

Section 11.1

ASPHALT LOT DOCUMENTATION

11.1.1 Purpose

This procedure establishes guidelines for asphalt LOT documentation related to the daily measurement and documentation of bituminous quantities.

11.1.2 Authority

Sections 20.23(3) (a) and 334.048(3), Florida Statutes (F.S.)

11.1.3 General

Specifications Section 320 includes the requirements for asphalt plant operations. All asphalt plants shall have electronic weigh systems with automatic ticket printouts.

11.1.4 Asphalt LOT Submittal Package

The **LOT Submittal Package** consists of information provided by the Contractor's Plant and Roadway Technicians and/or the Department's Plant and Roadway Verification Technicians. It is compiled by the the Department personnel which could include the Plant and Roadway Verification Technicians and/or Resident Office. It is recommended that a **PDF Package** be used to assemble the **LOT Submittal Package** (see **Attachment 11.1-1**) and uploaded into **Project Solve SharePoint (PSSP)**, also known as the collaboration site. The Resident Office (RO) will ensure that the PDF package is complete.

Each LOT is either 2,000 or 4,000 Tons and Initial LOTs are always 2,000 Tons, per **Specifications Section 334-5.2**. The **LOT Submittal Packages** will be uploaded to the collaboration site when the LOT is paid and should include the following documentation:

(A) Asphalt Printed Tickets

- (1) There must be an original and at least one (1) legible copy. The original is retained by the Plant Verification Technician and one copy goes to the Roadway Verification Technician. See **Attachment 11.1-1b** for examples of asphalt tickets.
- (2) Tickets shall be grouped by LOT in the daily order of production. Each asphalt ticket will contain the following information:

The Financial Project ID Number, contract number, date and time, mix design number, type of material, ticket number, Asphalt Contractor company name and address, truck number, load number, Gross, Tare and Net Weight in Tons, plant number, total accumulated daily quantity and the hand-written temperature.

The tickets shall be available for review by the Plant Verification Technician one day after production and shall become part of the **LOT Submittal Package**.

NOTE: Material of different types, pay items, waste, or private work for each day's production run shall be identified on the **Quality Control Roadway Report (QCRR)**.

- (3) The original weight tickets (white tickets) shall be scanned into the **LOT Submittal Package** and the hard copies will be destroyed. It is also acceptable to receive scanned tickets from the Contractor. Scanned tickets must be checked and verified for accuracy and clarity by the RO before inclusion within the **Lot Submittal Package** and before destruction of tickets.
- (4) All projects let January 1, 2018 and after shall not be required to submit **Form 700-050-72, Computer Summary of Quantities for Asphaltic Concrete**.

(B) Asphalt Plant – Composite Pay Factor Sheet

The Contractor's test results for each Sublot are entered into **Materials Acceptance and Certification (MAC)** at the asphalt plant. The gradation, asphalt content, air voids and density together generate the **Composite Pay Factor (CPF)** for the LOT.

The CPF Sheet is now generated in MAC and is part of the Comparison Package Report which also contains the LOT Verification information. See **Attachment 11.1-1c**. The **CPF Sheet** is required for all **Lot Submittal Packages** regardless of testing. For non-tested lots, the **CPF Sheet** will show a CPF equal to 1.

(C) Asphalt Roadway - Verification Report

Form No. 675-030-21, Asphalt Roadway - Verification Report, is filled out by the Roadway Verification Technician. The technician enters and verifies the spread rate, the temperature, and bituminous materials used in each LOT. This will be submitted within the **LOT Submittal Package** in Excel Format. See **Attachment 11.1-1d**.

This form contains the following information:

Financial Project ID Number, Material No., Type of Mix, Mix Design No., Intended Use, Plant No., LOT No., Intended LOT Size, Verification of Spread Rate, Verification results, Verification of Tack, and Verification of Established Temperatures.

(D) Asphalt Roadway – Daily Report of Quality Control Report (QCRR)

The final portion of the **LOT Submittal Package** contains **Form 675-030-20A, Asphalt Roadway - Daily Report of Quality Control**, also known as the **Quality Control Roadway Report (QCRR)**. See **Attachment 11.1-1e**. This form is furnished by the Department and is required to be submitted to the Project Administrator (PA) at the close of each lot or as requested by the PA. The QCRR calculates the spread rate and quantity adjustments automatically.

Each Contractor is required to record the placement of asphalt on the above form as the pavement operation progresses. The Contractor's Plant and Roadway Technicians are responsible for verifying the QCRR is filled out and correct. The Contractor is to ensure quality work. These reports are to be available for the Department's Plant and Roadway Verification Technicians at the place of production. The Roadway Verification Technician and the PA shall work together to ensure that the Contractor's quantities are correct on the QCRR and that the **LOT Submittal Package** is in order and ready to be submitted into the Collaboration Site. **If corrections to the QCRR are required, the RO shall send the form back to the Contractor for resubmittal.**

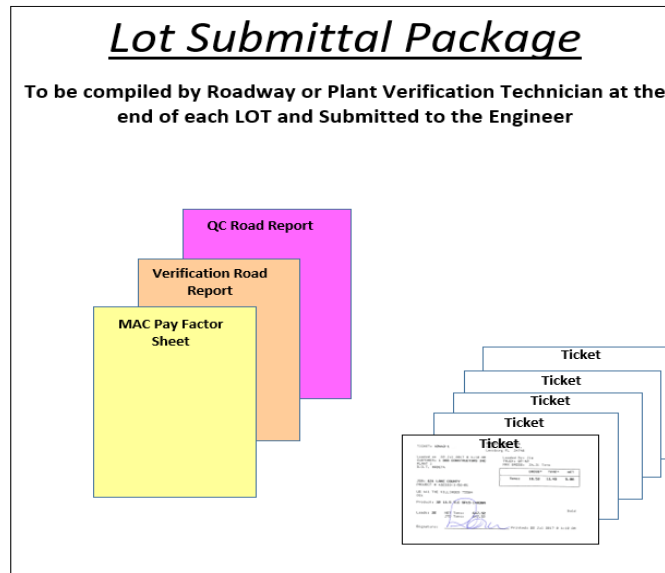
The QCRR shall be submitted in Excel format. Once the asphalt is completed and paid for, the final QCRR will be sent via email to the State Material's Office as a record of the as-built pavement data at the following email address: SM-MACQCRRUpload@dot.state.fl.us. The final QCRR submitted to the State Material's Office will be the final QCRR record in the **Electronic Document Management System (EDMS)**. See **CPAM 11.4** for further information.

All projects let January 2018 and after, will **not** be required to submit **Form 700-050-72, Computer Summary of Quantities for Asphaltic Concrete**, also known as the daily asphalt ticket cover. However, the same daily tonnage information can be produced by the QCRR through the Reports function within the spreadsheet. The Report – **Daily Tons by Intended Use** should be used to compare the daily tonnage documented within the QCRR and the asphalt tickets for accuracy. Since the Report – Daily Tons by Intended Use is within the QCRR, it is not required to be submitted separately. See **Attachment 11.1-1a** for an example of this report.

11.1.5 Attachments

Attachment 11.1-1LOT Submittal Package and PDF Package
Attachment 11.1-1a Quality Control Roadway Report – Daily Tons by Intended Use
Attachment 11.1-1b Asphalt Ticket Sheet Examples
Attachment 11.1-1c CPF Sheet Generated in MAC
Attachment 11.1-1d Asphalt Roadway - Verification Report
Attachment 11.1-1e Asphalt Roadway – Daily Report of Quality Control

Attachment 11.1-1 Lot Submittal Package and PDF Package



PDF Package

7_11_17 Lot 1.pdf	8/2/2017 2:51:00 PM	559.08 KB
7_13_17 Lot 1.pdf	8/2/2017 2:54:20 PM	535.56 KB
7_14_17 Lot 1.pdf	8/2/2017 2:58:49 PM	271.20 KB
7_16_17 Lot 1.pdf	8/2/2017 3:14:10 PM	712.17 KB
7_17_17 Lot 1.pdf	8/2/2017 3:07:21 PM	507.88 KB
7_18_17 Lot 1.pdf	8/2/2017 3:09:06 PM	580.94 KB
7_21_17 Lot 1.pdf	8/2/2017 3:10:06 PM	588.98 KB
Lot 1 CPF.pdf	8/2/2017 1:25:49 PM	87.71 KB
QC 7-21-17 Road Report Revised.xlsm	8/1/2017 7:08:09 AM	1.54 MB
VT 7-11-17 asphalt report.xls	7/17/2017 5:29:45 PM	348.50 KB
VT 7-13-17 asphalt report.xls	7/17/2017 5:29:37 PM	349.00 KB
VT 7-14-17 asphalt report.xls	7/17/2017 5:23:38 PM	348.50 KB
VT 7-16-17 asphalt report.xls	8/25/2017 8:13:52 AM	355.00 KB
VT 7-17-17 asphalt report.xls	7/20/2017 9:32:27 AM	350.00 KB
VT 7-18-17 asphalt report.xls	7/24/2017 11:16:15 AM	349.50 KB
VT 7-21-17 asphalt report.xls	7/24/2017 11:12:45 AM	349.50 KB

The [PDF Package](#) should be used for assembly of the **LOT Submittal Package** prior to entry into the Collaboration Site. This example contains:

- (1) White: Top seven rows of PDF Asphalt tickets compiled for each day.
- (2) Yellow: The CPF Sheet generated in MAC in PDF
- (3) Pink: The QCRR in Excel Format
- (4) Orange: Seven Verification Technician's Reports in Excel Format

Attachment 11.1-1a Quality Control Roadway Report (QCRR):

DAILY TONS BY INTENDED USE

	A	B	C	D	E	F	G
1							
2							
3	Sum of Quantity						
4		SP TL-C	Waste	(blank)	Grand Total		
5	(blank)						
6	7/11/2017	510.55	5.00		515.55		
7	7/13/2017	490.83	5.00		495.83		
8	7/14/2017	305.51	5.00		310.51		
9	7/16/2017	805.24	20.70		825.94		
10	7/17/2017	597.19			597.19		
11	7/18/2017	657.90	5.00		662.90		
12	7/21/2017	637.44	10.08		647.52		
13	7/23/2017	393.16			393.16		
14	7/24/2017	471.96	5.00		476.96		
15	7/25/2017	416.22	5.00		421.22		
16	7/26/2017	481.47	15.00		496.47		
17	7/27/2017	206.93			206.93		
18	7/31/2017						
19	Grand Total	5,974.40	75.78		6,050.18		
20							
21							

This report, produced by the QCRR, shows the daily tonnage by intended use. It should be used to verify the daily tonnage documented within the QCRR compares to the asphalt tickets. This report is not required to be submitted separately and replaces the information previously provided by **Form 700-050-72, Computer Summary of Quantities for Asphaltic Concrete**.

For example, on 7/21/2017, the report shows a Grand Total = 647.52 tons produced. However, only 637.44 tons were used and the remaining 10.08 tons were waste. **Attachment 11.1-1b** shows first load ticket and last load ticket. The final load ticket is for Load 32 on 7/21/2017 for a net total of 647.52 tons.

Attachment 11.1-1b Asphalt Ticket Sheet Examples

EXAMPLE OF FIRST AND LAST TRUCK LOAD TICKETS - 1ST DAY'S RUN

Page 3 of 3 300°

TICKET: 12412-1

DAB Constructors
1233 Commerce St.
Leesburg FL 34748

Loaded on 21 Jul 2017 @ 10:33 PM
CUSTOMER: 1 DAB CONSTRUCTORS INC
PLANT 1
D.O.T. #A0674

Loaded By: Jim
TRUCK: DT-40
MAX GROSS: 34.50 Tons

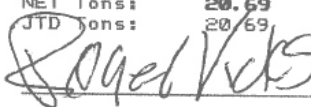
	GROSS*	TARE*	NET
Tons:	34.48	13.79	20.69

JOB: 631 LAKE COUNTY
PROJECT # 432333-1-52-01

US 441 THE VILLIAGES T5584
PO:

Product: 32 12.5 TLC SP15-14030A

Loads: 1 NET Tons: 20.69 Sold
JTD Tons: 20.69

Signature:  Printed: 21 Jul 2017 @ 10:33 PM

TICKET: 12443-1

DAB Constructors
1233 Commerce St.
Leesburg FL 34748

Loaded on 22 Jul 2017 @ 4:10 AM
CUSTOMER: 1 DAB CONSTRUCTORS INC
PLANT 1
D.O.T. #A0674

Loaded By: Jim
TRUCK: DT-47
MAX GROSS: 34.31 Tons

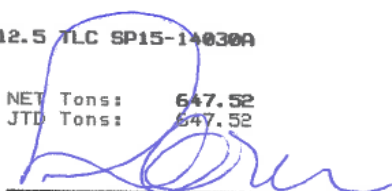
	GROSS*	TARE*	NET
Tons:	18.53	13.45	5.08

JOB: 631 LAKE COUNTY
PROJECT # 432333-1-52-01

US 441 THE VILLIAGES T5584
PO:

Product: 32 12.5 TLC SP15-14030A

Loads: 32 NET Tons: 647.52 Sold
JTD Tons: 647.52

Signature:  Printed: 22 Jul 2017 @ 4:10 AM

Attachment 11.1-1c CPF Sheet Generated in MAC

Florida Department of Transportation Material Acceptance and Certification (MAC) Comparison Package Information [8/2/2017]						
Comparison Package 15539 [1700135985 QC-VT]						
Comparison Package ID	Comparison Definition		Comparison Type		Comparison Status	
15539	QC-VT		Composite Pay Factor Comparison		Compares	
Spec					Last Updated By	Last Updated On
334 - Superpave Asphalt Concrete, Supplemental Specification, 01/2016, v4.7					Karen Madrid	7/26/2017
Original Sample	Sample Level	FDOT Sample Number	LOT #	Sublot #	Project(s)	
1700135985	QC	2C004Q	1	4	432333-1-52-01	
Verification Sample	Sample Level	FDOT Sample Number	LOT #	Sublot #	Alternate Density Sublot Number	
1700137980	VT	2C004V	1	4	N/A	
Comparison Results						
Comparison Name			Comparison Results			
1	APW: FM 5-563 (Percent Asphalt Content)		Compares			
2	APW: FM 1-T 030 Superpave Gradation (No. 8 Dense Graded)		Compares			
3	APW: FM 1-T 030 Superpave Gradation (No. 200 Dense Graded)		Compares			
4	APW: FM 1-T 166 Gmb - Plant (Average Gmb)		Compares			
5	APW: FM 1-T 166 Gmb - Roadway January 2016 (Gmb for each Core)		Compares			
6	APW: FM 1-T 209 Maximum Specific Gravity (Average Gmm)		Compares			
Associated Samples						
	Sublot #	Sample	Date Sample Taken	FDOT Sample Number	Mix Design	Sample Level
1	1	1700131854	7/13/2017	2C001Q	SP 15-14030A	QC
2	2	1700132331	7/14/2017	2C002Q	SP 15-14030A	QC
3	3	1700133537	7/16/2017	2C003Q	SP 15-14030A	QC
Composite Pay Factor						
		No. 8 Percent Passing	No. 200 Percent Passing	Percent Asphalt Content	Percent Air Voids	Density
Sublot 1		51.63	5.89	5.03	4.43	91.80
Sublot 2		49.51	5.90	4.88	4.34	91.33
Sublot 3		49.22	5.93	4.88	4.37	92.19
Sublot 4		48.81	5.79	4.99	3.64	91.50
Target		50.00	5.30	5.00	4.00	92.00
Pay Factor		1.05	1.05	1.05	1.05	1.05
Composite Pay Factor						1.05
* = Value is out of range [] = Replaced value						

Attachment 11.1-1d Asphalt Roadway – Verification Report

Print Form		<input checked="" type="radio"/> English <input type="radio"/> Metric		State Of Florida Department Of Transportation				DOT-309-21 CONSTRUCTION 03/05			
Asphalt Roadway – Verification Report											
Page No. 2 of 2											
Fin. Project ID: 123456-1-52-01		Material No.: 123L		Type of Mix: FC-5		Mix Design No.: SPM 13-11452B					
Intended use: FRICTION		Plant No.: A9741		Lot No.: 34		Intended Lot Size: 2000 Tons					
Verification of Spread Rate					Verification Results Y/N						
Date	Sublot	Lane / Lift # of #	Station To	Station	Loads	Linear Ft	Width	SY	Tons	Spread	
4/2/2017	1	RTL & SH / 1 of 1	1336 + 67	1330 + 86	1-19	581.00	###	1162.00	50.12	86.3	Y
4/2/2017	2	RTL / 1 of 1	1258 + 00	1255 + 20	5-6	280.00	###	466.67	25	107.1	N
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
			+	+							
Verification of Tack								Target Spread Rate: 83			
Record Of Bituminous Materials								Verification of Established Temp: 320			
Verification Results Y/N											
Date	Sub. Load No.	Temp.									
04/02/17	1	13							Y		
04/02/17	2	5							Y		
Date	04/02/17										
Sublot	2-Jan										
Pay Item No.	334-1-24										
Grade Of Asphalt	NTSS-1hm										
FDOT Calibration Tank No.	3159										
Beginning IN	16/8										
Gallons	1724										
Ending IN	25/6										
Gallons	1276										
Time of Day after Unloading	4:00 AM	AM	PH	AM	PH	AM	PH	AM	PH		
Temperature F	170										
Hot Hot Gallons	448.00										
Correction Factor	0.9732										
Gallons @ 60F	435.9936										
SY Covered	9434.6										
Spread Rate Gal/SY	0.046										
Verification Results	<input checked="" type="checkbox"/> Y	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Remarks 4/2/17 William's crew: Placed FC-5 along LT outside Rdwy at the following areas: side streets of Colbert Rd, Public Entrance RTL/turnout, clubhouse RTL/turnout, and paerial clubhouse gore area. This crew used loads 1,4,11,12,13,15,19. Junior's Crew: Placed FC-5 along LT rdwy at OS 1311+85 - 1281+40, Hoilside Heights RTL/OS, J Day side Street, Church entrance side street and 540A RTL at 1255+20 - 1258+00 as well as on RT Rdwy at RTL/OS at 1239+00. This crew used loads 2,3,5,7,9,10,14,21-23. 482.94 Tons											
								M32007080 Qualified Technician ID# (TIN)			
State Of Florida Department Of Transportation											
DOT-309-21 MATERIALS 03/05											

Form 675-030-21, Asphalt Roadway – Verification Report is a field form used to verify spread rate, temperature and bituminous materials

Attachment 11.1-1e Asphalt Roadway – Daily Report of Quality Control

State of Florida Department of Transportation															Update Workbook		Clear EVERYTHING		675-030-20A CONSTRUCTION 04/09/2015											
Asphalt Roadway - Daily Report of Quality Control															Show Bit Cert Page		Import from file		Email Form Feedback to: DOT-AsphaltForms@dot.state.fl.us											
<input checked="" type="checkbox"/> Lot Closed Intended Lot Size: 2000 tons Mix Design #: SPM13-11976A Reload Clear Data Gbr: 2.415 <input type="checkbox"/> Static Only															View Plan Quantity Sheet		remove last lot		Show Reports											
Assign Pay Item #'s															BASE ONLY		Total Thickness (in)		Prorated Base (SY)											
#	Day of Night	Sub Lot	Truck Load #'s	Intended Use	Density ?	Lane	Desc.	Lift # of #	Start Paving at Station	End Paving at Station	Length (FT)	Width (FT)	Area Paved (SY)	Quantity (TN)	Individual Lift Thickness (in)	Actual Spread Rate (LBS/SY)	Target Spread Rate (LBS/SY)	Total Thickness (in)	Prorated Base (SY)											
6	Night: 1	1	3	FC-576-22	N	RT	R-1	1 1	135+25.00	137+40.00	215	13.10	312.94	12.40	0.75	79.25	73													
7	Night: 1	1	4-6	FC-576-22	N	RT	R-1	1 1	137+40.00	149+70.00	1130	13.30	1563.89	63.84	0.75	76.46	73													
8	Night: 1	1	7-10	FC-576-22	N	RT	R-1	1 1	148+70.00	163+60.00	1490	13.20	2185.33	85.80	0.75	78.52	73													
9	Night: 1	1	11-12	FC-576-22	N	RT	R-1	1 1	163+60.00	171+10.00	750	13.10	1091.67	42.95	0.75	78.69	73													
10	Night: 1	1	13	FC-576-22	N	RT	R-1	1 1	171+10.00	172+75.00	165	13.10	240.17	9.40	0.75	78.73	73													
11	Night: 1	1	13-15	FC-576-22	N	RT	R-1	1 1	174+05.00	183+90.00	985	13.30	1455.61	54.93	0.75	75.47	73													
12	Night: 1			Waste									0.00	0.00																
				DAILY TOTALS: 269.32 Total Tons 0.00 Tons Not in Lot 269.32 net tons (0.00 tons Require Density) 269.32 tons Non-Density																										
															Intended Use		Pay Item #		Previous Total (Tons)		LOT Total (Tons)		Cumulative Total (Tons)		Previous Total (SY) w/OT/ATP		LOT Total (SY) w/OT/ATP		Cumulative Total (SY) w/OT/ATP	
															SP TL-D		334 114		852.65		0.00		852.65		11,006.63		0.00		11,006.63	
															SP TL-D 76-22		334 124		27,559.87		0.00		27,559.87		345,214.43		0.00		345,214.43	
															SP TL-C		334 113		1,192.43		0.00		1,192.43		21,788.06		0.00		21,788.06	
															SP TL-C 76-22		334 123		6,432.89		0.00		6,432.89		99,120.44		0.00		99,120.44	
															FC-576-22		337 722		4,000.00		269.32		4,269.32		104,051.62		6,955.61		111,007.23	
															Straightedge Corrections				1,605.19		0.00		1,605.19		19,325.83		0.00		19,325.83	
															Waste				755.34		0.00		755.34		0.00		0.00		0.00	

Form 675-030-20A, Asphalt Roadway - Daily Report of Quality Control is used to calculate spread rates and record asphalt and tack quantities.