

# REMOVAL ITEMS

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OVERVIEW

Removal Items have different documentation requirements for each unit of measure (UOM). All Removal Items must be counted, measured, and/or calculated prior to or during removal. Documentation examples for a few selected Removal 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.

INSPECTOR’S RESPONSIBILITIES – REMOVAL ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Structure List-Removals list (Figure 5-1) and/or the Main Structure list, located in the Contract plans, to help identify items, quantities, descriptions and locations.

					FED. DIST. PROJ. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
					19	NEVADA	STP-0160(016)	CLARK	RE-02
					<b>STRUCTURE LIST-REMOVALS</b>				
					<b>DESCRIPTION</b>		<b>STATION TO STATION</b>		
202 2020	REMOVE & RESET GUARDRAIL								
202 1304	REMOVAL OF FENCE								
202 1184	REMOVAL OF COMPOSITE SURFACE								
202 1056	REMOVE & RESET CHAIN-LINK FENCE								
202 0417	REMOVE & RESET GUARDRAIL END TREATMENT								
202 0076	REMOVE END SECTION								
201 0812	REMOVAL OF TREES (6-INCHES TO 12-INCHES)								
		LNFT	LNFT	CUYD	LNFT	EACH	EACH		
					1			REMOVAL OF TREES (6-INCHES TO 12-INCHES) (LT.)	"BD" 56+72.94
			500					REMOVE & RESET CHAIN-LINK FENCE (LT.)	"BD" 57+63.45 "BD" 62+63.45
					1			REMOVE END SECTION (88.44' LT.)	"BD" 57+89.98
					1			REMOVE END SECTION (85.41' RT.)	"BD" 57+98.14
			200					REMOVE & RESET CHAIN-LINK FENCE (RT.)	"BD" 58+90 "BD" 60+90
			100					REMOVE & RESET CHAIN-LINK FENCE (LT.)	"BD" 61+00 "BD" 62+00
					1			REMOVE END SECTION (80.15' RT.)	"Pe" 62+29.53
					1			REMOVE & RESET GUARDRAIL END TREATMENT (LT.)	"LNc" 363+20.47
					1			REMOVE & RESET GUARDRAIL END TREATMENT (LT.)	"LNc" 367+32.02
			600					REMOVE & RESET GUARDRAIL (LT.)	"W" 370+50 TO "W" 378+50

Figure 5-1: Example of a Structure List - Removals

- Review the following for accuracy:
  - Supplemental Notices
  - Special Provisions
  - Change Orders
- Turn in ALL Removal 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 5-2):
  - 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 5-2: 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 measurements, calculations and/or counts (CANNOT PAY PLAN!).
  - 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 Removal Item postings:

- If an each item has a specific location/station callout in the plans, then a separate posting will be done. It should NOT be grouped in a posting.
- If each items do NOT have a location/station callout but are grouped in a table or structure list, then they can be combined in one posting.
- Refer to Figure 5-3 through Figure 5-9 for examples of removal item postings with different UOM.

**New Item Posting**

**Item:** REMOVAL OF COMPOS...  
**Contractor:** Q&D CONSTRUCTION I...  
**Qty:** 154.44 CUYD  
**Authorized:** 162.500 CUYD  
**Total Posted:** 0.000 CUYD  
**Location:** "RW"  
**Station From:** 52 + 43  
**Offset Type:** RT  
**Offset Dist:**  
**Station To:** 65 + 93  
**Offset Type:** RT  
**Offset Dist:**  
**Measured:**  
**Comments:**  
 1000 x 5.56 X .75/27 = 154.44  
 3970 remaining

Figure 5-3: DWR Item Posting - Remove CUYD

NOTES for Removal CUYD/CUFT (Figure 5-3):

- Payment for CUYD and CUFT items will be based on field measure and calculations.
- Calculations for CUYD = L x W x D ÷ 27
- Calculations for CUFT = L x W x D
- 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:** REMOVE AND RESET L...  
**Contractor:** Q&D CONSTRUCTION I...  
**Qty:** .50 EACH  
**Authorized:** 10.000 EACH  
**Total Posted:** 6.000 EACH  
**Location:** "BW" 202+51  
**Station From:** +  
**Offset Type:** RT  
**Offset Dist:** 39.5'  
**Station To:** +  
**Offset Type:**  
**Offset Dist:**  
**Measured:**  
**Comments:**  
 Paid half for removal only  
 3973 remaining

Figure 5-4: DWR Item Posting - Remove LFT

NOTES for Remove & Reset EACH (Figure 5-4):

- Payment for Removal and Reset EACH items will be based on a field count at a Location.
- Pay .5 when item is Removed and .5 when it's Reset.
- Location: Enter the Line Designation and Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Comments: Indicate whether it is a removal or reset.

**New Item Posting**

**Item:** REMOVE END SECTION

**Contractor:** Q&D CONSTRUCTION I...

**Qty:** 1.00 EACH  
 Authorized: 3.000 EACH  
 Total Posted: 0.000 EACH

**Location:** "CW" 202+51

**Station From:** [ ] + [ ]

**Offset Type:** LT

**Offset Dist:** 88.95'

**Station To:** [ ] + [ ]

**Offset Type:** [ ]

**Offset Dist:** [ ]

**Measured:**

**Comments:**

3999 remaining

Figure 5-5: DWR Item Posting - Removal EACH

NOTES for Removal EACH (Figure 5-5):

- Payment for Removal EACH items will be based on a field count at a Location.
- Location: Enter the Line Designation and Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

**New Item Posting**

**Item:** REMOVE PAVEMENT M...

**Contractor:** Q&D CONSTRUCTION I...

**Qty:** 82 EACH  
 Authorized: 70.000 EACH  
 Total Posted: 0.000 EACH

**Location:** "BW"

**Station From:** 359 + 68

**Offset Type:** RT

**Offset Dist:** [ ]

**Station To:** 366 + 90

**Offset Type:** RT

**Offset Dist:** [ ]

**Measured:**

**Comments:**

counted

3990 remaining

**Attention:**

**Attention Comments:**

Additional qty. added per CO #3

225 remaining

Figure 5-6: DWR Item Posting - Combined EACH

NOTES for Combined EACH (Figure 5-6):

- Payment for Combined EACH items will be based on field count from Station to Station.
- 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:** REMOVAL OF FENCE

**Contractor:** Q&D CONSTRUCTION I...

**Qty:** 334.00 LFT  
 Authorized: 355.000 LFT  
 Total Posted: 0.000 LFT

**Location:** "TW"

**Station From:** 130 + 21.24  
**Offset Type:** RT  
**Offset Dist:** 76.3'

**Station To:** 133 + 75.05  
**Offset Type:** RT  
**Offset Dist:** 77.4'

**Measured:**

**Comments:**  
 Actual Length measured. Item Complete.

3960 remaining

Figure 5-7: DWR Item Posting - Remove LFT

Notes for Removal LFT (Figure 5-7)

- Payment for LFT items will be based on field measurement.
- 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
- Add a Comment when the item is completed.

**New Item Posting**

**Item:** REMOVAL OF BITUMIN...

**Contractor:** Q&D CONSTRUCTION I...

**Qty:** 0.13 MILE  
 Authorized: 500.000 MILE  
 Total Posted: 0.000 MILE

**Location:** "RW"

**Station From:** 4 + 00  
**Offset Type:** RT  
**Offset Dist:**

**Station To:** 10 + 90  
**Offset Type:** RT  
**Offset Dist:**

**Measured:**

**Comments:**  
 Meas. LFT =  $690/5280 = .13$  Mile

3968 remaining

Figure 5-8: DWR Item Posting - Removal MILE

NOTES for Removal MILE (Figure 5-8):

- Payment for Mile and Station Items will be based on field measure and calculations.
- Reference the Summary of Base and Surface Quantities and the Typical Sections (2 sheets) within the Contract plans.
- Calculations for mile =  $LFT \div 5280$  (always use this number)
- Calculations for sta. =  $LFT \div 100$  (always use this number)
- In Location, enter the Line Designation
- In Offset Type, enter the LT, RT, or CL.
- In Station From/To, refer to Contract plans
- Offset Dist., enter if known
- Sig. Fig. = .01

**New Item Posting**

**Item:** REMOVAL OF BITUMIN...  
**Contractor:** Q&D CONSTRUCTION I...  
**Qty:** 651.84 SQYD  
 Authorized: 342,862.000 SQYD  
 Total Posted: 0.000 SQYD  
**Location:** "CW" ramp  
**Station From:** 39 + 55.6  
**Offset Type:** LT  
**Offset Dist:**  
**Station To:** 42 + 50  
**Offset Type:** LT  
**Offset Dist:**  
**Measured:**  
**Comments:**  
 293.33 X 20 / 9 = 651.84  
 3975 remaining

Figure 5-9: DWR Item Posting - Removal SQYD

NOTES for Removal SQYD (Figure 5-9):

- Payment for SQYD items will be based on field measurement.
- Calculations for SQYD =  $(L \times W) \div 9$
- Reference the Summary of Base and Surface Quantities and the Paving Plan sheets in the Contract plans for removal of bituminous surface quantities.
- 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

4. Record the following required information in the New Equipment window (Figure 5-10 and Figure 5-11):
- 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 5-10: 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

**Figure 5-11: DWR Equipment List**

5. Record the following required information in the New Personnel window (Figure 5-12 and Figure 5-13):
  - 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 Personnel

**Contractor:**

**Personnel:**

**Employee:**

**Decision Class:**

**Number:**

**Total Hours:**

**Comments:**

3975 remaining

**Figure 5-12: DWR Personnel Entry**







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

Figure 5-13: DWR Personnel List

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

**Note:** When the Sync Data process has 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 will 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](#) for details.

## OFFICE ENGINEER'S RESPONSIBILITIES – REMOVAL ITEMS

- Save Removal Item photos in the appropriate EDOC Contract Files\Contract Files\ Division No. 3 - Multimedia Records\3.# Photographs with Descriptions directory.
- Review removal item calculation sheets for accuracy and save electronically in the appropriate EDOC Contract Files\Contract Files\ Division No. 7 - Construction Pay Estimate and Related Data\7.# DWR Calculation 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, Section, Reviewing a DWR from Mobile Inspector, in the [AWP User Guide](#) for details.

1. 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)
  - 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.

2. Approve the DWR if everything is correct.
3. If there are edits required in the DWR, Reject it.
4. Notify the Inspector who created the DWR there are edits to be completed. The Inspector will be required to log into the AWP program on a computer (not the iPad) to complete the edits.
5. Review the corrected DWR and Approve.

