OKLAHOMA DEPARTMENT OF TRANSPORTATION

SITEMANAGER SAMPLING FREQUENCY REPORT DECEMBER 11, 2020

SiteManager was used to automate ODOT's Contract sampling and testing requirements by allowing the Materials Division to associate materials to the master pay item list items, assign conversion factors, tests and the desired (default) frequencies for those tests.

This high-end set up is frequently referred to as "Global Sampling/Testing Requirements" since it is as determined/programmed by the Materials Division and subsequently made the default on all Contracts by selecting any new Contract in SiteManager and performing the built-in "Materials Generation" process.

There is a safety net for master pay items that may have gotten past the Materials Division. Prior to "Materials Generation", an "Outstanding Item List" process is completed. It indicates all Contract Pay Items that do not have material requirements associated and gives the Materials Division one last chance to address them globally, make them the default, and apply the updated default to that specific Contract and all subsequent Contracts.

Where the old separate Sampling Frequency Guide (Sampling Guide) played a significant role in Materials Division establishing these default automated sampling and testing requirements (with adjustments required by a different system), once the defaults were established and automated, a separate guide document serves little purpose (other than to somewhat confuse the issue).

What is "ODOT's Process" as far as what materials they test, what tests they conduct and at what frequency they conduct those tests? That is most logically and accurately relayed now by a data report of their actual distinct "Global Requirements". This report looks at all materials/tests on all master pay items in the system and lists all distinctly different ways they were set up to default on all Contracts.

One question we've had before about this report is: Why for a given material/test is there sometimes more than one frequency? Typically the higher frequency is the oddity and would be caused by something like a huge drill shaft pay item for which the default frequency just was not practical at all so a higher one was decided. Another example would be for concrete used in structures or pavements. Although it is still concrete and the same tests, we test those 2 applications at 2 different frequencies.

Following is ODOT Materials Division's distinct "Global Requirements" report:



Oklahoma Department of Transportation

SiteManager Sampling Frequency Report

Specification Year:

1999

Material Code Material Name	Spec. Ref.	
acem001 Asphaltic Cement Type PG 76-28 OK	708.03	
Sample Type Acceptance Method	Test Method	<u>Frequency</u>
MAT Material MAT Materials Division	C91018 PG Asphalt Binder_Project Sample	1 per 100,000 GAL
Material Code Material Name	Spec. Ref.	
acem002 Asphaltic Cement Type PG 70-28 OK	708.03	
Sample Type Acceptance Method	Test Method	<u>Frequency</u>
MAT Material MAT Materials Division	C91018 PG Asphalt Binder_Project Sample	1 per 100,000 GAL
Material Code Material Name	Spec. Ref.	
acem003 Asphaltic Cement Type PG 64-22 OK	708.03	
Sample Type Acceptance Method	Test Method	Frequency
MAT Material MAT Materials Division	C91018 PG Asphalt Binder_Project Sample	1 per 100,000 GAL
Material Code Material Name	Spec. Ref.	
acem007 Asphaltic Cement Type PG 76-28TR	OK TEMPORARY	
Sample Type Acceptance Method	Test Method	Frequency
MAT Material MAT Materials Division	C91018 PG Asphalt Binder_Project Sample	1 per 100,000 GAL
Material Code Material Name	Spec. Ref.	
aggr001 Aggregate Base Aggregate Type A	703.01	
Sample Type Acceptance Method	Test Method	Frequency
MAT Material CRES Construction Residency	T27 Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500 TON
Material Code Material Name	Spec. Ref.	
aggr011 Eco Base/CTB Alt2 Aggregate, Comb	pined 703.02	
Sample Type Acceptance Method	Test Method	Frequency
MAT Material CRES Construction Residency	C93004 Aggregate_Sand Equivalent T 176	1 per 50,000 TON
MAT Material CRES Construction Residency	T27 Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500 TON
Material Code Material Name	Spec. Ref.	
aggr012 Eco Base/CTB Alt1 Aggregate, Fine	703.02	
Sample Type Acceptance Method	Test Method	Frequency
MAT Material CRES Construction Residency	T27 Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500 TON
Material Code Material Name	Spec. Ref.	
aggr013 Eco Base/CTB Alt1 Aggregate, Coars	se 703.02	
Sample Type Acceptance Method	Test Method	<u>Frequency</u>
MAT Material CRES Construction Residency	T27 Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500 TON
Material Code Material Name	Spec. Ref.	
aggr017 Open Gr PC Conc Base Aggregate	703.03	
Sample Type Acceptance Method	Test Method	<u>Frequency</u>
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MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500	TON
Material Code	Material Name		Spec. Ref.		
aggr019 Co	over Aggregate No 2		703.04		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
Material Code	Material Name		Spec. Ref.		
aggr021 Co	over Aggregate No 3C		703.04		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
Material Code	Material Name		Spec. Ref.		
aggr026 TE	BSC Aggregate Type A		703.05		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500	TON
Material Code	Material Name		Spec. Ref.		
	BSC Aggregate Type C		703.05		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500	TON
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Material Code	Material Name		<u>Spec. Ref.</u> 703.05		
	BSC Aggregate Type E			_	
Sample Type	Acceptance Method		Method	Frequency	TON
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500	TON
Material Code	Material Name		Spec. Ref.		
aggr031 TE	BSC Aggregate Type F		703.05		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,500	TON
Material Code	Material Name		Spec. Ref.		
aggr033 Mi	icro Surf Aggregate Type I, Mineral		707.02		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 2,500	TON
Material Code	Material Name		Spec. Ref.		
aggr034 Mi	icro Surf Aggregate Type II, Mineral		707.02		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 2,500	TON
Material Code	Material Name		Spec. Ref.		
	icro Surf Aggregate Type III, Mineral		707.02		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 2,500	TON
Material Code	Material Name		Spac Ref		
	materiai Name ranular Backfill Aggregate		<u>Spec. Ref.</u> 703.07		
		T			
Sample Type MAT Material	Acceptance Method CRES Construction Residency	<u>1 est</u> T27	Method Sieve Analysis of Fine and Coarse Aggregates	<u>Frequency</u> 1 per 500	CY
WAT WATERA	SALO CONSTRUCTION NESTUENCY	141	Sieve Analysis of Fille and Obarse Aggregates	i per 500	01

Material Code	Material Name		Spec. Ref.		
aggr048 Pip	pe Underdrain, Filter Sand		703.06		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	 T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 250	CY
				·	
Material Code	Material Name		Spec. Ref.		
aggr049 Sta	andard Bedding Matl Class C		703.08		
Sample Type	Acceptance Method		<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 50	CY
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	CY
Material Code	Material Name		Spec. Ref.		
aggr051 Pip	pe Underdrain Aggregate, Coarse		703.06		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 250	CY
Material Code	Material Name		Spec. Ref.		
	Conc Aggregate, Fine		701.05		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
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Material Code	Material Name		Spec. Ref.		
aggr056 HC	Conc Aggregate No 67, Coarse		701.06		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
Material Code	Material Name		Spec. Ref.		
aggr057 HC	Conc Aggregate No 57, Coarse		701.06		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
Material Code	Material Name		Spec. Ref.		
	tex Mod Conc Aggregate, Combine	d	701.11		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 500	TON
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Material Code	Material Name		Spec. Ref.		
aggr078 Su	bballast Aggregrate Type B		plan notes		
Sample Type	Acceptance Method		Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 1,000	CY
MAT Material	CRES Construction Residency	T27	Sieve Analysis of Fine and Coarse Aggregates	1 per 1,000	CY
Material Code	Material Name		Spec. Ref.		
asco004 As	phalt Concrete, Type S2 (PG 76-28	OK)	708		
Comple Type		Tost	Method	Frequency	
Sample Type	Acceptance Method	1031			
MAT Material	Acceptance Method CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
	·			•	TON TON
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	

Material Code	Material Name		Spec. Ref.		
asco005 As	sphalt Concrete, Type S2 (PG 70-2	8 OK)	708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco006 As	sphalt Concrete, Type S2 (PG 64-22	2 OK)	708		
Sample Type	Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco007 As	sphalt Concrete, Type S3 (PG 76-28	8 OK)	708		
Sample Type	Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco008 As	sphalt Concrete, Type S3 (PG 70-2	8 OK)	708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco009 As	sphalt Concrete, Type S3 (PG 64-2	2 OK)	708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco010 As	sphalt Concrete, Type S4 (PG 76-2	8 OK)	708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco011 As	sphalt Concrete, Type S4 (PG 70-2	8 OK)	708		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
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MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco012 As	sphalt Concrete, Type S4 (PG 64-22	2 OK)	708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco013 As	sphalt Concrete, Type S5 (PG 76-28	з ок)	708		
Sample Type	Acceptance Method	<u>Test</u>	Method	Frequency	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco014 As	sphalt Concrete, Type S5 (PG 70-28	в ок)	708		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco015 As	sphalt Concrete, Type S5 (PG 64-22	2 OK)	708		
Sample Type	Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco018 As	sphalt Concrete, Type S6 (PG 64-22	2 OK)	708		
Sample Type	Acceptance Method	<u>Test</u>	Method	Frequency	
MAT Material	CRES Construction Residency	C93004	Aggregate_Sand Equivalent T 176	1 per 20,000	TON
MAT Material	MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material	CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material	CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
asco023 As	sphalt Concrete, Type OGBB		708		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
	sphalt Concrete, Type OGFSC		708		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 1,000	TON
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Material Code Material Name		Spec. Ref.		
asco027 Asphalt Concrete, Type 1/2" SMA		708		
Sample Type Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material MAT Materials Division	C93005	HMA TSR T 283	1 per 20,000	TON
MAT Material CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
MAT Material CRES Construction Residency	C93016	HMA Density Test for Pavement Cores	1 per 1,000	TON
Material Code Material Name		Spec. Ref.		
asco029 Asphalt Concrete, Type 1/2" PFC		708		
Sample Type Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material CRES Construction Residency	C93015	HMA Sample	1 per 1,000	TON
Material Code Material Name		Spec. Ref.		
asco030 Asphalt Concrete, Micro Surf, Type I		707		
Sample Type Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material CRES Construction Residency	C93013	Asphalt Binder Content by Ignition	1 per 500	TON
MAT Material CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 500	TON
Material Code Material Name		Spec. Ref.		
asco031 Asphalt Concrete, Micro Surf, Type II		707		
Sample Type Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material CRES Construction Residency	C93013	Asphalt Binder Content by Ignition	1 per 500	TON
MAT Material CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 500	TON
Material Code Material Name		Spec. Ref.		
asco032 Asphalt Concrete, Micro Surf, Type III		707		
Sample Type Acceptance Method	Test	Method	Frequency	
MAT Material CRES Construction Residency	C93013	Asphalt Binder Content by Ignition	1 per 500	TON
MAT Material CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 500	TON
Material Code Material Name		Spec. Ref.		
asco038 Asphalt Concrete, UTBWC, Type C		707		
Sample Type Acceptance Method	<u>Test</u>	Method	<u>Frequency</u>	
MAT Material CRES Construction Residency	T30	Mechanical Analysis of Extracted Aggregate	1 per 1,320	TON
Material Code Material Name		Spec. Ref.		
asph009 Asphalt, Emulsified, Type MS-2		708.03		
Sample Type Acceptance Method	Test	Method	Frequency	
MAT Material MAT Materials Division	C91006	Emulsified Asphalt_Project Sample	1 per 100,000	GAL
Material Code Material Name		Spec. Ref.		
asph021 Asphalt, Emulsified, Type PMCSS-1H		708.03		
Sample Type Acceptance Method	Test	Method	Frequency	
MAT Material MAT Materials Division	C91006	Emulsified Asphalt_Project Sample	1 per 10,000	GAL
Material Code Material Name		Spec. Ref.		
asph024 Asphalt, Emulsified, Type PMCRS-1S		708.03		
Sample Type Acceptance Method	Test	<u>Method</u>	Frequency	
MAT Material MAT Materials Division	C91006	Emulsified Asphalt_Project Sample	1 per 100,000	GAL
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001 Concrete Brick _Physical Test	1 per 100,000	_,
201 Congrete Prior Physical Test	1 per 100,000	EACH
Test Method	<u>Frequency</u>	
714.02		
Spec. Ref.		
In Place Density of Cement Treated Base by Nuclear Methods	1 per 2,500	
CTB Tests on Field Molded Specimens In Place Density of Cement Treated Base by Nuclear Methods	1 per 10,000	SY SY
Test Method	Frequency	0) (
317		
Spec. Ref.		
201 Density and Moisture Content of Soil Agg by Nuke Meth	1 per 2,500	SY
Test Method	Frequency	
SP-5/4/06		
Spec. Ref.		
In Place Density of OGPCCB by Nuclear Method	1 per 2,500	SY
Test Method	<u>Frequency</u>	
319		
Spec. Ref.		
D25 Fresh Concrete Tests	1 per 5,000	SY
O14 Compressive Strength of Concrete Cylinders	1 per 5,000	SY
Test Method	Frequency	
318		
Spec. Ref.		
Density and Moisture Content of Soil Agg by Nuke Meth	1 per 2,500	SY
Test Method 201	Frequency	ev
	Гис ээ.:	
<u>Spec. Ref.</u> 307		
Snoo Dof		
Density and Moisture Content of Soil Agg by Nuke Meth	1 per 10	STA
Test Method	Frequency	
311		
Spec. Ref.		
Donsity and Moisture Content of Soil Agg by Nuke Meth	1 per 2,500	SY
Test Method	Frequency	6 11
310.04(B)		
Spec. Ref.		
201 Donaity and midiating content of contagg by Nuke Meth	1 pci 000	<u> </u>
Test Method Oo1 Density and Moisture Content of Soil Agg by Nuke Meth	Frequency 1 per 800	CY
	Erosuos	
<u>Spec. Ref.</u> 303		
005 Emulsified Asphalt_QM Sample	1 per 20,000	GAL
Test Method	Frequency	
SP		
Spec. Ref.		
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Material Code	Material Name		Spec. Ref.		
ckds001 Cer	nent Kiln Dust (CKD)		702.03		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
	uid Membrane Curing Compound		701.07(C)		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 2,500	GAL
Material Code	Material Name		Spec. Ref.		
	rugated Metal Pipe (CMP)		726.02		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 250	LF
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 250	EACH
Material Code	Material Name		Spec. Ref.		
	rug. Polyethylene/Polypropylene P	Pipe	726.02		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 1,000	LF
Material Code	Material Name		Spec. Ref.		
	ct Wire/Cable, Building/Highway Li	iaht	738.02		
				<u> </u>	
Sample Type DOC Document	Acceptance Method CRES Construction Residency	AM5011	Method Acceptance Form for Bldg or Hwy Lighting Electric Wire	Frequency 1 per 5,000	LF
	CINEO CONSTRUCTION Residency	AMOUT	Acceptance Form for Blug of Tiwy Lighting Liectife Wife		
Material Code	Material Name		Spec. Ref.		
elec007 Ele	ct Cable, Communication		738.03		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5012	Acceptance of Communication Electric Cable	1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
elec008 Ele	ct Cable, Traffic Signal		738.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5008	Acceptance of Traffic Signal Electric Cable	1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
	ct Wire, Traffic Signal Wire		738.01		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5010	Acceptance of Dectector Loop Wire	1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
	ct Cable, Loop Detector Lead-in		738.01		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5009	Acceptance of Shielded Loop Detector Lead In Cable	1 per 5,000	LF
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Material Code	Material Name		Spec. Ref.		
	thwork, Select Borrow	_	202	_	
Sample Type	Acceptance Method		Method	Frequency	0) (
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 2,000	CY

Material Code	Material Name		Spec. Ref.		
ewrk002 Ear	rthwork, Excavation/Embankment		202		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 2,000	CY
Material Code	Material Name		Spec. Ref.		
ewrk003 Ear	rthwork, Trench Backfill		613.04		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 250	LF
Material Code	Material Name		Spec. Ref.		
ewrk004 Ear	rthwork, Machine Grading		209		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 25	STA
Material Code	Material Name		Spec. Ref.		
ewrk009 Ear	rthwork, Structure Excav & Backfill	I	501		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
MAT Material	CRES Construction Residency	C95001	Density and Moisture Content of Soil Agg by Nuke Meth	1 per 2,000	CY
Material Code	Material Name		Spec. Ref.		
fabr001 Fab	oric Reinf for Asphalt Concrete Pvr	nt	712.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 50,000	SY
Material Code	Material Name		Spec. Ref.		
fabr002 Fab	oric, Permanent Erosion Control		712.02		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 5,000	SY
Material Code	Material Name		Spec. Ref.		
fabr005 Fab	oric, Separator for Bases		712.05		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 50,000	SY
Material Code	Material Name		Spec. Ref.		
fabr006 Fab	oric, Silt Fence Filter		712.06		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001		1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
fabr010 Geo	ogrid		712.07		
Sample Type	Acceptance Method	<u>Test</u>	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 5,000	SY
Material Code	Material Name		Spec. Ref.		
fabr013 Fab	oric, Separator for Bond Breaker		317.02		
Sample Type	Acceptance Method	<u>Test</u>	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 50,000	SY

Material Code	Material Name		Spec. Ref.		
fenc002 Fenc	e Wire, Woven, Zinc Coated		732.06		
Sample Type	Acceptance Method	Test I	Method	Frequency	
MAT Material	MAT Materials Division	C92013	Fence_Woven Wire	1 per 16,500	LF
Material Code	Material Name		Spec. Ref.		
	e Wire, Barbed		732.06		
Sample Type	Acceptance Method	Test I	Method	<u>Frequency</u>	
	MAT Materials Division	C92010	Fence_Barbed Wire	1 per 66,000	LF
Material Code	Material Name		Spec. Ref.		
	Material Name e Wire, Barbless, Zinc Coated		732.06		
		Toot		Fraguency	
	Acceptance Method MAT Materials Division	C92011	Method Fence_Barbless Wire	<u>Frequency</u> 1 per 66,000	LF
- WAT Waterial	IVIA I IVIALEITAIS DIVISION	C92011	rence_barbless wife	1 per 60,000	LI
Material Code	Material Name		Spec. Ref.		
fenc009 Fenc	e Posts, Steel		732.06		
Sample Type	Acceptance Method	Test I	<u>Method</u>	<u>Frequency</u>	
MAT Material	MAT Materials Division	C92012	Fence_T Post	1 per 1,000	EACH
Material Code	Material Name		Spec. Ref.		
fenc011 Fenc	e Wire, Tie		732.06		
Sample Type	Acceptance Method	Test I	Method	<u>Frequency</u>	
MAT Material	MAT Materials Division	C92040	Post Ties for SWF and WWF	1 per 1,000,000	EACH
Material Code	Material Name		Spec. Ref.		
fenc016 Fenc	e Wire, Chain Link Fabric		732.07		
Sample Type	Acceptance Method	Test I	Method	Frequency	
MAT Material	MAT Materials Division	C92015	Fence_CLF Fabric	1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
fenc017 Fenc	e Wire, Chain Link Tension		732.07		
Sample Type	Acceptance Method	Test I	Method	Frequency	
MAT Material	MAT Materials Division	C92014	Fence_Tension Wire	1 per 1,000,000	LF
Material Code	Material Name		Spec. Ref.		
	e Wire, Chain Link Tie		732.07		
	Acceptance Method	Tast I	Method	<u>Frequency</u>	
	MAT Materials Division	C92048	Post Ties for Chain Link Fence (CLF)	1 per 1,000,000	FACH
	MAT Materials Division	C92048	Post Ties for Chain Link Fence (CLF)	1 per 100,000	EACH
Motorial Code	Matarial Nama		Coop Def		
Material Code fenc019 Fenc	Material Name se Posts, Chain Link Support		<u>Spec. Ref.</u> 732.07		
		T/ '		F	
	Acceptance Method MAT Materials Division	1 est 1 C92016	Method Fence_CLF Support Posts	Frequency 1 per 1,000	EACH
WAT MATCHAI	WINTER MICHIGIS DIVISION	002010	Tonoc_OLI Ouppoit 1 Oata	1 pc: 1,000	LAGIT
Material Code	Material Name		Spec. Ref.		
fenc020 Fenc	e Posts, Chain Link Line		732.07		
	Acceptance Method	<u>Test l</u>	<u>Method</u>	Frequency	
MAT Material	MAT Materials Division	C92017	Fence_CLF Line Post	1 per 1,000	EACH

Material Code	Material Name		Spec. Ref.		
fenc021 Fe	nce Rail, Chain Link, Top or Brace		732.07		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	MAT Materials Division	C92018	Fence_CLF Brace and Top Rails	1 per 1,000,000	LF
Material Code	Material Name		Spec. Ref.		
fenc033 Fe	nce Wire, Tension		732.06		
Sample Type	Acceptance Method	Test	Method	Frequency	
MAT Material	MAT Materials Division	C92014	Fence_Tension Wire	1 per 1,000,000	IUC
Material Code	Material Name		Spec. Ref.		
	me, Quick		706.02		
Sample Type	Acceptance Method	Tost	Method	Frequency	
MAT Material	MAT Materials Division	C92001	Quick Lime_Lab Analysis	1 per 250	TON
WAT Waterial	WAT Waterials Division	C92001	Quick Lime_Lab Analysis	1 per 250	TON
Material Code	Material Name		Spec. Ref.		
pcco001 HC	Conc Class AA(AE)		701.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 70	CY
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 150	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 35	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 75	CY
Material Code	Material Name		Spec. Ref.		
pcco002 HC	C Conc Class A (AE)		701.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 2,500	CY
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 70	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 35	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 2,500	CY
Material Code	Material Name		Spec. Ref.		
рссо004 НС	C Conc Class C(AE)		701.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 70	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 35	CY
Material Code	Material Name		Spec. Ref.		
рссо007 НС	Conc, Latex Modified - LMC		701.11		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
MAT Material	CRES Construction Residency	C94014	Compressive Strength of Concrete Cylinders	1 per 70	CY
MAT Material	CRES Construction Residency	C94025	Fresh Concrete Tests	1 per 35	CY
Material Code	Material Name		Spec. Ref.		
	C Conc, Cont Low Strngth Matl - CL	SM	701.19		
Sample Type	Acceptance Method	Test	Method	<u>Frequency</u>	
MAT Material	MAT Materials Division	C94004	CLSM_Compressive Strength	1 per 50	CY
Material Code	Material Name		Spec. Ref.		
	pen Gr PC Conc Base - Mix		319.04(C)		
peccori Op	Jen Si i O Conc Dase - IVIIX		313.0 1 (0)		
Sample Type	Acceptance Method	_	Method	Frequency	

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MAT Material	CRES Construction Residency	C94045	Density Unit Weight of Concrete	1 per 20,000	SY
Material Code	Material Name		Spec. Ref.		
qual001 HC	Conc Admixture, Liquid		701.03		
Sample Type	Acceptance Method	Test I	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	IUC
Material Code	Material Name		Spec. Ref.		
qual002 Hyd	draulic Cement		701.02		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 1,000	TON
Material Code	Material Name		Spec. Ref.		
qual003 Fly	Ash		702.01		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 1,000	TON
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	IUC
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	TON
Material Code	Material Name		Spec. Ref.		
qual004 Pre	stressed Concrete Bridge Item		503		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 10,000	LF
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 10,000	EACH
Material Code	Material Name		Spec. Ref.		
qual005 Fab	pricated Structural Steel Item		724		
Sample Type	Acceptance Method	Test I	Method	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 1,000,000	LB
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 10,000	LB
Material Code	Material Name		Spec. Ref.		
qual007 Gra	y Iron Castings		725.03		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5004	Acceptance of Iron Castings	1 per 50	EACH
Material Code	Material Name		Spec. Ref.		
qual008 Rei	nforced Concrete Pipe		726.01		
Sample Type	Acceptance Method	Test I	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 250	IUC
Material Code	Material Name		Spec. Ref.		
qual010 Cut	-Back Asphalt		708.03		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 100,000	GAL
Material Code	Material Name		Spec. Ref.		
qual011 Em	ulsified Asphalt		708.03		
Sample Type	Acceptance Method	Test I	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 100,000	GAL

Material Code	Material Name		Spec. Ref.		
qual012 Bar	Steel Reinforcement, Billet-Mill		723.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5005	Acceptance of Reinforcing Steel	1 per 1,000,000	LB
Material Code	Material Name		Spec. Ref.		
.	pricated Reinforcing Steel Item		723		
Sample Type	Acceptance Method	Tost	Method	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5005	Acceptance of Reinforcing Steel	1 per 1,000,000	IB
DOC Document	CRES Construction Residency	AM5005	Acceptance of Reinforcing Steel	1 per 10,000	LB
				' '	
Material Code	Material Name		Spec. Ref.		
qual022 Epo	oxy Coated Reinforcing Steel		723		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5005	Acceptance of Reinforcing Steel	1 per 1,000,000	
DOC Document	CRES Construction Residency	AM5005	Acceptance of Reinforcing Steel	1 per 1,000,000	IUC
Material Code	Material Name		Spec. Ref.		
qual024 Pre	cast Concrete Box		508		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5002		1 per 250	LF
	·			<u>`</u>	
Material Code	Material Name		Spec. Ref.		
qual025 Pre	cast Concrete Arch Structure		508		
Sample Type	Acceptance Method	Test	<u>Method</u>	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 10,000	LF
Material Code	Material Name		Spec. Ref.		
qual027 Pre	cast Concrete Wall		510		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5002	Acceptance of Pre Delivery Inspected	1 per 2,500	SY
Matadal Oada	Material Name		O D-f		
Material Code seal009 Jt. 9	Material Name	`	<u>Spec. Ref.</u>		
	Sealant, Silicone, Low Mod (Slf Lvl		701.08(F)	_	
Sample Type	Acceptance Method		Method	<u>Frequency</u>	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 100	GAL
Material Code	Material Name		Spec. Ref.		
seal010 Jt.	Sealant, Rapid Cure		701.08(G)		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	IUC
Material Code	Material Name		Coop Rof		
	stomeric Mortar		<u>Spec. Ref.</u> 701.08(G)		
			` ,	_	
Sample Type	Acceptance Method	·	Method Appropriate of Dra Approved Draducts	Frequency	05
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 1,000	CF
Material Code	Material Name		Spec. Ref.		
seal014 HC	Conc Penetrating Water Repellent		701.12		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 2,000	SY
			1000		

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MAT Material MAT Material	MAT Materials Division MAT Materials Division	C94005 C94006	Penetrating Water Repellent Treatment_Penetration Analysis Penetrating Water Repellent Treatment_Absorption	1 per 2,000 1 per 2,000	SY SY
Material Code	Material Name		Spec. Ref.		
seal022 Epo	oxy Bridge Deck Sealer, Types K,L		70113B1011		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 110	GAL
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 100	GAL
Material Code	Material Name		Spec. Ref.		
seal024 Epo	oxy for Injection, Type D		701.13B4		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 100	GAL
Material Code	Material Name		Spec. Ref.		
side010 See	ding Materials		735.03		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5007	Acceptance of Material by Visual Inspection	1 per 1	TON
Material Code	Material Name		Spec. Ref.		
	tilizer		735.06		
Sample Type	Acceptance Method	Test	Method	Frequency	
DOC Document	CRES Construction Residency	AM5007	Acceptance of Material by Visual Inspection	1 per 30	TON
DOC Document	CRES Construction Residency	AM5007	Acceptance of Material by Visual Inspection	1 per 10,000	TON
Material Code	Material Name		Spec. Ref.		
side020 Silt	Dike - Triangular		735.07		
Sample Type	Acceptance Method	Test	Method _	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 5,000	LF
Material Code	Material Name		Spec. Ref.		
sstl002 Stee	el Welding, Field		724.03		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	C94043	Documenting Field Welding	1 per 1,000,000	IUC
DOC Document	CRES Construction Residency	C94043	Documenting Field Welding	1 per 100,000	IUC
Material Code	Material Name		Spec. Ref.		
ston001 Rip	rap Stone		713.01		
Sample Type	Acceptance Method	Test	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	TON
Material Code	Material Name		Spec. Ref.		
ston004 Gab	oion Fill Stone		713.03		
Sample Type	Acceptance Method	<u>Test</u>	Method	Frequency	
DOC Document	CRES Construction Residency	AM5001	Acceptance of Pre Approved Products	1 per 10,000	TON
Material Code	Material Name		Spec. Ref.		
ston008 Filte	er Blanket Stone, 1 Course Backing	9	713.02		
Sample Type	Acceptance Method	<u>Test</u>	<u>Method</u>	Frequency	
DOC Document	CRES Construction Residency	AM5006	Acceptance of Material by Type A Certification	1 per 10,000	TON
	•				