

CONCRETE PAVING ITEMS

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OVERVIEW

Concrete Paving Items have different documentation requirements for each unit of measure (UOM). All Concrete Paving and related items must be counted and measured. Documentation examples for a few selected Concrete Paving and related items are illustrated in this chapter. Some minor modifications may be required to show the unusual circumstances that may occur with different items, but the general format should be followed. If there are items which cannot be documented according to the following examples, contact the Construction Admin Services Section for assistance.

When material samples are taken for the Materials Division labs, refer to the [AWP Sample Records](#) document for details.

INSPECTOR'S RESPONSIBILITIES – CONCRETE PAVING ITEMS

- Obtain a copy of the Agreement Estimate report to use as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders
- Turn in ALL concrete paving and related item calculation sheets to the Office Engineer.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

1. Create a DWR in Mobile Inspector daily to document the activity being monitored. Refer to the [Mobile Inspector User Guide](#) for details on using this application.
 - Report Details – daily activities
 - Item Postings – item(s) and quantity(s)
 - Equipment – type, number and hours used
 - Personnel – title and hours
2. Record the following required information in the Report Details window (Figure 12-1):
 - **Date**
 - **Weather**
 - **Low Temp and High Temp**
 - **Attachments:** (N/A) Send ALL photos via email.
 - **Remarks:** Select the appropriate Remark Type. Verify with the Resident Engineer on what information is required.

Figure 12-1: DWR Report Detail Window

3. Record the following required information in the New Item Postings window:
 - **Item:** Select the appropriate Project/Catg., if item is in more than one Project/Catg. – Refer to the AEB report.
 - **Contractor:** ALWAYS the Prime Contractor (Subs are not allowed).
 - **Qty:** Based on plan, measurements and calculations
 - **Material Set:** Select appropriate value (if applicable)
 - **Location:** Line Designation
 - **Station From/To:** Refer to Contract plans.
 - **Offset Type:** Enter the LT, RT, or CL.
 - **Offset Dist.:** Enter if known.
 - **Comments:** Must show calculations when appropriate, refer to Calculation Sheet when appropriate (refer to Appendix B, Calculation Formulas, in this Manual for a Calculation Sheet example), other information relevant to item posting, and explanations when Attention Flag is checked.
 - **Attention Flag:** Use to bring attention to Resident Engineer and Office Engineer for overruns and plan errors. Must enter Attention Comments.

NOTES for Concrete Paving item postings:

- Refer to Figure 12-2 through Figure 12-5 for examples of concrete paving and related item postings with different UOM.
- If a gallon item does not come in small size containers use the application and surface area to calculate the gallons applied. The following calculation will be documented in the DWR posting:

$$\text{Vol(gas)} = W \times L \times \text{App Rate}$$

$$\text{Pay} = \# \text{ gallons}$$

$$W = \#$$

$$L = \#$$

$$\text{App Rate} = 1\text{gal}/150 \text{ SQFT (Per Subsection 409.03.13, (Portland Cement Concrete Pavement) Construction – Curing, of the Standard Specifications.}$$
- The Inspector will visually make sure the coverage of the cure compound was satisfactory.

New Item Posting

Item: PCCP CURING COMPOU... ▼

Contractor: Q&D CONSTRUCTION INC ▼

Qty: 206.00 GAL

Authorized: 300.000 GAL
Total Posted: 35.000 GAL

Location: "BW"

Station From: 10 + 00

Offset Type: RT.

Offset Dist:

Station To: 50 + 00

Offset Type: RT.

Offset Dist:

Measured:

Comments:

Number of Drums = 3.75
Measurement was done by stabbing the drum.

3933 remaining

Attention:

Attention Comments:

See email: DWR 2019-7-8 TJW for container label and calculations.

191 remaining

Figure 12-2: DWR Item Posting – Concrete Paving GAL

NOTES for Concrete Paving GAL (Figure 12-2):

- Payment for GAL items will be based on field measurements and calculations.
- Calculations will consist of counting the drums used or measuring the container and calculating the quantity when a full drum is not used. If measured by another device show the calculations on how gallons were derived.
- A picture of a label must be taken and emailed to the Office Engineer for backup to confirm the quantity of the container. This photo is saved to the appropriate Contract Files\Contract\07 Estimates directory.
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Check the Attention Flag to notify the Office Engineer there's an email regarding this Item Posting.

New Item Posting

Item: SAW AND RESEAL TRA... ▼

Contractor: Q&D CONSTRUCTION INC ▼

Qty: 750.00 LFT

Authorized: 955.000 LFT
Total Posted: 0.000 LFT

Location: "BW"

Station From: 10 + 00

Offset Type: RT.

Offset Dist:

Station To: 25 + 00

Offset Type: RT.

Offset Dist:

Measured:

Comments:

95ea. x 15.79 = 1500 LFT
50% for saw only = 750 LFT

3947 remaining

Figure 12-3: DWR Item Posting – Concrete Paving LFT

NOTES for Concrete Paving LFT (Figure 12-3):

- Payment for LFT items will be based on field measurements.
- No percentages other than 50% for sawing and 50% for sealing will be allowed for payment.
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

New Item Posting

Item: MILLED RUMBLE STRIPS

Contractor: Q&D CONSTRUCTION INC

Qty: 0.83 MILE
 Authorized: 4.250 MILE
 Total Posted: 3.220 MILE

Location: "BW"

Station From: 451 + 00
Offset Type: RT.
Offset Dist:

Station To: 495 + 00
Offset Type: RT.
Offset Dist:

Measured:

Comments:
 4400' / 5280 = .83 mile

3976 remaining

Figure 12-4: DWR Item Posting – Concrete Paving MILE

NOTES for Concrete Paving MILE (Figure 12-4):

- Payment for MILE items will be based on field measure.
- Calculation for MILE = LFT ÷ 5280 (Always use this number)
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

New Item Posting

Item: PORTLAND CEMENT CO...

Contractor: Q&D CONSTRUCTION INC

Qty: 2488.89 SQYD
 Authorized: 3,546.000 SQYD
 Total Posted: 0.000 SQYD

Location: "BW"

Station From: 10 + 00
Offset Type: RT
Offset Dist:

Station To: 50 + 00
Offset Type: RT
Offset Dist:

Measured:

Comments:
 4000 L x 5.6 W / 9 = 2488.89 SQYD

3966 remaining

Figure 12-5: DWR Item Posting – Concrete Paving SQYD

NOTES for Concrete Paving SQYD (Figure 12-5):

- Payment for SQYD item will be based on field measure and calculations.
- Calculation for SQYD = L x W ÷ 9
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

- Record the following required information in the New Equipment window (Figure 12-6 and Figure 12-7):
 - **Contractor:** Actual contractor performing the work (include subs).
 - **Type:** Select from the Equipment list
 - **Used:** How many of each type.

- **Hours Used:** Total hours in use.
- **Comments:** Details of the type of equipment (e.g., diesel, HP, model, make). Include equipment attachment information if applicable.

New Equipment

Contractor: LAS VEGAS PAVING C... ▾

Type: LOADER / BACKHOE / ... ▾

Used: 1

On Site:

Hours Used: 8

Hours Idle:

Comments:

Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12" bit

506 remaining

✓
✗

Figure 12-6: DWR Equipment Entry

Add Equipment

Contractor: LAS VEGAS PAVING CORPORATION

Type: LOADER / BACKHOE / WHEEL LOADER / SKID STEER

Used: 1

Hours Used: 8.000

Comments:
Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12" bit

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Figure 12-7: DWR Equipment List

- Record the following required information in the New Personnel window (Figure 12-8 and Figure 12-9):
 - **Contractor:** Actual contractor performing the work (include subs).
 - **Type:** Select from the Personnel list.
 - **Number:** How many of each title.
 - **Total Hours:** Total hours worked.
 - **Comments:** Details of personnel type (e.g., foreman w/name, laborer, truck driver).

New Equipment	
Contractor:	LAS VEGAS PAVING C... ▾
Type:	LOADER / BACKHOE /... ▾
Used:	<input type="text" value="1"/>
On Site:	<input type="text"/>
Hours Used:	<input type="text" value="8"/>
Hours Idle:	<input type="text"/>
Comments:	Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12" bit
	506 remaining
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	

Figure 12-8: DWR Personnel Entry

Add Personnel	
Contractor: LAS VEGAS PAVING CORPORATION Description: LABORER Number: 3 Total Hours: 8.000	<input type="checkbox"/> <input type="checkbox"/>
Contractor: LAS VEGAS PAVING CORPORATION Description: OPERATING ENGINEER Number: 2 Total Hours: 8.000	<input type="checkbox"/> <input type="checkbox"/>
Contractor: LAS VEGAS PAVING CORPORATION Description: LABORER FOREMAN Number: 1 Total Hours: 8.000 Comments: Foreman - Cody Bellinger	<input type="checkbox"/> <input type="checkbox"/>

Figure 12-9: DWR Personnel List

- Complete a final review of the DWR, lock the report, and Sync Data.

Note: When a Mobile Inspector DWR is completed, locked and Synd Data is completed, the information is uploaded into an AWP DWR, where it is reviewed and Approved for processing progress payments.

DAILY WORK REPORT (DWR) – AWP EDITS

The Officer Engineer reviews each Inspector's DWRs for required entries and accuracy. If edits are needed on a DWR, the Inspector who created it may be required to log into the AWP program on a computer (not the iPad) and complete the edits. Refer to Chapter 5, Daily Work Reports, Section, Editing a Mobile Inspector DWR, in the [AWP User Guide With Materials](#) for details.

OFFICE ENGINEER'S RESPONSIBILITIES – CONCRETE PAVING ITEMS

- Collect all Material Certifications. Scan and save them to the appropriate Contract Files\Materials\03 Cert & Test Reports\3.# directory. Each Material Certification must have the contract ID, bid item and represented quantity entered. Hand-written entries are acceptable for the contract ID, bid item and quantity.
 - Name the scanned certificate file(s) with the contract ID, Material Code Name & description, load number (if applicable) - CERT (e.g., 03904 M7010101A Portland Cement Type 1 TON Load 1 - 10 - CERT.pdf). The Material Code Name and description is found in the NDOT Power BI, AWP Reports, Certification Tracking report.
- Create an AWP Materials Cert Sample Record for each Material Certification received. Refer to the [AWP Cert Sample Record Creation](#) document and Chapter 24, Progress Payments, in this Manual for details.
- Save concrete paving items general information photos in the appropriate Contract Files\Contract\03 Multimedia\3.1 Photos directory.
- Save concrete paving items label photos in the appropriate Contract Files\Contract\03 Multimedia\3.1 Photos directory.
- Review concrete paving and related item calculation sheets for accuracy and save electronically in the appropriate Contract Files\Contract\07 Estimates\7.# Calc Sheets directory using this naming convention: DWR YYYY-MM-DD Inspectors Initials, (e.g. DWR 2016-03-19 KMM).
- Distribute executed copies of Change Orders to Inspectors.

DAILY WORK REPORT (DWR) – AWP

When a Mobile Inspector DWR is locked by an Inspector, the information is uploaded into an AWP DWR. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.

- Verify the following:
 - Information in the Remarks
 - Information in the Contractor On Site tab
 - Information in the Contractor Equipment tab
 - Information in the Contractor Personnel tab
 - Items are paid correctly according to the contract documents (e.g., plans, supplemental notices, Change Orders).
 - Item quantities
 - Quantities in postings are documented to the correct Significant Figure (.01)
 - Material Set is correct.
 - Stations and Line Designations in the Locations
 - Calculations are correct.
 - Comments reference calculation sheets, if applicable.

Note: Length does not always equal the difference between the beginning and ending station. Sometimes there is a curve or an obstacle that will affect the distance. Always check with the Inspector before assuming the calculations are incorrect.

- Approve the DWR if everything is correct.
- If there are edits required, the Office Engineer may complete them and add a DWR Note with their name, date, and details of the correction. The DWR can then be Approved.
- If there are edits which need to be completed by the Inspector who created the DWR, the Inspector will be required to log into the AWP program on a computer (not the iPad) to complete the edits.
- Review the edited DWR and Approve.

