY NO.

050280

JOB:

Michael Benson, Materials Engineer

PAVEMENT SOUNDINGS AGG BASE CRS CL-7 5.0 ACHMBC ACHIMBC ACHMBC ACHMBC ACHMBC ACHIMBC ACHIMBC ACHIMBC ACHMBC ACHMBC ACHMBC ACHIMBC ACHIMBC ACHIMBC ACHIMBC ACHIMBC ACHIMBC 2.25 2.25 2.0 2.0 3.0 ACHIMSC **ACHIMSC** ACHIMISC ACHMSC ACHIMSC ACHIMSC ACHIMSC ACHMSC ACHIMSC ACHIMSC ACHMSC ACHMSC ACHIMSC ACHMSC ACHIMSC ACHIMSC ACHIMSC 5.25W 7.0W 7.0W 7.5W 8.0W 7.0W 6.0W 7.0W 6.0 0.5 13' RT 20' RT 06' RT 21' LT 06' RT 06' LT 13' RT 21' RT 06' RT 13' RT 13' LT 06' LT 13' LT 13' LT 19' LT 06' RT 06' LT STA.# LOC. 113+00 113+00 113+00 121+00 121+00 121+00 129+00 129+00 129+00 137+00 137+00 145+00 153+00 153+00 153+00 161+00 161+00

Monday, April 04, 2016

W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

comments:

Page 1 of 3

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PAVEMENT SOUNDINGS																																						The state of the s
	AGG BASE CRS CL-7	I	AGG BASE CRS CL-7	Î	AGG BASE CRS CL-7	5.0	AGG BASE CRS CL-7	0.9	AGG BASE CRS CL-7	5.0	AGG BASE CRS CL-7	7.0	AGG BASE CRS CL-7	5.0	AGG.BASE CL.7	1	AGG.BASE CL.7	4.0	AGG.BASE CL.7	8.0	AGG.BASE CL.7	5.0	AGG.BASE CL.7	1	AGG.BASE CL.7	5.0	AGG.BASE CL.7	5.0	AGG.BASE CL.7	1	AGG.BASE CL.7	5.0	AGG.BASE CL.7	5.0	AGG.BASE CL.7		AGG.BASE CL.7 5.0	
	ACHMBC		ACHMBC	ı	ACHMBC	3.0	ACHMBC	Ĩ	ACHMBC	3.0	ACHMBC	4.0	ACHMBC	1	ACHIMBC	1	ACHMBC	5.0	ACHMBC	2.0	ACHMBC	1.5X	ACHMBC	Ĭ	ACHMBC	3.5	ACHIMBC	3.0	ACHMBC	Ĭ	ACHMBC	2.0	ACHIMBC	1	ACHMBC		ACHMBC 2.0	CONTRACTOR STATE OF THE PERSON NAMED IN COLUMN
	ACHMSC	ı	ACHMSC	1	ACHIMSC	W5.9	ACHIMSC	0.9	ACHMSC	5.0W	ACHMSC	6.0W	ACHIMSC	5.0	ACHMSC	ŧ	ACHMSC	5.5W	ACHMSC	6.5W	ACHMSC	3.5	ACHIMSC	1	ACHMSC	6.0W	ACHMSC	3.5W	ACHMSC	1	ACHMSC	7.0W	ACHMSC	6.0W	ACHMSC	ï	ACHIMSC 7.5W	THE PROPERTY OF THE PROPERTY O
LOC.	18' RT		21' LT		06' LT		13' LT		06' RT		06′ LT		13' LT		18' LT		06' RT		06' LT		13' LT		19' LT		06' RT		13' RT		28' RT		06' RT		13' RT		19' RT		06' LT	NO COLUMN TO SERVICE S
STA.# LOC.	161+00		169+00		169+00		169+00		177+00		185+00		185+00		185+00		193+00		201+00		201+00		201+00		209+00		209+00		209+00		303+00		303+00		303+00		311+00	

comments: W=MULTIPLE LAYERS,X=STRIPPED,Z=AUGER REFUSAL

200	707
10	4
1:	April
Moundan	Monday,

PAVEMENT SOUNDINGS

AGG.BASE CL.7 3.0

ACHMBC

ACHIMSC 6.5

13' RT

318+00

ACHIMBC

ACHMSC 7.0W

06' RT

318+00

STA.# LOC.

AGG.BASE CL.7

ACHMBC

ACHIMSC

21' RT

318+00

AGG.BASE CL.7 5.0

ACHIMBC

ACHIMSC 6.0W

13' LT

327+00

AGG.BASE CL.7 6.0

ACHMBC 2.0

ACHIMSC 8.5W

06' LT

327+00

AGG.BASE CL.7 4.0

MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***

DATE - 04/01/16 SEQUENCE NO. - 1

JOB NUMBER - 050280 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 - 73

SUPPLIER NAME - STATE DISTRICT NO. - 05

NAME OF PROJECT - JOY - SEARCY (SAFETY IMPVTS.)(S)

PROJECT ENGINEER - NOT APPLICABLE

PIT/QUARRY - ARKANSAS

LOCATION - WHITE, COUNTY

SAMPLED BY - THORNTON

DATE SAMPLED - 03/02/16

SAMPLE FROM - TEST HOLE

DATE TESTED - 03/29/16

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

MATERIAL DESC SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS							
LAB NUMBER SAMPLE ID	-	20160841 S135	- 20160842 - S136	20160843 S137			
TEST STATUS	-	INFORMATION ONLY	- INFORMATION ONLY	INFORMATION ONLY			
STATION	-	113+00	- 113+00	113+00			
LOCATION	-	06' RT	- 13' RT	- 20' RT			
DEPTH IN FEET	-	0-5	0-5	0-5			
MAT'L COLOR MAT'L TYPE	-	BROWN	BROWN	BROWN			
	-	25 15 51 70	-	35 15 51 60			
LATITUDE DEG-MIN-			- 35 15 51.60	35 15 51.60			
LONGITUDE DEG-MIN-	SEC -	91 53 30.20	91 53 30.20	91 53 30.30			
% PASSING 2	IN		= 0	_			
1 1/2	: IN		-	-			
3/4	: IN		3 .0	-			
3/8	IN	100	100	100			
NO.	4 -	99	99	- 99			
NO.	10 -	96	91	_ 98			
NO.	40 -	93	89	_ 94			
NO.	80 -	89	84	- 90			
NO.	200 -	76	80	79			
LIQUID LIMIT	-	21	- 21	25			
PLASTICITY INDEX	-	5	= 5	5			
AASHTO SOIL	-	A-4(1)	A-4(1)	A-4(4)			
UNIFIED SOIL	-		-	-			
% MOISTURE CONTENT	' -	23.3	18.9	22.0			
ACHMSC	(IN) -	7.5W	4.0	# ###			
ACHMBC	(IN) -	2.0	7	To sever			
AGG BASE CRS CL-7	(IN) -		4.0				
	-		(#*	-			
	=		-	-			
	_			문 사 발생			
	_		=	<u>.</u>			
	_						

REMARKS - W=MULTIPLE LAYETS, X=STRIPPED, Z=AUGER REFUSAL

2

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MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/ JOB NUMBER - 050 FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNY SAMPLE FROM - TEST MATERIAL DESC SOI	280 BE ASSI L SURVE SPECIFI TE TOY - SE TOT APPL ISAS C, COUNT TON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE Y) (S)	MATERIAL SPEC. YE SUPPLIER COUNTY/S DISTRICT DATE SAM DATE REC DATE TES	NO 2 CODE - SSRVPS AR - 2014 ID 1 TATE - 73 NO 05 MPLED - 03/02/16 CEIVED - 03/17/16 GTED - 03/29/16
LAB NUMBER	-	20160844	-	20160845	:=	20160846
SAMPLE ID	_	S138	-	S139	100	S140
TEST STATUS	-	INFORMATION ONLY	_	INFORMATIO	N ONLY	INFORMATION ONLY
STATION	-	121+00	-	121+00	-	121+00
LOCATION	-	06' LT	_	13' LT) 	21' LT
DEPTH IN FEET	-	0-5	-	0-5	12	0-5
MAT'L COLOR	-	BROWN	-	BROWN		BROWN
MAT'L TYPE	-		-		196	45 45 45 00
LATITUDE DEG-MIN-		35 15 46.90	7.	35 15 4 91 53 2		
LONGITUDE DEG-MIN-	SEC -	91 53 22,20		91 53 2	22.10	91 53 22.10
% PASSING 2	IN		-		~	
	IN		*		·	
•	IN			100	-	
	IN	100	4	99	250 250	100
NO.		99 96	-	94 88	:=	99
NO.		96	***	83		97 93
NO.		90	-	80	(T)	91
NO.		-		70	_	83
LIQUID LIMIT	***	24	-	23	-	29
PLASTICITY INDEX	= = = = = = = = = = = = = = = = = = = =	8	70	5	_	10
AASHTO SOIL UNIFIED SOIL	-	A-4(4)	- 10°	A-4(1)	-	A-4(7)
% MOISTURE CONTENT	_	17.0	-	14.4	-	23.2
						45.2
ACHMSC	(IN) -	7.0W	-	6.0	-	
ACHMBC	(IN) -	2.5	-	4 0		
AGG BASE CRS CL-7	(IN)	4.0	-	4.0	2	
	=		· **		-	
	7				5	
	-		-		5	
	-		-		-	
	=				-	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

5

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 04/ JOB NUMBER - 050 FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - D PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORN SAMPLE FROM - TEST MATERIAL DESC SOI	E NO 3 L CODE - SSRVPS EAR - 2014 R ID 1 STATE - 73 F NO 05 MPLED - 03/02/16 CEIVED - 03/17/16 STED - 03/29/16					
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	- - - - - - SEC -	20160847 S141 INFORMATION ONLY 129+00 06' RT 0-4.3Z BROWN		20160848 S142 INFORMATIC 129+00 13' RT 0-3.5Z BROWN	ON ONLY -	20160849 S143 INFORMATION ONLY 129+00 21' RT 0-1.8Z BROWN 35 15 46.00 91 53 12.90
3/4 3/8 NO. NO. NO.	10 - 40 -	99 95 87	-	100 99 95 91 86 84 78	- - - - - - - -	100 99 94 86 83 72
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT ACHMSC ACHMBC AGG BASE CRS CL-7	- -	27 9 A-4(5) 9.6 7.0W 2.25	#XX	A-6(7)		28 12 A-6(6) 9.3
	-		-			- - - -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

AASHTO TESTS : T24 T88 T89 T90 T265

3

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 04/ JOB NUMBER - 050 FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST MATERIAL DESC SOI	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL SAS , COUNT CON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPY ICABLE Y			SPEC. YEAR SUPPLIER COUNTY/ST DISTRICT DATE SAM DATE RECOUNTE TEST	CODE - SSRVPS AR - 2014 ID 1 FATE - 73 NO 05 PLED - 03/02/16 EIVED - 03/17/16
LAB NUMBER	=	20160850	# 2	20160851	-	20160852
SAMPLE ID	=	S144	-	S145		S146
TEST STATUS	9	INFORMATION ONLY	-	INFORMATIO	ON ONLY -	INFORMATION ONLY
STATION	- 7	137+00		137+00	(=	145+00
LOCATION	=	06' LT	= 7	13' LT	(06' RT
DEPTH IN FEET	-	0-5	30 30	0-5	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0-1.25Z
MAT'L COLOR	<u>~</u>	BROWN	-0	BROWN	3 4	BROWN
MAT'L TYPE			-		-	
LATITUDE DEG-MIN-			=	35 15		35 15 45.90
LONGITUDE DEG-MIN-	SEC =	91 53 3.20		91 53	3.20	91 52 53.70
% PASSING 2	IN		<u> </u>		_	
1 1/2	IN. =				-	
	IN.		## ##		-	
·	IN.	100	5	100	-	100
NO.	_	99	-	98	_	99
NO.		97	670	96	-	99
NO.		92	ä	92	-	96
NO.		90	=	88 77	-	94 87
NO:	200 -	85		//		0 /
LIQUID LIMIT	*	26	-	23	\$ 	29
PLASTICITY INDEX	*	8	-	6	(E)	12
AASHTO SOIL	-	A-4(5)	_	A-4(2)	_	A-6(9)
UNIFIED SOIL	100	.11	_	16.3	S=	
% MOISTURE CONTENT	-	13.9		16.3		16.3
ACHMSC	(IN) -	8 . OW	-	7.0	-	6.0W
ACHMBC	(IN) -	2 0	-		-	2.25
AGG BASE CRS CL-7	(IN) -	3.0	_	5.0	-	₩ ₩
	_		_		_	
	-		-		-	
	-		-		-	
	_		-		_	
	-		_			

REMARKS - W=MUTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 04/ JOB NUMBER - 050 FEDERAL AID NO TO DEPURPOSE - SOID SPEC. REMARKS - NO SUPPLIER NAME - STANAME OF PROJECT - JUMPROJECT ENGINEER - NUMBER - NUMB	280 BE ASSI L SURVE SPECIFI FE OY - SE OT APPL SAS , COUNT ON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE			SPEC. YEAR SUPPLIER COUNTY/ST DISTRICT DATE SAM DATE RECOUNTE TEST	CODE - SSRVPS AR - 2014 ID 1 FATE - 73 NO 05 PLED - 03/02/16 EIVED - 03/17/16
LAB NUMBER	-	20160853		20160854	U.S.	20160855
SAMPLE ID	_	S147		S148		S149
TEST STATUS	_	INFORMATION ONLY	22	INFORMATIO	N ONLY -	INFORMATION ONLY
STATION	-	153+00	-	153+00	200	153+00
LOCATION	-	06' LT	-	13' LT	595	19' LT
DEPTH IN FEET	-	0-5	2	0-5	(2	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		**		:	45 44 00
LATITUDE DEG-MIN-		35 15 44.00	-	35 15 4		35 15 44.00
LONGITUDE DEG-MIN-	SEC -	91 52 44.50		91 52	44.40	91 52 44.40
% PASSING 2	IN		-		24	
·	IN		-		3300	
	IN		-		355 755	
	IN: -	100	_	100	177. 122	100
NO.		96	-	95	39 -	97
NO.		92	-	87	8=	93
NO.		87	-	79 74		87 85
NO.		8 4 78	_	62	-	76
110.	200	70		02		
LIQUID LIMIT	-	25	-	ND		22
PLASTICITY INDEX	-	8		NP		4
AASHTO SOIL	-	A-4 (4)	-	A-4(5)	-	A-4(1)
UNIFIED SOIL	-	15.4	-	16.5	=	16.4
% MOISTURE CONTENT		15.4				10.4
ACHMSC	(IN) -	7.0W	-	3.0	= 0	
ACHMBC	(IN) -	2.0	-	3.0	₩ ₩	***
AGG BASE CRS CL-7	(IN) -	7.0	_	8.0	=	
	-		-		*	
	-		-		25.0	
	_		-		3	
	-		_		-	
	-		_		=	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

MICHAEL BENSON, MATERIALS ENGINEER

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

SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNY SAMPLE FROM - TEST	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL SAS , COUNT ON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE		DATE SAMPLED - 03/02/16 DATE RECEIVED - 03/17/16 DATE TESTED - 03/29/16
MATERIAL DESC SOI	L SURVE	Y - R VALUE- PAN	/EME	MENT SOUNDINGS
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	- - - - - - SEC -	S150 INFORMATION ONLY 161+00 06' RT 0-5 BROWN 35 15 38.90		- - 35 15 38.80 - 35 15 38.80
% PASSING 2	IN		40	=
1 1/2 3/4 3/8 NO. NO. NO.	IN IN IN 4 - 10 - 40 - 80 - 200 -	97 93 88 84		- 100 - 99 - 100 96 - 99 94 - 96
LIQUID LIMIT	_	24	-	- 22 - 25
PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL	- - -	8 A-4(4)		5 - 8 - A-4(1) - A-4(4)
% MOISTURE CONTENT	-	14.2		8.7 13.8
ACHMSC ACHMBC AGG BASE CRS CL-7	(IN) - (IN) - - -	7.0W 2.0		0.5

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/2 JOB NUMBER - 0502 FEDERAL AID NO TO F PURPOSE - SOII SPEC. REMARKS - NO S SUPPLIER NAME - STAT NAME OF PROJECT - JO PROJECT ENGINEER - NO PIT/QUARRY - ARKANS LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST IM MATERIAL DESC SOI	280 BE ASSI SURVE SPECIFI FE DY - SE DT APPL SAS COUNT ON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV' ICABLE Y		DATE SAMPLED DATE RECEIVE DATE TESTED	E - SSRVPS - 2014 - 1 - 73 - 05 - 03/02/16 D - 03/17/16
LAB NUMBER					50051
				20160860 = 201 S154 = S15	
SAMPLE ID TEST STATUS		S153		INFORMATION ONLY - INF	
STATION		169+00	-	169+00 = 169	
LOCATION		06' LT	270	13' LT = 21'	
DEPTH IN FEET		0-5	•	0-5	
MAT'L COLOR		BROWN	_	BROWN BRO	NWN
MAT'L TYPE	-		_	;=	
LATITUDE DEG-MIN-S	SEC -	35 15 34.20	-	35 15 34.20 - 3	15 34.30
LONGITUDE DEG-MIN-S	SEC -	91 52 29.20		91 52 29.20	1 52 29.20
% PASSING 2	IN		-	1 2	
1 1/2			-	(= ,	
	IN	100	-	: =	
3/8	IN	98	-	100	0
	4 -	96	-		96
NO.	10 -	89	-		92
NO.	40 -	83	-		36
NO.		81			32
NO. 2	200 -	74		71 7	'1
LIQUID LIMIT	-	25	-	25 - 25	5
PLASTICITY INDEX	-	7	-	7 - 5	7
AASHTO SOIL	-	A-4(3)	_	A-4(3) - A-	-4(3)
UNIFIED SOIL	-		_	-	
% MOISTURE CONTENT	-	15.3		18.6	18.4
ACHMSC	(IN) -	6.5W		6.0	e:e:e
ACHMBC	(IN) -	3.0	-	seas E s	
AGG BASE CRS CL-7	(IN) _	5.0	-	6.0	
	-		-	=	
	=		-		
	2		-	= (
	_		-	240 240	
	_		-	= :	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 04/ JOB NUMBER - 050 FEDERAL AID NO TO: PURPOSE - SOI: SPEC. REMARKS - NO SUPPLIER NAME - STA' NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST: MATERIAL DESC SOI	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL SAS , COUNT ON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE Y			SPEC. YESUPPLIER COUNTY/S DISTRICT DATE SAMDATE RECOUNTE TEST	CODE - S AR - 2 ID 1 TATE - 7 NO 0 IPLED - 0 SEIVED - 0	SRVPS 014 3 5
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR	7 7 8 7	20160862 S156 INFORMATION ONLY 177+00 06' RT	#0 #0	20160863 S157	N ONLY -	20160864 S158 INFORMAT 185+00 13' LT 0-5 BROWN	
	SEC - IN IN	35 15 30.10 91 52 21.00	= : = :	35 15 2 91 52	26.30 - 12.60 -	91 52	26.30 12.50
3/8 NO. NO. NO.	10 - 40 - 80 -	100 97 94 89	- - - -	100 99 96 93 91	-	100 99 96 88 83	
NO. : LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - -	81 24 7 A-4(4)	# : # : # : # :	88 30 10 A-4(8) 21.5		77 26 8 A-4(4)	
ACHMSC ACHMBC AGG BASE CRS CL-7	(IN) - (IN) - - - - - -	5.0W 3.0 5.0		6.0W 4.0 7.0	- - - - - - -	5.0	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/ JOB NUMBER - 050 FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST MATERIAL DESC SOI	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL ISAS C, COUNT CON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE Y			SPEC. Y SUPPLIE COUNTY/ DISTRIC DATE SA DATE RI DATE TI	L CODE ZEAR R ID. STATE T NO. AMPLED ECEIVED	- SSRVPS - 2014 - 1 - 73
LAB NUMBER	_	20160865	; = 0;	20160866		- 2016	0867
SAMPLE ID	-			S160		- S161	
TEST STATUS	-	INFORMATION ONLY	=	INFORMATIC	N ONLY	- INFO	RMATION ONLY
STATION	-	185+00	_	193+00		201+	
LOCATION	_		_	06' RT		06'	
DEPTH IN FEET		0-5	77.5	0-5		0-3.	
MAT'L COLOR MAT'L TYPE	-	BROWN	Ξ,	BROWN		BROW	N
LATITUDE DEG-MIN-	CEC -	35 15 26.40	-	35 15 2	22 20	- - 35	15 18.80
LONGITUDE DEG-MIN-			=	91 52	4.30	- 35 91	
		J		02	1.50		32 33
% PASSING 2	IN IN		7			₹ 20	
·	IN	100	-			=	
· .		99	æ	100		100	
NO.		94	•	99		98	
NO.			-	97		94	
NO.	40 -	76	=	87		90	
NO.		71	-	84		- 88	
NO.	200 -	65		81		83	
LIQUID LIMIT	~	24	-	34		= 25	
PLASTICITY INDEX	=	7	-	14		= 8	
AASHTO SOIL	=	A-4(2)	-	A-6(10)		_ A-4	(5)
UNIFIED SOIL		4.4.6	20	10.2		=	
% MOISTURE CONTENT	10 0	14.9		18.3		2	12.8
ACHMSC	(IN) -	(m) (m) (m)	-	5.5W			. 5W
ACHMBC	(IN) -		-	5.0			. 0
AGG.BASE CL.7	(IN) -		-	4.0		- 8	. 0
	ä		-			20	
	=		3 = 3			= 0	
			-			an En	
	=		_			<u> </u>	
	_		-			320	

REMARKS - W=MULITPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/29/16 SEQUENCE NO 10 JOB NUMBER - 050280 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 - 73 SUPPLIER NAME - STATE DISTRICT NO 05 NAME OF PROJECT - JOY - SEARCY (SAFETY IMPVTS.)(S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - WHITE, COUNTY DATE SAMPLED - 03/02/16 SAMPLED BY - THORNTON DATE RECEIVED - 03/17/16 SAMPLE FROM - TEST HOLE DATE TESTED - 03/29/16						
LAB NUMBER	- 20160868	- 20160869		20160870		
SAMPLE ID	- S162	_ S163		S164		
TEST STATUS		- INFORMATIO		INFORMATION ONLY		
STATION	- 201+00	- 201+00		209+00		
LOCATION	- 13' LT	19' LT	100	06' RT		
DEPTH IN FEET	- 0-5	0-5		0-5		
MAT'L COLOR	- BROWN	_ BROWN	=	BROWN		
MAT'L TYPE	- C - 35 15 18.90	- - 35 15	10 00	35 15 18.40		
	35 15 18.90 3C - 91 51 55.70		18.90 - 55.70	91 51 46.10		
		74 31	33.70)1 JI 40.10		
	IN	-	-			
1 1/2 II		_	_	100		
3/4 I 3/8 I		- 100	-	99		
	4 - 99	- 98	-	98		
	.0 - 96	94	_	95		
	0 - 93	_ 84	- -	92		
	0 - 91	- 80	-	90		
NO. 20	0 - 88	73		87		
LIQUID LIMIT	- 35	27	83 - 6	26		
PLASTICITY INDEX	- 18	= 0 8	8 .	8		
AASHTO SOIL	- A-6(15)	A-4(4)	1E	A-4(5)		
UNIFIED SOIL	-		33 4 5			
% MOISTURE CONTENT	- 11.8	18.4		18.9		
ACHMSC (I	IN) - 3.5		-	6.0W		
.,	IN) - 1.5X			3.5		
AGG.BASE CL.7 (I	IN) - 5.0		8	5.0		
	-	2 /	팔.			
	-	(4)	=0			
	- -	:=:	=======================================			
	-		=			
	-	120	90			

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

AASHTO TESTS : T24 T88 T89 T90 T265

*

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/29/16 JOB NUMBER - 050280 FEDERAL AID NO TO BE ASS PURPOSE - SOIL SURV SPEC. REMARKS - NO SPECIF SUPPLIER NAME - STATE NAME OF PROJECT - JOY - S PROJECT ENGINEER - NOT APP PIT/QUARRY - ARKANSAS LOCATION - WHITE, COUN SAMPLED BY - THORNTON SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURV	EY SAMPLE ICATION CHECK EARCY (SAFETY IMPV LICABLE TY		SEQUENCE NO 11 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 73 DISTRICT NO 05 DATE SAMPLED - 03/02/16 DATE RECEIVED - 03/17/16 DATE TESTED - 03/29/16 GS
LAB NUMBER -	20160871	20160872	20160873
SAMPLE ID -	S165	_ S166	- S167
			ON ONLY - INFORMATION ONLY
STATION -	209+00	209+00	303+00
	13' RT	28' RT	- 06' RT
DEPTH IN FEET -	0-5	0-5	0-5
MAT'L COLOR -	BROWN	BROWN	BROWN
MAT'L TYPE -		=	<=
LATITUDE DEG-MIN-SEC -	35 15 18.40	35 15	
LONGITUDE DEG-MIN-SEC -	91 51 46.10	91 51	46.10 91 49 57.60
% PASSING 2 IN		_	(2
1 1/2 IN		-	%E
3/4 IN		-	100
3/8 IN	100	-	99
NO. 4 -	99	100	ূ 96
NO. 10 -	92	_ 100	89
NO. 40 -	84	_ 100	_{:=} 85
NO. 80 -	81	_ 100	- 78
NO. 200 -	74	95	60
LIQUID LIMIT -	24	26	- ND
PLASTICITY INDEX -	7	· - 5	- NP
AASHTO SOIL -	A-4(3)	A-4(4)	A-4(0)
UNIFIED SOIL -		100 miles	
% MOISTURE CONTENT -	19.0	20.5	17.0
ACHMSC (IN) -	3.5W	_ ===	- 7.0W
ACHMBC (IN) -	3.0		2.0
AGG.BASE CL.7 (IN)	5.0		5.0
-		-	
_		- -	
_		-	*
-	8	-	 :
-		-	5
-		-	<u>=</u> :

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/29/16 SEQUENCE NO 12 JOB NUMBER - 050280 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 - 73 SUPPLIER NAME - STATE DISTRICT NO 05 NAME OF PROJECT - JOY - SEARCY (SAFETY IMPVTS.)(S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - WHITE, COUNTY DATE SAMPLED - 03/02/16 SAMPLED BY - THORNTON DATE RECEIVED - 03/17/16 SAMPLE FROM - TEST HOLE					
MATERIAL DESC SOIL ST LAB NUMBER		- 20160875	- 20160	076	
SAMPLE ID	20160874 - S168	- 20160875 - S169	20160 - S170	876	
TEST STATUS	- INFORMATION ONLY		ON ONLY - INFOR	MATION ONLY	
STATION	= 303+00	- 303+00	- 311+0		
LOCATION	= 13' RT	- 19' RT	- 06' L	Т	
DEPTH IN FEET	- 0-5	0-5	- 0-5 -		
MAT'L COLOR	- BROWN	_ BROWN	_ BROWN		
MAT'L TYPE	25 15 90	- 25 15	- 35	15 .80	
LATITUDE DEG-MIN-SEC LONGITUDE DEG-MIN-SEC		- 35 15 91 49	.70 - 35 57.60 91	15 .80 49 48.00	
		21 42	57.60	40.00	
% PASSING 2 IN.		-	Y <u>a</u> r		
1 1/2 IN.		- 100	3 € 6		
3/4 IN. 3/8 IN.		- 99	- 100		
NO. 4	- 96	- 98	98		
NO. 10	- 0 91	- _ 95	94		
NO. 40	- : 86	_ 89	_ 86		
NO. 80	= 81	- 84	74		
NO. 200	- 70	78	61		
LIQUID LIMIT	= 23	26	- 26		
PLASTICITY INDEX	- 5	6	= 8		
AASHTO SOIL	- A-4(1)	A-4(3)	A-4 (2)	
UNIFIED SOIL	图7	#		_	
% MOISTURE CONTENT	- 15.8	22.2	13	.5	
ACHMSC (IN		Sec Sederal	7.5		
ACHMBC (IN		340 340474	2.0		
AGG.BASE CL.7 (IN) _ 5.0	-	5.0	1	
	4)	=	₩		
	-		-		
	<u>=</u> €	. 	=		
	क/ ८० ८०	# # #	# #		

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 03/ JOB NUMBER - 050 FEDERAL AID NO - TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST MATERIAL DESC SOI	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL SAS , COUNT ON HOLE	Y SAMPLE CATION CHECK ARCY (SAFETY IMPV ICABLE Y			SEQUEN MATERI SPEC. SUPPLI COUNTY DISTRI DATE S DATE R DATE I	AL YEA ER /ST CT	CODE - R - ID ATE - NO PLED -	\$\$ 20 1 73 05	RVPS 14 /02/16
LAB NUMBER	-	20160877	=)	20160878			201608	379	
SAMPLE ID	-	S171		S172			S173		
TEST STATUS	=	INFORMATION ONLY	7.	INFORMATIO	N ONLY			(ATI	ON ONLY
STATION	÷	318+00	-	318+00			318+00		
LOCATION	-		-	13' RT		-	21' RT		
DEPTH IN FEET	2	0-5	***	0-5			0-5		
MAT'L COLOR		BROWN	-	BROWN		-	BROWN		
MAT'L TYPE LATITUDE DEG-MIN-	ana .	25 15 20	-	25 15	2.0	-	35	15	.20
LONGITUDE DEG-MIN-				35 15 91 49	.30 39.60	-	91		39.60
		J1 4J 3J.00		71 47	39.00		7±	4,0	55.00
% PASSING 2	IN.		-			152			
•	IN. =		_			_			
	IN	100	_	100		-	100		
NO.		99	-	98		7	99		
NO.		96	-	93		_	92		
	40 -		_	86		_	80		
NO.	80 =	88	_	83		-	76		
NO.	200 =	83		79			68		
LIQUID LIMIT		26	_	29			26		
PLASTICITY INDEX	<u> </u>	7	-	9		-	5		
AASHTO SOIL	<u></u>	A-4(4)	-	A-4(6)			A-4 (2	2)	
UNIFIED SOIL	=		# 8						
% MOISTURE CONTENT	-	16.9	-	15.7		-	19.	. 1	
ACHMSC	(IN) -	7.0W	_	6.5		=			
ACHMBC	(IN) -	2.5	-			=			
AGG.BASE CL.7	(IN) -	4.0	-	3.0		~			
	₹ <u>2</u>		-			20			
			- ST			20			
	-		-			=			
			= 2			₹8 50			
	# =		-			20			
	-		_						

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 04/ JOB NUMBER - 050 FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - J PROJECT ENGINEER - N PIT/QUARRY - ARKAN	280 BE ASSI L SURVE SPECIFI TE OY - SE OT APPL	Y SAMPLE CATION CHECK ARCY (SAFET)) (s)	SUPPLIER ID COUNTY/STATE -	SSRVPS 2014 1
LOCATION - WHITE SAMPLED BY - THORNT SAMPLE FROM - TEST MATERIAL DESC SOI	'ON HOLE		E- PAVEME	NT SOUNDING		
	. DORVE				36	
LAB NUMBER	-	20160880		20160881		
SAMPLE ID TEST STATUS	-	S174		S175	NA ONT II	
STATION	-	INFORMATION 327+00		327+00	DN ONLY -	
LOCATION		06' LT	-	13' LT	62 62	
DEPTH IN FEET		0-5	-	0-5	3 =	
MAT'L COLOR		BROWN	355	BROWN	Ø ≡	- 4
MAT'L TYPE	_		∰). ≃≃		(-	
LATITUDE DEG-MIN-	SEC -	35 14 5	7.00	35 14 5	57.00	
LONGITUDE DEG-MIN-	SEC -	91 49 29	9.60			
% PASSING 2	IN					
	IN		50 50		ē	
	IN		=0	100	22	
_ '	IN	100	-	99	3#6	
NO.	4 -	99	= 0	99	i∰ ⊘::	
NO.	10 -	98	_	97		
NO .	40 -	92	=	93		
NO.	80 -	80	=.0	91		
NO.	200 -	70		85		
LIQUID LIMIT	_	33	(4)	26	9 4	
PLASTICITY INDEX	_	12	40	8	1986	
AASHTO SOIL	-	A-6(7)	-	A-4(5)	(
UNIFIED SOIL	-		. 		-	
% MOISTURE CONTENT	-	14.0	-	14.6	-	
ACHMSC	(IN) -	8.5W	- E	6.0W	¥1	
ACHMBC	(IN) -	2.0	-		=1;	
AGG.BASE CL.7	(IN) -	6.0		5.0	=0	
	-		7.			
	_		-		-	
	-		-		#1	
	-		17 1		5 .0	
	-		2		<u>=</u> 5	
	-		÷:		2	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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MICHAEL BENSON, MATERIALS ENGINEER

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

JOB NUMBER - FEDERAL AID NO PURPOSE - SPEC. REMARKS - SUPPLIER NAME - NAME OF PROJECT PROJECT ENGINEER PIT/QUARRY - AE LOCATION - WE SAMPLED BY - THO SAMPLE FROM - TE	SOIL SURVE NO SPECIFI STATE - JOY - SE - NOT APPL RKANSAS HITE, COUNT DRNTON EST HOLE	Y SAMPLE CATION CHE ARCY (SAFI ICABLE	ECK ETY IMPVT			SEQUENCE NO. MATERIAL CODE SPEC. YEAR SUPPLIER ID. COUNTY/STATE DISTRICT NO. DATE SAMPLED DATE RECEIVED DATE TESTED	2014 1 73 05 03/02/16 03/17/16
MATERIAL DESC LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-M	- - - - -	20160882 RV176 INFORMATI 161+00 24' RT 0-5 BROWN	ON ONLY		20160883 RV177 INFORMATIO 318+00 21' RT 0-5 BROWN	- DN ONLY - - - - -	
LONGITUDE DEG-M % PASSING 2 1	MIN-SEC -		37.30			39.60	
N N	IO. 10 - IO. 40 - IO. 80 - IO. 200 -	96 92 91 84 ND			91 83 79 73		
PLASTICITY INDE AASHTO SOIL UNIFIED SOIL % MOISTURE CONT	EX - - -	NP			5 A-4(2)	- - - -	
	-			经有 医 医多种性			
	-			-		#3 #3	

REMARKS -

-

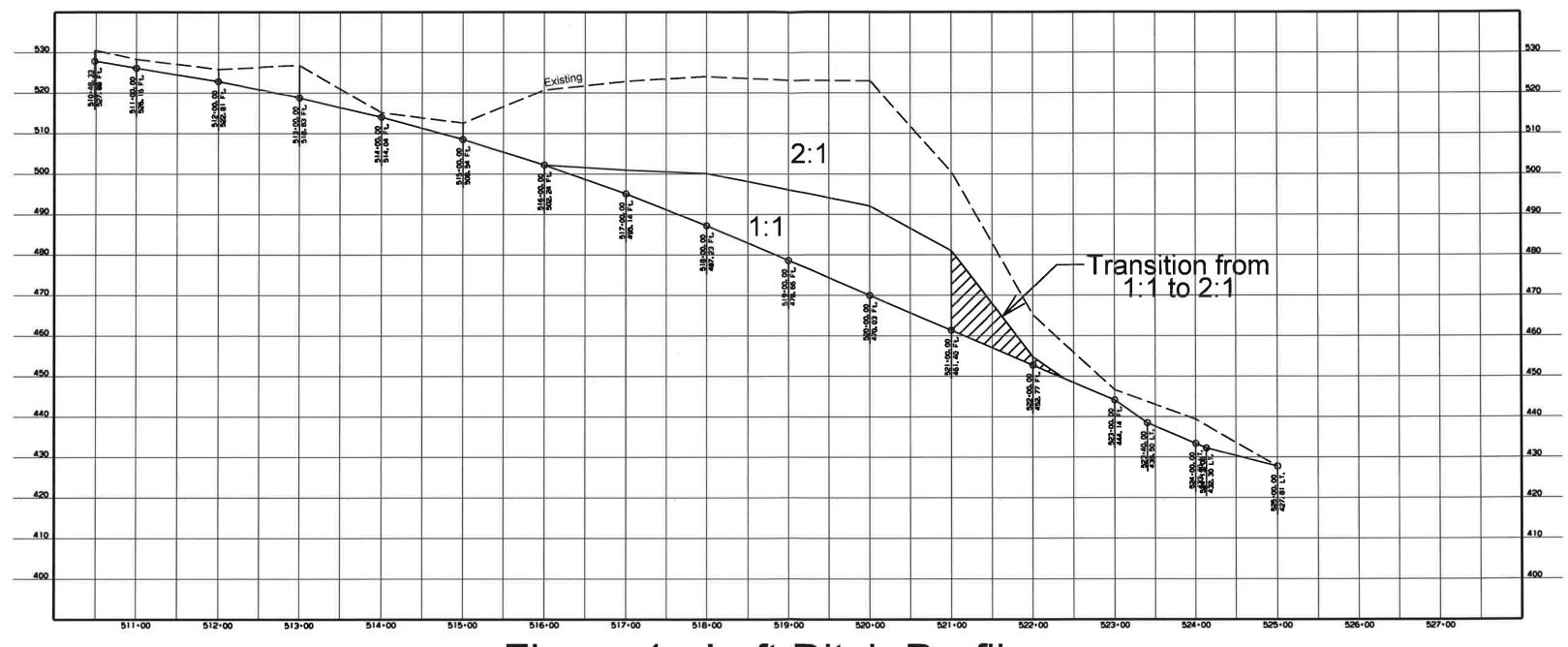


Figure 1 - Left Ditch Profile

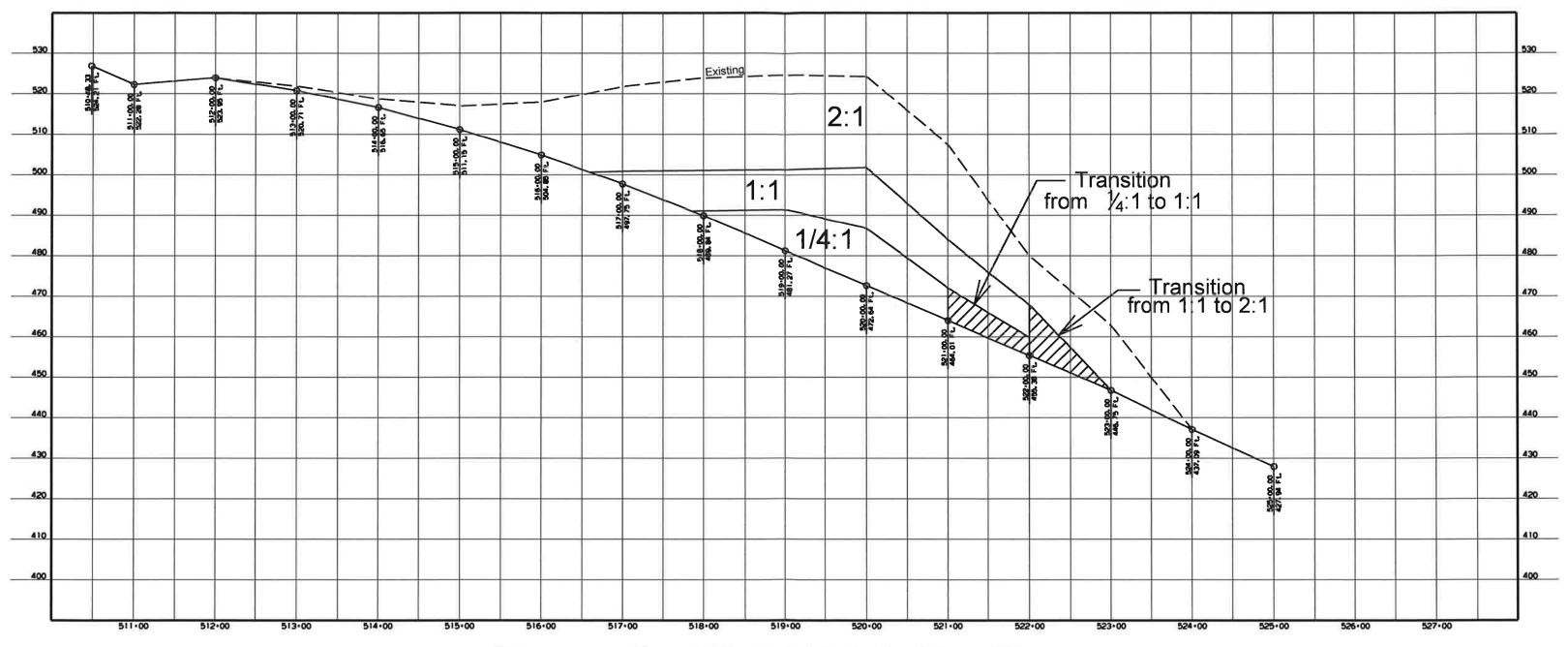


Figure 2 - Right Ditch Profile

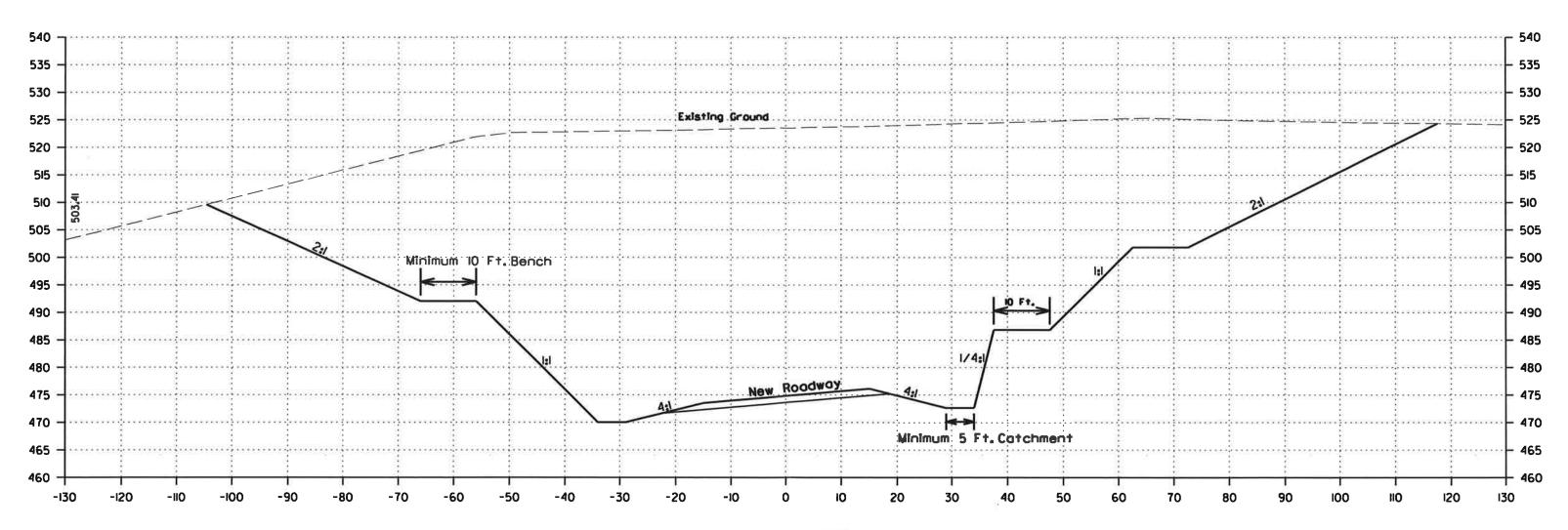


Figure 3 - Cut Slope Typical Section



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

March 8, 2018

TO:

Mr. Rick Ellis, Bridge Engineer

Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT:

Job No. 050280

Joy - Searcy (Safety Impvts.) (S)

Route 36 Section 3 White County

Transmitted herewith are a brief summary of the geology and site conditions, rock core unconfined compression test summary, RMR, D50 scour analysis, and the logs of the borings conducted for the structures, approaches, and cut slopes of the above referenced project. The samples obtained by the Standard Penetration Tests were brought to the laboratory and visually classified by experienced lab personnel to confirm the field identifications.

This project consists of shifting the alignment, of a section of Highway 36. The existing bridges, crossing East & West Hog Thief Creeks, will be reconstructed on the new alignment. Six of the eight requested borings were performed for this project: four for the West Hog Thief Creek Bridge and two for the East Hog Thief Creek Bridge. All borings had to be offset from the proposed construction centerline, due to conflicts with utilities. The two borings that were not obtained, for the East Hog Thief Creek Bridge, were located at: 817+50 C.L. Construction and 818+10 C.L. Construction. These borings were not obtained due to conflicts with utilities.

Based on plans provided by Bridge Division, it is anticipated that all bents will be founded on steel shell trestle piles. However, findings from this subsurface investigation revealed that bedrock is less than fifteen feet deep at each boring location. Therefore, spread footings may be considered as a viable foundation alternative. Spread footings founded in competent Shale to Shale with Sandstone should be designed based on the values provided in Table 1.

TABLE 1 – Bearing Capacity Recommendations for Spread Footings

Nominal Bearing	Factored Bearing	Bearing Resistance at				
Resistance (ksf)	Resistance (ksf)	Service Limit State (ksf)				
356	160	40				

Relocating this section of Highway 36 will require a large amount of excavation. Borings for the cut slopes were performed every 100 feet alternating from the proposed left ditch to the right ditch. Each boring was terminated below the elevation of the bottom of the ditch. Based on the boring logs a profile was developed, for the left and right ditch, showing the proposed cut slopes and transition zones. These profiles are attached in Figures 1 & 2. A typical section depicting the geometry of the cut slopes is attached in Figure 3.

If you have any questions concerning these recommendations, please contact the Geotechnical Section.

Michael C. Benson Materials Engineer

MCB:rpt:mlg

c: State Construction Engineer - Master File Copy/

District 5 Engineer

G.C. File

GEOLOGY AND SITE CONDITIONS Job No. 050280

Joy – Searcy (Safety Impvts.) (S) White County Route 36 Section 3

Site Conditions

The proposed project consists of improving the safety of a section of Highway 36 by shifting the current alignment. This shift will result in large cut slopes and two bridges being replaced.

Bridge 1: West Hog Thief Creek Bridge

The existing bridge crosses West Hog Thief Creek and is located approximately 45 feet west of Miranda Lane on Highway 36, east of the town of Joy. It is an approximately 66 feet long, 27 feet wide, east to west running bridge. The bridge has 3 spans and the superstructure consists of cast-inplace concrete decking supported by 2 concrete piers with concrete caps and concrete end walls. The bridge guardrails are composed of steel and are supported by steel posts leading up to the bridge and concrete posts on the bridge. There is piled riprap on both of the embankments leading up to the bridge and also on the slopes below the end walls. West Hog Thief Creek runs from northwest to southeast under the existing bridge and merges with East Hog Thief Creek approximately 0.2 miles downstream from the project alignment. Observed sediment in the channel and on the channel banks is primarily sand and silt and no signs of prior scour were evident. The south side of highway 36 consists of heavy woodlands both up and down station from the bridge. Overhead power lines, buried telecommunication lines, and a buried water line all parallel the north side of highway 36 up and down station from the existing bridge. These 3 utilities additionally run north of the bridge, paralleling the east side of the creek and leading up to a residence at the end of Miranda lane. There is a BHP Billiton gas pad approximately 500 feet down station from the bridge on the left side of highway 36.

Bridge 2: East Hog Thief Creek Bridge

The existing East Hog Thief Creek Bridge is much like the West Hog Thief Creek Bridge in size and structure. It is located approximately 0.13 miles up station and to the east of the West Hog Thief Creek Bridge and Miranda Lane on Highway 36. It is an approximately 66 feet long, 27 feet wide, 3 span bridge. The superstructure consists of cast-in-place concrete decking supported by concrete piers with concrete caps and end walls. There is piled riprap on both of the embankments leading up to the bridge and also on the slopes below the end walls. The bridge guardrails are composed of steel and are supported by steel posts leading up to the bridge and concrete posts on the bridge. Three of the concrete posts on the southeast side of the bridge have been replaced. Overhead power lines, buried telecommunication lines, and a buried water line all parallel the north side of highway 36 up and down station from the existing bridge. East Hog Thief Creek runs from north to south under the existing bridge and merges with West Hog Thief Bridge approximately 290 feet downstream from the project alignment. Observed sediment in the channel and on the channel banks is primarily sand and silt and no signs of prior scour were evident. Property surrounding the bridge is primarily pasture land with some dense woodland to the southwest.

Site Geology

The project alignment is located on the mapped outcrop of the Atoka Formation (Pa) of Pennsylvanian age. The Atoka Formation is a sequence of marine, mostly tan to gray silty sandstones and grayish-black shales. Some rare calcareous beds and siliceous shales are known. This unit has the largest areal extent of any of the Paleozoic formations in the state. It is the surface rock of the Boston Mountains and dominates the exposures in the Arkansas River Valley and the frontal Ouachita Mountains. It is also present in the southern part of the Ouachita Mountains. The unit locally contains discontinuous streaks of coal and coaly shale in the Boston Mountains and Arkansas River Valley. This formation can be up to 25,000 feet thick in the Ouachita Mountains, although only largely incomplete sections are known. The geology for both bridges was similar in overall composition and depth to bedrock. There were no exposed rock outcrops to evaluate during the field investigation, but the average depth to bedrock in the borings for this project was between 10 to 12 feet below ground level. There are many mapped faults surrounding the project locality and unmapped faults in the area are possible.

Subsurface Conditions

Based on the results of the borings, the subsurface stratigraphy may be generalized as follows:

0 to 10.5 Feet:* Varies from moist to wet, very soft to very hard, brown sandy to silty clay with

some gravel to medium dense to very dense, brown sand and silt with clay and

gravel (rock fragments).

10.5 to 41.5 Feet: Consists of slightly weathered to unweathered, medium hard, occasionally to

frequently fractured, gray shale with frequent sandstone partings.

* Based on 24-hour groundwater measurements made in two of the borings, a water table is present at 4.0 to 4.9 feet below the surface.

Rock Core Unconfined Compression Test Summary

Project Number:

050280

Project Name:

Joy - Searcy (Safety Impvts.) (S)

Date Tested:

1/30/2018

Station	Location	Sample No.	Depth (ft)	Diameter (in)	Height (in)	Total Load (lbs)	Correction Factor	Stress (psi)	Remarks
809+54	16' Rt	1	15.0	1.75	3.40	30,470	1.00	12,668	
809+85	16' Rt	2	17.0	1.75	3.35	24,450	1.00	10,165	
810+30	19' Rt	3	15.0	1.75	3.40	23,910	1.00	9,941	
810+56	15' Rt	4	12.0	1.75	3.40	29,240	1.00	12,157	
817+20	20' Rt	5	12.4	1.75	3.50	23,510	1.00	9,774	
817+80	24' Rt	6	13.4	1.75	3.40	20,310	1.00	8,444	
								9	

^{*} Please note any broken samples, fractures or other characteristics of sample in Remarks.

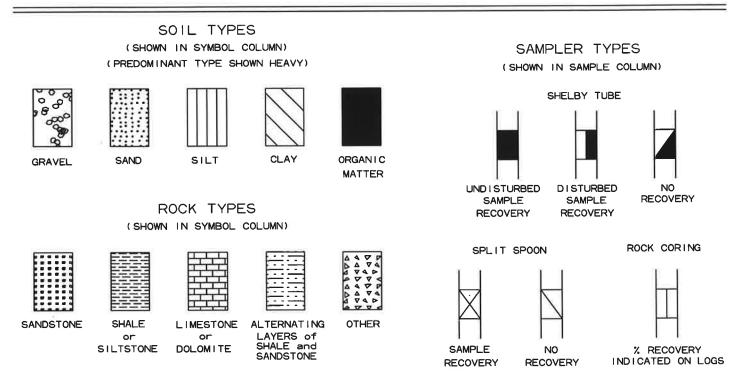
ROCK MASS RATING SUMMARY JOB # 050280

SAMPLE #1 SAMPLE #2 Station/Location Station/Location 809+54 / 16' RT CL 809+85 / 16' RT CL Depth (ft) Depth (ft) 15 Relative Rating Relative Rating Uniaxial Compressive Strength Uniaxial Compressive Strength RQD RQD Spacing of Joints Condition of Joints Spacing of Joints 10 10 Condition of Joints 20 20 **Groundwater Conditions** Groundwater Conditions Sum Sum 52 Class Number Class Number FAIR ROCK FAIR ROCK Description Description SAMPLE #3 SAMPLE #4 Station/Location 810+30 / 19.0 FT RT Station/Location 810+56 / 15.0 FT RT Depth (ft) Depth (ft) Relative Rating Relative Rating Uniaxial Compressive Strength Uniaxial Compressive Strength RQD RQD 13 Spacing of Joints Spacing of Joints 10 20 Condition of Joints Condition of Joints 20 20 **Groundwater Conditions Groundwater Conditions** Sum 67 Sum 47 Class Number Class Number III Description GOOD ROCK Description **FAIR ROCK** SAMPLE #6 SAMPLE #5 817+80 / 24.0 FT RT Station/Location 817+20 / 20.0 FT RT Station/Location Depth (ft) 12.4 Depth (ft) 13.4 Relative Rating Relative Rating Uniaxial Compressive Strength RQD Uniaxial Compressive Strength RQD 13 Spacing of Joints Spacing of Joints 20 10 Condition of Joints Condition of Joints 20 20 **Groundwater Conditions Groundwater Conditions** Sum Sum 57 Class Number Class Number III **GOOD ROCK** Description **FAIR ROCK** Description

D₅₀ AGGREGATE ANALYSIS FOR SCOUR CALCULATIONS

		Job No.	050280		
Creek Name	Station	Sample Type	Location	Depth (FT)	Aggregate Size (D50) (IN)
West Hog Thief Creek	810+15	Edge of Creek Bank	2' Right of Const. C.L.	N/A	0.0041
East Hog Thief Creek	817+50	Edge of Creek Bank	15' Right of Const. C.L.	N/A	Less Than 0.0029

LEGEND



TERMS DESCRIBING CONSISTENCY OR CONDITION

N° Value	Density Very Loose	N' Value	Consistency	N' Value	Consistency	'N' Value	Consistency
0-4	Very Loose	0-1					
		• '	Very Soft	0-1	Very Soft		
5-10	Loose	2-4	Soft	2-4	Soft	31-60	Soft
11-30	Medium Dense	5-8	Medium Stiff	5-8	Medium Stiff	0ver 60	
31-50	Dense	9-15	Stiff	9-15	Stiff	More than	2'
Over 50	Very Dense	16-30	Very Stiff	16-30	Very Stiff	Penetrati	on
		31-60	Hard	31-60	Hard	in 60 Blow	vsı Medium Har
		Over 60	Very Hard	0ver 60	Very Hard	Less than	2'
						Penetrati	on
						in 60 Blov	vsi Hard

- 1. Ground water elevations indicated on boring logs represent ground water elevations at date or time shown on boring log. Absence of water surface implies that no ground water data is available but does not necessarily mean that ground water will not be encountered at locations or within the vertical reaches of these borings.
- 2. Borings represent subsurface conditions at their respective locations for their respective depths. Variations in conditions between or adjacent to boring locations may be encountered.
- 3. Terms used for describing soils according to their texture or grain size distribution are in accordance with the Unified Soil Classification System.

Standard Penetration Test – Driving a 2.0" O.D., 1-3/8" I.D. sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and performing the test are recorded for each 6 inches of penetration on the drill log. The field "N" Value (N_f) can be obtained by

adding the bottom two numbers for example: $\frac{6}{8-9} \Rightarrow 8+9=17 blows/ft$. The "N" Value corrected to 60% efficiency (N₆₀) can be obtained by multiplying N_f by the hammer correction factor published on the boring log.

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO		: 1				
JOB N		_	050280 White County		DATE:			August	1, 2	017		\neg
JOB N	AME:		Joy - Searcy (Safety Impvts.) (S)		TYPE O		ILLING	:				
			Route 36 Section 3		Holl	ow S	tem A	uger -			ore	
STATI			516+00		EQUIPN	IENT	:	A	ker	1779		
LOCA			29' Left of Construction Centerline aul Campbell		1143434	ED 00	NDDEO2	CION CA	TTO D		N/A	
			DEPTH: 23.2		HAMM	EK CC	RREC	TION FA	JIOK		N/A	-
D		s	DDI 111. 23.2		Г				Т		П	_
E	S Y	A							١			
P	М	М	DESCRIPTION OF MATERIAL	SOIL				HT	N N		% T	% R
T H	В	P L		GROUP	ပ	T:		EIG	BI C	ż	C	Q
""	0	Ē			PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	NO OF BLOWS	PER 6-IN.	R	D
FT _x			SURFACE ELEVATION: 520.3		PLAST LIMIT	√ %	LIQUII	DR		PEF		
			Brown Sand with Clay									
			·									
	d		Moist, Very Dense, Brown Sand with Gravel									
5	0.00.8	X	(Sandstone Fragments)							33		
_ =			SANDSTONE							60 (4")		
			SANDSTONE - Weathered, Cemented,							(·)	100	0
			Frequent Fractures, Brown and Gray									
10			SANDSTONE - Slightly Weathered, Well									
			Cemented, Frequent Fractures, Brown and								94	7
			Gray									
 15												
10	ΞΞ		SANDSTONE WITH INTERBEDDED SHALE -								98	0
			Unweathered, Well Cemented, Gray									٥
			:									
20			SANDSTONE WITH INTERBEDDED SHALE -									
	E		Unweathered, Well Cemented, Frequent								52	0
			Fractures, Gray*									
	≣≣											
			Boring Terminated									
25												
					-							
30												
 35												
-	ARKS	S: (Cut slope boring. * Poor recovery from 18.2 to 23.2	due to	core b	arrel	malfı	unction	. La	t/Lone]:	
			5.27646804, -91.93463052								-	

			NY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO 1		· 1					
JOB N			050280 White County		DATE:				ust 1	, 201	7	_	\neg
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DR		_		,			
			Route 36 Section 3		Holl	ow S	Stem A	luge	r - D	iamo	nd C	ore	
STATI	ON:		517+00		EQUIPN	иENT	:		Ack	er 17	779		- 1
LOCA	TION:	:	29' Right of Construction Centerline										- 1
			aul Campbell		HAMM	ER CO	ORREC	ΓΙΟΝ	FACT	OR:]	N/A	
COM	PLET	ION	DEPTH: 31.2										
D E	S Y	S A							۳	50			
P T	М	M P	DESCRIPTION OF MATERIAL	SOIL				HI	Ü.F	,0W		% T	% R
Ĥ	ВО	L	ä	GROUP	TIC	IST	ے وا	WEI	ER (F BI	6-IN.	C R	Q D
FT.	Ĺ	E S	SURFACE ELEVATION: 522.1		PLASTIC LIMIT	% MOIST.	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6		
			Moist, Very Dense, Brown and Gray Sand with										
5		∇	Some Clay							1	0		- 1
_ =		$\stackrel{\frown}{}$								30- (6	-10 ")		
		_								,			
			SANDSTONE - Highly Weathered, Poorly										
10			Cemented, Occasional Clay Partings, Frequent Fractures, Brown									62	0
_ =			Tradiance, Brown										
			SANDSTONE - Unweathered, Well Cemented,									100	22
15			Frequent Fractures, Brown and Gray										
-		_											
-													
			SANDSTONE - Unweathered, Well Cemented,									96	7
20			Gray										
		-											_
												100	44
25	薑		SANDSTONE WITH INTERBEDDED SHALE -										
			Unweathered, Well Cemented, Occasional										_
			Fractures, Gray										
												100	52
30													52
			Boring Terminated									П	
35 REM	V D K C		L Cut slope boring. Lat/Long: 35.27616359, -91.9344	9978	1			1			_	لــــا	
I INCINI	~\\/\C	,	out slope boiling. Laucong. 55.21010508, -81.8544:	5570									

ARKANSAS HWY. & TRANS. DEPARTMENT	BORING NO. 3
MATERIALS DIVISION - GEOTECHNICAL SEC.	PAGE 1 OF 2
JOB NO. 050280 White County	DATE: July 25, 2017
JOB NAME: Joy - Searcy (Safety Impvts.) (S)	TYPE OF DRILLING:
Route 36 Section 3	Hollow Stem Auger - Diamond Core
STATION: 518+00	EQUIPMENT: Acker 1779
LOCATION: 29' Left of Construction Centerline	27/4
LOGGED BY: Steve Faulkner	HAMMER CORRECTION FACTOR: N/A
COMPLETION DEPTH: 43.8	
D S S A P M M P DESCRIPTION OF MATERIAL SOIL GROU	
O GORI ACE ELEVATION. 524.1	
Moist, Dense, Brown Clayey Sand With Gravel (Sandstone Fragments)	23 14-27
SANDSTONE - Weathered with Highly Weathered Layers, Cemented with Poorly Cemented Layers, Occasional Clay Seams, Brown and Gray	91 37
20	95 0
SANDSTONE WITH INTERBEDDED SHALE - Slightly Weathered, Cemented, Gray	100 42
SANDSTONE WITH INTERBEDDED SHALE - Unweathered, Well Cemented, Gray	100 40
35	
REMARKS: Cut slope boring. Lat/Long: 35.2760945, -91.9340915	

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	G NO 2		2				
JOB N			050280 White County		DATE:		- 01	July 2	5. 2	2017		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DRI	ILLING	•	-, -	3017		
10011			Route 36 Section 3					uger -	Dia	amono	i Coi	·e
STATI	ON:		518+00		EQUIPN			_		r 177		
LOCA			29' Left of Construction Centerline		EQUII I	12111						
			teve Faulkner		HAMM	ER CO	ORRECT	ΓΙΟΝ FA	СТС	R:	N/	A
			DEPTH: 43.8									
D		s			T				T		T	
E	S	A										
Р	Y	М	DESCRIPTION OF MATERIAL	0011					<u>-</u>	S⊗	%	
Т	M B	Р	DECORN HON OF WATERIAL	SOIL GROUP		٤.		<u> 15</u>	3	Ω.	T .	
Н	Ö	L		GROOT		ISI	le L	WE	7	F.	Z R	. Ď
FT.	Ĺ	E S	SURFACE ELEVATION: 524.1		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS FEK CU.F1	NO. OF BLOWS	PEK 6-IN.	
		7	SANDSTONE WITH INTERBEDDED SHALE -			_%		Δ,	7	Z	+	+
			Unweathered, Well Cemented, Occasional								10	d 70
			Fractures, Gray								'`	
	ΞΞ		1. detailed, 2. dy									
											-	
40												
			SHALE WITH INTERBEDDED SANDSTONE -								9	9 62
			Unweathered, Hard, Gray								١	0 02
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	<u>=</u> =	_	Boring Terminated		-			•	+		+	
45			borning reminiated									
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 65			1									
- 55	1											
	1											
	1											
70												
70 DEM	V D V C	2. (l Cut slope boring. Lat/Long: 35.2760945, -91.93409	15			J					
KEIN	WKV?). (out slope boiling. Latriong. 35.2700845, -81.83408	13								

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO		2					
JOB N			050280 White County		DATE:		- 01		24	201	7		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DR	ILLING		,		•		
1021			Route 36 Section 3				stem A		- D	iamo	nd C	Core	
STATI	ON:		519+00		EQUIPN			_		er 17			
LOCA		2	29' Right of Construction Centerline	- 1									
LOGG	ED BY		teve Faulkner		HAMM	ER C	ORRECT	rion i	FACT	OR:		N/A	
COM	PLET:	ION	DEPTH: 49.3										
D		s											
E	S	Α							2	70			
P	М	М	DESCRIPTION OF MATERIAL	SOIL				Ħ	J.F.) W		% T	% R
[В	Р		GROUP	ြ	Ę		EIG	S C	BL(÷.	C	Q
+	0	L			STI	OIS		≶	PEI	OF	[I-9	R	D
FTal	L	S	SURFACE ELEVATION: 525.7		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT.	NO. OF BLOWS	PER 6-IN		
	196%		00117102 2227711011. 020.1		+==	-0.			_			\Box	
— -													
			Moist, Very Dense, Brown and Gray Clayey										
	X		Sand with Gravel (Sandstone Fragments)										
<u> </u>	19		,										
5		\times								2			
				ľ						6	0		
										- ۲	')		_
												68	0
L_{-}			SANDSTONE - Highly Weathered, Cemented									Н	
10			with Poorly Cemented Layers, Frequent										
			Fractures, Occasional Clay Seams, Brown and										
			Gray									65	0
Γ													U
15													
1.0													
-			SANDSTONE - Weathered, Cemented,										40
<u> </u>			Occasional Clay Seams, Brown and Gray									92	18
<u> </u>													
<u> </u>		Ш											
_20													
-			CANDOTONE Weethered Commented										
			SANDSTONE - Weathered, Cemented, Occasional Fractures, Brown and Gray									94	23
			Occasional Fractures, blown and Gray										
L -													
25	Œ			Ī					14				
	ΙΞΞ												
			SANDSTONE WITH INTERBEDDED SHALE -									100	40
]≡≡		Slightly Weathered, Well Cemented, Gray									[]	
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30	H	\vdash		1									
	Œ												
-			SANDSTONE WITH INTERBEDDED SHALE -										
	tee.		Slightly Weathered, Well Cemented, Frequent									96	34
	ł		Fractures, Gray										
	Œ												
35	A E	Ш)	2052			1						
KEM	AKK	s: (Cut slope boring. Lat/Long: 35.27646804, -91.9346	3052									

			WY. & TRANS. DEPARTMENT		BORIN			. ^					
JOB N			DIVISION - GEOTECHNICAL SEC. D50280 White County		PAGE DATE:	2	OF	2 July	24	201	7		_
JOB N			Joy - Searcy (Safety Impvts.) (S)		DATE: TYPE O	F DRI	LLING	-	۷4,	∠VI	,		
JOBIN	in i		Route 36 Section 3				tem A		- D	iamo	nd C	ore	
STATI	ON:		519+00		EQUIPN					er 17			
LOCA			29' Right of Construction Centerline										
		_	teve Faulkner		HAMM	ER CC	DRRECT	rion i	FACT	OR:]	N/A	_
	PLET		DEPTH: 49.3		т —				7		_		\dashv
D E	S	S A	2										
P	Y	M	DESCRIPTION OF MATERIAL	COIL				IT.	FT.	WS		%	%
T	M B	Р	DESCRIPTION OF WATERIAL	SOIL GROUP	5)	19		IGE	CO	310	÷	T C	R Q
Н	ō	E			STIC	OIS'		Ĭ.	PER	0F 1	(I-9	R	Ď
FT₂	L		SURFACE ELEVATION: 525.7		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT.	NO. OF BLOWS	PER 6-IN.		
												99	64
,													
40													
— +			SANDSTONE WITH INTERBEDDED SHALE -										
			Unweathered, Well Cemented, Gray								ĺ	100	77
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 45		+											_
-,0	ΞΞ												
	≣≣											100	92
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50			Boring Terminated										
 55													
33													
60													
_ =													
65													
— – 70													
	ARKS	S: C	L Cut slope boring. Lat/Long: 35.27646804, -91.9346	3052						-			
			-										

			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE			₹ 2					
JOB N			050280 White County		DATE:			_	ust 8	3, 201	17		-
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE C	E DE		_	usi o	, 201	. /		
JOBIN	Z KIVILD.		Route 36 Section 3				Stem A	-	r - D	iamo	nd (`ore	
STATI	ON		519+87		EQUIPN			_		er 17		<i>7</i> 010	- 1
LOCA			39' Right of Construction Centerline		EQUIF	VIEIV I	•		ACK	.01 17	17		- 1
			aul Campbell/ Winston Buie		HAMM	ER CO	JBBEC.	TION	FACT	COB.	,	N/A	
			DEPTH: 54.3		TIZTIVITVI	LIC CC	IKKLC	HON	IACI	OK.		. 1/11	\dashv
	LLLI		DEI 111. 54.5								_	Т	\dashv
D E	S	S A											
-	Υ	м	DESCRIPTION OF MATERIAL					<u></u>	E.	NS NS		%	%
+	M	P	DESCRIPTION OF MATERIAL	SOIL				E E	CC.	19		T	R
ΗH	В	L		GROUP	10	ST.		VEI	SR (F BI	Ż	C R	Q D
1	O L	Е			PLASTIC LIMIT	% MOIST.		DRY WEIGHT	LBS PER CU.FT.	NO. OF BLOWS	PER 6-IN.	`	=
FT.	_	S	SURFACE ELEVATION: 526.1	J.	P.L.	1%	LIQUID LIMIT	D.K.	LB	2 2	PE		
	0.00												
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-	o ¹¹ ; g												- 1
	oo												
<u> </u>	00 00 00 00		Dry, Dense, Light Brown Sand with Gravel										
5	80.00	V	(Sandstone Fragments)							4		2:	
<u> </u>	90.58	\angle	(18-	-22		
L -	a .089												
ᆫᆜ	8,00												
	é												
10	37. 24	><	Dry, Very Dense, Light Brown Sand with Gravel	0						6	0		
			(Sandstone Fragments)							(4			
			SANDSTONE - Highly Weathered, Poorly										
	//		Cemented, Frequent Fractures, Brown									66	0
			Clay Layer (11.8' - 12.1') SANDSTONE - Highly Weathered, Poorly										
H			Cemented, Frequent Fractures, Brown										
15			Comence, Frequent Fractures, Brown	:									
			SANDSTONE - Slightly Weathered, Well										
L .			Cemented, Frequent Fractures, Brown and									92	26
			Gray										
20			SHALE - Slightly Weathered, Medium Hard,										-
			Gray										
			SANDSTONE - Slightly Weathered, Well										
			Cemented, Occasional Shale Partings and									100	15
-			Seams, Gray										
25	≡≡												
L .	ŒΞ												
	≘≣		SHALE WITH INTERBEDDED SANDSTONE -									100	28
	ΞΞ		Slightly Weathered, Medium Hard, Gray										
	ΞΞ												
30												H	
-			SANDSTONE WITH INTERBEDDED SHALE -										
	≣≣		Slightly Weathered, Well Cemented, Gray									100	27
			J,										
_ =					0								
35					,,								
REM	ARKS	S: (Cut slope boring. Lat/Long: 35.2757178, -91.93370	80									

		_	HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE			₹ 2					
JOB N		_	050280 White County		DATE:			Aug	ust 8	, 20	17		\neg
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE C	F DR		_		,			
l			Route 36 Section 3		Holl	ow S	stem A	uge	r - D	iamo	ond C	Core	
STATI	ON:	;	519+87		EQUIPN	MEN T	:	_	Ack	er 17	779		
LOCA	TION:		39' Right of Construction Centerline										
LOGG	ED BY	: P	aul Campbell/ Winston Buie		HAMM	ER CO)RREC	ΓΙΟΝ	FACT	OR:]	N/A	
COM	PLET	ION	J DEPTH: 54.3										
D	s	S											
E	Y	Α							Ţ.	Ø		%	%
P T	M	M P	DESCRIPTION OF MATERIAL	SOIL				Ħ	U.F	ΜO		Т	R
Ι'nΙ	В	L		GROUP	၂ပ	ST.		EI	R C	BL	ż	C	Q
Ι '' Ι	0	Ē			PLASTIC LIMIT	% MOIST		DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.	R	D
FT	L	S	SURFACE ELEVATION: 526.1		PLAST LIMIT	\\ %	LIQUID LIMIT	DR	LB	NO	PEF		
												100	58
												الما	30
40		H	SHALE WITH INTERBEDDED SANDSTONE - Unweathered, Hard, Gray									\dashv	_
10	ΞΞ		Onweathered, Hard, Gray										
	≡≡											100	98
45	uuu	-											
45													
												100	82
<u> </u>			SHALE WITH FREQUENT SANDSTONE										
<u> </u>	ruuri uuuri		PARTINGS AND SEAMS - Unweathered, Hard,										
50	ruru ruru		Gray										
<u> </u>													
⊢ +												100	80
	ruuu	Ш											
55			Boring Terminated										
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60													
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REM	ARKS	S: (Cut slope boring. Lat/Long: 35.2757178, -91.93370	80									

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	G NO		2					
JOB N			050280 White County		DATE:			Augu	st 2	201	7		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DR		_	St 2	, 201	,		
JOBIN	AIVIL.		Route 36 Section 3.				stem A		- D	iamo	nd C	ore	
STATI	ON:		519+97		EQUIPN			-		er 17		010	
LOCA			27' Left of Construction Centerline		LQUIII	LLIVI	•	•	1011		, ,		
			teve Faulkner		HAMM	ER CO	ORREC	ΓΙΟΝ F	АСТ	OR:]	V/A	
			DEPTH: 58										
D		S											
ΙĔ	S	A	"										
P	Y M	М	DESCRIPTION OF MATERIAL	SOIL					F.	MS.		% T	% R
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FT.	L	E S	CUREAGE ELEVATION: 525.4		PLASTIC LIMIT	% MOIST.	LIQUID	ORY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.		
F 1 &	Z35.7.3	0	SURFACE ELEVATION: 525.1			~	77		7	z	Ь	_	
	Z												
	1//												
			Moist, Very Dense, Brown and Gray Clayey Sand with Gravel (Sandstone Fragments)										
			Sand with Graver (Sandstone Fragments)										
5	11/1									1	,		
	XXZ	$\overset{\sim}{ o}$								60			
			SANDSTONE - Highly Weathered, Poorly							(3	")	96	0
			Cemented, Brown and Gray							ļ.			Ŭ
		П		1									
10			SANDSTONE Highly Weathered Boorly										
10			SANDSTONE - Highly Weathered, Poorly Cemented, Frequent Fractures, Occasional									90	0
			Clay Partings and Seams, Brown and Gray										
-			City v dianigo dina ocame, dicement dia									11	
		-											
15													_
												80	0
			SANDSTONE - Highly Weathered, Poorly				-						
		Ш	Cemented, Frequent Fractures, Brown and										
			Gray										
20													
												92	0
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			SHALE - Slightly Weathered, Hard, Gray	1									
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25													
25												97	0
<u> </u>												ا ۱	Ü
-			SANDSTONE - Weathered, Cemented,										
<u> </u>		\vdash	Frequent to Occasional Fractures, Occasional										
_ =			Shale Seams, Brown and Gray*										
30													
												14	0
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35				<u> </u>									
REM	ARKS		Cut slope boring. * Poor recovery from 28.0 to 33.0 85.2758242, -91.9335763	due to	core b	arre	ı malf	unctio	on.	Lat/l	Lon	3:	

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO 2		2					
JOB N			050280 White County		DATE:			Augi	ıst 2	. 20	17	-	
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DR		_	2	., 20.	•		
l vob i			Route 36 Section 3				Stem A		- D	iamo	ond (Core	
STATI	ON:		519+97		EQUIPN			_		er 1			
LOCA			27' Left of Construction Centerline		_ (
			teve Faulkner		HAMM	ER CO	ORREC'	TION I	ACT	OR:		N/A	
			DEPTH: 58										
D	s	s											
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P	I ѝ I	M	DESCRIPTION OF MATERIAL	SOIL				臣	U.F	MC.		% T	% R
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FT.	L	S	SURFACE ELEVATION: 525.1		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN		
		Т	SHALE WITH INTERBEDDED SANDSTONE -		 							96	62
			Slightly Weathered, Medium Hard, Occasional										-
			Fractures, Brown and Gray										
		+											
<u> </u>		0.000											
40			SHALE - Slightly Weathered, Hard, Occasional									المما	E 0
<u> </u>			Clay Seams, Gray									liuq	58
<u> </u>													
	ΞΞ												
45	三三		SANDSTONE WITH INTERBEDDED SHALE -										
	E≡		Slightly Weathered, Well Cemented, Brown and									82	24
	E≡		Gray										
			Soil Filled Void (47.8' - 49.5')										
50			SHALE WITH INTERBEDDED SANDSTONE -									70	32
			Slightly Weathered, Hard, Occasional Fractures,									[′′	32
	ΞΞ		Gray										
	==	\vdash	•										
	ŧΞΞ												
55	三三		SANDSTONE WITH INTERBEDDED SHALE -										
	三三		Unweathered, Well Cemented, Gray									94	73
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	V B K C	<u></u>	I Cut slope boring. * Poor recovery from 28.0 to 33.0	due to	core h	arre	l malf	uncti	on	Lat/	Lon	d:	-
	ALVINO		35.2758242, -91.9335763	330 10	JUI D	J. 10	an	J. 100	J. 1.	_40	_0,,	٠.	

			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO 1		2					
			050280 White County						her	13, 2	017		
JOB N			Joy - Searcy (Safety Impvts.) (S)		DATE: TYPE C	E DD.			OCI	13, 2	UI/		
10B IV	AIVIE:		Route 36 Section 3				stem A		ת .	iamo	nd C	ore	
STATI	ON:		809+54		EQUIPN			_		er 17		010	
LOCA			16' Right of Construction Centerline		LQUIPI	VIIII I			1 1 CK	-L 1 /	17		
			iteve Faulkner		НАММ	ER CO)RRFC	LION I	FACT	OR.	1	N/A	
-		_	DEPTH: 38.9		7 7 FIA11A1					J14.			
D		s	BBI TITI DOIS		1								
E	S	A							. (*)				
P	Y M	М	DESCRIPTION OF MATERIAL	COII	1				J.FT	M.S		% T	% R
T	B	Р	BEGORII FION OF WINTERINE	SOIL GROUP		_2		IG.	CC	3TO	<u>.</u> :	C	Q
Н	o	Ē			1 \(\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex	SIC	اء ا	 	PER	OF I	VI-9	R	Ď
FTa	L	E S	SURFACE ELEVATION: 272.5		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.		
	77	Ť	SONT ACE ELEVATION. 272.3	-	12 -			-				\dashv	
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5	//	V	Moist, Soft, Gray Sandy Clay							2			
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<u> </u>													
10			Moist, Hard, Brown Clay with Some Sand							1			
L .	17	\triangle	SHALE - Highly Weathered, Soft, Gray							12-	44		
	rurur	Т	SHALE WITH FREQUENT SANDSTONE	ì									
			PARTINGS - Slightly Weathered, Medium Hard,									10d	16
			Occasional Fractures, Gray										
15	ririi												
	uuuu vuu												
												96	15
	rururu rururu		SHALE WITH FREQUENT SANDSTONE										
	mm	Ш	PARTINGS - Unweathered, Medium Hard,										
20			Occasional Fractures, Gray										
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												99	56
	ninin uuu												
25													
			SHALE WITH FREQUENT SANDSTONE										
			PARTINGS - Unweathered, Medium Hard,									100	66
	ruru		Frequent Fractures, Gray										
	innini innini												
30	rururu rururu	T											
	ruuu vuur												
-												100	78
= =			SHALE WITH FREQUENT SANDSTONE										
35		\parallel	PARTINGS - Unweathered, Medium Hard, Gray										
	ARK	; · \	Nest Hog Thief Creek. Lat/Long: 34.2709399, -91.9		3		1	1					
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	_	-	IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE			2				
JOB N			050280 White County		DATE:				er 1.	3, 2017		$\neg$
JOB N.			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DRI				,		
			Route 36 Section 3		Holl	ow S	tem A	_		mond	Core	
STATI			309+54		EQUIPN	MENT	:	A	cke	r 1779		
			16' Right of Construction Centerline			ED 00			omo		N/A	
			teve Faulkner DEPTH: 38.9		HAMM	ER CC	RREC	IION FA	CIO	OK;	N/A	
D		s	DB 111. 30.7						T		П	
E	S Y	Α						١ ,	<u>.</u>	<b>70</b>		0/
P	м	М	DESCRIPTION OF MATERIAL	SOIL				HIT		Ã O	% T	% R
T H	В	P L		GROUP	≃	ST.		ÆIG	۲. ا	Ä Ä	C R	Q D
	O L	Е			PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.F.I.	NO. OF BLOWS PER 6-IN.	K	ע
FT.	-	S	SURFACE ELEVATION: 272.5		되길	%	35	MG ;	2	PE NG	<u> </u>	
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	101010 20001								1		ال	100
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 40		_	Boring Terminated		1				$\top$		T	
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70	A Diss	_	Alexandre Thirt Organization and 04 0700000	006404		<u></u>			_			
REM	ARKS	5: V	Vest Hog Thief Creek. Lat/Long: 34.2709399, -91.9	100421	)							

			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO		· 2					
JOB N			050280 White County	$\overline{}$	DATE:				ber 1	11, 20	017		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	F DRI				-, <b>-</b>			
			Route 36 Section 3		Holl	ow S	tem A	_				ore	
STATI			309+85		EQUIPM	4ENT:			Ack	er 17	79		
LOCA			16' Right of Construction Centerline		TT4355	7D 66	DDEC	11031	74.00	or		V/A	
			teve Faulker DEPTH: 38.7		HAMMI	EK CC	RRECT	LION	FACT	OR;	1	N/A	_
		s	DEI 111, 30,7									T	
D E	S	A											
Р	Y M	М	DESCRIPTION OF MATERIAL	SOIL				HT	U.FT	SMC		% T	% R
T H	В	Р		GROUP	ျ	Ţ.		EIG	RCI	BL(	$_{z} $	c	Q
П	0	F			PLASTIC LIMIT	% MOIST	LIQUID LIMIT	DRY WEIGHT	LBS PER CU.FT.	NO. OF BLOWS	PER 6-IN	R	D
FΤε	L		SURFACE ELEVATION: 272.0		PLAST LIMIT	% N	LIQ	DR	LBS	NO	PEF		
	300		Moist, Brown Clay with Gravel and Some Sand										
	38.8		worst, brown clay with Graver and Some Sand										
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_ =	//	$\triangle$	Moist, Soft, Brown Sandy Clay*						9	2-:	2		
	//												
 10										_			
10	1/1	$\times$	Wet, Very Hard, Brown Sandy Clay SHALE - Highly Weathered, Soft, Gray							22-			
			SHALE WITH FREQUENT SANDSTONE							(9'	")		
			PARTINGS - Slightly Weathered, Soft, Frequent									100	0
	HOOG		Fractures, Gray									Ta	
15													
	1000 1000												00
												96	20
20	iada		OLIAN E MUTULEBEOLIENT OANDOTONE										
===			SHALE WITH FREQUENT SANDSTONE PARTINGS - Unweathered, Soft, Frequent									100	40
			Fractures, Gray									~	.5
25	Hidd												
												100	94
 30													
	1000												
												99	88
	1000	Щ	SHALE WITH FREQUENT SANDSTONE										
35			PARTINGS - Unweathered, Soft, Gray										
REM	ARKS	3: V	Vest Hog Thief Creek. *Based on 24 hour water lev	el read	ing, th	ne w	ater to	able	was	s end	cour	itere	ed
		а	approximately 4.9 feet below ground level. Lat/Long	: 35.27	U9106	, -91	.9062	2052					

			WY. & TRANS. DEPARTMENT		BORIN			. 0					
		_	DIVISION - GEOTECHNICAL SEC.		PAGE	2		: 2	<b>1</b>	11 2	017		$\dashv$
JOB NO			050280 White County Joy - Searcy (Safety Impvts.) (S)		DATE: TYPE O	E DDI		ecem	ber	11, 2	017		- 1
JOB N	AME:		Route 36 Section 3				tem A		- D	iama	nd C	ore	- 1
STATI	ON:		309+85		EQUIPN					er 17		**************************************	
LOCA			16' Right of Construction Centerline										
LOGG	ED BY	: S	teve Faulker		HAMM	ER CC	DRRECT	TION I	FACT	OR:	1	N/A	_
COM	PLET	ION	DEPTH: 38.7			_					_		$\dashv$
<u> </u>	s	S											
E P	Υ	A M	DECORIDATION OF MATERIAL					  -	Ŧ.	WS		%	%
т	M B	Р	DESCRIPTION OF MATERIAL	SOIL GROUP		قع ا		IGH	S	3LO		T C	R Q
н	Ö	L			T	OIS	E I	WE	PER	OF I	4-i-9	C R	Ď
FΤε	L	E S	SURFACE ELEVATION: 272.0		PLASTIC LIMIT	% MOIST.	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.		
	nuur vuur	T	CONTROL ELEVATION. 27210		1								
												99	96
													- 1
	rurur	$\perp$	Device Terminated		-				_		_	$\vdash$	-
40			Boring Terminated										
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I KEM	AKKS	s: \	Vest Hog Thief Creek. *Based on 24 hour water lev	reac	ung, ti	ne W	aler t	apie	was	s en	cour	<b>iie</b> re	=u

approximately 4.9 feet below ground level. Lat/Long: 35.2709106, -91.9062052

			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE			. 2					
JOB N			050280 White County		DATE:				ber	18, 2	017		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPEC	F DR				10, 2	01,		
			Route 36 Section 3				Stem /		er - I	Diamo	ond	Core	e
STATI	ION:		810+30		EQUIP	MENT	:	Ū	Ack	er 17	779		
LOCA	TION:		19' Right of Construction Centerline										
LOGG	ED BY	<u>: S</u>	teve Faulkner		HAMM	ER CO	ORREC	ΓΙΟN	FACT	OR:		N/A	
COM	PLET	ION	DEPTH: 43.7				,						
D	s	S											
E P	Ϋ́	A							Ľ	S		%	%
-	М	M P	DESCRIPTION OF MATERIAL	SOIL				HH	Ü.F	0,0		Т	R
ΙĤΙ	В	Ĺ		GROUP	1 ≃	ST.		Æ	SR C	BL	ż	C R	Q D
I .	0 L	Ε			PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN		ט
FT	_	S	SURFACE ELEVATION: 271.4		F.E.	1%	EE	DR	LB	<u>8</u>	PE		
			Brown Clayey Sand										
5			Maint Madium Rance Brown and Oney Olaver										
		X	Moist, Medium Dense, Brown and Gray Clayey Sand with Gravel		1					3 4-			
	1//		Cana With Claver										
			Wet, Medium Dense, Brown and Gray Clayey		1								
	12		Sand with Gravel		1								
10													
		X	Wet, Very Hard, Brown and Gray Sandy Clay with Gravel (Shale Fragments)							1 14-			
	22	=	SHALE - Highly Weathered, Soft, Gray SHALE WITH FREQUENT SANDSTONE							(7	")		
												100	0
	0001		PARTINGS - Slightly Weathered, Medium Hard, Frequent Fractures, Gray									100	
15	H000 H000		Trequent Flactures, Gray										
	1000		SHALE WITH FREQUENT SANDSTONE										
	idad		PARTINGS - Unweathered, Medium Hard,									94	40
	ididi.		Frequent Fractures, Gray										
	1000												
20	1000 1000												
												98	92
			SHALE WITH FREQUENT SANDSTONE										
25	1999 1999		PARTINGS - Unweathered, Medium Hard, Occasional Fractures, Gray										
	Hilli											99	92
	idad												
	HOHO												
30	1000 1000												
30													
-												98	92
25													
35 REM	V D K C	. 1/	l Vest Hog Thief Creek. Lat/Long: 35.270884, -91.90	60070							_	ш	
``_'\		. v	1001 1109 111101 0100N. Educong. 00.210004, -81.80	50010									

			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE			F 2					
JOB N		_	050280 White County		DATE:				ber	18, 2	2017		
JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE C	F DR				,-			
			Route 36 Section 3		Hol	low	Stem A	Auge	er - F	Diam	ond	Core	e
STATI	ON:		810+30		EQUIPN	MENT	<b>':</b>		Ack	cer 17	779		
LOCA			19' Right of Construction Centerline										
-			iteve Faulkner		HAMM	ER CO	ORRECT	ΓΙΟΝ	FACT	OR:		N/A	
	PLET.	-	DEPTH: 43.7		т —	r		_		_	_	_	
D E	S	S											
	Υ	A M	D=00D;D=10.1 0= 11. ==0.11					ايا	FI	S		%	%
<u>Т</u>	M	Р	DESCRIPTION OF MATERIAL	SOIL GROUP				GH	CU.	2		T	R
Н	ВО	L		GROUP	1 \( \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex	IST	ا ۾ ا	WEI	ER	FB	Ä	C R	Q D
	Ĺ	E			PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN		
FT.		S	SURFACE ELEVATION: 271.4		<u> </u>	%	133	<u> </u>		ž		$\vdash$	
			SHALE WITH FREQUENT SANDSTONE								ļ	100	100
			PARTINGS - Unweathered, Medium Hard, Gray									"	100
	rurur rurur												
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												100	92
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	rurur		Boring Terminated		+				-		_	$\vdash$	
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70												Ш	
REM/	ARKS	3: V	Vest Hog Thief Creek. Lat/Long: 35.270884, -91.90	60979									

	_	_	DIVISION - GEOTECHNICAL SEC.		PAGE	1G NO		· 2					
JOB N			050280 White County		DATE:			eceml	ber 2	20, 20	017		
JOB N	AME:	,	Joy - Searcy (Safety Impvts.) (S)		TYPE C	F DR	ILLING	:					
		١	Route 36 Section 3		Holl	ow S	stem A	luger	- Di	iamo	nd C	ore	
STATI	ON:	- 8	810+56		EQUIPN	MENT	:	i	Ack	er 17	79		
LOCA			15' Right of Construction Centerline										
			Vinston Buie		HAMM	ER CO	ORREC'	ΓΙΟΝ F	ACT	OR:	1	V/A	
COM	PLET	ION	DEPTH: 39										
D	s	S					20						
E	Y	Α							إي	S		%	%
P T	М	M P	DESCRIPTION OF MATERIAL	SOIL				H	ŽΙ	NO.		Т	R
Ь'nІ	В	L		GROUP	2	ST.		/EIC	SR C	BI	zί	C R	Q D
	0	E			PLASTIC LIMIT	% MOIST.	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.	^	۱ ت
FT _€	L	S	SURFACE ELEVATION: 271.3		77.51	8	HH	DR	ĽB	<u>8</u>	E.		
	δ ⁰ 6.6												
			· ·										
	9000		Gravel*										
	д. 25G												- 1
5	od: :G									8			
15 85		Х								7-	5		
			No Commis (Commiss)										
			No Sample (Gravel Blocked Off Sampler)										
10	*****		W . W . B . B . Q . L . W . Q .		1					1			
	ınnı	$\triangle$	Wet, Very Dense, Brown Sand with Clay							12-	10		
			SHALE WITH FREQUENT SANDSTONE						- 1	(6'	")	-	
			PARTINGS - Slightly Weathered, Medium Hard,									92	0
			Gray									92	١
15													
-10													
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— -													
	nnn	+											-
25			22										
==			SHALE WITH FREQUENT SANDSTONE									100	07
			PARTINGS - Unweathered, Medium Hard, Gray									104	91
	nnn mm												
												+	
30													
			27										
	ririri											98	96
		Щ											
35													
REM	ARKS		Vest Hog Thief Creek. * Based on 24 hour water le						was	enc	oun	tere	d
l .		а	approximately 4 feet below ground level. Lat/Long: 3	35.2708	136, -9	1.90	10098						

			DIVISION - GEOTECHNICAL SEC.		PAGE	2		· 2				
JOB N	O.		050280 White County		DATE:			ecember	20, 2	2017	_	
JOB N	AME:		Joy - Searcy (Safety Impvts.) (S)		TYPE C		ILLING	h:				
			Route 36 Section 3		Holl	ow S	Stem A	Auger - D	)iamo	ond (	ore	
STATI			810+56		EQUIPN	MENT	:	Acl	ker 1'	779		
LOCA			15' Right of Construction Centerline			19						
			/inston Buie		HAMM	ER CO	ORRECT	TION FAC	ΓOR:	]	N/A	
	PLET.	-	DEPTH: 39		_	_		F	_		_	
D	s	S										
E P	Y	A M						LE	8		%	%
+	M	Р	DESCRIPTION OF MATERIAL	SOIL				[H 5]	5		Т	R
н	ВО	L	~	GROUP	1 =	IST		VEI ER	F B.	Ζį	C R	Q D
	Ĺ	E			PLASTIC LIMIT	% MOIST	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT	NO. OF BLOWS	PER 6-IN		_
FT	Goot	S	SURFACE ELEVATION: 271.3		II II	%			Įž	_E	_	
										1	10Q	100
	0001	$\perp$							<u> </u>			
40			Boring Terminated									
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70												
-	ARKS	· 1/	Vest Hog Thief Creek. * Based on 24 hour water le	vel read	ing th	<u>Α \Α/′</u>	ater to	able way			tere	-d
		a	pproximately 4 feet below ground level. Lat/Long:	35.2708	36, -9	1.90	6598	***	- 5110	. Juil		<b>.</b>

			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG No 1		F 2					
JOB N			050280 White County		DATE:			_	arv {	8, 201	18		
JOB N	AME:		Joy - Searcy (Safety Impvts.) (S)		TYPE C	F DR				.,			
			Route 36 Section 3		Holl	ow S	Stem A	luger	- D	iamo	nd (	Core	
STATI	ION:		817+20		EQUIP	MENT	:		Ack	er 17	179		
LOCA			20' Right of Construction Centerline										
			tanley Bates		HAMM	ER C	ORREC'	TION I	FACT	OR:		N/A	
	PLET		I DEPTH: 44		1								
D	s	S											
E P	Y	A M	DECORPTION OF MATERIA					ےا	FT.	VS		%	%
T	M B	Р	DESCRIPTION OF MATERIAL	SOIL GROUP		١.		GH	CU.	F0		T C	R
Н	0	Ŀ		GROUP	1≌	IST	اے وا	WEI	ER	F B	Z	R	Q D
FT:	Ĺ	E S	CUREAGE ELEVATION: 000 5		PLASTIC LIMIT	% MOIST	LIQUID	DRY WEIGHT	LBS PER CU.FT	NO. OF BLOWS	PER 6-IN.		
1.18	11	_	SURFACE ELEVATION: 269.5			%		<u> </u>	<u> </u>	Z	<u>-</u>	$\dashv$	
<u> </u>	//												
_==	//	6	Canada Olav										
==	//		Sandy Clay										
	//	i											
5	66									0	)		
	W	Х								0-	0		
	$\mathcal{U}$		Wat Van Saft Cray Silty Clay							(0'	")		
— -			Wet, Very Soft, Gray Silty Clay										
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			HWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO		2					
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JOB N			Joy - Searcy (Safety Impvts.) (S)		TYPE O	FDR			ус	, 20	10		
,00			Route 36 Section 3				Stem A		· D	iamc	nd (	Core	
STAT	ON:		817+20		EQUIPN					er 17			
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			IWY. & TRANS. DEPARTMENT DIVISION - GEOTECHNICAL SEC.		BORIN PAGE	IG NO 1		2					
JOB NO			050280 White County		DATE:			anua	ry 1	0, 20	18		
JOB NA			Joy - Searcy (Safety Impvts.) (S)		TYPE C	F DR							
			Route 36 Section 3		Holl	ow S	Stem A	-				Core	
STATIO			817+80		EQUIPN	MENT	:		Ack	er 17	779		
LOCAT			24' Right of Construction Centerline									. T / A	
			tanley Bates	_	HAMM	ER CO	ORREC'	TION :	FACT	OR:		N/A	
<b>—</b>	LEI.	_	DEPTH: 44.5		1				_				
D E P T H	S Y M B O L	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 271.1	SOIL GROUF	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT	LBS PER CU.FT.	NO. OF BLOWS	PER 6-IN.	% T C R	% R Q D
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ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.						BORING NO. 12 PAGE 2 OF 2								
JOB NO. 050280 White County					DATE: January 10, 2018									
JOB NAME: Joy - Searcy (Safety Impvts.) (S)						TYPE OF DRILLING:								
Route 36 Section 3					Hollow Stem Auger - Diamond Core									
STATION: 817+80						EQUIPMENT: Acker 1779								
LOCATION: 24' Right of Construction Centerline														
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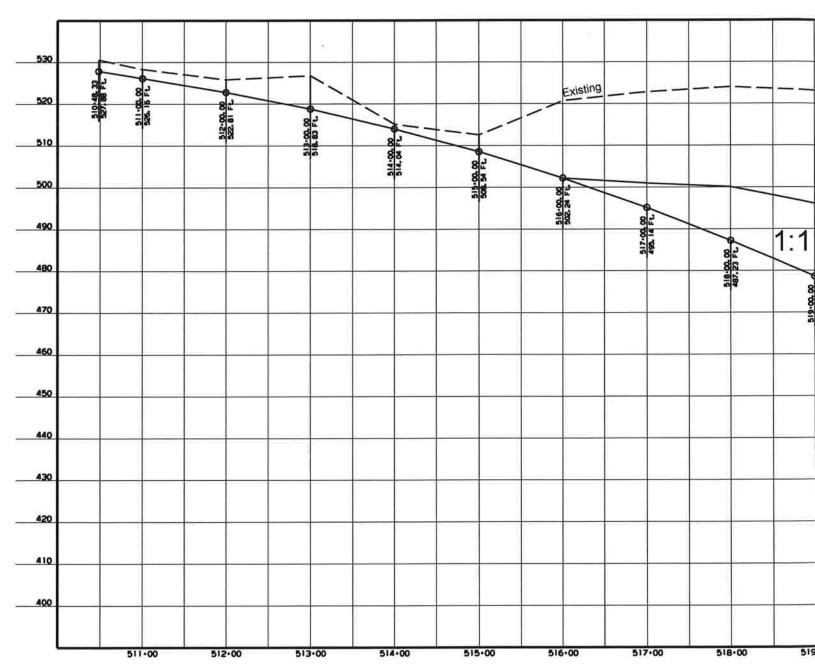


Figure 1 - Left

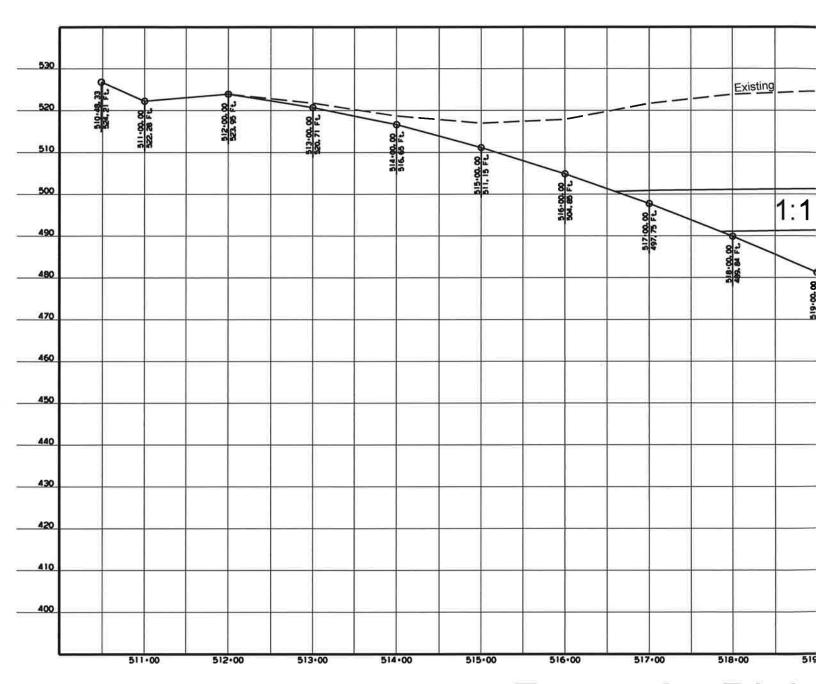


Figure 2 - Righ

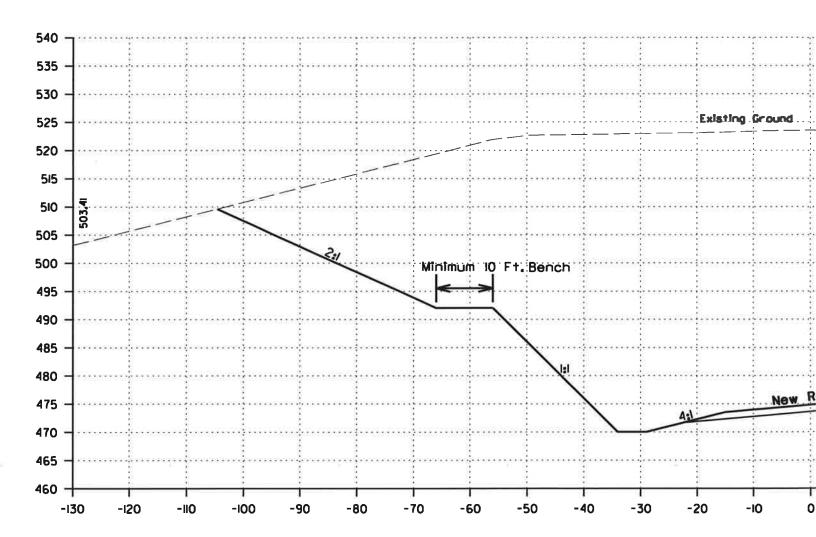


Figure 3 - Cut Slop