

Form QA423-1 Document Change Request Log

Document Owner: Lee Robertson

Revision: 0 - Rev. Date: ____

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Form QA423-2 Document Change Request

Document Owner: Lee Robertson

Revision: 0 - Rev. Date: XXXXXX

Review by: 10/15/2025

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Originator		DCR # 000		
Originator:		Date:		
Document Type: <input type="checkbox"/> CQMP <input type="checkbox"/> QA or QC Procedure <input type="checkbox"/> QA or QC Form <input type="checkbox"/> Other _____		Action Requested: <input type="checkbox"/> New Document <input type="checkbox"/> Major Revision <input type="checkbox"/> Minor Revision <input type="checkbox"/> Obsolete		
Document Title:	Document Number:	Current Revision:		
Description of Change: (attach an additional sheet if necessary) (List other affected documents and include in this DCR.)				
Reason for Change: (attach an additional sheet and supporting documentation if necessary)				
Review and Approval				
Role:	Name:	Date:	Approved	Approved as Noted
Document Owner			<input type="checkbox"/>	<input type="checkbox"/>
OVF Proj Engr			<input type="checkbox"/>	<input type="checkbox"/>
SCDOT CM			<input type="checkbox"/>	<input type="checkbox"/>
Records Manager – Final Release				
<input type="checkbox"/> Change Implemented Release Date: _____ <input type="checkbox"/> Electronic Document Repository Updated Records Manager Initials: _____				

Form QA744-1
IQF Buy America Verification

[illegible]



Form QA752-1 Daily Inspection Report

Document Owner: Lee Robertson	Revision: 0	
Approved By:	Revision Date:	Review By:
Approved By:	Release Date: TBD	Page 1 of 1

Inspections Conducted: Work Hours: Began Ended Report #

Inspector ID # Y Y M M D D

Entry # Segment Inspection Type

Section	Roadway	Direction	Structure/Item #	F.I.D.	Feature	From	To	Limits	I H	P F
								-	<input type="text"/>	<input type="text"/>

Section Description:

Contractor: Crew Foreman: Quantity Placed: Units:

Is this a re-inspection of work detailed in a previous Failing Report? Y ☐ N ☐ Previous Report #:

List any previous DN & NCR #s related to this work - Have they all been resolved? Y ☐ N ☐

Enter S.I.N.s associated with this work -

Are there any deficiencies with the work in this entry? ☐ No ☐ DN ☐ NCR ☐ Pending FDC

Description:

Comments on Quality/Specification Compliance/Observations of work performed:

Conversation Log(s) (Who, What, When, Where, Outcome):

Inspection Times

Scheduled- Start- End - Total Inspection Time(Hrs) -



File Number:		Desc:	
Mix Type:			

INSPECTOR:	DATE:

[illegible]





Intermodal Transportation

MEMORANDUM

TO: JESUS A. SANDOVAL-GIL, P.E., PHD
State Materials Engineer – Materials Group

THRU: LEE ROBERTSON
Construction Independent Quality Manager – Raba Kistner, Inc.

FROM: JULIE GADSBY
Construction Manager – Major Projects Group

DATE: April 23, 2021

RE: MATERIALS CERTIFICATION
202 MA 054 H882701C
SR 202L (South Mountain Freeway)
I-10 (Maricopa Freeway) – I-10 (Papago Freeway)

Enclosed are the Construction Independent Quality Manager's Materials Certification Log, Materials Sample Checklist, Nonconformance Report (NCR) Logs, and Engineering Judgement Logs.

I certify that I have reviewed the materials results for the above referenced project. The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. In addition, all material sampling and testing was performed in accordance with the Project's Materials Quality Assurance Program.

Construction Independent Quality Manager

Construction Manager

Incl.: Materials Sampling Checklist
Materials Certification Log
Nonconformance Report Log
Engineering Judgement Log

Table 1 - SOILS									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed (CY)	Tests Required	Tests Performed
203	EM	95, 100	Embankment	Proctor (Density/Moisture)	In-Place	One per soil type, per supplier, and as needed	3,608,352	14	209
				Compaction	In-Place	One per 1,500 Cubic Yards	3,608,352	2,406	3,647
				Gradation	In-Place	One per soil type, per supplier, and as needed	3,608,352	14	225
				PI	In-Place	One per soil type, per supplier, and as needed	3,608,352	14	223
	EM	-	Oversized Embankment (incl. rockfills & rubble)	Visual Observation of Compaction & Moisture Conditioning	In-Place	N/A	4,314,874	100% of placed	100% of placed
203	NG	95	Natural Ground for Embankment 5 ft. or less	Proctor (Density/Moisture)	In-Place	One per soil type, and as needed	358,369	6	39
				Compaction	In-Place	One per 1,500 Cubic Yards	358,369	239	357
203	SG	95, 100, PT	Subgrade	Proctor (Density/Moisture)	Roadway	1 per soil type, and as needed	406,708	6	44
				Compaction		One per 1,500 Cubic Yards	406,708	272	678
				Gradation		One per 1,500 ft. or change in material	406,708	264	268
				PI			406,708	264	270
203	BF	TR	Trench Backfill	Proctor (Density/Moisture)	In-Place	One per soil type, and as needed	57,633	6	54
				Compaction		One per 100 Cubic Yards	57,633	577	1,120
803	GM	-	Granite Mulch	Gradation	In-place or Source	One per 10,000 Cubic Yards	-	-	18
804	TS	-	Topsoil	Gradation	In-Place	Written soil analysis per source and six samples per lot (20,000 CY.)	-	6	6
				PI			-	6	6
				pH			-	6	6
				Soluble Salts			-	6	6
				Calcium Carbonate			-	6	6
				Exchangeable Sodium (in percent and ppm)			-	6	6

Table 2 - AGGREGATES									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed (CY)	Tests Required	Tests Performed
203 / 501	SB / BF / AG	95,100 / PP,CP,MP	Structural Backfill or Pipe Backfill	Proctor (Density/Moisture)	Stockpile	One per source, and as needed	71,314	6	37
				Compaction	In-Place	One per 75 CY.	71,314	951	3,233
				Resistivity	Source or Stockpile	One per source	71,314	4	16
				pH			71,314	4	16
				Gradation	On job site	One per 500 CY per source	71,314	143	334
				PI			71,314	143	333
303	AB	T2 / T3	Aggregate Base Class 2	Abrasion	Source	One per source	846,033	5	5
				Proctor (Density/Moisture)	Crusher Belt or Stockpile	Start of production, as material changes	846,033	5	22
				Compaction	Roadway	One per lift per 750 cubic yards	846,033	1,129	1,354
				Fractured Coarse Aggregate Particles	Stockpile	One per 5,000 cubic yards	846,033	169	291
				Gradation	Windrow	One per 1,000 cubic yards, minimum one per shift	846,033	846	1,023
				PI			846,033	846	1,013
501 / 508	BM	PP, CP, MP	Bedding Material for Pipe	Proctor (Density/Moisture)	Source or Stockpile	One per source, and as needed	33,100	2	23
				Compaction	In-Place	One per 50 CY	33,100	662	1,368
				Resistivity	Source or Stockpile	One per source	33,100	2	10
				pH			33,100	2	10
				Gradation		One per 300 CY per source	33,100	110	265
				PI			33,100	110	260
702	CB	57	Crash Barrel Sand	Dry Unit Weight per cubic foot	Plant or Site	One per each attenuator system location	2	2	2
				Gradation					
				Moisture Content					
808	BM	PV	Bedding Material for PVC Irrigation Pipe	Gradation	Source or Stockpile	One per source	-	1	1
913	-	-	Rock for Wire Tied Riprap, Gabions, and Rail Bank Protection	Specific Gravity	Source	One per source	-	2	2
				Gradation (visual)	Project	One per 1/2 shift	-	-	127

Table 2 - AGGREGATES - Continued									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed (CY)	Tests Required	Tests Performed
929	ME	R1	Reinforced MSE	Proctor (Density/Moisture)	Source or Stockpile	Once per source, change in rock content by more than 10%, or change in USCS Classification	482,717	6	19
				Test Pad			482,717	-	-
				Internal Friction Angle			482,717	6	9
				Compaction	In-Place	Once per 500 cubic yards, minimum one test per lift	482,717	965	2,580
				Resistivity	Source or Stockpile	Once every 500 cubic yards at Job Site	482,717	965	1,146
				Sulfates/Chlorides			482,717	965	1,146
				Organic Content			482,717	965	1,146
				pH			482,717	965	1,146
				PI			482,717	965	1,152
				Gradation			482,717	965	1,154
		R2	Retained MSE	Proctor (Density/Moisture)	Source or Stockpile	Once per source, change in rock content by more than 10%, or change in USCS Classification	81,165	5	15
				Internal Friction Angle			81,165	5	12
				Compaction	In-Place	Once per 500 cubic yards, minimum one test per lift	81,165	163	1,090
				Gradation	Source or Stockpile	Once every 500 cubic yards at Job Site	81,165	162	294
				PI			81,165	162	295
1006	FA	57	Fine Aggregate for Portland Cement Concrete (PCC) Classes P,S, and B	Sand Equivalent	Batch Plant Conveyor Belt or Stockpile	Once per week of PCC production	-	1,109	1,916
				Gradation			-	1,109	1,916
				Organic Impurities	Stockpile	One per source	-	-	-
				Mortar Strength			-	-	-
				Deleterious Substances		At the discretion of IQF	-	-	-
	CA	57, 7, 8, 912	Coarse Aggregate for Portland Cement Concrete (PCC) Classes P, S, and B	Gradation	Batch Plant Conveyor Belt or Stockpile	Once per week of PCC production	-	1,109	1,967
				Abrasion	Stockpile	One per source	-	-	-
				Deleterious Substances		At the discretion of IQF	-	-	-
				Fractured Coarse Aggregate Particles		One per source	-	-	-

Table 3 - BITUMINOUS MATERIAL									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed	Tests Required	Tests Performed
404			for Tack Coat and Fog Coat	Residue	Distributor	See PPD	237,739 gal	44	23
416	AC	34	for Asphaltic Concrete or ACFC	Dynamic Shear of Original Binder	Supplier or Project	Certificate of Compliance and duplicate samples (one gallon each in a metal can) per half shift. Testing per Table A: SMF Asphalt Binder Testing Recommendations	460 lots	92	165
				Dynamic Shear of RTFO Binder				92	165
				Dynamic Shear of PAV Binder				92	165
				Creep Stiffness of PAV Binder				92	165
				M-Value @ 60 sec.				92	165
				Rotational Viscosity	Circulation Line			92	165
1005, 1009, 413, 414, 415	AR	AR	Asphalt Cement for Asphalt Rubber for AR-AC or AR-ACFC	Per Specifications	Delivery Unit	1 sample every other production lot	59 lots	29	35
1009	AR	CR	Crumb Rubber for Asphalt Rubber Type A or Type B	Gradation	Project	1 sample every manufacturers lot		67	67
1009, 410	AR	AR	Asphalt Rubber Type 1, 2, or 3	Per Specifications	Distributor	1 sample every other production lot		29	35
1009, 413, 414, 415	AR	AR	Asphalt Rubber Type 1, 2, or 3 for AR-AC or AR-ACFC	Penetration	Circulation Line	1 round of testing every 5th sample	59 Lots	29	35
				Softening Point				29	35
				Resilience				29	35
				Rotational Viscosity				29	35
				Rotational Viscosity at plant		1 sample Per Production Lot	246 Lots	246	246

Table 4 - PORTLAND CEMENT CONCRETE									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed	Tests Required	Tests Performed
401, 1006	P	40, 45, 50...	Portland Cement Concrete (PCC) Class P	Compressive Strength	Immediately before going into paver or forms, or as directed by IQF (BATCH PLANT)	Five samples per lot (for compressive strength one set of three cylinders per sample)	161,074	545	689
				Slump			161,074	545	689
				Temperature			161,074	545	689
				Thickness	Roadway	10 cores per lot	-	-	-
1006 Less than 4000psi	S	25, 30, 35	Portland Cement Concrete (PCC) Class S	Compressive Strength	At Discharge	One sample for each 100 CY, or fraction thereof, of continuously placed concrete per day from each batch plant.	193,757	1,938	2,946
				Slump			193,757	1,938	2,946
				Temperature			193,757	1,938	2,946
1006 4000psi or greater	S	52521	Portland Cement Concrete (PCC) Class S	Compressive Strength	At Discharge	One sample for each 50 CY, or fraction thereof, of continuously placed concrete per day from each batch plant.	223,726	4,475	5,226
				Slump			223,726	4,475	5,226
				Temperature			223,726	4,475	5,226
1006	B	25, 30, 35...	Portland Cement Concrete (PCC) Class B	Compressive Strength	At Discharge	One sample for each 100 CY, or fraction thereof, of continuously placed concrete per day from each batch plant.	8,508	86	202
				Slump			8,508	86	202
				Temperature			8,508	86	202
601, 1006	S	75, 80, 85...	Portland Cement Structural Concrete for Minor Precast Structures	Rebound Hammer	At Fabrication Yard	One set of readings per casting day	702,115 sf	395	395
601, 1006	S	60, 65, 70... 90	Prestressed Concrete	Compressive Strength	At Discharge	One sample for each day's production (for compressive strength, a minimum of 3 sets of 3 cylinders per set)	15,978	1,296	1,296
				Slump			15,978	533	1,296
				Temperature			15,978	533	1,296
912	CA	912	Shotcrete	Compressive Strength	Test Panels	Three cones from a test panel every 100 CY or fraction thereof, per day	1,158	12	67
				Slump	At Mixer Discharge	One per 50 CY, or fraction thereof, per day	1,158	23	67
914	B	30	Grout for Masonry Block	Compressive Strength	Discharge or Point of Placement	Three consecutive passing tests and then every week of production thereafter	117 WEEKS OF PRODUCTION	120	234
930	B	30	Grout for Soil Nail Wall	Compressive Strength	Discharge or Point of Placement	No less than one test for every 10 cubic yards of grout placed or once per week, whichever occurs first	538	81	174

Table 7 - BITUMINOUS MIXTURES									
Specification Section	Material Code	Type Code	Material	Types of Tests Required	Sampling Point	Minimum Sampling Frequency	Quantity Placed	Tests Required	Tests Performed
414	AC	AR	Asphaltic Concrete (Asphalt Rubber) Friction Course - AR-ACFC	% Asphalt Rubber	Trucks at Mixing Plant	4 Per Lot	59	231	235
				Moisture Content	Trucks at Mixing Plant	4 Per Lot		231	235
				Coldfeed Gradation	Belt Cut	1 every 500 Tons	75,213	150	183
416	AC	34	Asphaltic Concrete - End Product	% Asphalt	Roadway	4 per lot	460 lots	1840	1884
				Moisture Content			460 lots	1840	1884
				Rice			460 lots	1840	1872
				Marshall Density			460 lots	1840	1872
				Gradation			460 lots	1840	1884
				Compaction		10 cores per lot	460 lots	4600	4710
			Asphaltic Concrete - Miscellaneous Paving			Tested at the discretion of the IQF	-	-	-

Form QA770-3 Example of Certification Log used on previous project for closeout

Master Certification File

Comments	Document Date	Disciplines	Feature	Quantity	Quantity Units	Segment	Specification	StructureNo	Submittal Title	Supplier	Uploaded Date
	11/7/2016	Drainage	Catch Basin	2759	lbs	A-Pecos	605		Catch Basin Rebar - Early Works	CMC Rebar Arizona	11/17/2016
	2/6/2019	Drainage	12" HDPE	16780	Linear Feet	A-Pecos	508		508-2.12 PP, 12" HDPE Pipe	Advanced Drainage Systems	9/19/2016
	11/7/2016	Drainage	Catch Basin	14		Project Wide	503		503-2.04, Structural Steel (Grates, Frames, Catch Basins)	Grate Solutions Co Inc.	11/17/2016
	11/11/2016	Pavement	PCCP	5215	lbs	A-Pecos	605		#5 Rebar- Grade 60 - Early Works	Nina Construction Supply	12/1/2016
	11/17/2016	Signing & Pavement Markings	Permanent Pavement Marking			Project Wide	708		708-2.01, Permanent Pavement Marking White/Yellow	Ennis-Flint	11/21/2016
#6- 347lbs, #7-636lbs, #9-5141	1/3/2017	Drainage	Manhole	6124	lbs	COP	605		Lab ID S17-0002, Release Number 1, #6, #7 and #9 Reinforcing Steel	Tyler Reinforcing LLC	1/3/2017
2300-3/8 x24, 1/2" x24"	11/22/2016	Pavement	PCCP	2575	pcs	A-Pecos	401		401-3.12, Load Transfer Dowels	Erect-A-Line, Inc.	12/1/2016
C202F Traffic Devices and Cert	11/23/2016	Maintenance of Traffic	MOT			Project Wide	701		701-2.01, Category I and II Devices, (MOT)		11/23/2016
Certificate of Conformance-Traffic Attenuators.pdf (449KB)	9/19/2016	Utilities	Pipe			A-Pecos	811		811-1.00, COP Cathodic Protection	Service Wire Co.	9/19/2016
Metro Retro-Reflective Letter	9/16/2016	Roadway	Attenuation Device			Project Wide	701		701-2.04, Temporary Impact Attenuation Devices	Howe Precast	9/16/2016
Steel Casing Pipe - Jack and B	12/13/2016	Signs/Signals	Signs & Signals			Project Wide	703		703-2.06, Retro-reflective Sheeting		12/13/2016
Temporary Concrete Barriers.pdf	12/8/2016	Drainage		3713	Linear Feet	D-110 Papago	501		501-6.00, Jacking, Boring or Tunneling Pipe	Horizontal Boring, LLC	12/28/2016
Stone Cold Masonry	9/16/2016	Roadway	Temp. Concrete Barrier			Project Wide	701		701-2.03, Temporary Concrete Barriers	Howe Precast	9/16/2016
	9/23/2019	Walls	Noisewall	31542	lbs	B-Center	605	SWL-2525-R	Lab ID S19-0024, Release #343, #5, #6, #7 and #8 Reinforcing Steel (Stone Cold)	White Cap	10/1/2019
	1/2/2019	Bridges/Structures	Light Blister	794	lbs	D-110 Papago	605	#560 ES RC	Lab ID S19-0003, Release #00560CS3, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	1/8/2019
	1/2/2019	Walls	CIP Coping	5327	lbs	A-Pecos	605	202-2133-DEF	Lab ID S19-0004, Release #02133DEF, #4 Reinforcing Steel	CMC Rebar Arizona	1/8/2019
	1/3/2019	Walls	CIP Coping	5142	lbs	D-110 Papago	605	WS-6150-CBA	Lab ID S19-0023, Release #06150CBA, #4 Reinforcing Steel	CMC Rebar Arizona	1/10/2019
	1/3/2020	Roadway	Misc Dowels	1504	lbs	D-110 Papago	605		Lab ID S20-0003, Release #0012-1, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	1/7/2020
	1/4/2019	Drainage	Headwall	1204	lbs	C-Salt River	605	C201 Pipe Culvert	Lab ID S19-0024, Release #201C-4, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	1/10/2019
	1/7/2020	Fencing	Wildlife Fence	3087	lbs	Project Wide	605		Lab ID S20-0007, Release #00139, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	1/23/2020
	1/9/2018	Roadway	CIP Barrier	5828	lbs	C-Salt River	605	#320 Salt River WB	Lab ID S18-0027, Release #00208, 00320F2 and 00320H2, #3 and #4 Reinforcing Steel	CMC Rebar Arizona	1/11/2018
	1/10/2018	Bridges/Structures	Falsework			C-Salt River	601	#400 RID/59th SB	601-3.02, Falsework and Forms, Bridge 400 Embed Materials	Five G, Inc	1/10/2018
	1/10/2018	Bridges/Structures	Falsework	4	pcs	D-110 Papago	601	#400 RID/59th SB	601-3.02, Falsework and Forms, Bridge 400 Tie Rod Hardware	Coupling Nut Supply	1/10/2018
	1/10/2018	Walls	Soil Nail Wall			D-110 Papago	605	EBAR-2450-R	Release #08004SHW, #4x4x4x4x4x4 Wire Mesh	CMC Rebar Arizona	1/15/2018

Master Certification File

	1/15/2018	Bridges/Structures	Diaphragm	500	Each	C-Salt River	601	#310 Salt River EB	601-3.02, Falsework and Forms, Diaphragm Threaded Inserts	CMC Rebar Arizona	1/22/2018
	1/15/2019	Walls	Noise wall	29695	lbs	C-Salt River	605	SWL-3260-L	Lab ID S19-0040, Release #03260L18, #4, #5, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	1/23/2019
	1/16/2018	Roadway	CIP Barrier	7022	lbs	D-110 Papago	605	#500 SB, Roosevelt OP	Lab ID S18-0049, Release #00500AC7, 00500AC8 and 550K65, #3 and #5 Reinforcing Steel	CMC Rebar Arizona	1/19/2018
	1/16/2018	Roadway	CIP Barrier	23244	lbs	C-Salt River	605	#320 Salt River WB	Lab ID S18-0048, Release #00320G2, 00320X1 and 00320Y1, #4, #5, #6 and #9 Reinforcing Steel	CMC Rebar Arizona	1/19/2018
	1/17/2018	ITS/Electrical	Electrical Boxes			Project Wide	732		732-2.03, #5 and #7 Pull Boxes	CS Construction	1/17/2018
	1/18/2019	Roadway	CIP Barrier	5920	lbs		605		Lab ID S19-0075, Release #00008-2, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	1/23/2019
	1/18/2019	Roadway	CIP Barrier	37535	lbs		605		Lab ID S19-0077, Release #00008-3, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	1/23/2019
	1/23/2020	Utilities	Utility Protection Slab	3428	lbs	A-Pecos	605		Lab ID S20-0016, Release #001PPS, #4 and #8 Reinforcing Steel	CMC Rebar Arizona	1/28/2020
	1/28/2019	Drainage,ITS/Electrical	Box Culvert	47074	lbs	A-Pecos	605		Lab ID S19-0105, Release #00005C10, 00006C10, 00007C10 and 00008C10, #4, #5, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	2/4/2019
	1/30/2017	Drainage	Manhole			Off Site	605		Lab ID S17-0011, #4 Reinforcing Steel	Olson Precast (1)	2/3/2017
	1/30/2017	Walls	MSE Wall			Project Wide	929		929-3.02, Steel Components (MSE)		2/6/2017
	1/30/2019	Roadway	CIP Barrier	6659	lbs		605		Lab ID S19-0118, Release #00008-3, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	1/31/2019
	1/30/2020	Lighting	Highway Lighting Pole	539	lbs		736		Release #247, #3 and #6 Reinforcing Steel	CMC Rebar Arizona	2/4/2020
	1/31/2018	Walls	CIP Coping	47721	lbs	A-Pecos	605	202-2080-E	Lab ID S19-0109, Release #02080E1 and 02080R2A, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	2/6/2018
	1/31/2019	Bridges/Structures	Box Culvert	1601	lbs	D-110 Papago	605		Lab ID S19-0123, Release #00127-1, #4, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	2/5/2019
	2/2/2018	Bridges/Structures,Roadway	Misc Reinforced Steel	534	lbs		605		Lab ID S18-0127, Release #00005DGO, #4 Reinforcing Steel	CMC Rebar Arizona	2/6/2018
	2/2/2018	Drainage	Precast Concrete Box Culverts	33704	lbs		605		Lab ID S18-0128, Release #00001C10, 00002C10 and 00003C10, #4, #5, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	2/9/2018
	2/3/2017	Drainage	Box Culvert	48603	lbs	A-Pecos	605	BC #B12	Lab ID S17-0031, Release #'s 201, 202, 203, 204 and 204-1, #4, #5, #6 and #7 Reinforcing Steel	CMC Rebar Arizona	2/6/2017
	2/3/2020	Drainage	Retaining Wall	11958	lbs	A-Pecos	605	32-2124-D	Lab ID S20-0023, Release #00148, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	2/10/2020
	2/3/2020	Roadway,Signs/Signals	Sign Supports	34	Each	Project Wide	607		607-1.00, Roadside Sign Supports	Five G, Inc	2/3/2020
	2/3/2020	Roadway,Signs/Signals	Signs & Signals			Project Wide	1007		1007-1.00, Retroreflective Sheeting	Five G, Inc	2/3/2020
	2/3/2020	Roadway,Signs/Signals	Signs & Signals	33184	Sq. Ft	Project Wide	608		608-1.00, Overhead Sign Panels	CS Construction	2/3/2020

Master Certification File

	2/6/2017	Bridges/Structures, Drainage, Roadway	36" CMP			Project Wide	501		501-2.01, All Pipe		2/8/2017
	2/6/2017	Drainage	Box Culvert	33987	lbs	A-Pecos	605	BC #A05	Lab ID S17-0034, Release #00001, #4, #5, #6 and #7	CMC Rebar Arizona	2/6/2017
	2/6/2017	Drainage	Box Culvert	42688	lbs	A-Pecos	605	BC #B02	Lab ID S17-0035, Release #00001 and 00101-1, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	2/6/2017
	2/6/2019	Bridges/Structures, Drainage, Roadway	CIP Barrier	7398	lbs		605		Lab ID S19-0151, Release #00008-4, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	2/12/2019
	2/6/2019	Drainage	18" HDPE	111360	Linear Feet	Project Wide	508		508-2.18 PP, 18" HDPE Pipe	Advanced Drainage Systems	2/24/2017
	2/6/2019	Drainage	24" HDPE	68900	Linear Feet	Project Wide	508		508-2.24 PP, 24" HDPE Pipe	Advanced Drainage Systems	2/24/2017
	2/7/2017	Drainage	Manhole			Off Site	605		Lab ID S17-0032, 100 #785009, #3 Reinforcing Steel		2/13/2017
	2/7/2017	Drainage	Manhole			Off Site	605		Lab ID S17-0033, #3 Reinforcing Steel (Olson)		2/9/2017
	2/7/2020	Bridges/Structures	Abutment Diaphragm	292	lbs	A-Pecos	605	#020 (32nd)	Release #009354, #3 and #6 Reinforcing Steel	CMC Rebar Arizona	2/19/2020
	2/12/2019	Utilities	Fiber Optic			Project Wide	740		740-2.02, Fiber Optic Cable	CS Construction	1/20/2020
	2/12/2019	Walls	CIP Coping	6760	lbs	B-Center	605	202-2977-CBA	Lab ID S19-0200, Release #02977 and #02977CBA, #4 Reinforcing Steel	CMC Rebar Arizona	2/14/2019
	2/13/2017	Bridges/Structures	Prestressed Concrete Girders			Off Site	602		602-2.01, TPAC Certs and Test Results	TPAC (1)	2/23/2017
	2/13/2020	Drainage	Manhole	2506	lbs	D-110 Papago	605		Lab ID S20-0029, Release #0076 and 0077, #4 and #6 Reinforcing Steel	CMC Rebar Arizona	2/19/2020
	2/14/2018	ITS/Electrical	Signs & Signals				742		742-1.00, ADOT Traffic Intersection Video Detection System	CS Construction	3/7/2018
	2/15/2018	Drainage	Precast Concrete Box Culverts	11824	lbs		605		Lab ID S20-0203, Release #000004C10, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	2/22/2018
	2/15/2019	Bridges/Structures	Drilled Shaft	41552	lbs	D-110 Papago	605	#460 Van Buren	Lab ID S19-0202, Release #00460-07, #00460-08, #00460-09 and #00460-12, #5, #6 and #11 Reinforcing Steel	CMC Rebar Arizona	2/20/2019
	2/15/2019	Drainage	Box Culvert	40129	lbs	B-Center	605		Lab ID S19-0186, Release #00100-SB, #10 Reinforcing Steel	CMC Rebar Arizona	2/19/2019
	2/15/2019	Roadway	CIP Barrier	15888	lbs		605		Lab ID S19-0197, Release #00000-3 and 00008-6, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	2/19/2019
	2/15/2019	Roadway	CIP Barrier	22042	lbs		910		Lab ID S19-0204, Release #00003H, #00003I, #00003J and #00003K, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	2/20/2019
	2/15/2019	Roadway	CIP Barrier	27563	lbs	A-Pecos	605		Lab ID S19-0205, Release #01027, #3, #4 and #5 Reinforcing Steel	CMC Rebar Arizona	2/20/2019
	2/18/2020	Pavement	Misc PCCP	817	lbs		605		Release #10033, #5 Reinforcing Steel	CMC Rebar Arizona	2/19/2020
	2/19/2019	Drainage	Box Culvert	43531	lbs		605		Lab ID S19-0214, Release #00103-SB, #10 Reinforcing Steel	CMC Rebar Arizona	2/22/2019
	2/20/2017	Drainage	Box Culvert	25158	lbs	A-Pecos	605	BC #B02	Lab ID S17-0087, Release #'s 00101-2, 00101-6 and 00101-7, #4, #5, #6 and #7 Reinforcing Steel	CMC Rebar Arizona	2/22/2017

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	2/20/2019	Bridges/Structures	Temp. Shoring	1092	lbs	C-Salt River	605		Lab ID S19-0223, Release #18045EX, #10 Reinforcing Steel	CMC Rebar Arizona	3/1/2019
	2/21/2017	ITS/Electrical	Conduit			Project Wide	732		732-2.02, Electrical Conduit, Test Results		2/23/2017
	2/21/2018	ITS/Electrical	Conduit			Project Wide	732		732-1.00, Electrical Underground Material	CS Construction	1/16/2020
	2/21/2019	Bridges/Structures	Misc Footings	3247	lbs	C-Salt River	605		Lab ID S19-0224, Release #038151SWL, No. 4, 5, 6, 7 and 8 Reinforcing Steel	CMC Rebar Arizona	3/1/2019
	2/22/2017	Drainage	Box Culvert	28029	lbs	A-Pecos	605	BC #A05	Lab ID S17-0097, Release #00001-2 and 00001-6, #4, #5, #6 and #7 Reinforcing Steel	CMC Rebar Arizona	2/23/2017
	2/23/2017	Drainage	30" HDPE	11200	Linear Feet	Project Wide	508		508-2.30 PP, 30" HDPE Pipe	Advanced Drainage Systems	2/24/2017
	2/23/2018	Bridges/Structures	Temporary Bridge	691	lbs	C-Salt River	605		Lab ID S18-0198, Release #00200-TB, #5 Reinforcing Steel	CMC Rebar Arizona	3/2/2018
	2/23/2018	Utilities	Utility Protection Slab	5526	lbs		605		Lab ID S18-0197, Release #00100, #4, #5 and #6 Reinforcing Steel	CMC Rebar Arizona	3/2/2018
	2/24/2017	Walls	MSE Wall Panels			Off Site	605		Lab ID S17-0097, #4 Reinforcing Steel, Heat #PL17100502	Oldcastle (1)	2/27/2017
	2/25/2019	Bridges/Structures	Misc Footings	1341	lbs	D-110 Papago	605		Lab ID S19-0225, Release #38152SWL, #6 Reinforcing Steel	CMC Rebar Arizona	3/4/2019
	2/25/2019	Bridges/Structures	OVHD SGN			Project Wide	606		606-2.03, Tapered Tubes for Overhead Signs (Valmont-UIS)	Universal Industrial Sales, Inc.	2/25/2019
	2/26/2019	Walls	NoiseWall	1395	lbs	D-110 Papago	605		Lab ID S19-0227, Release #38153SWL, #8 Reinforcing Steel	CMC Rebar Arizona	2/28/2019
	2/26/2019	Walls	NoiseWall	30752	lbs	A-Pecos	605	SWL-2135-R	Lab ID S19-0230, Release #02135R-2, #4, #5, #6 and #7 Reinforcing Steel	CMC Rebar Arizona	2/28/2019
	2/28/2017	Drainage	Box Culvert	107	lbs	A-Pecos	605	BC #A05	Release #00001-7, #4 and #6 Reinforcing Steel	CMC Rebar Arizona	3/1/2017
	2/28/2019	Bridges/Structures	Abutment	935	lbs	C-Salt River	605	#365 Elwood	Lab ID S19-0249, Release #00365CS7, #4 Reinforcing Steel	CMC Rebar Arizona	3/25/2019
	2/28/2019	Signing & Pavement Markings	Permanent Pavement Marking			Project Wide	706		706-2.02, Reflective Pavement Markers	Ennis-Flint	2/28/2019
	3/1/2017	Drainage	Box Culvert	1816	lbs	A-Pecos	605	BC #A05	Lab ID S17-0102, Release #00001-8, #4, #5 and #7 Reinforcing Steel	CMC Rebar Arizona	3/1/2017
	3/1/2018	Bridges/Structures	Temporary Bridge	691	lbs	C-Salt River	605		Lab ID S18-0204, Release #00201-TB, #5 Reinforcing Steel	CMC Rebar Arizona	3/6/2018
	3/1/2019	ITS/Electrical,Lighting	Light Foundation	906	lbs	C-Salt River	605		Lab ID S19-0252, Release #00010, #4, #5 and #7 Reinforcing Steel	CMC Rebar Arizona	3/5/2019
	3/4/2019	Bridges/Structures	Pier Cap	41405	lbs	D-110 Papago	605	#420 Buckeye	Lab ID S19-0254, Release #00420C20 and 00420D02, #4, #6, #7 and #10 Reinforcing Steel	CMC Rebar Arizona	3/5/2019
	3/7/2019	Drainage	48" CMP	1656	Linear Feet	Project Wide	501		501-2.48.CM, 48" CMP	Pacific Corrugated Pipe Co.	3/7/2019
	3/8/2017	Drainage	54" HDPE	1792	Linear Feet	C-Salt River	508		508-2.54 PP, 54" HDPE Pipe	Advanced Drainage Systems	3/17/2017
	3/11/2019	Walls	NoiseWall	26354	lbs	A-Pecos	605	SWL-2135B-R	Lab ID S19-0278, Release #02135B-1, #4, #5, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	3/15/2019

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	3/11/2019	Walls	Noisewall	32778	lbs	A-Pecos	605	SWL-2135B-R	Lab ID S19-0288, Release #2135B-3, #4, #5, #6 and #8 Reinforcing Steel	CMC Rebar Arizona	3/15/2019
	3/13/2018	Bridges/Structures,Walls	Precast Concrete Girders				602		Lab ID SF18-0255, #3 Reinforcing Steel (Concrete Design)	Nucor Fastener Division	3/16/2018
	3/14/2017	Utilities	Vault			Off Site	602		602-2-02, Reinforcing Steel and Prestressing Steel for Electrical Boxes (Oldcastle)	Oldcastle (1)	3/21/2017
	3/15/2018	Drainage	Vault	184168	lbs		605		Lab ID SF18-0249_ramp Vaults_Oldcastle (CERT)	Oldcastle	3/16/2018
	3/15/2019	Bridges/Structures	Abutment	37	lbs	D-110 Papago	605	#430 OF RAILROAD Frontage	Release #00430C04, #11 Reinforcing Steel	CMC Rebar Arizona	3/19/2019

Form QA770-4 Example of EJ Log used on a previous project for closeout purposes

Engineering Judgement for Concrete

TestForm	Testing Name	SIN	Sample Date	EngineerComment
Concrete Truck Log	Concrete Truck Log	1496316121601	12/16/2016	For class P concrete placed as PCCP shoulder, load 7 exceeded the allowable discharge time of 90 minutes by 9 minutes. Considering that concrete temperature at 99 minutes was recorded to be 87F degrees, and that concrete remained plastic through the end of the discharge of the load with no hardening or set-up of the concrete observed; this deviation should not materially affect the overall performance of the placed PCCP concrete. - Devan Allred P.E.
Concrete Truck Log	Concrete Truck Log	A222617011001	1/10/2017	For class B concrete placed as shoulder gutter, load 2 exceeded the allowable slump of 4IN plus/minus 1IN by 3/4IN on the high side. Considering that no honey combing or rock pockets were observed in the placed concrete after forms were stripped, and considering that 7 day compressive strength results exceeded the required 28 day required compressive strength ; this deviation should not materially affect the overall performance of the placed shoulder gutter concrete. - Devan Allred P.E.
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717012602	1/26/2017	For Oldcastle MSE wall panel precast concrete coarse aggregate, 88% passing the 1/2 inch sieve deviated from the tolerance by 2% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the Oldcastle Precast coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	A204317012602	1/26/2017	For class B concrete placed as catch basin walls, load 1 did not meet the allowable slump of 4IN plus/minus 1IN by 1/4IN on the low side. Considering that no honey combing or rock pockets were observed in the placed concrete after forms were stripped, and considering that 7 day compressive strength results exceeded the required 28 day required compressive strength ; this deviation should not materially affect the overall performance of the placed catch basin concrete. - Devan Allred P.E.

Engineering Judgement for Concrete

Concrete Truck Log	Concrete Truck Log	A204317020702	2/7/2017	For class B concrete placed as curb and gutter, load 2 exceeded the allowable discharge time of 90 minutes by 2 minutes. Considering that concrete temperature at 90 minutes did not exceed specified limits, and that concrete remained plastic through the end of the discharge of the load with no hardening or set-up of the concrete observed; this deviation should not materially affect the overall performance of the placed curb and gutter concrete. - Devan Allred P.E.
Concrete Truck Log	Concrete Truck Log	1496317020801	2/8/2017	For Class S concrete placed as a pipe collar, the maximum allowable discharge time of 90 minutes was exceeded by 23 minutes. Considering that the concrete temperature was measured at 77F after the placement exceeded the time limit, this deviation should not materially affect the performance of the concrete. Newel White, PE
Concrete Truck Log	Concrete Truck Log	1705717021002	2/10/2017	For class S concrete placed as drilled shaft foundations, load 2 exceeded the allowable slump of 5IN plus/minus 1.5IN by 3/4IN on the high side. Considering that water to cement ratios did not exceed specified limits, concrete temperatures remained within allowable limits, concrete discharge times were within allowable limits, and 3 day break results exceeded 80 percent of design strength; this deviation should not materially affect the overall performance of the placed drilled shaft foundation concrete. - Devan Allred P.E.
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717021404	2/14/2017	For Oldcastle MSE wall panel precast concrete coarse aggregate, 16% passing the No. 4 sieve deviated from the tolerance by 1% on the fine side. Considering the satisfactory test history on the No. 4 sieve of the Oldcastle Precast coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717022101	2/21/2017	For Oldcastle precast MSE wall concrete coarse aggregate, 21% passing the No. 4 sieve deviated from the tolerance by 6% on the fine side. Considering the satisfactory test history on the No. 4 sieve of the Oldcastle Precast coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE

Engineering Judgement for Concrete

ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	A204717022708	2/27/2017	For Cemex concrete coarse aggregate, 94% passing the 1 inch sieve deviated from the tolerance by 1% on the coarse side. Considering the satisfactory test history on the 1 inch sieve of the coarse aggregate from the 19th Ave. plant, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117030102	3/1/2017	For Arizona Materials 43rd Plant concrete coarse aggregate, 19% passing the 1/2 inch sieve deviated from the tolerance by 6% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the 43rd Plant coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	A204317030903	3/9/2017	For Class S concrete placed as a Drilled Shaft, the allowable discharge time for load 9 exceeded the limit by 1 minute. Considering that the concrete remained plastic and workable throughout the placement, this deviation should not materially affect the performance of the concrete. Newel White, PE
Concrete Truck Log	Concrete Truck Log	1419517031001	3/10/2017	For Class S concrete placed as bridge columns, the maximum allowable discharge time of 90 minutes was exceeded by 15 minutes for load 1. Considering that the concrete temperature was measured at 77F and concrete remained plastic after the placement exceeded the time limit, this deviation should not materially affect the performance of the concrete. Devan Allred, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117031302	3/13/2017	For Arizona Materials 43rd Plant concrete coarse aggregate, 21% passing the 1/2 inch sieve deviated from the tolerance by 4% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the 43rd Plant coarse aggregate and the satisfactory test history of concrete strength specimens associated with this mix, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE

Engineering Judgement for Concrete

ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717031402	3/14/2017	For Oldcastle precast MSE wall concrete coarse aggregate, 87% passing the 1/2 inch sieve deviated from the tolerance by 3% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the Oldcastle Precast coarse aggregate and the satisfactory test history of concrete strength specimens, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1712917031401	3/14/2017	For class S concrete that was placed as a Drilled Shaft, the allowable discharge time for load 1 exceeded the limit by 7 minutes. Considering that the concrete remained plastic and workable throughout the placement, the temperature of the concrete after 90 minutes was 77 degree F, this deviation should not materially affect the performance of the concrete. Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717031603	3/16/2017	For Oldcastle precast MSE wall concrete coarse aggregate, 8% passing the No. 8 sieve deviated from the tolerance by 3% on the fine side. Considering the satisfactory test history on the No. 8 sieve of the Oldcastle Precast coarse aggregate and the satisfactory test history of concrete strength specimens, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117031604	3/16/2017	For Cemex concrete coarse aggregate, 1.2% passing the No. 200 sieve deviated from the tolerance by 0.2% on the fine side. Considering the satisfactory test history on the No. 200 sieve of the coarse aggregate from the Maricopa plant, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1682817031701	3/17/2017	Measured slump on the 3rd load of class S concrete placed as bridge columns exceeded the allowable slump of 6 inches by 1 inch. Considering that 28 day concrete compressive strength results exceeded the required 3500 psi, this deviation should not material affect the performance of the placed concrete. Devan Allred PE

Engineering Judgement for Concrete

Concrete Truck Log	Concrete Truck Log	A204317032201	3/22/2017	For Class S Concrete placed as a drilled shaft, Load 9 exceeded the allowable time between batching to discharge of 90 minutes. The vast majority of the concrete in the truck was discharged within the allotted 90 minutes. The remaining concrete was tested for temperature and slump and the results were 79F degrees and 5.50", respectively. The concrete remained plastic throughout the end of the discharge of the load with no hardening or set-up of the concrete observed. Based on the facts previously mentioned, this deviation should not materially affect the overall performance of the placed concrete. -Lee Robertson, PE
Concrete Truck Log	Concrete Truck Log	1200317032201	3/22/2017	For concrete mix design #1594155, the maximum allowable slump is 6". Load 3 of the drilled shaft splice pour had a measured slump of 7.50". DN #C-002 was created as a result and the disposition of the DN will be made according to the cylinder break results of the cylinders that were made from this truck. -Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117032312	3/23/2017	For re-sampled and re-tested Rock Solid concrete coarse aggregate, 1.1% passing the No. 200 sieve and 6% passing the No. 8 sieve deviated from the tolerance by 0.1% and 1% respectively, on the fine side. Considering the satisfactory test history of the strength specimens and that this material was placed as temporary controller cabinet foundations, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117032703	3/27/2017	For Cemex concrete fine aggregate from the 19th Ave. plant, 11% passing the No. 100 sieve and 4.3% passing the No. 200 sieve deviated from the tolerance by 1% and 0.3% respectively on the fine side. Considering the satisfactory test history of the fine aggregate on the No. 100 and No. 200 sieve and the satisfactory Sand Equivalent test history, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE

Form QA770-5 Example of NCR Log used on previous project used for closeout purposes

NCR's concerning Materials

NCR No	Date	Description	NCR Status	Date	DirNo	Specification	Closure Date
A-002n	11/11/2016	Contractor's 2nd concrete truck ran over 90 minute time limit by 10 minutes prior to completion of concrete placement @ CB A59. Temperature of concrete @ 90 minutes was 83 degrees.	Closed		12630161111	601	
A-003n	11/17/2016	The measured slump (2 inches) was not within +/- 1 inch of the specified slump of 4 inches for CalPortland mix number 3025CS2.	Closed		17057161117	503	
A-004n	11/16/2016	Compaction tests performed on the FMS conduit trench backfill failed to meet project requirement of 95% of the maximum dry density. The failing test was covered over by additional lifts.	Closed	11/16/2016	14963161116	732	
A-012n	2/14/2017	Measured slump of concrete placed for catch basins was 1IN, mix requirements are 3IN to 5IN. Concrete discharge time exceeded the allowable limit of 90 minutes, total time from batch to final discharge was 229 minutes. Initial set of concrete was observed along with 12 inch size clods of concrete in the chute of the concrete during placement of the last catch basin (STA 2000+10). Contractor place set up concrete and concrete clods into the forms of the catch basin at STA 2000+10.	Closed	2/14/2017	A2411170214	503	

NCR's concerning Materials

A-026n	4/5/2017	For HMA Lot #3 placed with 416 Mix 220908(5181-211) w/15% RAP from Vulcan Materials, the core thickness Percent of Lot Within Limits (PWL) score of 69% deviated from the allowable PWL of 85% by 16% on the low side. As per spec section 416-7.03 "A lot will be considered acceptable if the PWL of the actual thickness placed is greater then 85 percent of the required thickness." See attached for core station locations.	Closed	4/5/2017		416	
A-031n	5/1/2017	MSE Wall 202-2385-B - Sample of reinforced backfill failed to meet project resistivity requirements (reference SIN 1706017042803, 1706017042804 and 1706017050202). This material was placed as reinforced backfill in an approx. 12IN lift (current/exposed surface, approx. elevation 1173.5FT) at the following locations: STA 10+30 to STA 11+60 STA 12+10 to STA 12+20 STA 12+70 to STA 12+80 STA 12+90 to STA 13+30	Closed	5/1/2017	17060170501	929	
A-055n	8/2/2017	A NCR is generated as an escalation of DN-A041 in which of Catch basin # A-222 was cast with concrete that did not meet the specifications for slump, temperature, and time of placement. Contractor indicated that the catch basin will be removed.	Closed	8/2/2017	16974170802	503	8/7/2017

NCR's concerning Materials

A-059n	8/31/2017	This NCR is being issued to escalate DN A-023. Contractor elected to leave in place subgrade material (top 3 feet of embankment) outside of the edge of pavement that does not meet the Subgrade Acceptance Factor requirements (see attached C202P/ADOT signed escalation form). Reference RFI-0122 and DN A-023 for further details.	Closed			203	9/13/2017
A-060n	9/1/2017	This NCR is being issued to escalate DN A-036. Contractor elected to leave in place subgrade material (top 3 feet of embankment) outside of the edge of pavement that does not meet the Subgrade Acceptance Factor requirements (see attached C202P/ADOT signed escalation form). Reference RFI-0122 and DN A-036 for further details.	Closed			203	9/14/2017
A-062n	9/12/2017	This NCR is being issued to elevate DN A-042. Additional soil samples obtained within the two failing sublots indicate the material within the entire sublots do not meet the SAF requirements. The two failing sublots are located on EB mainline from STA 2040+00 to 2055+00 and EB mainline from STA 2055+00 to 2065+00. see attached chart for locations where samples were obtained and SAF test results.	Closed			203	7/1/2019

NCR's concerning Materials

A-067n	10/5/2017	Subgrade soil samples obtained within two sublots indicate that the material within the entire sublots do not meet the SAF requirements. The two failing sublots are located on L202 mainline from STA 2092+00 to 2107+00 and from STA 2107+00 to 2115+00. Laboratory testing for Atterberg limits (PI) and Sieve analysis (-#200) were completed on two subgrade samples. Sublot Stationing Sample Station PI -200 MDR/SAF 1 Sublot 1 2092+00 to 2107+00 2104+57 12 52 86 2 Sublot 2 2107+00 to 2115+00 2112+39 7 52 72 The Atterberg limits and Sieve analysis were plotted on MDR Figure 1-2 Subgrade Acceptance Chart Design R-Value Segment A - Mainline Lanes and Shoulders. The subgrade tests in items 1 and 2 indicate that the subgrade is in the unacceptable range. Please see the MDR Figure 1-2 attached to this NCR for the additional information.	Closed	10/5/2017	16974171005	203	4/23/2019
A-068n	10/18/2017	Soundwall SWL-2050-R Within approximate stationing 50+50 to 51+00, the wall footing was cast too low resulting in a mortar bedding joint of up to 1.5 inches thick. Per ACI 530 the allowable thickness is 1/4 inch to 3/4 inch. Reference Specification for Masonry Structures (TMS 602-13/ACI 530.1-13/ASCE 6-13), Part 1, Section 3.3 page S-57.	Closed	10/18/2017	16337171018	914	11/30/2017

NCR's concerning Materials

A-084n	12/22/2017	C202P placed Cemex Plant 1960 concrete loads 13 and 14 in the Box Culvert B13 floor slab. A portion of both loads of concrete that was placed exceeded the the 90 minute requirement (time exceedance varied by 31 and 34 minutes). The Concrete was placed between stations 2431+30 and 2431+42, 83' Lt to 102' Lt. C202P placed Cemex Plant 1960 concrete loads 15, 16, and 17 in the Box Culvert B07 floor slab. A portion of the loads of concrete that was placed exceeded the the 90 minute requirement (time exceedance varied by 34 and 35 minutes). The Concrete was placed between stations 2410+93 and 2411+05, 85' Lt to 121' Lt.	Closed	12/22/2017	11620171222	601	1/24/2018
A-095n	2/9/2018	The closure for the daily blast set up at 17th Ave. exceeded the 25 minute allowance. The total time closed was from 13:13 to 13:41(28 minutes).	Closed	2/9/2018	17043180209	701	2/27/2018
A-096n	2/15/2018	Cal Portland Grout Mix Design #P3528GF1 was placed in a 4 foot section of the wall (sta 29+16 to 29+20). Grout originated from Plant #135 which is not an approved plant.	Closed	2/15/2018	16828180215	914	2/22/2018
A-103n	3/14/2018	Loads 7, 8, 9, 10, 12, and 13 of the Concrete Mix ID 1588397 (1960) placed in sound wall SW 2080-R footing from 13+01 to 17+42 exceeded the 90 minutes maximum placement time as required in the RFC specification section 1006-4.03. Please refer to the concrete truck log SIN 1162018031401 for additional information.	Closed	3/14/2018	11620180314	601	3/28/2018

Form QA810-1 Example of Engineering Judgment Log used on a previous Project

SR 202 - 202L MA 054 H8827 01 C - SR202

QA Laboratory / Field Tests

Log of Engineer Decision Tests

Beginning Date: 7/1/2016

Ending Date: 9/1/2017

Category: PCC Concrete & Aggregate

Report Rev: Latest REV

Created by: Lee Robertson

TestForm	Testing Name	SIN	Lab ID	Sampler	Sample Date	Supplier	Material Code	TypeCode	Segment	Structure	Feature	EngineerComment
Concrete Truck Log	Concrete Truck Log	1496316121601	A1-16000030D	Steve Hackert	12/16/2016	Calportland	P	40	A-Pecos		Roadway	For class P concrete placed as PCCP shoulder, load 7 exceeded the allowable discharge time of 90 minutes by 9 minutes. Considering that concrete temperature at 99 minutes was recorded to be 87F degrees, and that concrete remained plastic through the end of the discharge of the load with no hardening or set-up of the concrete observed; this deviation should not materially affect the overall performance of the placed PCCP concrete. - Devan Allred P.E.
Concrete Truck Log	Concrete Truck Log	A222617011001	A1-17000004D	Jaime Hinojos	1/10/2017	Calportland	B	25	A-Pecos		Curb & Gutter	For class B concrete placed as shoulder gutter, load 2 exceeded the allowable slump of 4IN plus/minus 1IN by 3/4IN on the high side. Considering that no honey combing or rock pockets were observed in the placed concrete after forms were stripped, and considering that 7 day compressive strength results exceeded the required 28 day required compressive strength ; this deviation should not materially affect the overall performance of the placed shoulder gutter concrete. - Devan Allred P.E.
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717012602	A1-17000042B	Rex Measom	1/26/2017	Oldcastle	CA	7	Off Site		Precast Wall Panel	For class B concrete placed as precast concrete coarse aggregate, considering the 1/2 inch sieve deviated from the tolerance by 2% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the Oldcastle Precast coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	A204317012602	A1-17000012B	Jim Grindley	1/26/2017	Calportland	B	25	A-Pecos		Catch Basin	For class B concrete placed as catch basin walls, load 1 did not meet the allowable slump of 4IN plus/minus 1IN by 1/4IN on the low side. Considering that no honey combing or rock pockets were observed in the placed concrete after forms were stripped, and considering that 7 day compressive strength results exceeded the required 28 day required compressive strength ; this deviation should not materially affect the overall performance of the placed catch basin concrete. - Devan Allred P.E.
Concrete Truck Log	Concrete Truck Log	A204317020702	A1-17000040D	Jim Grindley	2/7/2017	Calportland	B	25	A-Pecos		Curb & Gutter	discharge time of 90 minutes by 2 minutes. Considering that concrete temperature at 90 minutes did not exceed specified limits, and that concrete remained plastic through the end of the discharge of the load with no hardening or set-up of the concrete observed; this deviation should not materially affect the overall performance of the placed curb and gutter concrete. - Devan Allred P.E.

Concrete Truck Log	Concrete Truck Log	1705717021002	A1-17000065C	Rex Measom	2/10/2017	Arizona Materials	S	35	A-Pecos	#030 (24th)	Drilled Shaft	For class S concrete placed as drilled shaft foundations, load 2 exceeded the allowable slump of 5IN plus/minus 1.5IN by 3/4IN on the high side. Considering that water to cement ratios did not exceed specified limits, concrete temperatures remained within allowable limits, concrete discharge times were within allowable limits, and 3 day break results exceeded 80 percent of design strength; this deviation should not materially affect the overall performance of the placed drilled shaft foundation concrete. - Devan Allred P.E.
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717021404	A1-17000099A	Rex Measom	2/14/2017	Oldcastle	CA	7	Off Site		MSE Wall	the No. 4 sieve deviated from the tolerance by 1% on the fine side. Considering the satisfactory test history on the No. 4 sieve of the Oldcastle Precast coarse aggregate, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	A204717022708	A1-17000214B	AdanJoseLeon	2/27/2017	Cemex	CA	57	Off Site		Misc. Concrete	from the tolerance by 1% on the coarse side. Considering the satisfactory test history on the 1 inch sieve of the coarse aggregate from the 19th Ave. plant, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	A204317030903	A1-17000261D	Jim Grindley	3/9/2017	Arizona Materials	S	35	C-Salt River	#320 Salt River WB	Drilled Shaft	For Class S concrete placed as a Drilled Shaft, the allowable discharge time for load 9 exceeded the limit by 1 minute. Considering that the concrete remained plastic and workable throughout the placement, this deviation should not materially affect the performance of the concrete. Newel White, PE
Concrete Truck Log	Concrete Truck Log	1419517031001	A1-17000266B	Jason Foree	3/10/2017	Cemex	S	35	A-Pecos	#050 (17th)	Column	For Class S concrete placed as bridge columns, the maximum allowable discharge time of 90 minutes was exceeded by 15 minutes for load 1. Considering that the concrete temperature was measured at 77F and concrete remained plastic after the placement exceeded the time limit, this deviation should not materially affect the performance of the concrete. Devan Allred, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117031302	A1-17000297A	AdanJoseLeon	3/13/2017	Arizona Materials	CA	57	Off Site		Misc. Concrete	For Arizona Materials 43rd Plant concrete coarse aggregate, 21% passing the 1/2 inch sieve deviated from the tolerance by 4% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the 43rd Plant coarse aggregate and the satisfactory test history of concrete strength specimens associated with this mix, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717031402	A1-17000299A	Rex Measom	3/14/2017	Oldcastle	CA	7	Off Site		MSE Wall	inch sieve deviated from the tolerance by 3% on the coarse side. Considering the satisfactory test history on the 1/2 inch sieve of the Oldcastle Precast coarse aggregate and the satisfactory test history of concrete strength specimens, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1712917031401	A1-17000293D	Christopher Hernandez	3/14/2017	Cemex	S	35	C-Salt River	#320 Salt River WB	Column	For class S concrete that was placed as a Drilled Shaft, the allowable discharge time for load 1 exceeded the limit by 7 minutes. Considering that the concrete remained plastic and workable throughout the placement, the temperature of the concrete after 90 minutes was 77 degree F, this deviation should not materially affect the performance of the concrete. Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717031603	A1-17000328A	Rex Measom	3/16/2017	Oldcastle	CA	7	Off Site		MSE Wall	sieve deviated from the tolerance by 3% on the fine side. Considering the satisfactory test history on the No. 8 sieve of the Oldcastle Precast coarse aggregate and the satisfactory test history of concrete strength specimens, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117031604	A1-17000332A	AdanJoseLeon	3/16/2017	Cemex	CA	57	Off Site		Misc. Concrete	from the tolerance by 0.2% on the fine side. Considering the satisfactory test history on the No. 200 sieve of the coarse aggregate from the Maricopa plant, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1682817031701	A1-17000333C	Andrew McDaniel	3/17/2017	Cemex	S	35	A-Pecos	#030 (24th)	Column	exceeded the allowable slump of 6 inches by 1 inch. Considering that 28 day concrete compressive strength results exceeded the required 3500 psi, this deviation should not material affect the performance of the placed concrete. Devan Allred PE

Concrete Truck Log	Concrete Truck Log	A204317032201	A1-17000346C	Jim Grindley	3/22/2017	Arizona Materials	S	35	C-Salt River	#310 Salt River EB	Drilled Shaft	For Class S Concrete placed as a drilled shaft, Load 9 exceeded the allowable time between batching to discharge of 90 minutes. The vast majority of the concrete in the truck was discharged within the allotted 90 minutes. The remaining concrete was tested for temperature and slump and the results were 79F degrees and 5.50", respectively. The concrete remained plastic throughout the end of the discharge of the load with no hardening or set-up of the concrete observed. Based on the facts previously mentioned, this deviation should not materially affect the overall performance of the placed concrete. -Lee Robertson, PE
Concrete Truck Log	Concrete Truck Log	1200317032201	A1-17000355F	Miguel Sandoval	3/22/2017	Cemex	S	35	C-Salt River	#320 Salt River WB	Drilled Shaft	For concrete mix design 1557, the maximum allowable slump is 5"-5.50". The drilled shaft splice pour had a measured slump of 7.50". DN #C-002 was created as a result and the disposition of the DN will be made according to the cylinder break results of the cylinders that were made from this truck. -Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117032312	A1-17000236B		3/23/2017	Rock Solid	CA	57	Off Site		Misc. Concrete	For re-sampled and re-tested Rock Solid concrete coarse aggregate, 1.1% passing the No. 200 sieve and 6% passing the No. 8 sieve deviated from the tolerance by 0.1% and 1% respectively, on the fine side. Considering the satisfactory test history of the strength specimens and that this material was placed as temporary controller cabinet foundations, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117032703	A1-17000416A	AdanJoseLeon	3/27/2017	Cemex	FA	57	Off Site		Misc. Concrete	For Cemex concrete fine aggregate from the 19th Ave. plant, 11% passing the No. 100 sieve and 4.3% passing the No. 200 sieve deviated from the tolerance by 1% and 0.3% respectively on the fine side. Considering the satisfactory test history of the fine aggregate on the No. 100 and No. 200 sieve and the satisfactory Sand Equivalent test history, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1712917040601	A1-17000493D	Christopher Hernandez	4/6/2017	Cemex (1956)	S	35	C-Salt River	#320 Salt River WB	Drilled Shaft	time of 90 minutes was exceeded by 7 minutes for load 2. Considering that the concrete temperature was measured at 83F and concrete remained plastic after the placement exceeded the time limit (slump was measured to be 5"), this deviation should not materially affect the performance of the concrete. -Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1712117041202	A1-17000550C	AdanJoseLeon	4/12/2017	Arizona Materials (1)	CA	57	Off Site		Misc. Concrete	For Arizona Materials 43rd Plant concrete coarse aggregate, 23% passing the 1/2 inch sieve deviated from the tolerance by 2% on the coarse side. Considering the 43rd Plant coarse aggregate was out by 2%, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717041403	A1-17000567D	Rex Measom	4/14/2017	Oldcastle (1)	CA	7	Off Site		Precast MSE Panel	For Oldcastle precast MSE wall concrete coarse aggregate, 89% passing the 1/2 inch sieve deviated from the tolerance by 1% on the coarse side. Considering the 43rd Plant coarse aggregate was out by only 1%, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	A204317041701	A1-17000565E	Jim Grindley	4/17/2017	Cemex (1956)	S	40	C-Salt River	#320 Salt River WB	Cap	For Class S Concrete Mix Design No. 1578284, the maximum allowable slump allowed is 5". Load #3 exceeded the maximum allowable slump by 1". Concrete cylinders were made from this truck to verify that it will reach its required 28-day strength requirement. It should also be noted that this mix design is 4000psi, where the requirements for the pier cap are 3500psi. -Lee Robertson, PE
ARIZ 201 Concrete	ARIZ 201 Sieve Analysis Concrete Aggregates	1705717042101	A1-17000607E		4/21/2017	Oldcastle (1)	CA	7	Off Site		Precast MSE Panel	aggregate, 89% passing the 1/2 inch sieve deviated from the tolerance by 1% on the coarse side. Considering that the Oldcastle coarse aggregate was out by 1%, this deviation should not materially affect the performance of the concrete. Aaron Smith, PE
Concrete Truck Log	Concrete Truck Log	1710317060201	A1-17000940D	Jim Grindley	6/2/2017	Cemex (1956)	S	40	C-Salt River	#320 Salt River WB	Pier Cap	For concrete mix design 1578284, the allowable slump range is 3"-5". Truck No. 11 was tested at a slump of 5.75" which is 0.75" higher than the allowable slump per specifications. The truck was allowed to pour based on past breaking history of the mix design and the fact that the mix that was poured was 4000 psi and the requirement of the pier cap is 3500 psi per the plans. Representative cylinders were made out of the load in question. Final acceptance of the concrete will be based on the acceptable cylinder breaking strengths from this truck. -Lee Robertson, PE



Form QA824-01 Concrete Paving Thickness by Direct Measurement

Document Owner: Lee Robertson

Revision - 0

Effective Date:

Approved By:

Revision Date:

Review By:

Approved By:

Release Date:

Page 1 of 1

Lot ID Number*

T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

* LIN will be the same number as the first set of cylinders cast.

Test	Station	Offset (From pavement edge)	L / R		Design Thickness	Direct Measurement			Average Thickness	Core Location		Deficiency	
						1	2	3					
1	+		L	R						Y	N	Y	N
2	+		L	R						Y	N	Y	N
3	+		L	R						Y	N	Y	N
4	+		L	R						Y	N	Y	N
5	+		L	R						Y	N	Y	N
6	+		L	R						Y	N	Y	N
7	+		L	R						Y	N	Y	N
8	+		L	R						Y	N	Y	N
9	+		L	R						Y	N	Y	N
10	+		L	R						Y	N	Y	N
11	+		L	R						Y	N	Y	N
12	+		L	R						Y	N	Y	N
13	+		L	R						Y	N	Y	N
14	+		L	R						Y	N	Y	N
15	+		L	R						Y	N	Y	N


Remarks

Technician Name:

Date:

Reviewed By:

Date:

		Form QA824-02 Concrete Sampling and Testing (T23,T141, T119, T152, & T309)	
Document Owner: Lee Robertson		Revision - 0	
Approved By:		Effective Date:	
Approved By:		Revision Date:	
Approved By:		Release Date:	
		Page 1 of 1	

<table border="1"> <tr> <th colspan="16">Lot ID Number</th> </tr> <tr> <th>T</th><th>T</th><th>Q</th><th>P</th><th>I</th><th>D</th><th>Y</th><th>Y</th><th>M</th><th>M</th><th>D</th><th>D</th><th>S</th><th>N</th> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																Lot ID Number																T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N															Material/Mix Code: _____	
Lot ID Number																																																													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N																																																
# Sublots in Lot: _____		Grade/Class: _____																																																											
Segment: _____		Supplier: _____																																																											
Roadway: _____		Spec Section: _____																																																											
Location: _____		Material Description: _____																																																											
Feature: _____		*LIN Reference: _____																																																											
Structure #: _____		Misc.: _____																																																											
<p>*Reference of the primary LIN, where cylinders were made, is needed to join quantity information from Truck Log for MSTR compliance.</p>																																																													

Field Testing

Concrete Application:		(Structural)	(Non-structural)	(Paving)																														
Sublot #: _____		Sublot Quantity: _____ (yds ³)																																
		For Paving Concrete Only																																
<table border="1"> <tr> <th colspan="10">Sublot Station Limits:</th> </tr> <tr> <th colspan="5">Beginning Station</th> <th colspan="5">Ending Station</th> </tr> <tr> <td></td><td></td><td></td><td></td><td>+</td> <td></td><td></td><td></td><td></td><td>+</td> </tr> </table>					Sublot Station Limits:										Beginning Station					Ending Station									+					+
Sublot Station Limits:																																		
Beginning Station					Ending Station																													
				+					+																									
Sample Type: (RI) (RS) (FI) (FS) (I) (IA)																																		
<table border="1"> <tr> <th colspan="10">Sublot Width Limits:</th> </tr> <tr> <th colspan="5">Offset Dist. 1 (ft.)</th> <th colspan="5">Offset Dist. 2 (ft.)</th> </tr> <tr> <td></td><td></td><td></td><td></td><td>(Lt.) (Rt.)</td> <td></td><td></td><td></td><td></td><td>(Lt.) (Rt.)</td> </tr> </table>					Sublot Width Limits:										Offset Dist. 1 (ft.)					Offset Dist. 2 (ft.)									(Lt.) (Rt.)					(Lt.) (Rt.)
Sublot Width Limits:																																		
Offset Dist. 1 (ft.)					Offset Dist. 2 (ft.)																													
				(Lt.) (Rt.)					(Lt.) (Rt.)																									
Split Sample ID: _____																																		
Random #1: _____ Random #2: _____																																		
F.I.D.: _____																																		
<table border="1"> <tr> <th colspan="10">Test Location:</th> </tr> <tr> <th colspan="5">Station</th> <th colspan="5">Offset (ft.)</th> </tr> <tr> <td></td><td></td><td></td><td></td><td>+</td> <td></td><td></td><td></td><td></td><td>(Lt.) (Rt.)</td> </tr> </table>					Test Location:										Station					Offset (ft.)									+					(Lt.) (Rt.)
Test Location:																																		
Station					Offset (ft.)																													
				+					(Lt.) (Rt.)																									

Concrete Info.

Batch Water (lbs):	a	Total Cementitious Material (lbs):		Design W/C:	
Free Water (lbs):	b	Aggitated?:	(Y) (N)	Spec W/C:	
Water Added (lbs):	c	Pumped?:	(Y) (N)	Actual W/C:	
Total Water (lbs):				Date Logger #:	
a+b+c (1 gal water = 8.33 lbs)					

Test Specimens

# of specimens	Curing time	Req'd f'c (psi)	# of specimens	Curing time	Req'd f'c (psi)
	(hrs) (days)			(days)	
	(hrs) (days)			(days)	
	(days)			(days)	

Remarks

Technician Name: _____	Date: _____	Reviewed By: _____	Date: _____
------------------------	-------------	--------------------	-------------



Form QA824-03 Concrete Thickness Correlation between Stab and Core

Document Owner: Lee Robertson

Revision - 0

Effective Date:

Approved By:

Revision Date:

Review By:

Approved By:

Release Date:

Page 1 of 1

Lot ID Number*

T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

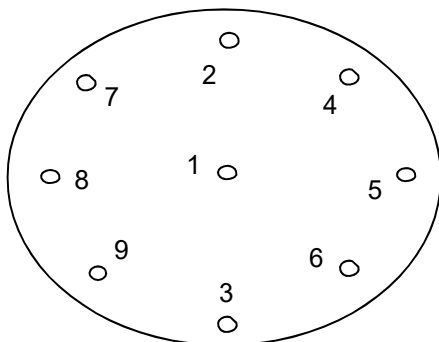
Technician: _____

Date: _____

Reviewed By: _____

Date: _____

Core Number														
Measured Thickness #1 (IN)														
Measured Thickness #2 (IN)														
Measured Thickness #3 (IN)														
Measured Thickness #4 (IN)														
Measured Thickness #5 (IN)														
Measured Thickness #6 (IN)														
Measured Thickness #7 (IN)														
Measured Thickness #8 (IN)														
Measured Thickness #9 (IN)														
Average Thickness (IN)														
Stab Thickness (IN)														



Jig Measurements (IN)

Side #1		
Side #2		
Side #3		
Side #4		
Average		

Peg Measurements (IN)

Peg #1	
Peg #2	
Peg #3	
Average	

Remarks



Document Owner: Lee Robertson

Revision - 0

Effective Date:

Approved By:

Revision Date:

Review By:	
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Approved By:

Release Date:

Page 1 of 1

Lot ID Number*

Use this form to document slump, air content and/or temperature concrete testing results

* LIN will be the same number as the first set of cylinders cast.

[illegible][illegible]

Remarks

Technician Name: _____ Date: _____

Reviewed By: _____ Date: _____



Form QA824-05 Determining the Liquid Limit, Plastic Limit and Plasticity Index of Soils (T89 & T90)

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Release Date:	Page 1 of 1

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

T89: Liquid Limit

Method A ☐ B ☐

T90: Plastic Limit & Plasticity Index

Point Number:

Tare Identification:

Tare + Wet Sample, A (g):

Tare + Dry Sample, B (g):

Mass of Tare, C (g):

Number of Blows, N:

Moisture Content, (%)

$W = 100(A-B)/(B-C)$

Liquid Limit, Method A

LL = Interpreted from Graph

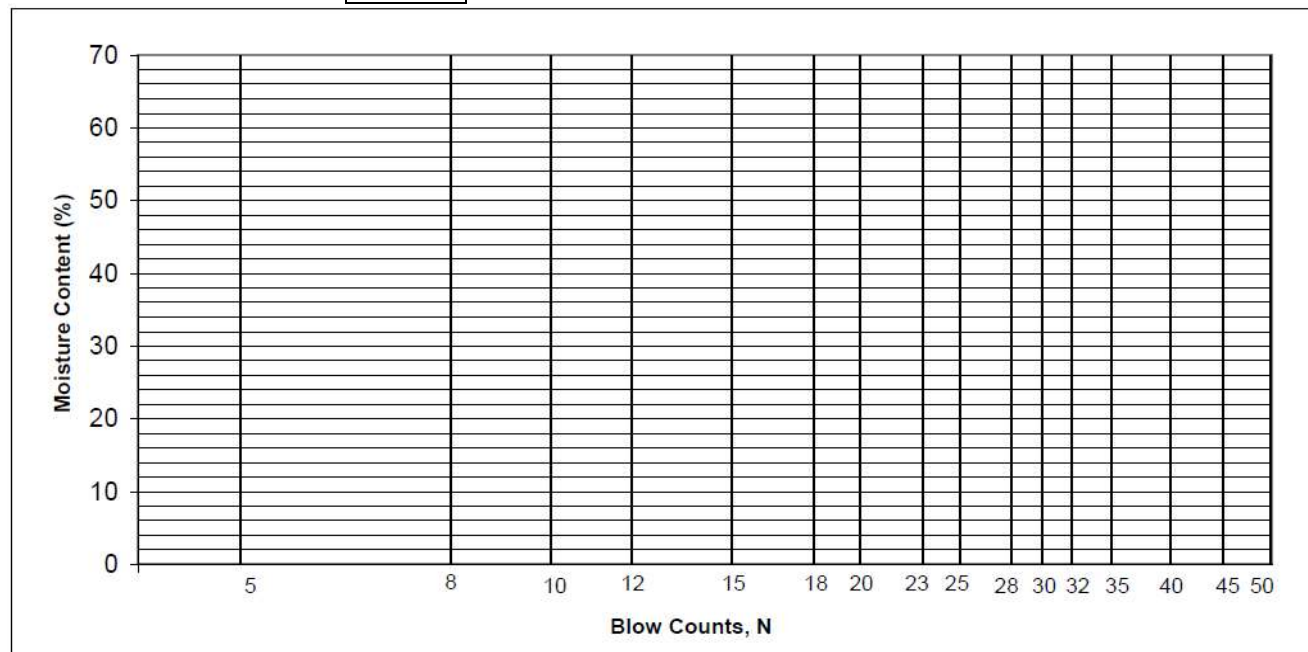
Liquid Limit, Method B

$LL = W(N/25)^{0.121}$

1	2	3

Tare Identification:	
Tare + Wet Sample, A (g):	
Tare + Dry Sample, B (g):	
Mass of Tare, C (g):	
Plastic Limit:	

Plasticity Index, PI = LL - PL	
---------------------------------------	--



Remarks: _____ Tested By / Date: _____ Reviewed By / Date: _____

Lab ID: _____

ELVIS ID: _____

Sheet _____ of _____



Form QA824-06 Moisture – Density Relationships of
Soils & Aggregates (T99/T180/SC-T-25/SC-T-140)

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Release Date:	Page 1 of 1

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

Test Procedure: ☐ T 99 ☐ T 180 ☐ SC-T-25 ☐ SC-T-140

Test Method: ☐ A ☐ B ☐ C ☐ D Mold ID: _____

T99 / T180: Laboratory Determination of Moisture – Density Relationship (Proctor Curve)

Test Point No.:					
Water Added (%)					
Wet Wt. of Compacted Specimen & Mold					
Weight of Mold					
Weight of Molded Specimen					
Mold Volume (cf.)					
Wet Density (pcf)					

Moisture

Tare Number					
Tare Weight					
Wet Wt. of Sample & Tare					
Dry Wt. of Sample & Tare					
Weight of Water					
Weight of Dry Sample					
Moisture Content (%)					
Dry Density (PCF)					
Use This Point?	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No

Uncorrected Max Dry Density (MDD) (pcf) _____ **Uncorrected Moisture Content (OMC) (%)** _____


Apply Oversize Correction? ☐ Yes ☐ No If Yes, Use this Sieve: ☐ +3/4" or ☐ + #4

Oversize Agg (Pc) (%) _____ Oversize Agg Absorption (Ac) _____ Oversize Agg Gsb (Pc) (%) _____

Corrected Density (pcf)
(6240*MDD*Gm) / [(MDD*Pc)+62.4*Gm(100-Pc)] _____ **Corrected Moisture (%)**
[OMC*(100-Pc)+Ac*Pc]/100 _____

Tested By / Date: _____ Reviewed By / Date: _____

Lab ID: _____ ELVIS ID: _____ Sheet _____ of _____

		Form QA824-07 Determining pH of Soil for use in Corrosion Testing (T289)	
Document Owner: Lee Robertson		Revision -0	
Approved By:		Effective Date:	
Approved By:		Revision Date:	
Approved By:		Review By:	
Approved By:		Page 1 of 1	

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

Meter Calibration:

Buffer Solution	Temp. Range	pH Range	Results
4.01 pH	20°C - 30°C	4.00 – 4.02	
7.00 pH	20°C - 30°C	6.98 – 7.01	
10.01 pH	20°C - 30°C	9.97 – 10.06	

T289: pH Determination

Mass of Sample (g): _____

Mass of Distilled Water (g): _____

Saturation Start Time: _____


Saturation End Time: _____

Temp. of Sample: _____

pH of sample (in Distilled Water):

Remarks: _____

Tested By / Date: _____ Reviewed By / Date: _____

		Form QA824-08 Determining Minimum Laboratory Soil Resistivity (T288)	
Document Owner: Lee Robertson		Revision -0	
Approved By:		Effective Date:	
Revision Date:		Review By:	
Approved By:		Page 1 of 1	

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

Meter Verification:

Zero Check: Adjustment Needed? ☐ Yes ☐ No

100-ohm resistor: _____ 200-ohm resistor: _____ 500-ohm resistor: _____
900-ohm resistor: _____

Readings within 10% of resistors? ☐ Yes ☐ No

T288: Resistivity Determination

Mass of Minus #10 Material (g): _____

Time/Date Material Began Saturation: _____ Time/Date Testing Began: _____

Water Added Total (ml)	Multiplier	Dial Reading	Resistance (ohms)
150			
250			
350			
450			
550			
650			
750			
850			
950			

Resistivity = Soil Box Factor X Minimum Resistance Soil Box Factor: _____

Resistivity = _____ X _____ = ohms-cm

Remarks:
Tested By / Date: _____ Reviewed By / Date: _____



Form QA824-09 Sample Identification Form

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Revision Date:	Page 1 of 1

Report
Type:☐

Original

☐

Retest

Retest L.I.N.: _____

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

Structure #: _____

Grade/Class: _____

Sublots in Lot: _____

Supplier/Producer: _____

Segment: _____

Spec. Section: _____

Location: _____

Roadway: _____

Reference: _____

DIR: _____

Material Description: _____

Feature: _____

Misc.: _____

Sublot #: _____

Quantity: _____ (Weekly) (Daily)

Retest Sublot #: _____

Material Mix Code: _____

Sublot Station Limits:											
Beginning Station						Ending Station					
				+					+		

Sublot Width Limits:							
Offset Dist. 1 (ft.)				Offset Dist. 2 (ft.)			
			(Lt.)				(Lt.)
			(Rt.)				(Rt.)

Sample Type: (RI) (RS) (FI) (FS) (I) (IA)

Split Sample ID: _____

Sample Location:											
				+						(Lt.)	
										(Rt.)	

F.I.D.: _____

Random # 1: _____ Random # 2: _____

AASHTO / SCDOT Test Assignments:

- ☐ T11/T27 Sieve
☐ T180 Proctor
☐ T288 Resistivity
☐ SC-T-036 Inorg. Cont.
☐ D4767 Triaxial Comp

- ☐ T89/T90 Atterberg (PI)
☐ SC-T-25 Proctor
☐ T19 Unit Weight
☐ SC-T-34 Sieve/Elutr.
☐ Other:

- ☐ T255/T265 Moisture
☐ SC-T-140 Proctor
☐ Chlorides/Sulfates
☐ T193 CBR

- ☐ T99 Proctor
☐ T289 pH
☐ T267 Organic Content
☐ T236 Direct Shear

Sampled By / Date: _____ Reviewed By / Date: _____

Lab ID: _____

ELVIS ID: _____

Sheet _____ of _____



Form QA824-10 Maximum Dry Density & Optimum
Moisture Content of Soils by the One-Point Method
(SC-T-29)

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Release Date:	Page 1 of 1

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

Test Procedure: SC-T-29

Mold I.D.: _____

SC-T-29: Maximum Dry Density & Optimum Moisture Content of Soils by the One-Point Method

Water Added (%)	
Wet Wt. of Compacted Specimen & Mold	
Weight of Mold	
Weight of Molded Specimen	
Mold Volume (cf.)	
Wet Density (pcf)	

Moisture: SC-T-22 Moisture Content of Soils by Carbide Gas Method

Dial Value:	
Moisture Content, from conversion chart (%)	

More than 5% by weight of the total sample (judged by the eye) retained on the No.4 Sieve ☐ Yes ☐ No

Tested By / Date: _____ Reviewed By / Date: _____

Lab ID: _____

ELVIS ID: _____

Sheet ____ of ____



Form QA824-11 In-Place Density and Moisture Content of Soils and Soil-Aggregate by Nuclear Method
SCT 31

Document Owner: Lee Robertson	Revision - 0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Release Date:	Page 1 of 1

Report Type: <input type="checkbox"/> Original <input type="checkbox"/> Retest	Work Area: _____	Supplier/Producer: _____
Retest L.I.N.: _____	Roadway: _____	Spec. Section: _____
<div>Lot ID Number T T Q P I D Y Y M M D D S N </div>	Feature: _____	Material Description: _____
	Location: _____	DIR Reference: _____
	Grade/Class: _____	
# Sublots in Lot: _____	Misc.: _____	

M-D Curve Descriptions / Plan & Specification Requirements

Method	Curve ID	Max. Dry Density	Optimum Moisture	Material Description:
A	_____	_____	_____	_____
B	_____	_____	_____	_____

Gauge Information


Gauge Serial #: _____	Make: _____	Density Standard: _____
Calibration Date: _____	Model: _____	Moisture Standard: _____

Field Test Information

Sublot #:						
Retest Sublot #:						
Sublot Station Limits:	Begin:	+	+	+	+	+
	End:	+	+	+	+	+
Sublot Width Limits:	Offset:	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)
	Offset:	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)
Sample Type:		(RI) (RS) (FI) (FS) (I) (IA)	(RI) (RS) (FI) (FS) (I) (IA)	(RI) (RS) (FI) (FS) (I) (IA)	(RI) (RS) (FI) (FS) (I) (IA)	(RI) (RS) (FI) (FS) (I) (IA)
Random #1:						
Random #2:						
Split Sample ID:						
F.I.D.						
Test Location:	Station:	+	+	+	+	+
	Offset:	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)	ft (Lt.) (Rt.)
Curve ID:		(A) (B)	(A) (B)	(A) (B)	(A) (B)	(A) (B)
Lift Thickness (in.):						
Probe Depth (in.):						
Density Count:						
Wet Density (pcf):						
Dry Density (pcf):						
Moisture (PCF):						
Moisture Content (%):		<input type="checkbox"/> Direct Read <input type="checkbox"/> SC-T-22	<input type="checkbox"/> Direct Read <input type="checkbox"/> SC-T-22	<input type="checkbox"/> Direct Read <input type="checkbox"/> SC-T-22	<input type="checkbox"/> Direct Read <input type="checkbox"/> SC-T-22	<input type="checkbox"/> Direct Read <input type="checkbox"/> SC-T-22
Compaction (%):						
Individual Test Result:		(Pass) (Fail) (Eng. Dec.) (Pending)	(Pass) (Fail) (Eng. Dec.) (Pending)	(Pass) (Fail) (Eng. Dec.) (Pending)	(Pass) (Fail) (Eng. Dec.) (Pending)	(Pass) (Fail) (Eng. Dec.) (Pending)

Summary of Density Tests

Minimum Compaction, %: _____	Average Compaction, %: _____	Required Minimum Compaction, %: _____	Required Average Compaction, %: _____
Acceptance Decision: <input type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Eng. Dec. <input type="checkbox"/> Pending			
<div></div>			

						Form QA824-12 Mechanical Analysis of Soils (Elutriation Method) (SC-T-34)											
Document Owner: Lee Robertson						Revision -0						Effective Date:					
Approved By:						Revision Date:						Review By:					
Approved By:						Revision Date:						Page 1 of 1					
Lot ID Number																	
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N				

SC-T-34: Mechanical Analysis of Soils (Elutriation Method)


Total Sample Weight (dry) (grams)	
Initial Sample Dry Weight (Portion Passing No.10 Sieve), (A)	
After Wash Dry Weight (Portion Passing No.10 Sieve), (B)	

Sieve Size	Accumulative Weight (grams)	Percent Retained	Percent Passing
2-1/2"			
1-1/2"			
3/4"			
3/8"			
No. 4			
No. 10			

Sieve Size	Individual Weight (grams)	Percent Retained	Percent Passing
No.20			
No.40			
No.60			
No.100			
No.200			
Pan			

Clay By Elutriation (%) A-B/A X 100	
Percent Silt (%)	
Total Sand (%)	
Percent Sand above the No.60 Sieve	
Silt as a Whole	
Clay as a Whole	

Remarks: _____

										Form QA824-13 Percent Ignition Loss of Inorganic Soils (SC-T-036)																			
Document Owner: Lee Robertson										Revision -0										Effective Date:									
Approved By:										Revision Date:										Review By:									
Approved By:										Revision Date:										Page 1 of 1									
Lot ID Number																													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N																

SC-T-036: Percent Ignition Loss of Inorganic Content

Crucible I.D.:	
Percent Total Sand (From SC-T-34) / 100 (P)	
Weight of Crucible, (grams) (B)	
Weight of Crucible & Sample Before Ignition, (grams) (C)	
Weight of Crucible & Sample After Ignition, (grams) (D)	
Weight of Sample, (grams) (M) (C-B)	
Loss on Ignition, (grams) (L) (C-D)	
Percent Ignition Loss on Material Passing 2-mm Sieve % Ig = (P x L)/M x 100	

Remarks: _____



Form QA824-14 Sieve Analysis for Borrow, Embankment & Free Draining Backfill, UTBC (T11,T27,T255,T265)

Document Owner: Lee Robertson

Revision -0

Effective Date:

Approved By:

Revision Date:

Review By:

Approved By:

Revision Date:

Page 1 of 1

Lot ID Number

T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

T255 & T265: Laboratory Determination of Moisture Content of Soils & Aggregates

Tare ID: _____ Tare, A (g):

Tare + Wet Specimen, B (g):

Tare + Dry Specimen, C (g):

Dry Solid Particle, D = C-A (g):

Mass of Water, E = B-C (g):

Moisture Content, 100(E/D) (%):

Tested By: _____

T11: Material Finer Than 75µm (No.200) Sieve in Mineral Aggregate by Washing

Initial Wet Weight (-#4), (g)

-#4 Before Wash Dry, F (g)

-#4 After Wash Dry, G (g)

Percent of Material Finer than 75µm
(No. 200) Sieve by Washing, [(F-G/F)
100

Tested BY /Date:

T27: Split Sieve

Sieve Size	Cumulative Wt. Retained (g)	Cumulative Retained (%)	Percent Passing
4"			
3"			
2-1/2"			
2"			
1-1/2"			
1"			
3/4"			
1/2"			
3/8"			
#4			

Minus #4 (Air Dry)	
Total Air Dry Weight	
Total Dry Weight	

Tested By/Date: _____

Reviewed By: _____

Sieve Size	Cu. Wt. Retained (g)	Cumulative Retained (%)	Percent Passing
#8			
#10			
#16			
#30			
#40			
#50			
#100			
#200			
Pan			

Tested By/Date: _____

Reviewed By: _____

Remarks: _____

Lab ID: _____

ELVIS ID: _____

Sheet ____ of ____



Form QA824-15 Sieve Analysis for HMA, Base, and
Concrete Aggregate (T11, T27, & T255, T265)

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Revision Date:	Page 1 of 1

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

T255 & T265: Laboratory Determination of Moisture Content of Soils & Aggregates Tare ID: <input type="text"/> Tare, A (g): <input type="text"/> Tare + Wet Specimen, B (g): <input type="text"/> Tare + Dry Specimen, C (g): <input type="text"/> Dry Solid Particle, D = C-A (g): <input type="text"/> Mass of Water, E = B-C (g): <input type="text"/> Moisture Content, 100(E/D) (%): <input type="text"/>	T11: Material Finer Than 75µm (No.200) Sieve in Mineral Aggregate by Washing Before Wash Dry, F (g) <input type="text"/> After Wash Dry, G (g) <input type="text"/> Percent of Material Finer than 75µm (No. 200) Sieve by Washing, [(F-G/F) 100] <input type="text"/>
--	--

T11/T27: Sieve Analysis

Dry Weight Before Wash, (g):
Total Wet Weight, (g): Dry Weight After Wash, (g):

Sieve Size	Cumulative Weight Retained (g)	Cumulative Retained (%)	Percent Passing
2"			
1-1/2"			
1"			
3/4"			
1/2"			
3/8"			
#4			
#8			
#10			
#16			
#30			
#40			
#50			
#100			
#200			
Pan			

Remarks: _____

Tested By / Date: _____ Reviewed By / Date: _____



Form QA824-16 Specific Gravity & Absorption of
Coarse Aggregate (T85)

Document Owner: Lee Robertson	Revision -0	Effective Date:
Approved By:	Revision Date:	Review By:
Approved By:	Revision Date:	Page 1 of 1

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

T85: Specific Gravity & Absorption:

Weight of Oven Dry Sample, A (g):

Weight of SSD Sample, B (g):

Weight of Sample in Water, C (g):

Bulk Specific Gravity Dry, $A/(B-C)$

Bulk Specific Gravity SSD, $B/(B-C)$

Apparent Specific Gravity, $A/(A-C)$

Absorption, $[(B-A)/A] \times 100$

Temperature of Water:


Remarks: _____

Tested By / Date: _____ Reviewed By / Date: _____

Lab ID: _____

ELVIS ID: _____


Sheet _____ of _____

										Form QA824-17 Organic Content in Soils by Loss on Ignition (T-267)																			
Document Owner: Lee Robertson										Revision -0										Effective Date:									
Approved By:										Revision Date:										Review By:									
Approved By:										Revision Date:										Page 1 of 1									
Lot ID Number																													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N																

T-267: Organic Content in Soils by Loss on Ignition

Crucible I.D.:	
Weight of Crucible, (grams) (C)	
Weight of Crucible & Oven Dried Sample Before Ignition, (grams) (A)	
Weight of Crucible & Sample After Ignition, (grams) (B)	
Weight of Sample, (grams) (M) (A-C)	
Percent Organic Matter, $\% = ((A-B) / (A-C)) \times 100$	

Remarks: _____

		Form QA824-18 Unit Weight and Voids in Aggregate (T19M/T19)	
Document Owner: Lee Robertson		Revision -0	
Approved By:		Effective Date:	
Approved By:		Revision Date:	
Approved By:		Review By:	
		Page 1 of 1	

Lot ID Number													
T	T	Q	P	I	D	Y	Y	M	M	D	D	S	N

T19M/T19 – Unit Weight:

	Jigging Method	Rodding Method	Shoveling Method
Weight and Tare, A (lbs):	<div></div> lbs	<div></div> lbs	<div></div> lbs
Tare Weight, B (lbs):	<div></div> lbs	<div></div> lbs	<div></div> lbs
Vol. of Measure, C:	<div></div> ft ³	<div></div> ft ³	<div></div> ft ³
Bulk Density, D:			
D = (A-B)/C	<div></div> lb/ft ³	<div></div> lb/ft ³	<div></div> lb/ft ³

Voids:

Bulk Specific Gravity of Material (Dry), E	<div></div>
Density of Water, F	<div>62.3</div> lb/ft ³
Voids (%),	<div> $\frac{100 [(E \times F) - D]}{E \times F}$ <div></div> % </div>

Remarks:

Tested By / Date: Reviewed By / Date:



Form QA830-1 Nonconformance Report

Document Owner: Lee Robertson	Revision:	
Approved By:	Revision Date:	Review By: 10/15/2025
Approved By:	Release Date:	Page 1 of 1

Date: _____ Originator: _____ NCR Tracking # _____

Notifications:

AUJV Foreman: _____ Date: _____

AUJV Manager: _____ Date: _____

1.0

IQF Daily Inspection Report #	Entry #	IQF SIN #	Audit Report #
-------------------------------	---------	-----------	----------------

2.0

Work Element: _____ Spec/Plan Sheet Reference: _____

3.0

Location: _____

Segment	Roadway	Other
---------	---------	-------

4.0 Material Information:

Sample of: _____ Date Sampled: _____

Supplier: _____

5.0 Specification and Description of Nonconformance:

6.0 Containment Action Required? ☐ Yes ☐ No

If yes, describe root cause and containment action:

7.0 Evaluation, Additional Testing:

6.0 Return to Conformance - Recommend Disposition ☐ Correct/Rework ☐ Replacement

Corrective Action Plan to Resolve Nonconformance:

6.1 Deviation Request - Recommended Disposition ☐ Accept As-Is

Comments:

7.0 Concurrence Signatures:

Engineer of Record: _____ Date: _____ Y ☐ N ☐

Quality Control Manager: _____ Date: _____ Y ☐ N ☐

Concurrence Comment: _____

7.1 Independent Quality Firm Comments and Recommendation:

Unless within a Controlled Document Binder, Printed Copies are Uncontrolled, User Must Verify Current Prior to Use

Independent Quality Manager (IQM): _____ Date: _____ Y ☐ N ☐

IQM Comments and Recommendations: _____

7.2 Owner Verification Firm Comments and Recommendation:

OVF Project Engineer (OVFPE): _____ Date: _____ Y ☐ N ☐

OVFPE Comments and Recommendations: _____

7.3 SCDOT Comments and Acceptance:

SCDOT Construction Manager: _____ Date: _____ Y ☐ N ☐

SCDOT Comments and Acceptance: _____

8.0 Verification and Closure:

_____	_____	_____	_____
IQF Daily Inspection Report #	Entry #	IQF SIN #	Audit Report #

QCM: _____	Date: _____
------------	-------------

IQM: _____	Date: _____
------------	-------------

Remarks: _____



Form QA831-1 Construction Deficiency Notice

Document Owner: Lee Robertson	Revision:	
Approved By: Lee Robertson	Revision Date:	Review By:
Approved By:	Release Date:	Page 1 of 1

Date: _____ Originator: _____ DN Tracking # _____

Notifications:

AUJV Foreman: _____ Date: _____

AUJV Manager: _____ Date: _____

1.0 _____
IQF Daily Inspection Report # Entry # IQF SIN # Audit Report #

2.0 Specification: _____

3.0 Location: _____
Segment Roadway Other

4.0 Description of Deficiency:

5.0 Corrective Action Disposition:

6.0 Verification Results:

6.1 Was the corrective deemed effective in eliminating the deficiency, reducing recurrence or improving the process, as appropriate?

☐ Yes ☐ No

6.2 _____
IQF Daily Inspection Report # Entry # IQF SIN # Audit Report #

7.0 Closure:

QCM: _____ Date: _____

IQM: _____ Date: _____

Attachments:

EXAMPLE ONLY. MEANT TO ONLY SHOW INFORMATION AND FORMAT OF FORM


(F) = forward stationing
(B) = back stationing

Bent (Pile)											
Pile (cut off elevation)		#2									
		Plan	3.167								
		Survey	3.784								
		Δ Vertical	0.617								
Footings (corners)			LT-out (B)	LT-out (F)	LT-in (B)	LT-in (F)	RT-out (B)	RT-out (F)	RT-in (B)	RT-in (F)	
		Plan	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	
		Survey	4.494	4.504	4.484	4.494	4.494	4.494	4.484	4.474	
		Δ Vertical	-0.006	0.004	-0.016	-0.006	-0.006	-0.006	-0.016	-0.026	
Columns (Top of			LT	RT							
		Plan	53.000	53.000							
		Survey	53.006	52.976							
		Δ Vertical	0.006	-0.024							
Bent Cap (corners)			LT (B)	LT (F)	RT (B)	RT (F)					
		Plan	59.000	59.000	59.000	59.000					
		Survey	58.986	59.026	58.986	58.966					
		Δ Vertical	-0.014	0.026	-0.014	-0.034					
Beam Seats (Corners) (Ahead)			1 (LT)	1 (RT)	2 (LT)	2 (RT)	3 (LT)	3 (RT)	4 (LT)	4 (RT)	5 (LT) 5 (RT)
		Plan	59.172	59.172	59.426	59.426	59.680	59.680	59.426	59.426	59.172 59.172
		Survey	59.126	59.106	59.386	59.386	59.606	59.636	59.396	59.396	59.116 59.116
		Δ Vertical	-0.046	-0.066	-0.040	-0.040	-0.074	-0.044	-0.030	-0.030	-0.056 -0.056
Beam Seats (Midpoint) (Ahead)			1(C)		2(C)		3(C)		4 (C)		5 (C)
		Plan	59.172		59.426		59.680		59.426		59.172
		Survey	59.136		59.396		59.646		59.396		59.136
		Δ Vertical	-0.036		-0.030		-0.034		-0.030		-0.036
Beam Seats (Corners) (Ahead)			1 (LT)	1 (RT)	2 (LT)	2 (RT)	3 (LT)	3 (RT)	4 (LT)	4 (RT)	5 (LT) 5 (RT)
		Plan	59.172	59.172	59.426	59.426	59.680	59.680	59.426	59.426	59.172 59.172
		Survey	59.116	59.116	59.376	59.386	59.616	59.636	59.406	59.396	59.116 59.126
		Δ Vertical	-0.056	-0.056	-0.050	-0.040	-0.064	-0.044	-0.020	-0.030	-0.056 -0.046
Beam Seats (Corners) (Back)			1 (LT)	1 (RT)	2 (LT)	2 (RT)	3 (LT)	3 (RT)	4 (LT)	4 (RT)	5 (LT) 5 (RT)
		Plan	59.465	59.465	59.719	59.719	59.972	59.972	59.719	59.719	59.465 59.465
		Survey	59.366	59.386	59.626	59.636	59.896	59.896	59.656	59.646	59.386 59.396
		Δ Vertical	-0.099	-0.079	-0.093	-0.083	-0.076	-0.076	-0.063	-0.073	-0.079 -0.069
Beam Seats (Midpoint) (Back)			1(C)		2(C)		3(C)		4 (C)		5 (C)
		Plan	59.465		59.719		59.972		59.719		59.465
		Survey	59.376		59.646		59.916		59.666		59.406
		Δ Vertical	-0.089		-0.073		-0.056		-0.053		-0.059
Beam Seats (Corners) (Back)			1 (LT)	1 (RT)	2 (LT)	2 (RT)	3 (LT)	3 (RT)	4 (LT)	4 (RT)	5 (LT) 5 (RT)
		Plan	59.465	59.465	59.719	59.719	59.972	59.972	59.719	59.719	59.465 59.465
		Survey	59.386	59.376	59.646	59.646	59.906	59.916	59.656	59.636	59.406 59.406
		Δ Vertical	-0.079	-0.089	-0.073	-0.073	-0.066	-0.056	-0.063	-0.083	-0.059 -0.059

Form QA865-1 Audit Summary

Document Owner: Lee Robertson
Revision: 0 - Rev. Date: xx/xx/xxxx
Page 1 of 1

Project Audited: Carolina Crossroads Phase 1 Project				Audit No: {#}	
				Audit Date: {date}	
Definitions: OFI = Opportunity for Improvement AF = Audit Finding OB = Observation					
Item	Requirement/ Reference	Checklist Question	Auditor Comments	Auditor Post Audit Conference Recommendation	Post Audit Conference Resolutions
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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14					
15					
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24					
25					
26					

	<h2>QA865-2 Audit Plan</h2>	
Document Owner: Lee Robertson	Revision – 0	Effective Date:
Approved By:	Release Date:	Review By:
Approved By:	Revision Date:	Page

Audit No:

Audit Date(s):

Business Function/Project to be audited:

Audit Location:

Audit Purpose/Scope:

Applicable Documents/Requirements:


Overall Schedule:

Pre-Audit Conference:

Audit:

Post-Audit Conference:


Audit Team Members:

		<h2 style="text-align: center;">QA865-3 Pre/Post Audit Conference Attendance</h2>	
Document Owner: Lee Robertson		Revision – 0	Effective Date:
Approved By:		Release Date:	Review By: 11/15/2025
Approved By:		Revision Date:	Page

	Audit Number	Pre-Audit Conference Date
Project Audited:	Auditor	Post-Audit Conference Date
Carolina Crossroads Phase 2 Project		

Attendees:

Signature	Printed Name	Firm	Title	Pre-Audit	Post-Audit
Opening Meeting Agenda:			Closing Meeting Agenda:		
• Review of Audit Scope and duration			• Review of Audit Scope		
• Approximate times/dates of actual audit			• Review of commendable efforts		
• Identification of auditees			• Review of findings/opportunities		
• Handling audit findings/opportunities			• Identification of improvement action owners		
• Approximate date of Post-Audit Conference			• Handling findings/opportunities		
• Content and expected date of Final Audit Report			• Expected date of Final Audit Report		

		QA865-4 Final Audit Report	
Document Owner: Lee Robertson		Revision – 0	Effective Date:
Approved By:		Release Date:	Review By:
Approved By:		Revision Date:	Page

Project Audited: Carolina Crossroads Phase 2 Project

Lead Auditor:

Audit Number:

Audit Team:

Auditees:

SOPs or Procedures Audited:

Pre-Audit Conference Date:

Post-Audit Conference Date:


Final Audit Report Date:

Audit Report Distribution:

Executive Summary:

The audit ...

OFI Number	Corrective or Preventive Action	Description	Responsible Manger
TABLE 1			

	QA865-4 Final Audit Report	
Document Owner: Lee Robertson	Revision – 0	Effective Date:
Approved By:	Release Date:	Review By:
Approved By:	Revision Date:	Page

Commendable Efforts (Good Points):

-

Audit Findings:

OFl #1 - Classification:

Responsible Manager:

OFl #2 - Classification:

Responsible Manager:

OFl #3 - Classification:

Responsible Manager:

Form QA865-5 Audit Schedule

Document Owner: Lee Robertson
Revision: 0 - Rev. Date: xx/xx/xxxx
Page 1 of 1

[illegible]