

ADDENDUM #1 2019 STREET REHABILITATION-UNIT 1 BID #18/19-001 / PWP #WA-2018-188 BIDS DUE NO LATER THAN: 1:45 PM ON MAY 24, 2018 PUBLIC BID OPENING: 2:00 PM ON MAY 24, 2018

This addendum is to notify all potential proposers of clarifications made to the Bid documents as stated below.

SUMBITTED REQUESTS FOR INFORMATION:

Questions provided by potential bidders as of 5/21/18, and answers provided by the City of Sparks:

Bidder Question

We are requesting the geotechnical report used to design the roadway section for this project. This could include drill logs, potholes, or any other appropriate data.

City Response

The requested information is provided in the remaining pages of this Addendum (Addendum #1).

Please note and adjust your bid according to the revisions, additions, deletions, clarifications or modifications as presented on this Addendum #1, which are made a part of this bid. NOTE: To avoid disqualification, this Addendum 1 (and any other addenda) must be signed by an authorized representative of the bidding firm in the space provided and must be submitted with your firm's sealed proposal. Failure to return this addendum, duly signed, may be cause for rejection of the bid. ALL ADDENDA SHOULD BE SIGNED AND PLACED IN SEQUENTIAL ORDER AND ATTACHED TO THE FRONT OF THE BID PACKAGE, COMPLETE WITH ALL REQUIRED DOCUMENTS.

CONTRACTOR BUSINESS NAME

Dan Marran, C.P.M., CPPO Contracts and Risk Manager

X_____Authorized Signature

May 21, 2018

Printed Name of Person Signing



March 20, 2018

City of Sparks Attn: Bob Schricker 431 Prater Way Sparks, NV 89434

RE: City of Sparks Pavement Investigation

This letter transmits information from the asphalt coring investigation provided for the City of Sparks, Nevada. It is our understanding the information provided herein is for FY 19 Unit 1. Lumos & Associates, Inc. was contracted to perform the coring, sampling, and materials testing, but not to provide recommendations or construction specifications.

Thirteen (13), 6-inch asphalt cores were extracted in order to determine pre-existing pavement sections (Refer to Plates 1 and 2 for core locations and Plates A-1 through A-13 for core hole logs). Base aggregate materials were sampled from all locations, where present. Sub-grade soil samples were obtained from all locations. Representative subgrade samples were tested to determine their plasticity index and percent fines (Refer to Plates B-1 and B-2).

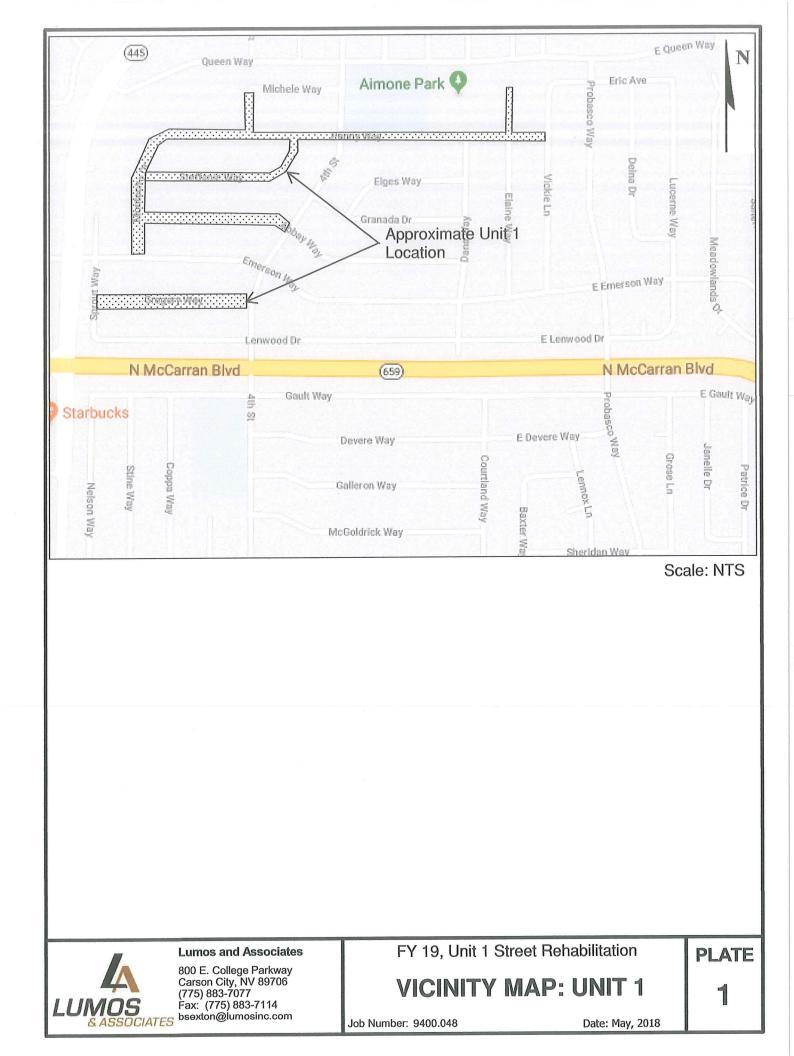
It has been a pleasure to be of service to you on this project. Should you have any questions, or would like to discuss the contents of this letter in greater detail, please do not hesitate to contact the undersigned at (775) 827-6111.

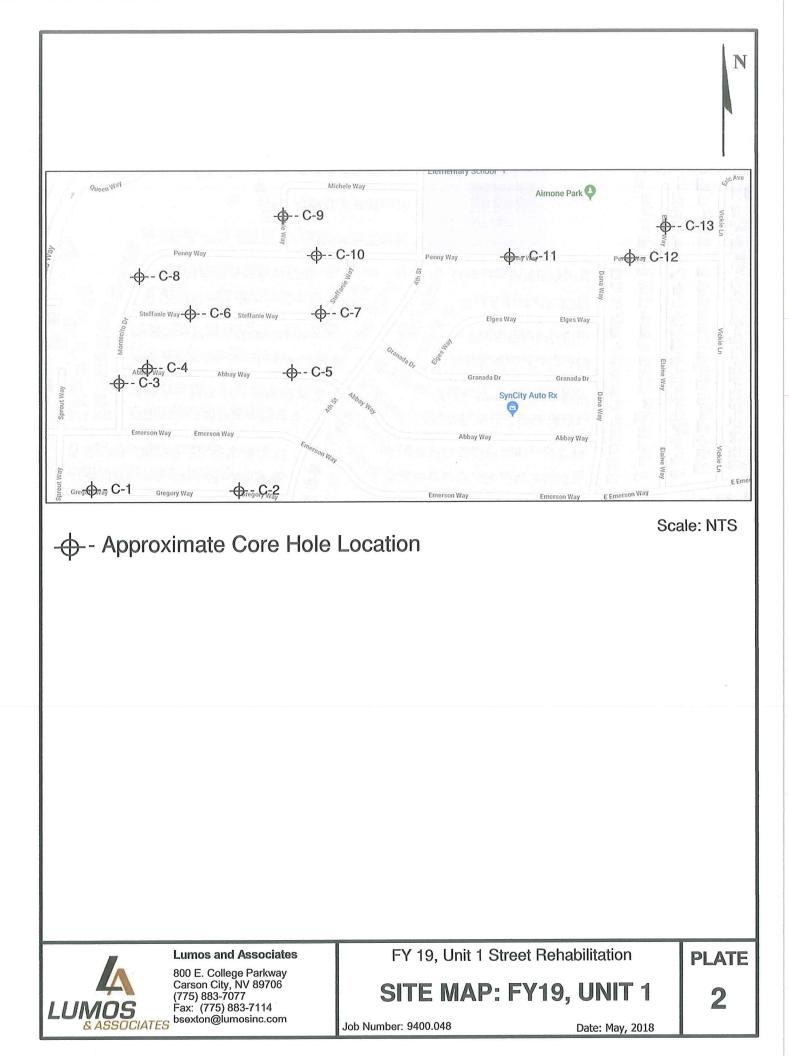
Sincerely,

Bert Sexton, E.I. Geotechnician Lumos & Associates, Inc.

Mitch Burns, P.E., C.E.M. Materials Engineering Manager Lumos & Associates, Inc.

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APPENDIX A



											TE	ST	PIT	' No	о. C	-01
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Depth in Feet	Graphic Log	Sample Type	California Sampler	B Bulk Sample	Static Water Table	•	SPT (N) Blows/Foot	Moisture Content, %	Dry Den	Liquid Limit, %	Plasticity Index, %	Gravel, % (3" - #4 Sieve	Sanc (#4 - #20	Fine: (< #200	R-V	Direct
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	& ASSOCIATES Fax: Job Number: 9						1				C	Date: I	May 20	18		

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		Z	Moist, Medium D Fine Sub-Round and 30% Clay.		l 15% Medium to arse to Fine Sand	<u>1.3</u>										
- 2 -		В	Light Brown to Loose to Mediun Sub-Round Grav 30% Clay.	Tan Clayey SAN n Dense. Estima vel, 60% Coarse	ted 10% Fine to Fine Sand, and	2.2										
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	UMOS (775) 883-7077 & ASSOCIATES				Job Number: 9400	.048					Ę	Date: 1	May 20	18		

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- 1				Dark Brown Cla	ayey SAND with	Gravel (SC),											
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- 1 -		В	9 1/2" Material S Rock. Material is Dense.	s Brown, Moist, a	nd Medium	1.3										
		В	Brown Clayey S Medium Dense. Sub-Angular to S Fine Sand, and 2	Estimated 15%	ei (SC), Moist, Medium to Fine el, 65% Coarse to											
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- 1 -		В	12" Material Sim Rock. Material is Dense.	ilar to Type 2 Agg s Brown, Moist, ai	gregate Base nd Medium											
- 2 -		В	Light Brown Sil	Ity, Clayey SANE n Dense.	<u>) (SC-SM),</u> Moist											
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Depth in Feet	Graphic Log	Sample Type	California Sampler	B Bulk Sample	Static Water Table		SPT Blows	Mois Conte	Dry Den	Limi	Plas	Gravel, % (3" - #4 Sieve	San (#4 - #20	Fine (< #200	R-V	Direct
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			3" Material Simil Seal. Material is Throughout.	ar to Asphalt witi Porous and has	n a Cap of Slurry Block Cracking											
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- 1		В	12" Material Sim Rock. Material is Dense.	illar to Type 2 Ag s Dark Brown, M	gregate Base oist, and Medium	1.3										
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- 2		Z	Reddish Brown Medium Dense. Sand and 20% N	<u>M),</u> Moist, Loose to Coarse to Fine	<u>1.8</u> D											
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			Light Brown to	Orange Clavey	SAND with Grav	1.3 el	3									
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- 1 -		B	15" Material Simi Rock. Material is Dense.	s Brown, Moist, a	nd Medium	1.5										
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			3" Material Simila Seal. Material is Throughout.	ar to Asphalt with Porous and has	a Cap of Slurry Block Cracking											
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			10" Material Sim Rock. Material is Dense.	ilar to Type 2 Ag s Dark Brown, Mo	gregate Base bist, and Medium											
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Drill	Туре	e:	Hand Excavation	on		G	round E	Elev.:	E.G	6.S. f	eet ±					
h in et	c Log	Type	Percolation Test	Split Spoon	Ziplock Sample		(N) /Foot	ture nt, %	sity, pcf	uid t, %	icity <, %	el, % Sieve)	I, % 0 Sieve)	Fines, % (< #200 Sieve)	alue	Shear
Depth in Feet	Graphic Log	Sample Type	California Sampler	B Bulk Sample	Static Wate Table	r	SPT (N) Blows/Foot	Moisture Content, %	Dry Density, pcf	Liquid Limit, %	Plasticity Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Si	Fine; (< #200	R-Value	Direct Shear
				SOIL DESCRIPTIO												
			2 1/2" Material S Slurry Seal. Mat and Alligator Cra	erial is Porous, S	Surface has Block											
	$\times\!\!\!\times\!\!\!\times$		15" Material Sim	ilar to Type 2 Ag	oregate Base	0.2										
		В	Rock. Material is Dense.	s Brown, Moist, a	nd Medium											
- 1 -			Dark Brown Cla Moist, Medium D	ayey SAND with Dense. Gravel is	Gravel (SC), Sub-Angular in	1.0										
		В	Shape.			1.5				29	11	17.5	60.4	22.0		
		Z	Brown Silty, Cla to Medium Dens Sand, and 30%	ayey SAND (SC- e. Estimated 70 Clay.	SM), Moist, Loos Coarse to Fine	e										
- 2 -						2.3	3									
			Test pit terminated at 2.3 fe	eet.												
			Lumos and	Associates	FY	19.	Unit 1	Street	t Reł	nabilit	ation				PLA	TE
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			800 East Col Carson City,	lege Parkway NV 89706	LOG O								Т		A-'	
	LUMOS (775) 883-7077 & ASSOCIATES Fax: Job Number					.048					1	Date: I	May 20	18		

											TE	ST	PIT	⁻ No). C-	12
Logg	jed B	y:	B. Sexton				otal Dep			feet						
Date	-						ater De						enco	ounte	ered	
Drill	Туре	:	Hand Excavation	วท		G	round E	:lev.:	E.C	6.S. f	eet I					
in in	: Log	Type	Percolation Test	Split Spoon	Ziplock Sample		(N) /Foot	ture nt, %	sity, pcf	uid t, %	icity <, %	el, % Sieve)	Sand, % #4 - #200 Sieve)	s, % Sieve)	R-Value	Direct Shear
Depth in Feet	Graphic Log	Sample Type	California Sampler	B Bulk Sample	Static Water Table		SPT (N) Blows/Foot	Moisture Content, %	Dry Density, pcf	Liquid Limit, %	Plasticity Index, %	Gravel, % (3" - #4 Sieve)	Sanc #4 - #20	Fine: (< #200	R-V	Direct
				SOIL DESCRIPTIO					-							
	No. of Lot of Lo		4 1/2" Material Si Slurry Seal. Material and Alligator Cra	erial is Porous. S	Surface has Block.					5						
					0.4											
		В	7 1/2" Material Si Rock. Material is Dense.	imilar to Type 2 s Light Brown, M	Aggregate Base oist, and Medium	1.0										
- 1 -	\bigotimes		Brown Clavey	SAND with Grav	el (SC) Moist	1.0	1							1		
		В	Brown Clayey S Medium Dense. Sub-Angular to S Fine Sand, and 3	Sub-Round Grav	Medium to Fine el, 40% Coarse to											
			Drown Cilty Cl	DIAN SAND (SC	SM) Moist Loos	1.7	1							-	1	
- 2 -		Z	Brown Silty, Cla to Medium Dens Sand, and 30% (Estimated 70	<u>-SM),</u> Moist, Loos % Coarse to Fine	2.	1									
	- 12.2															
			Test pit terminated at 2.1 fe	eet.												
			Lumos and	Associates	FY	19	, Unit 1	Stree	t Re	nabili	tatior	1			PL/	TF
		4	800 East Col Carson City,	llege Parkway NV 89706	LOG O								Π			
LU	05	(775) 883-70 CIATES ^{Fax:}	Job Number 0400	040	,				ì	Date:	May 2	018	A-	12		
1	a A	330	UNTLU		Job Number: 9400	1.040	,					Juic.	may Z			

LUMOS TP FULL PAGE C.O.S. 2018 PAVEMENT MAINTENANCE.GPJ US LAB.GDT 5/16/18

TEST PIT No. C												.13					
Logged By:		y:	B. Sexton					otal Dep		2 fe							
Date	Log	ged:	3-8-2018		ater Depth: No groundwater encountered												
Drill	Туре	:	Hand Excavation	on			Ground Elev.: E.G.S. feet ±										
et ii	c Log	Type	Percolation Test	Split Spoon	Ζ	Ziplock Sample		(N) /Foot	ture nt, %	sity, pcf	uid t, %	ticity x, %	el, % Sieve)	Sand, % - #200 Sieve)	Fines, % (< #200 Sieve)	R-Value	Direct Shear
Depth in Feet	Feet Graphic Log	Sample Type	California Sampler	B Bulk Sample	Ţ	Static Water Table		SPT (N) Blows/Foot	Moisture Content, %	Dry Density, pcf	Liquid Limit, %	Plasticity Index, %	Gravel, % (3" - #4 Sieve)	Sand, % (#4 - #200 Si	Fine: (< #200	R-V	Direct
			A 4 /Oll Matarial C	SOIL DESCRIPTION	ith o (Cap of											
			Slurry Seal. Mat	imilar to Asphalt w erial is Porous, Su acking Throughout	irface	has Block,		x									
							0.3										
	\bigotimes		7 1/2" Material S Rock. Material is Dense.	imilar to Type 2 A s Light Brown, Moi	ggreg st, an	ate Base d Medium											
	\bigotimes																
		В															
	\bigotimes																
4 -	\bigotimes						1.0										
			Brown Silty SA Gravel is Sub-Ro	<u>ND (SM),</u> Moist, M ound in Shape.	1ediur	n Dense.											
81/91/6 10		B									NP	NP	9.7	716	18.7		
IP FULL PAGE C.O.S. 2018 PAVEMENI MAINIENANCE.GPJ US LAB.GUI		D											0.7	11.0			
ANCE.GPJ																	
MAINIEN																	
- 2 -							2.0										
0.5. 20181															2		
PAGE C																	
			Test pit terminated at 2 fee	st.													
LUMO			Lumos and	Associates		FY	19, Unit 1 Street Rehabilitation							PLA	TE		
			800 East Col Carson City, (775) 883-70		LOG O	FE	EXPLORATORY TEST PIT							A -'	13		
LUMOS (775) 883-7077 & ASSOCIATES						umber: 9400.048 Date: May 2018											

		<u></u>	SYME	BOLS	TYPICAL				
M	AJOR DIVISI	ONS	GRAPH LETTER		DESCRIPTIONS				
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES				
	GRAVELLY (LITTLE OR NO FINES)		POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES						
COARSE GRAINED	MORE THAN 50% OF	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES				
SOILS	RETAINED ON NO. 4 SIEVE	COARSE FRACTION RETAINED ON NO. 4							
	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES				
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES				
	COARSE FRACTION	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES				
	PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES				
FINE GRAINED SOILS				ML	INORGANIC SILTS AND VERY FINE SANDS, RO FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY				
	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS SILTY CLAYS, LEAN CLAYS				
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS (LOW PLASTICITY				
MORE THAN 50% OF MATERIAL IS SMALLER				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS				
THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY				
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS				
Н	GHLY ORGANIC S	SOILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS				
NOTE: DUAL SYMBOLS AR	E USED TO INDICATE BORD	ERLINE SOIL CLASSIFICATIONS							
		Othe	r Tests						
AN		ANALYTICAL TE	EST (pH, Soluble Sulfate, and Resistivity)						
С		(CONSOLIDA	TION TEST					
DS				T SHEAR TEST					
MD		MO	ISTURE DE	NSITY CUR	/E				

LUMOS and Associates 800 E. College Parkway Carson City, NV 89706 (775) 883-7077 Fax: (775) 883-7114 mburns@lumosinc.com

UMOS LEGEND C.O.S. 2018 PAVEMENT MAINTENANCE.GPJ 10-23-06.GDT 3/19/18

FY 19, Unit 1 Street Rehabilitation

LEGEND

PLATE

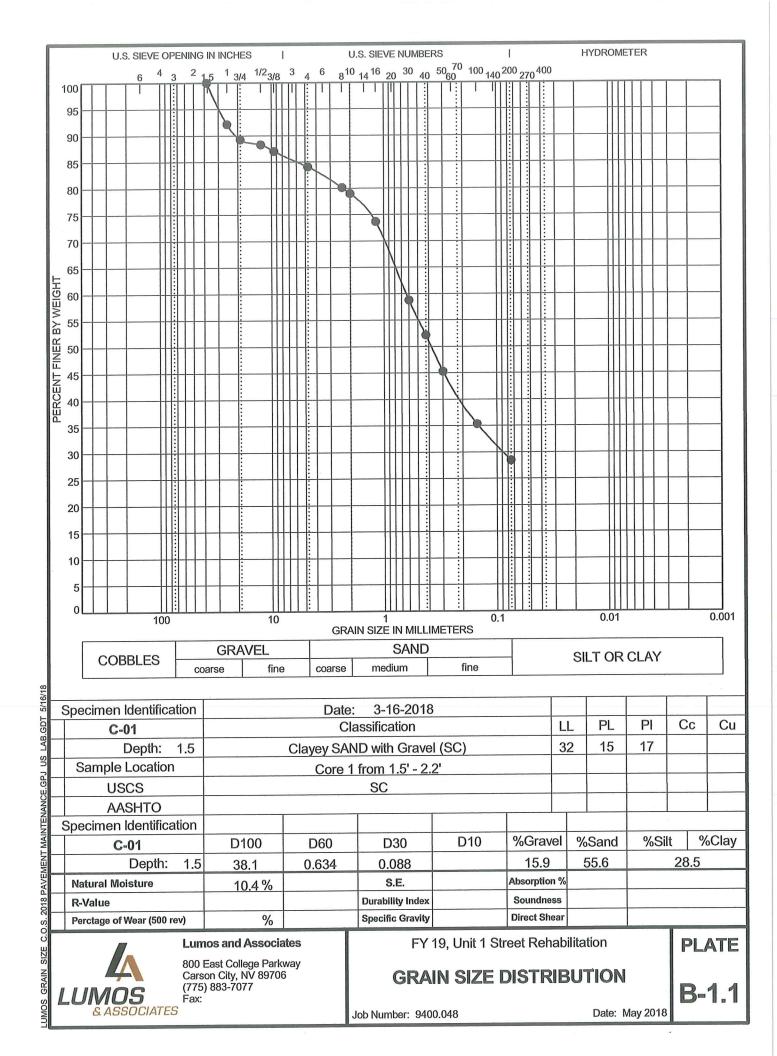
A-14

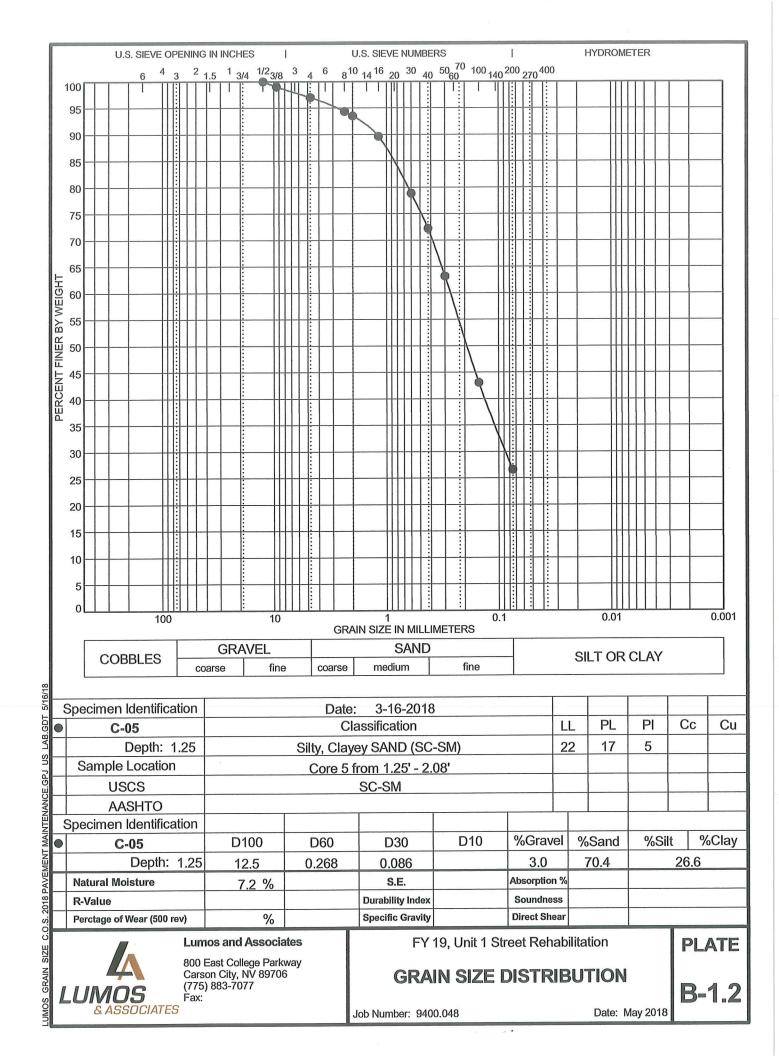
Job Number: 9400.048

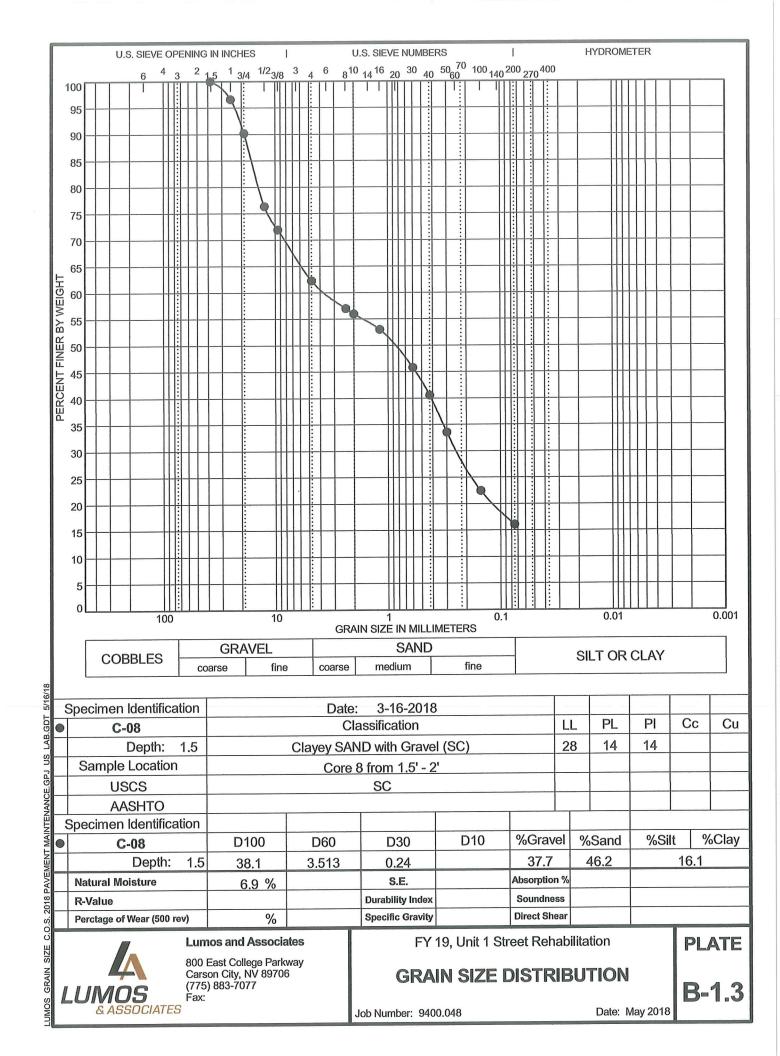
Date: May, 2018

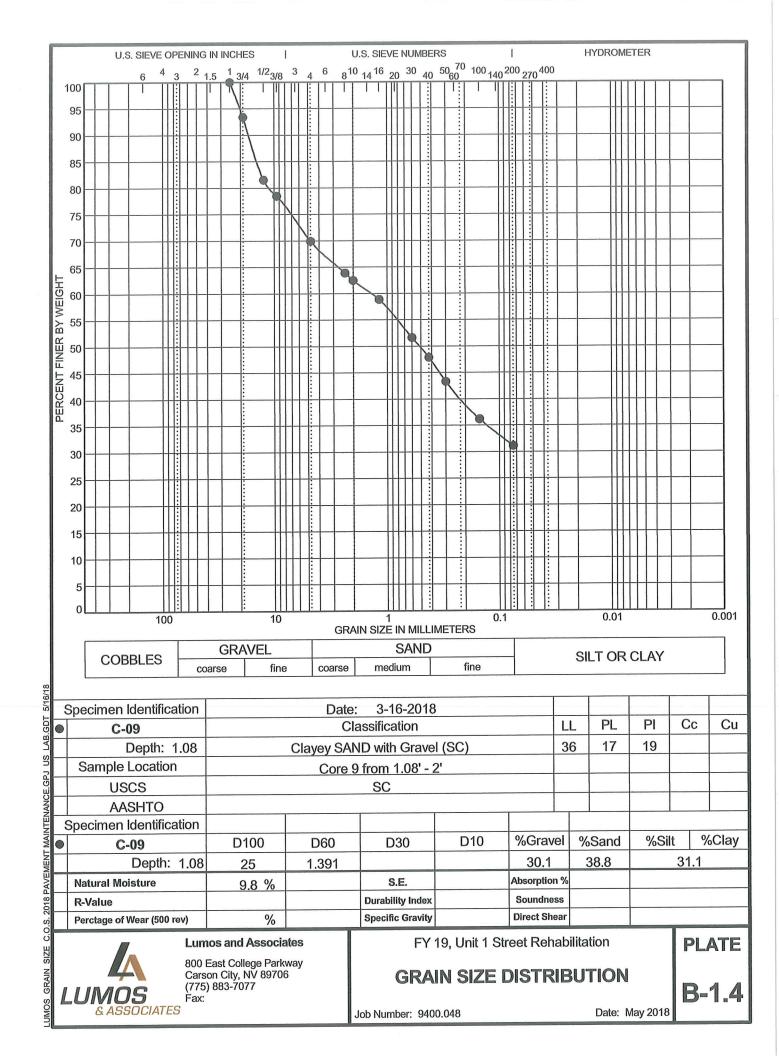
APPENDIX B

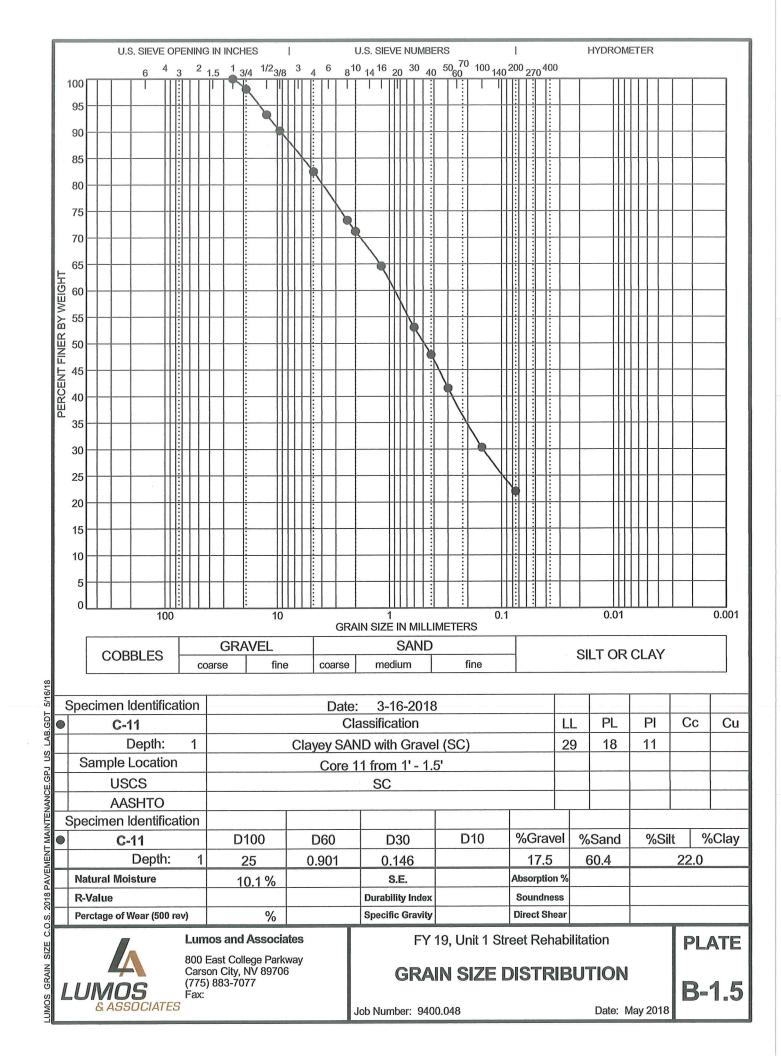


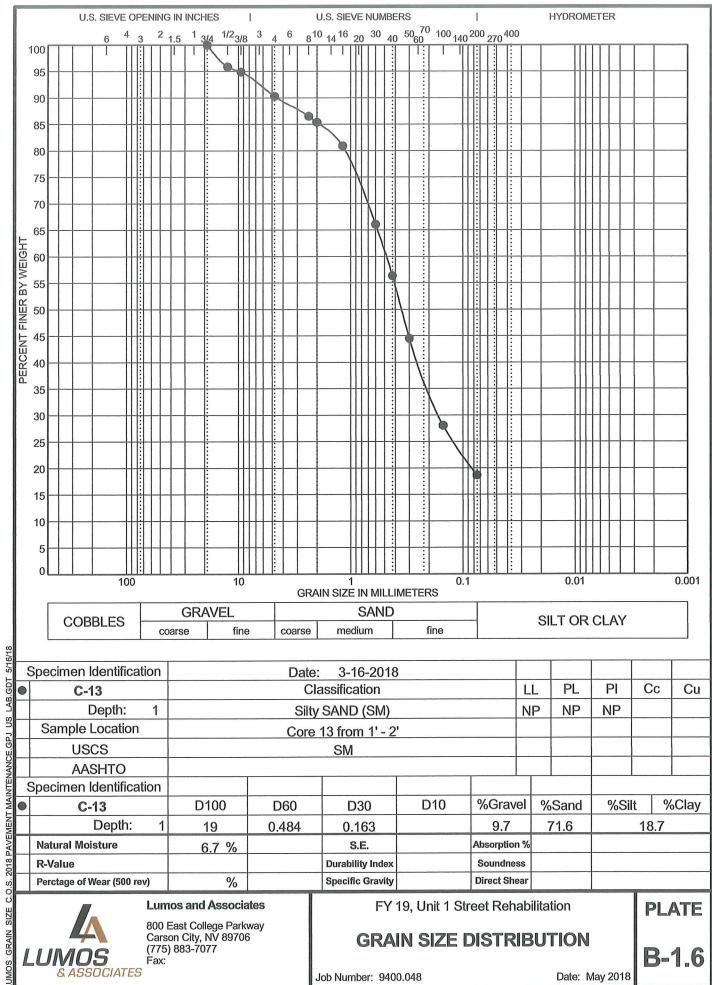












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		cimen Iden		LL	PL	PI		Classifica						
			1.5	32	15	17	28	Clayey SAN						
	C-05 1.3 22 17 5 27 Silty, Clayey SAND (SC-SM)													
	▲ C-08 1.5 28 14 14 16 Clayey SAND with Gravel (SC)													
7			1.1	36	17	19	31	31 Clayey SAND with Gravel (SC)						
0	-		1.0	29	18	11	22	Clayey SAN		el (SC)				
¢	C-13	í	1.0	NP	NP	NP	19	Silty SAND (SM)					
-														
		•												
5/16/18 I		nge tan kanan saya sa sa sa sa sa												
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LUMOS ATTERBERG LIMITS								landing the star of						
BERG	Lumos and Associates							FY 19	, Unit 1 S	treet Reh	abilitation		PLATE	
TTERE	800 East College Parkway Carson City, NV 89706 (775) 883-7077							ATTERBERG LIMITS' RESULTS						
IOS A	LUN	NOS	Fax:	1011			B-2							
& ASSOCIATES								Number: 9400.048 Date: May 2018						



CEMENT TREATED BASE COMPRESSION TESTS

. .

REPORT TO: <u>Ci</u>			Sparks			OJECT NAME:	FY18, Unit 1 Street Rehabilitation				
_					PR0	OJECT NO .:	9400.048				
						CATION:	Sparks, Nevada				
		-				NTRACTOR:	N/A				
SAMP	LED BY:	A. Szen	drey/J. Ha	rtley	DA	TE RECEIVED:	3/8/2018				
WEAT	HER:	Clear			TIN	1E:	•				
AIR T	EMP:	N/A			MO	LDED BY:	P. McCreary/ Z.	Lim			
DATE	MOLDED:	3/27/20)18								
MATE	RIAL DESCRIPT	ION:	4% Cemen	t Treated Bas	e - 30% Asph	alt Grindings and	70% Aggregate Ba	ise			
			2% Over O	ptimum Moist	ture Content			and the second second second			
SAMP	LE LOCATION:		2019 Unit	1, Blended I	Material						
						×					
SAMP	LE TYPE:	LAE	ORATORY	DESIGN	Χ	FIELD SAM	PLE				
		1									
		DIAMETER	HEIGHT	AREA	TEST	DATE	TOTAL	UNIT			
	LAB NO.	(IN)	(IN)	(SQ. IN)	AGE	TESTED	LOAD-LBS.	LOAD PSI			
	R-145-18	4.05	4.89	12.88	3	3/30/18	6,131	475			
	R-146-18	4.03	4.98	12.76	3	3/30/18	5,940	465			
	R-147-18	4.03	4.92	12.76	3	3/30/18	5,552	435			
	R-148-18	4.03	4.86	12.76	7	4/03/18	6,785	530			
	R-149-18	4.05	4.97	12.88	7	4/03/18	7,213	560			
	R-150-18	4.05	4.92	12.88	7	4/03/18	6,697	520			
					Average (Compressive S	trength 3-Day:	460			
					Average (Compressive S	trength 7-Day:	535			
		and Sampling we	ere performe	d in accordance	e with ASTM D-	558, C-1632, C-16	33. Standards as app	licable.			
	REMARKS:	,									
	CAPPING UNBONDED X BONDED										
	TEST RESULTS: COMPLY DO NOT COMPLY										
	Reviewed by:										
	Mitch Burns, P.E., Materials Engineering Manager										
I Ie	22 Prototype Driv 10, NV 89521 775.827.6111 < 775.827.6402		800 East C Carson City Tel 775.88 Fax 775.88		IEI //	outh Maine Stree , INV 89406 55.423.2188 75.423.5657	et 🗆 225 Kingsb Stateline, N Tel 775.58 Fax 775.58	3.6490			



CEMENT TREATED BASE COMPRESSION TESTS

REPOI	RT TO:	City of	Sparks		PRO	DJECT NAME:	FY19, Unit 1 Street	Rehabilitation			
					PRO	DJECT NO .:	9400.048				
					LOC	CATION:	Sparks, Nevada				
					CO	NTRACTOR:	N/A				
SAMPI	LED BY:	A. Szen	drey/J. Ha	rtley	DA	TE RECEIVED:	3/8/2018				
WEAT	HER:	Clear				1E:	N/A				
AIR TI	EMP:	N/A			MO	LDED BY:	P. McCreary/ Z.	. Lim			
DATE	MOLDED:	3/27/20)18								
MATE	RIAL DESCRIPT	ION:	3% Cemen	t Treated Bas	e - 30% Asph	alt Grindings and	70% Aggregate Ba	se			
			2% Over O	ptimum Moist	ure Content						
SAMPI	LE LOCATION:		2019 Unit	1, Blended I	Material						
SAMPI	LE TYPE:	LAB	BORATORY	DESIGN	Х	FIELD SAM	PLE				
					TEST	DATE	TOTAL	UNIT			
	LAB NO.	DIAMETER (IN)	HEIGHT (IN)	AREA (SQ. IN)	AGE	TESTED	LOAD-LBS.	LOAD PSI			
	R-139-18	4.06	4.95	12.95	3	3/30/18	4,577	355			
	R-140-18	4.04	4.94	12.95	3	3/30/18	4,841	380			
	R-141-18	4.04	4.90	12.82	3	3/30/18	5,072	395			
	R-142-18	4.06	4.93	12.02	7	4/03/18	5,218	405			
	R-143-18	4.04	4.92	12.82	7	4/03/18	5,201	405			
	R-144-18	4.04	4.84	12.82	7	4/03/18	5,218	405			
	K-144-10	1 1.01	1.01	12.02			strength 3-Day:	375			
							strength 7-Day:	405			
	DEMADING	nd Sampling we				558, C-1632, C-16	33. Standards as appl	licable.			
	CAPPING UNBONDED X BONDED										
	TEST RESULTS: COMPLY DO NOT COMPLY										
	Reviewed by:										
	Mitch Burns, P.	E., Materials	Engineering	g Manager							
I I I I	22 Prototype Driv 10, NV 89521 775.827.6111 x 775.827.6402		800 East C Carson City Tel 775.88 Fax 775.88		Ie //	outh Maine Strea , INV 89406 5.423.2188 75.423.5657	et 🗆 225 Kingsb Stateline, N Tel 775.58 Fax 775.58	3.6490			



CEMENT TREATED BASE COMPRESSION TESTS

T TO:	City of	Sparks				FY19, Unit 1 Street Rehabilitation			
	•								
FD BY:	A Szen	drev/1 Ha	rtlev	tanit mention and the					
	NI/A			 MO			Lim		
				110		T. Picercury 2.			
	-		t Troated Bas	e - 30% Acnh	alt Grindings and	70% Aggregate Ba	20		
IAL DESCRIPT.					ait Grindings and	7070 Aggregate Da			
FLOCATION									
L LOCATION.		2019 0110	I, Diendeu I	latenai					
e type:	LAE	ORATORY	DESIGN	Х	FIELD SAM	PLE			
	DIAMETER		4054	TEST	DATE	ΤΟΤΑΙ	UNIT		
						1	LOAD PSI		
							320		
							310		
							290		
							325		
							320		
							340		
K-130-10	דטוד	7.02	12.02				305		
				Average	ompressive 3	trengti z Day.	330		
Testing a	nd Sampling we	re performed	d in accordance	e with ASTM D-!	558, C-1632, C-163	33. Standards as app	licable.		
REMARKS:									
CAPPING UNBONDED X BONDED									
TEST RESU	JLTS:	co	OMPLY		DO NOT COMPLY				
Reviewed by:									
Mitch Burns, P.I	E., Materials I	Engineering	g Manager						
2 Prototype Driv 0, IVV 89521 775.827.6111 775.827.6402		Carson City Tel 77588	/, NV 89706	Fallon	, NV 89406 5423 2188	t □ 225 Kingsb Stateline, N Tel 775.58t Fax 775.58	3.6490		
	ED BY: IER: MP: MOLDED: IAL DESCRIPTI E LOCATION: E TYPE: LAB NO. R-133-18 R-134-18 R-135-18 R-136-18 R-137-18 R-137-18 R-138-18 R-138-18 R-138-18 R-137-18 R-137-18 R-138-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-137-18 R-138-18 CAPPING TEST RESU Reviewed by: Mitch Burns, P.I Prototype Dive	ED BY: <u>A. Szen</u> IER: <u>Clear</u> MP: <u>N/A</u> 40LDED: <u>3/27/20</u> IAL DESCRIPTION: E LOCATION: E LOCATION: E TYPE: LAE <u>DIAMETER</u> LAB NO. (IN) R-133-18 4.05 R-134-18 4.05 R-135-18 4.05 R-136-18 4.06 R-137-18 4.06 R-137-18 4.06 R-138-18 4.04 Testing and Sampling we REMARKS:	ED BY: A. Szendrey/J. Ha HER: Clear MP: N/A MOLDED: 3/27/2018 IAL DESCRIPTION: 2% Cemen 2% Over O E LOCATION: 2019 Unit E TYPE: LABORATORY LAB NO. (IN) (IN) R-133-18 4.05 4.87 R-134-18 4.05 4.89 R-135-18 4.05 4.83 R-136-18 4.06 4.94 R-137-18 4.06 4.94 R-137-18 4.06 4.94 R-138-18 4.04 4.82 Testing and Sampling were performed Reviewed by: CAPPING UN TEST RESULTS: CO Reviewed by: Mitch Burns, P.E., Materials Engineering 2 Prototype Dive USO East O CAPS DIVE USO EAST D CAPS DIVE US	ED BY: A. Szendrey/J. Hartley HER: Clear MP: N/A 4OLDED: 3/27/2018 IAL DESCRIPTION: 2% Cement Treated Bas 2% Over Optimum Moist E LOCATION: 2019 Unit 1, Blended N E TYPE: LABORATORY DESIGN E TYPE: LABORATORY DESIGN LAB NO. (IN) (IN) (SQ. IN) R-133-18 4.05 4.87 12.88 R-134-18 4.05 4.89 12.88 R-135-18 4.05 4.89 12.88 R-136-18 4.06 4.94 12.95 R-137-18 4.06 4.94 12.95 R-137-18 4.06 4.94 12.95 R-138-18 4.04 4.82 12.82 Testing and Sampling were performed in accordance REMARKS:	PRC COL MP: N/A MO MOLDED: 3/27/2018 IAL DESCRIPTION: 2% Cement Treated Base - 30% Asphratic 2% Over Optimum Moisture Content E LOCATION: 2019 Unit 1, Blended Material E TYPE: LABORATORY DESIGN X Testing and Sampling were performed in accordance with ASTM D- Reviaued by: CAPPING UNBONDED X Testing and Sampling were performed in accordance with ASTM D- Reviewed by: Witch Burns, P.E., Materials Engineering Manager 200 East College Parkvery 17850 ANW89201 Falor	PROJECT NO.: PROJECT NO.: LOCATION: CONTRACTOR: DATE RECEIVED: HER: Clear MP: N/A MOLDED 3/27/2018 JAL DESCRIPTION: 2% Cement Treated Base - 30% Asphalt Grindings and 2% Over Optimum Moisture Content E LOCATION: 2019 Unit 1, Blended Material E TYPE: LABORATORY DESIGN X FIELD SAM TEST DATE LABORATORY DESIGN R-133-18 4.05 4.87 12.88 3 3/30/18 R-134-18 4.05 4.89 12.88 3 3/30/18 R-135-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-137-18 4.06 4.94 12.95 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 R-138-18 4.04 4.82 12.82 7 4/03/18 128 128 128 128 128 128 128 1	Image: Construction of the second		