SECTION 11.1

ASPHALT PLANT TICKETS

11.1.1 PURPOSE

This procedure establishes guidelines to control asphalt plant tickets 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 PRINTED TICKETS

Requirements/submittals:

(a) There must be an original and at least one (1) legible copy. The original is retained by the Plant Verification Technician and becomes part of the LOT Submittal Package, and one copy goes to the Roadway Verification Technician. See ***Attachment 11-1-1*** for example of an asphalt ticket.

(b) Printed tickets shall be bound in sets for each day's production run. A cover sheet (***Form 700-050-72***) shall be prepared for each set (see ***Attachment 11-1-2a***) showing the Financial Project ID Number, pay item numbers, date, book number, mix design number, type of material, ticket numbers included, and total quantity. Material of different types, pay items, waste, or private work for each day's production run shall be identified. These packets shall be available for review by the Plant Verification Technician one day after production and shall become part of the LOT Submittal Package. See ***Attachments 11-1-2 and 11-1-2a thru 11-1-2d***.

Note: The cover sheet is used for Conventional and Lump Sum (LS)/ Design Build (DB) projects. For LS/DB Projects, show the pay item for the asphalt quantity to which the pay adjustment (if applicable, per Specifications) will be applied.

(c) The **original weight tickets** (white tickets), that are part of the LOT Submittal Packages shall be scanned into the Electronic Document Management System (EDMS with the contents of the LOT Submittal Package. The hard copies will be destroyed.

11.1.5 ASPHALT PLANT OPERATIONS

All plant operations will be in accordance with ***Specifications Section 320***.

11.1.6 ATTACHMENTS

ATTACHMENT 11-1-1
Automatic Printer Ticket

EAGLE ASPHALT COMPANY
SOMEWHERE FL
1-800-555-5555

Sold to:
FIN Project ID: 123456-1-52-01
Design No. SP 10-8280A

ACCOUNT	MIX	TRUCK	TONS
15	Super Pave	573	22.46

	Tons
GROSS	35.75
TARE	13.29
NET	22.46

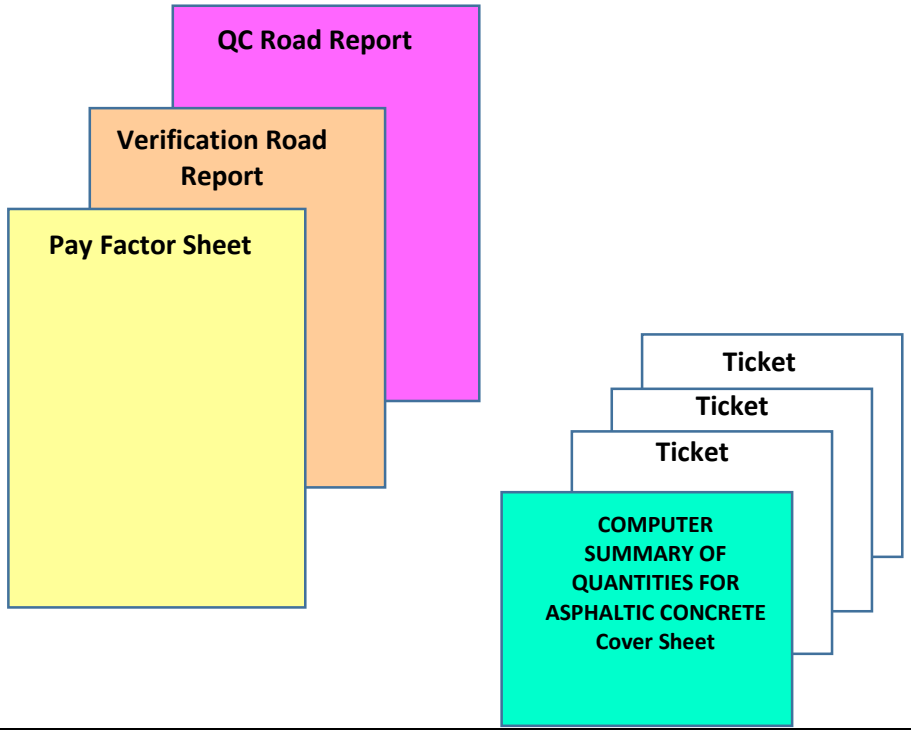
MIX TEMPERATURE: 325°
LOAD NO.: 10
ACC. TOTAL: 196.11 TONS
DATE/TIME: 01/01/2016 12:00 PM

Received by

ATTACHMENT 11-1-2

Lot Submittal Package

To be compiled by Roadway or Plant Verification Technician at the end of each LOT and Submitted to the Engineer



ATTACHMENT 11-1-2a

ASPHALT PACKAGE TICKET COVER SHEET Form 700-050-72

COMPUTER SUMMARY OF QUANTITIES FOR ASPHALTIC CONCRETE

Fin. Project ID: _____ Date: _____

Design Mix #: _____ Type of Material: _____

Total No. of Invoices for this bundle: _____ Total No. of Tons/MTs for this bundle: _____

Basis of Payment

Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
			Total: _____	Total: _____

Plant Inspector: _____

Remarks: _____

MATERIAL DISPOSITION

Rejected: _____
Waste: _____
No Pay: _____
Total @ No Pay: _____

ATTACHMENT 11-1.2b
PAY FACTOR WORKSHEET

675-030-22
MATERIALS
APW: 07/10

Florida Department of Transportation

Asphalt Plant - Lot Verification and Pay Factor Worksheet for Superpave Mixtures

Specification Version(s) 7/05	Project Information				
Contractor: **P&S PAVING**				Fin. Project ID: **21042735201**	
Mix Type: **SP-12.5**	Design No.: **SP 10-8347B**	Plant No.: **A0712**		Reported By: **J. TULLY**	
LOT #: **3**	Intended Tons: **2000**	Actual Tons: **188.37**		Date Reported: **10/1/2010**	
Verification Sublot: **1**	Start Date: **8/13/2010**	End Date: **9/28/2010**	Tons in this lot requiring no density:	188.37	**100.0%**
Proj. Description:	**A1A SUMMER HAVEN**				

Lot Verification

Property	P_{-8}	P_{-200}	P_b	Rice G_{mm}	Lab G_{mb}
QC	38.82	5.84	4.73	2.523	2.427
Verification	37.17	5.87	4.69	2.529	2.417
Tolerance	IN	IN	IN	IN	IN
Property	Core 1 G_{mb}	Core 2 G_{mb}	Core 3 G_{mb}	Core 4 G_{mb}	Core 5 G_{mb}
QC					
Verification					
Tolerance					

Lot Pay Factor Calculations

Property	P_{-8}	P_{-200}	P_b	Va	Density
Sublot 1	38.82	5.84	4.73	3.80	
Sublot 2					
Sublot 3					
Sublot 4					
Target	42.00	4.80	4.90	4.0	92.0
n=	1.00	1.00	1.00	1.00	
Mean	**38.82**	**5.84**	**4.73**	**3.80**	
SD					
Q_u					
P_u					
Q_l					
P_l					
PWL					
PF	**1.00**	**1.00**	**1.05**	**1.05**	**1.00**
Note: Sublot values which appear in RED are outside of the Master Production Range as specified in Table 334-5, refer to 334-5.1.4.4.			Composite Pay Factor		**1.03**

The Composite Pay Factor Worksheet is used to input the Contractor's test results for AC content, gradation, air voids and density for each sublot.

The Plant Verification Technician will test one predetermined sublot and input results. If verified, the composite pay factor will be used for the entire verified lot. If the sublot does not verify the whole lot goes to resolution.

The composite pay factor provided by the Plant Verification Technician, once verified by the PA, will be paid on the following Progress Estimate as a Line Item Adjustment.

ATTACHMENT 11-1-2c
ASPHALT ROADWAY – VERIFICATION REPORT

State Of Florida Department Of Transportation

Asphalt Roadway - Verification Report

Page No 2 of 2

Fin. Project ID:	408268-3-52-01	Material No.:	123L	Type of Mix:	FC-5	Mix Design No.:	SPM 13-11452B
Intended use:	Friction	Plant No.:	A0741	Lot No.:	34	Intended Lot Size:	2000 TNS

Verification of Spread Rate — **Verification Results Y/N**

Date	Sublot	Lane / Lift # of #	Station To Station		Loads	Linear Ft	Width	SY	Tons	Spread	
4/2/2015	1	RTL & SH / 1 of 1	1336 67	1330 86	4,11,1	581.00	##	1162.00	50.12	86.3	Y
4/2/2015	2	RTL / 1 of 1	1258 00	1255 20	9-10	280.00	##	466.67	25	107.1	N

Verification of Tack

Record Of Bituminous Materials

Date	04/02/15			
Sublot	1-2			
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 PM	AM PM	AM PM
Temperature F	170			
Net Hot Gallons	448.00			
Correction Factor	0.9732			
Gallons @ 60F	435.9936			
SY Covered	9434.6			
Spread Rate Gal/SY	0.046			
Verification Results	Y			

Target Spread Rate 83

Verification of Established Temp. 320

Verification Results Y/N

Date	Sub.	Load No.	Temp.	
04/02/15	1	13	325	Y
04/02/15	2	6	325	Y

M32007080
Qualified Technician ID# (TIN)

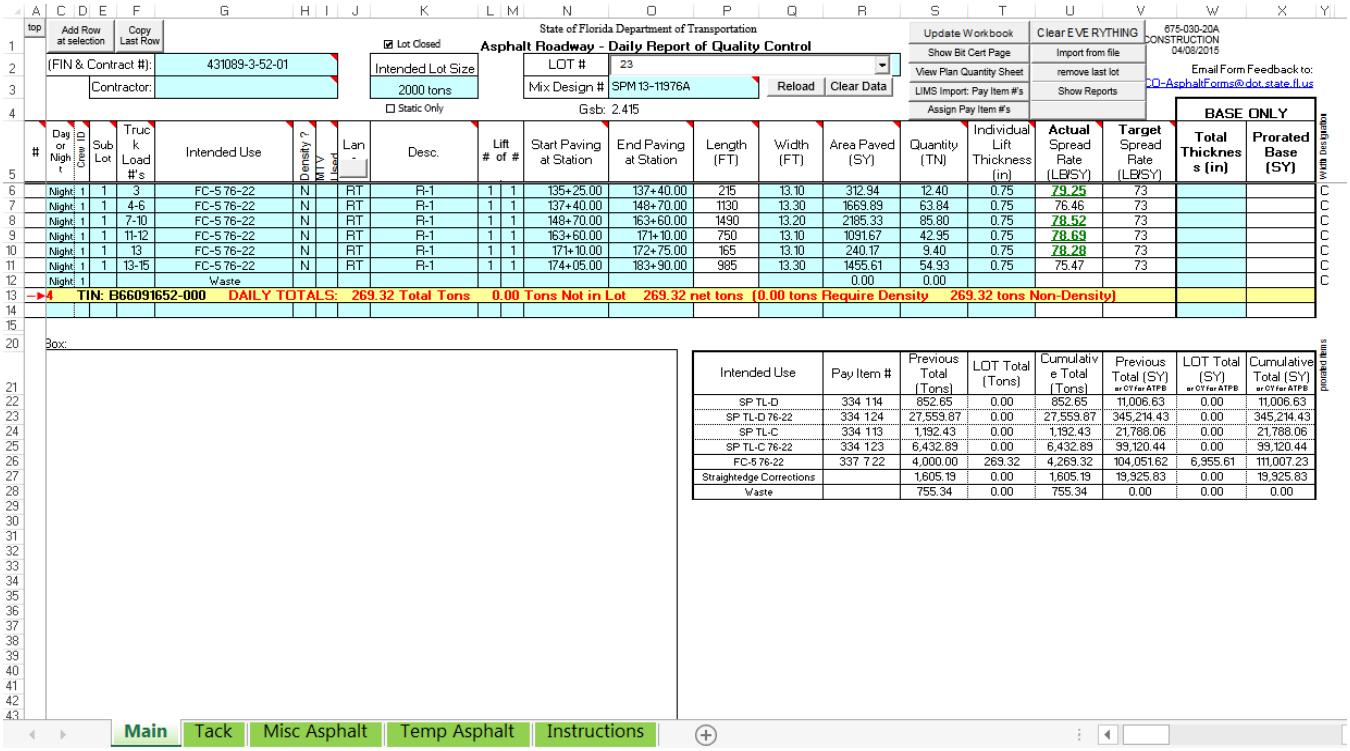
Remarks

04/02/15 William's crew: Placed FC-5 along LT outside Rdwy at the following areas: side streets of Colbert Rd, Publix entrance RTL/turnout, Clubhouse RTL/turnout, and partial 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, Hillside 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 the RTL/OS at 1239+00 - 1249+35. This crew used loads 2, 3, 5, 7, 9, 10, 14, 21-23. 482.94 tons delivered, 455.91 tons placed, 27.03 tons waste.

The Asphalt Roadway – Verification Report is a field form used to verify spread rate, temperature and bituminous materials.

ATTACHMENT 11-1-2d

ASPHALT ROADWAY – DAILY REPORT OF QUALITY CONTROL



The Daily Report of Quality Control is used to calculate spread rates and record asphalt and tack quantities.