

PROGRESS PAYMENTS

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OVERVIEW

This chapter provides guidance for the preparation of supporting documentation (stockpiles, escalation, liquidated damages and penalties) for Contractor payments and creation of the semi-monthly pay estimate. The pay estimate information is exported to NDOT's financial system for processing the contractor progress payment.

NOTE: Forms change periodically, go to the SharePoint Construction Forms, [Area: Construction Admin - Payment Forms](#) for the latest version.

STOCKPILES

Stockpile partial payments may be made for acceptable materials furnished and stored for use on a contract if such storage is within the vicinity of the job site in the State of Nevada and subject to or under the control of NDOT. This is more commonly referred to as payment for Materials On Hand. Refer to Subsection 109.06, (*Measurement and Payment*) *Partial Payment*, of the Standard Specifications for details.

- The Prime Contractor must submit a signed Request for Payment for Materials On Hand form, (Form No. 040-015) (Figure 24-1), an invoice (Figure 24-2), material certification and test report (if applicable) to request a stockpile partial payment. Any subsequent additions to the stockpile must be requested by submitting a new signed form and additional invoices.
- Partial payments for materials fabricated or manufactured off the jobsite (pipe, rebar, fence, guardrail, etc.) shall be allowed at invoice prices, providing the invoice costs are less than unit bid price for each item.
- Sales tax and freight charges may be included in the adjusted unit price if it is requested and substantiated by an invoice.
- The stockpiled price for reinforcing steel and all guardrail items (guardrail, end anchors, connections, etc.) cannot be greater than 50 percent of the bid price for the bid item.
- Payments for reinforcing steel for drilled shafts should not be greater than 50% of the unit bid price for the drilled shafts. If unusually high or low bid prices for these items are encountered, contact Construction Administrative Services staff on a case-by-case basis.
- Partial payments are not allowed for any perishable items unless allowed in the Special Provisions. This is especially important on the contracts which include planting or beautification items.

RESIDENT ENGINEER'S RESPONSIBILITIES

- When stockpile partial payment is requested but the materials have not been brought to the job site, add a detailed explanation of where the material is being stored and shipment date if known on the Request for Payment for Materials On Hand form (Figure 24-1).
- Assign an NDOT representative to verify quantity, quality, location, proper storage, acceptability of the material, and the information furnished with the Contractor's request.
- Determine a percentage of the unit bid price to be paid for the stockpile item if the unit price on the invoice exceeds the unit bid price for any item.
- Determine if materials included for payment have been incorporated in the work.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
REQUEST FOR PAYMENT FOR MATERIALS ON HAND

DATE 12/27/2016

TO Sami Yousuf
Resident Engineer

CONTRACT NO. 3628

FROM FISHER INDUSTRIES
Prime Contractor

PAYMENT NO. 1

In accordance with the provisions of Subsection 109.06 of the *Standard Specifications for Road and Bridge Construction*, request is made for payment as Materials on Hand for the following materials:

Bid Item No.	Quantity	Material Description	Value	Type of Substantiating Evidence of Purchase or Production Costs Attached	Where Stored or Stockpiled
6030720	360.00	30 Inch X 19 Inch RCP	\$ 26,727.84	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6030770	360.00	38 Inch X 24 Inch RCP	\$ 34,087.68	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6030820	712.00	45 Inch X 29 Inch RCP	\$ 97,296.22	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6031005	376.00	60 Inch X 38 Inch RCP	\$ 74,037.41	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6030990	3.00	38 Inch X 24 Inch FES	\$ 5,907.24	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6030995	3.00	45 Inch X 29 Inch FES	\$ 8,312.10	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6031000	2.00	53 Inch X 34 Inch FES	\$ 6,712.09	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6031005	3.00	60 Inch X 38 Inch FES	\$ 11,833.85	Invoice, and Visual Inspection	Rinker Yard Las Vegas
6030860	168.00	53 Inch X 34 Inch RCP	\$ 27,115.20	Invoice, and Visual Inspection	On Job site 3628
6031000	2.00	53 Inch X 34 Inch FES	\$ 6,712.09	Invoice, and Visual Inspection	On Job site 3628
6030880	128.00	60 Inch X 38 Inch RCP	\$ 25,204.22	Invoice, and Visual Inspection	On Job site 3628
6031005	2.00	60 Inch X 38 Inch FES	\$ 7,889.23	Invoice, and Visual Inspection	On Job site 3628

AFFIDAVIT

The materials listed above are separated from other like materials, are physically identified as our property and have been purchased exclusively for use on Contract No. 3628. The State may enter upon the premises for the purposes set forth in Subsection 109.06 of the *Standard Specifications for Road and Bridge Construction* for inspection, checking or auditing, or for any other purpose as you consider necessary. It is expressly understood and agreed that this information and affidavit is furnished to the State for the purpose of obtaining payment for the above materials before they are incorporated into the contract described above, and that the storage thereof at the location shown is subject to and under the control of the State.

Contractor declares under the penalties of perjury that this affidavit (including any accompanying evidence) has been examined by him and to the best of his knowledge and belief is a true and correct affidavit. It is further expressly understood and agreed by the Contractor that in the event he misrepresents to the State the Materials on Hand, Contractor will pay to State all costs and expenses, including reasonable attorneys fees, in any action brought by the State to recover any and all damages sustained by the State by reason of such misrepresentation.


Name (Signature) _____ Contractor

Instructions to Contractors: Submit original and one copy to Resident Engineer prior to the end of the payment cycle. Attach evidence of purchase to original.

Instructions to Resident Engineer: File original. Forward a copy to the Construction Division by the end of the payments cycle.

NDOT
040-015
(Rev 08-16)

Figure 24-1: Request for Payment On Materials on Hand



RINKER MATERIALS
2109 BURNS AVE.
HENDERSON, NV 89011

Rinker Materials Concrete Pipe Division

C AND S COMPANY INC
1903 SYCAMORE TRL
LAS VEGAS, NV 89108-1530

INVOICE

Date: 12/19/2016
Invoice No:
Terms: Net 10th Prox
Payment Due On: 1/10/2017
Job No.: NDOT 3628
Legal Address: TONOPAH NV 89049
Account No: 3104381
Account Name: C AND S COMPANY INC.

For All Inquiries Call:
702 565-8721

Remit To:
Rinker Materials | PO Box 730107 | Dallas, TX 75273-0197

DETAILED INFORMATION BY PO

PO Number: SIGNED QUOTE		DELIVERY ADDRESS: C AND S COMPANY INC, TONOPAH NV 89049										
BHP DATE	DELIVERY	REP #	PRODUCT CODE/DESCRIPTION	QTY	UOM	NET PRICE	BY	UOM	UNITS	AMOUNT	FREIGHT	TAX
13/9548			CPPE.DC.ELP.42(14X3)S C3PF	168	FT	\$153.00	1	PC	1	\$25,224.00	\$0.00	1,916.21
13/2894			CPPE.DC.ELP.36(18X3)S C4+R	360	FT	\$53.00	1	PC	1	\$19,080.00	\$0.00	1,887.84
13/7534			CPPE.DC.ELP.36(18X3)S C3PF	360	FT	\$86.00	1	PC	1	\$31,080.00	\$0.00	2,407.68
13/7533			CPPE.DC.ELP.36(18X4)S C3PF	717	FT	\$177.00	1	PC	1	\$127,414.00	\$0.00	6,872.72
13/3651			CPPE.DC.ELP.48(24X6)S C3PF	504	FT	\$180.00	1	PC	1	\$90,720.00	\$0.00	7,805.63
942996			PCAST.VHC.FE.36(6)OUTLET.PF.H.ELL	3	PC	\$1,890.00	1	PC	1	\$5,270.00	\$0.00	437.24
942980			PCAST.VHC.FE.36(6)OUTLET.PF.H.ELL	3	PC	\$3,570.00	1	PC	1	\$7,725.00	\$0.00	587.10
942962			PCAST.VHC.FE.42(6)W/LET.PF.H.ELL	4	PC	\$3,118.00	1	PC	1	\$12,472.00	\$0.00	948.18
942901			PCAST.VHC.FE.48(6)W/LET.PF.H.ELL	3	PC	\$3,665.00	1	PC	1	\$11,095.00	\$0.00	835.85
942983			PCAST.VHC.FE.48(6)OUTLET.PF.H.ELL	2	PC	\$3,665.00	1	PC	1	\$7,330.00	\$0.00	557.73

PO Subtotal: 0.00 Taxes: 0.00 Total: 1369,797.00 Material 0.00 Freight: 0.00 Other: 33,434.18 Tax: 1321,621.18 Invoice Total

Figure 24-2: Request for Payment on Materials On Hand Invoice

OFFICE ENGINEER'S RESPONSIBILITIES

- Scan and save the signed Request for Material On Hand form and invoice(s) to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Requests for Materials On Hand with Invoice directory.
- Scan and save the material certification and test report to the appropriate EDOC Contract Files\Material and Testing Files\Division No. 4 – Materials Division Certs and Test Reports\4.# directory. Send original certifications to the Materials Division for approval.
- Prior to creating the bi-weekly estimate (by Friday of the cut-off date) email the Request for Material On Hand form and invoice to the Construction Admin Services Section (const.admin@dot.nv.gov) for review.
- Create the stockpile record using the information from the invoice. Refer to Chapter 9, Working With Stockpiles, in the [FieldManager User Guide](#) for details. Once a stockpile for an item has been set up it will pay the entire stockpile amount on the next estimate processed and it will automatically recover the stockpile payment when the associated item has been paid for through an estimate(s).

Note: The stockpile must be created and included in a bi-weekly estimate before any IDR postings for the stockpile bid items are made. FieldManager will not allow stockpile payment on bid items to exceed plan quantity.

ASPHALT ESCALATION

Asphalt Escalation is an adjustment to minimize the impact of price uncertainty to the Contractor and the Department for “Asphalt Cement” used in construction contracts. Asphalt Escalation is added to a contract which has 7500+ wet tons of dense and/or open-graded plantmix. Asphalt Escalation is assessed on actual tonnage placed and accepted. Refer to subsection 109.04, (*Measurement and Payment*) *Asphalt Escalation*, of the Standard Specifications for details.

At the start of the contract, Construction Admin Services staff will email the Asphalt Material Adjustment Calculations for Wet Ton Contracts spreadsheet (Figure 24-4) to the crew office. This spreadsheet will be used to calculate and track asphalt escalation payments during construction. The original spreadsheet will be populated with the contract number and Basic Materials Index (Bi) for asphalt at the time of Contractor bid opening. A separate workbook within the spreadsheet, is required for each mix design used. If there are questions about this spreadsheet, contact the Construction Admin Services Section for assistance.

Every two weeks Construction Admin Services staff will email the Fuel and Asphalt Escalation for Cut-Off Memo (Figure 24-5) to the crew office. This Memo contains the current Bi-Weekly Materials Adjustment (Bp) amount for asphalt. The information in this memo is used to populate the Bp information in the Asphalt Material Adjustment Calculations for Wet Ton Contracts spreadsheet.

Email all mix designs used during the bi-weekly payment cycle to the Construction Admin Services Section (const.admin@dot.nv.gov).

OFFICE ENGINEER’S RESPONSIBILITY

ASPHALT ESCALATION SPREADSHEET

- Upon receipt of the New Contract Documentation email from Construction Admin Services staff, save the Asphalt Material Adjustment Calculations for Wet Ton Contracts spreadsheet (Figure 24-4) to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Asphalt Escalation Spreadsheets directory.
 - Enter the following data in the appropriate workbook tab using the information in the Bituminous Mix Design report (Figure 24-6), from the Materials Division. Use a separate workbook tab for each mix design.
 - % of Asphalt
 - % of Mineral Filler
 - % oil from RAP (only used on a RAP mix design)
 - Rename the workbook tab according to the mix design used (Figure 24-3).

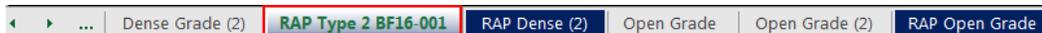


Figure 24-3: Asphalt Material Adjustment Calculations for Wet Ton, Workbook Tabs

Note: Copy and paste from the existing workbooks, if additional workbooks are needed for new mix designs.

- Update the following information in the spreadsheet when paying for Plantmix Surfacing items.
 - Cut-Off Date – Each AEB (category) will have a separate Cut-Off Date record.
 - AEB (Category)
 - Type of Asphalt
 - (Bp) Bi-weekly Adjustment Index – The amount found in the Fuel and Asphalt Escalation for Cut-Off Memo (Figure 24-5).
 - Wet Tons – The Tons Delivered amount from the Record of Delivery – Plantmix Surface spreadsheet.
 - Payment No. – The estimate number in FieldManager.

Note: The spreadsheet automatically calculates the Bi threshold (no escalation is assessed if Bp falls within this threshold), Difference of Bp and Bi, Dry Aggregate, Tons of Oil Used, Escalation \$, and Accum. Estimate Total \$.

Contract No:		3583		ASPHALT MATERIAL ADJUSTMENT CALCULATIONS FOR WET TON CONTRACTS									
Bi=		460.69		No Adjustment if the Bp is Between .90(Bi)=				414.62		& 1.10(Bi)=		506.76	
% Asphalt		3.80		\$		806.21		= (Max Bi)		\$ per English short ton			
% Mineral Filler		1.50											
% RAP		0.50		Mix Design # BF 16-001 Type 2C									
1	2	3	4	5		6	7	8	9	10	11	12	
Cut-Off Date	AEB	Type of Asphalt	(Bp) Bi-weekly adjustment index	Difference of (Bp) &		Wet Tons	Dry Aggregate	Tons of Oil Used	N/A	Escalation \$	Payment No.	Accum. Estimate Total \$	
				1.10 (Bi) +\$.90 (Bi) -\$								
4/21/2015	1	PG 76-22NV	508.85	2.09		8115.72	7670.81	291.49		609	5	609	
5/6/2016	1	PG 76-22NV	331.67		-82.95	838.17	792.22	30.10		-2497	12	-1888	
6/3/2016	1	PG 76-22NV	327.71		-86.91	4003.12	3783.67	143.78		-12496	13	-14384	
9/9/2016	1	PG 76-22NV	342.64		-71.98	494.85	467.72	17.77		-1279	18	-15663	

Figure 24-4: Asphalt Material Adjustment Calculations for Wet Ton Spreadsheet

- Combine the Escalation \$ totals for each category in each workbook tab. Use the combined totals for the IDR Asphalt Escalation Item posting.
- Save the spreadsheet to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Asphalt Escalation Spreadsheets directory.

STATE OF NEVADA
 DEPARTMENT OF TRANSPORTATION
 CONSTRUCTION DIVISION
 M E M O R A N D U M

DATE: March 13, 2017
 TO: ALL RESIDENT ENGINEERS
 FROM: Cecilia Whited, Construction
 SUBJECT: FUEL & ASPHALT ESCALATION FOR CUT-OFF 3/10/2017

Email payment data, including: stockpile info, mix designs for asphalt escalation, LOA, etc., directly to Construction Admin section's email inbox: Const.admin@dot.nv.gov

PLEASE SEND NO LATER THAN THE CUT-OFF DATE 3/10/2017.

Fuel Escalation (Ap) =\$1.78
 Asphalt Escalation (Bp) =\$333.82

Please assure that someone will be in the field office (or leave a phone number where you or your Office Person can be reached) to answer any bi-weekly payment questions that may require changes to be made to the payment.

Please remember that we are processing contracts statewide and may not get to your contract until Friday.

Thank you.

CW:rl

Figure 24-5: Fuel and Asphalt Escalation for Cut-Off Memo

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
MATERIALS DIVISION
 1263 S. STEWART ST. CARSON CITY, NV 89712
OPEN GRADED BITUMINOUS MIX DESIGN

LAB NUMBER:	BF16-44	BITUMEN RATIO:	6.2 PG 64-28NV
CONTRACT NUMBER:	3609		
COUNTY:	ELKO		
PRIMARY CONTRACTOR:	W.W. CLYDE		
DATE AGG. SAMPLED:	07/07/16		
DATE AGG. RECEIVED:	07/12/16		
REPORT DATE:	07/22/16		
SAMPLED BY:	C. HANSEN		
CHECKED BY:	RP & GR		
TYPE MATERIAL:	3/8" OPEN GRADED PLANT		
SOURCE OF SAMPLE(S):	EL 84-15		
MINERAL FILLER:	1.5% HYDRATED LIME WET-CURED (MARINATED) 48 HOURS		
TYPE ASPHALT:	PG 64-28NV	(CCAC16-440)	
ASPHALT PRODUCER:	CALUMET		
JOB DESCRIPTION: ON I-80 FROM 0.05 MILES WEST OF THE WILLOW CREEK GRADE SEPARATION TO 0.82 MILES EAST OF THE EAST WELLS INTERCHANGE			
MAX. DENSITY, Mg/m ³ (PCF):	2.418 (150.9)		
SURFACE AREA m ² /kg (ft ² /lb):	4.28 (20.9)		
SAND EQUIVALENT:	78		
CALIF. SPECIFIC GRAVITY:	2.65		SPECIFICATIONS:
COARSE AGG. BULK SPECIFIC GRAVITY:	2.62		2.95 MAX
FINE AGG. BULK SPECIFIC GRAVITY:	2.54		2.95 MAX
+#4 WATER ABSORPTION:	CHIPS: 0.9		4% MAX
SS SOUNDNESS COARSE:	5		12% MAX
SS SOUNDNESS FINES:	8		15% MAX
LIQUID LIMIT (BEFORE MARINATION):	CHIPS: 19; CLEAN FINES: N/A; DIRTY FINES: N/A		35 MAX
PLASTICITY INDEX (BEFORE MARINATION):	CHIPS: 3; CLEAN FINES: NP; DIRTY FINES: NP		10 MAX
LA ABRASION:	29.2		37% MAX
FRACTURE FACE COUNT:	CHIPS: 100		90% MIN
REMARKS: FOR THE MATERIAL REPRESENTED BY THE SUBMITTED SAMPLES WITH THE ATTACHED GRADINGS, LABORATORY TESTS INDICATE A BITUMEN RATIO OF 6.2 PG 64-28NV FOR 3/8" OPEN GRADED PLANTMIX AGGREGATE TREATED WITH 1.5% HYDRATED LIME WET-CURED (MARINATED) 48 HOURS.			
DISTRIBUTION: 1 DISTRICT ENGINEER 2 CONSTRUCTION ENGINEER 1 LAB FILES 1 BITUMINOUS LAB 1 ASPHALT LAB 1 BITUMINOUS OPERATIONS 1 LAS VEGAS LAB 1 AGGREGATE LAB	BIN PERCENTAGES: 70% CHIPS 14% CLEAN FINES 16% DIRTY FINES	NOTE: CHANGES FROM THE RECOMMENDED BITUMEN RATIO SHALL BE DISCUSSED WITH THE MATERIALS DIVISION. THE RECOMMENDED BITUMEN RATIO IS BASED UPON DRY WEIGHT OF AGGREGATE.	

Bitumen Ratio and Mineral Filler are used for Asphalt Escalation, Asphalt Damages, and in calculating to assure there are enough B/Ls to cover what has been used.

Ben Olsen

Figure 24-6: Bituminous Mix Design (Page 1)

INSPECTOR DAILY REPORT (FIELDMANAGER)

1. Create an IDR in FieldManager to document the Asphalt Escalation Item.
 - a. In the General tab, enter a Comment related to the item posting.
 - b. Enter an item posting (Figure 24-7) for the Asphalt Escalation item based on the Escalation \$ totals for each category (AEB) in each workbook tab, from the Asphalt Material Adjustment Calculations for Wet Ton Contracts spreadsheet.
2. Generate the IDR.

NOTES for Asphalt Escalation Items :

- If the Asphalt Escalation quantity amount falls below the Catg. Auth. Qty (FOR EACH CATEGORY) then a type 28 Reducing Escalation Quantity Contract Modification must be created, generated and approved. In this Contract Modification, decrease the original Asphalt Escalation Item's quantity to zero in each category. Refer to Chapter 10, Contract Modification, of the [FieldManager User Guide](#) and Chapter 3, Contract Modifications and Letters of Authorization, in this Manual, for details on creating and executing a Contract Modification. Then create an IDR posting and enter the negative quantity amount to the Asphalt Escalation Item.
- Refer to [Contract Modification Examples](#) in the Construction Crew Portal in SharePoint for an example of a completed escalation Contract Modification.
- Contact Construction Admin Services staff for questions on Fuel Escalation.

The screenshot shows a software window titled 'Change IDR (IDR: 3/22/2017, Cecilia A. Whited, 1) (Contract: 03583)'. It has several tabs: General, Contractors, Site Times, Postings, Attachments, and View. The 'Postings' tab is active, showing details for 'Item: 7360013, ASPHALT ESCALATION'. The 'Item Posting' section includes:

- Project: 60638C2C MAIN ROADWAY BREAKOUT
- Category: 01 (Construct N/E & W/S Ramps)FR. "XP"122+00 TO "XP25
- Contractor: LAS VEGAS PAVING CORPORATION
- Quantity: 672.000 L.S.
- Location: Entire Job
- Remarks: See Asphalt Esc. Spreadsheet

 Summary statistics at the top right show: Catg. Auth. Qty: 0.000, Catg. Auth. Amt: \$0.00, Unit Price: \$1.000, Catg. Qty. Placed: 672.000, Catg. Qty. Paid: 0.000. Buttons at the bottom include Materials, OK, Delete, Cancel, Add Materials, and Add Breakdowns.

NOTES for Asphalt Escalation L.S. (Figure 24-7):

- In Location, enter 'Entire job'.
- In Remarks, reference the Asphalt Escalation spreadsheet.
- Sig. Fig. = .01

Figure 24-7: Office Engineer's IDR Item Posting (Asphalt Escalation Item)

FUEL ESCALATION

Fuel Escalation is a price adjustment to minimize impact of fluctuations in fuel prices on the Contractor and the Department. Fuel Escalation is only included on contracts where Fuel Factor Percentage > 1%. Refer to the Contract Special Provisions for the "Fuel Factor Percentage" (Ffp). Refer to subsection 109.05, (*Measurement and Payment*) *Fuel Escalation*, of the Standard Specifications for details.

The Contractor will send a request to the Resident Engineer to activate fuel escalation on the contract. The Contractor can activate fuel escalation at any time during the contract. The Resident Engineer will forward the activation request to the Construction Admin Services staff.

At the start of the contract, Construction Admin Services staff will email the Diesel Fuel Adjustment Calculations spreadsheet (Figure 24-8) to the crew office. This spreadsheet will be used to calculate and track Fuel Escalation payments during construction. The original spreadsheet will be populated with the contract number, Contract Price (Cp) for fuel at the time of Contractor bid opening, and the Ffp from the contract Special Provisions. If there are questions about this spreadsheet, contact the Construction Admin Services Section for assistance.

Every two weeks, Construction Admin Services staff will email the Fuel and Asphalt Escalation for Cut-Off Memo (Figure 24-5) to the crew office. This memo contains the current Adjustment Price (Ap) amount for fuel. The information in this memo is used to populate the Ap information in the Diesel Fuel Adjustment Calculations spreadsheet.

OFFICE ENGINEER'S RESPONSIBILITY

Fuel Escalation is based on the payment amount earned on the previous payment estimate(s), so Estimate #1 will never contain Fuel Escalation. The Contractor can request to have Fuel Escalation activated at any point during construction. Fuel Escalation must be tracked bi-weekly throughout the life of the contract on the Fuel Escalation spreadsheet.

FUEL ESCALATION SPREADSHEET

- Upon receipt of the New Contract Documentation email from Construction Admin Services staff, save the Diesel Fuel Adjustment Calculations spreadsheet (Figure 24-8) to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Fuel Escalation Spreadsheets directory.
- Update the spreadsheet (Figure 24-8), bi-weekly (after the first estimate), with the following information:
 - Cut-Off Date – Each AEB (category) will have a separate Cut-Off Date record.
 - AEB (Category)
 - Ap - The amount found in the Fuel and Asphalt Escalation for Cut-Off Memo (Figure 24-5) that was received for current cut-off.
 - Category Amount Subject to Escalation – The amount (per category) found in the Category Escalation Summary by Estimate Inquire report for the estimate prior to the one in the current cut-off date (Figure 24-8). Refer to Chapter 15, Using Inquires, in the [FieldManager User Guide](#) for details.
 - Payment No. – The estimate number in FieldManager.

Note: The spreadsheet automatically calculates the Bi threshold (no escalation is assessed if Ap falls within this threshold), Max Ap, AEB cumulative totals (entries in Red), Ap/Cp, Increase or Decrease of Ap, Bi-weekly Fuel Cost (Bfc), A Fuel Adj., and the Accum. Payment Total \$.

Contract No:		3583		No. 2 Diesel Fuel Adjustment Calculations							
Cp=		1.79		No adjustment if Ap is between .90 (Cp)		1.61		& 1.10(Cp)		1.97	
Ffp=%		1.5									
				\$ 3.13							
				= (Max Ap)							
AEB 1 =	\$801	AEB 2 =	\$309	AEB 3 =	\$0	AEB 4 =	\$15	AEB 5 =	\$1	AEB 6 =	\$1
AEB 7 =	\$647	AEB 8 =	\$2	AEB 9 =	\$0	AEB 10 =	\$3	AEB 11 =	\$0	AEB 12 =	\$0
AEB 13 =	\$0	AEB 14 =	\$0	AEB 15 =	\$0	AEB 16 =	\$0	AEB 17 =	\$0	AEB 18 =	\$0
AEB 19 =	\$0	AEB 20 =	\$0	AEB 21 =	\$0	AEB 22 =	\$0	AEB 23 =	\$0	AEB 24 =	\$0
AEB 25 =	\$0	AEB 26 =	\$0	AEB 27 =	\$0	AEB 28 =	\$0	AEB 29 =	\$0	AEB 30 =	\$0

1	2	3	4	5		6	7	8	9	10
Cut-Off Date	AEB	Ap	Ap / Cp	Increase	Decrease	Category Amount Subject to Escalation	Bfc	A Fuel Adj.	Payment No.	Accum. Payment Total \$
			(3) / Cp	(4)-1.10	.90-(4)		(6) x Ffp	(5) x (7)		
10/23/2015	1	2.13	1.1899	0.0899		594000.03	8910.00	801	2	801
10/23/2015	2	2.13	1.1899	0.0899		228916.25	3433.74	309	2	1110
10/23/2015	4	2.13	1.1899	0.0899		11416.94	171.25	15	2	1125
10/23/2015	5	2.13	1.1899	0.0899		736.30	11.04	1	2	1126
10/23/2015	6	2.13	1.1899	0.0899		839.35	12.59	1	2	1127
10/23/2015	7	2.13	1.1899	0.0899		480041.29	7200.62	647	2	1774
10/23/2015	8	2.13	1.1899	0.0899		1231.30	18.47	2	2	1776
10/23/2015	9	2.13	1.1899	0.0899		6.43	0.10		2	1776
10/23/2015	10	2.13	1.1899	0.0899		1884.46	28.27	3	2	1779

Figure 24-8: Diesel Fuel Adjustment Calculations Spreadsheet

Category Escalation Summary by Estimate			
NEVADA DOT		4/28/2017 8:29 AM	
Department of Transportation		FieldManager 5.3a	
Contract: 03583, US95 NW PHASE 3A			
Estimate Number: 1			
Category	Project	Category Description	Amount Subject To Escalation
01	60638C2C	(Construct N/E & W/S Ramps)FR. "XP" 122+00 TO "XP" 252+67.47	\$594,000.03
02	60638C2C	New "WS" Bridge I-3035 "WS" 34+30.85 TO "WS" 58+00.85	\$228,916.25
04	60638C2C	Install and Replace Traffic Signs "XP" 122+00.00 TO "XP" 252+	\$11,416.94
05	60638C2C	Install New Lighting "XP" 122+00.00 TO "XP" 252+67.47	\$736.30
06	60638C2C	Install ITS "XP" 122+00.00 TO "XP" 252+67.47	\$839.35
07	60638C2C	Construct Retaining Walls "XP" 122+00.00 TO "XP" 252+67.47	\$480,041.29
08	60638C2C	Landscape & Aesthetics "XP" 122+00.00 TO "XP" 252+67.47	\$1,231.30
09	60638C3C	CCRFCD Box Culvert "CPCW" 14+03.56 TO "CPCW" 65+51.59	\$6.43
10	60638C2C	Construct Hydraulics "XP" 122+00.00 TO "XP" 252+67.47	\$1,884.46
Total:			\$1,319,072.35

Figure 24-9: FieldManager Category Escalation Summary by Estimate Report

- Save the spreadsheet (Figure 24-8) to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Fuel Escalation Spreadsheets directory.

INSPECTOR DAILY REPORT (IDR)

The following steps are completed when the Contractor activates Fuel Escalation:

- Create an IDR in FieldManager to document the Fuel Escalation Item.
 - In the General tab, enter a Comment related to the item posting.
 - Enter an item posting (Figure 24-10) for the Fuel Escalation item (per category) based on one of the following:

- i. If more than one estimate has processed prior to the activation of fuel escalation use the AEB cumulative totals (entries in Red), in the Diesel Fuel Adjustment Calculations spreadsheet (Figure 24-8).
 - ii. For all remaining estimates use the A Fuel Adj. (Column 8) amounts, in the Diesel Fuel Adjustment Calculations spreadsheet (Figure 24-8).
2. Generate the IDR.

NOTES for Fuel Escalation Items:

- If the fuel escalation quantity amount falls below the Catg. Auth. Qty (FOR EACH CATEGORY) then a type 28 Reducing Escalation Contract Modification must be created, generated and approved. In this Contract Modification, decrease the original fuel escalation item's quantity to zero in each category. Refer to Chapter 10, Contract Modification, of the [FieldManager User Guide](#) and Chapter 3, Contract Modifications and Letters of Authorization, in this Manual, for details on creating and executing a Contract Modification. Then create an IDR posting and enter the negative quantity amount to the Fuel Escalation Item.
- Refer to [Contract Modification Examples](#) in the Construction Crew Portal in SharePoint for an example of a completed escalation Contract Modification.
- Contact Construction Admin Services staff for questions on Fuel Escalation.

NOTES for Fuel Escalation L.S. (Figure 24-10):

- In Location, enter 'Entire job'.
- In Remarks, reference the Fuel Escalation spreadsheet.
- Sig. Fig. = .01

Figure 24-10: Office Engineer's IDR Item Posting (Fuel Escalation Item)

OFFICE ENGINEER IDR POSTINGS

OFFICE ENGINEER'S RESPONSIBILITIES

The Office Engineer will make IDR postings for the following items: ALL ton items, mobilization, prorated (percentage) items, trainee, time related overhead, and lump sum. Multiple postings can be added to one IDR. They can be completed daily, weekly or bi-weekly within the two-week pay period. Refer to Chapter 7, Inspector Daily Report, in the [FieldManager User Guide](#) for details.

1. Create an IDR in FieldManager.
 - a. In the General tab, enter a Comment related to the item posting(s).
 - b. Enter the item posting (Figure 24-11) through (Figure 24-15).
2. Generate the IDR.

TON ITEMS

Refer to the Office Engineer's Responsibilities Sections in Chapters 9, 10 and 11 in this Manual for details and screen shots of the Ton Item IDR postings.

MOBILIZATION (L.S.)

Figure 24-11: Office Engineer's IDR Item Posting (Mobilization L.S.)

NOTES for Mobilization L.S. (Figure 24-11):

- The Percentage Item Warning window (Figure 24-29), from the estimate process, lists the suggested quantity for mobilization, when appropriate. The quantity suggested is based on the information in Subsection 109.06 of the Standard Specifications and the percent complete awarded amount of the contract.
- In Location, enter 'Entire job'.
- Sig. Fig. = .01

PRORATED ITEM (L.S.)

Figure 24-12: Office Engineer's IDR Item Posting (Prorated L.S.)

NOTES for Prorated L.S. (Figure 24-12):

- The Percentage Item Warning window (Figure 24-29), from the estimate process, lists the suggested quantity for prorated items, when appropriate. The quantity suggested is based on the information in subsection 109.06 of the Standard Specifications and the percent complete awarded amount of the contract.
- In Location, enter 'Entire job'.
- Sig. Fig. = .01

TRAINEE

NOTES for Training HOUR (Figure 24-13):

- Payment for Trainee is based on hours.
- In Location, enter 'Entire Job'.
- Trainee hours for apprentices will be documented on a Weekly Trainee Report (Form No. 040-042) completed and signed weekly (Figure 24-14) or a Training Reimbursement Report printed from LCPTracker.
- Reference the 2017 Certified Payroll and Compliance Manual
- Sig. Fig. = 0.5 the nearest one-half (0.5) hour.

Figure 24-13: Office Engineer's IDR Item Posting (Training HOUR)

WEEKLY TRAINEE REPORT (FHWA ORDER INTERIM 7-2/2)		REPORT FOR WEEK ENDING <u>03/03/2017</u>	CONTRACT NO. <u>3583</u> PROJECT NO. <u>STP-16-040</u>						
TRAINEE INFORMATION	NOTES	AGREEMENT ON FILE	DAILY HOURS OF TRAINING						
TRAINEE 1	Payroll # 5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	S	M	T	W	T	F	S
Name: Timothy James			2.00	5.00	8.00	8.00			
Classification: Teamsters Group 1A Employer: LV Paving Corp.			WEEK 1 TOTAL: 23.00						
TRAINEE 2	Payroll # 5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			2.00	5.00	8.00	8.00	
Name: Nicole Patrice			WEEK 2 TOTAL: 23.00						
Classification: Teamsters Group 2A Employer: LV Paving Corp.			WEEK 3 TOTAL: 0.00						
TRAINEE 3		<input type="checkbox"/> Yes <input type="checkbox"/> No							
TRAINEE 4		<input type="checkbox"/> Yes <input type="checkbox"/> No							
TRAINEE 5		<input type="checkbox"/> Yes <input type="checkbox"/> No							
TRAINEE 6		<input type="checkbox"/> Yes <input type="checkbox"/> No							
TRAINEE 7		<input type="checkbox"/> Yes <input type="checkbox"/> No							
			TOTAL WEEKLY HOURS: 46.00						

Signature of State Representative Aaron Rogers Date 03/06/2017

NDOT
040-042
(Rev 02-16)

Figure 24-14: Weekly Trainee Report

TIME RELATED OVERHEAD

Change IDR (IDR: 3/22/2017, Cecilia A Whited, 1) (Contract: 03583)

General Contractors Site Times Postings Attachments View

Item: 6290100, TIME RELATED OVERHEAD

Prop. Ln: 0230 Unit: DAY Catg. Auth. Qty: 250.000 Catg. Auth. Amt: \$485,000.00
 Type: ORIGINAL ITEM Unit Price: \$1,940.000 Catg. Qty. Placed: 9.000
 Catg. Pending Chgs: 0.000 Catg. Qty. Paid: 0.000

Item Posting

Project: 60638C2C MAIN ROADWAY BREAKOUT
 Category: 01 (Construct N/E & W/S Ramps)FR. "XP"122+00 TO "XP25

Contractor: LAS VEGAS PAVING CORPORATION

Quantity: 9.000 DAY Attention:

Station From: Breakdown:

Station To: Remarks: 3/13/17 - 3/24/17
 Location: Entire Job NWD on 3/22/17 Rain

Materials OK Delete Cancel Add Materials Add Breakdowns

NOTES for Time Related Overhead DAY (Figure 24-15):

- Payment for Time Related Overhead is based on Days.
- In Location, enter 'Entire Job'.
- In Remarks, reference the time frame and any non-working days.
- Sig. Fig. = 1

Figure 24-15: Office Engineer's IDR Item Posting (Time Related Overhead DAY)

RIDE PAY ADJUSTMENT

The Ride Pay Adjustment item (7360033 – Ride Incentive/Disincentive) provides an incentive to the contractor to construct a roadway with a ride surface smoother than the specified Mean Roughness Index (MRI) and has a financial disincentive if the ride surface is rougher than the specified MRI or if the ride surface contains any localized roughness in excess of the specified maximum allowable International Roughness Index (IRI) values. The prime contractor will provide an Initial Profile Summary Report on the MRI and IRI values of the pavement riding surface upon completion of the placement of the open-graded material. If any corrections such as profile grinding are performed after the initial measurement, the prime contractor will provide a Final Profile Summary Report on the MRI and IRI values of the pavement riding surface upon completion of any such corrections. The information provided in these summary reports in conjunction with the table for the appropriate incentive/disincentive amounts based on MRI values, which can be found in Subsection 403.05.02, (*Plantmix Bituminous Open-Graded Surface*) *Ride Pay Adjustment*, of the Special Provisions, will be used for Ride Pay Adjustments. Participation in the Construction Division's Workshop - Introduction to Inertial Profilers, is strongly encouraged to aid in Ride Pay Adjustment procedures. Contact Construction Division Quality Insurance staff for ALL questions pertaining to Ride Pay Adjustment.

OFFICE ENGINEER'S RESPONSIBILITIES

Upon receiving the Profile Summary Report from the contractor, the following steps must be completed:

1. Obtain the Ride Pay Adjustment Columnar Sheet (Form No. 040-084) (Figure 24-16) from the [Construction and Materials](#) Form area in SharePoint.
2. Use the information in the Profile Summary Report (Figure 24-17) and Table 1 in Subsection 403.05.02, (*Plantmix Bituminous Open-Graded Surface*) *Ride Pay Adjustment*, of the Special Provisions, to fill out the Ride Pay Adjustment Columnar Sheet (Figure 24-16).
3. Create an IDR in FieldManager to document the Ride Pay Adjustment based on the Payment Total from the Ride Pay Adjustment Columnar Sheet. Refer to Chapter 7, Inspector Daily Report, in the [FieldManager User Guide](#) for details.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
RIDE PAY ADJUSTMENT COLUMNAR SHEET

Contract No: 3651 Project No: IM-080-2(055) Sheet No: 5 of 5

Contractor: Q&D Highway / Route No: IR-80 Date: 9/30/2017

Surface Type: PBS - Open Grade Lane Direction: Eastbound Lane Number:

Ride Quality	Ride Quality	MRI	Excess	Initial		Final	Accumulated		Progress Payment
Lot No.	Lot Length		Localized Roughness	Ride Pay	Correction	Ride Pay	Ride Pay Adjustment	Progress	Amount
RQL No.	Mile	In./mi	or Defects?	Adjustment	Performed?	Adjustment	Balance Forward	Payment	Balance Forward
			Yes / No	INITIAL RPA	Yes / No	FINAL RPA	\$56,310.00	Number	\$0.00
101	0.100	39.800	NO	\$180.00		\$180.00	\$56,490.00		
102	0.100	29.730	NO	\$480.00		\$480.00	\$56,970.00		
103	0.100	24.160	NO	\$600.00		\$600.00	\$57,570.00		
104	0.100	19.460	NO	\$600.00		\$600.00	\$58,170.00		
105	0.100	23.520	NO	\$600.00		\$600.00	\$58,770.00		
106	0.100	21.310	NO	\$600.00		\$600.00	\$59,370.00		
107	0.100	25.180	NO	\$600.00		\$600.00	\$59,970.00		
108	0.100	20.670	NO	\$600.00		\$600.00	\$60,570.00		
109	0.100	20.240	NO	\$600.00		\$600.00	\$61,170.00		
110	0.100	23.360	NO	\$600.00		\$600.00	\$61,770.00		
111	0.100	20.990	NO	\$600.00		\$600.00	\$62,370.00		
112	0.090	40.130	YES	\$0.00	YES	\$135.00	\$62,505.00	11	\$62,505.00
						Sheet Total			Payment Total
For Segments less than 0.100 mile:									
Actual length of segment / 0.100 X RPA value for MRI = Pro-Rated RPA						\$6,195.00			\$62,505.00

Ride Pay Adjustment based on Subsection 409.03.04, Table 1 for PBS Open-Grade and Subsection 409.03.12, Table 1 for PCCP

Remarks:

Checked By: CK

Signature: *Dave Schwartz* Resident Engineer

NDOT 040-084 Rev. 10/17 Distribution: Headquarters Construction, Resident Engineer

Figure 24-16: Ride Pay Adjustment Columnar Sheet

Run 1 - Initial Run						
Track 1			Track 2			Average
Seg	Mile Post (mi)	IRI (in/mi)	Seg	Mile Post (mi)	IRI (in/mi)	Average IRI (in/mi)
<u>1</u>	69.3070 69.4070	90.938	<u>1</u>	69.3070 69.4070	78.047	84.492
<u>2</u>	69.4070 69.5070	52.145	<u>2</u>	69.4070 69.5070	42.358	47.252
<u>3</u>	69.5070 69.6070	49.292	<u>3</u>	69.5070 69.6070	36.658	42.975
<u>4</u>	69.6070 69.7070	59.548	<u>4</u>	69.6070 69.7070	53.708	56.628
<u>5</u>	69.7070 69.8070	53.987	<u>5</u>	69.7070 69.8070	45.724	49.856
<u>6</u>	69.8070 69.9070	47.479	<u>6</u>	69.8070 69.9070	40.934	44.206
<u>7</u>	69.9070 70.0070	44.821	<u>7</u>	69.9070 70.0070	46.210	45.516
<u>8</u>	70.0070 70.1070	57.103	<u>8</u>	70.0070 70.1070	50.169	53.636
<u>9</u>	70.1070 70.2070	52.917	<u>9</u>	70.1070 70.2070	41.690	47.304
<u>10</u>	70.2070 70.3070	63.661	<u>10</u>	70.2070 70.3070	42.968	53.315
<u>11</u>	70.3070 70.4070	60.997	<u>11</u>	70.3070 70.4070	45.159	53.078
<u>12</u>	70.4070 70.5070	54.867	<u>12</u>	70.4070 70.5070	39.715	47.291
<u>13</u>	70.5070 70.6070	58.156	<u>13</u>	70.5070 70.6070	40.114	49.135
<u>14</u>	70.6070 70.7070	55.852	<u>14</u>	70.6070 70.7070	43.888	49.870
<u>15</u>	70.7070 70.8070	52.871	<u>15</u>	70.7070 70.8070	47.167	50.019
<u>16</u>		44.672	<u>16</u>		49.064	

Defect Locations:

Run 1:

Defect	Type	Track	Segment	Start	End	Length (mi)	Peak Height (in/mi)	Peak Station
<u>1</u>	IRI Peak	2	1	69.3077 to	69.3130	0.0053	Peak: 357.808	at 69.3114
<u>2</u>	IRI Peak	1	1	69.3079 to	69.3157	0.0079	Peak: 422.905	at 69.3115
<u>3</u>	IRI Peak	1	1	69.3368 to	69.3374	0.0006	Peak: 164.842	at 69.3371
<u>4</u>	IRI Peak	1	4	69.6165 to	69.6174	0.0009	Peak: 168.024	at 69.6171

Figure 24-17: Example of a Profile Summary Report

LIQUIDATED DAMAGES AND PENALTIES

Liquidated Damages (LD) and Penalties are defined as justifiable damages to the Department or general public. They are assessed in a contract by processing an Administrative type Contract Modification that adds the appropriate Liquidated Damage or Penalty Item and completing an IDR item posting to the item with a negative quantity.

Documentation examples for a few selected Liquidated Damage Items are illustrated in this section. Contact the Construction Division for questions prior to processing the Contract Modification.

RESIDENT ENGINEER'S RESPONSIBILITIES

- Complete an Administrative type Contract Modification (types 31 – 35) and supporting documentation for the following types of Liquidated Damages or Penalty. Refer to Chapter 3, Contract Modifications and Letters of Authorization, in this Manual, for details on creating and executing the Contract Modification.
 - Liquidated Damage (Environmental)
 - Refer to Section 637, (*Temporary Pollution Control*), of the Special Provisions and the [NDOT Stormwater Guidance Manual for Construction Project](#) for details.
 - A separate Contract Modification must be processed per deficiency per item.
 - Add the LD item in the category where the damage took place.
 - Call the Stormwater Division for guidance on environmental deficiencies.
 - Liquidated Damage (Material) *(Examples for failing asphalt and plantmix - Lottman are described in this chapter).
 - Refer to Subsection 109.02, (*Measurement and Payment*) *Scope of Payment*, of the Standard Specifications for details.

- A separate Contract Modification must be completed for each failing material type, but consecutive failures can be assessed on each material type.
- Add the LD item to the category where the material was placed and failed.
- Liquidated Damage (Time)
 - Refer to Subsections 108.09, *(Prosecution and Progress) Failure to Complete the Work on Time*, of the Standard Specifications and the Special Provisions for details.
 - A separate Contract Modification must be completed each time additional days are assessed.
 - For the overall completion of the contract (day or date), add the LD item to the largest category. For a time overage (related to Subsection 108.09, *(Prosecution and Progress) Failure to Complete the Work on Time*, in the Special Provisions), add the LD item to the category where the time was not met.
- Penalty (Labor Compliance)
 - Refer to Nevada Labor Commissioner memo(s) received from the Contract Compliance staff.
 - A separate Contract Modification must be completed for each wage determination and late payroll determination.
 - Add the penalty item to the largest category.

Refer to [Contract Modification Examples](#) in the Construction Crew Portal in SharePoint for examples of completed liquidated damage/penalty Contract Modification.

***EXAMPLE OF LIQUIDATED DAMAGES FOR ASPHALT**

Asphalt samples represent 25 tons or any fraction thereof on the last sample of the day. Make sure to check the Special Provisions of the contract to assure the sample frequency has not been changed.

The calculation of Liquidated Damages for asphalt represented by each sample on any given day is:

total asphalt used /total samples taken= tonnage represented for each sample

In no case shall any sample represent more than 25 tons. This is done on all samples for the day whether they passed or failed.

The items needed to calculate damages for asphalt are:

- The Report of Tests of Asphalt Cement (Figure 24-18) from the Materials Division shows whether a sample has pass/failed. Failures will include demerits. The information on top of the form comes from the Transmittal for Asphalt Samples (Form No. 020-016) that was turned in with the asphalt sample.

JUL 25 2016

STATE OF NEVADA
Department of Transportation
Materials Division
1263 SOUTH STEWART STREET CARSON CITY NV 89712
Report of Tests of Asphaltic Cement

Lab Number.....	CCAC-2016-00439	Field Number.....	102
Contract Number....	3583	Actual Tonnage....	25
Project Number*....	STP-580-1(032)	Sampled By.....	LENCHO
County.....	WASHOE	Observed By.....	WANG
Nevada Specification..	PG 64-28NV	Tested By.....	SR
Asphalt Producer....	PARAMOUNT-NEVADA	Date Sampled.....	7/17/2016
Shipping Point.....	FERNLEY, NV.	Date Received.....	7/18/2016
Contractor.....	SIERRA NEVADA CONSTRUCTION	Date Tested.....	7/22/2016
		Date Reported.....	7/22/2016

TESTS PERFORMED	Test Results	Re-Test Results	NEVADA SPECIFICATIONS
ORIGINAL BINDER			
Viscosity, 135°C, Pa·s			Maximum 3 Pa·s
Original Dynamic Shear, G ² /sin δ, 10 rad/s, kPa @ 64 °C	1.41		Minimum 1.00 kPa
Original Phase Angle @ 64 °C	71.9		N/A
Original Ductility, 4°C, 5 cm/min, cm	33	32	Minimum 50 cm
Toughness, Inch-lbs	79	84	Minimum 110 Inch-lbs
Tenacity, Inch-lbs	64	67	Minimum 75 Inch-lbs
Sieve Test			Maximum 0
Original Penetration @ 25°C, 100g, 5 sec, dmm			N/A
RTFO RESIDUE			
Loss on Heating, %			Maximum 1.0 %
Residue Dynamic Shear, G ² /sin δ, 10 rad/s, kPa @ 64 °C			Minimum 2.20 kPa
Residue Ductility, 4°C, 5 cm/min, cm	17	17	Minimum 25 cm
Creep Recovery, R3.2 @ 3.2kPa, % @ 64 °C			N/A
Non-Recoverable Creep Compliance, Jnr3.2 @ 3.2kPa, kPa ⁻¹ @ 64 °C			N/A
Non-Recoverable Creep Compliance Difference, Jnrdiff			N/A
PAV RESIDUE			
PAV Dynamic Shear, G ² /sin δ, 10 rad/s, kPa @ 22 °C			Maximum 5000 kPa
Creep Stiffness, 80s, S, MPa @ -18 °C			Maximum 300 MPa
M-value @ -18 °C			Minimum 0.300

REMARKS AND RECOMMENDATIONS: MATERIAL HAS FAILED NEVADA SPECIFICATIONS

TOTAL 10 DEMERIT(S)

DISTRIBUTION

District Engineer	1 Contractor
1 Resident Engineer	State Purchasing
1 Laboratory	Maintenance Engineer
1 Asphalt Producer	L.V. Facility
1 Construction	Bituminous Lab
RTC	Clark County

Page 1 of 1

* Other Project Numbers May Be Applicable
Report\OTests\AC.rpt

Figure 24-18: Report of Tests of Asphaltic Cement

- Plant Record Spreadsheet (Figure 24-19) will match the information placed on the Transmittal for Asphalt Samples (Form No. 020-016). Sample numbers 102 thru 106 shown below on the Plant Record, are used in the example on Figure 24-21.

Plant Record							
Contract No.:		3583		Total Tons:		1,759.38	
Asphalt Type:		PG 64-28NV					
Sample No.	Date (mm/dd/yyyy)	Time	Tons Represented	Inspector (initials)	Remarks		
99	07/14/2017	8:25 AM	25.75	TJW			
100	07/15/2017	8:30 AM	26.02	TJW			
101	07/15/2017	9:55 AM	26.02	TJW			
102	07/17/2017	8:45 AM	27.68	NPW			
103	07/17/2017	11:50 AM	27.68	NPW			
104	07/17/2017	1:22 AM	27.68	NPW			
105	07/17/2017	3:05 AM	27.68	NPW			
106	07/17/2017	4:10 PM	27.68	NPW			

Figure 24-19: Plant Record Spreadsheet

- Record of Delivery - Plantmix Surface Spreadsheet (Figure 24-20) that shows the Total Tons of mix placed on the day the sample(s) failed.

Record of Delivery -- Plantmix Surface							
Date:	02/20/2017		(mm/dd/yyyy)	Total Tons	153.46		
Contract No.:	3583						
Item No. / Description:	4020190 - PBS TYPE 2C (WET)						
Tickets taken by:	REW		(initials)				
Checked against scale sheet:	KMM		(initials)				
Ticket No.	Truck No.	Time	Station	Temperature (°F)	Tons Delivered	Cumulative Tons	Remarks
5172	192333	11:00 AM	"TJ" 17+70 RT	340	21.99	21.99	
5173	192346			335	16.06	38.05	
5174	192333			340	18.41	56.46	
5175	192346			336	19.57	76.03	
5776	192333	12:30 PM	"TJ" 15+90 RT	335	21.10	97.13	AEB # 1 total = 97.13 tons
5177	192346	1:05 PM	"NP" 10+12RT	330	20.40	117.53	
5178	192333			335	20.60	138.13	
5179	192346	1:45 PM	"NP" 8+10 RT	335	20.33	158.46	AEB # 2 total = 56.33 tons
					-5.00	153.46	Excess material at the end of shift

Figure 24-20: Record of Delivery – Plantmix Surface

- A copy of the applicable JMF (Figure 24-6) for the percent of asphalt and mineral filler.
- The dollar amount per ton from Subsection 402.05.01, (*Plantmix Bituminous Surface*) *Payment*, of the Special Provisions.
- The demerit chart in Subsection 109.02, (*Measurement and Payment*) *Scope of Payment*, of the Standard Specifications.
- Use the Liquidated Damages for Failing Asphalt Cement Calculation Worksheet (Figure 24-21) found in the SharePoint Construction Forms, Area: Construction Admin - [Area: Construction Admin Payment Forms](#). Complete the cells in Blue. Make sure the asphalt cement for the day and the total tons match. If the total tons do not match the asphalt cement for the day, an adjustment must be made on as many samples as it takes to get the total to equal.
- Complete the cells in Blue on Liquidated Damages for Failing Asphalt Cement form (Form No. 040-077) (Figure 24-22). Use one form for each material. Do not create a separate sheet for each pay period. Fill in the CATG# totals at the bottom when the form is complete or full. The Grand Total must match the total of all the CATG#s.
- When all calculations have been completed a letter explaining the Liquidated Damage must be sent to the Contractor, notifying when it will be deducted from the progress payment. Send a copy to the Construction Division.

Liquidated Damages for Failing Lottman Test Report Calculation Worksheet and all backup documentation will be saved to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Liquidated Damages (Materials) directory.

STATE OF NEVADA DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION 1263 S. STEWART ST. CARSON CITY, NV 89712 LOTTMAN TEST REPORT BITUMINOUS LABORATORY		
LAB NUMBER:	OM17-14	
CONTRACT NUMBER:	3583	
COUNTY(S):	CLARK	
PRIMARY CONTRACTOR:	ROAD AND HIGHWAY BUILDERS	
DATE SAMPLED:	04/16/17	
DATE RECEIVED:	04/19/17	
REPORT DATE:	04/26/17	
SAMPLED BY:	T. HOUGH	
CHECKED BY:	GR	
TYPE MATERIAL:	TYPE 2C/RAP PLANTMIX	
MIX DESIGN NUMBER:	BF17-19	
SOURCE OF SAMPLE:	R3~12+50 #3 LN	
TYPE ASPHALT:	PG 76-22NV	
ASPHALT PRODUCER:	CALUMET	
JOB DESCRIPTION:	ON I-580/US 395 CARSON CITY FREEWAY FROM SOUTH CARSON STREET TO FAIRVIEW DRIVE PACKAGE 2B-3	
ORIGINAL TENSILE STRENGTH, PSI:	86	100 PSI MIN
% RETAINED STRENGTH:	84	70% MINIMUM
REMARKS:	THIS SAMPLE FAILS TO MEET PROJECT SPECIFICATIONS FOR ORIGINAL TENSILE STRENGTH.	
DISTRIBUTION:	<ul style="list-style-type: none"> I DISTRICT ENGINEER I RESIDENT ENGINEER I CONSTRUCTION ENGINEER I LAB FILES I BITUMINOUS LAB 	

Figure 24-23: Lottman Test Report

LIQUIDATED DAMAGES FOR FAILING
LOTTMAN TEST REPORT
CALCULATION WORKSHEET

CONTRACT NO: 3583 LAB NO: OM17-14 TYPE OF MATERIAL: PG 76-22NV Type2C/RAP

REQUIREMENT 100 - TEST RESULT 86 = 14
 REQUIREMENT 100 - REJECTION LIMIT 85 = 15

REQUIREMENT TEST DIFFERENCE 14 + REQUIREMENT REJECTION DIFFERENCE 15 = 0.93 × MAX DEMERITS 21 = 2.9

ACTUAL DEMERITS 2 × \$ 0.72 × PER WET TONS PER SHIFT 2,000.0 = \$ 2,880.00 LD

Note: Refer to Standard Specifications for Road and Bridge Construction

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The worksheet calculates a positive demerit amount. The item posting MUST be entered as a negative quantity amount.

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Figure 24-24: Liquidated Damage for Failing Lottman Test Report Calculation Worksheet

OFFICE ENGINEER'S RESPONSIBILITIES

The Office Engineer will make IDR postings for the Liquidated Damage Items. Multiple postings can be added to one IDR. They can be completed daily, weekly or bi-weekly within the two-week pay period. Refer to Chapter 7, Inspector Daily Report, in the [FieldManager User Guide](#) for details.

- Create an IDR in FieldManager for the Liquidated Damage Item:
 - In the General tab, enter a Comment related to the item posting(s).
 - Enter the item posting (Figure 24-25 through Figure 24-28).

LIQUIDATED DAMAGE – ENVIRONMENTAL

Change IDR (IDR: 5/1/2017, Cecilia A Whited, 1) (Contract: 03583)

General Contractors Site Times Postings Attachments View

Item: 9992000, LIQUIDATED DAMAGE (ENVIRONMENTAL) ENVIRONMENTAL VIOLATIONS
 Prop. Ln: 1380 Unit: L.S. Catg. Auth. Qty: -1,000.000 Catg. Auth. Amt: \$-1,000.00
 Type: LIQUIDATED DAMAGE / PENALTY Unit Price: \$1,000 Catg. Qty. Placed: -4,500.000
 Catg. Pending Chgs: 0.000 Catg. Qty. Paid: 0.000

Item Posting

Project: 60638C2C MAIN ROADWAY BREAKOUT
 Category: 01 (Construct N/E & W/S Ramps)FR. "XP"122+00 TO "XP25
 Contractor: LAS VEGAS PAVING CORPORATION
 Quantity: -4,500.000 L.S. Attention:
 Station From: Breakdown:
 Station To: Remarks: Track-Out
 Location: "RW" 80+12.04 Rt.

Materials OK Delete Cancel Add Materials Add Breakdowns

Figure 24-25: Office Engineer's IDR Item Posting (LD Environmental L.S.)

NOTES for LD Environmental L.S. (Figure 24-25):

- In Location, enter the Line Designation and LT, RT, or CL.
- In Remarks, reference the specific deficiency.
- Sig. Fig. = .01

LIQUIDATED DAMAGE - MATERIAL

Change IDR (IDR: 5/1/2017, Cecilia A Whited, 1) (Contract: 03583)

General Contractors Site Times Postings Attachments View

Item: 9999000, LIQUIDATED DAMAGE (MATERIAL) Falling Lotman
 Prop. Ln: 1410 Unit: L.S. Catg. Auth. Qty: -2,880.000 Catg. Auth. Amt: \$-2,880.00
 Type: LIQUIDATED DAMAGE / PENALTY Unit Price: \$1,000 Catg. Qty. Placed: -2,880.000
 Catg. Pending Chgs: 0.000 Catg. Qty. Paid: 0.000

Item Posting

Project: 60638C2C MAIN ROADWAY BREAKOUT
 Category: 01 (Construct N/E & W/S Ramps)FR. "XP"122+00 TO "XP25
 Contractor: LAS VEGAS PAVING CORPORATION
 Quantity: -2,880.000 L.S. Attention:
 Station From: Breakdown:
 Station To: Remarks: Lab Test # OM17-14
 Location: "TW" Rt. Report Date 4/26/17

Materials OK Delete Cancel Add Materials Add Breakdowns

Figure 24-26: Office Engineer's IDR Item Posting (LD Material L.S.)

NOTES for LD Material L.S. (Figure 24-26):

- In Location, enter the Line Designation and LT, RT, or CL.
- In Remarks reference the lab test number.
- Sig. Fig. = .01

LIQUIDATED DAMAGE - TIME

Change IDR (IDR: 4/22/2017, Cecilia A Whited, 1) (Contract: 03583)

General Contractors Site Times Postings Attachments View

Item: 9991000, LIQUIDATED DAMAGE (TIME) Assessing 3 working days
 Prop. Ln: 1395 Unit: L.S. Catg. Auth. Qty: -10,500.000 Catg. Auth. Amt: \$-10,500.00
 Type: LIQUIDATED DAMAGE / PENALTY Unit Price: \$1,000 Catg. Qty. Placed: -10,500.000
 Catg. Pending Chgs: 0.000 Catg. Qty. Paid: 0.000

Item Posting

Project: 60638C2C MAIN ROADWAY BREAKOUT
 Category: 01 (Construct N/E & W/S Ramps)FR. *XP*122+00 TO *XP*25
 Contractor: LAS VEGAS PAVING CORPORATION
 Quantity: -10,500.000 L.S. Attention:
 Station From: Breakdown:
 Station To: Remarks: \$3,500.00 X 3 = \$10,500.00
 Location: Entire job

Materials OK Delete Cancel Add Materials Add Breakdowns

Figure 24-27: Office Engineer's IDR Item Posting (LD Time L.S.)

NOTES for LD Time L.S. (Figure 24-27):

- In Location, enter 'Entire job'.
- In Remarks, enter the LD for time calculation.
- Sig. Fig. = .01

PENALTY - LABOR COMPLIANCE

Change IDR (IDR: 4/22/2017, Cecilia A Whited, 1) (Contract: 03583)

General Contractors Site Times Postings Attachments View

Item: 9992500, PENALTY (LABOR COMPLIANCE) ABC Trucking
 Prop. Ln: 1385 Unit: L.S. Catg. Auth. Qty: -1,000.000 Catg. Auth. Amt: \$-1,000.00
 Type: LIQUIDATED DAMAGE / PENALTY Unit Price: \$1,000 Catg. Qty. Placed: -1,000.000
 Catg. Pending Chgs: 0.000 Catg. Qty. Paid: 0.000

Item Posting

Project: 60638C2C MAIN ROADWAY BREAKOUT
 Category: 01 (Construct N/E & W/S Ramps)FR. *XP*122+00 TO *XP*25
 Contractor: LAS VEGAS PAVING CORPORATION
 Quantity: -1,000.000 L.S. Attention:
 Station From: Breakdown:
 Station To: Remarks: Late Payrolls
 Location: Entire job Case # 27542

Materials OK Delete Cancel Add Materials Add Breakdowns

Figure 24-28: Office Engineer's IDR Item Posting (Penalty Labor Compliance L.S.)

NOTES for Penalty Labor Compliance L.S. (Figure 24-28):

- In Location, enter 'Entire job'.
- In Remarks, reference the Labor Commissioner case number.
- Sig. Fig. = .01

PAY ESTIMATES

The Contractor will be paid for the work performed on a bi-weekly basis using a FieldManager Estimate. The bi-weekly cut-off date for all estimates is every other Friday. Contact Construction Admin Services staff for cut-off dates.

The FieldManager software automatically runs a series of calculations (item usage, material approvals, working days and retainage) each time an estimate is created. Refer to Chapter 11, Estimates, in the [FieldManager User Guide](#), for details.

RESIDENT ENGINEER'S RESPONSIBILITIES

DAILY DIARIES

A Daily Diary is used to document pertinent daily contract activities and assess working days. It also incorporates information from generated IDR's from Inspectors and the Office Engineer for the corresponding day.

- Create and generate one diary, per day, per contract, prior to the creation of the pay estimate. Refer to Chapter 8, Daily Diaries, in the [FieldManager User Guide](#), for details.

Note: Make sure that all Inspector's IDRs are generated prior to creating the Daily Diary.

Note: Daily diaries are still required for the months of December, January and February if winter suspension is defined in subsection 108.02 of the Special Provisions, however, no time charges will be entered in the Site Times tab.

PAY ESTIMATES

- When the Office Engineer has created the estimate, review the draft for accuracy.
- When the Office Engineer generates and prints the estimate, sign the Approved by Resident Engineer line in the Estimate Certification area.

OFFICE ENGINEER'S RESPONSIBILITIES

Prior to creating the Semi-Monthly Estimate complete the following:

- Review all Inspector IDRs for:
 - Quantities– paid to the correct amount - in the correct category - to the correct Sig. Fig.

Note: Use the NDOT Power BI Report, Item Posting Tracking, to aid in tracking item posting quantities. Contact the Construction Admin Services staff for details on this Power BI report.

- Stationing and Location – RT, LT or CL, and offset if known.
- Remarks - contain required info (decided on by the Resident Engineer) to the bid item; necessary calculations have been referenced and/or made correctly.
- If Remarks reference a memo or person, include the date of memo, and full name and title of person.
- Generate all IDRs for this cut-off period.
- Check for certifications (payment should not be made if the certifications have not been approved by the Materials Division).
- Check that all necessary approvals for materials have been entered.

When an error is made in an IDR, a new IDR must be created to rectify the error. If the error is an overpayment, the new IDR must subtract the amount overpaid.

1. Create the Semi-Monthly Estimate. Refer to Chapter 11, Estimates, in the [FieldManager User Guide](#), for details.
2. Check the Item Usage tab for the Percentage (Prorated) Item (Figure 24-29) suggested quantity amounts.
3. Print the Estimate Percentage Item Warning and review with the Resident Engineer. If the suggested quantity amounts will be used, close the estimate without generating and create and generate new IDR postings using the new quantities. Then re-create the Semi-Monthly estimate.

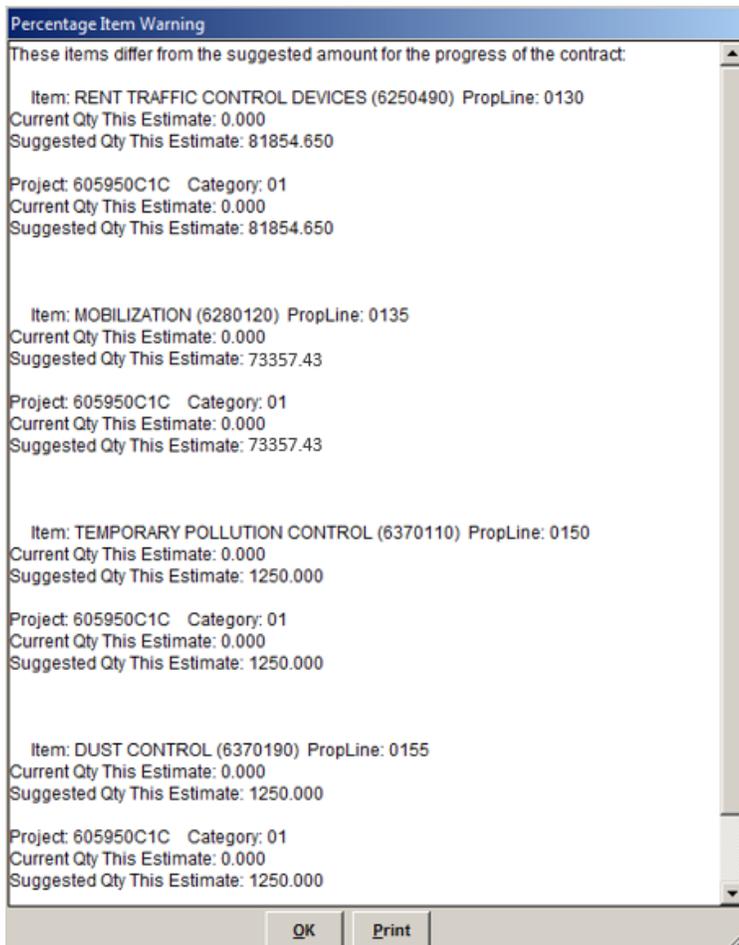


Figure 24-29: Estimate Percentage Item Warning Window

4. Have the estimate reviewed by someone other than the preparer.
5. Have the Resident Engineer review the estimate.
6. Generate and print the estimate.
7. Obtain all signatures (Prepared By, Checked By and Approved by Resident Engineer) via DocuSign.
8. Save the signed Estimate Report to the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# Construction Pay Estimate Report directory.