

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
CONSTRUCTION DIVISION

AWP
DOCUMENTATION
MANUAL With
Materials
2023



TABLE OF CONTENTS

Introduction	1-1
Overview	1-3
About this Manual	1-3
Conventions Used in this Manual	1-3
Updates, Revisions to this Manual	1-4
Distribution of this Manual	1-4
General Guidelines	1-4
NDOT Forms	1-4
Correspondence Email Information	1-4
Contract Startup	2-1
Overview	2-3
Beginning of a Contract	2-3
AWP Information	2-3
Electronic Organization of Contract Documentation	2-3
Setting Up the Contract Files Directory Template	2-4
Agreement Estimate Breakout Report	2-16
Estimate of Quantities Report	2-16
Measurement & Payment	2-17
Safety Checklist Contractor Operations Form	2-19
Change orders and Letters of Authorization	3-1
Overview	3-3
Change Orders	3-3
Change Order Types	3-3
Essential Elements of Change Orders	3-5
Guidance for Completing Change Order Documentation	3-5
Change Order Execution Workflow	3-9
Change Order Examples	3-11

TABLE OF CONTENTS

Letters of Authorization (LOA)	3-11
Essential Elements of an LOA	3-11
LOA Execution Workflow	3-11
LOA and Supporting Documentation Example	3-12
Force Account	4-1
Overview	4-3
General Force Account	4-3
Inspector's Responsibilities	4-3
Office Engineer's Responsibilities	4-4
Removal Items	5-1
Overview	5-3
Inspector's Responsibilities – Removal Items	5-3
Daily Work Report (DWR) – Mobile Inspector	5-4
Daily Work Report (DWR) – AWP Edits	5-10
Office Engineer's Responsibilities – Removal Items	5-10
Daily Work Report (DWR) – AWP	5-10
Earthwork Items	6-1
Overview	6-3
Inspector's Responsibilities – Earthwork Items	6-3
Daily Work Report (DWR) – Mobile Inspector	6-4
Daily Work Report (DWR) – AWP Edits	6-9
Office Engineer's Responsibilities – Earthwork Items	6-9
Daily Work Report (DWR) – AWP	6-9
Landscape and Irrigation Items	7-1
Overview	7-3
Inspector's Responsibilities – Landscape and Irrigation Items	7-3
Daily Work Report (DWR) – Mobile Inspector	7-4

TABLE OF CONTENTS

Daily Work Report (DWR) – AWP Edits	7-12
Office Engineer’s Responsibilities – Landscape and Irrigation Items	7-13
Daily Work Report (DWR) – AWP	7-13
Electrical Items	8-1
Overview	8-3
Inspector’s Responsibilities – Electrical Items	8-3
Daily Work Report (DWR) – Mobile Inspector	8-4
Daily Work Report (DWR) – AWP Edits	8-11
Office Engineer’s Responsibilities – Electrical Items	8-11
Daily Work Report (DWR) – AWP	8-12
Roadway Aggregates and Roadbed Modification Items	9-1
Overview	9-3
Inspector’s Responsibilities – Aggregate and Roadbed Mod Items	9-3
Aggregate Ton Items	9-3
Aggregate CUYD Items	9-8
Roadbed Modification Ton Items	9-9
Roadbed Mod SQYD and Mile Items	9-10
Office Engineer’s Responsibilities – Aggregate and Roadbed Mod Items	9-12
Aggregate Ton Items	9-13
Aggregate CUYD Items	9-17
Roadbed Mod Ton Item	9-17
Plantmix and Recycled Surface Items	10-1
Overview	10-3
Hot Plant/Marination Inspector’s Responsibilities – Plantmix Surfacing Items	10-3
Daily Work Report (DWR) – Mobile Inspector (Plantmix Surface)	10-4
Record of Delivery – Asphalt Cement, Mineral Filler Spreadsheet	10-5
Plant Record Spreadsheet	10-6

TABLE OF CONTENTS

Inspector’s Responsibilities – Plantmix Surfacing Items	10-7
Record of Delivery – Plantmix Surface Spreadsheet	10-7
Daily Work Report (DWR) – Mobile Inspector (Plantmix Surface)	10-8
Office Engineer’s Responsibilities – Plantmix Surfacing Items	10-11
Record of Delivery – Asphalt Cement, Mineral Filler Spreadsheet	10-12
Plant Record Spreadsheet	10-12
Record of Delivery – Plantmix Surface Spreadsheet	10-13
Daily Plant Report of Asphalt Mixtures Forms	10-13
Last Computerized Load Ticket of the Day	10-14
Bill of Lading Calculation Sheet	10-14
Daily Work Report (DWR) – AWP	10-15
Inspector’s Responsibilities – Recycled Bituminous Surface Items	10-17
Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) Spreadsheet	10-17
Daily Work Report (DWR) – Mobile Inspector (Lime - Ton)	10-18
Daily Work Report (DWR) – Mobile Inspector (Recycled Bituminous - SQYD)	10-19
Office Engineer’s Responsibility – Recycled Bituminous Surface Items	10-20
Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) Spreadsheet	10-21
Daily Work Report (DWR) AWP (Lime - Ton)	10-21
Daily Work Report (DWR) AWP (Recycled Bituminous - SQYD)	10-23
Liquid and Emulsified Asphalt Items	11-1
Overview	11-3
Liquid Asphalts	11-3
Emulsified Asphalts	11-3
Inspector’s Responsibilities – Liquid/Emulsified Asphalt Items	11-4
Record of Delivery—Liquid/Emulsified Asphalt Spreadsheets	11-4
Liquid/Emulsified Asphalt Application and Payment Spreadsheet	11-5
Oil and Water Check Sheet	11-8

TABLE OF CONTENTS

Daily Work Report (DWR) – Mobile Inspector (Liquid/Emulsified Asphalts)	11-9
Daily Work Report (DWR) – AWP Edits	11-12
Office Engineer’s Responsibilities – Liquid/Emulsified Asphalt Items	11-13
Record of Delivery—Liquid/Emulsified Asphalt Spreadsheet	11-13
Liquid/Emulsified Asphalt Application and Payment Spreadsheet	11-14
Daily Work Report (DWR) – AWP (Liquid/Emulsified Asphalts)	11-15
Bill of Lading and Certification for Liquid and Emulsified Asphalts	11-17
Concrete Paving Items	12-1
Overview	12-3
Inspector’s Responsibilities – Concrete Paving Items	12-3
Daily Work Report (DWR) – Mobile Inspector	12-3
Daily Work Report (DWR) – AWP Edits	12-8
Office Engineer’s Responsibilities – Concrete Paving Items	12-9
Daily Work Report (DWR) – AWP	12-9
Major Structure and Piling Items	13-1
Overview	13-3
Inspector’s Responsibilities – Major Structure and Piling Items	13-3
Daily Work Report (DWR) – Mobile Inspector	13-4
Daily Work Report (DWR) – AWP Edits	13-12
Office Engineer’s Responsibilities – Major Structure and Piling Items	13-13
Daily Work Report (DWR) – AWP	13-13
Drainage and Wall Items	14-1
Overview	14-3
Survey Crew Chief’s Responsibilities – Drainage and Wall Items	14-3
Daily Work Report (DWR) – AWP	14-3
Inspector’s Responsibilities – Drainage and Wall Items	14-4
Daily Work Report (DWR) – Mobile Inspector	14-5

TABLE OF CONTENTS

Daily Work Report (DWR) – AWP Edits	14-13
Office Engineer’s Responsibilities – Drainage and Wall Items	14-13
Daily Work Report (DWR) – AWP	14-14
Curb and Gutter Items	15-1
Overview	15-3
Inspector’s Responsibilities – Curb and Gutter Items	15-3
Daily Work Report (DWR) – Mobile Inspector	15-4
Daily Work Report (DWR) – AWP Edits	15-8
Office Engineer’s Responsibilities – Curb and Gutter Items	15-8
Daily Work Report (DWR) – AWP	15-9
Striping Items	16-1
Overview	16-3
Inspector’s Responsibilities – Striping Items	16-3
Daily Work Report (DWR) – Mobile Inspector	16-4
Daily Work Report (DWR) – AWP Edits	16-9
Office Engineer’s Responsibilities – Striping Items	16-9
Daily Work Report (DWR) – AWP	16-10
Guardrail Items	17-1
Overview	17-3
Survey Crew Chief’s Responsibilities – Guardrail Items	17-3
Daily Work Report (DWR) – AWP	17-3
Inspector’s Responsibilities – Guardrail Items	17-4
Daily Work Report (DWR) – Mobile Inspector	17-5
Daily Work Report (DWR) – AWP Edits	17-11
Office Engineer’s Responsibilities – Guardrail Items	17-11
Daily Work Report (DWR) – AWP	17-12
Adjust Valve and Manhole Items	18-1

TABLE OF CONTENTS

Overview	18-3
Inspector’s Responsibilities – Adjust Valve and Manhole Items	18-3
Daily Work Report (DWR) – Mobile Inspector	18-9
Daily Work Report (DWR) – AWP Edits	18-14
Office Engineer’s Responsibilities – Adjust Valve and Manhole Items	18-14
Daily Work Report (DWR) – AWP	18-14
Miscellaneous Items	19-1
Overview	19-3
Inspector’s Responsibilities – Miscellaneous Items	19-3
Daily Work Report (DWR) – Mobile Inspector	19-4
Daily Work Report (DWR) – AWP Edits	19-14
Office Engineer’s Responsibilities – Miscellaneous Items	19-15
Daily Work Report (DWR) – AWP	19-15
Permanent Sign Items	20-1
Overview	20-3
Inspector’s Responsibilities – Sign Items	20-3
Daily Work Report (DWR) – Mobile Inspector	20-4
Daily Work Report (DWR) – AWP Edits	20-9
Office Engineer’s Responsibilities – Sign Items	20-10
Daily Work Report (DWR) – AWP	20-10
Hour - Day - Month Items	21-1
Overview	21-3
Inspector’s Responsibilities – Hour-Day-Month Items	21-3
Daily Work Report (DWR) – Mobile Inspector	21-3
Daily Work Report (DWR) – AWP Edits	21-9
Office Engineer’s Responsibilities – Hour-Day-Month Items	21-10
Daily Work Report (DWR) – AWP	21-10

TABLE OF CONTENTS

Rent Construction Items	22-1
Overview	22-3
Inspector’s Responsibilities – Rent Construction Items	22-3
Daily Work Report (DWR) – Mobile Inspector	22-5
Daily Work Report (DWR) – AWP Edits	22-10
Office Engineer’s Responsibilities – Rent Construction Items	22-10
Daily Work Report (DWR) – AWP	22-10
Construction Manager at Risk Contracts	23-1
Overview	23-3
Inspector’s Responsibilities – CMAR Contract Items	23-3
Daily Work Report (DWR) – Mobile Inspector	23-3
Office Engineer’s Responsibilities – CMAR Contract Items	23-5
Daily Work Report (DWR) – Item Adjustments	23-5
Daily Work Report (DWR) – Risk Reserve	23-7
Resident Engineer’s Responsibilities – Risk Reserve	23-8
Risk Reserve Workflow	23-8
Progress Payments	24-1
Overview	24-3
Stockpiles	24-3
Resident Engineer’s Responsibilities	24-3
Office Engineer’s Responsibilities	24-5
Daily Diaries	24-6
Resident Engineer’s Responsibilities	24-6
Office Engineer DWR Postings	24-6
Office Engineer’s Responsibilities	24-6
Items Paid By Invoice	24-11
Ride Pay Adjustment	24-18

TABLE OF CONTENTS

Office Engineer's Responsibilities	24-18
Percent Within Limits (PWL)	24-20
Office Engineer's Responsibilities	24-20
Payment Estimates	24-21
Office Engineer's Responsibilities	24-22
Contract Closeout	25-1
Overview	25-3
Contract Closeout Tasks	25-3
Closeout Documents	25-5
Closeout Change Order	25-5
Contract Pickup Memo	25-5
EDOC Crew Checklist for the Final Pickup and Review	25-6
District Acceptance Letter	25-10
Final Payroll Letter	25-11
Acceptance of Contract Letter (Lab Clearance)	25-12
AWP Sampling and Testing Status Report (STSR) For Closeout	25-12
As-Built Plans and Shop Drawings	25-13
Pit/Property Owner Release	25-13
Materials Deposit Usage Report	25-14
Guardrail Inventory Data Sheet	25-14
Contractor Past Performance Rating (CPPR)	25-15
Closeout Helpful Hints	25-17
Preparation for the Final Contract Pickup	25-17
EDOC Contract File Directories Required at Job Pickup	25-18
Items Required Prior to Contract Pickup	25-18
Items Required Prior to a Remote Contract Pickup	25-18
Items to Complete for Force Account	25-18

TABLE OF CONTENTS

Items Required on the Last Scale Ticket for the Day	25-18
Items to Check on the Record of Delivery Sheets	25-19
Items to Check on the Bill of Ladings	25-19
Items to Check on the Asphalt Plant Record	25-19
Verifying Sufficient B/Ls to Cover Production	25-19
Item to Check on Letters of Authorization	25-20
Item to Check on Liquidated Damage for Time	25-20
Items to Check on Price Adjustment Liq. Dam. for Asphalt	25-20
Items to Check on Price Adjustment Liq. Dam. for Liquid and Emulsified Asphalt	25-20
Abbreviations	A-1
Abbreviations	A-3
Calculation Formulas	B-1
Volume Calculations	B-3
Area Calculations	B-4
Calculation Sheet	B-6
Forms List and Distribution	C-1
Construction Crew Forms	C-3
Independent Assurance Forms	C-5

INTRODUCTION

This chapter contains the following sections:

Overview	1-3
General Guidelines	1-4

OVERVIEW

ABOUT THIS MANUAL

The purpose of this document is to establish uniform procedures for documentation of work performed by contractors on highway construction projects and processing Change Orders using current AASHTOWare Project™ programs. This Manual is a reference for Resident Engineers, field office personnel, Inspectors and construction survey crews. The Resident Engineer is directly responsible for implementing the procedures outlined in this Manual.

To meet federal regulations, according to Title 23 Code of Federal Regulations (CFR), it is required that NDOT employees adequately document all items of work in a uniform manner. This Manual contains instructions for preparing original source documentation, Inspector's Daily Reports, Daily Diaries and Change Orders to substantiate payments made to contractors.

The instructions and procedures in this Manual are predicated on the Standard Specifications for Road and Bridge Construction. Whenever an unusual method of payment is described in the Special Provisions for an individual contract, the methods of documentation shown in this Manual may require modifications to fit the situation. Should this occur, apply a method that would be used for a closely related item of work for which there are instructions. If no usable instructions can be found in this Manual, contact the Construction Division staff for assistance in finding a proper way of documenting the item.

This Manual should be easily read and understood by anyone with a fundamental understanding of NDOT's construction process. In conjunction with related documentation and supplemental training, this Manual will serve as a framework for administering NDOT contracts.

This Manual does not address every phase, process or event throughout the contract lifecycle in detail, nor will it replace good engineering judgment. References to documents and/or related resources are provided throughout this Manual where necessary or applicable.

CONVENTIONS USED IN THIS MANUAL

References in this Manual include the following:

- *The Department*: The Nevada Department of Transportation (NDOT).
- *Project*: The lifecycle of an NDOT project up until it is advertised.
- *Contract*: The lifecycle of an NDOT project upon advertisement.
- *Standard Specifications*: NDOT's [Standard Specifications for Road and Bridge Construction](#). (This includes "Special Provisions", unless otherwise stated.)
- *Standard Plans*: NDOT's [Standard Plans for Road and Bridge Construction](#).
- *Contract Plans*: Plans specific to the contract.
- *Special Provisions*: Specifications specific to the contract.
- *Contract Documents*: All documents identified under *Contract* in Subsection 101.03, (*Terms and Conditions*) *Definitions*, of the *Standard Specifications*.
- *Manual*: the AWP Documentation Manual
- *AWP*: AASHTOWare Project Construction & Materials™

The order of precedence of contract documents is:

1. Supplemental Notices
2. Special Provisions
3. Contract Plans
4. Standard Specifications
5. Standard Plans

When discrepancies and/or contradictions within the above referenced documents occur, always follow the order of precedence to determine the governing documents. Guidelines when working with Standard Specifications, Standard Plans, Project Plans and/or Special Provisions include:

- Always verify changes to the Standard Plans and Standard Specifications by referencing the Special Provisions, Project Plans and Supplemental Notices.
- Changes to Standard Specifications in between published editions are made as Pull Sheets. When a Pull Sheet is implemented, it is included in a project's Special Provisions. (This incorporation of change in contract documents is a reason why Special Provisions take precedence over Standard Specifications.)
- Changes to Standard Plans are made as Special Details. When Special Details are implemented, they will be included in the Project Plans. (This incorporation of change in contract documents is a reason why Project Plans take precedence over Standard Plans.)
- Changes to contract documents after a project is advertised but before the bid is opened are provided in a Supplemental Notice.

UPDATES, REVISIONS TO THIS MANUAL

The Construction Division is responsible for maintaining an updated Documentation Manual. The Construction Division will revise and/or issue updates as needed. Users can request a revision to the Manual in writing to the Construction Division at ndotconstruction@dot.nv.gov. The Construction Division will review the request and take appropriate action. Between revisions/updates, the Construction Division may issue interim Construction Division policy memorandums which will be incorporated into the next revision.

DISTRIBUTION OF THIS MANUAL

The latest approved version of the Documentation Manual is posted on the NDOT Internet site [[AWP Documentation Manual With Materials](#)].

GENERAL GUIDELINES

NDOT FORMS

All updates, including wet signatures, on NDOT forms referenced in this manual MUST be completed using blue or black ink.

It is strongly recommended using DocuSign to obtain signatures whenever possible on NDOT forms referenced in this manual.

All corrections on NDOT forms mentioned in this manual MUST be completed using red ink or red pencil.

CORRESPONDENCE EMAIL INFORMATION

It is the responsibility of each crew to save contract related correspondence emails in the appropriate correspondence directories in the EDOC directory tree.

It is highly recommended that the entire email message (the last email in an email string/chain) from MS Outlook (.msg file) be saved to the appropriate correspondence directories in the EDOC directory tree. It is not necessary to save emails as a PDF. Please note that .msg files are acceptable in a claim situation. Correspondence email file names must include the contract number and a short description of the email. Keep the file names short (around 100 characters).

CONTRACT STARTUP

This chapter contains the following sections:

Overview	2-3
Beginning of a Contract	2-3
AWP Information	2-3
Electronic Organization of Contract Documentation	2-3
Agreement Estimate Breakout Report	2-16
Estimate of Quantities Report	2-16
Measurement & Payment	2-17
Safety Checklist Contractor Operations Form	2-19

OVERVIEW

This chapter provides guidance for setting up a newly awarded contract, setting up the field office electronic directories for storing contract documentation files, obtaining E-Bidding reports to assist in contract bid item review, understanding significant figures, and obtaining the required safety inspection report.

BEGINNING OF A CONTRACT

At the beginning of a contract, the Resident Engineer and Office Engineer will receive emails containing the following information necessary for contract documentation start-up:

- Notification the contract has been loaded in AWP Construction & Materials™ and Contract Materials have been set up. (Materials Division)
- Location of the AWP Documentation Manual With Materials, AWP User Guide, and when applicable, the location of the Record of Delivery spreadsheets and the Liquid/Emulsified Asphalt Application and Payment spreadsheet (Construction Admin Services Section)

Other information required for contract start-up includes:

- Agreement Estimate Breakout (AEB) report [e-Bidding Portal Intranet](#)
- Estimate of Quantities report [e-Bidding Portal Intranet](#)

Each of the above items will be explained in detail in the appropriate chapter in this manual.

AWP INFORMATION

- Enter/Confirm the following information in the AWP Construction & Materials, Contract Administration Summary Component at the start of a contract. Refer to Chapter 2, Contract Setup, in the [AWP User Guide With Materials](#) for details.
 - Contract Authority Tab
 - Add Contract Specific Contract Authority for each Mobile Inspector user needing access to the contract.
 - Contract Times Tab
 - Enter the CREW-REVIEW Informational Time after reviewing the AWP contract items and the Agreement Estimate and Estimate of Quantities reports. This informational time is required for generating Daily Work Report, Daily Diaries and Payment Estimates.
 - Enter the ConstStartedDate Informational Time (Construction Started Date)
 - Click on the Main Contract Site Time (00 AT or 00 CD) and go to the Units and Dates Tab. Confirm that the Start Date (Time Charges Start Date) is correct. Update if needed.
 - Permits Tab
 - Enter all Permits associated with the contract.

ELECTRONIC ORGANIZATION OF CONTRACT DOCUMENTATION

All field office records for each contract must be organized in the standardized Contract Files directory template. Utilizing this directory template on each contract will enable crew personnel, headquarters personnel, district personnel, FHWA, etc. to locate contract information consistently.

The directory template contains the following major file directories and file index:

- Contract Files
 - Contract
 - Materials
 - XXXX FILE INDEX.xlsx

Each contract will have an electronic file directory which contains the contract specific documents. Within these file sub-directories which correspond to the various areas within Contract Administration. The sub-directories will be set up in accordance with the contract specific documents.

The initial Contract Files and Materials and Testing Files have been set up with sub-directories. These initial sub-directories are examples and can be renumbered, renamed, deleted and new sub-directories can be added as necessary, per the contract. It is acceptable to have non sequential sub-directory numbers in the case that a sub-directory is deleted.

SETTING UP THE CONTRACT FILES DIRECTORY TEMPLATE

The directory template is set up in a ZIP file (Contracts files.zip) which is located in the SharePoint Construction Crew Portal, Construction Crew Documents, area.

Note: Set up a separate directory template for each contract.

It is recommended setting up the Contract Files directory template on OneDrive.

1. Using the Chrome browser go to the SharePoint Construction Crew Portal, [Construction Crew Documents](#), and click the **Contract Files.zip** file (Figure 2-1).

Construction Crew Documents


 Contract Files.zip

Figure 2-1: EDOC Contract Files.zip

2. Click on **Download** (Figure 2-2).




 Share  Copy link  **Download**

Figure 2-2: Download the zip file

3. Using Windows Explorer open the Downloads folder and double-click on the **Contract Files.zip** file (Figure 2-3).

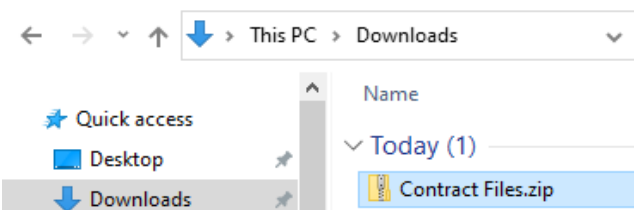


Figure 2-3: Saving the zip file

4. Click on **Extract all** (Figure 2-4).

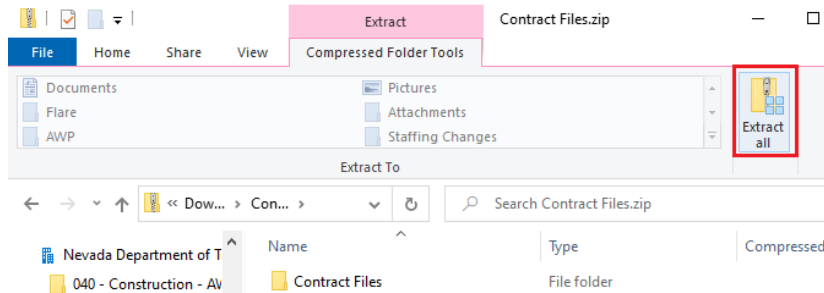


Figure 2-4: Extract all files

5. Click **Browse** to select the Destination (Figure 2-5).

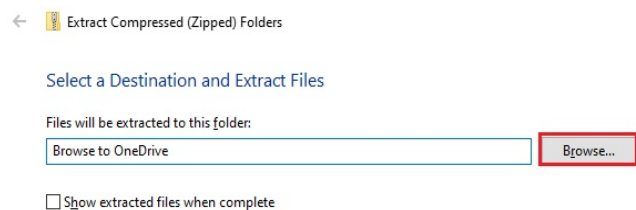


Figure 2-5: Extract Compressed (Zipped) Folders

6. Browse to OneDrive - Nevada Department of Transportation and click the **Select Folder** button (Figure 2-6).

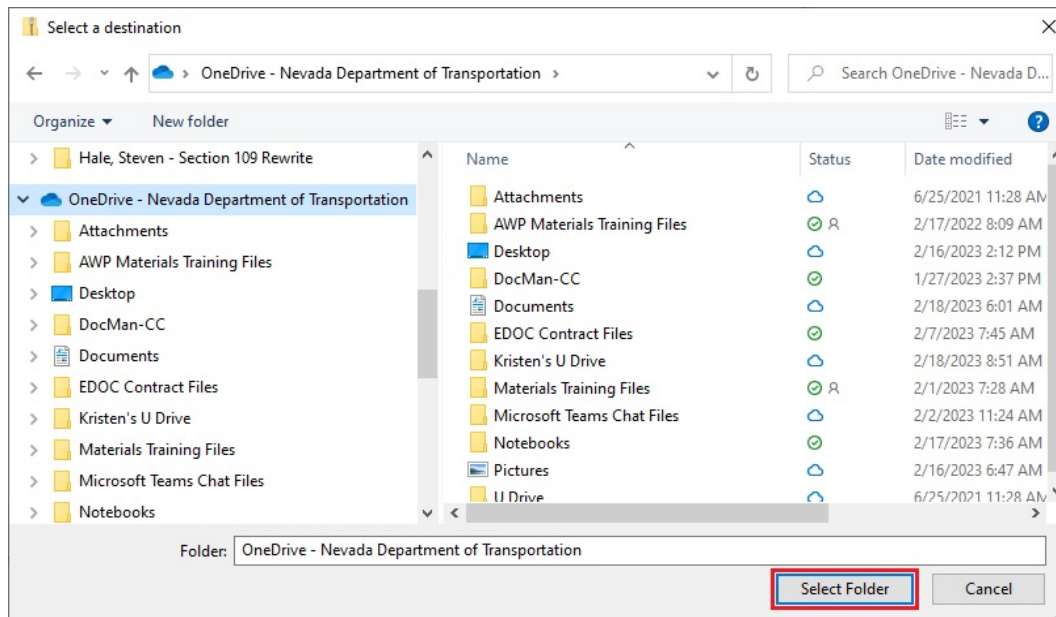


Figure 2-6: Select a Destination

7. Check the **Show extracted files when complete** box and click the **Extract** button (Figure 2-7).

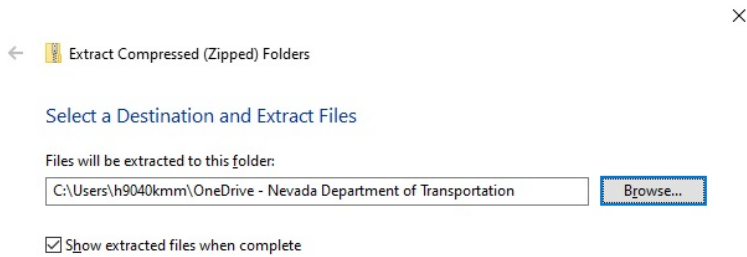


Figure 2-7: Extract the Zipped File

8. A copy status window will open while the zip file copies (extracts) the files (Figure 2-8).

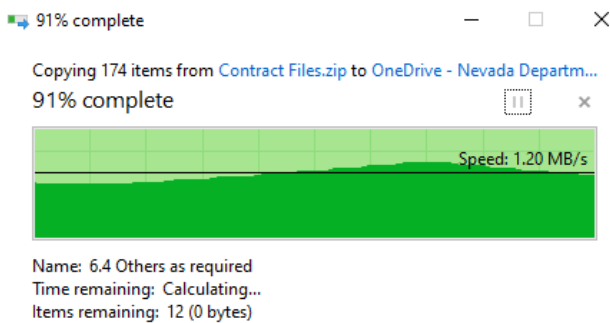


Figure 2-8: Copy Status Window

9. When the files are done copying, Windows Explorer will open the OneDrive - Nevada Department of Transportation showing the Contract Files directory (Figure 2-9).

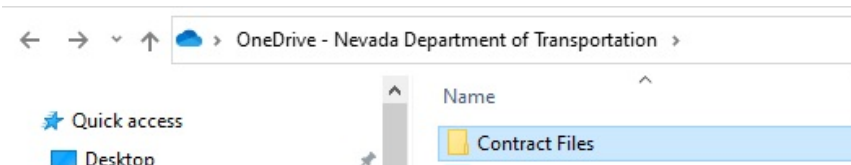


Figure 2-9: Contract Files Directory

10. Rename the Contract Files directory by entering the Contract ID at the beginning (Figure 2-10).

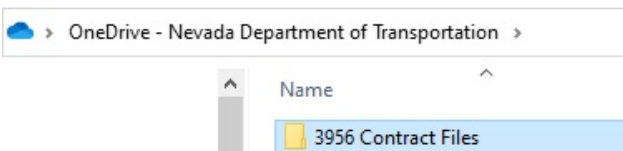


Figure 2-10: Rename Contract Files Directory

- The Contract Files directory template contains two sub-directories (Contract and Materials) and a file index spreadsheet (Figure 2-11). Each sub-directory contains additional sub-directories (Divisions) that are explained in the following sections.



Figure 2-11: Contract Files Sub-directories

- The XXXX FILE INDEX.xlsx spreadsheet contains the information that Construction Admin Services will pick up at the time of contract close-out. Rename this file by replacing the XXXX with your contract ID. Update the records in this index so that it corresponds to the changes made to the sub-directory names in each division on the crew share drive.

CONTRACT FILES

The Contract Files/Contract directory consists of 17 sub-directories (Figure 2-12). Each sub-directory will be explained in the following pages.

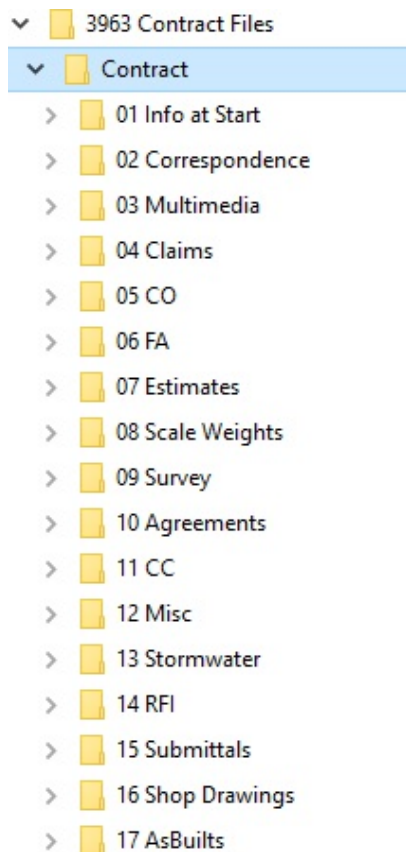


Figure 2-12: Contract Files/Contract Sub-directories

01 INFO AT START

This sub-directory contains documents furnished to the Resident Engineer at the beginning and during the contract (Figure 2-13).

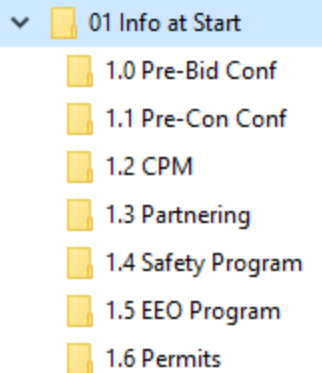


Figure 2-13: Contract, 01 Info at Start

02 CORRESPONDENCE

This sub-directory contains correspondence (including emails) relative to the contract (Figure 2-14). Email file names should include the contract ID and a **short** description of the email message. It is recommended the entire email message from MS Outlook (.msg file) be saved.

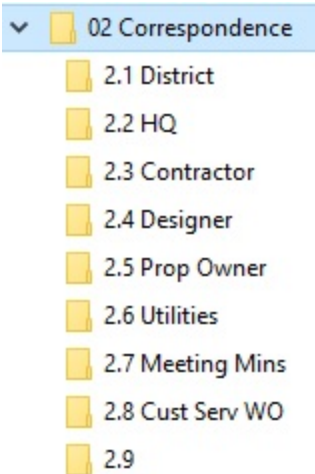


Figure 2-14: Contract, 02 Correspondence

03 MULTIMEDIA

This sub-directory contains the photographs and videos that relate to a contract (Figure 2-15). Create sub-directories in this location to organize photos and videos as needed. Use short file names for individual photos and/or videos.

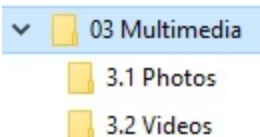


Figure 2-15: Contract, 03 Multimedia

04 CLAIMS

This sub-directory contains claims or information concerning claims pertaining to the contract (Figure 2-16). Separate sub-directories are required for each individual claim.

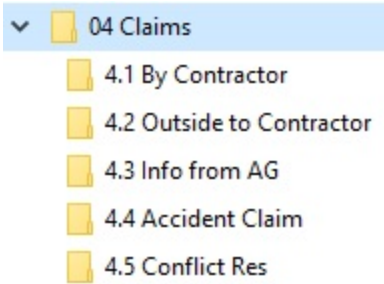


Figure 2-16: Contract, 04 Claims

05 CO

This sub-directory contains the AWP Change Order reports, all supporting documents, and justifications (Figure 2-17). Separate sub-directories are required for each Change Order.

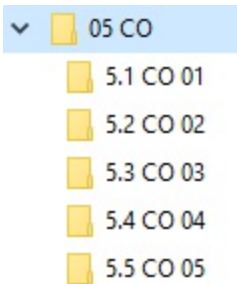


Figure 2-17: Contract, 05 CO

06 FA

This sub-directory contains the original Daily Costs of Force Account with Standby sheets, invoices, fringe benefit statements, force account recap sheets, and other required information described in Chapter 4, Force Account, of this Manual (Figure 2-18). Separate sub-directories are required for each Force Account Item and each individual category. Give each Force Account sub-directory a short name describing the activity.

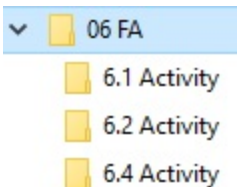


Figure 2-18: Contract, 06 FA

07 ESTIMATES

This sub-directory contains reports related to the bi-weekly Construction payment estimates and supporting documentation (Figure 2-19). Separate sub-directories are required for each item.

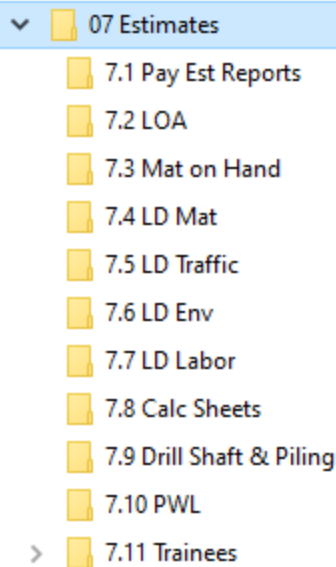


Figure 2-19: Contract, 07 Estimates

08 - SCALE WEIGHTS

This sub-directory contains the Record of Delivery spreadsheets for items paid by the ton and the Bill of Ladings (B/L) (only for Asphalts, Portland Cement, and Mineral Filler (Figure 2-20). A copy of the B/L along with the certification shall be filed in Materials\03Cert & Test Reports\3.# directory, as described in this chapter. Separate sub-directories are required for each item.

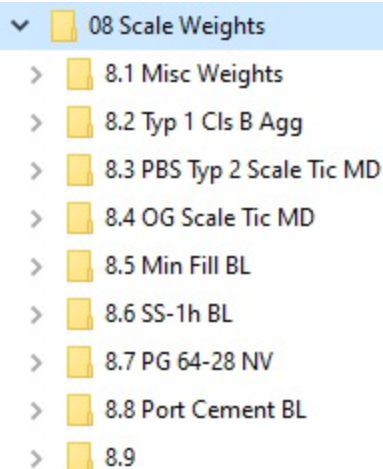


Figure 2-20: Contract, 08 Scale Weights

09 SURVEY

This sub-directory contains survey related data (Figure 2-21). Separate sub-directories are required for each item.

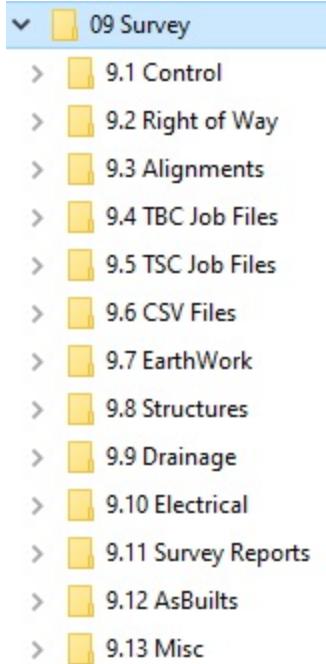


Figure 2-21: Contract, 09 Survey

10 AGREEMENTS

This sub-directory contains agreements received pertaining to utilities, right-of-way, developers, land owners, entities, etc. (Figure 2-22). Separate sub-directories are required for each agreement.

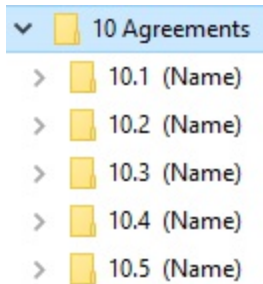


Figure 2-22: Contract, 10 Agreements

11 CC

This sub-directory contains Contract Compliance (CC) correspondence relative to subcontractor agreements (Figure 2-23). Separate sub-directories are required for each subcontractor.

- ▼ 11 CC
 - > 11.0 Sub (Firm)
 - > 11.1 Sub (Firm)
 - > 11.2 Sub (Firm)
 - > 11.3 Sub (Firm)
 - > 11.4 Sub (Firm)
 - > 11.5 Sub (Firm)

Figure 2-23: Contract, 11 CC

12 MISC

This sub-directory contains items that may be necessary to file but are not covered elsewhere (Figure 2-24). Separate sub-directories are required for each item.

- ▼ 12 Misc
 - > 12.1 Job Pickup Docs
 - > 12.2 MSDS Sheets
 - > 12.3 Traffic Delay Logs
 - > 12.4 Work Zone Traff Contr
 - > 12.5 Bio Field Reports
 - > 12.6 Payroll Items
 - > 12.7 Safety Checklist

Figure 2-24: Contract, 12 Misc

13 STORMWATER

This sub-directory contains Stormwater reports and information (Figure 2-25). Separate sub-directories are required for each item.

- ▼ 13 Stormwater
 - > 13.1 Inspections
 - > 13.2 SWPPP
 - > 13.3 Permits

Figure 2-25: Contract, 13 Stormwater

14 RFI

This sub-directory contains copies of all RFIs (Figure 2-26). All original RFIs will be distributed as necessary. Separate sub-directories are required for each RFI.

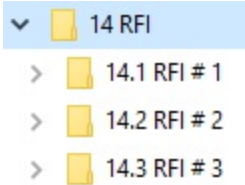


Figure 2-26: Contract, 14 RFI

15 SUBMITTALS

This sub-directory contains all Submittals (Figure 2-27). One copy of the submittal will be retained and filed, the rest will be distributed as necessary. When the approved/stamped copies are returned, retain and file one or more as needed and send the remainder to the contractor. The submittal is also filed with all related backup and correspondence. Separate sub-directories are required for each submittal.

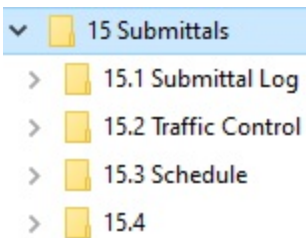


Figure 2-27: Contract, 15 Submittals

16 SHOP DRAWINGS

This sub-directory contains Shop Drawings (Figure 2-28). One copy of each shop drawing will be retained and filed. The remainder of the drawings will be distributed as necessary. When the approved/stamped copies are returned, retain and file one or more as needed and send the remainder to the contractor. File all correspondence and related backup documentation with the shop drawing. Separate sub-directories are required for each shop drawing.

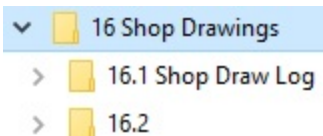


Figure 2-28: Contract, 16 Shop Drawings

17 ASBUILTS

This sub-directory contains all plan sheets and quantity revisions (Figure 2-29). All information shall be used to complete the As-Built Plans before the final closeout.

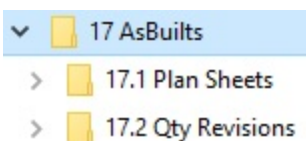


Figure 2-29: Contract, 17 AsBUILts

MATERIALS

The Contract Files/Materials directory consists of 6 sub-directories (Figure 2-30). Each will be explained in the following pages. Make sure to check with the Materials Division on items that are added to the contract through Change Orders to see if samples or certifications are required.

Note: Direct any questions concerning filing in these sub-directories to Construction Division Quality Assurance staff.










- ▼  3963 Contract Files
 - >  Contract
 - ▼  Materials
 - >  01 QPL STSR Info
 - >  02 QA Audit Reports
 - >  03 Cert & Test Reports
 - >  04 Tracking Sheets
 - >  05 Internal Profile
 - >  06 Struc Found Reports

Figure 2-30: Contract Files/Materials Sub-directories

01 QPL STSR INFO

This sub-division contains the Qualified Product List (QPL) received at the start of a contract from the Materials Division, the Sampling and Testing Status Report (STSR) directory where copies of the report will be saved, and Contractor's informational test reports (Figure 3-31). The QPL will include important information and should be reviewed upon receipt.





- ▼  01 QPL STSR Info
 - >  1.1 QPL
 - >  1.2 STSR
 - >  1.3 Informationals

Figure 2-31: Materials, 01 QPL STSR Info

02 QA AUDIT REPORTS

This sub-directory contains all audit results conducted by Construction Division Quality Assurance staff (Figure 2-32).



- ▼  02 QA Audit Reports
 - >  2.1 QA Inspection

Figure 2-32: Materials, 02 QA Audit Reports

03 CERT & TEST REPORTS

This sub-directory contains material certifications, bill of ladings (BL) and test results to/from the Materials Division (Figure 2-33). Create separate sub-directories based on the items in the Sampling and Testing Status Report (STSR).

- ▼ 03 Cert & Test Reports
 - > 3.1 Failing Tests
 - > 3.2 Metal Pipe
 - > 3.3 Reinforcing Steel
 - > 3.4 PD 76-22NV BL & Cert
 - > 3.5 Mineral Filler BL & Cert
 - > 3.6 PG 64-28NV BL & Cert

Figure 2-33: Materials, 03 Cert & Test Reports

04 TRACKING SHEETS

This sub-directory contains tracking sheets for material compactions, sieves and concrete (Figure 2-34).

- ▼ 04 Tracking Sheets
 - > 4.1 Compactions
 - > 4.2 Sieve
 - > 4.3 Concrete

Figure 2-34: Materials, 04 Tracking Sheets

05 INTERNAL PROFILE

This sub-division contains copies of profile reports provided by the contractor (Figure 2-35). The original reports are sent to Construction Division Quality Assurance. Separate sub-directories are required for each item.

- ▼ 05 Internal Profile
 - > 5.1 Dense Grade
 - > 5.2 Open Grade

Figure 2-35: Materials, 05 Internal Profile

06 STRUC FOUND REPORTS

This sub-directory contains copies of Structure Foundation Pile Driving Records, Structure Foundation Inspection Records, Pile Load Test Data Sheets, Drilled Shaft Inspection Reports, Cross-hole Sonic Logging Sheets, and any other information relating to pile driving and structure foundation (Figure 2-36). The original test reports are sent to Construction Division Quality Assurance. Separate sub-directories are required for each type of material.

- ▼ 06 Struc Found Reports
 - > 6.1 Pile Driving Record
 - > 6.2 Pile Load Test Data
 - > 6.3 Drilled Shaft Reports
 - > 6.4

Figure 2-36: Materials, 06 - Struc Found Reports

AGREEMENT ESTIMATE BREAKOUT REPORT

The Agreement Estimate Breakout (AEB) report identifies construction type codes, funding sources, bid items and bid item quantities by project and AEB. In the AWP program an AEB is referred to as a category. Categories (AEB) in a contract are established for each different type of construction (major structure, urban roadway, rural roadway, etc.) and different funding sources (State - C1C, Federal - C2C, Other - C3C, i.e. County, City, Utilities, etc.).

The Resident Engineer will compare the AEB report with the project plans to ensure that the bid items and quantities in each category (AEB) are correct in the AWP program. Figure 2-37 shows an example of the AEB report.

All construction personnel will be familiar with the AEB report, and are expected to record all quantities of items used on the contract according to the category (AEB) shown therein. The category (AEB) numbers assigned by Design, will be used when documenting or posting pay items, and may not be changed or modified. When an original bid item is not listed in the correct category (AEB) it will be added by the Resident Engineer in a Change Order. Items must be paid for where they are placed. When a new category (AEB) is needed, the Construction Division will work with the Financial Management Budget Division to budget the new category (AEB). The new category (AEB) is then added to the contract in AWP and the Resident Engineer is notified. The Resident Engineer will then create a Change Order to add the required items to the new category (AEB). Refer to Chapter 3, Change Orders and Letters of Authorization, in this Manual for details.

Note: The Agreement Estimate report is found on the [e-Bidding Portal Intranet](#) Intranet in the Contract Documents tab.

STATE OF NEVADA DEPARTMENT OF TRANSPORTATION AGREEMENT ESTIMATE		PAGE: Page 1 of 21 RUN DATE: 07/17/2015 RUN TIME: 10:43:24AM			
MASTER PROJECT NUMBER: 60604 CONTRACT NO: 3585 FUNCTIONAL CLASS: Rural Principal Arterial PROJECT NUMBER: NHP-395-1(027) LOCATION: US 395, CARSON CITY FREEWAY, FROM SOUTH CARSON ST TO FAIRVIEW DRIVE, PACKAGE 2B-3. CC 0.05 TO CC 3.15	PROJECT ID: 60604				
COUNTY: CARSON CITY DEMOGRAPHY: URBAN ROUTE SECTION: US395-1 CONTRACTOR: Road and Highway Builders LLC DESIGNER: FRED SHAKAL	MILE POST: CC 0.05 PHONE: (775)888-7593	TO: CC 3.15			
CONSTRUCTION TYPE CODE: I000 ROADWAY BREAKOUT DESCRIPTION: ROADWAY CONSTRUCTION					
BREAKOUT NO: 01 C2C 1490 CONTR FROM STATION: "L" 10+00.00 GASB34: NEW		COUNTY: CARSON CITY TO STATION: "02" 204+36.90			
UNIT OF WORK	QUANTITY	UNIT MEAS	DESCRIPTION	* UNIT PRICE	ITEM COST
2010100	1.000	LS	CLEARING AND GRUBBING	150,000.00	150,000.00
2020400	841.000	LINF	REMOVAL OF CONCRETE BARRIER RAIL	30.00	25,230.00
2020435	1.000	EACH	REMOVAL OF BUILDING	10,000.00	10,000.00
2020530	1.000	EACH	REMOVAL OF HEADWALL	3,000.00	3,000.00

Figure 2-37: Example of the Agreement Estimate Breakout Report


ESTIMATE OF QUANTITIES REPORT

The Estimate of Quantities report identifies the overall quantities of the items in a contract.

The Resident Engineer will compare the Estimate of Quantities report with the AWP Item list to ensure that the overall quantities of all the items in a contract are correct. Figures 2-38 and Figure 2-39 show examples of the Estimate of Quantities report and the AWP Item List.

In AWP, all Lump Sum (LS) item quantities are displayed with the actual dollar amount of the item and the Unit Price is always displayed as \$1.

Note: The Estimate of Quantities report is found on the [e-Bidding Portal Intranet](#) Intranet in the Contract Documents tab.



Nevada Department of Transportation Estimate of Quantities Report

Quantities shown are approximate and subject to change

Bid Opening Date: April 02, 2015 01:30 PM **District:** DISTRICT 2
Contract Number: 3585 **Estimate Range:** R37 \$41,000,000.01 to \$49,000,000
Location: US 395, CARSON CITY FREEWAY, FROM SOUTH CARSON ST TO FAIRVIEW DRIVE, PACKAGE 2B-3. CC 0.05 TO CC 3.15

Description: CONSTRUCT FOUR LANE CONTROLLED ACCESS FREEWAY TO INCLUDE SIGNS, LIGHTING, SOUND WALLS AND L&A; CONSTRUCT INTERIM ROADWAY FM JCT US50 AND SR 529 SO CARSON ST TO THE SR 518 SNYDER AVE GRADE SEPARATION

Project No(s): NHP-395-1(027)
Project Funding: FEDERAL

Seq#	Item Number	Unit of Measure	Quantity	Description
1	1100100	HOUR	1,000.000	TRAINING (1 TRAINEE)
2	2010100	LS	1.000	CLEARING AND GRUBBING
3	2020400	LINFT	841.000	REMOVAL OF CONCRETE BARRIER RAIL
4	2020435	EACH	1.000	REMOVAL OF BUILDING
5	2020530	EACH	1.000	REMOVAL OF HEADWALL
6	2020585	LINFT	4,521.000	REMOVAL OF FENCE

Figure 2-38: Example of the Estimate of Quantities Report

Item	Suppl Descr	Cmpl
2000100 - SURVEY CREW		Complete: No
> Current Quantity	Qty Pd to Dt	Qty Posted to Dt Appr DWRs
40.000	0.000	0.000
Change Order Number	Unit	Unit Price
	HOUR - Hour	400.00000
2020925 - REMOVAL OF PULL BOX		Complete: No
> 12.000	0.000	0.000
	EACH - Each	678.90000
2020935 - REMOVAL OF COMPOSITE SURFACE		Complete: No
> 138.000	0.000	0.000
	CUYD - CUBIC YARD	242.90000
2020990 - REMOVAL OF BITUMINOUS SURFACE (COLD MILLING)		Complete: No
> 7,290.000	0.000	0.000
	SQYD - SQUARE YARD	4.86000

Figure 2-39: Example of AWP Contract Item List

MEASUREMENT & PAYMENT

The following is a list of the method of measurement and payment that will be used on all items in a contract (Figure 2-40). It is the responsibility of the Inspector and Office Engineer to know which items can be paid to plan or require a measurement and/or calculation. The significant figures for all items are to the hundredths (.01).

UOM	Requirements	Remarks
ACRE	Meas & calcs	
*CUFT	Meas & calcs	
*CUYD	Plan qty, meas & calcs if different then plan qty	Cannot pay plan on removal items, Riprap items or

		items being weighed.
DAY		
L.S.	Percentage	
EACH	Counted Note: Station-to-station Each items require the word "Counted" in the posting Remarks.	If an each item has specific location / station, called out in the plans then it CAN be grouped in a posting. Comments must include specific location for each item. If an each item does NOT have a location / station called out in the plans but is grouped in a table or structure list then it can be grouped in a posting.
GAL	Meas & calcs	Must take picture of the container label and email to the Office Engineer.
HOUR		
LNFT	Meas	Multiple conduit runs CAN be grouped in a posting. Comments must contain the starting and ending stations, the measured LNFT, and the run number for each run.
MILE	Meas & calcs	
MONTH		
POUND	Plan qty, meas & calcs if different then plan qty	If an item is delivered in a container or sack, a picture of the label must be taken and emailed to the Office Engineer.
*SQFT	Meas & calcs	If taking quantities from the Standard Plans for marking film or sign quantities from the Contract Plans, plan qty. may be paid. Otherwise, calculations are required in the Remarks area. 2120050 - Detail Painting is the ONLY SQFT item that can be paid per plan. Refer to the plan sheet where it identifies the paid qty. For signs, the sign number is required in the Remarks area.
*SQYD	Meas & calcs	
STATION	Meas & calcs	
TON	Weighed over scales	Scale sheets, delivery tickets, or meas & calcs
*Can pay plan on the following Drainage items: RCP, Misc. Structures, Retaining, Sound and MSE Wall. Cannot pay plan on Riprap.		

Figure 2-40: Measurement & Payment

SAFETY CHECKLIST CONTRACTOR OPERATIONS FORM

The Safety Checklist Contractor Operations form (040-028) has been developed to aid in monitoring safety conditions on a contract.

Forms change periodically, go to the Nevada DOT, Doing Business, Construction, [Construction Forms](#) page for the most current form available.

The Safety Checklist Contractor Operations form must be completed by the contractor at the start of a contract and a copy turned into the NDOT field office. The contractor will keep the original form. On contracts of long duration, a new checklist must be completed and submitted once a year.

All Safety Checklist Contractor Operations forms will be saved electronically in the Contract Files\Contract\12 Misc\12.# Safety Checklist directory.

CHANGE ORDERS AND LETTERS OF AUTHORIZATION

This chapter contains the following sections:

Overview	3-3
Change Orders	3-3
Letters of Authorization (LOA)	3-11

OVERVIEW

This chapter provides guidance on the preparation of Change Orders and Letters of Authorization (LOA) documentation and the steps to successfully execute them.

CHANGE ORDERS

NDOT has the right to modify a contract. Change Orders are the contractual methods to make changes and are required for changes to the character of the work, payment, specification and/or working days/completion dates. A Change Order is legally binding and becomes part of the contract. Just as the original plans and specifications define the scope, terms, and conditions of work to be done, the Change Order needs to define the same.

A Change Order is legally binding to the contractor and to NDOT, so it must be prepared with care. The required elements of a Change Order must be clear, concise, and unambiguous. A Change Order must be prepared so that a person not familiar with the modification can readily interpret scope, terms, and conditions of the work.

CHANGE ORDER TYPES

NDOT has 3 Change Order types (General, Administrative and Prior) with 44 Change Order Reason Types (see the Change Order Reason Type list on the next page). Each type/reason covers a specific change to a contract.

General Change Orders include Reason Types 1 through 24. These Change Orders require a Cover Letter, cost justification (if applicable), and other various supporting documentation depending on their type. When extra work is part of the Change Order, a Record of Authorization To Proceed With Extra Work (form 040-002) is also required. These Change Orders must include signatures from the Resident Engineer, Contractor, District Engineer/Assistant District Engineer, Internal Division involved in the change, Chief of Construction, Assistant Chief of Construction, Assistant Director and FHWA (if applicable). DocuSign signature routing templates have been set up for each district and funding source for these Change Order types (refer to the Change Order Execution Workflow section in this chapter for details).

Administrative Change Orders include Reason Types 25 through 29. These Change Orders do NOT require a Cover Letter or a cost justification. They can have various supporting documentation depending on their type (e.g., calculation sheets, correspondence). Change Order Reason Types 25 and 27 must include signatures from the Resident Engineer, District Engineer/Assistant District Engineer, and Assistant Chief of Construction. A DocuSign signature routing template has been set up for the administrative Change Order types 25 and 27 (refer to the Change Order Execution Workflow section in this chapter for details). Change Order types 26, 28 and 29 only require a signature from the Resident Engineer. A DocuSign signature routing template has been set up for the administrative Change Order types 28 - 29 (refer to the Change Order Execution Workflow section in this chapter for details). The Close Out Change Order (Reason Type 26) is created by the Resident Engineer and left in DRAFT status. Construction Admin Services staff review and approve this type of Change Order. Change Order type 30 - HQ Administrative is reserved for Construction Admin Services staff use only.

Types 901 through 924 are Prior Change Orders. These Change Orders require a Cover Letter, cost justification (if applicable), and other various supporting documentation depending on their type. A Prior Change Order allows for payment for items of work, when the overall amount of work is not precisely known. They do require an additional Change Order to be created to finalize the quantity(s) for the work performed. These Change Orders must include signatures from the Resident Engineer, Contractor, District Engineer/Assistant District Engineer, Internal division involved in the change (if applicable), Chief of Construction, Assistant Chief of Construction, Assistant Director and FHWA (if applicable). DocuSign signature routing templates have been set based on the funding source for these Change Order types (refer to the Change Order Execution Workflow section in this chapter for details).

CHANGE ORDER REASON TYPE LIST

- 01 - Errors or Omissions
- 02 - Construction Stakeout Errors
- 03 - Utilities Conflicts
- 04 - Traffic Control (Temporary conditions - striping, pavement markings, phasing changes)
- 05 - ITS Changes or Additions (Signals, lighting, permanent signs and electrical)
- 06 - Roadway Changes
- 07 - Fencing / Right of Way (Gates, change of access)
- 08 - Drainage (Pipe extensions, DIs, RCB, anything underground)
- 09 - Structural Items
- 10 - Material and Testing (Alternate pits, if existing pit to materials only, materials, lime treatment, sieve changes, test methods, material spec changes)
- 11 - Safety and Traffic (Permanent conditions - guardrail, barrier rail, guideposts, striping, pavement markings)
- 12 - Specifications Changes (No materials or traffic control phasing)
- 13 - Miscellaneous
- 14 - Flaggers
- 15 - Non-Specification Material Allowed to Remain in Place
- 16 - Claims
- 17 - Dispute Resolution
- 18 - Value Added Work
- 20 - Landscape & Aesthetic Treatments
- 21 - VEP: Value Engineering Proposal
- 22 - Stormwater
- 24 - Environmental
- 25 - Adjusting Incentive / Disincentive (Crew Administrative)
- 26 - Contract Closeout (Crew Administrative) (HQ reviews and processes)
- 27 - Quantity Overrun (Crew Administrative) (This applies to any item major item (\$50,000 or greater) with a quantity change over \$100,000 or 100% of the original bid amount)
- 28 - Reducing Escalation Quantity (Crew Administrative)
- 29 - Category Adjustment (Crew Administrative)
- 30 - HQ Administrative (**HQ Admin ONLY**)
- 901 - Prior - Errors or Omissions on Plans
- 903 - Prior - Utilities Conflicts
- 904 - Prior - Traffic Control (Temporary conditions - striping, pavement markings, phasing changes)
- 905 - Prior - ITS Changes or Additions (Signals, lighting, permanent signs and electrical)
- 906 - Prior - Roadway Changes
- 907 - Prior - Fencing / Right of Way (Gates, change of access)
- 908 - Prior - Drainage (Pipe extensions, DIs, RCB, anything underground)
- 909 - Prior - Structural Items
- 911 - Prior - Safety and Traffic (Permanent conditions - guardrail, barrier rail, guideposts, striping, pavement markings)
- 913 - Prior - Miscellaneous
- 914 - Prior - Flaggers
- 918 - Prior - Value added work
- 920 - Prior - Landscape & Aesthetic Treatments
- 921 - Prior - VEP: Value Engineering Proposal
- 922 - Prior - Stormwater
- 924 - Prior - Environmental

ESSENTIAL ELEMENTS OF CHANGE ORDERS

Change Orders include the following elements (depending on the type):

- Record of Authorization To Proceed With Extra Work, (form 040-002 Rev. 1/22)
- Cover Letter - Description of the work to be performed
- Independent Cost Analysis/Cost of the work
- Method of payment and time to complete the work
- Appropriate signatures

GUIDANCE FOR COMPLETING CHANGE ORDER DOCUMENTATION

RECORD OF AUTHORIZATION TO PROCEED WITH EXTRA WORK FORM

If a Change Order is necessary to add extra work that was not anticipated to a contract, the Resident Engineer or District Engineer will complete a Record of Authorization To Proceed With Extra Work, form 040-002 Rev. 1/22 (Figure 3-1), and submit it to the Chief Construction Engineer. The form is located in the SharePoint [Construction Forms](#) Area.

- Identify the contract number and the project number.
- Identify the Change Order number that will be assigned to the change order.
- Identify the requester of the Change Order. If request is not coming from a Division Head, make sure the requester has the appropriate commitment authority as per the [Construction Manual](#), Chapter 2 - Contract Administration, page 48.
- Date on form should be the date of the Change Order Request Memo from the Division Head.
- Give a detailed description of the additional work and explain why it is necessary.
- Indicate the estimated change in cost to the contract by checking the appropriate box.
- Indicate whether there will be an increase, a decrease, or no change in Working Days by checking the appropriate box.
- Indicate the method of payment by checking the appropriate box or boxes.
- When the form is completed, print the report to a PDF file, and save to the appropriate Contract Files\Contract\05 CO\5.1 CO No. directory. The file name must contain the contract ID and the Change Order number. Upload the completed form to DocuSign for signatures using the appropriate template. The Resident Engineer, District Engineer, Construction Engineer must sign. If cost is projected to be more than \$250,000.00 the Director's Office must sign as well.

STATE OF NEVADA Sheet 1 of 1
DEPARTMENT OF TRANSPORTATION
RECORD OF AUTHORIZATION TO PROCEED WITH EXTRA WORK

CONTRACT NO.: 3821 PROJECT NO(S): 74043
CHANGE ORDER NO.: 6 REQUESTOR: Rod Schilling, P.E., Chief Traff.Ops. Engineer 1/28/2022
(NAME, TITLE, COMPANY/DIVISION) DATE

NATURE AND REASON FOR PROPOSED REVISION

(Include a description of the additional work and why it is necessary.)

During the bid item repair of delamination and spalling in the bridge deck of structure G-1864, the contractor damaged conduit and conductor wire in the northbound lanes near "P" 13+22. It was determined that preformed signal loops were installed just above top mat of reinforcement in the original bridge deck for advanced detection for northbound McCarran for the signal system at 4th St. and McCarran Blvd. These loops were not identified in the contract plans.

After discussion with the City of Reno, Traffic Ops., Structural Design and the Contractor, it was agreed that instead of replacing these loops, a camera detection system should be installed for the detection at this intersection due to the potential for future damage to the bridge deck from spalling and delamination.

Payment will be made by adding a new Lump Sum Extra Work pay item at a negotiated price.

ESTIMATED CHANGE TO CONTRACT: UNDER \$125,000.00 \$125,000.01 - \$250,000.00 \$250,000.01 - \$375,000.00 *
CHECK ONE BOX: *REQUIRES DIRECTOR'S OFFICE SIGNATURE \$375,000.01 - \$500,000.00 * \$500,000.01 AND ABOVE *

ESTIMATED CHANGE TO WORKING DAYS: _____ INCREASE DECREASE NONE
FILL IN AND CHECK ONE BOX: DAYS

METHOD OF PAYMENT: CHECK ALL BOXES THAT APPLY: UNIT BID PRICE(S) FORCE ACCOUNT NEGOTIATED PRICE LUMP SUM

RESIDENT ENGINEER: Andrew Lawrence, P.E., R.E. C905 1/28/2022
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

DISTRICT ENGINEER: _____
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

CONSTRUCTION ENGINEER: _____
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

DIRECTOR'S OFFICE: _____
DEPUTY DIRECTOR - PROJECT DELIVERY OR AUTH. REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED ONLY FOR AMOUNTS OVER \$250,000.00

NDOT 040-002
Rev. 1/22

Distribution: Construction Division, District, Resident Engineer

Figure 3-1: Record of Authorization To Proceed With Additional Work Form

COVER LETTER

Cover Letters are required except when processing an administrative type Change Order. The following is guidance on composing a Change Order Cover Letter:

- Use Department, District specific letterhead.
- Include the date the letter was composed.
- Address the letter to the Deputy Director-Engineering, ATTN: to the Chief Construction Engineer.
- Include the contract and federal/state project number(s).
- Add the location and project description from the front of the Special Provisions.
- Include the Change Order Reason description and the Reason Type #, e.g., Errors or Omissions - Reason Type 01.
- Clearly explain the change and what it involves for an audience who is seeing it for the first time, e.g., New added work, Specification change Revising the plans, etc. Can a person without any knowledge of the Change Order understand why the change is needed?
- The main body of the letter should address what and where the problem is and what the solution is if any revised plan sheets have been provided or new or revised specifications.
- Identify who (the name of the person, title, and Division, e.g., Design, Materials, Construction, District, etc.) requested the Change Order.
- Identify who (the name of the person, title, and Division, e.g., Design, Materials, Construction, District, etc.) was consulted about the Change Order. Don't refer to conversations/concurrences if the conversations/concurrences didn't take place.
- The letter needs to state whether there is an increase or decrease in cost. If no cost increase, state that as well.
- Discuss how the Change Order will be paid, e.g., existing bid items, new items, the total dollar amount, and what Category it will be paid in.
- The letter needs to state whether additional working days are going to be granted. If the Change Order increases or decreases working days (or milestone dates), a detailed explanation with backup is needed, e.g., schedule impact analysis from the Contractor.
- Third-party agreements should be mentioned if work is being done for a third-party entity and need to be amended if the language does not exist in the agreement to cover the added expense.
- If the project is a Project of Divisional Interest, PODI, the only way a specification change can be made is if it meets one of three criteria. Use the following exact language in the letter:
 - "The Specification, as written, is impossible or impractical to comply with."
 - "A product of equal in all respects to the one specified can be furnished at a savings to the contract."
 - "A product superior to one specified can be furnished at no increase in cost."
- If a Prior Change Order has been executed, the cover letter must address the Prior and any changes not addressed in the Prior that are being covered with the follow-up Change Order.
- The cover letter will be distributed to the DocuSign Distribution list and saved to the Contract Files\05 CO\5.# CO No. directory. The file name must contain the contract ID and the Change Order number.

COST JUSTIFICATION

Adequate cost justification must be provided with Change Orders except when processing an Administrative type Change Order. Cost justifications explain why the price is reasonable or justified. Each cost element needs to be assigned to the appropriate category (AEB). The exception would be Type 27 Overrun and Administrative Type Change Orders. They require a detailed explanation of why the overrun occurred.

The most common methods of cost justification include:

- Reference the historical bid price found in the integrated Project Development (iPD) program. The iPD program is accessed using the [E-Bid-ding log-in](#) link located in the Applications area in SharePoint.
- Similar scope of work on other contracts
- Invoices
- Third Party Quotes from an independent source
- Independent cost analysis (Cost Analysis form) (Figure 3-2)
- The method of payment needs to be identified whether it be force account, agreed lump sum, agreed unit price or individual bid items.

3

CHANGE ORDERS AND LETTERS OF AUTHORIZATION

When preparing a Cost Analysis form for a Change Order, the Resident Engineer should follow these guidelines:

- Use prevailing wage rates for labor and the current Labor Surcharge from when the work is being performed.
- Use EquipmentWatch for hourly equipment rates (attach EquipmentWatch report, refer to Chapter 4, Force Account, in this manual for details)
- Use invoice/quote for materials (attach invoice/quote)
- Ensure the correct markup has been applied. Subcontract work is limited to 5% on pass through work the contractor does not complete. Labor, Equipment and Material are up to 20% at the RE's discretion during negotiation with the contractor. Refer to Subsections 104.03, (*Scope of Work*) *Extra Work*, and 109.03(d), (*Measurement and Payment*) *Force Account Work (Subcontracted Work)*, of the Standard Specifications.
- All cost justification files will be saved to the appropriate Contract Files\Contract\05 CO\5.# CO No directory. The file name must contain the contract ID and the Change Order number.

CONTRACT NO.: 3585		STATE OF NEVADA		DATE: 02/01/2017	
IN REFERENCE TO: Change Order 06		DEPARTMENT OF TRANSPORTATION		SHEET 1 OF 1	
(LOA or CM #)		COST ANALYSIS			
DESCRIPTION OF WORK: Install head wall not included in plans					
CATG NO.: 1					

LABOR				EQUIPMENT				MATERIAL		
Classification	Hours	Pay Rate	Amount	Description	Hours	Rate	Amount	Description	Inv/Quote#	Amount
Operator	8.00	\$ 19.50	\$ 156.00	1995 773B Cat haul truck	8.00	\$ 25.60	\$ 204.80	Joe's Concrete	162201	\$ 470.00
Laborer	8.50	\$ 10.00	\$ 85.00	2017 F-250 Flat bed	2.00	\$ 15.20	\$ 30.40	Home Depot		\$ 200.70
Mason	2.00	\$ 17.00	\$ 34.00	2000 Chevy 3/4 ton pu	8.00	\$ 10.20	\$ 81.60	CMI Material	20160	\$ 4,200.00
Carpenter	8.00	\$ 12.50	\$ 100.00	2001 69b Excavator	8.00	\$ 22.30	\$ 178.40			\$ 0.00
Truck driver	4.00	\$ 22.00	\$ 88.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
Total payroll.....			\$ 463.00	Subtotal.....			\$ 495.20	Subtotal.....		\$ 4,870.70
Labor Surcharge @.....		21.39%	\$ 99.04	+ 20.00% on equipment costs.....			\$ 99.04	+ 0.00% on material costs.....		\$ 0.00
Fringe Benefits @.....	\$ 3.00 /hr for	8.50 hrs	\$ 25.50	TOTAL COST OF EQUIPMENT (B)			\$ 594.24	+ 0.00% Sales Tax (if paid).....		\$ 0.00
Fringe Benefits @.....	\$ 4.20 /hr for	10.00 hrs	\$ 42.00	TOTAL COST OF MATERIALS (C)			\$ 4,870.70			
Fringe Benefits @.....	\$ 5.60 /hr for	12.00 hrs	\$ 67.20							
Fringe Benefits @.....	\$ 0.00 /hr for	0.00 hrs	\$ 0.00							
Subtotal.....			\$ 696.74							
+ 20.00% on all labor costs.....			\$ 139.35							
TOTAL COSTS OF LABOR (A)			\$ 836.08							
				GRAND TOTAL (A+B+C)			\$ 6,301.02			
				Use Agreed Price			\$ 4,000.00			

Rev 11-16

Figure 3-2: Cost Analysis Form

CHANGE ORDER AWP ENTRIES

Details for generating and approving a Change Order are found in Chapter 8, Change Orders, of the [AWP User Guide With Materials](#).

The following is guidance for completing ALL Change Orders:

- The person requesting the Change Order will be identified in the Requestor field .
- The Supp Explanation in the Change Order Explanations area should only include changes to the contract. It should not be a repeat of the cover letter. It should clearly describe the scope of the change and direction to the contractor, including location and limits, specification lan-

guage change (additions or deletions), plan changes including the plan sheets affected. Include the payment method, such as bid prices, Force Account, Agreed Prices or Lump Sum. If the scope of the change has multiple elements, describe each element separately.

- The cost increase/decrease with associated quantities must be included.
- Any specification language change (additions or deletions), plan changes including the plan sheets, stations, locations, and Justification for costs, etc., will be added to the Explanation field in the Change Order item record.
- If additional days are granted, and the contract has lump sum prorated items (traffic control, temporary pollution control, dust control, etc.) and/or items paid by the day (traffic control supervisor, time related overhead, etc.) the Change Order shall increase these items accordingly. Guidance can be provided by the Assistant Construction Engineers as needed.
- The impact of time, or added working days, should be stated on the Change Order. If no working days are added, the Change Order should state so. The explanation of time impact should be addressed on the cover letter, not in the Change Order. An independent analysis to support the time extension must be performed and a copy of the new schedule will be included in the Change Order supporting documentation.
- The last Change Order Explanation record must include the Accord and Satisfaction Clause on all General Change Orders.
- The last Change Order Explanation record must include the Prior Clause on all Prior Change Orders. The following language must be included in the Supp Explanation field:
 - Change Order #__ will be generated to complete and finalize the quantities and associated payment."

OTHER SUPPORTING DOCUMENTS

The following is a list of supporting documentation/correspondence that must accompany the Change Order when the Change Order is submitted to the appropriate Assistant Construction Engineer and Construction Admin Services staff for review (as applicable):

- Record of Authorization To Proceed With Extra Work (form 040-002)
- Email correspondence
- Change Order Request Memo and Construction Division concurrence
- Calculation sheets
- Third Party Agreements
- Independent Cost Analysis
- Late Payroll Determinations
- Affirming Orders
- Failing Test Reports

These files will be saved to the appropriate Contract Files\Contract\05 CO\5.# CO No. directory. The file names must contain the contract ID and the Change Order number.

CHANGE ORDER EXECUTION WORKFLOW

The following is guidance for executing ALL Change Orders.

1. Determine if the contract is an FHWA Project of Divisional Interest (PoDI) project. If so, then complete the [FHWA Pre-Authorization form](#) (FHWA-1365) as necessary for the Change Order and route through DocuSign for approvals. If not, then proceed to step 2.
2. Create the appropriate supporting documentation required for the Change Order (authorization form, cover letter, cost justification, etc.)
3. Create the AWP Change Order. Refer to Chapter 8, Change Orders, Section, Steps To Create a Change Order, of the [AWP User Guide With Materials](#).
4. Send an email to the appropriate Construction Admin Services staff requesting the creation of a SharePoint Change Order review directory.
5. Copy all supporting documentation files to the SharePoint review directory. When all files have been copied, email the appropriate Assistant Construction Chief and the appropriate Construction Admin Services staff letting them know they can start their review.
6. The Construction Division will review the AWP Change Order information and the supporting documentation for the following items and work with the Resident Engineer on necessary revisions.
 - a. Assistant Construction Chief review for the following:
 - i. Request memo from the requesting division with concurrence and guidelines from Construction.
 - ii. Verify that scope, corresponding days and costs, seem reasonable.
 - iii. Completeness of contractual documents to include a clearly defined change.

- b. Construction Admin Services staff will review for the following:
 - i. Verify Change Order type and Change Order reason.
 - ii. Review for completeness to ensure document meets FHWA requirements.
 - iii. Review estimate of costs and justification for reasonableness.
 - iv. If reviewing a Change Order with associated Prior Approval, verify that the dollar amount is accurate.
7. Assistant Construction Engineer will notify the Resident Engineer that the review of all packet information is complete and the Change Order is ready for processing.
8. Generate the AWP Change Order report. Refer to Chapter 8, Change Orders, Section, Change Order Report Generation, in the [AWP User Guide With Materials](#). Print the report to a PDF file, and save to the appropriate Contract\Contract Files\05 CO\5.# CO No. directory. The file name must contain the contract ID and the Change Order number.
9. Log on to DocuSign and create a NEW envelope. Upload the Cover Letter (if applicable), AWP Change Order report and plan sheets. Refer to the [How to Send an AWP Change Order in DocuSign using a Template](#) guide for details.
10. Use the appropriate template.
 - a. District 1 DocuSign templates:
 - i. Const Admin - D1, CO, FHWA Funding
 - ii. Const Admin - D1, CO, State Funding
 - b. District 2 DocuSign templates:
 - i. Const Admin - D2, CO, FHWA Funding
 - ii. Const Admin - D2, CO, State Funding
 - c. District 3 DocuSign templates:
 - i. Const Admin - D3, CO, FHWA Funding
 - ii. Const Admin - D3, CO, State Funding
 - d. Shared DocuSign templates:
 - i. Const Admin - D1, D2, D3, CO, Admin Types 25 & 27
 - ii. Const Admin - D1, D2, D3, CO, Admin Types 28 - 35
 - iii. Const Admin - D1, D2, D3, CO, FHWA Prior
 - iv. Const Admin - D1, D2, D3, CO, State Prior

Note: Construction Admin Services staff route the Change Order to the appropriate staff, divisions and FHWA (if appropriate) after the Resident Engineer has signed.

11. Once the Change Order has been routed through all required signers the originator of the DocuSign envelope will receive an email from DocuSign. This email contains attached PDF copy of the signed (executed) Change Order. Save the executed (signed) AWP Change Order PDF file to the appropriate Contract Files\Contract\05 CO\5.# CO No. directory. The file name must contain the contract ID, the Change Order number, and the executed date.

Note: If this Change Order is part of a Prior, make sure to attach the executed Prior PDF file to the associated Change Order as backup documentation.

12. Attach the executed AWP Change Order report and Cover Letter (if appropriate) to the AWP Change Order. Refer to Chapter 8, Change Orders, Section, Approving a Change Order, in the [AWP User Guide With Materials](#).
13. Resident Engineer approves the Change Order. Refer to Chapter 8, Change Orders, Section, Approving a Change Order in the [AWP User Guide With Materials](#).

Important: When adding a NEW category (AEB) through a Change Order, DO NOT approve the Change Order in AWP until a notification from Construction Admin Services is received stating that the new category (AEB) has been funded.

Important: If the Approved Change Order added a new bid item and/or increased an existing bid and the item(s) Current Extended Amount (current quantity x item unit price) is \$50,000 or more then the item(s) MUST be marked as a Major item. Refer to the [AWP User Guide With Materials](#), Chapter 4, Contract Items, Section, Marking a Contract Item As a Major Item, for details.

Note: Contact the Construction Admin Services Section staff or the Assistant Construction Engineer with questions.

CHANGE ORDER EXAMPLES

Refer to [Change Order Examples](#) in the Construction Crew Portal of the Construction Division SharePoint for various examples of completed Change Orders.

LETTERS OF AUTHORIZATION (LOA)

Occasionally minor construction items, not anticipated in the original scope of a contract, must be completed on a project. These minor construction items are incidental construction items, which do not have bid items, and is a means to compensate the contractor for incidental construction items. The Resident Engineer can pay for these incidental construction items with a Letter of Authorization (LOA).

The following are the Resident Engineer's limitations on Letters of Authorization:

- The spending limit per incident is set at \$15,000.
- The cumulative total of incidental construction items cannot exceed the amount programmed for the contract.
- Multiple LOAs cannot be written to cover the same issue, (i.e., the same thing multiple times or multiple LOAs to achieve one goal).

ESSENTIAL ELEMENTS OF AN LOA

The Letter of Authorization must contain the following information:


- Contract number and project number
- Letter of Authorization number (numbered consecutively beginning with 1)
- Date of authorization
- Reason for work
- Description of work
- Cost of work
 - Cost justification for work:
 - The Resident Engineer prepares an independent cost analysis of the contractor's cost estimate and compares the two. Any significant differences are resolved with the contractor. Refer to the Cost Justification Section in this chapter for additional information on preparing a cost analysis.
 - Include the cumulative total of incidental funds used on project, expressed as a dollar amount and cumulative amount of incidental funds used compared to incidental funds budgeted, expressed as a percentage.
- Signature of contractor and Resident Engineer.

LOA EXECUTION WORKFLOW

1. Complete LOA and all supporting documentation (e.g., Independent Cost Analysis, invoices).
2. Send to HQ Construction Admin Section, requesting a review.
3. Log on to DocuSign and create a NEW envelope. Upload the LOA and supporting documents. Route to the Resident Engineer and Contractor for signature.
4. Once the LOA has been routed through all required signers, the originator of the DocuSign envelope will receive an email from DocuSign. This email contains attached PDF files of the signed (executed) LOA and supporting documents. Save the LOA and all supporting documents in the appropriate Contract Files\Contract\07 Estimates\7.# LOA) directory.
5. The Resident Engineer sends copies of signed LOA and supporting documents to the District and Construction Division.
6. Create a DWR in AWP, Posting to item 7360040 - Incidental Construction, for the amount authorized in the LOA.

LOA AND SUPPORTING DOCUMENTATION EXAMPLE

The following is an example of an LOA and supporting documentation (Figure 3-12 through Figure 3-14):

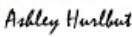
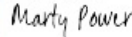
 STEVE SISOLAK, Governor	STATE OF NEVADA DEPARTMENT OF TRANSPORTATION District II 310 Galletti Way Sparks, Nevada 89431 775-888-7899 May 15, 2019	Kristina Swallow, P.E., Director
	Granite Construction 1900 Glendale Ave Sparks, NV 89431 Attention: Marty Powers, Project Manager	Contract No. 3745 Project No. NHP-050-2(016) Letter of Authorization 02 Hydraulic Facility Sediment Removal

Reference is made to Contract No. 3745, Project No. NHP-050-2(016), On US 50, Lyon County, from Roy's Road to the Junction with US 95A.

This Letter of Authorization is being written to address the compensation due to Granite Construction, for the work performed to remove sediment in and around the double reinforced concrete box hydraulic facility that crosses US 50 located at "X2" 1545+46. Granite Construction rain gage recorded a precipitation total of 1.04 inches on Wednesday, February 13, 2019 and 0.58 inch on Thursday, February 14, 2019. The total storm event precipitation depth was 1.62 inches over the 48 hour period. Based on National Oceanic and Atmospheric Administration (NOAA) precipitation frequency estimates the 24 hour duration equates to a 2 year storm and the 48 hour total equates to a 10 year storm. Proper BMP's, consisting of two rows of sediment logs located at the inlet, were installed prior to the storm event in an effort to minimize storm water runoff resulting in sediment deposits. In addition to the precipitation totals onsite, there was significant storm water run-on that was generated offsite. Due to the severity of this storm and the addition of offsite run-on, a significant amount of sediment overwhelmed the BMP's and was deposited in the double reinforced concrete box which filled the majority of the hydraulic facility resulting in it being nonfunctional. Granite Construction contracted Badger Daylighting Corporation to assist with storm cleanup. The work consisted of the cleaning of the double reinforced concrete box and the removal of sediment 20 feet past both the inlet and outlet.

Payment will be made under Bid Item 736 0040 INCIDENTAL CONSTRUCTION (LS) in the amount of \$14,166.88 on AEB 04, as shown on the attached Cost Analysis sheet, and should be considered full compensation for the work.

Please signify your concurrence to perform this work at the lump sum unit price in the amount of \$14,166.88 by signing below. No additional working days shall be allotted for the performance of this concurrent work.

Approved:	Concur:
DocuSigned by:  <hr/> Ashley Hurlbut, P.E. Resident Engineer	DocuSigned by:  <hr/> Marty Powers Project Manager
05/16/2019 <hr/> Date	05/16/2019 <hr/> Date

Increased Cost for this Letter of Authorization: \$14,166.88
 Cumulative Amount of Letters of Authorization to Date: \$15,476.40
 Incidental Construction Bid Amount: \$150,000.00
 Cumulative Amount Used Compared to Budgeted Amount to Date: 10.32%

ASH:ssst

Figure 3-3: Example of an LOA

CONTRACT NO.: 3745 DATE: 2/26/19 to 3/1/19

IN REFERENCE TO: LOA 02 SHEET 2 OF 7
(LOA ref ID)

COST ANALYSIS

DESCRIPTION OF WORK: Remove sediment from existing double reinforced concrete box that crosses US 50 at "X2" 1545+46 (AEB 04)

LABOR				EQUIPMENT				INVOICE			
Classification	Hours	Pay Rate	Amount	Description	Hours	Rate	Amount	Description	Invoice #	Amount	
Foreman Operator	4.00	\$ 37.26	\$ 149.04	CAT 328 Excavator	4.00	\$ 142.59	\$ 570.36	2/26/19 Badger Daylighting	Invoice # 00917474	\$ 3,473.25	
								2/27/19 Badger Daylighting	Invoice # 00989954	\$ 2,778.60	
								2/28/19 Badger Daylighting	Invoice # 00989960	\$ 2,778.60	
								3/1/19 Badger Daylighting	Invoice # 00989990	\$ 3,473.25	
Total payroll			\$ 149.04	Subtotal			\$ 570.36	Subtotal		\$ 12,503.70	
Labor Surcharge @	21.34%		\$ 31.81	+ 20 % on equipment costs			\$ 114.07	+ 5% on invoice costs		\$ 625.19	
Fringe Benefits @	25.50 /hr	4.00 hrs	\$ 102.00	TOTAL COST OF EQUIPMENT	(B)		\$ 664.43	Sales Tax (if paid)			
Fringe Benefits @	/hr	hrs						TOTAL COST OF INVOICES	(C)	\$ 13,128.89	
Fringe Benefits @	/hr	hrs						GRAND TOTAL (A+B+C)		\$ 14,166.08	
Fringe Benefits @	/hr	hrs									
Subtotal			\$ 282.85								
+ 25 % on all labor costs			\$ 70.71								
TOTAL COSTS OF LABOR	(A)		\$ 353.56								

Figure 3-4: Example of an LOA Cost Analysis Form

TKT00989954



Badger Daylighting Corp
 75 Remittance Drive Suite 3185
 Chicago, Illinois, United States, 60675-3185
 Ph: (877) 3BADGER Fax: (877) 741-3134
 Email: AR Dept

Contract No. 3745
 LOA 02
 Sheet 4 of 7

Billed To: GRANITE CONSTRUCTION-SPARKS
 1900 GLENDALE AVE
 SPARKS NV 89431

Job Number J00587355
Ticket Date: 02/27/2019
Paper Ticket #:

Job Location US50 LY 19.90 to LY 29.44
Company: Badger Daylighting Corp Select Truck
Job Name/#: US50 CULVERT - Hydrovac
Area RENO NV CORP

PO: 846169
Project Name/AFE:
Customer Rep: MARTY POWERS
Customer Rep #: 775-233-5025
Industry GOVERNMENT PROPERTY - FED

Ticket Items

Item	Unit # / Personnel	Quantity	U of M	Rate	Amount
HYDROVAC 2 MAN CREW - HOURLY - 01 STANDARD RATE	1236, HYDROVAC	8.00	HR	330.00	2,640.00
FUEL RECOVERY FEE %	1236, HYDROVAC	2,640.00	PCNT	5.25%	138.80
TIME-41-TRAVEL TO SITE	RAYAS CERVANTES, RAFAE	0.00	HR	0.00	0.00
TIME-41-TRAVEL TO SITE	DAVIS, RODNEY	0.00	HR	0.00	0.00
TIME-41-TRAVEL TO SITE	VASCO, DANIEL	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	VASCO, DANIEL	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	RAYAS CERVANTES, RAFAE	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	DAVIS, RODNEY	0.00	HR	0.00	0.00

From LSD
 To LSD

Total 2,778.60

Approved By:

Taxes included if applicable.

Work Order #1

Figure 3-5: Example of an LOA Cost Justification Invoice

Refer to the [Construction Administrative Services Document Resources](#) area for an LOA template.

FORCE ACCOUNT

This chapter contains the following sections:

Overview	4-3
General Force Account	4-3

OVERVIEW

Force Account is the method to track and pay for labor, equipment and/or materials when work cannot easily be quantified during the design phase. It is also used when the Department and the contractor are unable to come to an agreed price on an item of work. The source documentation requirement for any work to be paid on a Force Account basis is the Daily Costs of Force Account w Standby (Form No. 040-008). Refer to Subsection 109.03, (*Measurement and Payment*) *Force Account*, of the Standard Specifications for specific requirements relating to force account.

All Daily Costs of Force Account w Standby forms, Force Account Recap sheets and supporting documentation, (e.g. invoices, payroll records, affidavits) will be saved electronically in the appropriate Contract Files\Contract \06 - FA\6.# [Name of the Force Account] directory(ies). Each Force Account will have a separate directory, (i.e. 6.1 (Name of Force Account), 6.2 (Name of Force Account)).

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

GENERAL FORCE ACCOUNT

INSPECTOR'S RESPONSIBILITIES

1. Obtain the Daily Costs of Force Account w Standby form (Figure 4-1).
2. Record the following required information in the Form Header section:
 - a. Contract number, date performed, Change Order number (if applicable), description of work, category number and item number.
3. Record the following required information in the LABOR Section:
 - a. The names, classification and hours worked of each person performing work on the force account.
 - b. Overtime hours will be listed separate from straight time hours.
4. Record the following required information in the EQUIPMENT Section:
 - a. The year and a complete description of each piece of equipment such as make, model, horsepower, capacity, size, etc., the actual hours worked, and standby hours.
 - b. Any equipment attachments and give a description.
5. Record the following required information in the MATERIALS Section:
 - a. A complete description and the quantities used on the Force Account work. The contractor may provide an invoice for the materials. Turn the invoice into your Office Engineer with the Force Account sheet.
6. Record the following required information in the APPROVED Section:
 - a. Review the Force Account form with the Contractor and obtain the Contractor's signature after the work for the day is completed. Do not fill in hourly rates, extended amounts, or material prices at this time.
7. Turn the partially completed sheet into the field Office Engineer.

Note: If mistakes are made on a paper form, line through the error and write in the corrected entry. Correction fluid and/or tape is not allowed.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
DAILY COSTS OF FORCE ACCOUNT

Contract No. 3636 Date 4-25-19
Change Order No. 3 Report No. _____

Description of Work: Repairing Drainage Problem @ "X" 100+30 RT
Category No. 01 Item No. 5069000

(LABOR)	Name	Classification	Hour	Hourly Rate	Vacation Rate	Remote Area Pay Rate	Total
	Cody Bellinger	Mason Group 1	4				\$ -
	Casey Seager	Carpenter A1	4				\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
Rates verified against payroll no. _____ Total Payroll.....							\$ 0 -
for contractor: Labor Surcharge (see special provisions) @ _____ \$ -							
	Other fringe benefit -			/hr. for	.0 hrs		\$ -
for week ending: Other fringe benefit - /hr. for .0 hrs \$ -							
Other fringe benefit - /hr. for .0 hrs \$ -							
Notes: Other fringe benefit - /hr. for .0 hrs \$ -							
Other fringe benefit - /hr. for .0 hrs \$ -							
							Subsistence and/or travel \$ -
Subtotal.....							\$ -
+25.00% on labor costs.....							\$ -
Verified by: _____ Total cost of labor.....(A)							\$ -
(EQUIPMENT)	Description	Year	Operating Hrs	Standby Hrs	Rate	Total	
	Y2 Ton Truck 4x2 Gas 14315 ComCab	2018	4			\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
Note: Obtain rental rates from Equipment Watch							Subtotal.....
							\$ -
+20.00% on Operating costs.....							\$ -
Total cost of equipment.....(B)							\$ -
(MATERIALS)	Invoice No.	Pre-Tax	Sales Tax	Total			
	10 Linft of 24 inch RCP			\$ -			
	1 24 inch Metal End Section			\$ -			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
Subtotal.....				\$ -			
+20.00% on material Pre-Tax.....				\$ -			
Total cost of materials.....(C)				\$ -			
Total (A+B+C)				\$ -			

Approved: Justin Yurman Title Tech 4
State's Representative
Chyler Ammons Title Foreman
Contractor's Representative

Rates and extensions by _____
Checked by _____
Estimate no. _____

Figure 4-1: Example of Inspector's Entries in the Daily Costs of Force Account w Standby Form

OFFICE ENGINEER'S RESPONSIBILITIES

The Daily Costs Force Account form signed by the Contractor and submitted by the Inspector (Figure 4-1) will be one of the source documents used to determine the total cost of the Force Account for that day.

Research and document the additional information on the Daily Costs of Force Account w Standby form (Figure 4-5):

1. Transfer all the Inspector's entries from the paper form to a new electronic form.
2. Enter the appropriate Report No. in the HEADER Section.
3. Enter the following in the LABOR Section:
 - a. Use the contractor's payroll from [LCPtracker](#) to obtain the correct hourly rates, remote area pay and vacation rate paid to each person listed.
 - b. Determine if the hourly rate on the payroll includes vacation and remote area pay. If the total hours multiplied by the hourly rate equals the gross pay, then the hourly rate includes vacation and remote area pay, if applicable. The hourly rate is entered on the force account sheet, leave the vacation and remote area pay columns blank. There is no need to separate the vacation or remote area pay, as long as it is included.
 - c. If the total hours multiplied by the hourly rate are less than the gross pay, add the total hours multiplied by the hourly vacation rate from the fringe benefit statement. If the two amounts added together equal the job gross, record the base rate and vacation rate on the force account sheet. Some Operating Engineers are paid time and one-half for vacation for overtime hours.
 - d. In order for the Contractor to be reimbursed for vacation and remote area pay, it must be included in the job gross.
 - e. Obtain the labor surcharge from the [Construction Administrative Services Documentation Resource](#) area on SharePoint. The labor surcharge reimburses the Contractor for the percentage paid into FICA, Workman's Compensation, State and Federal unemployment taxes. Use the applicable labor surcharge in effect at the time the work was performed.
 - f. Indicate the amount per hour for fringe benefits obtained from the Fringe Benefit Statement (Form No. 052-062) found in LCPtracker (Figure 4-2), and the total hours for each labor classification. The fringe benefit rate must be verified either by checking the rates against the payroll or contacting the Contractor for a breakdown. If the fringe benefits on the form do not match the fringe benefits on the payroll, verify the correct wage from the Contractor. If the Fringe Benefit Statement is in error, a revised form must be submitted.

Note: *Non-union Contractors may not have fringe benefits listed on the Fringe Benefit Statement (Form No. 052-062). In this case, you would only pay their hourly rate.*

- g. Obtain subsistence and/or travel expense (if any) from supporting documentation such as receipts and/or invoices must be provided.
- h. Make certain that the actual wage rates verified do not include any additives except vacation pay.
- i. Print the payroll document as a PDF file and save it to the appropriate Contract Files\Contract\06 - FA directory.

Note: *No payment will be made for labor performed on force account until the Contractor certified payrolls are entered in LCPtracker for the week that the work was performed. Save the certified payroll report to the appropriate Contract Files\Contract\06 - FA directory.*


Nevada Department of Transportation (NDOT)							
FRINGE BENEFIT ITEMIZED CONTRIBUTIONS/DEDUCTIONS STATEMENT							
NDOT Contract No.: 3636		NDOT Project No.(s): SPFR-PE01(2)				Date: 4/20/2016	
Contractor/Subcontractor: Keep On Trucking			To: RESIDENT ENGINEER				
Phone No.: 775-331-5100			Phone No.: 775-888-7880				
Contractor/Subcontractor Address: 975 Industrial Way, Sparks, NV 89431			Resident Engineer Address: 1283 South Stewart Street, Carson City, NV 89712				
<p>This form is to be completed and submitted in addition to the certified payroll as a means of compliance. The Nevada Administrative Code (NAC) to Chapter 338 of the Nevada Revised Statutes (NRS) requires that each certified payroll report must include a itemization of all contributions made to a third person pursuant to a fund, plan or program in the name of a workman as authorized by NRS 338.035, if any such contributions were made as part of the wages of that workman, NAC 338 - 11(1).</p> <p>To ensure the proper Fringe Benefit rates are applied to the certified payrolls and/or to any Force Account work (if applicable to this contract), the rates for fringe benefits, subsistence and/or travel allowance payment (as required by the State Labor Commissioner and the U.S. Department of Labor) used for employees, on the various classes or work, are tabulated below.</p>							
Name of the classification and/or employee(s) receiving the benefit. Use additional sheet if needed.	Subsistence or Travel Allowance	Indicate the amount of each contribution as an hourly rate.					Effective Date of Benefit
		Health and Welfare	Pension	Vacation/Holiday	Training or Apprenticeships	Other	
Mason/Jrnyman		4.5					10/1/2015
Laborer Apprentice Level 2		4.5	4.5			.97**	10/1/2015
Carpenter		4.5					10/1/2015
* Vacation/holiday is included in rate of pay							
**Dues Checkoffs included in rate of pay							
Funds Submitted Each Month:							
Northern Nevada Laborers Trust Fund							
445 Apple St., Ste 109							
Reno, NV 89502							
<p>A revised statement must be submitted when changes occur. If differing benefits apply to various employees the employer is required to report said differences on the certified payroll or this form.</p> <p>The contractor/subcontractor certifies the information provided on this form is accurate, correct and complete. All wage deductions and contributions to fringe benefits comply with applicable state of federal laws and regulations. Refer to NRS 608, NRS 338, 40 USC 278(a) Davis Bacon Act and related rules and regulations for public works law, i.e., NAC 338, titles 29, 41 and 49 of the Code of Federal Regulations.</p> <p>Signature of the employer or its agent who pays or supervises the payment of the persons employed under the contract. Falsification of this report may subject the contractor or subcontractor to civil or criminal prosecution and sever penalties:</p>							
Signature <i>Stephanie Wadleigh</i>				Title of person signing Payroll/HR Manager			
Form No. 052-062							

Figure 4-2: Example of Fringe Benefit Statement

4. Enter the following in the EQUIPMENT Section:
 - a. Obtain the required Force Account Equipment Listing (Form No. 040-033) from the Contractor. This form should include each piece of equipment utilized on the Force Account (Figure 4-3).

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
FORCE ACCOUNT EQUIPMENT LISTING

Contract No. 3636 Project No. SPFR-PE01(2) Date 4/25/16

Equipment Description And #	Year	Make (Manufacturer)	Model No.	Power Source (Gas, Diesel, Etc.)	Size or Weight Capacity	HP.
BACKHOE	2011	CASE	580	DIESEL	1 CUYD	
COMPACTOR	2011	WACKER	RS800A	GAS	28.3" DRUM	11
TRUCK	2011	CHEVY	1500	GAS	4 X 2	143
Submitted: Contractor/Subcontractor KEEP ON TRUCKING				By: 		

NDOT
040-033 (10-05)

Figure 4-3: Example of Force Account Equipment Listing form

- b. The rates for each type of equipment on a force account will be based on EquipmentWatch calculations. The [EquipmentWatch](#) program is found on the Construction Division’s SharePoint home page under the Construction Division Links area. Refer to the "[Using EquipmentWatch](#)" on page 4-11 in this chapter, for details on using EquipmentWatch.
- c. Record the Adjusted Hourly Rate dollar amount under the Rate column.

Note: If equipment is in Standby mode enter the Standby Rate indicated on the EquipmentWatch, Rental Rate Blue Book report in the Non-Active Use Rates area. See red boxes in Figure 4-14 and Figure 4-20.

- 5. Enter the following in the MATERIALS Section:
 - a. Obtain copies of supplier’s invoices from the Contractor to verify actual costs and quantities of materials used on the force account. To be eligible for payment, invoices for materials must:
 - i. Substantiate at least the total quantity of materials to be paid for on the force account.
 - ii. Be extended to show totals and sales tax.
 - The contractor can submit a copy of their Department of Taxation Statement for proof of sales tax paid.
 - iii. Be dated on or before the date work was performed.
 - b. Record the invoice number with the materials listed.
 - c. For materials not specifically purchased for force account work, but are taken from the Contractor’s stock, an affidavit may be supplied in lieu of an invoice. The affidavit must be signed by the Contractor and notarized. The affidavit must certify that such materials were taken from stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost (Figure 4-4).

KEEP ON TRUCKING
985 SAMMI ROAD
RENO, NV 89502

April 22, 2016

Mr. Aaron Rodgers
State Of Nevada
Department of Transportation
1202 S. Mary St.
Reno, NV 89503

RE: Contract No. 3636, I-395 in Reno @ Plumb Lane Int.

Dear Mr. Rodgers,

I certify that the materials used on Contract No. 3636 force account for Contract Modification No. 3 were taken from my stock. The quantity claimed was actually used, and the price and transportation claimed represent the actual cost as listed below:

24-inch RCP	10 linft	@	\$30.00
24-inch End Section	1 each	@	\$200.00

Signed:

Joe B. Wilson 4/22/16
Joe B. Wilson, Owner Date



Figure 4-4: Materials Affidavit

- d. No payment will be made for materials used on a Force Account until these documents have been supplied to the Resident Engineer. Freight charges for materials delivered for use on a Force Account will be paid if properly documented and included in the sub-total to which the markup is applied. State sales tax is to be included for reimbursement if it is properly documented on the materials invoice.
 - e. Sales tax amounts are not subject to the markup on materials costs. Complete all extensions and total the materials costs. The Contractor's percentage of material costs will be as specified in Subsection 109.03, (*Measurement and Payment*) Force Account, of the Standard Specifications.
6. Enter the following in the Signatures and Payment area:
- a. The Rates and Extension by line is signed by the person who completed the form. This signature can be obtained via DocuSign.
 - b. The form must be checked and signed by someone other than the person who completed the Rates and Extensions. This signature can be obtained via DocuSign
 - c. Enter the Estimate number in which the Force Account was paid.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
DAILY COSTS OF FORCE ACCOUNT

Contract No. 3636		Date 4/25/2019
Change Order No. 3		Report No. 1 of 1
Description of Work: Repairing Drainage Problems @ "X" 100 + 30 RT		

(LABOR)	Name	Classification	Hour	Hourly Rate	Vacation Rate	Remote Area Pay Rate	Total
	Cody Bellinger	Mason Group 1	4	\$37.76			\$ 151.04
	Casey Seager	Carpenter	4	\$33.30			\$ 133.20
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
Rates verified against payroll no. 12				Total Payroll.....			\$ 284.24
for contractor:		Labor Surcharge (see special provisions) @		21.34%			\$ 60.66
Keep on Trucking	Other fringe benefit - Mason			\$4.50	/hr. for	4.0 hrs	\$ 18.00
for week ending: 4/25/2019	Other fringe benefit - Carpenter			\$4.50	/hr. for	4.0 hrs	\$ 18.00
Notes:	Other fringe benefit -				/hr. for	.0 hrs	\$ -
	Other fringe benefit -				/hr. for	.0 hrs	\$ -
					Subsistence and/or travel		\$ -
				Subtotal.....			\$ 380.90
				+25.00% on labor costs.....			\$ 95.22
Verified by: J. Pederson				Total cost of labor.....(A)			\$ 476.12
(EQUIPMENT)	Description	Year	Operating Hrs	Standby Hrs	Rate	Total	
	1/2 Ton Truck 4X2 Gas 143 HP Conv Cab	2018	4		\$14.33	\$ 57.32	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
						\$ -	
Note: Obtain rental rates from Equipment Watch				Subtotal.....		\$ 57.32	
				+20.00% on Operating costs.....		\$ 11.46	
				Total cost of equipment.....(B)		\$ 68.78	
(MATERIALS)	Description	Invoice No.	Pre-Tax	Sales Tax	Total		
	10 Linft. of 24 inch RCP Price Per Affidavit		\$300.00	7.00%	\$ 321.00		
	(1) 24 inch Metal End Section Price per Affidavit		\$200.00	7.00%	\$ 214.00		
					\$ -		
					\$ -		
					\$ -		
					\$ -		
					\$ -		
					\$ -		
				Subtotal.....		\$ 535.00	
				+20.00% on material Pre-Tax.....		\$ 100.00	
				Total cost of materials.....(C)		\$ 635.00	
				Total (A+B+C)		\$ 1,179.90	

Approved: _____

State's Representative Title

Contractor's Representative Title

Rates and extensions by Kristen McDaniel
 Checked by Timmy Fitch
 Estimate no. 830747C077401

NDOT
040-008
Rev. 04/21

Figure 4-5: Completed Daily Costs Force Account Form

7. Scan the Inspector's handwritten form and save to the Contract Files\Contract\06 - FA\6.# [Name of the Force Account] directory.
8. Obtain handwritten or DocuSign signatures for the 'Rates and extension by' and 'Checked by'.
9. Save the form to the Contract Files\Contract\06 - FA\6.# [Name of the Force Account] directory.
10. Email copies of the completed Daily Costs Force Account forms to the contractor. Both forms are the source documentation for payment.
11. Enter the Force Account Daily Total in an AWP DWR posting (Figure 4-6). Refer to Chapter 5, Daily Work Reports in the [AWP User Guide With Materials](#), for details on DWR postings.

Item ID	Item Description	Current ...	Project	Category
4020170	REPAIR ROADWAY	305.460	60989C1C	02
Supplemental Descript...	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		305.460	305.460	1

Item Posting ...	Contractor	Station/Location	Quantity Post...
1	11112 - ROAD AND HIGHWAY BUI	MP ST 8.03, MP ST 8.36, MP ST	305.460

Contractor* ROAD AND HIGHWAY BUILDERS LLC (Prime)	Attention 0
Quantity Posted 305.460	Units FA
Station From 	Agency Views None
Station From Plus 	Location MP ST 8.03, MP ST 8.36, MP ST 8.60 LT, RT, CL
Offset Type 	Measured <input type="checkbox"/>
Offset Distance 	Material Set 3895 T2R BF22-27 JMF01
Station To 	Plan Sheet Page Number
Station To Plus 	Comments Repair Roadway Complete Total = 305.46 100% Paid
Offset Type 	

Figure 4-6: Force Account Item DWR Posting

12. Enter the daily totals (labor, equipment, materials) for each Daily Costs Force Account sheet on a Force Account Recap sheet (Figure 4-7) and save to the appropriate Contract Files\Contract\06 - FA\6.# [Name of the Force Account] directory.

CONTRACT NO. 3635 **FORCE ACCOUNT RECAP** SHEET 1 of 1
 DESCRIPTION: Repairing Drainage Problem @ "X" 1000 + 30 RT
 ITEM NO. 5066000 CATG NO. 01

REPORT NO.	DATE / DATE RANGE	LABOR COST	EQUIPMENT COST	MATERIALS COST	DAILY TOTAL	AMOUNT PAID PER ESTIMATE	PAYMENT NO.	CUTOFF PAYMENT DATE	REMARKS
1	4/25/19	\$476.12	\$68.78	\$635.00	\$1,179.90	1179.00	31	4/29/19	
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
		\$0.00	\$0.00	\$0.00	\$0.00				
FINAL TOTALS		\$476.12	\$68.78	\$635.00	\$1,179.90				

Rev. 09-18
Figure 4-7: Force Account Recap Sheet

USING EQUIPMENTWATCH

To use the EquipmentWatch program:

1. Go to Construction Division SharePoint homepage. Under Construction Division Links, Click on the [EquipmentWatch – Equipment Rental Rates](#) link (Figure 4-8).

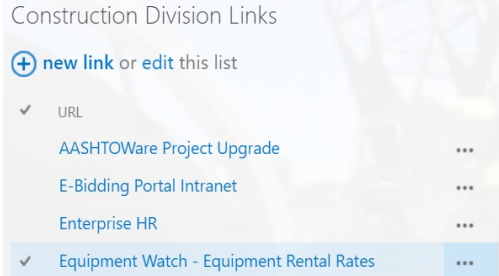


Figure 4-8: EquipmentWatch Link on SharePoint

2. The homepage will open. Check the Rental Rate Blue Book and click the green Search button (Figure 4-9).

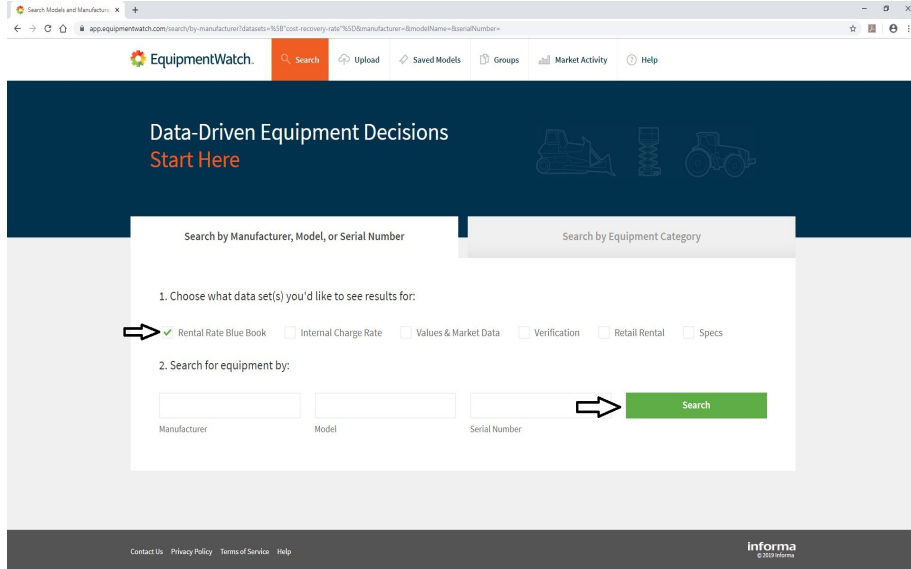


Figure 4-9: EquipmentWatch Homepage

3. There are two options for searching for equipment.

a. Option 1:

- i. Enter the type of equipment that you are inquiring about in the Manufacturer and Model boxes and click the Search button (Figure 4-10).

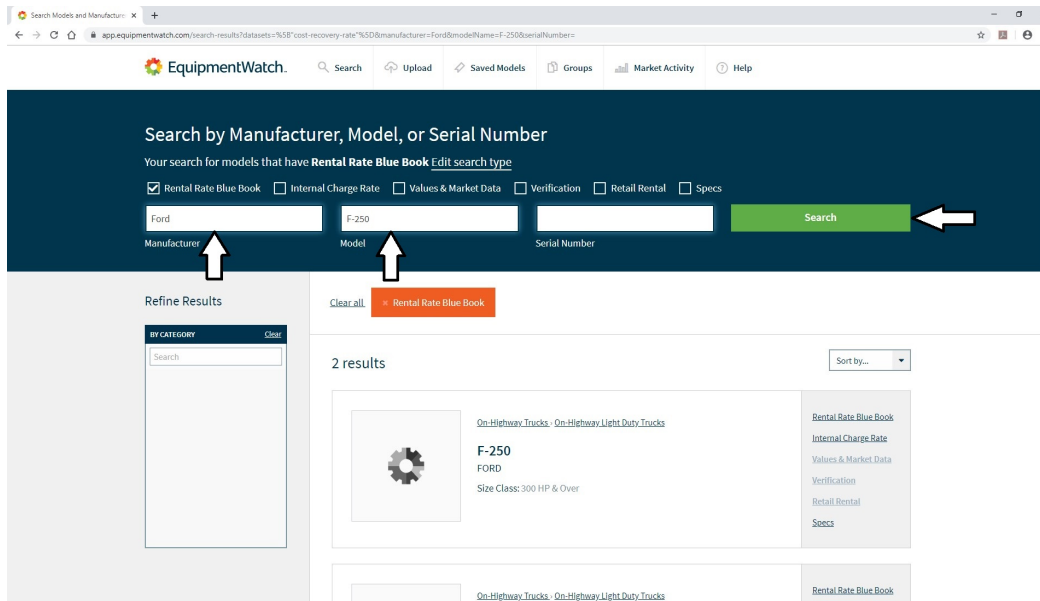


Figure 4-10: EquipmentWatch Search Area

- ii. The Results of the Search display. Click on the equipment item that best matches your inquiry (Figure 4-11).

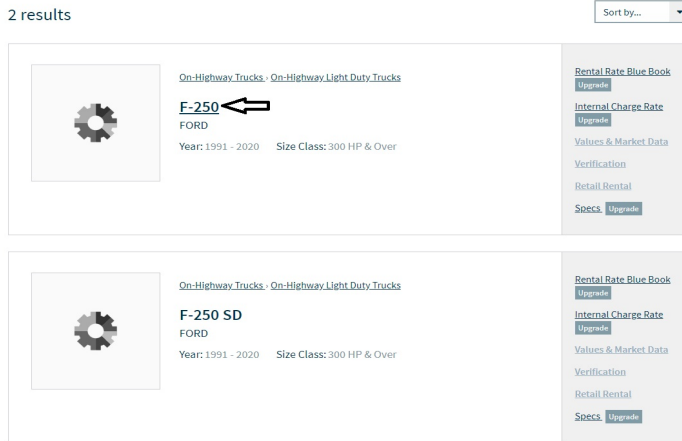


Figure 4-11: EquipmentWatch Search Results

- iii. The equipment record opens. Select the Year, Axle Configuration and click the Confirm Equipment Configuration button (Figure 4-12).

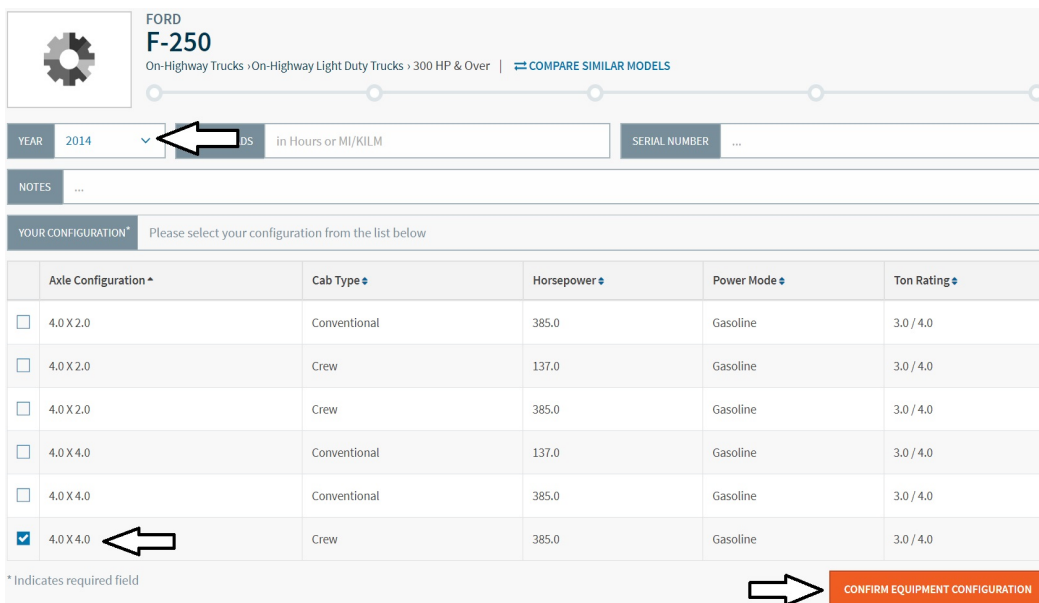


Figure 4-12: EquipmentWatch Equipment Configurations

- iv. Go to the Costs/Rental Rate Blue Book tab and select Nevada DOT (Figure 4-13). Record the 'Your Adjusted Hourly Rate' amount on the Daily Costs of Force Account w Standby form in the EQUIPMENT section, under the Rate column (Figure 4-5).
- v. Click the Print Report icon (Figure 4-13).

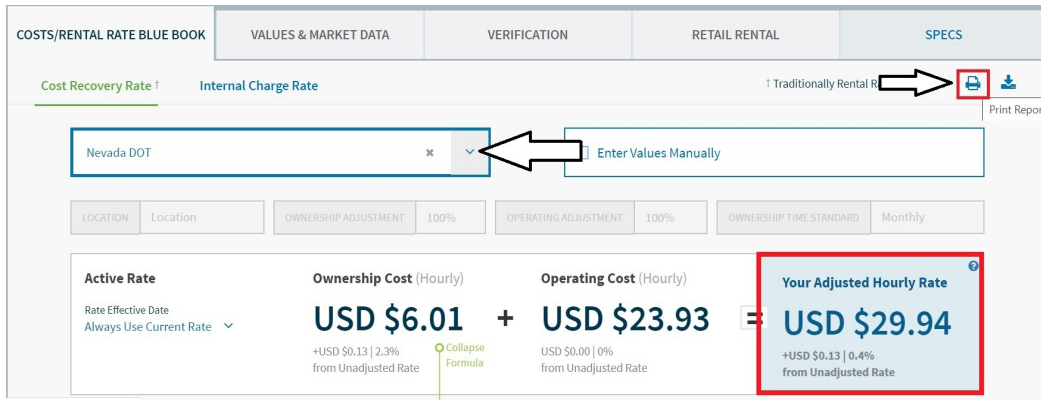


Figure 4-13: EquipmentWatch Equipment Rates

- vi. The Rental Rate Blue Book report opens in a new browser tab. Click the Print icon (Figure 4-14).

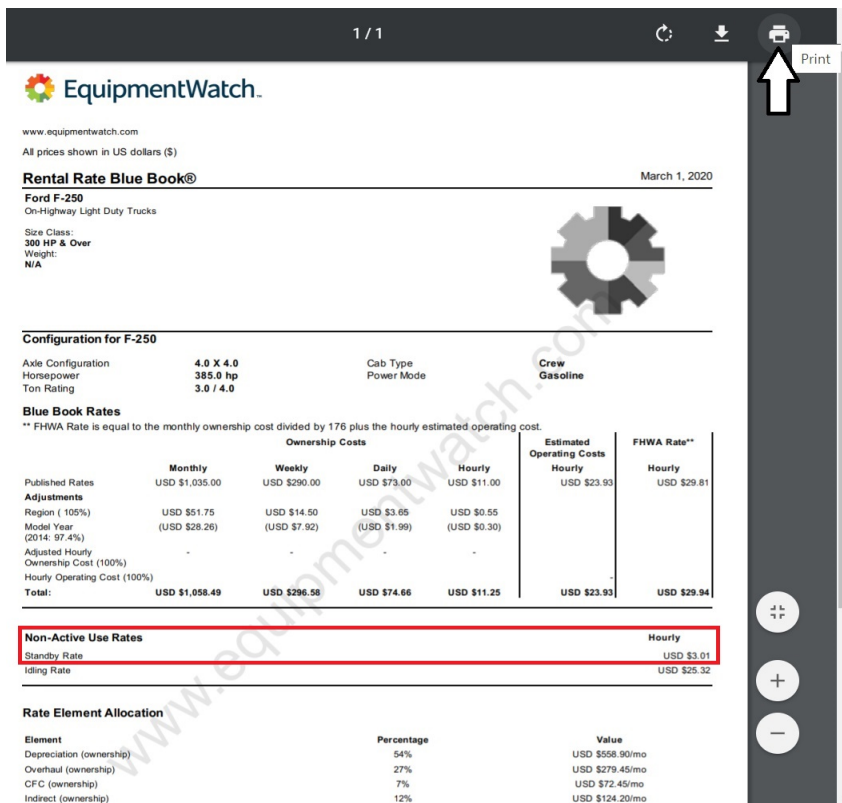


Figure 4-14: EquipmentWatch Equipment Rates Report

- vii. Print the report to a PDF file, following the browser print options, and save to the Contract Files\Contract\06 - FA\6.# [Name of the Force Account] directory and click on the Save button (Figure 4-15).

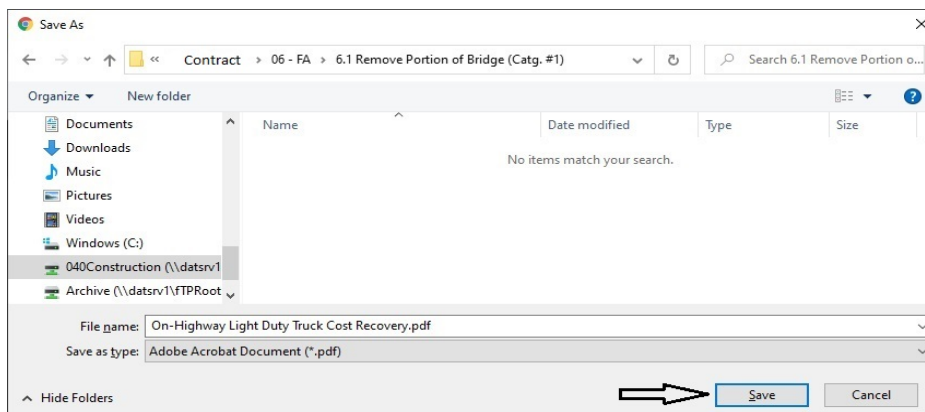


Figure 4-15: Save As Window

- b. Option 2:
 - i. Use the By Category list. Scroll down to the category of equipment needed (Figure 4-16).

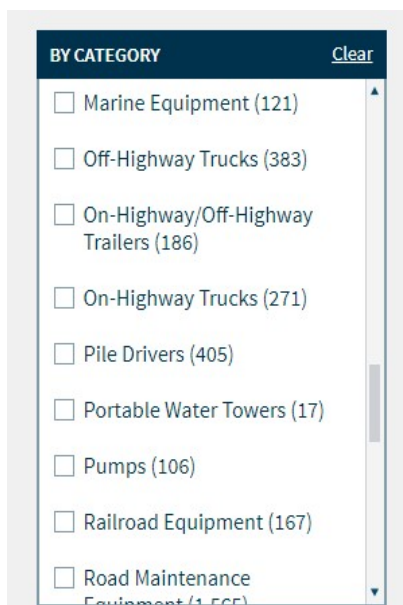


Figure 4-16: EquipmentWatch By Category Search

- ii. Check the box for the type of equipment. This will open a By Subtype list. Check the box for the type of equipment (Figure 4-17).

BY CATEGORY [Clear](#)

Search

On-Highway Trucks (409)

BY SUBTYPE [Clear](#)

Search

On-Highway Flatbed Trucks (13)

On-Highway Light Duty Trucks (277)

On-Highway Rear Dumps (11)

On-Highway Truck Rail Gear (5)

On-Highway Truck Tractors (34)

On-Highway Water Tankers (19)

Figure 4-17: EquipmentWatch By Category & By Subtype Search

- iii. The Results of the Search display. Click on the equipment item that best matches your inquiry (Figure 4-18).

409 results Sort by...

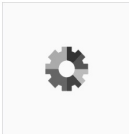
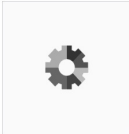
	<p>On-Highway Trucks - On-Highway Truck Tractors</p> <p>4X2 25KGWV DSL ←</p> <p>MISCELLANEOUS</p> <p>Year: 1991 - 2020 Size Class: 19,501 - 26,000 GVW</p>	<p>Rental Rate Blue Book</p> <p>Internal Charge Rate</p> <p>Values & Market Data</p> <p>Verification</p> <p>Retail Rental</p> <p>Specs</p>
	<p>On-Highway Trucks - On-Highway Light Duty Trucks</p> <p>4X2 1 234 CONV GAS</p> <p>MISCELLANEOUS</p> <p>Year: 1991 - 2020 Size Class: 200 - 299 HP</p>	<p>Rental Rate Blue Book</p> <p>Internal Charge Rate</p> <p>Values & Market Data</p> <p>Verification</p> <p>Retail Rental</p> <p>Specs</p>

Figure 4-18: EquipmentWatch Search Results

- iv. The equipment records opens. Select the year and Nevada DOT (Figure 4-19). Record the 'Your Adjusted Hourly Rate' amount on the Daily Costs of Force Account w Standby form in the EQUIPMENT section, under the Rate column (Figure 4-5).
- v. Click the Print Report icon (Figure 4-19).

MISCELLANEOUS
4X2 25KGWV DSL
On-Highway Trucks - On-Highway Truck Tractors - 19,501 - 26,000 GWW

YEAR: 2016 | in Hours or MI/KLM | SERIAL NUMBER: ...

Notes: ...

Axle Configuration: 4X2 | Horsepower: 200.0 | Maximum Gross Vehicle Weight: 25000.0 | Power Mode: Diesel

COSTS/RENTAL RATE BLUE BOOK | VALUES & MARKET DATA | VERIFICATION | RETAIL RENTAL | SPECS

Cost Recovery Rate: Internal Charge Rate | Traditionally Rental Rate Blue Book

Nevada DOT | Enter Values Manually | Print Report

Active Rate: Rate Effective Date: Always Use Current Rate

Ownership Cost (Hourly): **USD \$10.75**
+USD \$0.44 [4.3% from Unadjusted Rate] Collapse Formula

Operating Cost (Hourly): **USD \$22.14**
USD \$0.00 [0% from Unadjusted Rate]

Your Adjusted Hourly Rate: USD \$32.89
+USD \$0.44 [1.4% from Unadjusted Rate]

Figure 4-19: EquipmentWatch Equipment Rates

- vi. The Rental Rate Blue Book report opens in a new browser tab. Click the Print icon (Figure 4-20).

EquipmentWatch

www.equipmentwatch.com

All prices shown in US dollars (\$)

Rental Rate Blue Book® March 1, 2020

Miscellaneous 4X2 25KGWV DSL
On-Highway Truck Tractors

Size Class: 19,501 - 26,000 GWW
Weight: 8793 lbs

Configuration for 4X2 25KGWV DSL

Axle Configuration	4X2	Horsepower	200.0
Maximum Gross Vehicle Weight	25000.0 lbs	Power Mode	Diesel

Blue Book Rates
** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$1,815.00	USD \$510.00	USD \$130.00	USD \$20.00	USD \$22.14	USD \$32.45
Adjustments						
Region (105%)	USD \$90.75	USD \$25.50	USD \$6.50	USD \$1.00		
Model Year (2016: 99.3%)	(USD \$13.34)	(USD \$3.75)	(USD \$0.96)	(USD \$0.15)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$1,892.41	USD \$531.75	USD \$135.54	USD \$20.85	USD \$22.14	USD \$32.89

Non-Active Use Rates

Standby Rate	Hourly	USD \$5.38
Idling Rate		USD \$25.74

Print

Figure 4-20: EquipmentWatch Equipment Rates Report

- vii. Print the report to a PDF file, following the browser print options, and save to the Contract Files\Contract\06 - FA\6.# [Name of the Force Account] directory and click on the Save button (Figure 4-21).

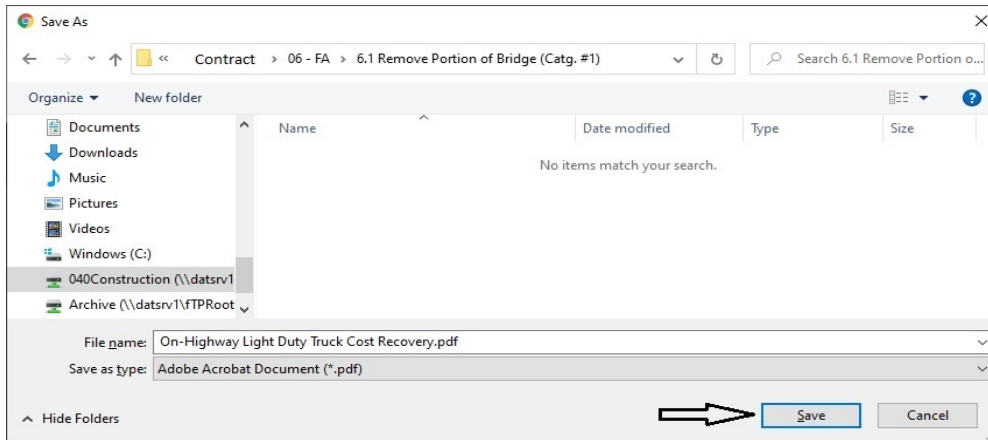


Figure 4-21: Save As Window

REMOVAL ITEMS

This chapter contains the following sections:

Overview	5-3
Inspector's Responsibilities – Removal Items	5-3
Office Engineer's Responsibilities – Removal Items	5-10

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.

STRUCTURE LIST-REMOVALS										
					DESCRIPTION		STATION TO STATION			
			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 0512	REMOVAL OF TREES (6-INCHES TO 12-INCHES)	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.)	"LNe" 363+20.47	
						1		REMOVE & RESET GUARDRAIL END TREATMENT (LT.)	"LNe" 367+32.02	
					600			REMOVE & RESET GUARDRAIL (LT.)	"W" 370+50 TO "W" 376+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

- 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
- 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.

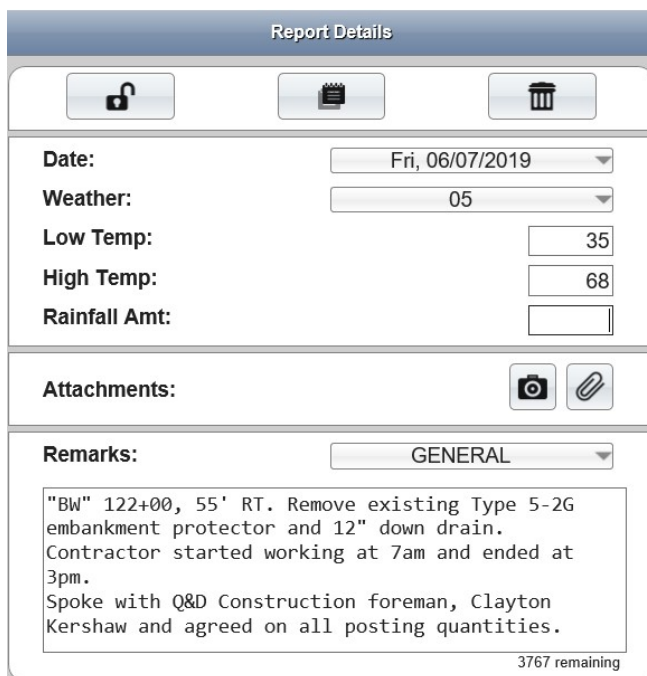


Figure 5-2: DWR Report Detail Window

- 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!).
 - 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 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

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

Figure 5-5: DWR Item Posting - Removal EACH

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

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

Figure 5-6: DWR Item Posting - Combined EACH

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 ÷ 5280 (always use this number)
- Calculations for sta. = LFT ÷ 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	
Contractor: LAS VEGAS PAVING CORPORATION Description: LABORER Number: 3 Total Hours: 8.000	 
Contractor: LAS VEGAS PAVING CORPORATION Description: OPERATING ENGINEER Number: 2 Total Hours: 8.000	 
Contractor: LAS VEGAS PAVING CORPORATION Description: LABORER FOREMAN Number: 1 Total Hours: 8.000 Comments: 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 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 – REMOVAL ITEMS

- Save Removal Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review removal 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, Section, Reviewing a DWR from Mobile Inspector, 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.

EARTHWORK ITEMS

This chapter contains the following sections:

Overview	6-3
Inspector's Responsibilities – Earthwork Items	6-3
Office Engineer's Responsibilities – Earthwork Items	6-9

OVERVIEW

Earthwork Items have different documentation requirements depending on the item. All Earthwork Items may be paid by plan or are measured and calculated. Documentation examples for a few selected Earthwork 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 that cannot be documented according to the following examples, contact the Construction Admin Services Section for assistance.

Prior to excavation operations ensure survey of surfaces are complete in the event of re-measurement and/or re-calculation requests made by the Contractor or Resident Engineer.

INSPECTOR'S RESPONSIBILITIES – EARTHWORK ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Summary of Earthwork Quantities sheet(s), (Figure 6-1) located in the Contract plans, to help identify items, quantities, descriptions and locations. When quantity totals on the Summary of Earthwork Quantities sheet do not match quantity totals in the AEB refer to additional Structure Lists.

SUMMARY OF EARTHWORK QUANTITIES												STATE	PROJECT NO.	COUNTY	SHEET NO.
												NEVADA	SI-051-00(0)	LANDER	01
ALL QUANTITIES MEASURED IN CUBIC YARDS															
LOCATION	SIDE	ROADWAY EXCAVATION	STRUCTURE EXCAVATION	DRAINAGE EXCAVATION	SHRINK/SWELL	TOTAL EXCAVATION	EMBANKMENT	(BORROW OR EXCESS)	** TOPSOIL SALVAGE	NOTES					
CL	Station to Station														
"P"	36+03.92 to 75+00.00	LT	29,348.44			-10.00%	26,413.90	12,910.38	13,503.22	3,843.34	Slope Flattening				
"P"	36+03.92 to 75+00.00	RT	15,441.24	49.30	18.10	-10.00%	13,957.78	23,740.97	9,783.19	3,892.68	Slope Flattening				
"P"	75+00.00 to 135+00.00	LT	12,706.47			-10.00%	11,435.62	7,364.69	4,070.93	3,657.13	Slope Flattening				
"P"	75+00.00 to 135+00.00	RT	11,280.58	51.10	834.10	-10.00%	10,949.18	7,928.36	3,020.82	3,535.47	Slope Flattening				
"P"	135+00.00 to 195+00.00	LT	49.88			-10.00%	44.98	3,297.37	(3,252.39)	1,857.94	Slope Flattening				
"P"	135+00.00 to 195+00.00	RT	24.66	76.30	13.40	-10.00%	102.94	5,314.45	(5,211.49)	2,334.58	Slope Flattening				
"P"	195+00.00 to 255+00.00	LT	15.11			-10.00%	13.62	4,374.71	(4,361.11)	2,550.10	Slope Flattening				
"P"	195+00.00 to 255+00.00	RT	15.30			-10.00%	13.77	5,533.84	(5,540.07)	2,640.57	Slope Flattening				
"P"	255+00.00 to 315+00.00	LT	17.03			-10.00%	15.33	8,191.45	(8,176.12)	2,959.47	Slope Flattening				
"P"	255+00.00 to 315+00.00	RT	6.65			-10.00%	5.99	8,744.09	(8,738.11)	2,962.88	Slope Flattening				
"P"	315+00.00 to 375+00.00	LT	1,811.54			-10.00%	1,630.98	7,702.42	(6,072.03)	3,649.00	Slope Flattening				
"P"	315+00.00 to 375+00.00	RT	2,748.19	47.90	5.50	-10.00%	2,521.43	11,643.32	(9,121.89)	3,965.20	Slope Flattening				
"P"	375+00.00 to 435+00.00	LT	3,335.55			-10.00%	3,002.00	1,198.30	1,803.70	3,305.81	Slope Flattening				
"P"	375+00.00 to 435+00.00	RT	1,362.83	392.00	124.90	-10.00%	1,718.76	8,765.07	(7,046.31)	3,204.05	Slope Flattening				
"P"	435+00.00 to 495+00.00	LT	538.05			-10.00%	484.25	5,029.26	(4,545.02)	3,092.64	Slope Flattening				
"P"	435+00.00 to 495+00.00	RT	2,922.23	93.60		-10.00%	2,714.25	3,194.19	(479.94)	3,486.23	Slope Flattening				
"P"	495+00.00 to 555+00.00	LT	1,569.54			-10.00%	1,403.59	5,220.20	(3,816.61)	3,330.65	Slope Flattening				
"P"	495+00.00 to 555+00.00	RT	4,765.71	84.30	4.80	-10.00%	4,360.33	2,935.88	1,424.45	3,518.50	Slope Flattening				
"P"	555+00.00 to 615+00.00	LT	3,156.02			-10.00%	2,876.42	2,901.57	(25.15)	3,081.59	Slope Flattening				
"P"	555+00.00 to 615+00.00	RT	3,087.21			-10.00%	2,769.49	6,636.19	(3,875.64)	3,621.86	Slope Flattening				
"P"	615+00.00 to 675+00.00	LT	1,485.59			-10.00%	1,337.03	4,114.24	(2,777.21)	3,124.89	Slope Flattening				
"P"	615+00.00 to 675+00.00	RT	1,012.63			-10.00%	911.37	6,239.36	(5,327.99)	3,209.49	Slope Flattening				
"P"	675+00.00 to 735+00.00	LT	2,364.07			-10.00%	2,127.66	7,052.63	(4,924.97)	3,409.79	Slope Flattening				
"P"	675+00.00 to 735+00.00	RT	2,475.91	14.80		-10.00%	2,241.84	9,998.83	(6,754.99)	3,744.16	Slope Flattening				
"P"	735+00.00 to 795+00.00	LT	2,989.57			-10.00%	2,690.61	7,564.36	(4,873.77)	3,900.18	Slope Flattening				
"P"	735+00.00 to 795+00.00	RT	3,121.87	54.20		-10.00%	2,858.46	10,751.95	(7,893.49)	4,169.09	Slope Flattening				
"P"	795+00.00 to 855+00.00	LT	1,687.68			-10.00%	1,518.91	8,076.52	(6,557.61)	3,499.33	Slope Flattening				
"P"	795+00.00 to 855+00.00	RT	844.70	30.20		-10.00%	787.41	15,083.12	(14,295.71)	3,469.44	Slope Flattening				
"P"	855+00.00 to 915+00.00	LT	210.35			-10.00%	189.32	5,595.26	(5,405.97)	2,513.41	Slope Flattening				
"P"	855+00.00 to 915+00.00	RT	338.38	27.10		-10.00%	328.83	5,447.39	(5,118.46)	2,476.03	Slope Flattening				
"P"	915+00.00 to 975+00.00	LT	27.40			-10.00%	24.66	13,112.30	(13,087.64)	3,359.16	Slope Flattening				
"P"	915+00.00 to 975+00.00	RT	315.55	63.90		-10.00%	85.91	11,551.34	(11,485.44)	3,198.61	Slope Flattening				
"P"	975+00.00 to 1035+00.00	LT	53.61			-10.00%	30.25	6,130.01	(6,099.76)	2,759.23	Slope Flattening				
"P"	975+00.00 to 1035+00.00	RT	133.53	29.60		-10.00%	146.82	6,388.77	(6,241.95)	2,940.45	Slope Flattening				
"P"	1035+00.00 to 1095+00.00	LT	862.48			-10.00%	794.23	7,789.10	(6,974.87)	3,186.56	Slope Flattening				
"P"	1035+00.00 to 1095+00.00	RT	1,363.41	14.90		-10.00%	1,240.48	7,374.36	(6,133.88)	3,248.91	Slope Flattening				
"P"	1095+00.00 to 1155+00.00	LT	8,407.89			-10.00%	5,767.09	2,351.46	3,415.63	3,518.31	Slope Flattening				
"P"	1095+00.00 to 1155+00.00	RT	5,863.72	12.00	1.30	-10.00%	5,289.32	2,649.82	2,639.50	3,658.22	Slope Flattening				
"P"	1155+00.00 to 1215+00.00	LT	11,172.41			-10.00%	10,055.17	43,057.83	(33,002.66)	6,130.51	Slope Flattening				
"P"	1155+00.00 to 1215+00.00	RT	7,242.42	290.30	124.80	-10.00%	6,891.59	41,574.54	(34,882.95)	5,505.55	Slope Flattening				
"P"	1245+00.00 to 1249+00.00	LT	590.98			-10.00%	531.88	200.26	331.62	496.23	Widening				
"P"	61+99.21 to 85+08.48	LT	553.73			-10.00%	498.36	2,212.87	(1,714.31)		Reconstruct				
"P"	RECONSTRUCT APPROACHES	BOTH	1,893.00			-10.00%	1,703.70			1,703.70					
Total			146,960.00	1,340.00	1,130.00		134,480.00	365,950.00	231,470.00	136,020.00					

NOTES:
 * Borrow Quantity shall be paid for with Borrow Embankment Bid Item. Excess material shall be Disposed of according to 107.14.
 ** Topsoil shall be salvaged to the depth specified prior to any excavation or placement of embankment.
 Earthwork Quantities allow for the replacement of topsoil at specified depth to achieve final grade.

Figure 6-1: Example of a Summary of Earthwork Quantities Sheet

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL earthwork 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 6-2):
 - **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 6-2: 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 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 Earthwork Item postings:

- Refer to Subsection 203.04.01, (*Excavation and Embankment*) *Measurement*, of the Standard Specifications for additional details/requirements on measurement for payment of excavation and embankment items.
- When excavation is utilized to construct embankment, it is only paid ONCE as an excavation item.
- The limit for payment of excavation items are based upon the Standard Plans or plan details. Changes to these limits for contractor convenience or methods of construction do not affect quantity for payment.
- The Inspector will base the quantity posted on the percent of earthwork completed for each station per the Contract plans Summary of Earthwork Quantity sheets. Indicate when a section is completed in the item posting comments.
- Refer to Figure 6-3 through Figure 6-6 for examples of Earthwork Item postings.

New Item Posting

Item:	BORROW EMBANKMENT
Contractor:	Q&D CONSTRUCTION I...
Qty:	244.35 CUYD
Authorized:	79,348.440 CUYD
Total Posted:	0.000 CUYD
Location:	"CW"
Station From:	0 + 22
Offset Type:	LT
Offset Dist:	
Station To:	5 + 10
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	Plan qty. for this section = 1629.00 CUYD 15% complete 1629.00 X .15 = 244.35 CUYD

3915 remaining

NOTES for Earthwork CUYD (Figure 6-3):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = $L \times W \times D \div 27$
- 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

Figure 6-3: DWR Item Posting - Earthwork CUYD

New Item Posting

Item: CHANNEL EXCAVATION

Contractor: Q&D CONSTRUCTION I...

Qty: 179.20 CUYD
 Authorized: 698.550 CUYD
 Total Posted: 100.800 CUYD

Location: "CW"

Station From: 35 + 05
Offset Type: LT

Offset Dist:

Station To: 45 + 10
Offset Type: LT

Offset Dist:

Measured:

Comments:
 Plan qty for this section = 280.00 CUYD
 36% previous paid = 100.80 CUYD
 280.00 - 100.80 = 179.20 CUYD
 Item 100% complete for this section.

3858 remaining

Figure 6-4: DWR Item Posting - Earthwork CUYD

NOTES for Earthwork CUYD (Figure 6-4):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = $L \times W \times D \div 27$
- 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: ROADWAY EXCAVATION

Contractor: Q&D CONSTRUCTION I...

Qty: 312.78 CUYD
 Authorized: 2,245.000 CUYD
 Total Posted: 621.480 CUYD

Location: "CW"

Station From: 0 + 22
Offset Type: LT

Offset Dist:

Station To: 5 + 10
Offset Type: RT

Offset Dist:

Measured:

Comments:
 Plan qty. for this section = 235.00 cuyd.
 Additional qty.
 $200L \times 7W \times 1.5D / 27 = 77.87 \text{ cuyd.}$
 $235.00 + 77.87 = 312.78$

3879 remaining

Attention:

Attention Comments:
 Additional qty. to correct cross slope.

217 remaining

Figure 6-5: DWR Item Posting - Earthwork CUYD

NOTES for Earthwork CUYD (Figure 6-5):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = $L \times W \times D \div 27$
- 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: TOP SOIL (SALVAGE) ▼

Contractor: Q&D CONSTRUCTION I... ▼

Qty: 12.96 CUYD

Authorized: 200.000 CUYD
Total Posted: 0.000 CUYD

Location: "CW"

Station From: 355 + 11

Offset Type: RT

Offset Dist:

Station To: 367 + 23

Offset Type: RT

Offset Dist:

Measured:

Comments:

Replaced topsoil to original location.
 $10 \times 5 \times 7 / 27 = 12.96 \text{ CUYD}$

3931 remaining

NOTES for Earthwork CUYD (Figure 6-6):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = $L \times W \times D \div 27$
- Pay .5 when item is removed and .5 when it's replaced.
- 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

Figure 6-6: DWR Item Posting - Earthwork CUYD

4. Record the following required information in the New Equipment window (Figure 6-7 and Figure 6-8):
 - **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.
 - **Hours Idle:** 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:

On Site:

Hours Used:

Hours Idle:

Comments:

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

506 remaining

Figure 6-7: DWR Equipment Entry



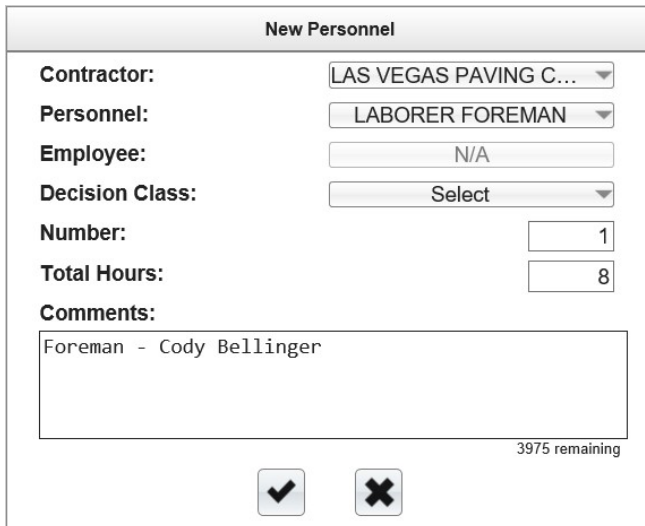
Add Equipment

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 6-8: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 6-9 and Figure 6-10):
- **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: LAS VEGAS PAVING C...
Personnel: LABORER FOREMAN
Employee: N/A
Decision Class: Select
Number: 1
Total Hours: 8
Comments:
 Foreman - Cody Bellinger

3975 remaining



 

Figure 6-9: DWR Personnel Entry







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

Figure 6-10: 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 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 – EARTHWORK ITEMS

- Save Earthwork Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Earthwork 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).

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.

LANDSCAPE AND IRRIGATION ITEMS

This chapter contains the following sections:

Overview	7-3
Inspector's Responsibilities – Landscape and Irrigation Items	7-3
Office Engineer's Responsibilities – Landscape and Irrigation Items	7-13

OVERVIEW

Landscape and Irrigation Items have different documentation requirements for each unit of measure (UOM). All Landscape and Irrigation Item quantities must be counted, measured, calculated or based on plan. Documentation examples for a few selected Landscape and Irrigation 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 – LANDSCAPE AND IRRIGATION 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-Landscaping list (Figure 7-1) and/or the Main Structure list, located in the Contract plans, to help identify items, quantities, descriptions and locations.

ITEM NO.	DESCRIPTION	UOM	QTY	UNIT PRICE	TOTAL PRICE	PROJECT INFORMATION				
						FED. RD. DIST. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
						9	NEVADA	STP-0150(115)	CLARK	L-02
STRUCTURE LIST-LANDSCAPING										
						DESCRIPTION	STATION TO STATION			
NOTE: ALL LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER										
7815	PAINTING (CONC WALL GRAPHICS)	SQFT	2708	2854	490		I-15 Northbound (RT)	"LN# 354+10 TO "LN# 362+ 00		
7815	1/2-INCH POLYCHLORIDE PIPE (FLEXIBLE)	LIN FT	2708	2854	490					
7820	GRANITE MULCH	CY	2708	2854	490					
7820	FERTILIZER	TON	2708	2854	490					
7820	FERTILIZER (COMMERCIAL)	TON	2708	2854	490					
7820	TOPSOIL	CY	2708	2854	490					
7820	SITE PREPARATION	EA	2708	2854	490					
7820	PLANTS (GROUP A-9)	EA	2708	2854	490					
7820	GRANULAR BACKFILL	CY	2708	2854	490					
Total						18				
Use Total						20				
*SEE ESTIMATE OF QUANTITIES FOR USE TOTAL										

Figure 7-1: Example of a Structure List- Landscape and Irrigation

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL Landscape and Irrigation 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 7-2):
 - **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 7-2: 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 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 Landscape and Irrigation 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 7-3 through Figure 7-13 for examples of landscape and irrigation item postings with different UOM.

New Item Posting

Item: SITE PREPARATION

Contractor: Q&D CONSTRUCTION INC

Qty: .15 ACRE

Authorized: 50.000 ACRE

Total Posted: 0.000 ACRE

Location: "BW"

Station From: 354 + 10

Offset Type: RT.

Offset Dist:

Station To: 362 + 22

Offset Type: RT

Offset Dist:

Measured:

Comments:

100' X 65' / 43560 = .15

3975 remaining

Figure 7-3: DWR Item Posting - Landscape ACRE

NOTES for Landscape ACRE (Figure 7-3):

- Payment for ACRE item will be based on field measure and Calculations.
- Calculation for ACRE = $L \times W \div 43560$ (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

NOTES for Landscape ACRE (Figure 7-4):

- Payment for ACRE item will be based on field measure and Calculations.
- Calculation for ACRE = $L \times W \div 43560$ (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
- NOTE: Collect seed tag and keep in the office until Plant Establishment has been achieved.

New Item Posting	
Item:	SEEDING
Contractor:	Q&D CONSTRUCTION INC
Qty:	0.19 ACRE
Authorized:	2.150 ACRE
Total Posted:	0.000 ACRE
Location:	"CW"
Station From:	6 + 00
Offset Type:	RT
Offset Dist:	
Station To:	8 + 00
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	200 x 41 / 43560 = .19
	3977 remaining

Figure 7-4: DWR Item Posting - Landscape ACRE

New Item Posting	
Item:	MULCH (WOOD CHIPS)
Contractor:	Q&D CONSTRUCTION INC
Qty:	18.12 CUYD
Authorized:	235.000 CUYD
Total Posted:	216.880 CUYD
Location:	"BW"
Station From:	354 + 10
Offset Type:	LT
Offset Dist:	
Station To:	362 + 22
Offset Type:	LT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	Paid Plan qty. per plan sheet L10 100% Complete
	3951 remaining

Figure 7-5: DWR Item Posting - Landscape CUYD

NOTES for Landscape CUYD (Figure 7-5):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = $L \times W \times D \div 27$.
- 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

NOTES for Landscape CUYD by Truck (Figure 7-6):

- Payment for CUYD delivered by a truck that isn't weighed over a scale will be based on field measure and calculations.
- State the Truck Number and Number of Loads.
- Calculation for CUYD delivered by a truck that isn't weighed over a scale = $L \times W \times D \div 27 \times \text{the}$

New Item Posting

Item: TOP SOIL

Contractor: Q&D CONSTRUCTION INC

Qty: 72.00 CUYD
 Authorized: 224.000 CUYD
 Total Posted: 0.000 CUYD

Location: "BW"

Station From: 354 + 30

Offset Type: RT.

Offset Dist: "BW"

Station To: 358 + 00

Offset Type: RT

Offset Dist:

Measured:

Comments:

Number of loads = 8 Truck # 35
 $9 \times 4.5 \times 6 / 27 = 9$
 $8 \times 9 = 72.00 \text{ CUYD}$

3926 remaining

Figure 7-6: DWR Item Posting – Landscape CUYD by Truck

- # of loads.
- The calculations show the capacity for each truck. Multiply the number of loads by the truck capacity to get CUYD's.
- 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: PLANTS (GROUP A-5)

Contractor: Q&D CONSTRUCTION INC

Qty: 95.00 EACH
 Authorized: 100.000 EACH
 Total Posted: 0.000 EACH

Location: "BW"

Station From: 354 + 10

Offset Type: RT.

Offset Dist: "BW"

Station To: 358 + 50

Offset Type: RT

Offset Dist:

Measured:

Comments:

Counted

3992 remaining

Figure 7-7: DWR Posting - Landscape EACH Combined

- NOTES for Landscape EACH Combined (Figure 7-7)
- Payment for EACH item will be based on field count.
 - This shows an EACH item combined.
 - 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

- NOTES for Landscape GAL (Figure 7-8):
- 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.

New Item Posting	
Item:	FERTILIZER
Contractor:	Q&D CONSTRUCTION INC
Qty:	110.00 GAL
Authorized:	300.000 GAL
Total Posted:	0.000 GAL
Location:	"BW"
Station From:	354 + 10
Offset Type:	RT.
Offset Dist:	"BW"
Station To:	355 + 20
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	2 Drums @ 55 gal. = 110gal. 3969 remaining
Attention:	<input checked="" type="checkbox"/>
Attention Comments:	See email: DWR 2019-6-7 KMM for container label. 208 remaining

Figure 7-8: DWR Item Posting - Landscape GAL

New Item Posting	
Item:	1/2-INCH POLYVINYL CH...
Contractor:	Q&D CONSTRUCTION INC
Qty:	1910.00 LFT
Authorized:	2,000.000 LFT
Total Posted:	0.000 LFT
Location:	"BW"
Station From:	354 + 10
Offset Type:	RT.
Offset Dist:	"BW"
Station To:	360 + 10
Offset Type:	RT
Offset Dist:	
Measured:	<input checked="" type="checkbox"/>
Comments:	Item completed 3985 remaining

Figure 7-9: DWR Item Posting – Landscape LFT

- A photo 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.

NOTES for Landscape LFT (Figure 7-9):

- Payment for LFT items will be based on field measurements.
- 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

NOTES for Landscape LB (Figure 7-10):

New Item Posting

Item: FERTILIZER (COMMERC...
Contractor: Q&D CONSTRUCTION INC
Qty: 100.00 LB
 Authorized: 200.000 LB
 Total Posted: 0.000 LB
Location: "BW"
Station From: 354 + 10
Offset Type: RT.
Offset Dist: "BW"
Station To: 359 + 50
Offset Type: RT
Offset Dist:
Measured:
Comments:
 4 bags @ 25 lbs. ea. = 100 lbs.
 3966 remaining
Attention:
Attention Comments:
 See email: DWR 2019-3-18 KMM for label.
 217 remaining

Figure 7-10: DWR Item Posting – Landscape LB

- Payment for POUND (LB) items will be based on plan quantity or field measurements and calculations if different than plan.
- A photo 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: ROCK WALL
Contractor: Q&D CONSTRUCTION INC
Qty: 4480.00 SQFT
 Authorized: 6,543.000 SQFT
 Total Posted: 951.100 SQFT
Location: "BW"
Station From: 355 + 45
Offset Type: RT.
Offset Dist: "BW"
Station To: 358 + 65
Offset Type: RT
Offset Dist:
Measured:
Comments:
 320L x 14W = 4480.00 SQFT
 3974 remaining

Figure 7-11: DWR Item Posting – Landscape SQFT

- NOTES for Landscape SQFT (Figure 7-11):
- Payment for SQFT item will be based on field measure and Calculations.
 - Calculation for SQFT = L x W
 - 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

NOTES for Landscape SQFT (Figure 7-12):

New Item Posting	
Item:	DETAIL PAINTING
Contractor:	Q&D CONSTRUCTION INC
Qty:	380.00 SQFT
Authorized:	6,586.350 SQFT
Total Posted:	0.000 SQFT
Location:	Str. I-1951 East Stem Wall
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	Paid plan qty. per plan sheet L607
3965 remaining	

Figure 7-12: DWR Item Posting – Landscape SQFT

- Detail Painting is the ONLY SQFT item that can be paid per plan. Refer to the plan sheet where it identifies the paid qty.
- Location: Refer to Contract plans
- Sig. Fig. = .01

New Item Posting	
Item:	PAINTING
Contractor:	Q&D CONSTRUCTION INC
Qty:	881.67 SQYD
Authorized:	1,000.000 SQYD
Total Posted:	97.700 SQYD
Location:	"BW"
Station From:	354 + 90
Offset Type:	RT
Offset Dist:	<input type="text"/>
Station To:	360 + 10
Offset Type:	RT
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	529 L x 15 W / 9 = 881.67 SQYD
3969 remaining	

Figure 7-13: DWR Item Posting – Landscape SQYD

NOTES for Landscape SQYD (Figure 7-13):

- Payment for SQYD item will be based on field measure and Calculations.
- Calculation for SQYD = $L \times W \div 9$
- 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 7-14 and Figure 7-15):
 - **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 7-14: 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 7-15: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 7-16 and Figure 7-17):
 - **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:	LAS VEGAS PAVING C... ▾
Personnel:	LABORER FOREMAN ▾
Employee:	N/A
Decision Class:	Select ▾
Number:	1
Total Hours:	8
Comments:	Foreman - Cody Bellinger
	3975 remaining
<input type="checkbox"/> <input type="checkbox"/>	

Figure 7-16: 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 7-17: 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 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 – LANDSCAPE AND IRRIGATION 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 and description - CERT (e.g., 03094 M6050001 Plastic Pipe - 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 Landscape and Irrigation items general information photos in the appropriate Contract Files\Contract\ 03 Multimedia\3.# Photos directory.
- Save Landscape and Irrigation items Gallon and Pound label photos to the appropriate Contract Files\Contract\07 Estimates directory to confirm the quantity of the container.
- Review Landscape and Irrigation 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 2017-03-19 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.

ELECTRICAL ITEMS

This chapter contains the following sections:

Overview	8-3
Inspector's Responsibilities – Electrical Items	8-3
Office Engineer's Responsibilities – Electrical Items	8-11

OVERVIEW

Electrical Items have different documentation requirements for each unit of measure (UOM). All Electrical Items must be counted and measured. Documentation examples for a few selected Electrical 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 – ELECTRICAL ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Schedules found on the Signals and Lighting sheets (Figure 8-1), located in the Contract plans, to help identify items, quantities, descriptions and locations.

CONDUIT RUN SCHEDULE							
CON. RUN	FROM	TO	LEN. LNFT	CONDUIT			COMMENTS
				PVC	GRD	PGW	
13 01	POLE 13A	CAB-13g	30'	1	1		SOLAR CABLING INCIDENTAL TO SOLAR BID ITEMS.
13 02	CAB-13g	PULL BOX (13g)	20'	1	1	2	
13 03	PULL BOX (13g)	CHAIN-UP SIGN (14b)	30'	1	1	2	SOLAR CABLING INCIDENTAL TO SOLAR BID ITEMS.
13 04	POLE 13B	CAB-13b	30'	1	1	2	
13 05	CAB-13b	PULL BOX (13b)	20'	1	1	2	
13 06	PULL BOX (13b)	CHAIN-UP SIGN (152)	30'	1	1	2	

PULL BOX SCHEDULE						
NO.	STATION	OFFSET/RT/EX.	TYPE	LOCKING LID	BURIED	COMMENTS
13 a	PE 1031+96	79' RT	NO. 5 PULL BOX	X		
13 b	PW 1032+22	63' LT	NO. 5 PULL BOX	X		

POLE SCHEDULE							
NO.	STATION	OFFSET/RT/RT	TYPE	DEVICES			COMMENTS
				SAFETY BASE	EX. EX.	SOLAR PANELS	
13 A	PE 1031+90	98' RT	ITS 30'			2	SOLAR CABLING INCIDENTAL TO SOLAR BID ITEMS.
13 B	PW 1032+28	82' LT	ITS 30'			2	SOLAR CABLING INCIDENTAL TO SOLAR BID ITEMS.

CABINET SCHEDULE									
CABINET LABEL/NAME	STATION	OFFSET/RT/EX.	TYPE	CABINET EQUIPMENT				COMMENTS	
				EX.	FHES	CELLULAR TELEPHONE MODEM	FLASHING BEACON CONTROLLER		
CAB-13g	PE 1031+96	98' RT	ITS		1	1	1	FOR EASTBOUND CHAIN-UP SIGN.	
CAB-13b	PW 1032+22	82' LT	ITS		1	1	1	FOR WESTBOUND CHAIN-UP SIGN.	

STREET LIGHTING LUMINAIRE SCHEDULE									
NO.	STATION	OFFSET/RT/RT	TYPE	EX. EX.	# OF LUM'R	ARM LENGTH	LUMINAIRE		COMMENTS
							TYPE	TYPE	
02 01	R1 1+54	5' RT	7	X	1	15'	LUMINAIRE (TYPE B) (SL)		REMOVE EXISTING HPS LUMINAIRE. REPLACE WITH LED. USE EXISTING CONDUCTORS.
02 02	R1 3+77	5' RT	7	X	1	15'	LUMINAIRE (TYPE B) (SL)		REMOVE EXISTING HPS LUMINAIRE. REPLACE WITH LED. USE EXISTING CONDUCTORS.
02 03	R1 6+01	5' RT	7	X	1	15'	LUMINAIRE (TYPE B) (SL)		REMOVE EXISTING HPS LUMINAIRE. REPLACE WITH LED. USE EXISTING CONDUCTORS.
02 04	R4 3+01	10' LT	7	X	1	15'	LUMINAIRE (TYPE B) (SL)		REMOVE EXISTING HPS LUMINAIRE. REPLACE WITH LED. USE EXISTING CONDUCTORS.

Figure 8-1: Examples of a Schedules Sheets- Electrical Items

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL electrical item calculation sheets to the Office Engineer.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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
- Record the following required information in the Report Details window (Figure 8-2):
 - 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 8-2: DWR Report Detail Window

- Record the following required information in the 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 Electrical 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.
- Multiple items can be included in one posting as long as the individual locations are listed in the comments. The Location box will contain the stations that encompass all the locations that are being paid for.
- If there are changes to the Schedules Sheets, enter the Conduit Run, Pull Box No., Pole No., or Cabinet Label/Name, etc., in the Location box and an explanation of the changes in the Remarks box.
- Refer to Figure 8-3 through Figure 8-11 for examples of electrical item postings with different UOM.

New Item Posting

Item: NO. 5 PULL BOX

Contractor: Q&D CONSTRUCTION INC

Qty: 1.00 EACH
 Authorized: 15.000 EACH
 Total Posted: 10.000 EACH

Location: No. 13a

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Counted. Refer to plan sheet T3

3982 remaining

Figure 8-3: DWR Item Posting – Electrical EACH

NOTES for Electrical EACH (Pull Box) (Figure 8-3):

- Payment for EACH items will be based on field count.
- Location: Enter the Pull Box number.
- Sig. Fig. = .01

New Item Posting

Item: NO. 5 PULL BOX

Contractor: Q&D CONSTRUCTION INC

Qty: 1.00 EACH
 Authorized: 15.000 EACH
 Total Posted: 10.000 EACH

Location: No. 13b

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Pull Box 13b was moved 18' east from the original location. A storm drain was in the way. New offset 42.77' Rt.

3886 remaining

Figure 8-4: DWR Item Posting – Electrical EACH

NOTES for Electrical EACH (Pull Box) (Figure 8-4):

- Payment for EACH items will be based on field count.
- Location: Enter the Pull Box number.
- Comments: Enter an explanation of the changes if there are changes to the Schedules Sheets.
- Sig. Fig. = .01

New Item Posting

Item: STEEL POLE, TYPE 1A

Contractor: Q&D CONSTRUCTION INC

Qty: 0.50 EACH
 Authorized: 10.000 EACH
 Total Posted: 3.500 EACH

Location: Pole 13A

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Base only

3988 remaining

Figure 8-5: DWR Item Posting – Electrical EACH

NOTES for Electrical EACH (Pole) (Figure 8-5):

- Payment for EACH items will be based on field count.
- Location: Enter the Pole number.
- Sig. Fig. = .01

New Item Posting

Item: STEEL POLE, TYPE 1A

Contractor: Q&D CONSTRUCTION INC

Qty: 0.50 EACH
 Authorized: 10.000 EACH
 Total Posted: 3.500 EACH

Location: Pole 13A

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Pole only,
 Pole 13A is 100% complete.

3959 remaining

Figure 8-6: DWR Item Posting – Electrical EACH (Pole)

NOTES for Electrical EACH (Pole) (Figure 8-6):

- Payment for EACH items will be based on field count.
- Pay 50% (.5) for Base and 50% (.5) for Pole.
- Location: Enter the Pole number.
- Comments: Indicate when the item is completed (base & pole is installed).
- Sig. Fig. = .01 (when complete)

New Item Posting

Item: SIGNAL HEAD 1W1C, PO... ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: EACH
 Authorized: 8.000 EACH
 Total Posted: 0.000 EACH

Location: Pole 2A

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

3976 remaining

Figure 8-7: DWR Item Posting – Electrical EACH (Signal Head)

NOTES for Electrical EACH (Signal Head) (Figure 8-7):

- Payment for EACH items will be based on field count.
- Pay 50% (.5) for Base and 50% (.5) for Pole.
- Location: Enter the Pole number.
- Comments: Indicate when the item is completed (base & pole is installed).
- Sig. Fig. = .01 (when complete)

New Item Posting

Item: 3-INCH CONDUIT ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: LFT
 Authorized: 19,907.000 LFT
 Total Posted: 0.000 LFT

Location: Run No. 13 01

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

3999 remaining

Figure 8-8: DWR Item Posting – Electrical LFT

NOTES for Electrical LFT (Figure 8-8):

- Payment for LFT items will be based on field measurements.
- Location: Enter the Conduit Run number.
- Sig. Fig. = .01

New Item Posting

Item: 3-INCH CONDUIT

Contractor: Q&D CONSTRUCTION INC

Qty: 40.00 LFT
 Authorized: 19,907.000 LFT
 Total Posted: 30.000 LFT

Location: Run No. 13 04

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments: []
3999 remaining

Attention:

Attention Comments: []
 10 Additional footage was need to connect to CAB-13b
 30 + 10 = 40LFT
187 remaining

Figure 8-9: DWR Item Posting – Electrical LFT

NOTES for Electrical LFT (Figure 8-9):

- Payment for LFT items will be based on field measurements.
- Location: Enter the Conduit Run number.
- Comments: Enter an explanation of the changes if there are changes to the Schedules Sheets.
- Sig. Fig. = .01

New Item Posting

Item: NO. 6 CONDUCTOR

Contractor: Q&D CONSTRUCTION INC

Qty: 60.00 LFT
 Authorized: 12,639.000 LFT
 Total Posted: 951.000 LFT

Location: Run No. 13 02

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments: []
 3 Conductors
 20LFT x 3 = 60 LFT
3967 remaining

Figure 8-10: DWR Item Posting – Electrical LFT

NOTES for Electrical LFT (Figure 8-10):

- Payment for LFT items will be based on field measurements.
- Location: Enter the Conduit Run number.
- Comments: If there is more than one conduit/conductor per run, show the calculation for total LFT.
- Sig. Fig. = .01

New Item Posting

Item: TRAFFIC SIGNAL SIGNS

Contractor: Q&D CONSTRUCTION INC

Qty: 16.92 SQFT

Authorized: 335.430 SQFT
Total Posted: 0.000 SQFT

Location: Pole 2B

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:

Sign # R3-4
 36" x 36" = 1296sq.inch / 144 = 9.00sqft.
 Sign # R10-12
 30" x 38" = 1140sq.inch / 144 = 7.62sqft.
 9.00sqft. + 7.62sqft. = 16.92

3856 remaining

NOTES for Electrical SQFT (Figure 8-11):

- Traffic signs placed on a Pole or Mast Arms are considered Electrical item that are associated with the Pole or Mast Arms.
- Multiple sign can be paid for in one posting, if it's on the same Pole or Mast Arm.
- Location: Enter the Conduit Run number.
- Comments: Add the Sign Number and convert the Units from square inches to square feet. L x W / 144 (converting inches to feet)
- Sig. Fig. = .01

Figure 8-11: DWR Item Posting – Electrical SQFT

4. Record the following required information in the New Equipment window (Figure 8-12 and Figure 8-13):
 - **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 8-12: 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 8-13: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 8-14 and Figure 8-15):
- **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:	LAS VEGAS PAVING C... ▼
Personnel:	LABORER FOREMAN ▼
Employee:	N/A
Decision Class:	Select ▼
Number:	<input type="text" value="1"/>
Total Hours:	<input type="text" value="8"/>
Comments:	<input type="text" value="Foreman - Cody Bellinger"/>
3975 remaining	
 	

Figure 8-14: DWR Personnel Entry







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

Figure 8-15: 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 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 – ELECTRICAL 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 and description- CERT (e.g., 03904 M6230001 Traffic Systems - 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 Electrical Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Electrical 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.

ROADWAY AGGREGATES AND ROADBED MODIFICATION ITEMS

This chapter contains the following sections:

Overview	9-3
Inspector's Responsibilities – Aggregate and Roadbed Mod Items	9-3
Office Engineer's Responsibilities – Aggregate and Roadbed Mod Items	9-12

OVERVIEW

Roadway Aggregate and Roadbed Modification (Mod) Items have different documentation requirements for each unit of measure (UOM). All Roadway Aggregate and Roadbed Mod Item quantities must be measured and calculated. 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.

Note: Forms change periodically, go to the SharePoint [Construction Forms](#) area for the latest version.

Screenings (paid by the ton) shall be documented in the same manner as described and illustrated in this chapter. The type and grade of bituminous material used with the screening will be specified in the contract's Special Provisions and documentation will depend on the type specified.

INSPECTOR'S RESPONSIBILITIES – AGGREGATE AND ROADBED MOD ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Typical Sections (the 2 sheet) and the Summary of Base and Surface Quantities (the 3 sheet) in the contract plans, for location and quantity information.
- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

AGGREGATE TON ITEMS

- Retrieve all computerized load tickets and review for the following information:
 - Date
 - Material source
 - Material type
 - Gross, tare, net weights, and tons
 - Cumulative total tons
 - Time
 - Contract Number
- Turn in ALL computerized load tickets into the Office Engineer.

Note: In situations where computerized load tickets are not available (i.e., cold milled material for base) use volume calculations converted to weights. Refer to Appendix B, Calculation Formulas, in this Manual for details.

RECORD OF DELIVERY – AGGREGATE BASE SPREADSHEET

The Record of Delivery – Aggregate Base spreadsheet (Figure 9-1) is used to track the daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Open the Record of Delivery – Aggregate Base spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Record the following information from the computerized load tickets into the appropriate day tab in the spreadsheet:
 - **Date**
 - **Contract Number**
 - **Item Number**
 - **Description:** Item
 - **Tickets Taken By:** Initials or name
 - **Ticket Number**
 - **Truck Number**
 - **Time:** Every fifth load (Optional)
 - **Station:** Beginning and Ending Station for the day and every change in Line Designations. Each station listed must have a line designation and LT, RT, or CL.
 - **Tons Delivered:** From computerized load ticket, indicate any waste at the end of the day.
 - **Remarks:** Explanations of changes in Line Designations and waste. State the total tons per AEB (category)*.
3. Save and email the completed spreadsheet to the Office Engineer.

Record of Delivery -- Aggregate Base, Sand Blotter, Shoulder Material

Date: (mm/dd/yyyy) Total Tons:

Contract No.:

Item No.:

Description:

Tickets taken by: (initials) Optimum Moisture: %

Checked against scale sheet: (initials) Actual Moisture: %

Ticket No.	Truck No.	Time	Station	Tons Delivered	Cumulative Tons	Remarks
0234	6	6:20 AM	"A" 1+00 RT	26.90	26.90	
0235	43			25.22	52.12	
0236	47			27.71	79.83	
0237	50			26.85	106.68	
0238	6	7:10 AM	"A" 9+75 RT	27.00	133.68	AEB #1 = 133.68
0239	43		"X" 10+15 RT	27.29	160.97	Change in line designation
0240	47			26.25	187.22	
0241	50	8:05 AM	"X" 18+15 RT	25.55	212.77	AEB #2 = 79.09
						0 Waste

Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 | Day 9 | Day 10 | Day 11 | Day 12 | Day 13

***NOTE:** The inspector must indicate the ton amount to be paid to each AEB (category) in the Remarks.

In this example, there was a total of 212.77 tons delivered to the job with 133.68* of those tons being paid in AEB #1. Therefore, 212.77 - 133.68 = 79.09* tons that remain to be paid in AEB #2.

Figure 9-1: Record of Delivery – Aggregate Base (Inspector’s Entries)

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (AGGREGATE TON ITEMS)

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 – N/A for ton Items. These posting will be completed by the Office Engineer.

- Equipment – type, number and hours used
 - Personnel – title and hours
2. Record the following required information in the Report Details window (Figure 9-2):
- **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.

Report Details

Date:	<input type="text" value="Tue, 11/19/2019"/>
Weather:	<input type="text" value="10"/>
Low Temp:	<input type="text" value="22"/>
High Temp:	<input type="text" value="38"/>
Rainfall Amt:	<input type="text"/>

Attachments:

Remarks:

Contractor placed Type 1B Aggregate from "A" 1+00 to "A" 9+75 RT. (AEB#1) and "X" 10+15 to "X" 18+15 RT. (AEB#2) Type 1B Aggregate Base - Repair cattle guard from "X" 75+90 to "X" 97+54 RT. Due to bad soil, extra excavation had to be done which resulted in the need for more Type 1B than the plans called for.

3689 remaining

Figure 9-2: DWR Report Detail Window

3. Record the following required information in the New Equipment window (Figure 9-3 and Figure 9-4):
- **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:	<input type="text" value="1"/>
On Site:	<input type="text"/>
Hours Used:	<input type="text" value="8"/>
Hours Idle:	<input type="text"/>
Comments:	<div style="border: 1px solid black; padding: 5px;"> Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12" bit </div>
506 remaining	
<input type="checkbox"/> <input checked="" type="checkbox"/>	

Figure 9-3: 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
<input type="checkbox"/> <input type="checkbox"/>

Figure 9-4: DWR Equipment List

4. Record the following required information in the New Personnel window (Figure 9-5 and Figure 9-6):
- **Contractor:** Actual contractor performing the work (include subs).
 - **Type:** Details of personnel type (e.g., foreman, laborer, truck driver).
 - **Number:** How many of each title.
 - **Hours:** Total hours worked.

New Personnel

Contractor: LAS VEGAS PAVING C... ▾

Personnel: LABORER FOREMAN ▾

Employee: N/A

Decision Class: Select ▾

Number: 1

Total Hours: 8

Comments:

Foreman - Cody Bellinger

3975 remaining

✓
✗

Figure 9-5: DWR Personnel Entry

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

Figure 9-6: DWR Personnel List

5. 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 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.

AGGREGATE CUYD ITEMS

- Turn in ALL roadway aggregate item calculation sheets to the Office Engineer.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (AGGREGATE CUYD ITEMS)

- 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.

Note: Refer to Steps 1 - 4 in the Daily Work Report (DWR) – Mobile Inspector (Aggregate Ton Items) Section for details on completing the Report Details, Equipment and Personnel for the aggregate CUYD item(s).

- Record the following required information in the 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.

Refer to Figure 9-7 for an example of an Inspector's roadway aggregate CUYD item posting.

New Item Posting	
Item:	TYPE 1 CLASS B AGGREGATE...
Contractor:	SIERRA NEVADA CONSTRUC...
Qty:	438.81 CUYD
Authorized:	715.000 CUYD
Total Posted:	0.000 CUYD
Location:	"X"
Station From:	75 + 90
Offset Type:	RT.
Offset Dist:	
Station To:	97 + 54
Offset Type:	RT.
Offset Dist:	
Measured:	
Comments:	(2164 x 7.3 x .75) / 27 = 438.81 cuyd.
Attention:	<input checked="" type="checkbox"/>
Attention Comments:	Over plan quantity by 38.81 cuyd. in this location due to field conditions.

3957 remaining

178 remaining

NOTES for Roadway Aggregate CUYD (Figure 9-7):

- Payment for CUYD items shall be based on plan quantity or field measured and calculations if different than plan.
- Calculations for CUYD
= L x W x D ÷ 27
- 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

Figure 9-7: DWR Item Posting – Roadway Aggregate CUYD

- 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.

ROADBED MODIFICATION TON ITEMS

- Collect a Bill of Lading (B/L) for each delivery of Portland Cement.
 - Record the contract ID in the upper right-hand corner.
 - Check and initial all weight calculations.
 - Turn into the Office Engineer each day.
- Collect a Material Certification for each delivery of Portland Cement.
 - Record the contract ID in the upper right-hand corner.
 - Turn into the Office Engineer each day.

RECORD OF DELIVERY AND PAYMENT – PORTLAND CEMENT, LIME (COLD RECYCLE) SPREADSHEET

The Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet (Figure 9-8) is used to track the Bill of Ladings (B/Ls) for daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

- Open the Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
- Record the following:
 - **Contract Number**
 - **Item Number**
 - **Description** : Item
 - **Plan Qty.**: (tons)
 - **Inspector**: Initials or name
 - **Date**
 - **Truck No.**
 - **Trailer No.**
 - **Bill of Lading No.**
 - **Tons Delivered**
 - **Tons Waste**
 - **Tons Left in Storage**: What is left at the end of the day

Note: The amounts in Tons Left in Storage will automatically be added to the next day's Tons Used value. If there are any Tons Left in Storage at the end of the contract, they are considered waste and will be subtracted from the total Tons Used.

- **AEB No.:** AWP category
- **Remarks:** leave blank for Office Engineer comments for payment.

- Save the spreadsheet and email to the Office Engineer.

Record of Delivery & Payment -- Portland Cement, Lime (Cold Recycle)										
Contract No.:		3585			Total Tons Delivered:		149.87			
Item No.:		3050220								
Item Description:		Portland Cement								
Plan Qty. (tons):		800.00			Total Tons Used:		147.87			
Inspector	Date	Truck No.	Trailer No.	Bill of Lading No.	Tons Delivered	Tons Wasted	Tons Left in Storage	Tons Used & Paid	AEB No.	Remarks
M. Muncy	09/10/2016	122	122A	10101	26.10		3.00	23.10	01	
M. Muncy	09/12/2016	110	110A	10102	25.89			28.89	01	
M. Muncy	09/13/2016	113	113A	10104	25.10			25.10	01	
Gavin Lux	09/15/2016	111	111A	10201	24.00			24.00	03	
Chris Taylor	09/29/2016	112	112A	10242	23.98	2.00		21.98	03	
Chris Taylor	09/30/2016	124	124A	10250	24.80			24.80	03	

Figure 9-8: Record of Delivery and Payment - Portland Cement (Inspector's Entries)

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (ROADBED MOD TON ITEMS)

- 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.

Note: Refer to Steps 1 - 5 in the Daily Work Report (DWR) – Mobile Inspector (Aggregate Ton Items) Section for details on completing the Report Details, Equipment and Personnel for the roadbed mod ton item(s). The Office Engineer will complete the item postings for ton items.

- 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 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.

ROADBED MOD SQYD AND MILE ITEMS

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (ROADBED MOD SQYD & MILE ITEMS)

- 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.

Note: Refer to Steps 1 - 4 in the Daily Work Report (DWR) – Mobile Inspector (Aggregate Ton Items) Section for details on completing the Report Details, Equipment and Personnel for the roadbed mod SQYD and MILE item(s).

- Record the following required information in the 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.

Refer to Figure 9-9 and Figure 9-10 for examples of an Inspector’s roadbed mod SQYD and MILE item postings.

New Item Posting

Item:	PROCESSING FOR... ▾
Contractor:	SIERRA NEVADA C... ▾
Qty:	7466.70 SQYD
Authorized:	12,543.000 SQYD
Total Posted:	0.000 SQYD
Location:	"RW"
Station From:	452 + 00
Offset Type:	RT
Offset Dist:	
Station To:	500 + 00
Offset Type:	RT
Offset Dist:	
Measured:	
Comments:	4800 X 14 / 9 = 7466.70 SQYD

3971 remaining

NOTES for Roadbed Mod SQYD (Figure 9-9):

- Payment for SQYD items will be based on field measurements 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

Figure 9-9: DWR Item Posting – Roadbed Mod SQYD

New Item Posting	
Item:	PULVERIZE EXISTI...
Contractor:	SIERRA NEVADA C...
Qty:	.83 MILE
Authorized:	350.000 MILE
Total Posted:	0.000 MILE
Location:	"CW"
Station From:	451 + 00
Offset Type:	RT
Offset Dist:	
Station To:	495 + 00
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	4400 / 5280 = .83
	3982 remaining

NOTES for Roadbed Mod MILE (Figure 9-10):

- 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

Figure 9-10: DWR Item Posting – Roadbed Mod MILE

3. 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 – AGGREGATE AND ROADBED MOD ITEMS

- Collect all computerized load tickets from the Inspector(s). Only the last ticket is required for documentation.
- Collect all Bill of Ladings. Scan and save them to the appropriate Contract Files\Contract\08 Scale Weights\8.# BL directory. In the case of Portland Cement the delivery ticket is a combination of the Material Certification and the Bill of Lading. Scan a copy to the appropriate Contract Files\Contract\08 Scale Weights\8.# BL directory.
- Collect all Material Certifications. Scan a copy of the Bill of Lading and the Material Certification and save them to the appropriate Contract Files\Materials\03 Cert & Test Reports\3.# directory. In the case of Portland Cement the delivery ticket is a combination of the Material Certification and the Bill of Lading. Scan a copy 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 and description, load number (if applicable) - CERT (e.g., 03904 M3020130 Type 1 Class B Aggregate Base (ton) Load 1 - 25 - 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 photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review 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.

AGGREGATE TON ITEMS

RECORD OF DELIVERY – AGGREGATE BASE SPREADSHEET

The Record of Delivery – Aggregate Base spreadsheet (Figure 9-11) is used to track the daily material delivered to the job site. The completed daily spreadsheets are used as the source documents for payment.

1. Email the Record of Delivery – Aggregate Base spreadsheet to the Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Save the updated Record of Delivery – Aggregate Base spreadsheet, received in an email from the Inspector, to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.
3. Verify and update the spreadsheet in the appropriate day tab:
 - Entries match the information on the computerized load tickets.
 - Beginning and ending stations with line designations and LT, RT, or CL.
 - Totals posted to each AEB (category) add up to the total delivered for the day.
 - A time is listed every fifth entry. (Optional)
 - Waste was recorded.
 - The Remarks are appropriate and clear.
 - If the Total Tons box on the spreadsheet does not match the total tons on the final computerized load ticket enter a line through the total tons on the final ticket and record the number from the Total Tons box.
 - Record the Optimum Moisture (located on the Compaction Report Form – No. 040-069) and Actual Moisture (located on the Field Material Sieve Worksheet – Form No. 040-013) for the day.
 - Enter initials in the 'Checked against scale sheet:' box.
 - Show the calculations for moisture deductions, if applicable, in the Remarks.
4. Indicate the Dry Aggregate Pay Totals for each AEB (category). These totals will be entered in an DWR item posting in AWP.
5. Save the completed the spreadsheet to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

Record of Delivery -- Aggregate Base, Sand Blotter, Shoulder Material

Date:	11/12/2015	(mm/dd/yyyy)	Total Tons	212.77
Contract No.:	3585			
Item No.:	302 0130			
Description:	Type 1B Agg Base			
Tickets taken by:	TH	(initials)	Optimum Moisture:	5.2 %
Checked against scale sheet:	BLF	(initials)	Actual Moisture:	6.4 %

Ticket No.	Truck No.	Time	Station	Tons Delivered	Cumulative Tons	Remarks
0234	6	6:20 AM	"A" 1+00 RT	26.90	26.90	
0235	43			25.22	52.12	
0236	47			27.71	79.83	
0237	50			26.85	106.68	
0238	6	7:10 AM	"A" 9+75 RT	27.00	133.68	AEB #1 = 133.68
0239	43		"X" 10+15 RT	27.29	160.97	Change in line designation
0240	47			26.25	187.22	
0241	50	8:05 AM	"X" 18+15 RT	25.55	212.77	AEB #2 = 79.09
						0 Waste
						133.68 / [1 + (6.4% / 100)] *
						133.68 / 1.0640 = 125.64 Dry Agg
						125.64 x [1 + ((5.2% + 1%) / 100)]
						125.64 x 1.0620 = 133.43 Pay Tons AEB #1
						79.09 / [1 + (6.4% / 100)] *
						79.09 / 1.0640 = 74.33 Dry Agg
						74.33 x [1 + ((5.2% + 1%) / 100)]
						74.33 x 1.0620 = 78.94 Pay Tons AEB #2

Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13

Figure 9-11: Record of Delivery – Aggregate Base (Office Engineer Entries)

NOTES for Moisture Deduction calculations:

- Moisture tests are required per Section 304, *Portland Cement Treated Base*, of the Standard Specifications.
- If moisture was not weighed, a note explaining why will be placed on the last computerized load ticket and in the remarks on the Record of Delivery – Aggregate Base spreadsheet relaying this information.
- Moisture deduction calculations are only completed when the Actual Moisture content of aggregate base is plus one percent of the Optimum Moisture.
- If a Compaction Report is not run daily, use a Compaction Report that was completed before the date being processed.
- Moisture deductions apply to both Type A and Type B Aggregate.
- Calculations for moisture deductions are shown in Figure 9-11. The following formulas shall be used to arrive at the daily pay total of aggregate base material when a deduction is necessary.
 - Total aggregate = Dry Agg / [1 + (actual moisture% / 100)]
 - Dry Agg x [1 + ((optimum % + 1 %) / 100)] = Dry Aggregate Pay Total
 - For instance, the daily total for AEB (category) #1 is 133.68 tons. Actual Moisture is 6.4% and optimum moisture is 5.2%. The calculated quantity for payment would be: 125.64 x 1.062 = 133.43 Dry Aggregate Pay Total AEB (category) #1.
- If calculations are needed and there are more than one AEB (category) numbers involved, make sure to adjust for the water in each AEB# as shown in Figure 9-11.
- If a calculation for water deduction is needed, the total tons WILL NOT match the total tons delivered.

LAST COMPUTERIZED LOAD TICKET OF THE DAY

The last computerized load ticket is part of the official contract documentation record for payment.

1. Copy the following information from the appropriate day tab in the Record of Delivery – Aggregate Base spreadsheet (Figure 9-11) onto the last computerized load ticket of the day:
 - Beginning and Ending stations, making sure all stations are represented and match the spreadsheet.
 - Indicate line designation left, right or center line.
 - AEB (category) number and total tonnage.
 - Cumulative total is circled.
 - Waste, even if it is zero, is circled in red.
2. Have the Resident Engineer sign the ticket.
3. Scan and save the ticket into the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

DAILY WORK REPORT (DWR) – AWP (AGGREGATE TON ITEMS)

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.

INSPECTOR'S DWR

- 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
- 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.

ITEM POSTING DWR

1. Create a DWR in AWP to document the item postings for aggregate ton items:
 - In the General tab, enter a Comment related to the item posting.
 - Enter an item posting (Figure 9-12) for the aggregate ton item based on the Dry Aggregate Pay Totals for each AEB (category) from the appropriate day tab(s) in the Record of Delivery – Aggregate Base spreadsheet.

Note: These DWRs can be completed daily, weekly or bi-weekly within the two-week pay period.

Item ID	Item Description	Current Quan...	Project	Category
3020130	TYPE 1 CLASS B AGGREGATE BASE	30,480.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		133.430	266.860	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	PUR0003792 - SIERRA NEVADA CONSTRUC1	Sta "A" 10 + 00 to Sta "A" 9 + 75	133.430

Contractor ▼
SIERRA NEVADA CONSTRUCTION INC (Prime)

Quantity Posted ▼
133.430

Station From ▼
"A" 10

Station From Plus ▼
00

Offset Type ▼
RT.

Offset Distance ▼

Station To ▼
"A" 9

Station To Plus ▼
75

Offset Type ▼
RT.

Offset Distance ▼

Attention
0

Units
TON

Agency Views
None

Location ▼

Measured ▼

Material Set ▼
Base

Plan Sheet Page Number ▼

Comments ▼
See Record of Delivery on 11/12/15

Figure 9-12: Office Engineer's DWR Item Posting (Agg TON)

NOTES for Aggregate TON (Figure 9-12):

- **Station From/To:** Refer to Contract plans
- **Offset Type:** Enter the LT, RT, or CL.
- **Offset Dist:** Enter if known
- **Material Set:** Select appropriate value
- **Comments:** Reference the Record of Delivery spreadsheet.
- Sig. Fig. = .01

2. Approve the DWR.

TONNAGE ITEM SPREADSHEET BY CUTOFF DATE

The Tonnage Item Spreadsheet by Cutoff Date spreadsheet (Figure 9-13) was created as a useful tool to aid in the tracking and payment of ton items. The use of this spreadsheet is not required for ton item documentation. The spreadsheet is found in the SharePoint [Construction Forms](#) area. Refer to the [Tonnage Items Spreadsheet by Cutoff Date Instructions](#) for details on using this spreadsheet.

1. Open the Tonnage Item Spreadsheet by Cutoff Date spreadsheet.
2. Complete the spreadsheet information for the two-week period prior to the cutoff date.
3. Save the spreadsheet to the appropriate Contract Files\Contract\07 - Estimates directory.

CONTRACT NO:		
BID ITEM NO:		
PLAN QTY:		
Accum Daily Total Placed/Paid - CATG #	0	0.00
Accum Daily Total Placed/Paid - CATG #	0	0.00
Accum Daily Total Placed/Paid - CATG #	0	0.00
Accum Total PAID ALL CATG's =		0.00
Accum Daily Total WASTE ALL CATG's =		0.00
Accum Daily Total DELIVERED ALL CATG's =		0.00

CUTOFF DATE	CATG #	CATG #	CATG #	Daily Total Waste (all catg)	DAILY TOTAL PLACED/PAID	ACCUM. TOTAL PLACED/PAID	PMT #	DAILY TOTAL DELIVERED	MIX DESIGN #	COMMENTS
	TOTAL PLACED/PAID	TOTAL PLACED/PAID	TOTAL PLACED/PAID							
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		

Figure 9-13: Tonnage Item Spreadsheet by Cutoff Date Spreadsheet

AGGREGATE CUYD ITEMS

DAILY WORK REPORT (DWR) – AWP (AGGREGATE CUYD ITEMS)

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.

ROADBED MOD TON ITEM

RECORD OF DELIVERY AND PAYMENT – PORTLAND CEMENT, LIME (COLD RECYCLE) SPREADSHEET

The Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet (Figure 9-14) is used to track the Bill of Ladings (B/Ls) for daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Email the Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet to the Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Save the updated Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet, received in an email from the Inspector, to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.
3. Verify the following:
 - Entries match the information on the Bill of Ladings (B/Ls).
 - Plan Qty. (tons)
 - Waste and storage was recorded.
 - Correct AEB (category)
4. Enter the total Tons Used for each AEB (category) and the payment number in the Remarks section.
5. Save the completed the Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet, to the appropriate Contract Files\Contract\08 Daily Scale Weights\8.# directory.

Record of Delivery & Payment -- Portland Cement, Lime (Cold Recycle)										
Contract No.:	3585			Total Tons Delivered:	149.87					
Item No.:	3050220									
Item Description:	Portland Cement									
Plan Qty. (tons):	800.00			Total Tons Used:	147.87					
Inspector	Date	Truck No.	Trailer No.	Bill of Lading No.	Tons Delivered	Tons Wasted	Tons Left in Storage	Tons Used & Paid	AEB No.	Remarks
M. Muncy	09/10/2016	122	122A	10101	26.10		3.00	23.10	01	
M. Muncy	09/12/2016	110	110A	10102	25.89			28.89	01	
M. Muncy	09/13/2016	113	113A	10104	25.10			25.10	01	AEB # 1=77.09, AEB # 3=24.00
Gavin Lux	09/15/2016	111	111A	10201	24.00			24.00	03	PMT. #6
Chris Taylor	09/29/2016	112	112A	10242	23.98	2.00		21.98	03	
Chris Taylor	09/30/2016	124	124A	10250	24.80			24.80	03	AEB # 3=46.78 PMT. #6

Figure 9-14: Record of Delivery & Payment – Portland Cement (Office Engineer's Entries)

DAILY WORK REPORT (DWR) – AWP (PORTLAND CEMENT TON ITEMS)

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.

INSPECTOR'S DWR

- 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
- 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.

ITEM POSTING DWR

1. Create a DWR in AWP to document the item postings for aggregate ton items:
 - In the General tab, enter a Comment related to the item posting.
 - Enter an item posting (Figure 9-15) for the Portland Cement item based on the Tons Used for each AEB (category) from the Record of Delivery & Payment – Portland Cement, Lime (Cold Recycle) spreadsheet.

Note: These DWRs can be completed daily, weekly or bi-weekly within the two-week pay period.

Item ID	Item Description	Current Qu...	Project	Category
3050220	PORTLAND CEMENT	350.000	90644C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		133.430	133.430	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	T81009604 - Q&D CONSTRUCTION IN	Sta "A" 10 + 00 to Sta "A" 9 + 75	133.430

Contractor ▼

Q&D CONSTRUCTION INC (Prime) ▼

Quantity Posted ▼

133.430

Station From ▼

"A" 10

Station From Plus ▼

00

Offset Type ▼

RT.

Offset Distance ▼

Station To ▼

"A" 9

Station To Plus ▼

75

Offset Type ▼

RT.

Offset Distance ▼

Attention

0

Units

TON

Agency Views

None

Location ▼

Measured ▼

Material Set ▼

Concrete ▼

Plan Sheet Page Number ▼

Comments ▼

See Record of Delivery on 11/12/15

Figure 9-15: Office Engineer's DWR Item Posting (Portland Cement TON)

NOTES for Portland Cement TON (Figure 9-15):

- **Station From/To:** Refer to Contract plans
 - **Offset Type:** Enter the LT, RT, or CL.
 - **Offset Dist:** Enter if known
 - **Material Set:** Select appropriate value
 - **Comments:** Reference the Record of Delivery spreadsheet.
 - Sig. Fig. = .01
2. Approve the DWR.

PLANTMIX AND RECYCLED SURFACE ITEMS

This chapter contains the following sections:

Overview	10-3
Hot Plant/Marination Inspector's Responsibilities – Plantmix Surfacing Items	10-3
Inspector's Responsibilities – Plantmix Surfacing Items	10-7
Office Engineer's Responsibilities – Plantmix Surfacing Items	10-11
Inspector's Responsibilities – Recycled Bituminous Surface Items	10-17
Office Engineer's Responsibility – Recycled Bituminous Surface Items	10-20

OVERVIEW

All Plantmix and Recycled Bituminous Surfacing Items must be measured. Documentation examples for a few selected Plantmix and Recycled Bituminous Surfacing Items are illustrated in this chapter. 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.

Forms change periodically, go to the SharePoint [Construction Forms](#) Area for the latest form available.

HOT PLANT/MARINATION INSPECTOR'S RESPONSIBILITIES – PLANTMIX SURFACING ITEMS

- Receive a copy of the current Jobmix Formula from the Office Engineer.
- Complete the Daily Plant Inspector spreadsheet (Form No. 040-011A) and attach to the Mobile Inspector Report Details. Refer to Part 3, Forms, in the [Field Testing Guide](#) for details. Contact Construction Division Quality Assurance for assistance.
 - Make sure to record ALL Plantmix Wasted in the Report of Asphalt Quantities section of the 040-011A form.
- Collect a Bill of Lading (B/L) (Figure 10-1) for each delivery of asphalt cement and/or mineral filler.
 - Record the contract ID in the upper right-hand corner.
 - Check and initial all weight calculations.
 - Turn into the Office Engineer each day.

3608

 VVVVVV
 VVVVVV

 GRAYMONT
 Sold To: **GRAYMONT**
 Sierra Nevada Construction Inc.
 P.O. BOX 50760
 Sparks NV 89435

Graymont Western US Inc.
 Pilot Peak Plant
 13 Miles W of West Wendover, Exit 398
 P.O. Box 2520
 West Wendover NV 89883
 Ship To: 204650
 Sierra Nevada Construction Inc.
 Mustang Hot Plant
 Mustang NV 89434

Laidy
 8/21/15

BILL OF LADING - Not Negotiable

Customer#:	187173	S/L Number:	4007049	Page:	1
Customer FCB:	Mustang	Ship Date:	20-Aug-2015		
Our Order No.:	178607 SO	Broker #:	172957 FCA-COLLECT		
Related Ord No.:		Broker Name:	Customer's Truck		
Order Date:	31-Aug-2015	Zone:	Blank		
Terms:	Net 30	Delivery:	21-Aug-2015		
Shipment#:	56449026	CTO/NIR:			172957

Gross:	128940 lb 22.0"	Scale ID:	
Tare:	46180 lb 22.0"	Car/Truck #:	130
Net:	82760 lb MAX WT	Carrier:	Customer's Truck

Item	Quantity	Description
2000	41.380 TN	Chem Hydrate, Bulk, High Calcium Hydrated Lime

This is to certify that Hydrated Lime produced at Pilot Peak, NV by Graymont Western US Inc. for the above named project identified and covered by this BL conforms to the chemical and physical requirements of ASTM C1697 and AASHTO M303 Type 1 Hydrate.
 EMERGENCY TEL. NO. WHMIS: (800) 424-9300 CHEMTREC (US)
 (613) 596-6666 CANUTEC (CANADA)

Delivery Instructions:
 MUSTANG HOT PLANT

Shipper/Deputy: _____ per SA
 Carrier: _____ per [Signature]
 Consignee: _____ per [Signature]
 S/L Number 4007049

SHIPPING NOTICE-Customer Copy

Figure 10-1: Bill of Lading

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (PLANTMIX SURFACE)

- Create a DWR in Mobile Inspector (Details only) daily to document the activity being monitored at the plant. Refer to the [Mobile Inspector User Guide](#) for details on using this application.
- Record the following required information in the Report Details window (Figure 10-2):
 - Date**
 - Weather**
 - Low Temp and High Temp**
 - Attachments** : Attach the completed Daily Plant Inspector spreadsheet (Form No. 040-011A)
 - Remarks**: Record the following information:
 - Checks every hour to determine bit ratio
 - Average daily bitumen ratio, calculated from daily totals of mix, aggregate, and asphalt.
 - Quantities of material delivered to the plant, plant settings, and moisture corrections.
 - Plant production rate and plant operation times, noting any time the plant is not in operation and the reason why.
- Complete a final review of the DWR, lock the report, and Sync Data.

Note: When a Mobile Inspector DWR is completed and locked the information is uploaded into an AWP DWR where it is reviewed and generated.

The screenshot shows a 'Report Details' window with the following fields and content:

- Date:** Tue, 11/19/2019
- Weather:** 02
- Low Temp:** 65
- High Temp:** 99
- Rainfall Amt:** (empty field)
- Attachments:** (Camera and Paperclip icons)
- Remarks:** GENERAL

Remarks Content:

```
Hot Plant Inspector: daytime
Production of type 2C plantmix from mix
design #BF 16-48, JMF #02. Started plant
at 1:25pm. Stopped plant at 3:13pm (silo
full). Loaded last truck at 3:35pm.
Cleaned out drum at 3:45pm.
8 trucks with double belly dump trailers
hauled the material.
14 loads were sent to jobsite.
Total RAP used= 84.00 tons
Total oil used = 19.43 tons
(tank stick showed 18.59 tons)
bitumen ratio= 3.81%.
Total baghouse fines= 9.29 tons
Baghouse fines percentage was 1.82%.
3504 remaining
```

Figure 10-2: DWR Report Detail Window (Hot Plant/Marination Inspector)

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.

RECORD OF DELIVERY – ASPHALT CEMENT, MINERAL FILLER SPREADSHEET

The Record of Delivery – Asphalt Cement, Mineral Filler spreadsheet (Figure 10-3) is used to track the asphalt cement and mineral filler that was delivered to the project. A separate spreadsheet is used for each type of material. The spreadsheets are used as part of the source documents for payment.

1. Open the Record of Delivery – Asphalt Cement, Mineral Filler spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Record the following information from the B/L into the spreadsheet (Figure 10-3):

- **Contract Number**
 - **Description:** Material type
 - **Inspector:** Initials or name
 - **Date**
 - **Bill of Lading No.**
 - **Truck No.**
 - **Trailer No.** (if applicable)
 - **Tons**
3. Email the completed spreadsheet to the Office Engineer at the end of each day.

Record of Delivery -- Asphalt Cement, Mineral Filler

Contract No.: 3583 Total Tons: 154.78
 Description: PG 76-NV

Inspector	Date	Bill of Lading No.	Truck No.	Trailer No.	Tons	Cumulative Tons	Remarks
NPW	08/06/2016	56007	12380	125	22.55	22.55	
NPW	08/06/2016	56015	1952520	1295	23.72	46.27	
TJL	08/07/2016	56020	12380	125	22.89	69.16	
TJL	08/07/2016	56028	2340	4852	23.09	92.25	
TJL	08/07/2016	56040	1952520	1295	24.66	116.91	
NPW	08/08/2016	56045	1952520	1295	13.96	130.87	
NPW	08/08/2016	56549	12380	125	23.91	154.78	

Figure 10-3: Record of Delivery – Asphalt Cement, Mineral Filler

PLANT RECORD SPREADSHEET

The Plant Record spreadsheet (Figure 10-4) is used to track the materials samples taken each day. Refer to Subsection 106.04, *(Control of Material) Samples and Tests*, in the Standard Specifications for details.

1. Open the Plant Record spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Record the following information (Figure 10-4):
 - **Sample No.**
 - **Date**
 - **Time:** Mandatory on Plant Record spreadsheet
 - **Tons Represented**
 - **Inspector's initials**
 - **Remarks:** Add the daily total of wet tons placed
3. Email completed spreadsheet to the Office Engineer or the Crew Lab's Supervisor/Lead Tester at the end of each day. Each crew will

Plant Record

Contract No.:	3583	Total Tons:	127.00
Asphalt Type:	PG 76-22NV		

Sample No.	Date (mm/dd/yyyy)	Time	Tons Represented	Inspector (initials)	Remarks
1	08/04/2016	6:00 AM	21.00	TMH	
2	08/04/2016	2:00 PM	21.00	TMH	8/4 - 1078 wet tons placed
3	08/05/2016	6:05 AM	25.00	TMH	8/5 - 900 wet tons placed
4	08/06/2016	6:00 AM	25.00	TMH	8/6 - 850 wet tons placed
5	08/07/2016	5:30 AM	17.50	TMH	
6	08/07/2016	12:00 PM	17.50	TMH	8/7 - 998 wet tons placed

Figure 10-4: Plant Record Spreadsheet

INSPECTOR'S RESPONSIBILITIES – PLANTMIX SURFACING 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).
- To help identify paving items, use the Summary of Quantities located in the Contract plans.
- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Complete the Daily Paving Inspector spreadsheet (Form No. 040-011B) and attach to the Mobile Inspector Report Details. It is important that all information is accurate to what is shown in the Record of Delivery – Plantmix Surface spreadsheet for that day. Refer to Part 3, Forms, in the [Field Testing Guide](#) for details. Contact Construction Division Quality Assurance for assistance.

Note: Make sure to record ALL Plantmix Wasted on the 040-011B form.

- Retrieve all computerized load tickets and review for the following information:
 - Date
 - Material source
 - Material type
 - Gross, tare, net weights, and tons
 - Cumulative total tons
 - Time
 - Contract Number
 - Pit Number
- Turn in ALL computerized load tickets into the Office Engineer each day.

RECORD OF DELIVERY – PLANTMIX SURFACE SPREADSHEET

The Record of Delivery – Plantmix Surface spreadsheet is used to track daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Open the Record of Delivery – Plantmix Surface spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Record the following information from the computerized load tickets onto the appropriate day tab in the spreadsheet (Figure 10-5):
 - **Date**
 - **Contract Number**
 - **Item Number**
 - **Description:** Item
 - **Tickets Taken By:** Initials or name
 - **Ticket Number**
 - **Truck Number**
 - **Time:** Every fifth load (Optional)
 - **Station:** Beginning and Ending Station for the day and every change in Line Designation. Each station listed must have a line designation and LT, RT, or CL.
 - **Temperature**
 - **Tons Delivered:** From computerized load ticket, indicate any waste at the end of the day.
 - **Remarks:** Explanations of waste. State the total tons per AEB (category).
3. Email the completed spreadsheet to the Office Engineer at the end of each day.

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:		(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
<div style="display: flex; justify-content: space-between; align-items: center;"> ← ... Day 83 Day 84 Day 85 Day 86 Day 87 Day 88 Day 89 Day90 (+) </div>							

Figure 10-5: Record of Delivery – Plantmix Surface

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (PLANTMIX SURFACE)

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 – N/A for Plantmix Ton Items. The item posting will be completed by the Office Engineer in AWP.
 - Equipment – type, number and hours used
 - Personnel – title and hours
2. Record the following required information in the Report Details window (Figure 10-6):
 - **Date**
 - **Weather**
 - **Low Temp and High Temp**

- **Attachments:** Attach the completed Daily Paving Inspector spreadsheet (Form No. 040-011B)
- **Remarks:** Select the appropriate Remark Type. Verify with the Resident Engineer on what information is required.

Figure 10-6: DWR Report Detail Window

- Record the following required information in the New Equipment window (10-7 and 10-8):
 - **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.

Figure 10-7: DWR Equipment Entry



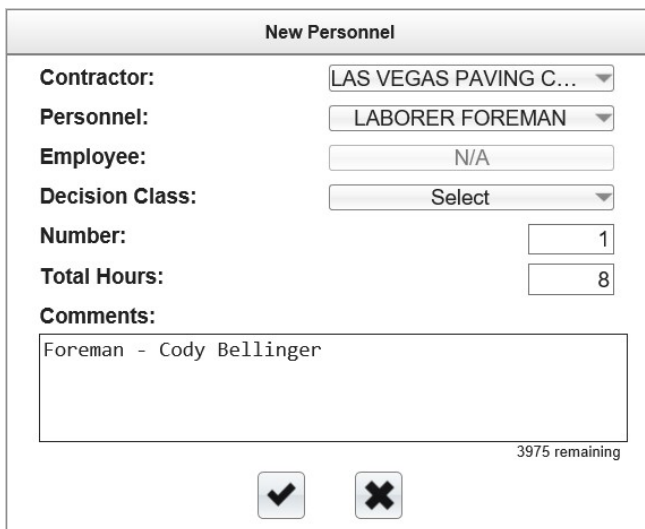
Add Equipment

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 10-8: DWR Equipment List

4. Record the following required information in the New Personnel window (Figure 10-9 and Figure 10-10):
- **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: LAS VEGAS PAVING C...
Personnel: LABORER FOREMAN
Employee: N/A
Decision Class: Select
Number: 1
Total Hours: 8
Comments:
 Foreman - Cody Bellinger

3975 remaining



 

Figure 10-9: DWR Personnel Entry







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

Figure 10-10: 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 – PLANTMIX SURFACING ITEMS

- Save and file the Mix Design(s) to the appropriate Contract Files\Contract\08 Scale Weights\8.# MD directory.
- Collect all Bill of Ladings (B/Ls). Scan and save them to the appropriate Contract Files\Contract\08 Scale Weights\8.# BL directory.
 - If the marination is being done for more than one contract make copies of the B/Ls and send them to the other Resident Engineers for the remainder of the project.

Note: Each contract will be listing the same B/Ls. Communicate with the other office personnel and compare what has been used on each contract to assure no B/L is being used more than once.

- Collect all Material Certifications. Scan a copy of the Bill of Lading and the Material Certification 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 and description, load number (if applicable) - CERT (e.g., 03904 M3020130 Type 2 Class A Aggregate Base (CUYD) Load 1 - 25 - CERT.pdf). The Material Code Name and description is found in the NDOT Power BI, AWP Reports, Certification Tracking report.
- If the marination is being done for more than one contract make copies of Material Certifications and send them to the other Resident Engineers for the remainder of the project.
- 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.
- Collect all computerized load tickets from the Inspector(s). Only the last ticket is required for documentation.
- The Transmittal for Test Samples and Certifications (Form No. 020-018) shall be completed by the Office Engineer for the Materials Certifications. If there are any questions concerning this form, contact the Materials Division.
- Save plantmix surfacing item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Distribute executed copies of Change Orders to Inspectors.

RECORD OF DELIVERY – ASPHALT CEMENT, MINERAL FILLER SPREADSHEET

The Record of Delivery – Asphalt Cement, Mineral Filler spreadsheet (Figure 10-4) is used to track the asphalt cement and mineral filler that was delivered to the project. A separate spreadsheet is used for each type of material. The spreadsheet is used as part of the source documents for payment.

1. Email the Record of Delivery –Asphalt Cement, Mineral Filler spreadsheet to Hotplant/Marination Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Review the entries against the B/Ls.
3. Save the updated Record of Delivery –Asphalt Cement, Mineral Filler spreadsheet to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

PLANT RECORD SPREADSHEET

The Plant Record spreadsheet (Figure 10-4) is used to track the materials samples taken each day. Refer to Subsection 106.04, (*Control of Material) Samples and Tests*, in the Standard Specifications for details.

1. Email the Plant Record spreadsheet to the Hotplant/Marination Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Coordinate with the individual(s) who created the AWP Sample Records for each sample taken to obtain the Sample Record IDs. Enter the Sample Record IDs into the appropriate Sample No. (Figure 10-11) This is important when calculating liquidated damages.
3. Save the updated Plant Record spreadsheet to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

Plant Record

Contract No.:	3583	Total Tons:	127.00
Asphalt Type:	PG 76-22NV		

Sample No.	Date (mm/dd/yyyy)	Time	Tons Represented	Inspector (initials)	Remarks
1- KMcDan20160805091026	08/04/2016	6:00 AM	21.00	TMH	
2- KMcDan20160805091135	08/04/2016	2:00 PM	21.00	TMH	8/4 - 1078 wet tons placed
3- KMcDan20160806073029	08/05/2016	6:05 AM	25.00	TMH	8/5 - 900 wet tons placed
4- KMcDan20160807092854	08/06/2016	6:00 AM	25.00	TMH	8/6 - 850 wet tons placed
5- KMcDan20160808103817	08/07/2016	5:30 AM	17.50	TMH	
6- KMcDan20160808110528	08/07/2016	12:00 PM	17.50	TMH	8/7 - 998 wet tons placed

Figure 10-11: Plant Record Spreadsheet

RECORD OF DELIVERY – PLANTMIX SURFACE SPREADSHEET

The Record of Delivery – Plantmix Surface spreadsheet (Figure 10-12) is used to track daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Email the Record of Delivery – Plantmix Surface spreadsheet to the Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Save the updated Record of Delivery – Plantmix Surface spreadsheet to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.
3. Review the entries in the appropriate day tabs against the computerized load tickets. Ensure that all waste is explained in the Remarks.
4. Enter the Plant Inspectors waste from the Report of Asphalt Quantities on Form No. 040-011A. Provide an explanation for any waste in the remarks section.
5. Enter initials in the Checked against scale sheet box and save the file.
6. Save the completed spreadsheet (Figure 10-12) to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory and email a copy back to the inspector.

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
<div style="display: flex; justify-content: space-between; align-items: center;"> ← ... Day 83 Day 84 Day 85 Day 86 Day 87 Day 88 Day 89 Day 90 → </div>							

Figure 10-12: Record of Delivery – Plantmix Surface

DAILY PLANT REPORT OF ASPHALT MIXTURES FORMS

The Daily Plant Inspector form (Form No. 040-011A) and the Daily Paving Inspector form (Form No. 040-011B) are filled out by the Hotplant and Street Inspectors and are attached to their DWRs for review. Refer to Part 3, Forms, in the [Field Testing Guide](#) for details. Contact Construction Division Quality Assurance for assistance with this form.

1. Email the Daily Plant Inspector form (Form No. 040-011A) to the Hotplant/Marination Inspector daily.
2. Email the Daily Paving Inspector form (Form No. 040-11B) to the Paving Inspector daily.
3. Confirm that all the information is correct by viewing the forms in the DWR Attachments.
4. Compare the stations on the Daily Paving Inspector form with those on the Record of Delivery – Plantmix spreadsheet.

Note: If the jobmix formula is being used on multiple contracts for different Resident Engineers, copies of the completed Daily Plant Inspector forms must be made and emailed to the other Resident Engineers for the remainder of the contracts. This does not relieve any of the other documentation requirements.

LAST COMPUTERIZED LOAD TICKET OF THE DAY

The last computerized load ticket is part of the official contract documentation record for payment.

1. Copy the following information from the appropriate day tab in the Record of Delivery – Plantmix Surface spreadsheet (Figure 10-12) onto the last computerized load ticket of the day:
 - Beginning and Ending stations, making sure all stations are represented and match the spreadsheet.
 - Indicate line designation left, right or center line.
 - AEB (category) number and total tonnage
 - Waste from the Hotplant/Marination Inspector and the Street Inspector, even if it is zero, and circle in red.
2. Have the Resident Engineer sign the ticket.
3. Have the person checking the information on the ticket initial it.
4. Scan and save the ticket into the appropriate Contract Files\Contract\08 Scale Weights\8.# Scale Tic MD directory.

BILL OF LADING CALCULATION SHEET

The Bill of Lading Calculation Sheet (Figure 10-13) verifies there are enough Bill of Ladings (B/Ls) to cover the quantities placed on the contract based off the mix design (only). Go to the SharePoint Construction Forms, [Area: Construction Admin - Payment Forms](#) Area for the latest form available.

1. Complete the areas in Blue every two weeks, after Bill of Lading (B/Ls) are collected and recorded on the Record of Delivery Asphalt Cement spreadsheet, and the computerized load tickets are collected and recorded on day tabs of the Record of Delivery – Plantmix Surface spreadsheet.
2. Save the completed Bill of Lading Calculation Sheet to the appropriate Contract Files\Contract\08 Scale Weights\8.# Scale Tic MD directory.

State of Nevada
Department of Transportation
BILL OF LADING CALCULATION SHEET

CONTRACT NO. DATE MATERIAL

MIX DESIGN NO. %RAP The %RAP, %OIL and %M.F. are taken from the applicable mix design.

(% OIL + % M.F.) + 1 = COMBINED % FOR CALCULATING NOTE: When adding in RAP, use the Bin Percentage from the bottom of the mix design sheet.

TOTAL WET TONS PRODUCED:

TOTAL WET TONS PRODUCED: + = DRY TONS The Total Wet Tons Delivered amount comes from the Record of Delivery – Plantmix Surface spreadsheet. Add up the Total Tons from each of the day tabs for the two-week period. Do not deduct Waste.

X = TOTAL ASPHALT TONS

X (1 -) X = MINERAL FILLER TONS

TOTAL BILL OF LADINGS DELIVERED FOR ASPHALT CEMENT: TONS The Total B/Ls Delivered for Asphalt Cement and Mineral Filler come from the Record of Delivery Asphalt Cement spreadsheet. Add up the Cumulative Tones for the two-week period.

TOTAL BILL OF LADINGS DELIVERED FOR MINERAL FILLER: TONS

IN THE BOXES ABOVE, PLACE THE ACCUM. TOTAL SHOWN ON THE RECORD OF DELIVERY FOR THE ASPHALT CEMENT AND MINERAL FILLER.
COMPARE THESE TOTALS TO THE CALCULATED ASPHALT AND MINERAL FILLER SHOWN ON THIS FORM.

THIS SHEET IS USED TO ASSURE THAT ENOUGH ASPHALT AND MINERAL FILLER BILL OF LADINGS ARE COLLECTED TO COVER WHAT WAS DELIVERED. DO NOT DEDUCT WASTE OR STORAGE.

* If this mix design does not contain RAP, enter 0 in the box next to "%RAP".
* When RAP is included use the bitumen ratio added as shown on the mix design. Do not use the bitumen ratio total.
* The percentage of RAP is taken from the Bin Percentages total RAP %, not the Bitumen Ratio From RAP %.

ENTERED BY:

CHECKED BY:

Figure 10-13: Bill of Lading Calculation Sheet

Note: It is the responsibility of the Resident Engineer to work with the contractor to have extra and/or missing B/Ls submitted. These B/Ls must be entered into the Record of Delivery Asphalt Cement spreadsheet.

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.

INSPECTOR'S DWR

- 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
- 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.

ITEM POSTING DWR

1. Create a DWR in AWP to document the item postings for the ton items:
 - In the General tab, enter a Comment related to the item posting.
 - Enter an item posting (Figure 10-14) for the ton item based on the Total Tons for each AEB (category) from the appropriate day tab(s) in the Record of Delivery – Plantmix Surface spreadsheet.

Note: These DWRs can be completed daily, weekly or bi-weekly within the two-week pay period.

Item ID	Item Description	Current Qua...	Project	Category
4030120	PLANTMIX OPEN-GRADED SURFACING (1/2-INCH	5,480.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		4,373.760	4,373.760	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	PUR0003792 - SIERRA NEVADA CONSTRUC	1) "RNT" 20+55 to "RNT" 45+14 RT.2) "TW	4,373.760

Contractor ▼ SIERRA NEVADA CONSTRUCTION INC (Prime)	Attention 0
Quantity Posted ▼ 4,373.760	Units TON
Station From ▼ []	Agency Views None
Station From Plus ▼ []	Location ▼ 1) "RNT" 20+55 to "RNT" 45+14 RT. 2) "TW" 56+10 to "TW" 69+20.21 RT. 3) "NW" 10+12 to "NW" 25+16 10.1 T
Offset Type ▼ []	Measured ▼ <input type="checkbox"/>
Offset Distance ▼ []	Material Set ▼ Plantmix
Station To ▼ []	Plan Sheet Page Number ▼ []
Station To Plus ▼ []	Comments ▼ 1) 3/13/17 = 2459.00 2) 3/14/17 = 410.21 3) 3/15/17 = 1504.55. See Record of Delivery Spreadsheet-Plantmix Surface
Offset Type ▼ []	
Offset Distance ▼ []	

Figure 10-14: Office Engineer's DWR Item Posting (Plantmix Ton Item)

NOTES for Plantmix TON (Figure 10-14):

- **Location:** Enter the Line Designation and LT, RT, or CL.
 - **Comments:** Reference the Record of Delivery spreadsheet amounts.
 - **Material Set:** Select appropriate value.
 - **Sig. Fig.** = .01
2. Approve the DWR.

TONNAGE ITEM SPREADSHEET BY CUTOFF DATE

The Tonnage Item Spreadsheet by Cutoff Date spreadsheet (Figure 10-15) was created as a useful tool to aid in the tracking and payment of ton items. The use of this spreadsheet is not required for ton item documentation. The spreadsheet is found in the SharePoint Construction Forms, [Area: Construction Admin - Payment Forms](#) Area. Refer to the [Tonnage Items Spreadsheet by Cutoff Date Instructions](#) for details on using this spreadsheet.

1. Open the Tonnage Item Spreadsheet by Cutoff Date spreadsheet.
2. Complete the spreadsheet information for the two-week period prior to the cutoff date.
3. Save the spreadsheet to the appropriate Contract Files\Contract\07 Estimates directory.

CONTRACT NO: _____										
BID ITEM NO: _____										
PLAN QTY: _____										
Accum Daily Total Placed/Paid - CATG #		0		0.00						
Accum Daily Total Placed/Paid - CATG #		0		0.00						
Accum Daily Total Placed/Paid - CATG #		0		0.00						
Accum Total PAID ALL CATG's =				0.00						
Accum Daily Total WASTE ALL CATG's =				0.00						
Accum Daily Total DELIVERED ALL CATG's =				0.00						
CUTOFF DATE	CATG #	CATG #	CATG #	Daily Total Waste (all catg)	DAILY TOTAL PLACED/PAID	ACCUM. TOTAL PLACED/PAID	PMT #	DAILY TOTAL DELIVERED	MIX DESIGN #	COMMENTS
	TOTAL PLACED/PAID	TOTAL PLACED/PAID	TOTAL PLACED/PAID							
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		
#####					0.00	0.00		0.00		

Figure 10-15: Tonnage Item Spreadsheet by Cutoff Date Spreadsheet

INSPECTOR'S RESPONSIBILITIES – RECYCLED BITUMINOUS SURFACE 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).
- To help identify paving items use the Summary of Quantities located in the Contract plans.
- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item reference the Change Order number in the DWR item posting remarks.

- Collect a Bill of Lading (B/L) for each delivery of Lime (Cold Recycle).
 - Record the contract ID in the upper right-hand corner.
 - Check and initial all weight calculations.
 - Turn into the Office Engineer each day.

RECORD OF DELIVERY AND PAYMENT – PORTLAND CEMENT, LIME (COLD RECYCLE) SPREADSHEET

The Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet (Figure 10-16) is used to track the Bill of Ladings (B/Ls) for daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Open the Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Record the following (Figure 10-16):
 - **Contract Number**
 - **Item Number**
 - **Description:** Item
 - **Plan Qty.:** (tons)
 - **Inspector:** Initials
 - **Date**
 - **Truck No.**
 - **Trailer No.**
 - **Bill of Lading No.**
 - **Tons Delivered**
 - **Tons Wasted**
 - **Tons Left in Storage:** at the end of the day.

Note: The amounts in Tons Left in Storage will automatically be added to the next day's Tons Used value. If there are any Tons Left in Storage at the end of the contract, they are considered waste and will be subtracted from the total Tons Used.

- **AEB No:** category
 - **Remarks:** leave blank for Office Engineer comments for payment.
3. Email the completed spreadsheet to the Office Engineer.

Record of Delivery & Payment -- Portland Cement, Lime (Cold Recycle)										
Contract No.:		3585			Total Tons Delivered:		98.60			
Item No.:		4040140								
Item Description:		Lime (Cold Recycle)								
Plan Qty. (tons):		420.00			Total Tons Used:		79.60			
Inspector	Date	Truck No.	Trailer No.	Bill of Lading No.	Tons Delivered	Tons Wasted	Tons Left in Storage	Tons Used & Paid	AEB No.	Remarks
CAW	02/14/2017	45	492	11017	25.15	2.00	0.00	23.15	9	
CAW	02/15/2017	390	391	11121	26.05	5.00	0.00	21.05	9	
CAW	02/18/2017	65	65A	11128	24.15	0.00	0.00	24.15	9	
CAW	02/19/2017	4	4A	11129	23.25	2.00	10.00	11.25	9	

Figure 10-16: Record of Delivery & Payment – Lime (Inspector’s Entries)

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (LIME - TON)

- 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.

Note: Refer to Steps 1 through 3 in the Daily Work Report (DWR) – Mobile Inspector (Plantmix Surface) section, in this chapter, for details on completing the Report Details, Equipment and Personnel for the lime item. The Office Engineer will complete these item postings.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (RECYLED BITUMINOUS - SQYD)

1. Create a DWR in Mobile Inspector daily to document the activity being monitored. to the [Mobile Inspector User Guide](#) for details on using this application.

Note: Refer to Steps 1 through 4 in the Daily Work Report (DWR) – Mobile Inspector (Plantmix Surface) section, in this chapter, for details on completing the Report Details, Equipment and Personnel for the recycled bituminous items.

2. Record the following required information in the New Item Postings window (Figure 10-17):
 - **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.

New Item Posting	
Item:	RECYCLED BITUMINO...
Contractor:	SIERRA NEVADA CON...
Qty:	5539.60 SQYD
Authorized:	8,765.430 SQYD
Total Posted:	0.000 SQYD
Location:	"TW"
Station From:	116 + 30
Offset Type:	RT
Offset Dist:	
Station To:	156 + 75
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	3561.2 X 14 / 9 = 5539.60 sqyd. 3968 remaining
Attention:	<input checked="" type="checkbox"/>
Attention Comments:	Length does not equal distance between stations due to an Island at "TW" 125 + 10 to "TW" 129 + 93.80 154 remaining

NOTES for Recycled Bituminous SQYD (Figure 10-17):

- Payment for SQYD items will be based on field measurements and calculations.
- Calculation for SQYD = $L \times W \div 9$
- 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

Figure 10-17: DWR Item Posting – Recycled Bituminous SQYD

3. 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 RESPONSIBILITY – RECYCLED BITUMINOUS SURFACE ITEMS

- Collect all Bill of Ladings. Scan and save them to the Contract Files\Contract\08 Scale Weights\8.# Lime BL directory.
- Collect all Material Certifications. Scan a copy of the Bill of Lading and the Material Certification 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 and description, load number (if applicable) - CERT (e.g., 03904 M4040140 Lime (Cold Recycle) - 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 item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review 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 2017-03-19 KMM).
- Distribute executed copies of Change Ordersto Inspectors.

RECORD OF DELIVERY AND PAYMENT – PORTLAND CEMENT, LIME (COLD RECYCLE) SPREADSHEET

The Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet (Figure 10-18) is used to track the Bill of Ladings (B/Ls) for daily material delivered to the job site. The spreadsheet is used as part of the source documents for payment.

1. Email the Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet to the Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Save the updated Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet, received in an email from the Inspector, to the appropriate Contract Files\Contract\08 Scale Weights\8.# Lime directory.
3. Verify the following:
 - Entries match the information on the Bill of Ladings (B/Ls).
 - Plan Qty. (tons)
 - Waste and storage was recorded.
 - Correct AEB (category)
4. Enter the total Tons Used for each AEB (category) and the payment number in the Remarks section.
5. Save the completed Record of Delivery and Payment – Portland Cement, Lime (Cold Recycle) spreadsheet, to the appropriate Contract Files\Contract\08 Scale Weights\8.# Lime directory.

Record of Delivery & Payment -- Portland Cement, Lime (Cold Recycle)										
Contract No.:		3585			Total Tons Delivered:		98.60			
Item No.:		4040140								
Item Description:		Lime (Cold Recycle)								
Plan Qty. (tons):		420.00			Total Tons Used:		79.60			
Inspector	Date	Truck No.	Trailer No.	Bill of Lading No.	Tons Delivered	Tons Wasted	Tons Left in Storage	Tons Used & Paid	AEB No.	Remarks
CAW	02/14/2017	45	492	11017	25.15	2.00	0.00	23.15	9	
CAW	02/15/2017	390	391	11121	26.05	5.00	0.00	21.05	9	
CAW	02/18/2017	65	65A	11128	24.15	0.00	0.00	24.15	9	
CAW	02/19/2017	4	4A	11129	23.25	2.00	10.00	11.25	9	Pmt. 12 = 79.60 AEB # 9

Figure 10-18: Record of Delivery & Payment – Lime (Cold Recycle) (Office Engineer’s Entries)

DAILY WORK REPORT (DWR) AWP (LIME - TON)

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.

INSPECTOR'S DWR

- 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
- 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.

ITEM POSTING DWR

1. Create a DWR in AWP to document the item postings for Portland Cement and Lime ton items:
 - In the General tab, enter a Comment related to the item posting.
 - Enter an item posting (Figure 10-19) for the lime (cold recycle) item based on the Tons Used for each AEB (category) from the Record of Delivery & Payment – Portland Cement, Lime (Cold Recycle) spreadsheet.

Note: *These DWRs can be completed daily, weekly or bi-weekly within the two-week pay period.*

2. Approve the DWR.

Item ID	Item Description	Current Qua...	Project	Category
4040140	LIME (COLD RECYCLE)	654.560	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		79.600	79.600	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	PUR0003792 - SIERRA NEVADA CONSTRUC	Sta "TW" 116 + 30 to Sta "TW" 117 + 00	79.600

Contractor ▼
 SIERRA NEVADA CONSTRUCTION INC (Prime)

Quantity Posted ▼
 79.600

Station From ▼
 "TW" 116

Station From Plus ▼
 30

Offset Type ▼
 RT

Offset Distance ▼

Station To ▼
 "TW" 117

Station To Plus ▼
 00

Offset Type ▼
 RT

Offset Distance ▼

Attention
 0

Units
 TON

Agency Views
 None

Location ▼

Measured ▼

Material Set ▼
 Cold Recycle

Plan Sheet Page Number ▼

Comments ▼
 See Record of Delivery and Payment-Portland Cement, Lime (Cold Recycle) 2/14/17 through 2/19/17

Figure 10-19: Office Engineer’s DWR Item Posting (Lime (Cold Recycle) Ton Item)

NOTES for Lime (Cold Recycle) TON (Figure 10-19):

- **Station From/To:** Refer to Contract plans
- **Offset Type:** Enter the LT, RT, or CL.
- **Offset Dist:** Enter if known
- **Material Set:** Select appropriate value (if applicable)
- **Comments:** Reference the Record of Delivery spreadsheet.
- **Sig. Fig. = .01**

DAILY WORK REPORT (DWR) AWP (RECYCLED BITUMINOUS - SQYD)

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.

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)
 - 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.

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.

LIQUID AND EMULSIFIED ASPHALT ITEMS

This chapter contains the following sections:

Overview	11-3
Inspector's Responsibilities – Liquid/Emulsified Asphalt Items	11-4
Office Engineer's Responsibilities – Liquid/Emulsified Asphalt Items	11-13

OVERVIEW

All Liquid and Emulsified Asphalt Items have a unit of measure (UOM) of tons or square yards. All Liquid and Emulsified Asphalt Items must be measured. Documentation examples for a few selected Liquid and Emulsified Asphalt 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.

Theoretical application rates are NOT permitted to be used to determine the total tons placed for payment of all Liquid and Emulsified Asphalt items.

Forms change periodically, go to the SharePoint [Construction Forms](#) area for the latest form available.

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

LIQUID ASPHALTS

Liquid Asphalts are typically used for prime coats and curing seals. These items are typically paid for by the square yard.

- Liquid asphalts are also referred to as cut-back asphalts and include MC-70, MC-250, etc.
- Liquid asphalts will be documented in the Record of Delivery—Liquid Asphalt and the Liquid/Emulsified Asphalt Application and Payment spreadsheets.
- When another material has been approved for use in lieu of the liquid asphalt, there may be different application rates and dilution factors that must be documented. Make sure to check the contract's Special Provisions and/or the manufacturer's recommendation to assure proper application.
- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Information on Liquid Items are found on the Summary of Quantities sheets in the Contract plans.
- There are 3 ways to document the application of Liquid Asphalt:
 - Total delivery (Bill of Lading)
 - Weigh Back - Weighing the trucks over the Contractor's scales
 - Gallon Meter - List the following in the Remarks box of the posting tab in the Inspector's DWR.
 - Beginning meter reading
 - Ending meter reading
 - Gallons used

Note: *NDOT is no longer applying a Temperature Volume Correction factor.*

- In no case will the Liquid Asphalt pay quantity exceed the total certified asphalt delivered less any material wasted or left in storage.

EMULSIFIED ASPHALTS

Emulsified Asphalts are typically used for tack coats, seal coats, chips seals and cold in place recycle. These items can be paid for by square yard, tons or they may be incidental to other items of work.

- Emulsified asphalts (CMS-2S, SS-1h, LMCRS-2H, etc.) will be documented in the Record of Delivery—Liquid Asphalt and the Liquid/Emulsified Asphalt Application and Payment spreadsheets.
- It is the Inspector's responsibility to ensure proper dilution and application rates regardless of the item's UOM.
- Emulsified asphalt is delivered either diluted or undiluted.
 - If the emulsified asphalt is delivered diluted, verify the proper dilution ratios are on the bill of lading.
 - If the emulsified asphalt is delivered undiluted, use the Oil and Water Check Sheet to verify the correct gallons of water were added.

Note: The Liquid/Emulsified Asphalt Oil and Water Check Sheet is designed to assist the inspector in determining the correct pounds/tons of water added to the oil to get the approved oil/water ratio. Refer to the Liquid/Emulsified Asphalt Oil and Water Check Sheet in the Fourth tab of the Liquid/Emulsified Asphalt Application and Payment spreadsheet (Figure 11-7).

- Once proper dilution is obtained for the specified application, measurement for payment and application rate can proceed.
- There are 3 ways to document the application of Emulsified Asphalt:
 - Total delivery (Bill of Lading)
 - Weigh Back - Weighing the trucks over the Contractor's scales
 - Gallon Meter - List the following in the Remarks box of the posting tab in the Inspector's DWR.
 - Beginning meter reading
 - Ending meter reading
 - Gallons used

Note: NDOT is no longer applying a Temperature Volume Correction factor.

- In no case will the emulsified asphalt pay quantity exceed the total certified asphalt delivered less any material wasted or left in storage.

INSPECTOR'S RESPONSIBILITIES – LIQUID/EMULSIFIED ASPHALT ITEMS

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders
- Collect a Bill of Lading (B/L) (Figure 11-20) for each delivery of liquid/emulsified asphalt.
 - Record the Contract ID in the upper right-hand corner.
 - Check and initial all weight calculations.
 - Turn into the Office Engineer each day.

Note: Each B/L for emulsified asphalts must show the weight of raw asphalt separately from the water added or show the mix percent. If the emulsified asphalt is delivered without this information on the B/L, the Resident Engineer shall inform the contractor that it is unacceptable, and any application shall be done without payment. The B/L must plainly state whether the material was delivered diluted or undiluted. The Inspector is responsible for documenting (on the B/L) the weight of raw asphalt separately from the water added.

- Collect a Material Certification (Figure 11-22) for each delivery of Liquid and Emulsified asphalt.
 - Record the Contract ID in the upper right-hand corner if you receive a paper copy.
 - Turn into the Office Engineer each day.
- It is the Inspector's responsibility to ensure proper dilution and application rates regardless of the item's UOM or payment.

RECORD OF DELIVERY—LIQUID/EMULSIFIED ASPHALT SPREADSHEETS

The Record of Delivery – Liquid Asphalt and Emulsified Asphalt (Diluted/Undiluted) spreadsheets (Figure 11-1 through Figure 11-3) are used to track the asphalt delivered to the job site. Separate spreadsheets will be provided for liquid asphalts and emulsified asphalts (dilute)/(undiluted). The spreadsheets are used as part of the source documents for payment.

1. Open the Liquid/ Emulsified Asphalt Application and Payment spreadsheet received in an email from the Office Engineer. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.

- Select the appropriate Record of Delivery tab at the bottom of the spreadsheet and record the following:
 - Inspector's initials
 - Date delivered (which may not be the same date the load was applied)
 - Truck No.
 - Trailer No. (if applicable)
 - Bill of Lading No.
 - Tons delivered
 - Remarks
- Save the spreadsheet(s) and email to the Office Engineer.

Record of Delivery -- Liquid Asphalt							
Contract No.:	3583			Total Tons:	9.83		
Item No.:	4060100						
Description:	MC-70						
Plan Quantity:	325.00 tons						
Inspector (Initials)	Date (mm/dd/yyyy)	Truck No.	Trailer No.	B/L No.	Tons Delivered	Cumulative Tons	Remarks
TMH	06/07/2020	182025		46401	3.39	3.39	
TMH	07/08/2020	182025		47521	6.44	9.83	
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet							

Figure 11-1: Record of Delivery – Liquid Asphalt

Record of Delivery -- Emulsified Asphalt, Diluted							
Contract No.:	3583			Total Tons:	10.57		
Item No.:	4060180						
Description:	SS-1H (Diluted)						
Plan Quantity:	48.00 tons						
Inspector (Initials)	Date (mm/dd/yyyy)	Truck No.	Trailer No.	B/L No.	Tons Delivered	Cumulative Tons	Remarks
TMH	03/18/2020	56781	635	5594	10.57	10.57	Delivered and stored in contractors yard
							Item will be mixed to 60/40 by contractor
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet							

Figure 11-2: Record of Delivery – Emulsified Asphalt, Diluted

Record of Delivery -- Emulsified Asphalt, Undiluted							
Contract No.:	3583			Total Tons:	21.15		
Item No.:	4050120						
Description:	SS-1H (Raw)						
Plan Quantity:	40.00 tons						
Inspector (Initials)	Date (mm/dd/yyyy)	Truck No.	Trailer No.	B/L No.	Tons Delivered (Raw)	Cumulative Tons (Raw)	Remarks
TMH	03/10/2020	182021		55933	7.29	7.29	
TMH	03/16/2020	182023		55942	5.00	12.29	
TMH	03/16/2020	182024		55944	3.39	15.68	
TMH	03/20/2020	282027		55949	4.20	19.88	
TMH	03/21/2020	182029		55949	1.27	21.15	
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet							

Figure 11-3: Record of Delivery – Emulsified Asphalt, Undiluted

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT SPREADSHEET

The Liquid/Emulsified Asphalt Application and Payment spreadsheet (Figure 11-4 through Figure 11-6) is used to track asphalt applications, payments and oil/water ratios. Each liquid/emulsified asphalt bid item will be documented on a separate spreadsheet. The spreadsheet is used as part

of the source documents for payment.

1. Open the Liquid/Emulsified Asphalt Application and Payment spreadsheet received in an email from the Office Engineer.
2. Select the appropriate tab at the bottom of the spreadsheet: Prime Coat, tack Coat, or Seal Coat.
3. Record the following
 - **Contract Number**
 - **Item** (Description)
 - **Item Number**
 - **Dilution % Factor**: Enter as whole number (60/40 mix enter as 60)
 - **Bill of Lading Tons Delivered per day**: If item is delivered diluted, enter tonnage per day and place 100 in Dilution % Factor
 - **Insp**: Inspector initials
 - **Date**
 - **Station to Station**: Complete station to station, including line designation and LT, RT, or CL.
 - **Length**: Actual length measured in feet, NOT 'Station to Station'.
 - **Width**: Actual Width measured in feet, NOT 'Varies Width'.
 - For Total **SQYD**, **Gallons**, and **App Rate**:
 - Enter Length, Width and Gallons (Using the digital meter from the truck; take the beginning read minus the ending read for the gallons placed). If using the Bill of Lading tons or the Weighback tons, the calculation is provided on the Liquid/Emulsified Asphalt and Payment spreadsheet to determine.
 - Once the gallons are determine and entered, the computer will calculate the Tons and the App. Rate column. When entering the gallons per stationing, the App. Rate is calculated for that station only. When there are multiple stations but are only documenting the total gallons placed for the day on the last line, the spreadsheet will calculate the App. Rate for that last station only however, it will total the the SQYDs, Gallons, Tons and App. Rate for the entire day at the bottom of the page.
 - If at any time the "Total Tons Remaining (Diluted)" number is red, there were not enough Bill of Ladings (B/L) collected to cover the material places. Obtain more B/L.
 - **Remarks**: Add the Category/AEB of where the material is to be paid in. If paid in more than one Category(ies)/AEB(s) break out how much are paid in each. If the item is incidental, document how much was incidental. If paid by the SQYD, add the total SQYD per day to show how much SQYD will be paid on the estimate.
4. Save the spreadsheet and email to the Office Engineer.

Note: Pay will be based on delivery minus waste and/or material left in storage, not based on the application rate. In no case will the liquid asphalt pay quantity exceed the certified total asphalt delivered, less any wasted material and less any material left in storage.

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT										
Cont:	3583	Item:	MC-70	Item Number:	4060100					To convert gallons to tons use formulas: [Gal x (lb/gal)] ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables For tons to gallons use formula: [(tons x 2000)/8.3 = Gallons
Total BOL Tons Delivered (Raw):		3.39		Total SQYD used:		4500.0				
Total BOL Tons Delivered (Diluted):		3.39		Total Gallons used:		790.0				
Total Tons Placed (Diluted):		3.28		Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted or Delivered Diluted = 100% Factor						
Total Tons Remaining (Diluted):		0.11		Dilution % Factor: 100 109.01 Standard Plans (lb/gal) conversion factor: 8.3						
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.										
Bill of Lading Tons Delivered (Per Day):				3.39		PMT #:				
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:	
TMH	6/7/2020	"X" 740+32 to "X" 741+32 LT.	100.0	5.0	55.56	10.00	0.04	0.18		
		"X" 741+32 to "X" 745+32 LT.	400.0	9.0	400.00	20.00	0.08	0.05	Cat. # 01 = 0.12	
		"X" 878+20 to "X" 902+80 RT	2800.0	13.0	4,044.44	760.00	3.15	0.19	Cat. # 03 = 3.15	
Totals:					4,500.00	790.00	3.28	0.18		
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet										

Calculated Application Rate per locations.
 Total calculated Application Rate per day.

Figure 11-4: Liquid / Emulsified Asphalt Application and Payment Sheet (Liquid Asphalt)

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT										
Cont:	3583	Item:	SS-1H (Diluted)	Item Number:	4060180					To convert gallons to tons use formulas: (Gal x (lb/gal)) ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables For tons to gallons use formula: [(tons x 2000)/8.3 = Gallons
Total BOL Tons Delivered (Raw):		4.00		Total SQYD used:		17374.7				
Total BOL Tons Delivered (Diluted):		4.00		Total Gallons used:		950.0				
Total Tons Placed (Diluted):		3.94		Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted Material or Delivered Diluted = 100% Factor						
Total Tons Remaining (Diluted):		0.06		Dilution % Factor: 100 109.01 Standard Plans (lb/gal) conversion factor: 8.3						
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.										
Bill of Lading Tons Delivered (Per Day):				4.00		PMT #:				
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:	
IDK	3/20/2017	"L" 110+13 to "L" 240+44 Rt.	13031.0	12.0	17374.67	950.00	3.94	0.05	Paying 3.94 tons in CAT #1	
Totals:					17374.67	950.00	3.94	0.05		
Record of Delivery Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet										

Figure 11-5: Liquid / Emulsified Asphalt Application and Payment Sheet (Emulsified Asphalt Diluted)

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT									
Cont:	3583	Item:	SS-1H (Undiluted)	Item Number:	4050120				
Total BOL Tons Delivered (Raw):		4.20		Total SQYD used:		10120.0		To convert gallons to tons use formulas: (Gal x (lb/gal)) ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables	
Total BOL Tons Delivered (Diluted):		4.20		Total Gallons used:		600.0		For tons to gallons use formula: (tons x 2000)/8.3 = Gallons	
Total Tons Placed (Diluted):		2.49		Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted or Delivered Diluted = 100% Factor					
Total Tons Remaining (Diluted):		1.71							
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.									
Dilution % Factor:				100		109.01 Standard Plans (lb/gal) conversion factor: 8.3			
Bill of Lading Tons Delivered (Per Day):						4.20		PMT #:	
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:
TMH	3/20/2020	"L" 5+09 to "L" 16+84 LT.	1175.0	48.0	6,266.67	400.00	1.66	0.06	Catg. # 1 = 1.66
		"S" 19+80 to "S" 48+70 LT	2890.0	12.0	3,853.33	200.00	0.83	0.05	Catg. # 2 = .83
Totals:					10,120.00	600.00	2.49	0.06	
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet									

Figure 11-6: Liquid / Emulsified Asphalt Application and Payment Sheet (Emulsified Asphalt Undiluted)

NOTES for Emulsified Asphalt item postings only:

- If the total tonnage placed was based off reading the gallon meter, the Inspector must document the beginning and ending meter reading and the gallons used in the Remarks box of the posting tab in the DWR.
- If the truck sprays completely out, the total tons delivered listed on the Bill of Lading (B/L) must be converted to gallons by applying the formula listed in the top right corner of the spreadsheet. The total gallons must then be documented in the "Gallons" field and the computer will automatically fill in the Tons field.
- If a weighback is needed and provided, then the total tons placed according to the weighback must be converted into gallons and documented in the "Gallons" field.
- If the entire truck was not sprayed out and the contractor does not provide a weighback ticket, or a working gallon meter reading, Liquidated Damages will be assessed per Subsection 109.2, (Measurement and Payment) Scope of Payment, in the Special Provisions.
- It is the Inspector's responsibility to verify that the application rate falls within an acceptable range according to the Standard Specifications.

OIL AND WATER CHECK SHEET

When the emulsified asphalt is delivered raw and placed in a tank, obtain a tare weight on the distributor truck before the asphalt and water is added. When the asphalt is added the truck will be weighed and then weighed again when the water is added. The ratio of oil to water will vary depending on the specification and the type of material. Make sure to check the Special Provisions to assure the correct ratio is being used. When the truck is finished spraying for the day the truck will be weighed once again to determine what was placed for the day, as shown below. Use the Oil and Water Check Sheet to verify dilution rates are correct (Figure 11-7).

Note: Make sure that any water ratio calculations are documented on the Bill of Lading sheets.

Note: Check the Manufacturer's Recommendation for the specific material and the Special Provisions for the contract to assure the correct oil/water ratio is being applied.

- Record the following:
 - Contract No.
 - Item (Description):
 - Item No.
 - Ticket No.
 - Truck No.
 - Gross weight in pounds: (Oil and Water)

- Tare weight in pounds (Oil)
 - Dilution % Factor
2. Save the spreadsheet and email it to the Office Engineer.

Liquid/Emulsified Asphalt Oil & Water Check Sheet						
Cont:	3583	Item:	SS-1H (diluted)	Item Number:	4060180	
Actual Field Measured Product (entered in pounds)						
Ticket #:	Truck #:	Gross Weight In pounds:	Tare Weight in pounds:	Net Weight in pounds:	Net Weight in tons:	Item:
5594	56781	33640	12500	21140	10.57	Oil
Enter Pounds in this order:						
1) Tare Weight of Oil		47733	33640	14093	7.05	Water
2) Gross Weight of Oil						
3) Gross Weight of Water		Mixed Oil & Water Total in Tons:			17.62	
Theoretical Field Product by Dilution Factor %						
Enter Dilution % Factor as whole number (ex: 60/40 dilution factor would be entered as 60):					60	
Raw Tons of Oil:	10.57	Total tons of Oil & Water:	17.62			
Tons of Water:	7.05	Pounds of Water that must added to Oil for a				
		60	% Diluted mixture:	14093		
Actual Field Measured Product vs Theoretical Field Product by Dilution Factor % Comparison						
Total pounds of Water used in Actual Field Measured Product (in pounds):					14093	
Total pounds of Water used in Theoretical Field Product by % Diluted Factor:					14093	
Difference in pounds between Actual Field Measured and Theoretical Field Product:					0	
<div style="display: flex; justify-content: space-between; align-items: center;"> < > CAT # x CAT # xx CAT # xxx Oil & Water Check Sheet + </div>						

Figure 11-7: Liquid / Emulsified Asphalt Oil & Water Check Sheet

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR (LIQUID/EMULSIFIED ASPHALTS)

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 – N/A for Plantmix Ton Items. The item posting will be completed by the Office Engineer in AWP.
 - Equipment – type, number and hours used
 - Personnel – title and hours
2. Record the following required information in the Report Details window (Figures 11-8 and 11-9):
 - **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 11-8: DWR Liquid Asphalt (Undiluted) Report Detail Window

Figure 11-9: DWR Emulsified Asphalt (Diluted) Detail Window

3. Record the following required information in the New Equipment window (Figure 11-10 and Figure 11-11):
 - **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 11-10: 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 11-11: DWR Equipment List

4. Record the following required information in the New Personnel window (Figure 11-12 and Figure 11-13):
 - **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:	LAS VEGAS PAVING C... ▾
Personnel:	LABORER FOREMAN ▾
Employee:	N/A
Decision Class:	Select ▾
Number:	1
Total Hours:	8
Comments:	Foreman - Cody Bellinger
3975 remaining	
<input type="checkbox"/> <input type="checkbox"/>	

Figure 11-12: 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 11-13: DWR Personnel List

5. 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 – LIQUID/EMULSIFIED ASPHALT ITEMS

- Collect all Material Certifications (Cert). Scan and save them to the appropriate Contract Files\Materials\03 Cert & Test Reports\3.#. 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., M7030303A Medium Curing Cutback Asphalt MC-70NV TON, Load 1 - 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 liquid and emulsified asphalt item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review liquid and emulsified asphalt 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.

Important: If SS-1h is delivered diluted to the jobsite and the Bill of Lading (B/L) does not show weight of raw asphalt separately from the water added or the state mix percent, the Resident Engineer will inform the Contractor that it is unacceptable, and any application will be done without payment. The Inspector is responsible for documenting (on the B/L) the weight of raw asphalt separately from the water added.

Important: If the entire truck was not sprayed out and the contractor does not provide a weigh back ticket, or a working gallon meter reading, Liquidated Damages will be assessed per Subsection 109.2, (Measurement and Payment) Scope of Payment, in the Special Provisions.

RECORD OF DELIVERY—LIQUID/EMULSIFIED ASPHALT SPREADSHEET

The Record of Delivery – Liquid Asphalt and Emulsified Asphalt (Diluted/Undiluted) spreadsheets (Figure 11-1 through Figure 11-3) are used to track the asphalt delivered to the job site. Separate spreadsheets will be provided for liquid asphalts and emulsified asphalts dilute/undiluted. The spreadsheets are used as part of the source documents for payment.

1. Email the appropriate Record of Delivery—Liquid/Emulsified Asphalt spreadsheet to the Inspector daily. Refer to the [How to Manage Load Sheets](#) document located on SharePoint under Construction Administrative Services Documents, Manuals and Guides, EDOC for details on maintaining the spreadsheet.
2. Verify the following:
 - Each B/L has a contract number that corresponds to the spreadsheet.
 - The weight calculations have been checked and initialed.
 - There are enough B/Ls to cover what has been applied.
3. Save the completed the spreadsheet(s) (Figure 11-14) to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

Record of Delivery -- Emulsified Asphalt, Diluted							
Contract No.:	3583	Total Tons:		10.57			
Item No.:	4060180						
Description:	SS-1H (Diluted)						
Plan Quantity:	48.00 tons						
Inspector (Initials)	Date (mm/dd/yyyy)	Truck No.	Trailer No.	B/L No.	Tons Delivered	Cumulative Tons	Remarks
TMH	03/18/2020	56781	635	5594	10.57	10.57	Delivered and stored in contractors yard Item will be mixed to 60/40 by contractor
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet							

Figure 11-14: Record of Delivery – Emulsified Asphalt, Diluted

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT SPREADSHEET

The Liquid/Emulsified Asphalt Application and Payment spreadsheet (Figure 11-15 through Figure 11-17) is used to track asphalt applications, payments and oil/water ratios. Each Liquid/Emulsified Asphalt bid item will be documented on a separate spreadsheet. The spreadsheet is used as part of the source documents for payment.

1. Email the Liquid/Emulsified Asphalt Application and Payment spreadsheet to the Inspector daily.
2. Verify the following:
 - Calculations are correct
 - All stationing has a line designation and LT, RT, or CL.
 - The application rate is within tolerance.
 - There are enough Bill of Ladings (B/L) to cover the tonnage of material being paid.
3. Add the Payment Number.
4. Save the completed spreadsheet(s) to the appropriate Contract Files\Contract\08 Scale Weights\8.# directory.

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT										
Cont:	3583	Item:	MC-70	Item Number:	4060100					
Total BOL Tons Delivered (Raw):				3.39	Total SQYD used:		4500.0			
Total BOL Tons Delivered (Diluted):				3.39	Total Gallons used:		790.0			
Total Tons Placed (Diluted):				3.28	Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted or Delivered Diluted = 100% Factor					
Total Tons Remaining (Diluted):				0.11	To convert gallons to tons use formulas: (Gal x (lb/gal)) ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables For tons to gallons use formula: (tons x 2000)/8.3 = Gallons					
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.										
Dilution % Factor:				100	109.01 Standard Plans (lb/gal) conversion factor: 8.3					
Bill of Lading Tons Delivered (Per Day):					3.39			PMT #:		22
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:	
TMH	6/7/2020	"X" 740+32 to "X" 741+32 LT.	100.0	5.0	55.56	10.00	0.04	0.18		
		"X" 741+32 to "X" 745+32 LT.	400.0	9.0	400.00	20.00	0.08	0.05	Catg. # 01 = 0.12	
		"X" 878+20 to "X" 902+80 RT	2800.0	13.0	4,044.44	760.00	3.15	0.19	Catg. # 03 = 3.15	
Totals:					4,500.00	790.00	3.28	0.18		
Rec of Delv Liquid Asphalt Rec of Del Emulsified Undiluted Rec of Delv Emulsified Diluted Prime Coat Tack Coat Seal Coat Oil & Water Check Sheet										

Figure 11-15: Liquid / Emulsified Asphalt Application and Payment Sheet (Liquid Asphalt)

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT											
Cont:	3583	Item:	SS-1H (Diluted)	Item Number:	4060180						
Total BOL Tons Delivered (Raw):		4.00		Total SQYD used:		17374.7		To convert gallons to tons use formulas: (Gal x (lb/gal)) ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables			
Total BOL Tons Delivered (Diluted):		4.00		Total Gallons used:		950.0		For tons to gallons use formula: (tons x 2000)/8.3 = Gallons			
Total Tons Placed (Diluted):		3.94		Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted or Delivered Diluted = 100% Factor							
Total Tons Remaining (Diluted):		0.06									
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.											
Dilution % Factor:				100		109.01 Standard Plans (lb/gal) conversion factor: 8.3					
Bill of Lading Tons Delivered (Per Day):						4.00		PMT #:		10	
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:		
TMH	3/20/2020	"L" 110+13 to "L" 240+44 RT.	13031.0	12.0	17,374.67	950.00	3.94	0.05	3.94 tons in Catg. # 2		
Totals:						17,374.67	950.00	3.94	0.05		
Rec of Delv Liquid Asphalt		Rec of Del Emulsified Undiluted		Rec of Delv Emulsified Diluted		Prime Coat		Tack Coat		Seal Coat	Oil & Water Check Sheet

Figure 11-16: Liquid / Emulsified Asphalt Application and Payment Sheet (Emulsified Asphalt Diluted)

LIQUID/EMULSIFIED ASPHALT APPLICATION AND PAYMENT											
Cont:	3583	Item:	SS-1H (Undiluted)	Item Number:	4050120						
Total BOL Tons Delivered (Raw):		4.20		Total SQYD used:		10120.0		To convert gallons to tons use formulas: (Gal x (lb/gal)) ÷ 2000 = tons. (lbs/gal) conversions found in Standard Specs Section 109.01 pg. 67 tables			
Total BOL Tons Delivered (Diluted):		4.20		Total Gallons used:		600.0		For tons to gallons use formula: (tons x 2000)/8.3 = Gallons			
Total Tons Placed (Diluted):		2.49		Common Dilution % Factors: 50% (raw) to 50% (diluted) = 50% Factor // 60%(raw) to 40%(diluted) = 60% Factor // 70%(raw) to 30%(diluted) = 70% Factor // 33% (raw) 66% (diluted) = 33% Factor // 25% (raw) 75% (diluted) = 25% Factor. Undiluted or Delivered Diluted = 100% Factor							
Total Tons Remaining (Diluted):		1.71									
In "Remarks" box, document total tons paid per category per estimate, and indicate if item was incidental to a plantmix bid item. If payment is calculated off weighback tickets or the bill of lading, use the tons to gallons formula to calculate gallons to enter into the "Gallons" column to calculate application rate.											
Dilution % Factor:				100		109.01 Standard Plans (lb/gal) conversion factor: 8.3					
Bill of Lading Tons Delivered (Per Day):						4.20		PMT #:		13	
Insp:	Date:	Station to Station:	Length (feet):	Width (feet):	SQYD:	Gallons:	Tons:	App. Rate:	Remarks:		
TMH	3/20/2020	"L" 5+09 to "L" 16+84 LT.	1175.0	48.0	6,266.67	400.00	1.66	0.06	Catg. # 1 = 1.66		
		"S" 19+80 to "S" 48+70 LT	2890.0	12.0	3,853.33	200.00	0.83	0.05	Catg. # 2 = .83		
Totals:						10,120.00	600.00	2.49	0.06		
Rec of Delv Liquid Asphalt		Rec of Del Emulsified Undiluted		Rec of Delv Emulsified Diluted		Prime Coat		Tack Coat		Seal Coat	Oil & Water Check Sheet

Figure 11-17: Liquid / Emulsified Asphalt Application and Payment Sheet (Emulsified Asphalt Undiluted)

DAILY WORK REPORT (DWR) – AWP (LIQUID/EMULSIFIED ASPHALTS)

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.

INSPECTOR'S DWR

- 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
- 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 pro-

gram on a computer (not the iPad) to complete the edits.

- Review the edited DWR and Approve.

ITEM POSTING DWR

- Create a DWR in AWP to document the item postings for the Liquid/Emulsified Asphalt ton items:
 - In the General Tab enter a Comment related to the item posting.
 - Enter an Item Posting (Figure 11-18) for the Liquid/Emulsified Asphalt ton item based on the Liquid/Emulsified Asphalt Application and Payment spreadsheet.

Note: These DWRs can be completed daily, weekly or bi-weekly within the two-week pay period.

Item ID	Item Description	Current Q...	Project	Category
4060120	PRIME COAT	8,226.000	UATB0C2C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		4,120.000	4,120.000	1

Item Posting N...	Contractor	Station/Location	Quantity Posted
1	T81072018 - ROAD & HIGHWAY BU	Sta "X" 740 + 32 to Sta "X" 745 + 32	4,120.000

Contractor * ▼

ROAD & HIGHWAY BUILDERS LLC (Prime) ▼

Quantity Posted ▼

4,120.000

Station From ▼

"X" 740

Station From Plus ▼

32

Offset Type ▼

LT.

Offset Distance ▼

Station To ▼

"X" 745

Station To Plus ▼

32

Offset Type ▼

LT.

Offset Distance ▼

Attention

0

Units

SQYD

Agency Views

None

Location ▼

Measured ▼

Material Set ▼

Cutback Asphalt ▼

Plan Sheet Page Number ▼

Comments ▼

For details see Liquid/Emulsified Asphalt Record of App & Pmt. spreadsheet filed in 08 - Daily Record of Scale Weights. 🔍

Figure 11-18: Office Engineer's DWR Item Posting (Liquid/Emulsified Item)

NOTES for Liquid Asphalt TON (Figure 10-18):

- Station From/To:** Refer to Contract plans
- Offset Type:** Enter the LT, RT, or CL.
- Offset Dist:** Enter if known
- Material Set:** Select appropriate value.
- Comments:** Reference the Liquid/Emulsified Asphalt Record of Application and Payment spreadsheet.
- Sig. Fig. = .01

2. Approve the DWR.
3. Generate the DWR.

BILL OF LADING AND CERTIFICATION FOR LIQUID AND EMULSIFIED ASPHALTS

- Collect all Bill of Ladings (B/Ls) (Figure 11-20), Water Tickets (Figure 11-21) or Weighback Tickets from the Inspectors. Scan and save them to the appropriate Contract Files\Contract\08 Scale Weights\8.# BL directory.
- Collect all Material Certifications. Scan a copy of the Bill of Lading and the Material Certification 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 file with the contract ID, Material Code Name & description - CERT (e.g., 03904 M7030303A Medium Curing Cutback Asphalt MC-70NV TON - CERT.pdf).

STRAIGHT BILL OF LADING

03904
2115/22
JF

<p>SHIPPER/ORIGIN: ERGO ASPHALT AND EMULSIONS, INC. 9901 WEST PONDEROSA WAY LAS VEGAS, NV 89116 702-736-2059</p>	<p>Emergency Response Telephone Number: Call CHEMTREC (1-800-424-9300) Ergon, Inc. Contract Number 7956</p>
---	---

BOL NUMBER: 21080

<p>SOLD TO: LAS VEGAS PAVING CORPORATION 4420 SOUTH DECATUR BLVD LAS VEGAS NV 89103</p>	<p>CUSTOMER NO.: 464300 PO NUMBER: REFERENCE (JOB) NUMBER: 88AP PROJECT NUMBER: PROJECT NAME: General ORIGINAL BOL:</p>
<p>CONSIGNEE/DESTINATION: 2013476 LAS VEGAS PAVING CORPORATION-E CLARK COUNTY, NV</p>	<p>SHIP DATE: 11/10/2016 FRGHT: COL TIME IN/OUT: 12:30/12:40 CARRIER: LAS VEGAS PAVING TRUCK-TRLR NO.: 182025 ORDER #: AGREMT #:</p>

PRODUCT	TANK	TEMP	UOM	NET VOLUME	WEIGHTS
CSS-1H	2	150.00 F 65.61 C	UG6 LTR	747.642 2,890.193	GROSS: 41,180 LBS 18,679 KG TARE: 34,840 LBS 15,802 KG NET: 6,340 LBS 2,876 KG NET: 3.170 TON 2.876 MT

Lbs/gal @ 60F: 8.480 Kilograms per Liter: 1.018 Spec Gravity @ 60F: 1.017

Loaded By: _____ Additive: N/A
LAB/LOT NUMBER: _____ Certification #: _____

PROPER SHIPPING DESCRIPTION: Non-Regulated, Asphalt Product

Certification: Ergon Asphalt & Emulsions certifies that the materials provided under this bill of lading shall meet the standards of and were tested in accord with Ergon's Quality Control Plan submitted to the state and thereby conforms to the State of Nevada's specifications. Ergon Asphalt & Emulsions tests in accordance with AASHTO/ASTM testing procedures or reasonable equivalents. The densities and Specific Gravity denoted are typical results. Product densities can vary through the processes of manufacturing, shipping, and handling.

Handwritten:
6340/8780 = 72% oil
2440/8780 = 28% wtr

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Signature by Shipper: _____

Cargo Tank Supplied By Carrier/Carrier Compliance to Laws - Where the cargo tank is supplied by the carrier, the carrier hereby certifies that the cargo tank supplied for this shipment is a proper container for the transportation of this commodity. This is to acknowledge that the carrier has in his possession or has been offered and accepted the required hazard materials placards and/or emergency response information.

This property described herein in apparent good order is received by the carrier shown on this Bill of Lading and the carrier agrees to transport the property to the consignee and the destination set forth herein subject to the classifications and tariffs, and the terms and conditions of the Uniform Domestic Straight Bill of Lading found in National Motor Freight Classification, in effect on the date of the issuance of this Bill of Lading or the applicable contract with shipper. It is further agreed by the carrier that the transportation of this shipment will be performed in compliance with all applicable rules, regulations and laws.

Signature by Motor Carrier: _____

Figure 11-19: Bill of Lading

ERGON ASPHALT & EMULSIONS, INC.

Loading Checklist	Weights
<p style="text-align: center;">Driver to complete this section</p> <p>Customer Name <u>LVP</u></p> <p>Product to be loaded <u>Water</u></p> <p>Last product loaded _____</p> <p>Is the product requested for loading compatible with the last product hauled? Yes ___ No ___</p> <p>Is the trailer free and clear of contaminants? Yes ___ No ___</p> <p>Is the trailer free of water? Yes ___ No ___</p> <p>Driver Signature <u>[Signature]</u></p>	<p>ID# 02 WEIGHT 411801b 12:41 11-10-16</p> <p>CUSTOMER NAME STREET ADDRESS CITY STATE ZIP ID# 02 12:48 11-10-16</p> <p>GROSS 436201b TARE 411801b NET 24401b Gals: <u>292.91</u> <u>294.00 Gals</u></p>
<p style="text-align: center;">Operator to complete this section</p> <p>Bill of Lading# <u>21080</u></p> <p>Operator Signature _____</p>	

6370 8780

Figure 11-20: Bill of Lading Water Ticket



03904

Ergon Asphalt & Emulsions, Inc.

Certificate of Analysis

Date 02/15/2022
 Product CSS-1H *(tem - 4080300)*
 State Nevada
 Facility Location LAS VEGAS, NV (T2)

This material conforms to RTC specifications for CSS-1h in accordance with NDOT Section 703 Table 4 of Standard Specifications for Road and Bridge Construction.

TEST	MIN	MAX	RESULT
Saybolt Viscosity, 25°C, SSF	20	100	36
Residue by Distillation, 260°C, 15 min hold	57	---	63
Storage Stability, 24 Hr, %	---	1	0.1
Sieve Test, %	---	0.1	0.05
Cement Mixing Test, %	---	2.0	0
Particle Charge Test	PASS	---	PASS
Penetration, 25°C, 100g, 5 sec, dmm	40	90	70
Solubility, %	02/15/2021 97.5	---	99.9
Ductility, 25°C, HG, 5cm/min, cm	40	---	80

Represented Qty. 500 tons

02/13/2022

Quality Assurance Manager

Date

Figure 11-21: Material Certification

CONCRETE PAVING ITEMS

This chapter contains the following sections:

Overview	12-3
Inspector's Responsibilities – Concrete Paving Items	12-3
Office Engineer's Responsibilities – Concrete Paving Items	12-9

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.

Report Details

Date:

Weather:

Low Temp:

High Temp:

Rainfall Amt:

Attachments:

Remarks:

"BW" 10 + 00 to "BW" 62 + 69.89 Rt. PCCP and Saw Transverse Weakened Plane Joint. Contractor started at 7:00am and ended at 4:00pm. I got with Cody Bellinger, Q & D Construction foreman to agree with the quantities that I posted for payment.

3756 remaining

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: GAL

Authorized: 300.000 GAL
Total Posted: 35.000 GAL

Location: "BW"

Station From: +

Offset Type: RT.

Offset Dist:

Station To: +

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: LFT

Authorized: 955.000 LFT
Total Posted: 0.000 LFT

Location: "BW"

Station From: +

Offset Type: RT.

Offset Dist:

Station To: +

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

✎
🗑

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"/>	

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.

MAJOR STRUCTURE AND PILING ITEMS

This chapter contains the following sections:

Overview	13-3
Inspector's Responsibilities – Major Structure and Piling Items	13-3
Office Engineer's Responsibilities – Major Structure and Piling Items	13-13

OVERVIEW

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

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

Per Subsection 200.01.01, (Construction Stakeout) General, of the Standard Specifications, the Contractor will be responsible for stakeout data on major structures. The Contractor's stakeout information must be given to the Resident Engineer.

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

INSPECTOR'S RESPONSIBILITIES – MAJOR STRUCTURE AND PILING ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Geometrics, General Notes and Quantities Sheet (Figure 13-1), located in the Contract plans, to help identify items, quantities, descriptions and locations.

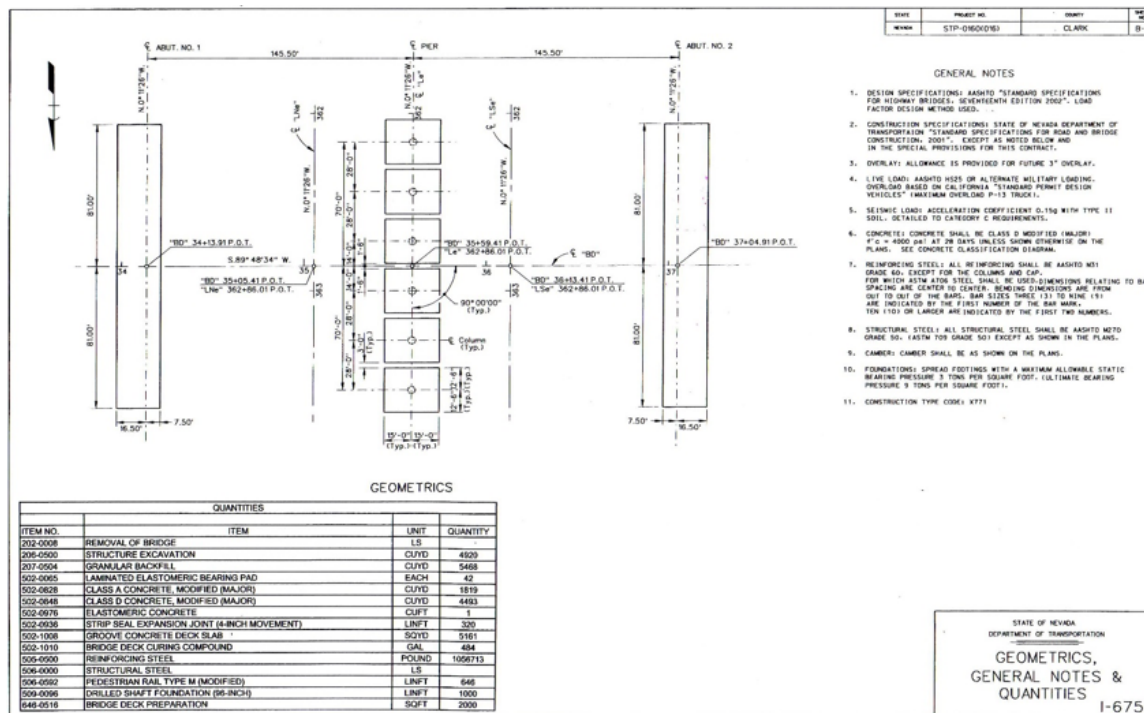


Figure 13-1: Example of a Geometrics, General Notes and Quantities Sheet

- Review the following for accuracy:

- Special Provisions
- Supplemental Notices
- Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL structure 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 13-2):
 - **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 13-2: 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 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 Major Structure and Piling 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 13-3 through Figure 13-10 for examples of Structure and Piling 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:
 - $\text{Vol}(\text{gas}) = W \times L \times \text{App Rate}$
 - Pay = # gallons
 - W = #
 - L = #
 - App Rate = 1gal/150 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:	CLASS D CONCRETE (M... ▾)
Contractor:	Q&D CONSTRUCTION INC ▾
Qty:	960.06 CUYD
Authorized:	1,250.000 CUYD
Total Posted:	0.000 CUYD
Location:	Abut. # 1 (Str. I-675)
Station From:	[] + []
Offset Type:	[]
Offset Dist:	[]
Station To:	[] + []
Offset Type:	[]
Offset Dist:	[]
Measured:	[]
Comments:	Per Bill of Materials, Plan sheet B-44 100% Complete

3959 remaining

Figure 13-3: DWR Item Posting - Structure CUYD

NOTES for Structure CUYD/CUFT (Figure 13-3):

- Payment for CUYD items will be based on plan quantity or field measurements and calculations if different than plan. Payment for CUFT items will be based on field measurements and calculations.
- Calculations for CUYD = $L \times W \times D \div 27$
- Calculations for CUFT = $L \times W \times D$
- Location: Refer to Contract plans
- Sig. Fig. = .01
- In no case will the payment for any area exceed the net amount without authorized changes and/or final measurement. When paying for concrete, payment will be paid according to the Bill of Materials (Figure 13-6). If the quantity is different, then calculations are needed.

New Item Posting

Item: BRIDGE DECK CURING...
Contractor: Q&D CONSTRUCTION INC
Qty: 110.00 GAL
 Authorized: 235.000 GAL
 Total Posted: 95.000 GAL
Location: Approach Slab # 1
Station From: [] + []
Offset Type: []
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured:
Comments:
 2 Drums @ 55 gal. = 110.00 gal.
3966 remaining
Attention:
Attention Comments:
 See email: DWR 2019-6-7 CAW for container label.
208 remaining

Figure 13-4: DWR Item Posting - Structure GAL

NOTES for Structure GAL (Figure 13-4):

- 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 email to your 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: Refer to Contract plans
- Sig. Fig. = .01
- Check the Attention Flag to notify the Office Engineer there's email that belong with this Item Posting

New Item Posting

Item: REINFORCING STEEL
Contractor: Q&D CONSTRUCTION INC
Qty: 45765.90 LB
 Authorized: 130,734.000 LB
 Total Posted: 0.000 LB
Location: Str. I-675 Abut. # 2
Station From: [] + []
Offset Type: []
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured:
Comments:
 Per Bill of Materials, Page B44
 35% completed
 $130734 \times .35 = 45765.90 \text{ lbs.}$
3923 remaining

Figure 13-5: DWR Item Posting - Structure LB

NOTES for Structure LB (Figure 13-5):

- Payment for POUND (LB) for Reinforcing Steel is based on the Bill of Materials (Figure 13-6). If plan quantity is different, field measurements and calculations (per Subsection 505.04.01, *(Reinforcing Steel) Measurement*, of the Standard Specifications) are required.
- Location: Refer to Contract plans
- Sig. Fig. = .01

New Item Posting

Item: DRIVE STEEL PILES

Contractor: Q&D CONSTRUCTION INC

Qty: 1.00 EACH
Authorized: 4.000 EACH
Total Posted: 2.000 EACH

Location: Abut. 1 (Str. I-675)

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

File # 2

3991 remaining

Attention:

Attention Comments:

See Foundation Pile Driving Record from dated 7/8/2019

202 remaining

NOTES for Piling EACH (Figure 13-8):

- Prepare the Foundation Piling Driving Record (Form 040-058).
- Payment for EACH item will be based on the Total Number Placed value from the 040-058 form.
- Location: Refer to Contract plans
- Sig. Fig. = .01
- If there are any questions concerning the Foundation Piling Driving Record (Form No. 040-058), contact Materials Division, Geotechnical Section for assistance.

Figure 13-8: DWR Item Posting – Piling EACH

New Item Posting

Item: ▼

Contractor: ▼

Qty: LFT

Authorized: 200.000 LFT

Total Posted: 75.000 LFT

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

Pile # 4

3989 remaining

Attention:

Attention Comments:

Verified by the Geotechnical section to keep driving until min. blows per foot are reached. See Foundation Pile Driving Record from 6/7/19

117 remaining

NOTES for Piling LFT (Figure 13-9):

- Prepare the Foundation Piling Driving Record (Form 040-058).
- Payment for LFT item will be based on the Total Length for Payment value from the 040-058 form.
- Location: Refer to Contract plans
- Sig. Fig. = .01
- If there are any questions concerning the Foundation Piling Driving Record (Form No. 040-058), contact Materials Division, Geotechnical Section for assistance.

Figure 13-9: DWR Item Posting – Piling LFT

New Item Posting	
Item:	DRILLED SHAFT FOUND... ▾
Contractor:	Q&D CONSTRUCTION INC ▾
Qty:	80.00 LFT
Authorized:	200.000 LFT
Total Posted:	0.000 LFT
Location:	Abut. 1 (Str. I-675)
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	<div style="border: 1px solid black; padding: 5px;"> Pier 1 <div style="text-align: right; font-size: small;">3993 remaining</div> </div>
Attention:	<input checked="" type="checkbox"/>
Attention Comments:	<div style="border: 1px solid black; padding: 5px;"> See Drilled Shaft Inspection Report dated 6/7/19 <div style="text-align: right; font-size: small;">208 remaining</div> </div>

Figure 13-10: DWR Item Posting – Drill Shaft LFT

NOTES for Drill Shaft LFT (Figure 13-10):

- Prepare the Drilled Shaft Inspection Report (Form 040-060)
- The LFT for payment is from the Total Length Paid value that is shown on the 040-060 form.
- Location: Refer to Contract plans
- Sig. Fig. = .01
- If there are any questions concerning the Foundation Piling Driving Record (Form No. 040-058), contact Materials Division, Geotechnical Section for assistance.

4. Record the following required information in the New Equipment window (Figure 13-11 and Figure 13-12):
- **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 13-11: 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 13-12: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 13-13 and Figure 13-14):
 - **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: LAS VEGAS PAVING C... ▾

Personnel: LABORER FOREMAN ▾

Employee: N/A

Decision Class: Select ▾

Number: 1

Total Hours: 8

Comments:

Foreman - Cody Bellinger

3975 remaining

✓
✗

Figure 13-13: DWR Personnel Entry

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

Figure 13-14: DWR Personnel List

6. 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](#) for details.

OFFICE ENGINEER'S RESPONSIBILITIES – MAJOR STRUCTURE AND PILING ITEMS

- Save all contractor's survey stakeout data in the Contract Files\Contract\12 Misc\12.# Stakeout Data directory.
- Collect all Material Certifications. Scan and save them to the 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 M5050100 Reinforcing Steel - 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 Structure items general information photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Save Structure items Gallon label photos to the appropriate Contract Files\Contract\07 Estimates directory to confirm the quantity of the container.
- Review structure 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).
- Review the Foundation Piling Driving Records and Drilled Shaft Inspection Reports for accuracy and save electronically in the appropriate Contract Files\Contract\07 Estimates\7.# Drill Shaft & Piling directory.
- 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](#) 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.

DRAINAGE AND WALL ITEMS

This chapter contains the following sections:

Overview	14-3
Survey Crew Chief's Responsibilities – Drainage and Wall Items	14-3
Inspector's Responsibilities – Drainage and Wall Items	14-4
Office Engineer's Responsibilities – Drainage and Wall Items	14-13

OVERVIEW

Drainage and Wall Items have different documentation requirements for each unit of measure (UOM). All Drainage and Wall Items must be counted, measured, calculated and/or based on plan. Documentation examples for a few selected Drainage and Wall 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.

SURVEY CREW CHIEF'S RESPONSIBILITIES – DRAINAGE AND WALL ITEMS

- When survey data is used as support for payment, any survey data output/reports from Trimble Business Center (TBC) should be formatted to accurately represent the points (data) collected and a description of what the data represents.
- Email ALL TBC survey data output/reports to the Office Engineer. Use the naming convention: Stakeout Data YYYY-MM-DD Inspectors Initials, (e.g. Stakeout Data 2017-03-19 BLF) in the email Subject line.

DAILY WORK REPORT (DWR) – AWP

1. Create a DWR in AWP daily to document the survey activity. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.
2. Record the following required information in the General tab (Figure 14-1):
 - DWR Date
 - Inspector
 - Weather
 - Low Temp and High Temp
 - Remarks: Select the General Remark Type and enter an overview of survey activities for the day (Figure 14-2).

Contract: 03779 - CHIP SEAL WITH SEAL COAT Save ?

General

DWR Date *
03/16/2020

Inspector *
GFisk
Fisk Glen

Weather
01 - Clear

Rainfall Amount
-

Low Temperature
32

High Temperature
49

Number of Remarks
0

Federal Project Number

State Project Number

Entered By
-

Entered Date

Approval Date

Approved By

Remarks

Type *	Remarks *
01 - GENERAL	"BD" 19+21.80 Construct Type 3 D.I. 59.5' Lt. H=3.45' Install 18"x76' RCP w/safety slope end section Lt. Install Class 150

Figure 14-1: Survey Crew Chief DWR General Tab

"BD" 19+21.80 Construct Type 3 D.I. 59.5' Lt. H=3.45' Install 18"x76' RCP w/safety slope end section Lt. Install Class 150 Rip Rap apron Lt. Connect to earthen ditch. For stakeout data see email: stakeout data 2019-6-7 CAW

Apply

Figure 14-2: Survey Crew Chief General Remarks Expanded

- Complete a final review of the DWR, Save and Approve it.

INSPECTOR'S RESPONSIBILITIES – DRAINAGE AND WALL 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 - Drainage Sheet (Figure 14-3), located in the Contract plans, and the Standard Plans, to help identify items, quantities, descriptions and locations.

REC. NO.		STATE	PROJECT NO.	COUNTY	SHEET
REV. NO.		MINOR	STP 01620(10)	CLARK	113-57
STRUCTURE LIST-DRAINAGE					
				DESCRIPTION	STATION TO STATION
				NOTE: ALL LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER	
				CONSTRUCT TYPE 3 DI, 59.50' LT, H=3.45'	"BD" 19+21.80
				INSTALL 18" X 72.33' RCP W/SAFETY SLOPE END SECTION LT.	
				INSTALL CLASS 150 RIPRAP APRON LT	
				CONNECT TO EARTHEN DITCH	
				(SEE SHEET SD-19)	
				CONSTRUCT TYPE 3 DI, 59.50' LT, H=3.35'	"BD" 19+54.30
				INSTALL 18" X 30.00' RCP	
				CONNECT TO STRUCTURE 2.1	
				(SEE SHEET SD-19)	
				CONSTRUCT TYPE 3 DI, 59.50' LT, H=3.26'	"BD" 19+88.37
				INSTALL 18" X 30.00' RCP	
				CONNECT TO STRUCTURE 2.2	
				(SEE SHEET SD-19)	
				CONSTRUCT TYPE 11 DI, 59.50' LT, H=3.26', L=12'	"BD" 20+58.36
				INSTALL 18" X 69.03' RCP	
				CONNECT TO STRUCTURE 2.3	
				(SEE SHEET DS-19)	

Figure 14-3: Example of a Structure List – Drainage

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL Drainage and Wall Item Calculation Sheets to the Office Engineer.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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
- Record the following required information in the Report Details window (Figure 14-4):
 - 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 14-4: 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 Drainage and Wall 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.
- When installing slotted corrugated metal pipe drains and pipes with end sections, care should be taken when measuring for payment. Do not include the length of the end section in the measurement (refer to the Standard Plans).
- Prior to excavation operations ensure survey of surfaces are complete in the event of re-measurement and/or re-calculation requests made by the Contractor or Resident Engineer.
- Quantities for structure excavation, granular backfill, concrete, reinforcing steel, and structural steel may be based on planned quantity, unless the length of pipe or RCB placed differs three feet (3') or more from plan quantity. All quantities effected by the difference must be recalculated or prorated based on the original quantities, with an explanation and cross-reference to the DWR Posting of where the item was either lengthened or shortened three feet (3') or more. See Appendix B, Calculation Formulas, for examples of calculations and prorations. Example of a structure excavation proration:

Pipe plan = 40 LFT

Pipe field measure = 45 LFT

Structure Excavation plan = 120 CUYD

$45 \div 40 = 1.125 \times 120 = 135$ CUYD new quantity for structure excavation

- Refer to Figure 14-5 through Figure 14-12 for examples of Drainage and Wall Item postings with different UOM.

New Item Posting

Item: STRUCTURE EXCAVATI... ▼

Contractor: Q&D CONSTRUCTION INC ▼

Qty: CUYD

Authorized: 4,561.250 CUYD

Total Posted: 951.480 CUYD

Location: "BW" 19 + 21.80

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

$76' \times 6' \times 20' / 27 = 337.78$ CUYD

$[1/2 (16 \times 16) \times 2] \times 76 / 27 = 720.59$ CUYD

(1:1 Safety Slope)

$337.78 + 720.59 = 1058.37$ CUYD

3866 remaining

NOTES for Drainage and Wall CUYD/CUFT (Figure 14-5):

- Payment for CUYD items will be based on plan quantity or field measurements and calculations if different than plan.
- Calculations for CUYD = $L \times W \times D \div 27$
- Calculations for CUFT = $L \times W \times D$
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- In no case will the payment for any area exceed the net amount without authorized changes and/or final measurement.

Figure 14-5: DWR Item Posting - Drainage and Wall CUYD

New Item Posting

Item: RIPRAP (CLASS 300) ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: 52.72 CUYD
 Authorized: 234.350 CUYD
 Total Posted: 41.320 CUYD

Location: "BW" 19 + 21.80

Station From: [] + []

Offset Type: LT

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 260' x 7.3 x .75 / 27 = 52.72 CUYD

3965 remaining

Figure 14-6: DWR Item Posting - Drainage and Wall CUYD

NOTES for Drainage and Wall CUYD/CUFT (Figure 14-6):

- Riprap items must be field measured with calculations.
- Calculation for CUYD = L x W x D ÷ 27
- Calculation for CUFT = L x W x D
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

New Item Posting

Item: 18-INCH METAL END SE... ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: 1.00 EACH
 Authorized: 8.000 EACH
 Total Posted: 2.000 EACH

Location: "BW" 19 + 21.80

Station From: [] + []

Offset Type: LT

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Item complete for this installation.
 See plan sheet SD-18
 Counted

3941 remaining

Figure 14-7: DWR Item Posting - Drainage and Wall EACH

NOTES for Drainage and Wall EACH (Figure 14-7):

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

New Item Posting

Item: 18-INCH REINFORCED C... ▼

Contractor: Q&D CONSTRUCTION INC ▼

Qty: 76.00 LFT
 Authorized: 365.000 LFT
 Total Posted: 0.000 LFT

Location: "BW" 19 + 21.80

Station From: [] + []

Offset Type: LT

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments:
 Pipe extended due to an obstruction found in the field. See plan sheet SD-18 Note: 10
 Item complete for this installation.

3876 remaining

Figure 14-8: DWR Item Posting - Drainage and Wall LFT

NOTES for Drainage and Wall LFT (Figure 14-8):

- Payment for LFT items will be based on field measurements.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

New Item Posting

Item: REINFORCING STEEL ▼

Contractor: SIERRA NEVADA CONSTR... ▼

Qty: 61.00 LB
 Authorized: 456.000 LB
 Total Posted: 0.000 LB

Location: "BW" 19 + 21.80

Station From: [] + []

Offset Type: LT

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments:
 Paid plan qty. per plan sheet SD-18 Note: 22.
 The extended length of the pipe did not affect this item.

3895 remaining

Attention:

Attention Comments:
 See email: 2020-7-8 CAW

233 remaining

Figure 14-9: DWR Item Posting – Drainage and Wall LB

NOTES for Drainage and Wall LB (Figure 14-9):

- Payment for POUND (LB) items will be based on plan quantity (per Subsection 505.04.01, *(Reinforcing Steel) Measurement*, of the Standard Specifications or the Standard Plans) or field measurements and calculations if different than plan. Include Standard Plan Table reference callouts.
- If a pound item comes in a container or bag, you must take a picture of the label on the delivered container and email it to your Office Engineer for backup to confirm the quantity of the container.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Check the Attention Flag to notify the Office Engineer there's email that belong with this Item Posting.

New Item Posting

Item: REINFORCING STEEL

Contractor: Q&D CONSTRUCTION INC

Qty: 155.00 LB
 Authorized: 130,734.000 LB
 Total Posted: 0.000 LB

Location: "REW" 731 + 99.18

Station From: [] + []

Offset Type: RT

Offset Dist: 68.95'

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments:
 Plan Qty for Ty. 2 DI = 115 lbs.
 Addition 4'
 Per 2017 Standard Plans pg. R-43 (R-4.2.1) for rate (lbs/ft.). 10lbs x 4ft. = 40lbs.
 115lbs + 40lbs = 155lbs
 3841 remaining

Attention:

Attention Comments:
 DI walls had to be raised addition 4ft. to match roadway elevation change.
 180 remaining

Figure 14-10: DWR Item Posting – Drainage and Wall LB

- NOTES for Drainage and Wall LB (Figure 14-10):
- Payment for POUND (LB) items will be based on plan quantity (per Subsection 505.04.01, (*Reinforcing Steel*) *Measurement*, of the Standard Specifications or the Standard Plans) or field measurements and calculations if different than plan.
 - Give a detailed explanation when payment differs from plan.
 - Location: Enter the Line Designation
 - Offset Type: Enter the LT, RT, or CL.
 - Offset Dist: Enter if known
 - Sig. Fig. = .01
 - Check against Bill of Material in the Standard Plans.

New Item Posting

Item: STRUCTURAL STEEL GRATES

Contractor: SIERRA NEVADA CONSTRU...

Qty: 117.00 LB
 Authorized: 351.000 LB
 Total Posted: 0.000 LB

Location: "BW" 35 + 35.00

Station From: [] + []

Offset Type: RT.

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured:

Comments:
 DI Type 7, 2020 STD Plan pg. 79, Detail # DS-38
 3952 remaining

Figure 14-11: DWR Item Posting – Drainage and Wall LB

- NOTES for Drainage and Wall LB (Figure 14-11):
- Payment for POUND (LB) items will be based on plan quantity (per the Standard Plans) or field measurements and calculations if different than plan. Include Standard Plan Table reference calculations.
 - Location: Enter the Line Designation
 - Offset Type: Enter the LT, RT, or CL.
 - Offset Dist: Enter if known
 - Sig. Fig. = .01

New Item Posting

Item: GEOTEXTILE (CLASS 2) ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: 7.00 SQYD

Authorized: 55.000 SQYD

Total Posted: 22.200 SQYD

Location: "RW" 19 + 21.80

Station From: +

Offset Type: RT

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

7'x 9' / 9 = 7.00 SQYD
 Completed for this installation.
 See plan sheet SD-18

3920 remaining

NOTES for Drainage and Wall SQYD/SQFT (Figure 14-12):

- Payment for SQYD and SQFT items will be based on field measurements and calculations.
- Items related to sound and MSE walls (walls, concrete stain, etc.) that have a UOM of SQYD may be paid to plan. If different than plan, calculations are required.
- Calculation for SQYD = L x W ÷ 9
- Calculation for SQFT = L x W
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

Figure 14-12: DWR Item Posting – Drainage and Wall SQYD/SQFT

4. Record the following required information in the New Equipment window (Figure 14-13 and Figure 14-14):
 - **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 14-13: 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 14-14: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 14-15 and Figure 14-16):
- **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:	LAS VEGAS PAVING C... ▼
Personnel:	LABORER FOREMAN ▼
Employee:	N/A
Decision Class:	Select ▼
Number:	<input type="text" value="1"/>
Total Hours:	<input type="text" value="8"/>
Comments:	<input type="text" value="Foreman - Cody Bellinger"/> <small>3975 remaining</small>
 	

Figure 14-15: DWR Personnel Entry







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

Figure 14-16: 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 – DRAINAGE AND WALL ITEMS

- Collect all Material Certifications. Scan and save them to the 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 - CERT (e.g., 03904 M6100160 Riprap - 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 emails containing TBC survey stakeout report/data in the appropriate Contract Files\Contract\09 Survey directory.
- Save Drainage and Wall items general information photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Save Drainage and Wall items Pound label photos to the appropriate Contract Files\Contract\07 Estimates directory to confirm the quantity of the bundle.

- Review Drainage and Wall 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.

CURB AND GUTTER ITEMS

This chapter contains the following sections:

Overview	15-3
Inspector's Responsibilities – Curb and Gutter Items	15-3
Office Engineer's Responsibilities – Curb and Gutter Items	15-8

OVERVIEW

Curb and Gutter Items have different documentation requirements for each unit of measure (UOM). All Curb and Gutter Items must be measured, calculated and/or based on plan. Documentation examples for a few selected Curb and Gutter 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 – CURB AND GUTTER 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, located in the Contract plans (Figure 15-1), to help identify items, quantities, descriptions and locations.

<table border="1" style="float: right; margin-left: auto;"> <tr> <td>FED. RD. RES. NO.</td> <td>STATE</td> <td>PROJECT NO.</td> <td>COUNTY</td> <td>SHEET NO.</td> </tr> <tr> <td>9</td> <td>NEVADA</td> <td>STP-0160(016)</td> <td>CLARK</td> <td>S-01</td> </tr> </table>																					FED. RD. RES. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.	9	NEVADA	STP-0160(016)	CLARK	S-01
FED. RD. RES. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.																										
9	NEVADA	STP-0160(016)	CLARK	S-01																										
																			STRUCTURE LIST											
																			DESCRIPTION	STATION TO STATION										
																			NOTE: ALL LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER											
																			400	REPAIR CATTLE GUARD, (RT.)	"X" 75+90 "X" 97+54									
																			350	REPAIR CATTLE GUARD, (RT.)	"X" 98+10 "X" 105+10									
																					1288	CONSTRUCT TYPE 5 CURB & GUTTER WITH 5' SIDEWALK, (LT) (CONSTRUCT TYPE D CURB RAMP 98.51' (LT) "BD" 10+72.74 AND 75.93' (LT) "BD" 22+94.19)		"BD" 10+55.75 "BD" 22+96.11						
																					2079	CONSTRUCT TYPE 5 CURB & GUTTER WITH 5' SIDEWALK, (RT) (CONSTRUCT TYPE D CURB RAMP 77.55' (RT) "BD" 10+85.27)		"BD" 10+66.99 "BD" 31+05.83						
																					2118	92	CONSTRUCT MEDIAN ISLAND WITH TYPE D CURB RAMP 26.50' (LT) "BD" 32+71.48 TO 14.50' (RT) "BD" 33+16.49		"BD" 22+44.36 "BD" 33+41.60					
																					11.6	21	CONSTRUCT TYPE 5 CURB & GUTTER WITH 5' SIDEWALK, (RT) (CONSTRUCT TYPE D CURB RAMP 30.00' (RT.) "RS" 0+86.50)		"BD" 37+20.91 "BD" 37+25.91					
																					14.2	26	CONSTRUCT TYPE 5 CURB & GUTTER WITH 5' SIDEWALK, (LT.)		"BD" 37+20.91 "BD" 37+29.13					

Figure 15-1: Example of a Structure List – Curb and Gutter Items

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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 and hours
 - Personnel – title and hours
- Record the following required information in the Report Details window (Figure 15-2):
 - Date**
 - Weather**
 - Low Temp** and **High Temp**
 - Attachments:** (N/A) Send ALL photos via email.
 - Remarks:** Verify with the Resident Engineer on what information is required.

Report Details

Date: Fri, 06/07/2019
Weather: 02
Low Temp: 65
High Temp: 91
Rainfall Amt:

Attachments:

Remarks: GENERAL

"REW" 10 + 55.75 to "REW" 37 + 29.13 LT. Type 5 Curb & Gutter with 5" Sidewalk and Type D Curb Ramp 68.51 LT.
 Contractor started work at 7:00 AM and ended at 3:00 PM.
 I got with Clayton Kershaw, Q&D Foreman to agree with the quantities that I posted for today's work.

3730 remaining

Figure 15-2: DWR Report Detail Window

- 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 Curb and Gutter Item postings:

- Reference the Summary of Base and Surface Quantities and the Paving Plan sheets in the Contract plans for curb and gutter bituminous surface quantities.
- Refer to Figure 15-3 through Figure 15-5 for examples of curb and gutter item postings with different UOM.

New Item Posting

Item: CLASS AA CONCRETE (L... ▾)

Contractor: Q&D CONSTRUCTION INC ▾

Qty: CUYD
 Authorized: 4.740 CUYD
 Total Posted: 3.470 CUYD

Location: "REW"

Station From: +
Offset Type: LT

Station To: +
Offset Type: LT

Measured:

Comments:

3937 remaining

Figure 15-3: DWR Item Posting – Curb and Gutter CUYD

NOTES for Curb and Gutter CUYD/CUFT (Figure 15-3):

- Payment for CUYD items will be based on plan quantity, field measurements and calculations if different than plan, or Standard Plan reference with table callout.
- 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: CLASS AA CONCRETE C... ▾

Contractor: Q&D CONSTRUCTION INC ▾

Qty: LFT
 Authorized: 2,071.000 LFT
 Total Posted: 0.000 LFT

Location: "REW"

Station From: +
Offset Type: LT

Station To: +
Offset Type: LT

Measured:

Comments:

3999 remaining

Figure 15-4: DWR Item Posting - Curb and Gutter LFT

NOTES for Curb and Gutter LFT (Figure 15-4):

- Payment for LFT items will be based on field measurement.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

New Item Posting

Item: CLASS AA CONCRETE S...
 Contractor: Q&D CONSTRUCTION INC
 Qty: 11.11 SQYD
 Authorized: 110.600 SQYD
 Total Posted: 84.500 SQYD
 Location: "REW"
 Station From: 37 + 20.91
 Offset Type: LT
 Offset Dist:
 Station To: 37 + 25.91
 Offset Type: LT
 Offset Dist:
 Measured:
 Comments:
 20'L x 5'W / 9 = 11.11 SQYD
 3972 remaining

NOTES for Curb and Gutter SQYD (Figure 15-5):

- Payment for SQYD items will be based on field measurement.
- Calculations 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

Figure 15-5: DWR Item Posting – Curb and Gutter SQYD

4. Record the following required information in the New Equipment window (Figure 15-6 and Figure 15-7):
- **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 15-6: 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

Figure 15-7: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 15-8 and Figure 15-9):
 - **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 Personnel

Contractor:

Personnel:

Employee:

Decision Class:

Number:

Total Hours:

Comments:

3975 remaining

Figure 15-8: DWR Personnel Entry






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

Figure 15-9: DWR Personnel List

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

Note: When a Mobile Inspector DWR is completed, locked and Sync 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 – CURB AND GUTTER ITEMS

- Collect all Material Certifications. Scan and save them to the 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 - 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 Curb and Gutter Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Curb and Gutter 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.

STRIPING ITEMS

This chapter contains the following sections:

Overview	16-3
Inspector's Responsibilities – Striping Items	16-3
Office Engineer's Responsibilities – Striping Items	16-9

OVERVIEW

Striping Items have different documentation requirements for each unit of measure (UOM). All Striping Items must be counted or measured and calculated. Documentation examples for a few selected Striping 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.

When an Inspector observes contractor striping testing refer to the [AWP Construction Agency View Manual](#) for details on creating the required Materials Sample Record.

INSPECTOR'S RESPONSIBILITIES – STRIPING ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Striping General Notes, located in the Contract plans (Figure 16-1), to help identify items, quantities, descriptions and locations.

STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	SPSR-0582(003)	CLARK	ST1

BOULDER HWY TOTAL				
ITEM NO.	DESCRIPTION	TOTAL	USE TOTAL	UNIT
2020515	REMOVAL OF RAISED PAVEMENT MARKER	371.00		EACH
2021290	REMOVE PAVEMENT MARKINGS	392.00		LINFT
2021295	REMOVE PAVEMENT MARKINGS	233.00		SQYD
6321160	POLYUREA PAVEMENT STRIPING (SOLID WHITE)	363.00		LINFT
6321250	POLYUREA PAVEMENT STRIPING (SOLID YELLOW)	999.00		LINFT
6321262	POLYUREA PAVEMENT STRIPING (VARIES)	2180.00		SQFT
6321300	POLYUREA PAVEMENT STRIPING (DOUBLE SOLID YELLOW)	354.00		LINFT
6341030	THERMOPLASTIC PAVEMENT MARKING (24-INCH SOLID WHITE)	943.00		LINFT
6341060	THERMOPLASTIC PAVEMENT MARKING (VARIES)	658.00		SQFT

STRIPING GENERAL NOTES

1. The locations of crosswalks and stop bars are controlled by the associated curb ramps per Standard Detail T-38.1.3 unless Indicated otherwise. Refer to the structure list for exact locations of curb ramps.

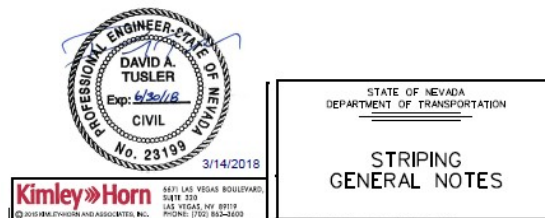


Figure 16-1: Example of Striping General Notes – Striping Items

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices

- Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL Striping 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 16-2):
 - **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.

Report Details

Date: Tue, 11/19/2019

Weather: 02

Low Temp: 65

High Temp: 99

Rainfall Amt:

Attachments:

Remarks: GENERAL

Placing Non-Reflective Pavement Markers from "RW" 382+43 to "RW" 395+02 RT. Contractor started at 7:00am and ended to day at 3:30pm.

3867 remaining

Figure 16-2: 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 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 Striping 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 16-3 through Figure 16-6 for examples of Striping item postings with different UOM.

New Item Posting

Item: REFLECTIVE PAVEME... ▼

Contractor: SIERRA NEVADA CON... ▼

Qty: 78.00 EACH

Authorized: 159.000 EACH

Total Posted: 0.000 EACH

Location: "RW"

Station From: 382 + 43

Offset Type: RT

Offset Dist:

Station To: 395 + 02

Offset Type: RT

Offset Dist:

Measured:

Comments:

NB Lane # 1

3988 remaining

NOTES for Striping EACH (Figure 16-3):

- Payment for EACH items will be based on field count.
- This example shows an EACH item combined.
- 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

Figure 16-3: DWR Item Posting – Striping EACH

New Item Posting

Item: EPOXY PAVEMENT...
 Contractor: SIERRA NEVADA C...
 Qty: 297.00 LFT
 Authorized: 280.000 LFT
 Total Posted: 0.000 LFT
 Location: "CW"
 Station From: 982 + 00
 Offset Type: LT
 Offset Dist:
 Station To: 984 + 97
 Offset Type: LT
 Offset Dist:
 Measured:
 Comments:
 Outside left turn lane, between the thru lane and the turn lane.
 3935 remaining

Figure 16-4: DWR Item Posting - Striping LFT

NOTES for Striping LFT (Figure 16-4):

- Payment for LFT items will be based on field measurements.
- 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: POLYUREA PAVEMENT...
 Contractor: SIERRA NEVADA CONS...
 Qty: .12 MILE
 Authorized: 3.250 MILE
 Total Posted: 0.000 MILE
 Location: "RW"
 Station From: 4 + 36
 Offset Type: RT
 Offset Dist:
 Station To: 10 + 86
 Offset Type: RT
 Offset Dist:
 Measured:
 Comments:
 650 LFT / 5280 = .12 Miles
 Northbound center line
 3949 remaining

Figure 16-5: DWR Item Posting – Striping MILE

NOTES for Striping MILE (Figure 16-5):

- Payment for MILE items will be based on field measurements.
- 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:

Contractor:

Qty: SQFT

Authorized: 1,410.500 SQFT

Total Posted: 0.000 SQFT

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

Outside left turning lane:
 Left Turn Arrows = 15.50 sqft. (2017
 Standard Plans Pg. 156 T38.1.1)
 7 arrows X 15.50 sqft = 108.50 sqft.

3865 remaining

NOTES for Striping Remove and Reset SQFT (Figure 16-6):

- Payment for SQFT items will be based on calculation, field measurements, Standard Plans or the Manual on Uniform Traffic Control Devices.
- Calculation for SQFT = L X W
- 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

Figure 16-6: DWR Item Posting – Striping SQFT

4. Record the following required information in the New Equipment window (Figure 16-7 and Figure 16-8):
 - **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:

Type:

Used:

On Site:

Hours Used:

Hours Idle:

Comments:

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

506 remaining

Figure 16-7: 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 16-8: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 16-9 and Figure 16-10):
- **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:	LAS VEGAS PAVING C... ▼
Personnel:	LABORER FOREMAN ▼
Employee:	N/A
Decision Class:	Select ▼
Number:	<input type="text" value="1"/>
Total Hours:	<input type="text" value="8"/>
Comments:	<input type="text" value="Foreman - Cody Bellinger"/>
3975 remaining	
 	

Figure 16-9: DWR Personnel Entry







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

Figure 16-10: 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 – STRIPING ITEMS

- Collect all Material Certifications. Scan and save them to the Contract Files\Materials\03 Cert & Test Reports\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 - CERT (e.g., 03904 M6330001 Payment Markers - 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 Striping Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Striping 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.

GUARDRAIL ITEMS

This chapter contains the following sections:

Overview	17-3
Survey Crew Chief's Responsibilities – Guardrail Items	17-3
Inspector's Responsibilities – Guardrail Items	17-4
Office Engineer's Responsibilities – Guardrail Items	17-11

OVERVIEW

Guardrail Items have different documentation requirements for each unit of measure (UOM). All Guardrail Items must be counted or measured and calculated. Documentation examples for a few selected Guardrail 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.

SURVEY CREW CHIEF'S RESPONSIBILITIES – GUARDRAIL ITEMS

- When survey data is used as support for payment, any survey data output/reports from Trimble Business Center (TBC) should be formatted to accurately represent the points (data) collected and a description of what the data represents.
- Email ALL TBC survey data output/reports to the Office Engineer. Use the naming convention: Stakeout Data YYYY-MM-DD Inspectors Initials, (e.g. Stakeout Data 2017-03-19 BLF) in the email subject line.

DAILY WORK REPORT (DWR) – AWP

1. Create a DWR in AWP daily to document the survey activity. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.
2. Record the following required information in the General tab (Figure 17-1).
 - **DWR Date**
 - **Inspector**
 - **Weather**
 - **Low Temp and High Temp**
 - **Remarks:** Select the General Remark Type and enter an overview of survey activities for the day (Figure 17-2).

Contract: 03779 - CHIP SEAL WITH SEAL COAT Save ?

General

DWR Date *
07/05/2019

Inspector *
KMcDaniel2@dot.nv.gov
McDaniel Kristen

Weather
01 - Clear

Rainfall Amount
-

Low Temperature
68

High Temperature
87

Number of Remarks
0

Federal Project Number

State Project Number

Entered By
-

Entered Date

Approval Date

Approved By

Remarks

Type *	Remarks *
01 - GENERAL	"CW" 45+29.66 to "CW" 61+79.66 RT. Install Galvanized Guardrail with Trailing End Anchor. For data see email: stakeout data 7/5/19.

Figure 17-1: Survey Crew Chief DWR General Tab

"CW" 45+29.66 to "CW" 61+79.66 RT. Install Galvanized Guardrail with Trailing End Anchor. For data see email: stakeout data 7/5/19.

Apply

Figure 17-2: Survey Crew Chief General Remarks Expanded

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

INSPECTOR'S RESPONSIBILITIES – GUARDRAIL 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 (Figure 17-3), located in the Contract plans and the Standard Plans, to help identify items, quantities, descriptions and locations.

		FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.	
		0	NEVADA	STP-0100(016)	CLARK	8-53	
		STRUCTURE LIST					
		DESCRIPTION				STATION TO STATION	
PERPETUATE SURVEY MONUMENTS	621 0006						
GALVANIZED GUARDRAIL	616 0524						
TRAILING END ANCHOR	616 0038						
12-FOOT SWING GATE (DOUBLE)	616 0916						
72-INCH CHAIN-LINK FENCE	616 0712	4000				"BD" 42+50 "BD" 72+50	
CLASS A CONCRETE SIDEWALK (4-INCH)	613 0854						
CLASS A CONCRETE CURB & GUTTER (TYPE B)	613 0732						
CLASS A CONCRETE CURB & DOWN CURB (TYPE A)	613 0604						
CLASS A CONCRETE APRONS	611 0528		1520			"BD" 43+75.00	
CASTINGS	609 0500			270		"BD" 45+29.66 "BD" 61+79.66	
ADJUSTING COVERS (METHOD C)	609 0120					"BD" 50+03.98	
ADJUSTING COVERS (METHOD B)	609 0116						
ADJUSTING COVERS (METHOD A)	609 0112					"Pd" 0+78 "Pd" 4+40	
CONCRETE BARRIER RAIL (TYPE A)	502 0528				362	"Pd" 0+00 "Pd" 1+98	
PORTABLE PRECAST CONCRETE BARRIER RAIL	502 0616				168		
CLASS A CONCRETE (ISLAND PAVING)	402 0508					CONSTRUCT V-TYPE DITCH (LT.)	
PLANTMIX MISCELLANEOUS AREAS	402 0960					"Pd" 12+00 "Pd" 14+00	
TYPE I CLASS A AGGREGATE	302 0592						
V-TYPE DITCHES	203 0566				2		
						PLANTMIX MISCELLANEOUS AREA (LT.) (ISLAND SPANDREL)	
						"Ln" 204+33	
						PLANTMIX MISCELLANEOUS AREA (RT.) (ISLAND SPANDREL)	
						"Ln" 221+00	

Figure 17-3: Example of a Structure List – Guardrail

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL Guardrail Item calculation sheets to the Office Engineer.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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
- Record the following required information in the Report Details window (Figure 17-4):
 - 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 17-4: 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 Guardrail 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.
- The Design Division's Standards and Compliance Section shall review the guardrail once it is staked and prior to the Contractor ordering the material and starting the installation. This will allow changes to be made to the guardrail if the Contract plans are incorrect for the actual field conditions. On current and future contracts, contact the Standards and Compliance Section to schedule a review.
- The Resident Engineer will contact the Maintenance and Asset Division at the completion of every contract to see if a Guardrail Inventory Data sheet is required. If the data sheet is required, it will be completed by the Resident Engineer and sent to the Safety Division, with a copy sent to the Construction Admin Services Section. If there are any questions, contact Maintenance and Asset Division for assistance.
- Per subsection 109.06, (*Measurement and Payment*) *Partial Payment*, of the Standard Specifications, partial payment may be made for guardrail when only the posts have been put in. Therefore, when the guardrail posts are installed, 50% of the guardrail quantity shall be allowed for payment. The remaining 50% will be paid when the guardrail is complete.

- After each section of guardrail has been completed the final in-place measurement will be documented.
- Refer to Figure 17-5 through Figure 17-9 for examples of guardrail item postings with different UOM.

New Item Posting

Item: TRAILING END ANCHOR

Contractor: Q&D CONSTRUCTION INC

Qty: 2.00 EACH
 Authorized: 6.000 EACH
 Total Posted: 0.000 EACH

Location: "CW"

Station From: 45 + 29.66
Offset Type: RT.
Offset Dist:

Station To: 61 + 76.66
Offset Type: RT.
Offset Dist:

Measured:

Comments:
 Counted
 Item complete for this installation

3955 remaining

Figure 17-5: DWR Item Posting - Guardrail EACH

NOTES for Guardrail EACH (Figure 17-5):

- Payment for EACH items will be based on field count.
- 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: GALVANIZED GUARDRAIL

Contractor: Q&D CONSTRUCTION INC

Qty: 525.00 LFT
 Authorized: 3,214.000 LFT
 Total Posted: 0.000 LFT

Location: "CW"

Station From: 45 + 29.66
Offset Type: RT.
Offset Dist:

Station To: 61 + 76.66
Offset Type: RT.
Offset Dist:

Measured:

Comments:
 1050 LFT for this section
 Paid 50% for Posts only

3949 remaining

Figure 17-6: DWR Item Posting - Guardrail LFT

NOTES for Guardrail LFT (Figure 17-6):

- Payment for LFT items will be based on field measurements.
- Pay 50% of the measured length (section) when the Posts are complete.
- 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: GALVANIZED GUARDRAIL

Contractor: Q&D CONSTRUCTION INC

Qty: 525.00 LFT
 Authorized: 3,214.000 LFT
 Total Posted: 525.000 LFT

Location: "CW"

Station From: 45 + 29.66
Offset Type: RT.
Offset Dist:

Station To: 61 + 76.66
Offset Type: RT.
Offset Dist:

Measured:

Comments:
 For this section = 1050 LFT
 Paid 50% for Rail only

3948 remaining

Figure 17-7: DWR Item Posting - Guardrail LFT

NOTES for Guardrail LFT (Figure 17-7):

- Payment for LFT items will be based on field measurements
- Pay 50% of the measured length (section) when the Rail are complete
- After each length (section) of guardrail has been completed, the final in-place measurement shall be documented
- 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 G...

Contractor: Q&D CONSTRUCTION INC

Qty: 300.00 LFT
 Authorized: 2,391.000 LFT
 Total Posted: 0.000 LFT

Location: "CW"

Station From: 370 + 50
Offset Type: RT.
Offset Dist:

Station To: 376 + 50
Offset Type: RT.
Offset Dist:

Measured:

Comments:
 For this section = 600 LFT
 paid 50% for removal only

3946 remaining

Figure 17-8: DWR Item Posting – Guardrail Remove and Reset LFT

NOTES for Guardrail Remove and Reset LFT (Figure 17-8):

- Payment for LFT items will be based on field measurements.
- Guardrail must be Measured before removed
- Pay 50% for removal of the measured length (section) when completed.
- 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 G... LFT

Contractor: Q&D CONSTRUCTION INC LFT

Qty: 300.00 LFT

Authorized: 2,391.000 LFT

Total Posted: 300.000 LFT

Location: "CW"

Station From: 370 + 50

Offset Type: RT

Offset Dist:

Station To: 376 + 50

Offset Type: RT

Offset Dist:

Measured:

Comments:

600 LFT for this section
 Paid 50% for reset only

3950 remaining

NOTES for Guardrail Remove and Reset LFT (Figure 17-9):

- Payment for LFT items will be based on field measurements.
- Pay 50% for reset of the measured length (section) when completed.
- 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

Figure 17-9: Item Posting – Guardrail Remove and Reset LFT

4. Record the following required information in the New Equipment window (Figure 17-10 and Figure 17-11):
 - **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... LFT

Type: LOADER / BACKHOE / ... LFT

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 17-10: 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 17-11: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 17-12 and Figure 17-13):
- **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:	LAS VEGAS PAVING C... ▼
Personnel:	LABORER FOREMAN ▼
Employee:	N/A
Decision Class:	Select ▼
Number:	<input type="text" value="1"/>
Total Hours:	<input type="text" value="8"/>
Comments:	<input type="text" value="Foreman - Cody Bellinger"/>
3975 remaining	
 	

Figure 17-12: DWR Personnel Entry







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

Figure 17-13: 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 – GUARDRAIL ITEMS

- Collect all Material Certifications. Scan and save them to the 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 - CERT (e.g., 03904 M6180001 Guardrail - 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 emails containing TBC survey stakeout report/data in the appropriate Contract Files\Contract\09 Survey directory.
- Save Guardrail Items photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review guardrail 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 2017-03-19 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.

ADJUST VALVE AND MANHOLE ITEMS

This chapter contains the following sections:

Overview	18-3
Inspector's Responsibilities – Adjust Valve and Manhole Items	18-3
Office Engineer's Responsibilities – Adjust Valve and Manhole Items	18-14

OVERVIEW

Adjust Valve and Manhole Items have different documentation requirements for each unit of measure (UOM). All Adjust Valve and Manhole Items must be counted. Documentation examples for a few selected Adjust Valve and Manhole 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.

To ensure the correct number of valves and manholes are being billed to the different entities for payment:

- Review the Agreement(s) with the different entities for the adjusting of valves and manholes for the contract. If you do not have any Agreement(s), contact Right-of-Way Division for assistance.
- Review the Agreement, contract plan Structure List, and the Agreement Estimate report for the quantity and location of each valve and manhole cover.
- Notify the Resident Engineer if a discrepancy is found. The Resident Engineer will notify Right-of-Way Division and the entity of the discrepancy.
- If additional valves or manholes are found in the field, the Resident Engineer will notify the entity. Make sure to note additional adjustments in the Remarks of the DWR.
- It will be at the discretion of the Resident Engineer to assess if the manhole needs to be adjusted.
- If the station or value in the Agreement does not match the station or value in the field, a reason for the change is required in the Remarks of the DWR posting.
- If the manhole is a 'Prior Right', state it in the Comments within the DWR item posting.

INSPECTOR'S RESPONSIBILITIES – ADJUST VALVE AND MANHOLE 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 (Figure 18-1), located in the Contract plans, to help identify items, quantities, descriptions and locations.

		FED. RD. DIST. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
		8	NEVADA	STP-01600248	CLARK	5-04
STRUCTURE LIST						
		DESCRIPTION	STATION TO STATION			
021 0006	PERPETUATE SURVEY MONUMENTS					
018 0024	GALVANIZED GUARDRAIL					
018 0038	TRAILING END ANCHOR					
016 0916	18-FOOT SWING GATE (DOUBLE)					
016 0712	72-INCH CHAINLINK FENCE					
013 0864	CLASS A CONCRETE SIDEWALK (4-INCH)					
013 0732	CLASS A CONCRETE CURB & GUTTER (TYPE 5)					
013 0804	CLASS A CONCRETE GLUE DOWN CURB (TYPE A)					
011 0508	CLASS A CONCRETE APRONS					
009 0500	CASTINGS					
009 0120	ADJUSTING COVERS (METHOD C)					
009 0116	ADJUSTING COVERS (METHOD B)					
009 0112	ADJUSTING COVERS (METHOD A)					
002 0028	CONCRETE BARRIER RAIL (TYPE A)					
002 0816	PORTABLE PRECAST CONCRETE BARRIER RAIL					
002 0508	CLASS A CONCRETE (ISLAND PAVING)					
002 0660	PLANTMIX MISCELLANEOUS AREAS					
002 0592	TYPE 1 CLASS A AGGREGATE					
003 0556	V-TYPE DITCHES					
		CLARK COUNTY SANITATION DISTRICT				
		ADJUSTING MANHOLE COVERS, 10.00' (RT.)	"B0" 56+34.81			
		ADJUSTING MANHOLE COVERS, 5.00' (RT.)	"B0" 56+39.10			
		ADJUSTING MANHOLE COVERS, 8.00' (RT.)	"B0" 56+62.75			
		ADJUSTING MANHOLE COVERS, 22.00' (L.T.)	"B0" 57+49.00			
		ADJUSTING MANHOLE COVERS, 25.00' (L.T.)	"B0" 57+71.99			
		ADJUSTING MANHOLE COVERS, 15.00' (RT.)	"B0" 58+02.05			
		ADJUSTING MANHOLE COVERS, 5.00' (RT.)	"B0" 58+37.43			
		ADJUSTING MANHOLE COVERS, 5.00' (RT.)	"Pn" 2+75			
		ADJUSTING MANHOLE COVERS, 10.00' (RT.)	"Pn" 4+00			
		ADJUSTING MANHOLE COVERS, 8.00' (RT.)	"Pn" 4+25			
		ADJUSTING MANHOLE COVERS, 15.00' (RT.)	"Pn" 5+25			
		SPRINT TELEPHONE				
		ADJUSTING MANHOLE COVERS, 25.00' (RT.)	"B0" 56+78.12			
		ADJUSTING MANHOLE COVERS, 15.00' (RT.)	"B0" 56+92.90			
		ADJUSTING MANHOLE COVERS, 22.00' (L.T.)	"B0" 57+19.00			
		SOUTHWEST GAS CORPORATION				
		ADJUSTING MANHOLE COVERS, 12.00' (RT.)	"B0" 57+17.54			

Figure 18-1: Example of a Structure List – Adjust Valve and Manhole Items

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Valve and Manhole Agreement documents (Figure 18-2 through Figure 18-6).
- Turn in ALL Adjust Valve and Manhole Item calculation sheets to the Office Engineer.

**NEVADA DEPARTMENT OF TRANSPORTATION
AGREEMENT SUMMARY SHEET**

Agreement No. NM 126-16-080 Amendment No. _____ Task Order No. _____ Task Order Amendment No. _____
 Start Date: 3-7-16 End Date: 05/30/2019 Amendment Date: _____ Procured by: _____
 Agreement Type: Facility Agreement Sub-Type: Utility Procurement No.: _____
 Purpose: Manhole and Valve Adjustment

County(ies) where work is being performed: Clark

Contact Person: Tina Kramer Phone No.: (775) 888-7993 Email: kkramer@dot.state.nv.us
 Project Manager: N/A Phone No.: N/A Email: N/A@dot.state.nv.us

Second Party Information

Contact Person: Joe Yalson Email: N/A Phone No.: (702) 455-6082
 Company Name: Clark County Department of Public Works NV Business License No.: N/A
 Primary Address: 500 S Grand Central Parkway, Las Vegas NV 89*155 Business License Expiration: n/a
 Invoice Remit To Address: _____ Business License Search _____

Original budget approval (Form 2A) must be attached

Total Estimated Cost of Agreement: _____ Org No, Responsible for Billing: C030 Funding Percentage: _____
 Payable Amount: _____ Fixed Fee %: _____ Payment Code: Non-Monetary Federal %: _____
 Receivable Amount: _____ Overhead %: _____ Payment Cycle: _____ State %: _____
 Amendment Amount: _____ Retention %: _____ Security Deposit: Yes No Local %: _____
 Fed Participation: Yes No In-Kind Services: Yes No Deposit Amount: _____ DBE Goal: _____
 Appr Unit: N/A Activity: N/A Object: N/A Job/Project: N/A

Project Identification

Project ID No.: SPRS-0604(029) Contract: _____
 EA No.: 73781 Other: _____

Board Approval

Yes No Transportation BOE Meeting Date: _____ BOE Contract No.: _____
 Approved Date: _____ Agenda Item No.: _____
 Does the firm employ current or former State employees who have left State employment in the past two years? Yes No
 If yes, who, where did they work, and when did they leave? _____

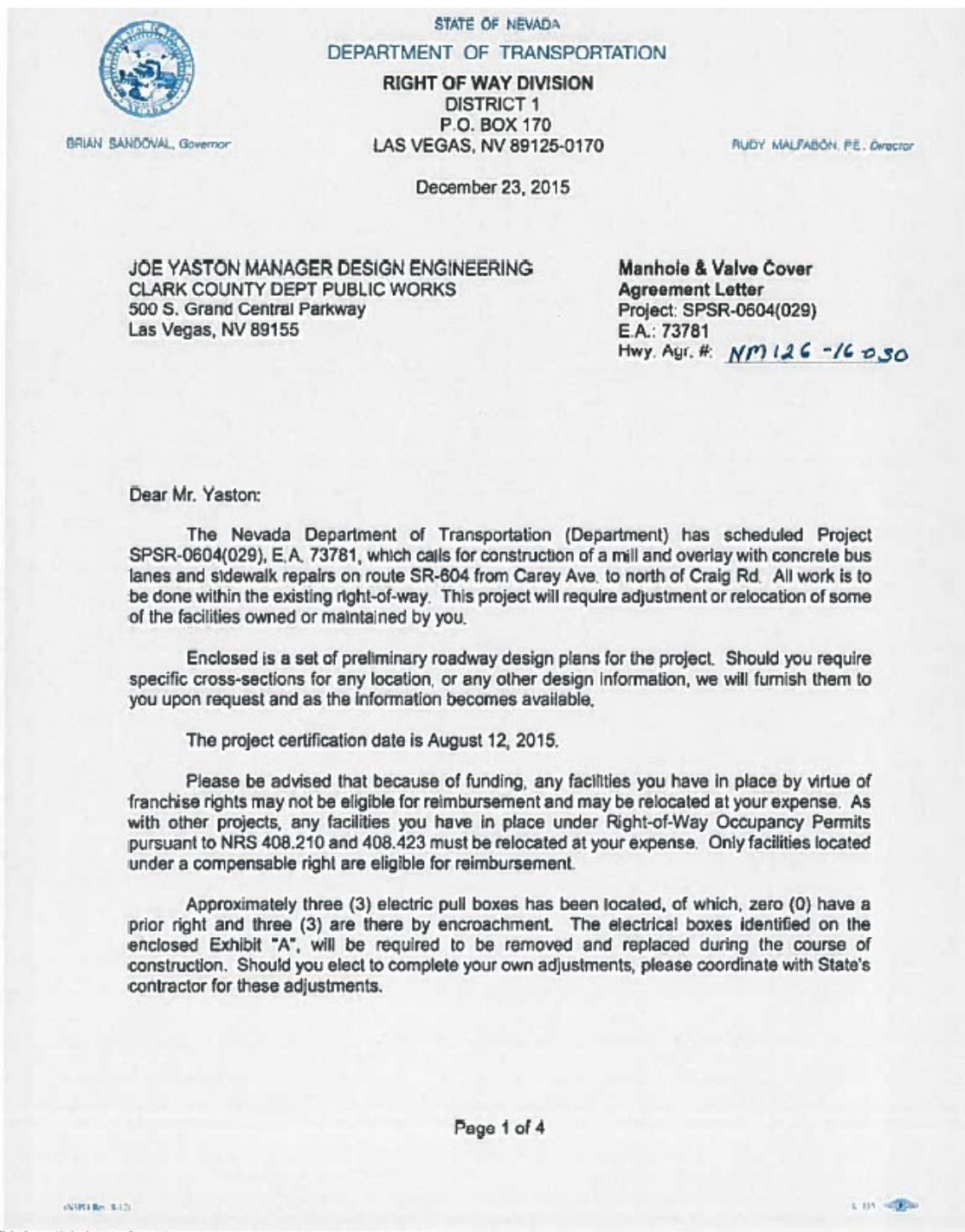
Review Approval:	Final Distribution	Required docs to start process: (to be completed by Admin Services)	Execution: (to be completed by Admin Services)
Asst. Director <u>JMT</u>	Recipient: _____	Original Summary Sheet: <input type="checkbox"/>	<input type="checkbox"/> Do Not Pay (Federal only)
Dist./Div. Head _____	_____	Original Form 2A: <input type="checkbox"/>	<input type="checkbox"/> NV Board of Engineers
Environmental _____	_____	Electronic Draft of Agreement: <input type="checkbox"/>	<input checked="" type="checkbox"/> AGMM <input checked="" type="checkbox"/> ANOT
IT _____	_____	Agree Services _____	<input checked="" type="checkbox"/> AGMT <input checked="" type="checkbox"/> AGML
Legal <u>AB 3-4-16</u>	_____		<input type="checkbox"/> Notice of Award Sent
Proj. Accting _____	_____		<input type="checkbox"/> Tracking Log Updated
Right of Way <u>AB</u>	_____		<input type="checkbox"/> Insurance Log Updated
			Date/Initials <u>3/5/16 EGA</u>
			Verified <u>by 3/10/16</u>

3-12
LH

NDOT
070-001
Rev. 09/14

This is a digital copy from AppXtender by h9070krg, Kalie R. Giardina

Figure 18-2: Agreement Summary Sheet



This is a digital copy from AppXtender by h9070krg; Kalie R. Giardina

Figure 18-3: Manhole and Valve Cover Agreement Letter

JOE YASTON, MGR DESIGN ENGINEERING
CLARK COUNTY DEPT PUBLIC WORKS
December 23, 2015

If you wish to have these adjustments made by NDOT's contractor during construction, we will include this work in our contract and bill you for any non-compensable adjustments after the contract has been completed. This bill will be for the actual number of non-compensable manholes to be adjusted at the actual bid cost plus 5% to 15% Construction Engineering costs for the project. The engineer's estimated bid price is ONE THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$1,500.00) for each non-compensable No. 7 pull box. The Department does not provide any warranty that the estimate is an accurate reflection of the final cost. The Department disclaims any such warranty. The final costs may vary widely depending on the Contractor's bid prices. Clark County Department Public Works shall be wary in its reliance on the estimates set forth in this Agreement Letter.

Any compensable adjustments made by NDOT's contractor during construction will be included in the Department's contract at no cost to Clark County Department Public Works. The number of electrical boxes described above is an approximation only, the actual numbers may increase or decrease; however, you will only be responsible for payment of the non-compensable covers actually adjusted during construction.

(Please check the appropriate box)

Clark County Department Public Works agrees to have the work completed by the STATE's CONTRACTOR. Please sign below indicating your approval and authorization, and return this letter to me before July 13, 2015. Clark County Department Public Works requires ___ days for notice of lead time prior to construction.

Clark County Department Public Works elects to perform the required adjustment with our OWN FORCES. Clark County Department Public Works understands that all work must be coordinated with the STATE's CONTRACTOR in order to avoid delays on the project. If delays are experienced due to the relocation of our facility, any damages incurred by the Contractor or the State will be our responsibility. Clark County Department Public Works requires 10 days for notice of lead time prior to construction.

Should you have any questions or require further information, please contact Allisa Root of this office at (702) 385-6552.

Sincerely,

David Moreno
Supervisory Right-of-Way Agent

dm/ar/dc
Enclosure

cc: K. Maxwell, Project Coordinator
D. Lake, Designer
D. Christiansen, Resident Engineer
A. Ramos, Utility Inspector, District 1
M. Martini, District 1 Engineer

Page 2 of 4

This is a digital copy from AppXtender by h9070krg; Kalie R. Giardina

Figure 18-4: Manhole and Valve Cover Agreement Letter (Cont.)

JOE YASTON, MGR DESIGN ENGINEERING
CLARK COUNTY DEPT PUBLIC WORKS
December 23, 2015

.....
CLARK COUNTY DEPARTMENT PUBLIC WORKS
AGREES TO PERFORM THE ABOVE-DESCRIBED ADJUSTMENTS PRIOR TO
THE PROJECT CERTIFICATION DATE AS STATED ABOVE:

CLARK COUNTY DEPARTMENT PUBLIC WORKS

By: *[Signature]* DESIGN ENGINEER 2/11/16
Name, Title Date

REVIEWED AND RECOMMENDED BY:

[Signature] 3/1/16
Date
Jerry Hoover, Acting Chief RWay Agent
Patli Correlli

DP
2-28-16

APPROVED FOR LEGALITY AND FORM:

[Signature] 3-4-2016
Date
Deputy Attorney General

STATE OF NEVADA, acting by and through its
DEPARTMENT OF TRANSPORTATION

[Signature] 3/2/16
Date
Asst. Director

This is a digital copy from AppXtender by h9070krg; Katie R. Giardina

Figure 18-5: Manhole and Valve Cover Agreement Letter (Cont.)

EXHIBIT "A"
UTILITY LOCATIONS

Project: SPSR-0604 (002)
E.A.: 73781

STATION	UTILITY	OFFSET
"P" 199+22.78+/-	CCDPW- Electric Pull Box #7	53' RT
"P" 296+19.50+/-	CCDPW- Electric Pull Box #5	52' RT
"P" 298+71.69+/-	CCDPW- Electric Pull Box #5	52' RT

Figure 18-6: Manhole and Valve Cover Agreement Letter - Utility Locations

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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
- Record the following required information in the Report Details window (Figure 18-7):
 - 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.

Report Details

Date: Thu, 01/02/2020
Weather: 02
Low Temp: 35
High Temp: 57
Rainfall Amt:

Attachments:

Remarks: GENERAL
 Adjusting Manhole Covers from "BD" 56 + 34.81 to "BD" 58 + 37 Rt. & LT. Contractor started working at 6:00 AM and ended at 3:30 PM. Clark County Sanitation District came out to the job site to verify everyone is on the same page per their revised manhole agreement before any work began.

3710 remaining

Figure 18-7: DWR Report Detail Window

- Record the following required information in the NewItem 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 Adjust Valve and Manhole Items:

- Refer to Subsection 609.03.02, *(Inlets and Manholes) General – Adjusting Manhole and Valve Covers*, of the Standard Specifications for Methods A, B and C prior to paving.
- Method A - Used when removal of the existing pavement by cold milling is not required. Once all paving is completed, locate and adjust the cover to the final finished pavement level.
- Method B - Used when removal of the existing pavement by cold milling is required. Before cold milling, lower the cover sufficiently to accommodate the required pavement removal depth. After the new pavement is placed and completed, locate and adjust the cover to the final pavement level.
- Method C - Used when the method of adjustment is outside the areas described in Methods A and B, when removal of cold milling and paving is not used. Method C is paid as either lowered and raised or just raised depending on what is called for in the field.
- Refer to Figure 18-8 through Figure 18-11 for examples of adjust valve and manhole item postings with different UOM.

New Item Posting

Item:

Contractor:

Qty: EACH

Authorized: 1.000 EACH

Total Posted: 0.000 EACH

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

Raised
 Type = Phone
 Owner = Sprint
 Agreement # NA123-19-030

3937 remaining

NOTES for Adjust Valve and Manhole EACH (Method A) (Figure 18-8):

- Payment for EACH items will be based on field count.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Must identify the TYPE, OWNER and AGREEMENT # of all valve and manhole covers to be adjusted.

Figure 18-8: DWR Item Posting - Adjust Valve and Manhole EACH (Method A)

New Item Posting	
Item:	ADJUSTING VALVE CO... ▼
Contractor:	SIERRA NEVADA CON... ▼
Qty:	<input type="text" value="0.50"/> EACH
Authorized:	3.000 EACH
Total Posted:	0.000 EACH
Location:	"BD" 57 + 49.00
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	RT
Offset Dist:	22.00'
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	<p>Paid half for lowering. Type = Sewer Owner = LVVWD Agreement # P588-15-030</p>
3922 remaining	

Figure 18-9: DWR Item Posting - Adjust Valve and Manhole EACH (Method B)

NOTES for Adjust Valve and Manhole EACH (Method B) (Figure 18-9):

- Payment for EACH items will be based on field count.
- Pay .5 when lowered and pay .5 when raised.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Must identify the TYPE, OWNER and AGREEMENT # of all valve and manhole covers to be adjusted.

New Item Posting	
Item:	ADJUSTING MANHOLE... ▼
Contractor:	SIERRA NEVADA CON... ▼
Qty:	<input type="text" value="1.00"/> EACH
Authorized:	1.000 EACH
Total Posted:	0.000 EACH
Location:	"Pe" 4 + 00
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	RT
Offset Dist:	10.00'
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	<p>Raised Type = Sewer Owner = CCSD Agreement # NM127-19-030</p>
3939 remaining	

Figure 18-10: DWR Item Posting - Adjust Valve and Manhole EACH (Method C)

NOTES for Adjust Valve and Manhole EACH (Method C – Raised) (Figure 18-10):

- Payment for EACH items will be based on field count.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Must identify the TYPE, OWNER and AGREEMENT # of all valve and manhole covers to be adjusted.

New Item Posting	
Item:	ADJUSTING VALVE CO... ▾
Contractor:	SIERRA NEVADA CON... ▾
Qty:	<input type="text" value=".50"/> EACH
Authorized:	1.000 EACH
Total Posted:	0.000 EACH
Location:	"Pe" 2 + 75
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	RT
Offset Dist:	5.00'
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="checkbox"/>
Comments:	<input type="text" value="Paid half for lowering"/> Type = Gas Owner = SWG Agreement # NM126-18-030
3926 remaining	

Figure 18-11: DWR Item Posting – Adjust Valve and Manhole EACH (Method C)

NOTES for Adjust Valve and Manhole EACH
(Method C – Lowered and Raised) (Figure 18-11):

- Payment for EACH items will be based on field count.
- Pay .5 when lowered and pay .5 when raised.
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Must identify the TYPE, OWNER and AGREEMENT # of all valve and manhole covers to be adjusted.

4. Record the following required information in the New Equipment window (Figure 18-12 and Figure 18-13):
- **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.
 - **Hours Idle:** 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:	<input type="text" value="1"/>
On Site:	<input type="text"/>
Hours Used:	<input type="text" value="8"/>
Hours Idle:	<input type="text"/>
Comments:	<input bit"="" type="text" value="Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12"/>
506 remaining	
<input checked="" type="checkbox"/> <input type="checkbox"/>	

Figure 18-12: DWR Equipment Entry

Figure 18-13: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 18-14 and Figure 18-15):
 - **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).

Figure 18-14: DWR Personnel Entry







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

Figure 18-15: 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 Sync 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 – ADJUST VALVE AND MANHOLE ITEMS

- Distribute all Agreement documents to the Inspectors.
- Save the Agreement documents to the appropriate Contract Files\Contract\10 Agreements directory.
- Save Adjust Valve and Manhole Items photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photographs with Descriptions directory.
- 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.

MISCELLANEOUS ITEMS

This chapter contains the following sections:

Overview	19-3
Inspector's Responsibilities – Miscellaneous Items	19-3
Office Engineer's Responsibilities – Miscellaneous Items	19-15

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL miscellaneous 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 19-2):
 - **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.

Report Details

Date: Fri, 06/07/2019
Weather: 05
Low Temp: 35
High Temp: 48
Rainfall Amt:

Attachments:

Remarks: GENERAL

"CW" 38 + 10 RT. installed 12' swing gate (Double) and at "CW" 37 + 22 to "CW" 40 + 28 RT. installed 72" chain-link fence.
 Contractor started work at 8:45 AM and due to having problems with their equipment. Contractor ended at 3:30 PM.
 Cody Bellinger, Resident Engineer, came out to the jobsite to talk to Clayton Kershaw, Q&D Foreman, about the delay in starting work on time.

3620 remaining

Figure 19-2: 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 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 Miscellaneous 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.
- When a miscellaneous item has a UOM of SQYD, there are some cases when the plan quantity can be used for the pay quantity. An example of this would be the item Plantmixing Miscellaneous in a "contained" area, such as a gore island. In this case, the area would not be expected to change from the planned dimensions. Using plan quantity will eliminate making the difficult calculations of an irregularly curved area. This must be stated in the remarks as to why calculations were not done.
- If the final quantity for a lump sum item (excluding 736 items) is under plan quantity, a complete explanation as to why the item is not paid to plan is required in the Closeout Change Order. Refer to Chapter 10, Change Orders, in the [AWP User Guide](#) for details.
- 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:

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

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

$$W = \#$$

$$L = \#$$

App Rate = 1gal/150 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.
- Refer to Figure 19-3 through Figure 19-17 for examples of miscellaneous item postings with different UOM.

New Item Posting

Item:	DUST PALLIATIVE
Contractor:	Q&D CONSTRUCTION INC
Qty:	0.19 ACRE
Authorized:	2.120 ACRE
Total Posted:	0.000 ACRE
Location:	"CW"
Station From:	40 + 93.30
Offset Type:	RT
Offset Dist:	
Station To:	42 + 17.30
Offset Type:	RT
Offset Dist:	
Measured:	<input type="checkbox"/>
Comments:	200' x 41' / 43560 = .19 acre

3970 remaining

NOTES for Miscellaneous ACRE (Figure 19-3):

- Payment for ACRE item will be based on field measure and calculations.
- Calculation for ACRE = $L \times W \div 43560$ (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

Figure 19-3: DWR Item Posting – Miscellaneous ACRE

New Item Posting

Item: POLYMER CONCRETE

Contractor: Q&D CONSTRUCTION INC

Qty: 30.00 CUFT
 Authorized: 142.520 CUFT
 Total Posted: 0.000 CUFT

Location: "CW" 425 + 30 RT.

Station From: [] + []
 Offset Type: []
 Offset Dist: []

Station To: [] + []
 Offset Type: []
 Offset Dist: []

Measured:

Comments:
 20 x 3 x .5 = 30.00

3979 remaining

Figure 19-4: DWR Item Posting - Miscellaneous CUFT

NOTES for Miscellaneous CUFT (Figure 19-4):

- Payment for CUFT items will be based on field measurements and calculations.
- Calculation for CUFT = L x W x D
- Location: Enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .01

New Item Posting

Item: CLASS A CONCRETE (MI...)

Contractor: Q&D CONSTRUCTION INC

Qty: 1972.00 CUYD
 Authorized: 1,972.000 CUYD
 Total Posted: 0.000 CUYD

Location: "CW" 425 + 30 RT.

Station From: [] + []
 Offset Type: []
 Offset Dist: []

Station To: [] + []
 Offset Type: []
 Offset Dist: []

Measured:

Comments:
 Paid plan qty. per plan sheet # SD1

3964 remaining

Figure 19-5: DWR Item Posting – Miscellaneous CUYD

NOTES for Miscellaneous CUYD (Figure 19-5):

- Payment for CUYD items will be based on plan quantity or field measurements and calculations if different than plan.
- Calculation for CUYD = L x W x D ÷ 27
- Location: Enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .01

New Item Posting

Item:

Contractor:

Qty: EACH
 Authorized: 214.000 EACH
 Total Posted: 0.000 EACH

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

3992 remaining

Figure 19-6: DWR Item Posting – Miscellaneous EACH

NOTES for Miscellaneous EACH (Figure 19-6):

- Payment for EACH items will be based on field count.
- 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:

Contractor:

Qty: EACH
 Authorized: 1.000 EACH
 Total Posted: 0.000 EACH

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:

3999 remaining

Figure 19-7: DWR Item Posting – Miscellaneous EACH

NOTES for Miscellaneous EACH (Figure 19-7):

- Payment for EACH items will be based on field count.
- Location: Enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .01

New Item Posting

Item: PORTABLE PRECAST C...
Contractor: Q&D CONSTRUCTION INC
Qty: 63.00 LFT
 Authorized: 70.000 LFT
 Total Posted: 0.000 LFT
Location: "RW"
Station From: 37 + 55.12
Offset Type: RT
Offset Dist:
Station To: 38 + 15.12
Offset Type: RT
Offset Dist:
Measured:
Comments:
 3999 remaining

Figure 19-8: DWR Item Posting – Miscellaneous LFT

- NOTES for Miscellaneous LFT (Figure 19-8):
- Payment for LFT items will be based on field measurements.
 - 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: 72-INCH CHAIN-LINK F...
Contractor: SIERRA NEVADA CON...
Qty: 1125.00 LFT
 Authorized: 3,500.000 LFT
 Total Posted: 0.000 LFT
Location: "REW"
Station From: 42 + 50
Offset Type: RT
Offset Dist: 22.00'
Station To: 62 + 50
Offset Type: RT
Offset Dist: 22.00'
Measured:
Comments:
 Measure 2250 LFT. Post only
 2250 / 2 = 1125.00 LFT
 3947 remaining

Figure 19-9: DWR Item Posting – Miscellaneous LFT

- NOTES for Miscellaneous LFT (Figure 19-9):
- Payment for LFT items will be based on field measurements.
 - 50% of the measured length (section) can be paid when the posts are completed.
 - 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: 72-INCH CHAIN-LINK F...
Contractor: SIERRA NEVADA CON...
Qty: 1125.00 LFT
 Authorized: 3,500.000 LFT
 Total Posted: 1,125.000 LFT
Location: "REW"
Station From: 42 + 50
Offset Type: RT
Offset Dist: 22.00'
Station To: 62 + 50
Offset Type: RT
Offset Dist: 22.00'
Measured:
Comments:
 Measure 2250 LFT. Wire only.
 This section is 100% complete.
 2250 / 2 = 1125.00 LFT
3914 remaining

Figure 19-10: DWR Item Posting – Miscellaneous LFT

NOTES for Miscellaneous LTF (Figure 19-10):

- Payment for LFT items will be based on field measurements.
- When each length (section) of fence has been completed, record a measurement and indicate that the section is 100% complete.
- 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: IRON SULFATE
Contractor: Q&D CONSTRUCTION INC
Qty: 15.00 LB
 Authorized: 25.000 LB
 Total Posted: 0.000 LB
Location: "REW"
Station From: 120 + 16
Offset Type: CL
Offset Dist:
Station To: 128 + 43
Offset Type: CL
Offset Dist:
Measured:
Comments:
 3 @ 5 lbs. bags = 15.00 lbs.
3971 remaining
Attention:
Attention Comments:
 See email: DWR 2019-1-4 KMM for the labels
214 remaining

Figure 19-11: DWR Item Posting – Miscellaneous LB

NOTES for Miscellaneous LB (Figure 19-11):

- Payment for POUND (LB) items will be based on plan quantity or field measurements and calculations if different than plan.
- A photo 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
- Sig. Fig. = .01
- Check the Attention Flag to notify the Office Engineer there's an email regarding this Item Posting.

New Item Posting

Item: WATER LINE MODIFICA...
 Contractor: Q&D CONSTRUCTION INC
 Qty: 184009.09 L.S.
 Authorized: 1,472,072.74 L.S.
 Total Posted: 0.000 L.S.
 Location: "REW"
 Station From: 120 + 16
 Offset Type: LT
 Offset Dist:
 Station To: 148 + 43
 Offset Type: RT
 Offset Dist:
 Measured:
 Comments:
 25% complete for category 6 only.
 $\$736,036.37 \times 0.25 = \$184,009.09$
 3932 remaining

Figure 19-12: DWR Item Posting – Miscellaneous L.S.

NOTES for Miscellaneous L.S. (Figure 19-12):

- Payment for LUMP SUM items will be based on plan quantity or percentage and calculations per category (AEB).
- Calculation for LS = Total \$ amount multiplied (X) the percent (%) of work completed.
- No payment over plan is allowed on Lump Sum items.
- 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: WATER LINE MODIFICA...
 Contractor: Q&D CONSTRUCTION INC
 Qty: 552027.28 L.S.
 Authorized: 1,472,072.74 L.S.
 Total Posted: 184,009.090 L.S.
 Location: "REW"
 Station From: 120 + 16
 Offset Type: LT
 Offset Dist:
 Station To: 148 + 43
 Offset Type: RT
 Offset Dist:
 Measured:
 Comments:
 100% complete in category 6 only.
 $\$736,036.37 - \$184,009.09(\text{what was paid already}) = \$552,027.28$
 3903 remaining

Figure 19-13: DWR Item Posting – Miscellaneous L.S.

NOTES for Miscellaneous L.S. (Figure 19-13):

- Payment for LUMP SUM items will be based on plan quantity or percentage and calculations per category (AEB).
- Calculation for LS = Total \$ amount multiplied (X) the percent (%) of work completed, minus (-) what has been paid on an earlier payment.
- No payment over plan is allowed on Lump Sum items.
- 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: RESHAPE ROADWAY DI...
Contractor: Q&D CONSTRUCTION INC
Qty: 0.12 MILE
 Authorized: 1.250 MILE
 Total Posted: 0.000 MILE
Location: "CW"
Station From: 4 + 36
Offset Type: RT
Offset Dist:
Station To: 10 + 17.86
Offset Type: RT
Offset Dist:
Measured:
Comments:
 650' / 5280 = .12 miles
3976 remaining

Figure 19-14: DWR Item Posting – Miscellaneous MILE

NOTES for Miscellaneous MILE (Figure 19-14):

- Payment for MILE items will be based on field measurements.
- 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: GROUTED RIPRAP
Contractor: Q&D CONSTRUCTION INC
Qty: 330.00 SQFT
 Authorized: 456.150 SQFT
 Total Posted: 0.000 SQFT
Location: "CW"
Station From: 10 + 35
Offset Type: CL
Offset Dist:
Station To: 30 + 22
Offset Type: CL
Offset Dist:
Measured:
Comments:
 22' x 15' = 330.00
3981 remaining

Figure 19-15: DWR Item Posting – Miscellaneous SQFT

NOTES for Miscellaneous SQFT (Figure 19-15):

- Payment for SQFT items will be based on calculation, field measurements, Standard Plans or the Manual on Uniform Traffic Control Devices.
- Calculation for SQFT = L X W
- 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: PLANTMIXING MISCELL...

Contractor: Q&D CONSTRUCTION INC

Qty: 52.78 SQYD
 Authorized: 1,788.000 SQYD
 Total Posted: 0.000 SQYD

Location: "RW" 204 + 33 LT.

Station From: [] + []

Offset Type: []

Offset Dist: []

Station To: [] + []

Offset Type: []

Offset Dist: []

Measured: []

Comments:
 Avg. L = 50' x Avg. W = 9.5' / 9 = 52.78 SQYD
 3972 remaining

Attention:

Attention Comments:
 Per CO # 5
 246 remaining

Figure 19-16: DWR Item Posting – Miscellaneous SQYD

- NOTES for Miscellaneous SQYD (Figure 19-16):
- Payment for SQYD item will be based on field measure and calculations.
 - Calculation for SQYD = $L \times W \div 9$
 - Location: Enter the Line Designation and LT, RT, or CL.
 - Sig. Fig. = .01
 - Plantmixing Miscellaneous paving is only paid once. The payment is made on the dense grade, not open-graded.

New Item Posting

Item: V-TYPE DITCHES

Contractor: Q&D CONSTRUCTION INC

Qty: .24 STA
 Authorized: 0.750 STA
 Total Posted: 0.000 STA

Location: "CW"

Station From: 40 + 93.30

Offset Type: RT

Offset Dist: []

Station To: 41 + 17.30

Offset Type: RT

Offset Dist: []

Measured: []

Comments:
 $24 / 100 = .24$
 3984 remaining

Figure 19-17: DWR Item Posting – Miscellaneous STA

- NOTES for Miscellaneous STA (Figure 19-17):
- Payment for Station items will be based on field measure.
 - Calculation for STA = $LFT \div 100$ (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

4. Record the following required information in the New Equipment window (Figure 19-18 and Figure 19-19).

- **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 19-18: 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 19-19: DWR Equipment List

- Record the following required information in the New Personnel window (Figure 19-20 and Figure 19-21).
 - **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:	LAS VEGAS PAVING C... ▾
Personnel:	LABORER FOREMAN ▾
Employee:	N/A
Decision Class:	Select ▾
Number:	1
Total Hours:	8
Comments:	Foreman - Cody Bellinger
	3975 remaining
<input type="checkbox"/> <input type="checkbox"/>	

Figure 19-20: 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 19-21: 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 – MISCELLANEOUS ITEMS

- Collect all Material Certifications. Scan and save them to the 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 and description, load number (if applicable) - CERT (e.g., 03904 M4960001 Polymer Concrete - 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 Miscellaneous Items photos in the appropriate Contract Files\Contract\03 - Multimedia\3.1 Photos directory.
- Save Miscellaneous Items Pound label photos to the appropriate Contract Files\Contract\07 Estimates directory to confirm the quantity of the container.
- Review miscellaneous 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.

PERMANENT SIGN ITEMS

This chapter contains the following sections:

Overview	20-3
Inspector's Responsibilities – Sign Items	20-3
Office Engineer's Responsibilities – Sign Items	20-10

OVERVIEW

Permanent Sign Items have different documentation requirements for each unit of measure (UOM). All Permanent Sign Items must be counted, measured and calculated, or based on plan. Documentation examples for a few selected sign 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 – SIGN ITEMS

- Use the Agreement Estimate Report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Sign Summary Lists (Figure 20-1) the Sign Locations (Figure 20-2), located in the Contract plans to, help identify items, quantities, descriptions and locations.

SIGN SUMMARY															STATE	PROJECT NO.	COUNTY	SHEET NO.			
															NEVADA	NHP-080-3(065)	HUMBOLDT	TS 52			
															**POST LENGTHS & TYPE ARE FOR INFORMATIONAL ESTIMATING PURPOSE ONLY. SEE GENERAL NOTES.						
Remarks	Stack Length (ft)	Length (ft)		Post **	Type and Size (in)	Mounting (ft)	Slope	Curb & Offset	Panel Size (in. x in.)	Panel Area (sq. ft.)	New Bid Item Number	Sign No.	Panel Size (in. x in.)	Panel Area (sq. ft.)	Removal Bid Item Number	Sign Message	Sign Station	Location	Sign Number		
		Inner	Outer																# of Posts	W	H
	12' 2"		1	3' RND SGNL POST	7' 8" : 1			36 x 36	9.00	627 0160	RS-1	36 x 36	9.00	627 0240	DO NOT ENTER						
MOUNT BACK TO BACK MOUNT BACK TO BACK								36 x 12	3.00	627 0160	RS-1R	36 x 12	3.00	627 0240	ONE WAY (ENCLOSED IN RIGHT ARROW)	"R3C" 23 + 70	LT	130	130R		
	12' 2"		1	3' RND SGNL POST	7' 8" : 1			36 x 36	9.00	627 0160	RS-1	36 x 36	9.00	627 0240	DO NOT ENTER						
	12' 1"		1	2.5' SQ 12 GA POST	7' 8" : 1			36 x 36	7.48	627 0160	R1-1	36 x 36	7.48	627 0240	STOP	"R3C" 23 + 85	LT	131	131R		
	11'		1	2.5' SQ 12 GA POST	7' 8" : 1			12 x 18	1.50	627 0160	M1-8	12 x 18	1.50	627 0240	BICYCLE ROUTE MARKER	"R3C" 24 + 85	LT	132	132R		
	11' 1"		1	2.5' SQ 12 GA POST	7' 8" : 1			12 x 6	0.50	627 0160	M6-1	12 x 6	0.50	627 0240	HORIZONTAL ARROW						
	11' 1"		1	2.5' SQ 12 GA POST	7' 8" : 1			36 x 24	6.00	627 0160	RS-1A	36 x 24	6.00	627 0240	WRONG WAY	"R3C" 28 + 10	RT	133	133R		

Figure 20-1: Sign Summary List

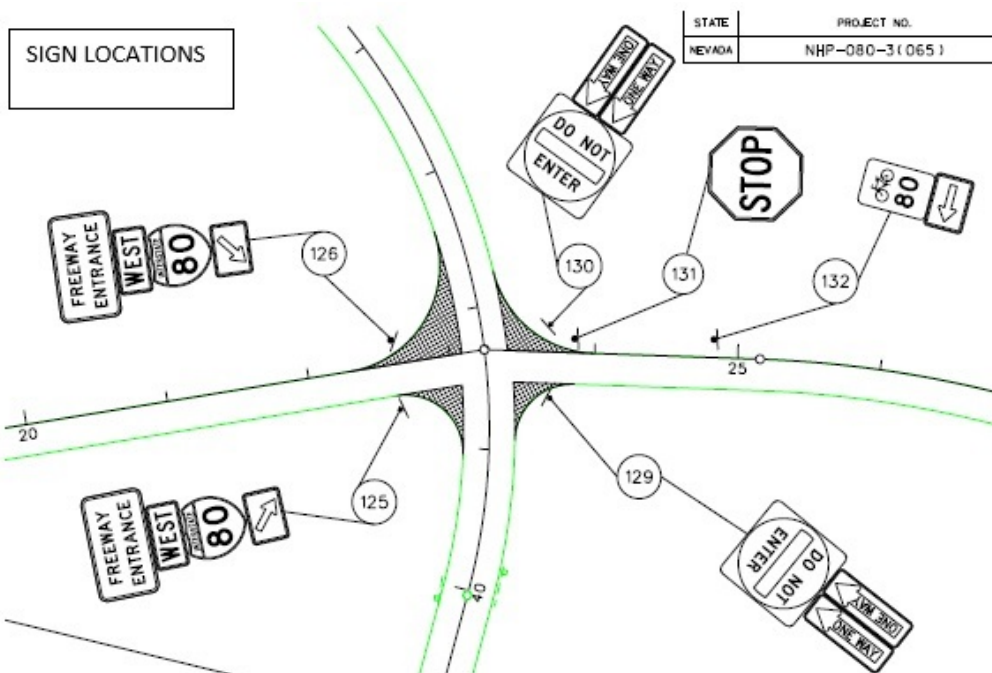


Figure 20-2: Sign Locations

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices
 - Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL sign 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 20-3):
 - **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 20-3: 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 Permanent Sign 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.
- If the message, panel size, sign number and the SQFT match the Sign Summary Sheets in the Contract plans, enter the New/Removal Sign Number in the Posting Location (Figure 20-5 and Figure 20-6).
- If the message, panel size, sign number and the SQFT DOES NOT match the Sign Summary Sheets in the Contract plans, you will need to document the message, panel size, sign number and the SQFT in the Remarks of your posting with an explanation of the changes in the Remarks box. (Figure 20-7 and Figure 20-8).
- Refer to Figure 20-4 through Figure 20-8 for examples of sign item postings with different UOM.

New Item Posting

Item:	PERMANENT OVERHEA... ▾
Contractor:	SIERRA NEVADA CONS... ▾
Qty:	1.00 EACH
Authorized:	2.000 EACH
Total Posted:	0.000 EACH
Location:	"LSE" 420 + 19
Station From:	[] + []
Offset Type:	RT
Offset Dist:	[]
Station To:	[] + []
Offset Type:	[]
Offset Dist:	[]
Measured:	[]
Comments:	[]

3999 remaining

NOTES for Sign EACH (Figure 20-4):

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

Figure 20-4: DWR Item Posting – Sign EACH

New Item Posting

Item: PERMANENT SIGNS (GR... ▾)

Contractor: SIERRA NEVADA CONS... ▾

Qty: 7.46 SQFT
 Authorized: 98.240 SQFT
 Total Posted: 0.000 SQFT

Location: New Sign #131

Station From: [] + []
 Offset Type: []
 Offset Dist: []

Station To: [] + []
 Offset Type: []
 Offset Dist: []

Measured: 

Comments: []

3986 remaining

Figure 20-5: DWR Item Posting - Sign SQFT

NOTES for Sign SQFT (Figure 20-5):

- Payment for SQFT item will be based on plan quantity.
- Location: Enter the Sign Number
- Sig. Fig. = .01

New Item Posting

Item: PERMANENT SIGNS, RE... ▾


Contractor: SIERRA NEVADA CONS... ▾

Qty: 7.46 SQFT
 Authorized: 65.120 SQFT
 Total Posted: 0.000 SQFT

Location: Removal Sign #131R

Station From: [] + []
 Offset Type: []
 Offset Dist: []

Station To: [] + []
 Offset Type: []
 Offset Dist: []

Measured: 

Comments: []

3981 remaining

Figure 20-6: DWR Item Posting – Sign (Remove or Reset) SQFT

NOTES for Sign (Remove or Reset) SQFT (Figure 20-6):

- Payment for SQFT item will be based on plan quantity.
- Location: Enter the Sign Number
- Sig. Fig. = .01

New Item Posting

Item: PERMANENT SIGNS (GR...
Contractor: SIERRA NEVADA CONS...
Qty: 12.00 SQFT
 Authorized: 87.250 SQFT
 Total Posted: 0.000 SQFT
Location: "R3C" 23+70
Station From: [] + []
Offset Type: LT
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 New Sign #131
 Sign No. R6-R Panel Size 36x12/144=3.00 SQFT.
 One Way (Enclosed in Right Arrow).
 Sign No. R5-1 Panel Size 36x36/144=9.00 SQFT.
 Do Not Enter.
 3.00 + 9.00 = 12.00 SQFT
 Sign No. R6-1L was never installed.
 Message: One Way (Enclosed in Left Arrow)

3730 remaining

Figure 20-7: DWR Item Posting - Sign SQFT

NOTES for Sign (Remove or Reset) SQFT (Figure 20-7):

- Payment for SQFT item will be based on field measurements and calculations if different than plan.
- Calculation for SQFT = L x W / 144 (converting inches to feet).
- Location: Enter the Sign Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Enter the Sign Number, panel size, SQFT and message in Comments.

New Item Posting

Item: PERMANENT SIGNS (GR...
Contractor: SIERRA NEVADA CONS...
Qty: 119.00 SQFT
 Authorized: 254.210 SQFT
 Total Posted: 0.000 SQFT
Location: "LNE" 318 + 50
Station From: [] + []
Offset Type: RT
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 Sign # = Special per CO # 3
 Panel Size 204 x 84
 204 X 84 / 144 = 119.00 SQFT.
 Message: Red Rock Canyon, Death Valley Next Right

3862 remaining

Figure 20-8: DWR Item Posting – Sign (Remove or Reset) SQFT

NOTES for Sign (Remove or Reset) SQFT (Figure 20-8):

- Payment for SQFT item will be based on field measurements and calculations if different than plan.
- Calculation for SQFT = L x W / 144 (converting inches to feet).
- Location: Enter the Sign Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Enter the Sign Number, panel size, SQFT and message in Comments.

- Record the following required information in the New Equipment window (Figure 20-9 and Figure 20-10):
 - **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:	<input type="text" value="1"/>
On Site:	<input type="text"/>
Hours Used:	<input type="text" value="8"/>
Hours Idle:	<input type="text"/>
Comments:	<div style="border: 1px solid black; padding: 5px;"> Bobcat 256C, Skid Steer, Diesel, 82HP, 1350lbs with an Auger Loader, attachment, 15C w/12" bit </div>
506 remaining	
<input checked="" type="checkbox"/> <input type="checkbox"/>	

Figure 20-9: 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
<input type="checkbox"/> <input type="checkbox"/>

Figure 20-10: DWR Equipment List

- Record the following required information in the New Personnel window (Figure 20-11 and Figure 20-12):
 - **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: LAS VEGAS PAVING C...

Personnel: LABORER FOREMAN

Employee: N/A

Decision Class: Select

Number: 1

Total Hours: 8

Comments:

Foreman - Cody Bellinger

3975 remaining

✓
✗

Figure 20-11: DWR Personnel Entry

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

Figure 20-12: DWR Personnel List

6. 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 – SIGN ITEMS

- Collect all Material Certifications. Scan and save them to the 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 and description, load number (if applicable) - CERT (e.g., 03904 M6270001 Permanent Signs - 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 Permanent Sign Items photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Permanent Sign Items 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.

HOUR - DAY - MONTH ITEMS

This chapter contains the following sections:

Overview	21-3
Inspector's Responsibilities – Hour-Day-Month Items	21-3
Office Engineer's Responsibilities – Hour-Day-Month Items	21-10

OVERVIEW

Hour, Day and Month Items have different documentation requirements for each unit of measure (UOM). All Hour, Day and Month Items must be counted or measured and calculated. Documentation examples for a few selected Hour, Day and Month 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 – HOUR-DAY-MONTH ITEMS

- Use the Agreement Estimate report 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

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

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 21-1):
 - **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.

Report Details

Date: Tue, 10/15/2019
Weather: 07
Low Temp: 22
High Temp: 45
Rainfall Amt:

Attachments:

Remarks: GENERAL

Flaggers on site at "BW" 140+00 LT. and "BW" 114+00 RT. Two NHP used at Cave Rock working both NB and SB side for the 24 hour lane closure. 20 yards of concrete poured around the new 10in. sewer line. 5:15pm the last truck poured out.

3761 remaining

Figure 21-1: 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.

Refer to Figure 21-2 through Figure 21-7 for examples of Hour, Day and Month Items postings.

New Item Posting

Item: PILOT CAR

Contractor: SIERRA NEVADA CONS...

Qty: 12.00 HOUR
 Authorized: 200.000 HOUR
 Total Posted: 85.000 HOUR

Location: "BW"

Station From: 114 + 10

Offset Type: RT.

Offset Dist:

Station To: 140 + 10

Offset Type: LT

Offset Dist:

Measured:

Comments:

SB & NB Lane # 2
 2 pilot car @ 6 hrs. = 12.00 hrs.

3948 remaining

Figure 21-2: DWR Item Posting – HOUR

NOTES for HOUR (Figure 21-2):

- Payment for HOUR is based on time.
- 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 (to the nearest one-half (0.50) hour)

New Item Posting

Item: FLAGGER

Contractor: SIERRA NEVADA CONS...

Qty: 8.50 HOUR
 Authorized: 425.000 HOUR
 Total Posted: 123.500 HOUR

Location: "BW"

Station From: 82 + 50

Offset Type: RT.

Offset Dist:

Station To: 90 + 00

Offset Type: RT.

Offset Dist:

Measured:

Comments:

2 flaggers = 8.50 hrs. for paving.
 Justin Turner = 4.5 hrs. @ "BW" 82+50 RT. - Checked
 flagger's card
 Joc Pederson = 4.0 hrs. @ "BW" 90+00 RT. - Checked
 flagger's card

3829 remaining

Figure 21-3: DWR Item Posting – HOUR

NOTES for HOUR (Figure 21-3):

- Payment for HOUR is based on time.
- 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. = 0.01 (the nearest one-half (0.50) hour)
- When paying Flagger, enter an explanation as to why the flaggers were required.
- When paying Flagger, enter Flagger name(s) and check the expiration date on each flagger's card.

New Item Posting

Item:

Contractor:

Qty: DAY
 Authorized: 30.000 DAY
 Total Posted: 0.000 DAY

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:
 1/27/20 to 2/7/20
 2/2/20 = NWD - Snow

3961 remaining

Figure 21-4: DWR Item Posting – DAY

NOTES for DAY (Figure 21-4):

- Payment for DAY is based on days charged.
- Location: Enter 'Entire Job'
- When paying for Biologist (by the day), it is acceptable to document up to two weeks (coinciding with each payment cycle) on one posting. An explanation is required if a day is not charged in the two-week cycle.
- Sig. Fig. = Significant figure is paid to the whole number (1.00), unless payment is split between two AEB numbers, then the significant figure is (0.50) on each AEB number to equal a whole number.

New Item Posting

Item:

Contractor:

Qty: DAY
 Authorized: 45.000 DAY
 Total Posted: 0.000 DAY

Location:

Station From: +

Offset Type:

Offset Dist:

Station To: +

Offset Type:

Offset Dist:

Measured:

Comments:
 Nov.2, 2020 to Nov.6, 2020
 Nov.9 & 10, 2020 - Nov.12 & 13, 2020
 Holiday on Nov. 11, 2020

3907 remaining

Figure 21-5: DWR Item Posting – DAY

NOTES for DAY (Figure 21-5):

- Payment for DAY is based on days charged.
- Location: Enter 'Entire Job'
- When paying for Traffic Control Supervisor (by the day), it is acceptable to document up to two weeks (coinciding with each payment cycle) on one posting. An explanation is required if a day is not charged in the two-week cycle.
- Sig. Fig. = Significant figure is paid to the whole number (1.00), unless payment is split between two AEB numbers, then the significant figure is (0.50) on each AEB number to equal a whole number.

New Item Posting

Item: RENT EQUIPMENT (OFFI...
Contractor: SIERRA NEVADA CONS...
Qty: .50 MON
 Authorized: 6.000 MON
 Total Posted: 2.000 MON
Location: Entire Job
Station From: [] + []
Offset Type: []
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 Mar. 1, 2020 through Mar. 15, 2020
 3965 remaining

Figure 21-6: DWR Item Posting – MONTH

NOTES for MONTH (Figure 21-6 and Figure 21-7):

- When paying for office space (by the MONTH), the pay quantity for every other pay cycle shall be the accumulation of days for that month.
- Location: Enter 'Entire Job'
- Sig. Fig. = Increments of (0.50), or to the whole number (1.00).
- The beginning and ending dates for the month will be listed in the posting.

New Item Posting

Item: RENT EQUIPMENT (OFFI...
Contractor: SIERRA NEVADA CONS...
Qty: 1.00 MON
 Authorized: 6.000 MON
 Total Posted: 2.000 MON
Location: Entire Job
Station From: [] + []
Offset Type: []
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 Mar. 1, 2020 through Mar. 31, 2020
 3965 remaining

Figure 21-7: DWR Item Posting – MONTH

- Record the following required information in the New Equipment window (Figure 21-8 and Figure 21-9):
 - **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 21-8: 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 21-9: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 21-10 and Figure 21-11):
- **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: LAS VEGAS PAVING C... ▼

Personnel: LABORER FOREMAN ▼

Employee: N/A

Decision Class: Select ▼

Number:

Total Hours:

Comments:

3975 remaining

Figure 21-10: 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 21-11: DWR Personnel List

6. 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 – HOUR-DAY-MONTH ITEMS

- 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.

RENT CONSTRUCTION ITEMS

This chapter contains the following sections:

Overview	22-3
Inspector's Responsibilities – Rent Construction Items	22-3
Office Engineer's Responsibilities – Rent Construction Items	22-10

OVERVIEW

Rent Construction Items have different documentation requirements for each unit of measure (UOM). All Rent Construction Items must be counted, measured and calculated and/or based on plan. Documentation examples for a few selected Rent Construction 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 – RENT CONSTRUCTION ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Summary of Construction Signs (Figure 22-1), the Summary of Barricades (Figure 22-2), and/or the Main Structure List, located in the Contract plans, to help identify items, quantities, descriptions and locations.

SUMMARY OF CONSTRUCTION SIGNS						
NOTE: QUANTITIES SHOWN ARE APPROXIMATE AND ARE SUBJECT TO INCREASE OR DECREASE.						
ADDITIONAL SIGNS, NOT LISTED, MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.						
* QUANTITIES FOR CONSTRUCTION SIGNS AND TRAFFIC CONTROL DEVICES ARE BASED ON A ONE WORK ZONE SETUP.						
STP-0160(018)						
SIGN NO.	MESSAGE	PANEL SIZE	TOTAL SIGNS*	SOFT EACH	SQFT TOTAL	
M1-1	INTERSTATE SHIELD (15) (BLACK ON ORANGE)	24" X 24"	23	4.0	92.0	
M3-1	NORTH (BLACK ON ORANGE)	24" X 12"	11	2.0	22.0	
M3-3	SOUTH (BLACK ON ORANGE)	24" X 12"	8	2.0	18.0	
M4-3	DETOUR (BLACK ON ORANGE)	30" X 15"	15	3.1	47.0	
M6-1	ARROW (BYM) RIGHT OR LEFT	21" X 18"	18	2.2	38.4	
M6-3	ARROW (BYM) UP	21" X 18"	8	2.2	17.6	
NBA_1	BUSINESS ACCESS (RIGHT ARROW)	42" X 42"	4	12.3	48.0	
NBA_2	BUSINESS ACCESS (LEFT ARROW)	42" X 42"	4	12.3	48.0	
NDP_1	30 MINUTE DELAY POSSIBLE	48" X 36"	6	12.0	72.0	
NPR_1	PREPARE TO STOP	48" X 48"	7	14.0	112.0	
NRC_1	RAMP CLOSED	48" X 30"	6	12.0	72.0	
NRC_1A	RAMP CLOSED AHEAD	48" X 48"	2	16.0	32.0	
NRE_1	RAMP EXIT	42" X 54"	1	18.8	18.8	
NTL_1	LEFT TURN LANE	30" X 48"	11	10.0	110.0	
NTL_2	RIGHT TURN LANE	30" X 48"	1	10.0	10.0	
NTT_1	THROUGH TRAFFIC UP ARROW	54" X 60"	6	22.5	112.5	
NWZ_1	BEGIN WORK ZONE	48" X 24"	10	8.0	80.0	
NWZ_2	END WORK ZONE	48" X 24"	12	8.0	96.0	
NWZ_3	DOUBLE PENALTY IN WORK ZONE	48" X 48"	10	16.0	160.0	
RL_1	SPEED LIMIT 35	48" X 60"	2	20.0	40.0	
RL_1	SPEED LIMIT 35	48" X 60"	6	20.0	100.0	
RL_1	SPEED LIMIT 65	48" X 60"	4	20.0	80.0	
RL_5A	REDUCE SPEED AHEAD	48" X 60"	4	20.0	80.0	
R3_1	NO RIGHT TURN (BYM)	48" X 48"	1	16.0	16.0	
R3_2	NO LEFT TURN (BYM)	48" X 48"	2	16.0	32.0	
R3_7L	MANDATORY TURN (LEFT)	30" X 30"	3	6.3	18.8	
R3_7R	MANDATORY TURN (RIGHT)	30" X 30"	3	6.3	18.8	
RL_7A	KEEP RIGHT (HORIZONTAL ARROW)	48" X 60"	2	20.0	40.0	
RL_8A	KEEP LEFT (HORIZONTAL ARROW)	48" X 60"	2	20.0	40.0	
R11_2	ROAD CLOSED	48" X 30"	7	10.0	70.0	
R11_4	ROAD CLOSED TO THRU TRAFFIC	60" X 30"	1	12.5	12.5	
W1_1L	TURN (LEFT)	48" X 48"	1	16.0	16.0	
W1_1R	TURN (RIGHT)	48" X 48"	1	16.0	16.0	
W1_4BL	TWO LANE REVERSE CURVE (LEFT)	48" X 48"	3	16.0	32.0	
W1_4BR	TWO LANE REVERSE CURVE (RIGHT)	48" X 48"	4	16.0	64.0	
W1_4L	REVERSE CURVE (LEFT)	48" X 48"	2	16.0	32.0	
W1_4R	REVERSE CURVE (RIGHT)	48" X 48"	8	16.0	128.0	
W4_1AR	THRU TRAFFIC MERGE RIGHT	48" X 48"	6	16.0	96.0	
W4_3L	LANE ENDS (LEFT)	48" X 48"	2	16.0	32.0	
W4_3R	LANE ENDS (RIGHT)	48" X 48"	2	16.0	32.0	
W8_3	TWO WAY (BYM)	48" X 48"	1	16.0	16.0	
W13_1	ADVISORY SPEED PLATE (15)	24" X 24"	2	4.0	8.0	
W13_1	ADVISORY SPEED PLATE (35)	24" X 24"	6	4.0	24.0	
W13_1	ADVISORY SPEED PLATE (45)	24" X 24"	11	4.0	44.0	
W13_1	ADVISORY SPEED PLATE (65)	24" X 24"	5	4.0	20.0	
W20_1	ROAD WORK AHEAD	48" X 48"	12	16.0	192.0	
W20_2	DETOUR AHEAD	48" X 48"	2	16.0	32.0	
W20_4	ONE LANE ROAD AHEAD	48" X 48"	1	16.0	16.0	
W20_3L	LEFT LANE CLOSED AHEAD	48" X 48"	6	16.0	96.0	
W20_3R	RIGHT LANE CLOSED AHEAD	48" X 48"	6	16.0	96.0	
W20_7A	FLAGGER SYMBOL	48" X 48"	7	16.0	112.0	
W21_5	SHOULDER WORK	48" X 48"	7	16.0	112.0	
TOTAL SIGNS NEEDED			391			
TOTAL SQUARE FEET					3942.1	
IM-015-1(126)						
NWZ_1	BEGIN WORK ZONE	48" X 24"	2	8.0	16.0	
NWZ_2	END WORK ZONE	48" X 24"	2	8.0	16.0	
NWZ_3	DOUBLE PENALTY IN WORK ZONE	48" X 48"	2	16.0	32.0	
RL_1	SPEED LIMIT 65	48" X 60"	2	20.0	40.0	
RL_1	SPEED LIMIT 45	48" X 60"	2	20.0	40.0	
W4_3L	LANE ENDS (LEFT)	48" X 48"	2	16.0	32.0	
W4_3R	LANE ENDS (RIGHT)	48" X 48"	2	16.0	32.0	
W13_1	ADVISORY SPEED PLATE (65)	24" X 24"	2	4.0	8.0	
W20_1	ROAD WORK AHEAD	48" X 48"	2	16.0	32.0	
W20_3L	LEFT LANE CLOSED AHEAD	48" X 48"	2	16.0	32.0	
W20_3R	RIGHT LANE CLOSED AHEAD	48" X 48"	2	16.0	32.0	
W21_5	SHOULDER WORK	48" X 48"	2	16.0	32.0	
TOTAL SIGNS NEEDED			24			
TOTAL SQUARE FEET					344.0	
FEED NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.		
REV. NO.		STATIONING				
9	NEVADA	MOVS-11(26)		38		

Figure 22-1: Summary of Construction Signs

SUMMARY OF CONSTRUCTION BARRICADES		
NOTE: QUANTITIES SHOWN ARE APPROXIMATE AND ARE SUBJECT TO INCREASE OR DECREASE.		
STP-0160(016)		
CONSTRUCTION DEVICES	UNIT	TOTAL
ARROW BOARDS (TYPE C) (EACH)	EACH	2.00
ATTENUATOR 45 MPH	EACH	2.00
ATTENUATOR 55 MPH	EACH	1.00
TYPE 3B BARRICADE	EACH	57.00
TRAFFIC CONES (EACH)	EACH	393.00
TRAFFIC DRUMS (EACH)	EACH	202.00
FLAGGER	EACH	4.00
PORTABLE TRAFFIC SIGNAL	EACH	1.00
PORTABLE PRECAST CONCRETE BARRIER RAIL	LIN FT	42.00
TEMPORARY PAINTED STRIPING (BROKEN WHITE)	MILE	3.33
TEMPORARY PAINTED STRIPING (8-INCH SOLID WHITE)	MILE	0.37
TEMPORARY PAINTED STRIPING (DOUBLE SOLID YELLOW)	MILE	2.76
TEMPORARY PAINTED STRIPING (SOLID WHITE)	MILE	11.87
TEMPORARY PAINTED STRIPING (SOLID YELLOW)	MILE	5.16
TEMPORARY PAINTED STRIPING (VARIES)	SQFT	1060.00
TYPE 1 TEMPORARY STRIPING TAPE (SOLID WHITE)	LIN FT	3210.00
TYPE 1 TEMPORARY STRIPING TAPE (SOLID YELLOW)	LIN FT	1820.00
TYPE 1 TEMPORARY STRIPING TAPE (PILOT LINES)	LIN FT	700.00
IM-015-1(126)		
CONSTRUCTION DEVICES	UNIT	TOTAL
ARROW BOARDS (TYPE C) (EACH)	EACH	1
ATTENUATOR 55 MPH	EACH	1
TRAFFIC DRUMS (EACH)	EACH	202
PORTABLE PRECAST CONCRETE BARRIER RAIL	LIN FT	420
TEMPORARY PAINTED STRIPING (BROKEN WHITE)	MILE	18.40
TEMPORARY PAINTED STRIPING (SOLID WHITE)	MILE	10.70
TEMPORARY PAINTED STRIPING (SOLID YELLOW)	MILE	8.70
TEMPORARY PAINTED STRIPING (DOTTED WHITE)	MILE	1.20
GENERAL NOTES		
1.	Refer to Nevada Department of Transportation Standard Specifications for Road and Bridge Construction, 2001 Edition, for specifications except as modified by these plans and special provisions.	
2.	Sign numbers shown on the Summary of Construction Signs are taken from the Manual on Uniform Traffic Control Devices (2003 Edition) and Standard Highway Signs (2002) and Nevada Supplement thereto, (1997 Edition).	
3.	Traffic control devices, construction signs, and barricades shall conform to the requirements of the M.U.T.C.D. 2003 edition and the Nevada Standard Plans, 2003 Edition.	
4.	Depth of base and surface is minimum compacted thickness.	
5.	State will remove and furnish all milepost marker panels.	
6.	Guide posts and object markers shall be removed by contractor, at no direct payment.	
7.	The Contractor shall avoid damage to underground utilities. Locations are approximate and the Contractor will field verify and survey the locations. No Direct Payment.	
8.	Grades and cross slopes of the roadway shall conform to the present travel way.	
9.	All legally established survey monuments disturbed during construction shall be preserved in accordance with State and local laws and regulations.	
10.	Mineral filler and asphalt cement quantities shown are for informational purposes only and payment for them is included within the Plantmix Surfacing (Type 2C) (Wet) and Plantmix Open-Graded Surfacing (3/8-inch) (Wet) bid item.	
11.	For traffic control not shown, refer to Nevada Standards, 2003 Edition and MUTCD (2003) Edition.	

FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	STP-0160(016) IM-015-1(126)	CLARK	35

Figure 22-2: Summary of Construction Barricades

- Review the following for accuracy:
 - Special Provisions
 - Supplemental Notices

- Change Orders

Note: When any changes are made to an item, reference the Change Order number in the DWR item posting remarks.

- Turn in ALL Rent Construction 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 22-3):
 - **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 22-3: 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 Rent Construction 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 22-4 through Figure 22-8 for examples of Rent Construction Item postings with different UOM.

New Item Posting	
Item:	RENT ARROW BOARD (...)
Contractor:	SIERRA NEVADA CONS...
Qty:	1.00 EACH
Authorized:	2.000 EACH
Total Posted:	0.000 EACH
Location:	"CW" 220 + 40
Station From:	<input type="text"/> + <input type="text"/>
Offset Type:	RT
Offset Dist:	<input type="text"/>
Station To:	<input type="text"/> + <input type="text"/>
Offset Type:	<input type="text"/>
Offset Dist:	<input type="text"/>
Measured:	<input type="text"/>
Comments:	Counted
	3999 remaining

NOTES for Rent Construction Item EACH (Figure 22-4):

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

Figure 22-4: DWR Item Posting – Rent Construction Item EACH

New Item Posting

Item: RENT TRAFFIC DRUMS

Contractor: SIERRA NEVADA CONS...

Qty: 50.00 EACH
 Authorized: 100.000 EACH
 Total Posted: 0.000 EACH

Location: "BW"

Station From: 0 + 10
Offset Type: RT
Offset Dist:

Station To: 11 + 00
Offset Type: RT
Offset Dist:

Measured:

Comments:
 Counted

3992 remaining

Figure 22-5: DWR Item Posting - Rent Construction Item EACH

NOTES for Rent Construction Item EACH (Figure 22-5):

- Payment for EACH items will be based on field count (this example shows an EACH item combined).
- 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: RENT PORTABLE PREC...

Contractor: SIERRA NEVADA CONS...

Qty: 40.00 LFT
 Authorized: 100.000 LFT
 Total Posted: 0.000 LFT

Location: "TW"

Station From: 220 + 10
Offset Type: RT
Offset Dist:

Station To: 224 + 30
Offset Type: RT
Offset Dist:

Measured:

Comments:

3999 remaining

Figure 22-6: DWR Item Posting – Rent Construction Item LFT

NOTES for Rent Construction Item LFT (Figure 22-6):

- Payment for LFT items will be based on field measurements.
- 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: RENT CONSTRUCTION...
Contractor: SIERRA NEVADA CONS...
Qty: 16.00 SQFT
 Authorized: 195.000 SQFT
 Total Posted: 0.000 SQFT
Location: "NW" 20 + 10
Station From: [] + []
Offset Type: RT
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 Summary of Construction Signs
 Sign # NPS-1
 3956 remaining

Figure 22-7: DWR Item Posting – Rent Construction Item SQFT

NOTES for Rent Construction Item SQFT (Figure 22-7):

- Payment for SQFT (Signs only) shall be based on plan or if different than plan a complete explanation as to how the SQFT were derived or calculations are needed.
- Calculation for SQFT = L x W
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Sign No. must be entered in the Comments (Sign No. is identification number of the sign as shown in the Contract plans). The message for the Sign No. must match the Summary of Construction Signs sheet (refer to Figure 22-1). If it does not, an explanation is required.

New Item Posting

Item: RENT CONSTRUCTION...
Contractor: SIERRA NEVADA CONS...
Qty: 2.00 SQFT
 Authorized: 195.000 SQFT
 Total Posted: 0.000 SQFT
Location: "RW" 40 + 10
Station From: [] + []
Offset Type: RT
Offset Dist: []
Station To: [] + []
Offset Type: []
Offset Dist: []
Measured: []
Comments:
 Message: Prepare To Stop
 12" x 24" / 144 = 2.00
 Per CO # 4
 3937 remaining

Figure 22-8: DWR Item Posting – Rent Construction Item SQFT

NOTES for Rent Construction Item SQFT (Figure 22-8):

- Payment for SQFT (Signs only) shall be based on plan or if different than plan a complete explanation as to how the SQFT were derived or calculations are needed.
- Calculation for SQFT = L x W
- Location: Enter the Line Designation
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Sign No. must be entered in the Comments (Sign No. is identification number of the sign as shown in the Contract plans). The message for the Sign No. must match the Summary of Construction Signs sheet (refer to Figure 22-1). If it does not, an explanation is required.

4. Record the following required information in the New Equipment window (Figure 22-9 and Figure 22-10).

- **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 PAVI...
 Type: Bobcat 256C Skid ...
 Number: 1
 Hours: 8

✓ ✕

Figure 22-9: DWR Equipment Entry

Add Equipment

LAS VEGAS PAVING CORPORATION
 Bobcat 256C Skid Steer, Diesel, 82HP, 2350lbs
 Number: 1.00 Hours: 8.00

LAS VEGAS PAVING CORPORATION
 Bobcat Auger Loader, Attachment, 15C w/12" bit
 Number: 1.00 Hours: 8.00

Figure 22-10: DWR Equipment List

5. Record the following required information in the New Personnel window (Figure 22-11 and Figure 22-12):
 - **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: LAS VEGAS PAVING CO...
 Type: Foreman - Donald Driver
 Number: 1
 Hours: 8

✓ ✕

Figure 22-11: DWR Personnel Entry







Add Personnel	
LAS VEGAS PAVING CORPORATION Foreman - Donald Driver Number: 1.00 Hours: 8.00	 
LAS VEGAS PAVING CORPORATION Laborer Number: 3.00 Hours: 8.00	 
LAS VEGAS PAVING CORPORATION Operator Number: 2.00 Hours: 8.00	 

Figure 22-12: 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 – RENT CONSTRUCTION ITEMS

- Save Rent Construction Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review Rent Construction 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.

CONSTRUCTION MANAGER AT RISK CONTRACTS

Contents:

Overview	23-3
Inspector's Responsibilities – CMAR Contract Items	23-3
Office Engineer's Responsibilities – CMAR Contract Items	23-5
Resident Engineer's Responsibilities – Risk Reserve	23-8

OVERVIEW

This chapter provides guidance for posting quantities on Construction Manager at Risk (CMAR) Contract items and processing the Record of Authorization of Risk Reserve Expenditure form when a risk is evoked.

CMAR is a contracting tool where the Department hires a contractor and an Independent Cost Estimator (ICE) early in the design phase to assist in the development of the Contract plans and specifications. The contract amount will be defined by the Guaranteed Maximum Price (GMP), which is the negotiated itemized dollar amount for the contract. With the contractor (CMAR), ICE and Designer working together, risks can be mitigated and/or defined by designing to the contractors means and methods. Quantities are paid in full. Potential risk previously identified will have a risk reserve set aside to quickly resolve the issue if encountered.

CMAR is most beneficial when:

- The design is complex, requiring innovation from sources with specific expertise.
- There is a high coordination requirement with external agencies making cost over-runs and construction schedule a potential risk.
- The project is sequence or schedule sensitive.

INSPECTOR'S RESPONSIBILITIES – CMAR CONTRACT ITEMS

The overall documentation process for the items contained in a CMAR contract is the same as demonstrated in Chapters 4 through 22 in this Manual. Refer to the appropriate chapter for the documentation requirements for each item and unit of measure (UOM).

The notable difference for an Inspector when documenting the items in a CMAR contract is to remember that an item's Total Posted amount CANNOT BE OVER the item's Authorized (Auth) Quantity (QTY) regardless of actual field measurements and calculations.

DAILY WORK REPORT (DWR) – MOBILE INSPECTOR

- 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.
- Before posting to an item check the Contract Items details (Figure 23-1 and Figure 23-3) for the Auth Qty (Original) and the Total Posted quantities to verify the quantity that has been posted to date, to avoid potential overpayment.

NOTES for CMAR Contract items:

- An item's Total Posted quantity can be less than the Auth Qty. When this occurs the Office Engineer will create a posting in AWP to add the additional quantity needed so that the Total Posted equals the Auth Qty.
- Figure 23-2 and Figure 23-4 demonstrate how to document item postings, when the field measurement and the posted quantity are different, so as not to overrun the authorized quantity.

Contract Items	
5020670	
5020670: GROOVE CONCRETE DECK SLAB	
Line: 0340	
Auth Qty: 9,692.000 SQYD	
Original:	9,692.000
Pending:	0.000
Total Posted:	7,223.730
Total Paid:	7,223.730
Unit Price:	\$10.120

Figure 23-1: Mobile Inspector Contract Items Detail

NOTES for Figure 23-1:

- In this example, the Auth Qty is 9,692.00 and the Total Posted is 7,223.73.
- $9,692.00 - 7,223.73 = 2,468.27$
- Based on these amounts the remaining postings cannot be more than 2,468.27.

New Item Posting	
Item:	GROOVE CONCRETE D...
Contractor:	SIERRA NEVADA CONS...
Qty:	2468.27 SQYD
Authorized:	9,692.000 SQYD
Total Posted:	7,223.730 SQYD
Location:	"TW"
Station From:	34 + 13.91
Offset Type:	LT.
Offset Dist:	"TW"
Station To:	37 + 4.91
Offset Type:	LT.
Offset Dist:	
Measured:	
Comments:	345 X 65 / 9 = 2491.67 (actual calculation) Only posting 2468.27 SQYD. to pay item to 100% complete.
	3898 remaining

Figure 23-2: CMAR DWR Item Posting

NOTES for Figure 23-2:

- Actual measurements and calculations must be shown in the Remarks.
- ONLY post up to the item's Authorized Quantity.

Contract Items	
Removal of Fence	
2020585: REMOVAL OF FENCE	
Line: 0030	
Auth Qty: 1,795.000 LFT	
Original:	1,795.000
Pending:	0.000
Total Posted:	1,795.000
Total Paid:	1,795.000
Unit Price:	\$5.000

Figure 23-3: Mobile Inspector Contract Items Detail

NOTES for Figure 23-3:

- In this example, the Auth Qty is 1,795.00 and the Total Posted is 1,795.00.
- This item's Total Posted quantity equals the Auth Qty. There CANNOT be any additional quantity postings.

New Item Posting

Item: REMOVAL OF FENCE

Contractor: SIERRA NEVADA CONS...

Qty: 0.00 LFT

Authorized: 1,765.000 LFT
Total Posted: 1,765.000 LFT

Location: "NW"

Station From: 53 + 94.69

Offset Type: RT.

Offset Dist: 76.3'

Station To: 53 + 95.05

Offset Type: RT.

Offset Dist: 77.4'

Measured:

Comments:

Actual length measured 10 LFT.
Item is 100% completed.
No additional Qty can be posted

3910 remaining

NOTES for Figure 23-4:

- Actual measurements and calculations must be shown in the Remarks.
- Enter a zero "0" in the Qty box.

Figure 23-4: CMAR DWR Item Posting

OFFICE ENGINEER'S RESPONSIBILITIES – CMAR CONTRACT ITEMS

The overall documentation process for the items contained in a CMAR contract is the same as demonstrated in Chapters 4 through 22. Refer to the appropriate chapter for the documentation requirements for each item and unit of measure (UOM).

The notable difference for items in a CMAR contract is that they are ALL paid to 100% (NO OVERRUNS ARE ALLOWED) except for the Risk Reserve and Force Account. Uniform Traffic Control (UTC) will only be paid by the invoice received. All posting adjustments will be completed in an Office Engineer's DWR.

DAILY WORK REPORT (DWR) – ITEM ADJUSTMENTS

All items, except for Risk Reserve, must be paid to 100% when the work for that item is complete. DO NOT wait until the Semi-Final estimate to make the adjusting DWR postings.

1. Go to the AWP Items list (Figure 23-5). Note which items require postings to bring them to 100% complete.

Item	Suppl Descr	Cmpl		
6321010 - EPOXY PAVEMENT STRIPING (SOLID YELLOW)		Complete: No		
<input checked="" type="checkbox"/> Current Quantity	Qty Pd to Dt	Qty Posted to Dt	Appr DWRs	Unit Price
3.000	2.540	2.540	MILE - Mile	1,700.00000
Change Order Number				

Figure 23-5: AWP Items List

2. Create a new DWR (Figure 23-6). Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details. Add a note in the Comments field indicating that this DWR is for adjusting item quantities.

DWR Date * 11/15/2019	Number of Remarks 0
Inspector * cwhited@dot.nv.gov Whited Cecilia	Federal Project Number
Weather [Dropdown]	State Project Number SPSR-0529(001)
Rainfall Amount [Input]	Entered By -
Low Temperature [Input]	Entered Date
High Temperature [Input]	Approval Date
Stormwater Event	Approved By
Contractors Onsite No	Estimate Number
Attachments No	Payment Est Status
	Agency Views 0
	Work Items Installed 0

▼ Remarks

Type *	Remarks *
01 - GENERAL	Posting the necessary quantities to bring all items to 100%

Figure 23-6: Office Engineer DWR General Tab (CMAR)

3. Enter an item posting. In the Remarks box enter the Plan Qty (Catg. Auth. Qty) minus the Paid to Date (Catg. Qty. Paid) to show the amount of the quantity posting (Figure 23-7).

Item ID	Item Description	Current Quan...	Project	Category
6321010	EPOXY PAVEMENT STRIPING (SOLID YELLOW)	3.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		0.000	2.540	0

Item Posting Num	Contractor	Station/Location	Quantity Posted
	-	Entire Job	0.460

Contractor ▼
SIERRA NEVADA CONSTRUCTION INC (Prime)

Quantity Posted ▼
0.460

Station From ▼
[]

Station From Plus ▼
[]

Offset Type ▼
[]

Offset Distance ▼
[]

Station To ▼
[]

Station To Plus ▼
[]

Offset Type ▼
[]

Offset Distance ▼
[]

Attention
0

Units
MILE

Agency Views
None

Location ▼
Entire Job

Measured ▼

Material Set ▼
[]

Plan Sheet Page Number ▼
[]

Comments ▼
100% Complete
Current Qty: 3.00 minus Qty Paid to Date: 2.54 = .46 mile

Figure 23-7: Office Engineer DWR Item Posting Tab (CMAR Item Adjustment)

4. Generate the DWR.

DAILY WORK REPORT (DWR) – RISK RESERVE

1. When the executed Record of Authorization of Risk Reserve form is received from the Resident Engineer, complete an DWR posting (Figure 23-8) to the Risk Reserve Item (6670010) for amount indicated. This item posting can be included in the bi-weekly DWR.

Item ID	Item Description	Current Quan...	Project	Category
6670010	RISK RESERVE	100,000.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		21,684.000	21,684.000	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	PUR0003792 - SIERRA NEVADA CONSTRUC	Str. B1112W	8,500.000

Contractor * SIERRA NEVADA CONSTRUCTION INC (Prime)	Attention 0
Quantity Posted 8,500.000	Units L.S.
Station From []	Agency Views None
Station From Plus []	Location Str. B1112W
Offset Type []	Measured <input type="checkbox"/>
Offset Distance []	Material Set []
Station To []	Plan Sheet Page Number []
Station To Plus []	Comments RRE # 04
Offset Type []	
Offset Distance []	

Figure 23-8: Office Engineer DWR Item Posting Tab (CMAR Risk Reserve)

2. Generate the DWR.

RESIDENT ENGINEER'S RESPONSIBILITIES – RISK RESERVE

The Risk Reserve item will be used when a risk event has been identified. Only the items of work listed in Subsection 667.01.02, (*Risk Reserve*) *Description – Risk Events*, of the Special Provisions can be used for Risk Reserve. The Resident Engineer will discuss the details of the risk event with the contract's Project Manager and proceed with the Risk Reserve process.

RISK RESERVE WORKFLOW

1. Upon receiving the contractor's summary of the risk event, complete the Record of Authorization of Risk Reserve Expenditure (RRE) (Form No. 040-002CMAR) (Figure 23-9), found in the SharePoint Construction Forms, [Area: Construction Admin -Payment Forms](#), and all supporting documentation (e.g., Independent Cost Analysis, invoices, concurrence with NDOT Project Manager to proceed).
2. Send a copy of the RRE and all supporting documents to the NDOT Project Manager and the Construction Division Assistant Chief for review.
3. Log on to DocuSign and create a NEW envelope using the Const Admin - Risk Reserve Expenditure template. Upload the RRE and supporting documents.
4. Once the RRE and supporting documents have been routed through all required signers the originator of the DocuSign envelope will receive an email from DocuSign. This email contains attached PDF files of the signed (executed) RRE and supporting documents. Save the RRE form and all supporting documents in the appropriate Contract Files\Contract\07 Estimates\7.# Directory.
5. When the RRE is complete, have the Office Engineer create an DWR posting (Figure 23-8) to the Risk Reserve Item for the amount authorized in the RRE.

STATE OF NEVADA Sheet of
 DEPARTMENT OF TRANSPORTATION

RECORD OF AUTHORIZATION OF RISK RESERVE EXPENDITURE (RRE)

CONTRACT NO.: PROJECT NO(S)::

DESCRIPTION OF WORK:

RRE NO: CHANGE REQUESTED BY:

NAME, TITLE, COMPANY/DIVISION DATE

NATURE AND REASON FOR PROPOSED REVISION

This Risk Reserve Expenditure (RRE)

Payment for this work will be made as a Lump Sum Agreed Price in the amount of \$XXXXXX.

No extension of contract time will be allowed for this work.

This work meets the requirements of the Special Provisions section

This RRE has been discussed with(i.e., Project Manager, District Engineer, etc.)

ESTIMATED COST: Increase Decrease

WORKING DAYS: Increase Decrease No Change

METHOD OF PAYMENT

UNIT BID PRICE(S) FORCE ACCOUNT NEGOTIATED PRICE OTHER _____

RESIDENT ENGINEER: _____ / _____
PRINT NAME & TITLE SIGNATURE DATE

PROJECT MANAGER: _____ / _____
PRINT NAME & TITLE SIGNATURE DATE

DISTRICT ENGINEER: _____ / _____
PRINT NAME & TITLE SIGNATURE DATE

CONSTRUCTION ENGINEER: _____ / _____
PRINT NAME & TITLE SIGNATURE DATE

NDOT 040-002CMAR (Rev 04-17)

Figure 23-9: RRE (Form No. 040-002CMAR)

PROGRESS PAYMENTS

This chapter contains the following sections:

Overview	24-3
Stockpiles	24-3
Daily Diaries	24-6
Office Engineer DWR Postings	24-6
Ride Pay Adjustment	24-18
Percent Within Limits (PWL)	24-20
Payment Estimates	24-21

OVERVIEW

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

Forms change periodically, go to the SharePoint [Construction Forms](#) Area for the latest form available.

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(s), all test reports including RAP test reports if applicable, and approved mix design or contractor's proposed mix design (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 job site (pipe, rebar, fence, 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% 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.
- Any Stockpile request submitted, will need contractor informational testing verification from the Construction QA, IA Section and they will have 14 calendar days to approve or reject the request.

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. Material incorporated into the work needs to be reduced from the stockpile unless there is enough in the item to cover the stockpile.

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

Date: 01/05/2023

Location & Verified By*:
Fluorspar Canyon Rd & US95 - N. Tani

To: Samih Alhwayek
Resident Engineer

Contract No.: 3890

From: Las Vegas Paving
Prime Contractor

Payment No.: 1

*Entered by crew office staff.

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

Bid Item No.	Quantity	Material Description	Value	Type of Evidence of Purchase or Production Costs Attached	Cert Sample Record ID*
6030720	360.00	30 inch x 19 inch RCP	\$26,727.84	Invoice and Visual Inspection	LCurri20230104074814
6030770	400.00	38 inch x 24 inch RCP	\$34,087.68	Invoice and Visual Inspection	LCurri20230104081523
6030990	3.00	38 inch x 24 inch FES	\$5,907.24	Invoice and Visual Inspection	LCurri20230104104055
6031000	2.00	53 inch x 34 inch FES	\$6,712.09	Invoice and Visual Inspection	LCurri20230104113042

*Cert Sample Record ID entered by crew office staff when applicable.

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: 3890. 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.

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


Charles Rodgers
Prime Contractor Signature

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

Instructions to Resident Engineer: Forward original to Headquarters Construction. Retain duplicate in your office as a supporting record for the progress payment.

NDOT
040-015
(Rev. 3/23)

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



RINKER MATERIALS
2109 BURNS AVE.
HENDERSON, NV 89011

Rinker Materials Concrete Pipe Division

INVOICE

Date: 12/19/2016
 Invoice No:
 Terms: Net 10th Prox
 Payment Due On: 1/10/2017
 Job No.: NDOT 2625
 Legal Address: TONOPAH NV 89049
 Account No: 2104381
 Account Name: C AND S COMPANY INC.

C AND S COMPANY INC
1803 SYCAMORE TRL
LAS VEGAS, NV 89108-1538

For All Inquiries Call:
702 565-8721

Remit To:
Rinker Materials | PO Box 730187 | Dallas, TX 75273-0187

DETAILED INFORMATION BY PO												
DELIVERY ADDRESS: C AND S COMPANY INC, TONOPAH NV 89049												
PO Number	SIGNED QUOTE	REF #	PRODUCT CODE/DESCRIPTION	QTY	UOM	NET PRICE	BY	UOM	UNITS	AMOUNT	FRIGHT	TAX
1313648			CP/PE/DC/ELP/42(18X33)8 C3 PF	188	FT	\$133.00	1	PC	1	\$25,200.00	\$0.00	1,916.25
1313648			CP/PE/DC/ELP/24(18X33)8 C4 PF	260	FT	503.00	1	PC	1	\$132,800.00	\$0.00	1,887.84
1387534			CP/PE/DC/ELP/30(18X33)8 C3 PF	360	FT	396.00	1	PC	1	\$141,600.00	\$0.00	2,407.68
1387533			CP/PE/DC/ELP/36(18X33)8 C3 PF	717	FT	177.00	1	PC	1	\$127,414.00	\$0.00	6,872.72
1373651			CP/PE/DC/ELP/48(18X33)8 C3 PF	504	FT	180.00	1	PC	1	\$90,720.00	\$0.00	1,808.63
9423396			PCAST/H/C FE 36.6 OUTLET PF H-ELL	3	PC	\$1,830.00	1	PC	1	\$5,490.00	\$0.00	437.34
9423980			PCAST/H/C FE 36.6 OUTLET PF H-ELL	3	PC	\$3,570.00	1	PC	1	\$10,710.00	\$0.00	948.18
9423662			PCAST/H/C FE 48.6 H/LET PF H-ELL	4	PC	\$3,118.00	1	PC	1	\$12,472.00	\$0.00	835.85
9423661			PCAST/H/C FE 48.6 H/LET PF H-ELL	3	PC	\$3,045.00	1	PC	1	\$9,135.00	\$0.00	557.28
9423663			PCAST/H/C FE 48.6 H/LET PF H-ELL	2	PC	\$3,068.00	1	PC	1	\$6,136.00	\$0.00	332.25

PO Subtotal:	0.00 Yards	0.00 Yards	1364,397.00 Material	0.00 Freight	0.00 Other	33,436.18 Tax	1321,833.18 Total
--------------	------------	------------	----------------------	--------------	------------	---------------	-------------------

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

OFFICE ENGINEER'S RESPONSIBILITIES

- Save the Material Certification(s) and test report(s) to the appropriate Contract Files\Materials\03 Certs & Test Reports\3.# directory.
- Create a 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.
- Enter the Cert Sample Record ID(s) in the appropriate location on the Request for Payment for Materials On Hand form, (Form No. 040-015) (Figure 24-1).
- Save the signed Request for Material On Hand form and invoice(s) to the appropriate Contract Files\Contract\07 Estimates\7.# Mat on Hand directory.
- 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 dollar amount information from the invoice. Refer to Chapter 7, Stockpiles, in the [AWP User Guide With Materials](#) for details. Once a stockpile for an item has been set up it will pay the entire stockpile amount on the next Payment Estimate processed. The Stockpile will automatically recover in later Payment Estimate(s) when the associated item has been paid for.

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

DAILY DIARIES

A Daily Diary is used to document pertinent daily contract activities and to assess working days for contracts that have an Available Time (Working Day) Main Site Time. It also incorporates information from Approved DWR's from Inspectors and the Office Engineer for the corresponding day.

RESIDENT ENGINEER'S RESPONSIBILITIES

- Create and generate one Daily Diary, per day, per contract, prior to the creation of the Payment Estimate. Refer to Chapter 6, Daily Diaries, in the [AWP User Guide With Materials](#) for details.

Note: Make sure that all Inspector's DWRs for the corresponding day are Approved prior to creating the Daily Diary.

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

OFFICE ENGINEER DWR POSTINGS

OFFICE ENGINEER'S RESPONSIBILITIES

The Office Engineer will make DWR postings for the following items: ALL Ton items, Mobilization, Percentage (prorated) items, Trainee, Time Related Overhead (TRO), Lump Sum, and items paid by invoices. Multiple postings can be added to one DWR. They can be completed daily, weekly or bi-weekly within the two-week pay period. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.

1. Add a DWR in AWP.
 - a. **General Tab:**
 - i. Enter all appropriate information.
 - ii. Select a Remark Type of General and a Remark related to the item posting(s)
 - b. **Note Tab:** Enter a Note if appropriate.
 - c. **Contractors On Site Tab:** Select the Prime Contractor and click the Save button.
 - d. **Posting Tab:** Enter the appropriate item postings (Figure 24-3) through (Figure 24-7).
2. Approve the DWR.

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 DWR postings.

MOBILIZATION (L.S.)

Item ID	Item Description	Current Qua...	Project	Category
6280120	MOBILIZATION	60,000.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		0.000	60,000.000	0

Item Posting Num	Contractor	Station/Location	Quantity Posted
	-	Entire job.	35,000.000

Contractor ▼
SIERRA NEVADA CONSTRUCTION INC (Prime) ▼

Quantity Posted ▼

Station From ▼

Station From Plus ▼

Offset Type ▼

Offset Distance ▼

Station To ▼

Station To Plus ▼

Offset Type ▼

Offset Distance ▼

Attention
0

Units
L.S.

Agency Views
None

Location ▼
 🔍

Measured ▼

Material Set ▼

Plan Sheet Page Number ▼

Comments ▼
 🔍

Figure 24-3: Office Engineer's DWR Item Posting (Mobilization L.S.)

NOTES for Mobilization L.S. (Figure 24-3):

- The Exceptions Tab (Figure 24-22), within the Payment Estimate, lists the suggested quantity for mobilization, when appropriate. Refer to Chapter 9, Payment Estimates, in the [AWP User Guide With Materials](#) for details. The quantity suggested is based on the information in Sub-section 109.06 of the Standard Specifications and the percent complete awarded amount of the contract. This suggested amount must be entered in the Quantity Posted field.
- Location: Enter 'Entire job'.
- Sig. Fig. = .01

PRORATED ITEM (L.S.)

Item ID	Item Description	Current Qua...	Project	Category
6250490	RENT TRAFFIC CONTROL DEVICES	103,293.210	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		0.000	10,000.000	0

Item Posting Num	Contractor	Station/Location	Quantity Posted
	-	Entire Job	81,854.650

Contractor ▼ SIERRA NEVADA CONSTRUCTION INC (Prime) ▼	Attention 0
Quantity Posted ▼ 81,854.650	Units L.S.
Station From ▼ []	Agency Views None
Station From Plus ▼ []	Location ▼ Entire Job
Offset Type ▼ []	Measured ▼ <input type="checkbox"/>
Offset Distance ▼ []	Material Set ▼ []
Station To ▼ []	Plan Sheet Page Number ▼ []
Station To Plus ▼ []	Comments ▼ []
Offset Type ▼ []	
Offset Distance ▼ []	

Figure 24-4: Office Engineer's DWR Item Posting (Prorated L.S.)

NOTES for Prorated L.S. (Figure 24-4):

- The Exceptions Tab (Figure 24-22), within the Payment Estimate, lists the suggested quantity for Percentage (Prorated) items, when appropriate. Refer to Chapter 9, Payment Estimates, in the [AWP User Guide With Materials](#) for details. 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.
- Location: Enter 'Entire job'.
- Sig. Fig. = .01

TRAINEE

Item ID	Item Description	Current Qua...	Project	Category
1100050	TRAINING	500.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		0.000	0.000	0

Item Posting Num	Contractor	Station/Location	Quantity Posted
-		Entire Job	46.000

Contractor * SIERRA NEVADA CONSTRUCTION INC (Prime)	Attention 0
Quantity Posted 46.000	Units HOUR
Station From []	Agency Views None
Station From Plus []	Location Entire Job
Offset Type []	Measured <input type="checkbox"/>
Offset Distance []	Material Set []
Station To []	Plan Sheet Page Number []
Station To Plus []	Comments See Weekly Training Report for week ending 3/03/2017
Offset Type []	
Offset Distance []	

Figure 24-5: Office Engineer's DWR Item Posting (Training HOUR)

NOTES for Training HOUR (Figure 24-5):

- Payment for Trainee is based on hours.
- 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 24-6) or a Training Reimbursement Report printed from LCPtracker.
- Comments: Reference the Weekly Trainee Report.
- Reference the 2017 Certified Payroll and Compliance Manual
- Sig. Fig. = 0.01 the nearest one-half (0.30) 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						
			S	M	T	W	T	F	S
TRAINEE 1	Payroll # 5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.00	5.00	8.00	8.00		
Name: Timothy James			WEEK 1 TOTAL: 23.00						
Classification: Teamsters Group 1A									
Employer: LV Paving Corp.									
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.									
TRAINEE 3		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Name:			WEEK 3 TOTAL: 0.00						
Classification:									
Employer:									
TRAINEE 4		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Name:			WEEK 4 TOTAL: 0.00						
Classification:									
Employer:									
TRAINEE 5		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Name:			WEEK 5 TOTAL: 0.00						
Classification:									
Employer:									
TRAINEE 6		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Name:			WEEK 6 TOTAL: 0.00						
Classification:									
Employer:									
TRAINEE 7		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Name:			WEEK 7 TOTAL: 0.00						
Classification:									
Employer:									
			TOTAL WEEKLY HOURS: 46.00						

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

NDOT
040-042
(Rev 02-16)

Figure 24-6: Weekly Trainee Report

TIME RELATED OVERHEAD

Item ID	Item Description	Current Quan...	Project	Category
6290100	TIME RELATED OVERHEAD	125.000	UG136C1C	01
Supplemental Description	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		9.000	9.000	1

Item Posting Num	Contractor	Station/Location	Quantity Posted
1	PUR0003792 - SIERRA NEVADA CONSTRUCT	Entire Job	9.000

Contractor ▼

SIERRA NEVADA CONSTRUCTION INC (Prime) ▼

Quantity Posted ▼

9.000

Station From ▼

Station From Plus ▼

Offset Type ▼

Offset Distance ▼

Station To ▼

Station To Plus ▼

Offset Type ▼

Offset Distance ▼

Attention

0

Units

DAY

Agency Views

None

Location ▼

Entire Job

Measured ▼

Material Set ▼

Plan Sheet Page Number ▼

Comments ▼

3/16/2020 - 3/27/2020
NWD on 3/18/2020 due to rain

Figure 24-7: Office Engineer’s DWR Item Posting (Time Related Overhead DAY)

NOTES for Time Related Overhead DAY (Figure 24-7):

- Payment for Time Related Overhead is based on Days.
- Location: Enter ‘Entire Job’.
- Comments: Reference the time frame and any non-working days.
- Sig. Fig. = .01

ITEMS PAID BY INVOICE

There are three bid items which are paid by invoices received by the crew: 6240130 - Uniformed Traffic Control Officer, 7340224 - Railroad Flagging and Inspection, and 7360020 - Partnering.

UNIFORMED TRAFFIC CONTROL OFFICER

Uniformed Traffic Control Officers are paid using the Nevada Department of Public Safety invoice received from the Prime Contractor. This only applies to Nevada Highway Patrol Officers.

The Prime Contractor will turn in a copy of the Uniformed Traffic Control Officer invoice (Figure 24-8) they received from the Nevada Department of Public Safety.

1. Enter the Contract number and report number sequence (e.g., Report 1 of 5) (Figure 24-8).
2. Enter calculations for a 10 percent markup on the invoice (Figure 24-8).
3. Save the invoice, showing the 10 percent markup, in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.
4. Enter the invoice total with the 10 percent markup in an AWP DWR posting (Figure 24-9). Refer to Chapter 5, Daily Work Reports) in the [AWP User Guide With Materials](#), for details on DWR postings.
5. Enter the totals for each invoice on an Invoice Recap Tracking Sheet (Figure 24-13). Details on filling out this tracking sheet are found in Section, *Instructions For completing the Invoice Recap Tracking Sheet*, on page 24-18. Save the spreadsheet in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.



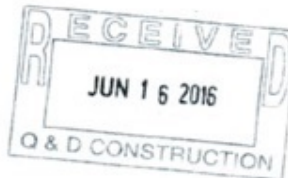
SERVICE INVOICE

3636
Report 1

SERVICE FOR:
Traffic Control in construction zones
May 23 - 27, 2016
Tuesday - Friday
Mt. Rose project

INVOICE NUMBER RN16-42-03
NHP TAX I.D.# 88-6000022
DATE 6/15/2016

BILL TO:
Q&D Construction
Attn: Sarah VanEmmerik
1050 South 21st Street
Sparks, NV 89431



DATE	SERVICE DESCRIPTION	MILES	HOURS	RATE	AMOUNT
5/23/2016	Trooper (TOTAL HRS WORKED)		10.5	\$65.49	\$687.65
	9.5 hrs of immobile svcs (round to 1 hr from above total)		9.5	\$4.00	\$38.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
5/23/2016	Trooper (TOTAL HRS WORKED)		10.5	\$65.49	\$687.65
	9.5 hrs of immobile svcs (round to 1 hr from above total)		9.5	\$4.00	\$38.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
5/24/2016	Trooper (TOTAL HRS WORKED)		6	\$65.49	\$392.94
	5 hrs of immobile svcs (round to 1 hr from above total)		5	\$4.00	\$20.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
5/24/2016	Trooper (TOTAL HRS WORKED)		6	\$65.49	\$392.94
	5 hrs of immobile svcs (round to 1 hr from above total)		5	\$4.00	\$20.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
5/25/2016	Trooper (TOTAL HRS WORKED)		10.25	\$65.49	\$671.27
	9.25 hrs of immobile svcs (round to 1 hr from above total)		9.25	\$4.00	\$37.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
5/25/2016	Trooper (TOTAL HRS WORKED)		10.5	\$65.49	\$687.65
	9.5 hrs of immobile svcs (round to 1 hr from above total)		9.5	\$4.00	\$38.00
	0 miles of mobile svcs (from substation to substation)	0		\$0.40	\$0.00
TOTALS		0	101.5		\$3,711.09

Nevada Highway Patrol
357 Hammill Lane
Reno, Nevada 89511-2015

page totals **\$3,711.09**

created 6-15-16
updated

3711.09
x .10 (10% Markup)

371.11
+ 3711.09

\$4,082.20 Total

Figure 24-8: Uniformed Traffic Control Invoice With 10% Markup Calculations

Item ID	Item Description	Current ...	Project	Category
6240130	UNIFORMED TRAFFIC CONTROL OF	84,000.000	UATB0C2C	01
Supplemental Descrip...	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		4,082.200	4,082.200	1

Item Posting ...	Contractor	Station/Location	Quantity Pos...
1	T81072018 - ROAD & HIGHWAY I	Entire job.	4,082.200

Contractor *	Attention
ROAD & HIGHWAY BUILDERS LLC (Prime)	0
Quantity Posted	Units
4,082.200	FA
Station From	Agency Views
	None
Station From Plus	Location
	Entire job.
Offset Type	Measured
	<input type="checkbox"/>
Offset Distance	Material Set
Station To	Plan Sheet Page Number
Station To Plus	Comments
	Invoice number RN16-42-03
Offset Type	

Figure 24-9: Uniformed Traffic Control DWR Posting

Invoice Recap Tracking Sheet								
Total Paid	Catg # 01		\$4,082.20	Contract #:	3635			
Total Paid	Catg # 00		\$0.00	Description:	Uniformed Traffic Control Officer			
Total Paid	Catg # 00		\$0.00	Bid Item Number:	6240130			
Accum Total PAID All Catg			\$4,082.20					
Inv. Report #	Catg # 01 TOTAL	Catg # 00 TOTAL	Catg # 00 TOTAL	Invoice Date	Invoice #	Payment Amount	Pay Estimate #	Remarks
1	\$4,082.20			6/15/2016	RN16-42-03	\$4,082.20	1	
FINAL TOTAL	\$4,082.20	\$0.00	\$0.00			4082.20		


Figure 24-10: Completed Invoice Recap Tracking Sheet (Uniformed Traffic Control)

RAILROAD FLAGGING AND INSPECTION

Qualified railroad flaggers/inspectors are paid using the railroad flagger/inspector service provider invoice received from the Prime Contractor.

The Prime Contractor will turn in a copy of the railroad flagger/inspector invoice (Figure 24-11) they received from the service provider.

1. Enter the Contract number and report number sequence (e.g., Report 1 of 3) (Figure 24-11).
2. Enter calculations for a 5 percent markup on the invoice. (Figure 24-11).
3. Save the invoice, showing the 5 percent markup, in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.
4. Enter the invoice total with the 5 percent markup in an AWP DWR posting (Figure 24-12). Refer to Chapter 5, Daily Work Reports) in the [AWP User Guide With Materials](#), for details on DWR postings.
5. Enter the totals for each invoice on an Invoice Recap Tracking Sheet (Figure 24-13). Details on filling out this tracking sheet are found in Section, *Instructions For completing the Invoice Recap Tracking Sheet*, on page 24-18. Save the spreadsheet in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.



Invoice

SERVICES PROVIDED TO: 3583
 ACC Southwest
 Attn: Linda Rogbers - A/P Report 1
 PO Box 60726
 Phoenix, AZ 85082

RailPros Invoice #	AC63021702
Invoice Date	2/16/2017
Due Date	2/16/2017
RP Task Order No.	6302
PO#	PO#16208
Terms	Due on receipt

Submitted Via:

Task Name	RWIC Protection	
Location	Caliente	NV
Period	Jan-17	

Description	U/M	Quantity	Rate	Amount
RWIC Chad Winn - 02/01, 02/02	DAILY	2	950.00	1,900.00
RWIC Chad Winn	OT	3	125.00	375.00

(supporting documents attached)

PLEASE PAY THIS AMOUNT >>

Please make check payable to: **RailPros Field Services, Inc.**

Please remit payment to: **RailPros Field Services, Inc.**

Due this invoice **\$2,275.00**

1705 W. Northwest Hwy. Suite 150
 Grapevine, TX 76051
 Phone: 682-223-6897
 Fax: 866-762-7619
 Email: accounting@railprofs.com

2275.00
 x .05 (5% Markup)

 113.75
 + 2275.00

 Total \$2,388.75

Figure 24-11: Railroad Flagger/Inspector Invoice With 5% Markup Calculation

Item ID	Item Description	Current ...	Project	Category
7340224	RAILROAD FLAGGING AND INSPECT	53,237.000	UATB0C2C	01
Supplemental Descrip...	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		2,388.750	2,388.750	1

Item Posting ...	Contractor	Station/Location	Quantity Pos...
1	T81072018 - ROAD & HIGHWAY I	Entire job	2,388.750

Contractor*	Attention
ROAD & HIGHWAY BUILDERS LLC (Prime)	0
Quantity Posted	Units
2,388.750	L.S.
Station From	Agency Views
	None
Station From Plus	Location
	Entire job
Offset Type	Measured
	<input type="checkbox"/>
Offset Distance	Material Set
Station To	Plan Sheet Page Number
Station To Plus	Comments
	Invoice number AC63021702
Offset Type	
Offset Distance	

Figure 24-12: Railroad Flagging and Inspection DWR Posting

Invoice Recap Tracking Sheet								
Total Paid	Catg # 05		\$2,388.75		Contract #:	3583		
Total Paid	Catg # 00		\$0.00		Description:	Railroad Flagging and Inspector		
Total Paid	Catg # 00		\$0.00		Bid Item Number:	7340224		
Accum Total PAID All Catg			\$2,388.75					
Inv. Report #	Catg # 05 TOTAL	Catg # 00 TOTAL	Catg # 00 TOTAL	Invoice Date	Invoice #	Payment Amount	Pay Estimate #	Remarks
1	\$2,388.75			2/16/2017	AC63021702	\$2,388.75	35	
FINAL TOTAL	\$2,388.75	\$0.00	\$0.00			2388.75		

Figure 24-13: Completed Invoice Recap Tracking Sheet (Railroad Flagger/Inspector)

PARTNERING

Partnering is paid using the Partnering invoice received from the Prime Contractor.

The Prime Contractor will turn in a copy of the Partnering Invoice (Figure 24-14).

1. Enter the Contract number and report number sequence (e.g., Report 1 of 1) (Figure 24-14).
2. Save the invoice in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.

Note: No markup is allowed.

3. Enter the invoice total in an AWP DWR posting (Figure 24-15). Refer to Chapter 5, Daily Work Reports) in the [AWP User Guide With Materials](#), for details on DWR postings.
4. Enter the totals for each invoice on an Invoice Recap Tracking Sheet (Figure 24-16). Details on filling out this tracking sheet are found in Section, *Instructions For completing the Invoice Recap Tracking Sheet*, on page 24-18. Save the spreadsheet in the appropriate Contract Files\Contract\07 Estimates\7.# Invoices directory.



 <p>Corporate Advisors "Helping Organizations Grow"</p>	<p>Sherman Tingey, Ph.D. Principal</p>										
<p>June 7, 2016</p>	<p>3836 Report 1</p>										
<p>Mr. Randy Rosenberg, Proj. Mgr. LAS VEGAS PAVING CORP. 4420 South Decatur Blvd. Las Vegas NV 89103-5803</p>											
<table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Our Invoice No.:</td> <td>710</td> </tr> <tr> <td>Project:</td> <td>US-95 Widening Partnering Workshop with NDOT</td> </tr> <tr> <td>Workshop Date:</td> <td>February 12, 2007</td> </tr> <tr> <td>Location:</td> <td>Canyon Gate Club, Las Vegas, NV</td> </tr> </table>		Our Invoice No.:	710	Project:	US-95 Widening Partnering Workshop with NDOT	Workshop Date:	February 12, 2007	Location:	Canyon Gate Club, Las Vegas, NV		
Our Invoice No.:	710										
Project:	US-95 Widening Partnering Workshop with NDOT										
Workshop Date:	February 12, 2007										
Location:	Canyon Gate Club, Las Vegas, NV										
<p>Facilitation Fee: Preparation of workshop materials, agenda, etc. Pre-workshop communications and arrangements. LD telephone calls will all key representatives. Facilitate ½-day tailored workshop. Prepare <i>Summary Report</i>.....</p>											
	<p>\$2,000.00</p>										
<p>Other Expenses:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;">Airfare (\$59.40 + \$81.90)</td> <td style="text-align: right;">\$141.30</td> </tr> <tr> <td>Hotel (-0-) & Meals (8.00)</td> <td style="text-align: right;">8.00</td> </tr> <tr> <td>Rental Car, Airport Pkg, Gas (\$56.19 + \$10.00 +\$2)</td> <td style="text-align: right;">68.19</td> </tr> <tr> <td>Materials, __ attendees @ \$5.00 each</td> <td style="text-align: right;">-0-</td> </tr> <tr> <td>Copies of Project Charters in plaques and Summary Reports (plus S&H).....</td> <td style="text-align: right; border-top: 1px solid black;">-0-</td> </tr> </table>		Airfare (\$59.40 + \$81.90)	\$141.30	Hotel (-0-) & Meals (8.00)	8.00	Rental Car, Airport Pkg, Gas (\$56.19 + \$10.00 +\$2)	68.19	Materials, __ attendees @ \$5.00 each	-0-	Copies of Project Charters in plaques and Summary Reports (plus S&H).....	-0-
Airfare (\$59.40 + \$81.90)	\$141.30										
Hotel (-0-) & Meals (8.00)	8.00										
Rental Car, Airport Pkg, Gas (\$56.19 + \$10.00 +\$2)	68.19										
Materials, __ attendees @ \$5.00 each	-0-										
Copies of Project Charters in plaques and Summary Reports (plus S&H).....	-0-										
	<p>Subtotal..... \$ 217.49</p>										
	<p>TOTAL AMOUNT DUE..... \$2,217.49</p>										
<p><i>Receipts enclosed.</i></p> 											

Figure 24-14: Partnering Invoice

Item ID	Item Description	Current ...	Project	Category
7360020	PARTNERING	6,000.000	UATB0C2C	01
Supplemental Descrip...	Attention	Tot Qty Posted	Tot Qty Posted to Dt	Records
No		2,217.490	2,217.490	1

Item Posting ...	Contractor	Station/Location	Quantity Pos...
1	T81072018 - ROAD & HIGHWAY I	Entire job	2,217.490

Contractor*	Attention
ROAD & HIGHWAY BUILDERS LLC (Prime)	0
Quantity Posted	Units
2,217.490	L.S.
Station From	Agency Views
	None
Station From Plus	Location
	Entire job
Offset Type	Measured
	<input type="checkbox"/>
Offset Distance	Material Set
Station To	Plan Sheet Page Number
Station To Plus	Comments
	Invoice number 710
Offset Type	
Offset Distance	

Figure 24-15: Partnering DWR Posting

Invoice Recap Tracking Sheet								
Total Paid	Catg # 02		\$2,217.49		Contract #:	3836		
Total Paid	Catg # 00		\$0.00		Description:	Partnering		
Total Paid	Catg # 00		\$0.00		Bid Item Number:	7360020		
Accum Total PAID All Catg			\$2,217.49					
Inv. Report #	Catg # 02 TOTAL	Catg # 00 TOTAL	Catg # 00 TOTAL	Invoice Date	Invoice #	Payment Amount	Pay Estimate #	Remarks
1	\$2,217.49			6/7/2016	710	\$2,217.49	35	
FINAL TOTAL	\$2,217.49	\$0.00	\$0.00			2217.49		

Figure 24-16: Completed Invoice Recap Tracking Sheet (Partnering)

INSTRUCTIONS FOR COMPLETING THE INVOICE RECAP TRACKING SHEET

The Invoice Recap Tracking Sheet (Figures 24-10, 24-13 & 24-16) is a spreadsheet used to track Uniform Traffic Control Officer invoice, Railroad Flagger and Inspector invoice, and Partnering invoice progress payments. Each bid item will be tracked on a separate spreadsheet. The spreadsheet is used as part of the source documents for payment. The Invoice Recap Tracking Sheet is located in the SharePoint [Construction Forms](#) Area.

1. Record the following information specific to your contract and invoice:
 - **Contract #**
 - **Description**
 - **Bid item number**
 - **Category (Catg) #** - Change the Catg. # in the YELLOW box (this will update the Catg. Field at the top automatically.) If the contract only has one Catg. change the other Catg. fields in YELLOW to 00. If there are more Categories than what is provided on the sheet, contact Construction Admin Services staff.
 - **Inv. Report #**
 - **TOTAL**- quantity to be paid in the correct Catg. Column
 - **Invoice Date** - Date listed on the invoice
 - **Invoice #**
 - **Payment Amount**
 - **Pay Estimate #** the invoice was paid on
 - **Remarks** - when applicable

RIDE PAY ADJUSTMENT

The Ride Pay Adjustment item (7360033 – Ride Incentive/Disincentive) provides an incentive to the contractor to construct a road-way 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 a Profile Summary Report on the MRI and IRI values of the pavement riding surface upon completion of the placement of the open-graded material. The information provided in the summary report 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 Assurance 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 24-17) from the [Quality Assurance](#) Form Area in SharePoint.
2. Use the information in the Profile Summary Report (Figure 24-18) 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 24-17).
3. Create a DWR in AWP to document the Ride Pay Adjustment based on the Payment Total from the Ride Pay Adjustment Columnar Sheet. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
RIDE PAY ADJUSTMENT COLUMNAR SHEET

Contract No: 3791 Project No: NHP-080-2(058) Sheet No: 1 of 1

Contractor: Road and Highway Builders Surface Type: PBS Open-Grade Date: July 24, 2020

Highway/Route No: IR-80 Lane Direction: Eastbound Lane Number: 1

Ride Quality Lot No. (Segment #)	Ride Quality Lot Begin (Station/MP)	Ride Quality Lot End (Station/MP)	Ride Quality Lot Length (Miles)	Ride Quality Lot MRI (Inches/Mile)	Localized Roughness (Defects?)	Ride Pay Adjustment (Dollars)	Accum. Ride Pay Adjustment (Balance Forward)	PROGRESS PAYMENT	
RQL NO.	RQL BEGIN	RQL END	RQL LENGTH	RQL MRI	YES / NO	RQL RPA		Payment Number	Payment Amount (Balance Forward)
1	"LE" 1694+00	"LE" 1699+28	0.100	48.029	YES	\$0.00	\$0.00		
2	"LE" 1699+28	"LE" 1704+56	0.100	23.876		\$2,500.00	\$2,500.00		
3	"LE" 1704+56	"LE" 1709+84	0.100	36.315		\$1,125.00	\$3,625.00		
4	"LE" 1709+84	"LE" 1715+12	0.100	23.159		\$2,500.00	\$6,125.00		
5	"LE" 1715+12	"LE" 1720+40	0.100	21.807		\$2,500.00	\$8,625.00		
6	"LE" 1720+40	"LE" 1725+68	0.100	52.462	YES	\$0.00	\$8,625.00		
7	"LE" 1725+68	"LE" 1730+96	0.100	26.790		\$2,375.00	\$11,000.00		
8	"LE" 1730+96	"LE" 1736+24	0.100	21.197		\$2,500.00	\$13,500.00		
9	"LE" 1736+24	"LE" 1741+52	0.100	23.233		\$2,500.00	\$16,000.00		
10	"LE" 1741+52	"LE" 1746+80	0.100	30.387		\$1,875.00	\$17,875.00		
11	"LE" 1746+80	"LE" 1752+08	0.100	28.186		\$2,125.00	\$20,000.00		
122	"LE" 2332+88	"LE" 2338+16	0.100	22.490		\$2,500.00	\$293,000.00		
123	"LE" 2338+16	"LE" 2343+44	0.100	22.516		\$2,500.00	\$295,500.00		
124	"LE" 2343+44	"LE" 2348+72	0.100	25.295		\$2,500.00	\$298,000.00		
125	"LE" 2348+72	"LE" 2354+00	0.100	18.841		\$2,500.00	\$300,500.00		
126	"LE" 2354+00	"LE" 2359+28	0.100	21.784		\$2,500.00	\$303,000.00		
127	"LE" 2359+28	"LE" 2360+41.417	0.021	50.173	YES	\$0.00	\$303,000.00	11	\$303,000.00

Actual length of segment (mile) / 0.100 X RPA value for MRI = Pro-Rated RPA \$303,000.00 \$303,000.00

Ride Pay Adjustment based on Subsection 403.05.02, Table 1 for PBS Open-Grade and Subsection 409.05.02, Table 1 for Portland Cement Concrete Paving.

Remarks:

Checked By: DEH

Signature: *Amy Smith, PE*
Resident Engineer

NDOT 040-084 (Electronic)
Rev. 7/2020

Distribution: Headquarters Construction, Resident Engineer

Figure 24-17: Ride Pay Adjustment Columnar Sheet

Report Settings

Highlight RI values above 50.00 in/mi
Highlight RI values below 26.00 in/mi

Summary - Run 1								
Track 1				Track 2				Average
Segment	Station (ft)	Defects	IRI (in/mi)	Segment	Station (ft)	Defects	IRI (in/mi)	IRI (in/mi)
1	1694+00.000	1	46.116	1	1694+00.000	1	49.942	48.029
	1699+28.000				1699+28.000			
2	1699+28.000	0	23.081	2	1699+28.000	0	24.671	23.876
	1704+56.000				1704+56.000			
3	1704+56.000	1	41.210	3	1704+56.000	0	31.420	36.315
	1709+84.000				1709+84.000			
4	1709+84.000	0	22.202	4	1709+84.000	0	24.116	23.159
	1715+12.000				1715+12.000			
5	1715+12.000	0	21.093	5	1715+12.000	0	22.521	21.807
	1720+40.000				1720+40.000			
6	1720+40.000	2	54.711	6	1720+40.000	2	50.214	52.462
	1725+68.000				1725+68.000			
7	1725+68.000	0	25.047	7	1725+68.000	0	28.533	26.790
	1730+96.000				1730+96.000			
8	1730+96.000	0	21.568	8	1730+96.000	0	20.826	21.197
	1736+24.000				1736+24.000			

Defect Locations - Run 1 - By Station									
Defect	Type	Track	Segment	Start (ft)	End (ft)	Length (ft)	Peak Height (in/mi)	Peak Station (ft)	Closest GPS
1	IRI Peak	2	1	1694+25.500	1694+51.667	26.167	238.540	1694+37.333	40 41' 32.51" N 118 3' 17.94" W
2	IRI Peak	1	1	1694+29.333	1694+74.917	45.583	217.245	1694+37.167	40 41' 32.51" N 118 3' 17.94" W
3	IRI Peak	1	3	1705+71.000	1705+95.083	24.083	195.469	1705+81.167	40 41' 42.81" N 118 3' 12.01" W
4	IRI Peak	1	6	1721+94.917	1722+15.750	20.833	176.248	1722+02.667	40 41' 57.51" N 118 3' 03.59" W
5	IRI Peak	2	6	1722+05.000	1722+08.000	3.000	152.236	1722+06.917	40 41' 57.55" N 118 3' 03.57" W
6	IRI Peak	2	6	1722+14.833	1722+28.583	13.750	181.271	1722+21.250	40 41' 57.68" N 118 3' 03.49" W
7	IRI Peak	1	6	1722+28.000	1722+34.333	6.333	156.379	1722+32.000	40 41' 57.78" N 118 3' 03.44" W
8	IRI Peak	1	127	2360+05.167	2360+25.250	20.083	178.379	2360+14.500	40 51' 27.60" N 117 57' 08.69" W

Figure 24-18: Example of a Profile Summary Report

PERCENT WITHIN LIMITS (PWL)

The Percent Within Limits (PWL) specification is included on all contracts that contain 25,000 tons or greater of Type 2 or Type 2C plantmix bituminous surface. Depending on the ability of the contractor to produce a consistent mix that is within specification, the Progress Payment for item, 7360030 - PWL Incentive/Disincentive, provides a financial incentive or disincentive to the contractor.

PWL uses a statistical analysis to determine the consistency of a given lot of the plantmix bituminous surface. The statistical analysis is based upon the asphalt content, in-place density, and aggregate gradation (1/2 inch for Type 2C or 3/8 inch for Type 2, No. 4, No. 10 and No. 200). The information pertaining to the PWL Specifications can be found in Subsection 401.02.02, (*Plantmix Bituminous Pavements*) *Composition of Mixtures* and Subsection 402.05.02 (*Plantmix Bituminous Pavements*) *Plantmix Progress Payment Adjustment*, of the Special Provisions.

Participation in the Construction Division's Workshop - Percent Within Limits (PWL) Training, is strongly encouraged to aid in the PWL procedures. Contact Construction Division Quality Assurance staff for ALL questions pertaining to PWL.

OFFICE ENGINEER'S RESPONSIBILITIES

Prior to the production of (Type 2 or Type 2C) plantmix bituminous surface, the following must be completed:

1. Obtain the most current PWL calculation sheet for either Type 2 or Type 2C from the PWL folder of the [Quality Assurance Documents](#) Area in SharePoint.
2. Fill out the required header information on the PWL calculation sheet (Resident Engineer, Contract Number, County, etc.) (Figure 24-19).
 - a. The Unit price, \$/ton is the contract bid price for the Type 2 or Type 2C plantmix bituminous surface.

3. As the required test reports are received, input the applicable data into the PWL calculation sheet using the rounding convention from each test report's cover sheet.
 - a. Based upon the criteria established in Subsection 402.05.02 of the Special Provisions, assign subplot and corresponding lot numbers to the applicable test reports.
4. Prior to making the bi-weekly payment, check with the Construction Division's Quality Assurance Section to ensure the correct Progress Pay Adjustment (PPA) is being used.
 - a. The Construction Division's Admin Services Section will not approve the bi-weekly payment without consent from the Quality Assurance Section.



GREEN HIGHLIGHTED CELLS CAN NOT BE EDITED

Resident Engineer	Kash Register
Contract Number	3775
County	Churchill
Route	US950-3
Mile Post	CH 85.961 to CH 106.88
Asphalt Type	PG 64.28NV

Primary Contractor	LOL Construction
Asphalt Producer	PNAC
Unit price, \$/ton	58.00
Pay Factor Adjustment (XX) % + (0.5 * PWL overs)	55
Cease production if 2 consecutive lots criteria are <	70

VERIFY IN CONTRACT
VERIFY IN CONTRACT

% Passing Sieve	JMFE Limits							
	1		2		3			
	L1	U1	L2	U2	L3	U3		
1"	100	100	100	100				
3/4"	90	100	90	100				
1/2"								
3/8"	63	72	63	72				
#4	45	55	45	55				
#10	30	36	30	36				
#40	14	22	14	22				
#200	5	8	5	8				
Bit Ratio	3.7	4.5	3.5	4.3				

Date	Lot	Sub Lot	Job Mix Formula	Plantmix Type	1"	3/4"	1/2"	3/8"	#4	#10	#40	#200	Bit Ratio	Compaction Test #	Compaction Type	Compaction %	Sublot Quantity, ton	Payment No.	Payment Amount
10/10/2019	1	1	2	2	100	95		65	50	31	18	7	3.3	06-PM-01	Mat	95.0			
10/10/2019	1	1	2	2	100	97		73	52	33	19	7	4.5	06-PM-02	Mat	93.0	1,112.86		
10/11/2019	1	2	2	2	100	96		71	52	32	19	6	3.4	06-PM-03	Mat	94.0			
10/11/2019	1	3	2	2	100	95		68	50	31	19	8	3.7	06-PM-04	Mat	93.0	1,589.84		
10/12/2019	1	4	2	2	100	96		68	51	32	19	8	3.7	06-PM-05	Mat	93.0	974.18		
10/14/2019	1	5	2	2	100	95		66	50	32	19	8	3.3	07-PM-01	Mat	93.0			
10/14/2019	1	5	2	2	100	95		70	52	33	20	7	4.5	07-PM-02	Mat	94.0	1,201.74		
	1													07-PM-03	Mat	93.0			
	1													07-PM-04	Mat	93.0			
	1													07-PM-05	Mat	94.0			
	1													08-PM-01	Mat	93.0			
	1													08-PM-02	Mat	92.0			
	1													08-PM-03	Mat	93.0			
	1													08-PM-04	Mat	93.0			
	1													08-PM-05	Mat	92.0			
	1													09-PM-01	Mat	93.0			
	1													09-PM-02	Mat	93.0			
	1													09-PM-03	Mat	93.0			
	1													09-PM-04	Mat	93.0			
	1													09-PM-05	Mat	94.0			
	1													10-PM-01	Mat	95.0			
	1													11-PM-01	Mat	95.0			
	1													11-PM-02	Mat	92.0			
	1													11-PM-03	Mat	94.0			



Contract Information

Resident Engineer	Kash Register
Contract Number	3775
County	Churchill
Route	US950-3
Mile Post	CH 85.961 to CH 106.88
Asphalt Type	PG 64.28NV

Primary Contractor	LOL Construction
Asphalt Producer	PNAC
Unit price, \$/ton	58.00
Lots	1

ONLY YELLOW HIGHLIGHTED CELLS can be edited

Lot	Sublots	Sublot criteria met?	Production criteria met?	INF criteria met?	From	To	PWL _{total}	PWL _{combined}	PWL _{in base}	PWL _{ready}	PWL _{total}	Pay Factor %	FF < 9% Remove & Replace? (Y or N)	Remove from PWL calculation	Production tons	Unadjusted Payment	Bonus	Deduct	Cumulative Payment	Payment No.	Payment Amount
1	5	Yes	Yes	Yes	10/10/19	10/14/19	PWL<55	95	S3	92	80	95	N	N	4,878.62	282,959.96		(14,472.62)	268,487.34		

Figure 24-19. PWL Calculation Sheet Example

PAYMENT ESTIMATES

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

An AWP Payment Estimate can include:

- DWR item postings that have not been paid in a prior estimate but are approved. The maximum allowable amount that can be paid for Major Items (any item over \$50,000) based on NDOT's overrun criteria is \$100,000 or 100%. The overrun is calculated at the item's project/category level.
- Retainage calculations based on NDOT's Standard Specifications
- Liquidated Damages for Main Site Time overages
- Stockpile transactions
- Payment Adjustments (Liquidated Damages or Penalties)
- Other Item Adjustments for Insufficient Materials for items with deficient/missing certifications
- Price Indexes (Fuel and Asphalt Escalations)

The Payment Estimate process also calculates the Site Time charges for the contract. For Working Day Site Times, AWP bases its calculations on Daily Diary records within the pay period. For Completion Date Site Times, AWP bases the calculations on the date of the estimate.

Liquidated Damages (LDs) to assess overages on the contract's Main Site Time are automatically calculated and assessed by the AWP software in a Payment Estimate for the following criteria. Refer to Chapter 2, Contract Setup, Site Area, in the [AWP User Guide With Materials](#) for details.

- Available Time (Working Day) Contracts: LDs are assessed in a Payment Estimate when the days charged in the RE's Daily Diaries exceed the days designated in the contract's Main Site Time, Units and Dates Tab, Current Number of Time Units. The amount assessed equals the number of days exceeded times the Liquidated Damage/Disincentive Rate found in the Rates and Cap Amount Tab in the Main Contracts Site Time.
- Completion Date Contracts: LDs are assessed in a Payment Estimate when the date entered in the Actual Completion date exceeds the Current Completion date in the contract's Main Site Time, Units and Dates Tab. The amount assessed equals the number of days exceeded times the Liquidated Damage/Disincentive Rate found in the Rates and Cap Amount Tab in the Main Contracts Site Time.

The AWP software allows for Payment Adjustments within a payment estimate (supporting documentation is REQUIRED). These adjustments will allow NDOT Construction Crews to assess liquidated damages for the following: Environmental issues, Material discrepancies where the item's unit price is NOT changed, Traffic and Lane Closures, and Penalties for Labor Compliance, thus eliminating the creation and processing of a Change Order

The AWP software automatically withholds payment on items with deficient and/or missing material certifications. This automatic process uses a Material Certification Sample, where the crew office creates a Cert Sample Record and attaches a copy of the material certification. This Cert Sample Record is reviewed and approved by the Material Division, Lab Services (Carson City) staff.

The AWP software automatically calculates Fuel and Asphalt Escalation payment or decrement amounts. The AWP software designates an escalation as a Price Adjustment Index. NDOT's Fuel and Asphalt Escalations will be automatically calculated on each Payment Estimate (starting with estimate number one).

Important: ALL contracts will use the AWP Payment Estimate Review and Approval process to obtain signatures on Payment Estimates.

OFFICE ENGINEER'S RESPONSIBILITIES

INSPECTOR'S DAILY WORK REPORT (DWR) REVIEW

Prior to adding and processing a Progress Payment Estimate, review and verify all Inspector DWRs for the following. Refer to Chapter 5, Daily Work Reports, in the [AWP User Guide With Materials](#) for details.

- Information in the Remarks (decided on by the Resident Engineer)
- 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).
- Quantities – paid to the correct amount - in the correct category - to the correct Sig. Fig. (.01)

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

- Material Set is correct.
- Stationing and Location – RT, LT or CL, and offset if known. "Quotations" can be around the line designations.
- Comments - contain required info to the bid item; necessary calculations have been referenced and/or made correctly.
- If Comments/Remarks reference a memo or person, include the date of memo, and full name and title of person.
- Approve all DWRs for the cut-off period if everything is correct.
- If there are edits required in the DWR, it can be Rejected and the Inspector will complete the edits, or it can be corrected by the Office Engineer.
- If the DWR is Rejected, 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.
- Review the edited DWR and Approve.
- If the correction is completed by the Office Engineer a DWR Note must be completed noting the name of the person completing the correction, the date of the correction, and details of the correction.

Note: Non-Quantity Error in a DWR included in a Payment Estimate.

When a non-quantity error is made in a DWR in the below Tabs/Fields and the DWR has been included in a Payment Estimate, create a DWR Note in the DWR with specific details of the correction for the error.

- **General Tab:** Weather, Temperature, Remarks Type or Remarks
- **Equipment Tab and Personnel Tab:** Number, Hours or Comments (Description and Name)
- **Postings Tab:** Stationing/Location, Offsets, Line Destination or Comments

Note: Quantity Error in an DWR.

When a quantity error (Only) is made in a DWR and it has been included in a Payment Estimate, a new DWR must be created to correct the quantity.

Use the DWR Notes to cross-reference both DWRs.

- In the Note for DWR with the quantiterrory , provide details on the specific error and the following information from the correcting DWR: Item number and Description, Stationing/Location, Inspector, and the details of the correction that was applied.
- In the Posting comments for the correcting DWR, reference the following information from the DWR were the error occurred: DWR Date, Inspector, Item Number and Description, Stationing/Location and the details on the specific error and provide details on the correction applied.

ADDING AND PROCESSING A PROGRESS TYPE PAYMENT ESTIMATE

Refer to Chapter 9, Payment Estimates, in the [AWP User Guide With Materials](#) for details.

1. Add the Progress Type Payment Estimate.
2. Review the Draft Payment Estimate and complete the Contract Payment Estimate Summary Tabs as appropriate.

a. **General:** Review the Draft Payment Estimate summary information (Figure 24-20).

General	Pay Amount This Contract Payment Estimate	Prime Contractor
Notes	318,661.35	11057 - Q&D CONSTRUCTION
Exceptions	Total Pay Amount (All Payment Estimates)	Current Contract Amount
Time Charges	318,661.35	14,556,895.50
Projects	Transfer to Accounting Date	Contract Percent Complete
Items		2.19
Payment Adjustments		Created By
Item Adjustments		kmcdaniel2@dot.nv.gov
Approval Tracking		Created Date
		03/07/2023 6:57:27 AM

Contract: 0MD02 - District 2 Materials Training Contract			
Payment Est Number:	0001	Period EndDate:	02/17/2023
Status:	Draft		
Type:	Progress - Progress		

	Previous Pay Est	This Pay Estimate	Total (All Pay Est)	
Posted Item Pay:	0.00	528,000.00	528,000.00	
Gross Item Adjustments:	0.00	-201,167.85	-201,167.85	
Gross Item Pay :	0.00	326,832.15	326,832.15	
Participating Item Pay:	0.00	0.00	0.00	
Non-Participating Item Pay:	0.00	336,807.90	336,807.90	
Cash Retainage:	0.00	-8,170.80	-8,170.80	
Liquidated Damage:	0.00	0.00	0.00	
Other Contract Adjustments:	0.00	0.00	0.00	
Total Pay Amount:	0.00	318,661.35	318,661.35	

Item Adjustment Type	Previous Pay Est	This Pay Estimate	Total (All Pay Est)	
Overrun:	0.00	0.00	0.00	
Price - Fuel:	0.00	-24,219.42	-24,219.42	
Price - Asphalt:	0.00	-1,948.43	-1,948.43	
Price - Emulsified Asphalt:	0.00	0.00	0.00	
Insufficient Material:	0.00	-175,000.00	-175,000.00	
Material Credit:	0.00	0.00	0.00	
Construction Stockpile:	0.00	0.00	0.00	
Other Item Adjustments:	0.00	0.00	0.00	
Gross Item Adjustments:	0.00	-201,167.85	-201,167.85	

Liquidated Damage:
Values in this line indicate LDs for Main Site Time ONLY.

Other Contract Adj.:
Values in this line indicate NDOT Liquidated Damages for the following: Environmental, Materials, Lane Closures, and Penalty for Labor Compliance.

Price – Fuel:
Price – Asphalt:
Price – Emulsified Asphalt:
Values in these lines indicate Fuel, Asphalt, and Emulsified Asphalt escalation payments or decrements.

Insufficient Material:
Values in this line indicate amount being withheld due to insufficient Material Certs.

Material Credit:
Values in this line indicate when an Insufficient Material Cert has been satisfied and amount has been credited.

Figure 24-20. General Tab Details

- b. **Notes:** Enter a Payment Estimate Note as appropriate. .
- c. **Exceptions Tab:** This tab displays payment exceptions, which may prevent the payment estimate's approval. The exceptions require specific responses depending on the estimate type. Refer to the chart in Figure 24-21. It is strongly recommended to first search the entire list for all exceptions (Insufficient Materials, Overrun, Missing Percentage of Schedule DWR Item Positioning, Pending or Draft Daily Work Reports, etc.) that must be Resolved and/or-* Acknowledged using the Quick Find search box (Figure 24-22).

Payment Estimate Exception Chart		
Exception	Progress	Semi-Final
Construction Stockpile Balance	Not Displayed	Must Resolve
Funding Check	Must Resolve	Must Resolve
Item Incomplete	Not Displayed	Must Resolve
Item Overrun	Must Acknowledge	Must Resolve
Missing Percentage of Schedule DWR Item Posting	Must Acknowledge	Must Acknowledge
Missing Start Time	Must Resolve	Must Resolve
Negative Estimate	Must Resolve	Must Resolve
Pending or Draft Daily Work Reports	Must Acknowledge	Must Resolve
Insufficient Materials	May Be Left Unresolved*	May Be Left Unresolved*

Definition of Status Response

Must Acknowledge - Exception is valid, issue the specified payment to Contractor. Must include a detailed Remark.

Must Resolve - Exception is valid and must be corrected to continue with estimate.

May Be Left Unresolved - Exception is valid, issue the specified payment to Contractor. ***MUST Acknowledge ONLY when the Adjustment value is Yes. Must include a detailed Remark.**

Figure 24-21. Payment Estimate Exception Chart

Contract Payment Estimate Summary

▼ 0301B - MATERIALS TESTING 0301B
Save ▼ ?

Estimate Number: 0001 Period End Date: 03/19/2021 12:00:00 AM Type: Progress Status: Draft

General

Notes

Exceptions

Time Charges

Projects

Items

Payment Adjustments

Item Adjustments

Annual Tracking

System Default ▼
Showing 4 of 4

Adjustment
No Filter ▼

0 changed

Exception ID	Payment Estimate Exception	Status	Adjustment
> 35	Missing Percentage of Schedule DWI	Unresolved	No
> 36	Missing Percentage of Schedule DWI	Unresolved	No
> 37	Missing Percentage of Schedule DWI	Unresolved	No
> 38	Missing Percentage of Schedule DWI	Unresolved	No

Figure 24-22. Payment Estimate Exception Tab Details - Quick Find Search Box

With the introduction of Materials functionality, the Payment Estimate Exception list includes exceptions for Insufficient Materials. These materials exceptions indicate insufficiencies with sampling & testing and certifications. A new filter is available where you can filter on the Adjustment (Figure 24-23). The only exceptions of this type that WILL be Acknowledged are those where the Adjustment has a value of 'Yes' (Figure 24-23). These exceptions indicate there are insufficient material certifications and payment will be withheld on the item associated to the material certification. The Insufficient Materials exceptions where the Adjustment has a value of 'No' indicate that there are sample/testing insufficiencies (Figure 24-24). These exceptions do NOT affect payments but are listed for information purposes only.

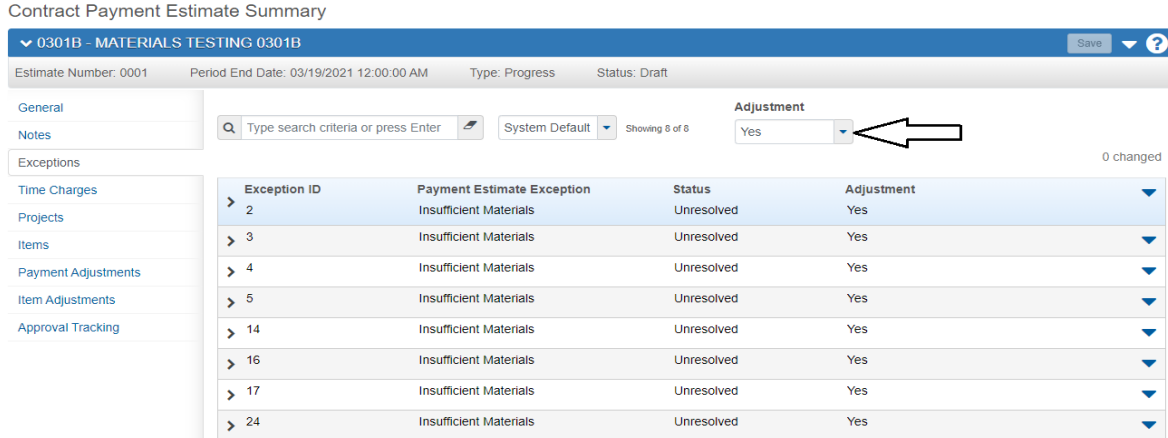


Figure 24-23. Payment Estimate Exception Tab Details - Insufficient Materials Exceptions, Adjustment = Yes

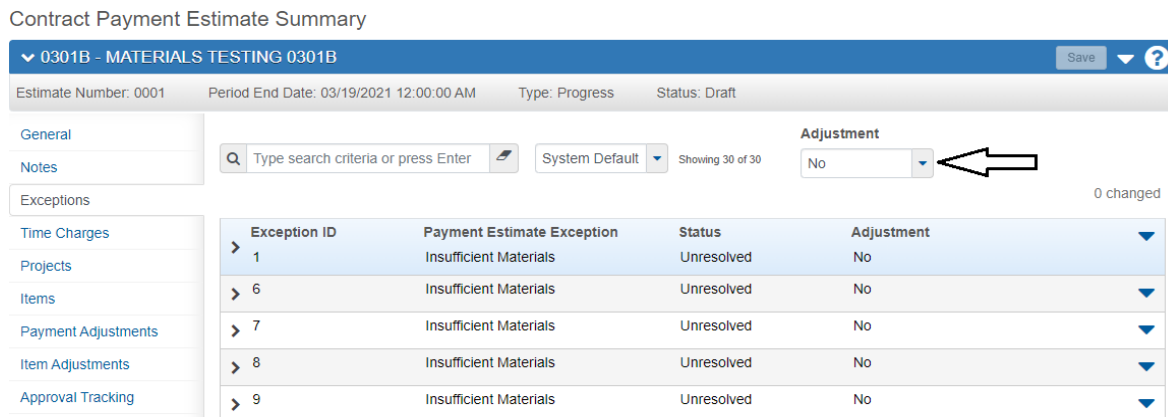


Figure 24-24. Payment Estimate Exception Tab Details - Insufficient Materials Exceptions, Adjustment = No

Important: When reviewing and resolving Payment Estimate Exception(s), be sure to work with the Resident Engineer to determine the appropriate response(s) for ALL Payment Estimate Exceptions PRIOR to updating the Payment Estimate Exception Status. If there are multiple Payment Estimate Exceptions and, for example, one requires an additional DWR be created and/or approved in order to be included on the Payment Estimate, the Payment Estimate will have to be deleted and all data entered on the Payment Estimate will be lost. When the new Payment Estimate is created, the Payment Estimate Exceptions which are still unresolved, will show again and will require re-entry with the appropriate response.

- i. Review the Exception by clicking the Expand Chevron found to the left of the Exception (Figure 24-25).

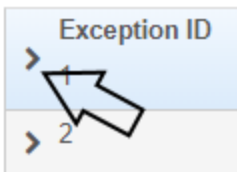


Figure 24-25. Expand Chevron

- ii. Click the Expand Text box icon for the Description field to view full details of the Exception (Figure 24-26).

Exception ID	Payment Estimate Exception	Status	Adjustment
35	Missing Percentage of Schedule DW	Unresolved	No

Description Status * ▾

Estimate Exception Type: Missing Percent of Schedule DWR Item Unresolved ▾

Adjustment

No

Remarks

Type * Remark *

Figure 24-26. Expand Text box Icon

- iii. Provide the Description details (Figures 9-27 & 9-28) to the Resident Engineer in order to determine the action to be taken. The Exception will need to be resolved (delete the Payment Estimate and make the appropriate change to the contract to resolve the exception) or Acknowledged according to the Payment Estimate Exception Chart (Figure 24-21).

Description ✕

Estimate Exception Type: Missing Percent of Schedule DWR Item Posting: Contract 0DM01, Percentage of Schedule suggested quantity of 5164.6605 for Reference Item 6250490 - RENT TRAFFIC CONTROL DEVICES, Contract Line Item Number 0150, Project DM016C1C, Project Item Line Number 0150, Category ID 01.

Figure 24-27. Description Large Text window

Description ✕

Estimate Exception Type: Insufficient Materials: Project 301B6C1C, Item 4020180, Project Item Line Number 0055, Material Set 0301B BF21-09 PBS Type 2C w/RAP JMF 01, Material M7030302B - ASPHALT CEMENT PG 76-22NV, Acceptance Action CERT 0001 is insufficient.

Figure 24-28. Description Large Text window

Important: Remember, review ALL Payment Estimate Exceptions PRIOR to continuing on to the next steps.

- iv. If there are any exceptions, address each one according to the chart. See Figure 24-21 Payment Estimate Exception Chart.
 - **Must Resolve:** This requires the exception to be resolved at the contract level. The Payment Estimate must be deleted prior to resolving the issue. Once the issue is resolved, the estimate must be recreated.
 - **Must Acknowledge:** This requires the exception to have a Status set to Acknowledged (Figure 24-29).

Status *

Acknowledged

Overridden

Unresolved

Figure 24-29. Exception Status, Acknowledged

- **May Be Left Unresolved:** This exception is unique for Insufficient Materials. Only the Insufficient Materials Exceptions where the Adjustment value is 'Yes' MUST have a Status of Acknowledged (Figure 24-30).

Exception ID	Payment Estimate Exception	Status	Adjustment
2	Insufficient Materials	Acknowledged	Yes
Description		Status *	
Estimate Exception Type: Insufficient Materials: Project 301B6C10		Acknowledged	
Adjustment			
Yes			

Figure 24-30. Exception Status, Insufficient Materials Where Adjustment = Yes

Note: *NDOT will not be using the Overridden Exception at this time.*

- v. Once the Status has been updated, select the **Remarks Type** of Acknowledged - Acknowledged Explanation and enter specific details explaining the recommendation for the Exception in the **Remark** field (Figure 24-31).

Remarks

Type *

Remark *

Acknowledged - Acknowledge Explanation

Enter remark here

Figure 24-31. Exception Remarks, Acknowledged

- vi. Repeat for all exceptions, then click the Save button (Figure 24-32).

Contract Payment Estimate Summary There are unsaved changes.

0301B - MATERIALS TESTING 0301B Save ?

Estimate Number: 0001 Period End Date: 03/19/2021 12:00:00 AM Type: Progress Status: Draft

General

Notes

Exceptions

Time Charges

Projects

Items

Payment Adjustments

Item Adjustments

Approval Tracking

Adjustment: Yes

Showing 7 of 8

Exception ID	Payment Estimate Exception	Status	Adjustment
3	Insufficient Materials	Acknowledged	Yes

3 changed

Description: Estimate Exception Type: Insufficient Materials: Project 301B6C1 Status: Acknowledged

Adjustment: Yes

Remarks: Type: Acknowledged - Acknowledge Explanation Remark: Enter a detailed remark.

Figure 24-32. Contract Payment Estimate Summary Save button

Important: Be sure to resolve ALL exceptions prior to moving forward. If you need to delete the payment estimate and re-create it to reevaluate the Estimate Exceptions, you will lose any information entered in the Estimate Exceptions.

- d. **Time Charges:** This tab is used to summarize time charged on this Payment Estimate.
 - e. **Projects:** This tab is used to summarize project information on this Payment Estimate.
 - f. **Items:** This tab is used to summarize item information on this Payment Estimate.
 - g. **Payment Adjustments:**
 - i. **User-Generated Payment Adjustments** are used to withhold payment for Liquidated Damages (Environmental, Materials, Traffic and Lane Closures, and Penalty for Labor Compliance). Refer to the *Payment Adjustments To Assess Liquidated Damages and Penalties Section* in this chapter for details on entering these types of adjustments.
 - ii. **System-Generated Payment Adjustments** include the retainage information for the Payment Estimate. This information is read-only.
 - h. **Item Adjustments:**
 - i. **User-Generated Quantity-Based Item Adjustments** will **NOT** be used on contracts where materials are set up.
 - ii. **System-Generated Quantity-Based Item Adjustments** include: Stockpile, Overrun, Insufficient Materials (Material & MaterialCredit, and Fuel and/or Asphalt Escalation (Price) payments or decrements. This information is Read-Only.
 - i. **Approval Tracking:** The Approval Tracking tab will populate after the payment estimate is submitted for approval and will track the AWP four-level approval process.
3. When all appropriate tabs have been updated and the Payment Estimate has been reviewed, Submit for Approval. This starts the AWP Payment Estimate approval process, where the federally required signatures are obtained. This approval process goes through four levels: Level 1 - Estimate Generator (the individual who added the Payment Estimate and submitted it for Approval), Level 2 - Estimate Review, Level 3 - Estimate Approve, and Level 4 - Estimate Final Check (this step is complete by Construction Admin staff). Every level **MUST** be completed by a different individual.
 4. When Construction Admin staff Approve Level 4 the Payment Estimate changes to the Approved status (the Payment Estimate is completed at this point) (Figure 24-14). Print the Payment Estimate for Contractor Report (this report contains the electronic signatures obtained during the four-level approval process) to PDF and save the file in the Contract Files\Contract\07 Estimates\7.# Pay Est Reports directory. The signed report must be printed and saved **PRIOR** to the creation of the next Payment Estimate.

- General
- Notes
- Exceptions
- Time Charges
- Projects
- Items
- Payment Adjustments
- Item Adjustments
- Approval Tracking

Pay Amount This Contract Payment Estimate	308,911.35	Prime Contractor
Total Pay Amount (All Payment Estimates)	308,911.35	11057 - Q&D CONSTRUCTION
Transfer to Accounting Date		Current Contract Amount
		14,556,895.50
		Contract Percent Complete
		2.19
		Created By
		kmcdaniel2@dot.nv.gov
		Created Date
		03/07/2023 6:57:27 AM

Contract: OMD02 - District 2 Materials Training Contract

Payment Est Number: 0001 Period EndDate: 02/17/2023 Status: Draft

Type: Progress - Progress

	Previous Pay Est	This Pay Estimate	Total (All Pay Est)
Posted Item Pay:	0.00	528,000.00	528,000.00
Gross Item Adjustments:	0.00	-201,167.85	-201,167.85
Gross Item Pay :	0.00	326,832.15	326,832.15
Participating Item Pay:	0.00	0.00	0.00
Non-Participating Item Pay:	0.00	336,807.90	336,807.90
Cash Retainage:	0.00	-7,920.80	-7,920.80
Liquidated Damage:	0.00	0.00	0.00
Other Contract Adjustments:	0.00	-10,000.00	-10,000.00
Total Pay Amount:	0.00	308,911.35	308,911.35

	Previous Pay Est	This Pay Estimate	Total (All Pay Est)
Item Adjustment Type			
Overrun:	0.00	0.00	0.00
Price - Fuel:	0.00	-24,219.42	-24,219.42
Price - Asphalt:	0.00	-1,948.43	-1,948.43
Price - Emulsified Asphalt:	0.00	0.00	0.00
Insufficient Material:	0.00	-175,000.00	-175,000.00
Material Credit:	0.00	0.00	0.00
Construction Stockpile:	0.00	0.00	0.00
Other Item Adjustments:	0.00	0.00	0.00
Gross Item Adjustments:	0.00	-201,167.85	-201,167.85

Price – Fuel:

Price – Asphalt:

Price – Emulsified Asphalt:

Values in these lines indicate Fuel, Asphalt, and Emulsified Asphalt escalation payments or decrements.

Insufficient Material:

Values in this line indicate amount being withheld due to insufficient Material Certs.

Material Credit:

Values in this line indicate when an Insufficient Material Cert has been satisfied and amount has been credited.

Liquidated Damage:
Values in this line indicate LDs for Main Site Time ONLY.

Other Contract Adj.:
Values in this line indicate NDOT Liquidated Damages for the following: Environmental, Materials, Lane Closures, and Penalty for Labor Compliance.

Figure 24-33. Contract Payment Estimate Summary, General tab after Adjustments

PAYMENT ADJUSTMENTS TO ASSESS LIQUIDATED DAMAGES AND PENALTIES

Liquidated Damages and Penalties are defined as justifiable damages to the Department or general public.

Liquidated Damages and Penalties for Environmental, Materials, Traffic and Lane Closures, and Penalty for Labor Compliance are assessed in the AWP software by adding a Payment Estimate, Payment Adjustment and attaching all supporting documentation in the Payment Adjustment record.

Refer to Chapter 9, Payment Estimates, in the [AWP User Guide With Materials](#) for details. The following steps assume the Payment Estimate has been added.

1. Click on the Payment Adjustment Tab.
2. Click on the **New** button under the User-Generated Payment Adjustments section.
3. Complete the following fields (Figure 24-35):
 - a. **Other Payment Adjustment Type:** Select the appropriate type (Figure 24-34).

Other Payment Adjustment Type

<input type="text"/>
005 - Asphalt Cements
010 - Bituminous Pavement
015 - Concrete
020 - Cut Backs
025 - Early Completion Incentive
030 - Emulsion
035 - IRI
040 - Labor Compliance Deduction
045 - Paint / Striping
050 - PWL
055 - Stormwater
060 - Surface Tolerance
065 - T/C Deficiencies
070 - Traffic and Lane Closures
075 - Other

Figure 24-34. Other Payment Adjustment Types List

- b. **Amount:** Enter the Liquidated Damage or Penalty Amount.
 - c. **Comments:** Enter an appropriate comment..
4. Click the Save button.
 5. Attach all required supporting documentation (Failing test reports and material worksheets, email correspondence, Nevada Labor Commissioner memos, etc.) for this Liquidated Damage or Penalty.

Contract Payment Estin There are unsaved changes. x

0201Y - Test Item Adjustment Save ?

Estimate Number: 0002 Period End Date: 11/15/2019 12:00:00 AM Type: Progress Status: Draft

General
Notes
Exceptions
Time Charges
Projects
Items
Payment Adjustments
Item Adjustments
Approval Tracking

▼ User-Generated Payment Adjustments

Q Type search criteria or press Enter Advanced

New 1 added | 0 marked for deletion | 0 changed

Type	Amount	Other Payment Adjustment Type
▼ Comments	-2,880.00	010
Lab Test # CM17-14 Report Date 4/26/19		

Payment Adjustment ID Distributed By

Type* ▼ Percentage

Other Contract Adjustment Last Updated By

Other Payment Adjustment Type ▼ Last Updated Date

010 - Bituminous Pavement

Amount* ▼

-2,880.00

Comments ▼

Lab Test # CM17-14
Report Date 4/26/19

Figure 24-35. Payment Adjustment Detail

NOTES for Liquidated Damage and Penalty Payment Adjustments.

- 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 Payment Adjustment must be processed per deficiency per item.
 - Call the Stormwater Division for guidance on environmental deficiencies.
 - Save all required supporting documentation to the Contract Files\Contract\07 Estimates\7.# LD - Env directory.
- 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 Payment Adjustment must be completed for each failing material type, but consecutive failures can be assessed on each material type.
 - Save all required supporting documentation to the Contract Files\Contract\07 Estimates\7.# LD Mat directory.
- Liquidated Damage - **Traffic or Lane Closure**
 - 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 Payment Adjustment must be completed each time additional damages are assessed.
 - Save all required supporting documentation to the Contract Files\Contract\07 Estimates\7.# LD - Traffic directory.
- **Penalty (Labor Compliance)**
 - Refer to Nevada Labor Commissioner memo(s) received from the Contract Compliance staff.
 - A separate Payment Adjustment must be completed for each wage determination and late payroll determination.
 - Save all required supporting documentation to the Contract Files\Contract\07 Estimates\7.# LD Labor directory.

*EXAMPLE OF LIQUIDATED DAMAGES FOR ASPHALT

Asphalt samples will be taken every 25 tons or any fraction thereof on the last sample of the day. Actual sample size will be determined by total wet tons (Figure 24-40). When utilizing the LD worksheet to find the total asphalt cement, please enter zero for the moisture. Moisture will remain on the form for other purposes.

The amount of asphalt samples taken for the day will determine the tons per sample:

From the Job-Mix Formula: Bitumen ratio = 5.0%, Mineral filler = 1.28%, RAP = 0.8% $1 + (.05 + .0128 + .008) = 1.0708$

Total wet tons for day = $2200.00 \div 1.0708 = 2054.54$ Dry tons

PG for the day = $2054.54 \times 0.05 = 102.73$ tons

Samples taken for the day = 5

Tons per sample = $102.73 \div 5 = 20.55$

20.55 tons will represent each sample for that day.

If 4 samples were taken, you still need to account for the total PG Asphalt:

Tons per sample = $102.73 \div 4 = 25.68$

25.68 tons will represent each sample for that day.

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 Asphaltic Cement (Figure 24-36) 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...	20.55
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.....	7/19/2016
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 ^o /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** FAILED**	33	Minimum 50 cm
Toughness, Inch-lbs	79	Minimum 110 Inch-lbs
Tenacity, Inch-lbs	64	Minimum 75 Inch-lbs
Sieve Test		
Original Penetration @ 25°C, 100g, 5 sec, dmm		Maximum 0
RTFC RESIDUE		
Loss on Heating, %		Maximum 1.0%
Residue Dynamic Shear, G ^o /sin δ, 10 rad/s, kPa @ 64 °C		Minimum 2.20 kPa
Residue Ductility, 4°C, 5 cm/min, cm	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 ^o /sin δ, 10 rad/s, kPa @ 22 °C		Maximum 5000 kPa
Creep Stiffness, S, MPa @ -18 °C		Maximum 300 MPa
M-value @ -18 °C		Minimum 0.300

REMARKS AND RECOMMENDATIONS: MATERIAL HAS FAILED NEVADA SPECIFICATIONS

TOTAL 3D DEMERIT(S)

DISTRIBUTION

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

[Signature]
 * Other Project Numbers May Be Applicable
 Rep:DIOTestsAC.rpt

Page 1 of 1

Figure 24-36: Report of Tests of Asphaltic Cement

- Sample numbers 1 thru 7 shown below on the Plant Record spreadsheet, are used in the example on Figure 24-40.

Plant Record

Contract No.:	3583	Total Tons:	154.79
Asphalt Type:	PG 64-28NV		

Sample No.	Date (mm/dd/yyyy)	Time	Tons Represented	Inspector (initials)	Remarks
TWATSO20160716063028	07/15/2016	8:30 AM	26.02	TJW	
TWATSO20160716082035	07/15/2016	9:55 AM	26.02	TJW	7/15 - 1,152 wet tons placed.
TWATER20160718115045	07/17/2016	8:45 AM	20.55	NPW	
TWATER20160718123033	07/17/2016	11:50 AM	20.55	NPW	
TWATER20160718012541	07/17/2016	1:22 PM	20.55	NPW	
TWATER20160718020351	07/17/2016	3:00 PM	20.55	NPW	
TWATER20160718035903	07/17/2016	4:35 PM	20.55	NPW	7/17 - 2,200 wet tons placed.

Figure 24-37: Plant Record Spreadsheet

- Record of Delivery - Plantmix Surface Spreadsheet (Figure 24-38) that shows the Total Tons of mix placed on the day the sample(s) failed.

Record of Delivery -- Plantmix Surface

Date:	07/17/2016	(mm/dd/yyyy)	Total Tons	2,200.00
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
5176	154				40.12	1,736.33	
5177	317				38.23	1,774.56	
5178	411				39.58	1,814.14	
5179	622				39.56	1,853.70	
5172	154				38.10	1,891.80	
5173	317	1:45 PM	"X"- 69+50	325	36.81	1,928.61	
5174	411				37.33	1,965.94	
5175	622				39.22	2,005.16	
5176	154				40.12	2,045.28	
5177	317				39.23	2,084.51	
5178	411				40.58	2,125.09	
5179	622	3:30 AM	"X"- 61+50	315	40.56	2,165.65	
5172	154				39.10	2,204.75	
					-4.75	2,200.00	4.75 tons of waste at the end of shift

Figure 24-38: Record of Delivery – Plantmix Surface

- A copy of the applicable JMF (Figure 24-39) for the percent of asphalt and mineral filler.

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	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.
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:	BIN PERCENTAGES:	70% CHIPS 14% CLEAN FINES 16% DIRTY FINES
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		
	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.

Ben BKA

Figure 24-39: JMF Mix Design

- 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 24-40) found in the SharePoint 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 24-40). 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 Estimate. Send a copy to the Construction Division.
- Liquidated Damages for Asphalt Cement Calculation Worksheet and all backup documentation will be saved to the appropriate Contract Files\Contract\07 Estimates\7.# LD - Mat directory.

LIQUIDATED DAMAGES FOR FAILING ASPHALT CEMENT CALCULATION WORKSHEET

CONTRACT NO: 3583 DATE USED: 07/17/2016
 TYPE OF ASPHALT (CHOOSE ONE): PG Grade (a) PG Grade (b) *Refer to Standard Specifications for Road and Bridge Construction, Section 109.02.*
 NAME OF ASPHALT: (CHOOSE ONE): PG 64-28NV
 MIX DESIGN NO: BF20-24 JOB MIX FORMULA NO: 1
 FROM JMF: BITUMEN RATIO = 5.00% **When RAP is included, use the bitumen ratio added as shown on the JMF; do not use the bitumen ratio total. NDOT is responsible for performing moisture tests.**
 MINERAL FILLER = 1.28%
 OIL FROM RAP = 0.80%
 MOISTURE = 0.00%
 ASPHALT COST (\$) = 700.00 *Refer to Special Provisions, Section 402.05.01.*
 TOTAL WET TONS FOR DAY = 2,200.00
 DRY TONS FOR DAY = 2,200.00 ÷ (0.0708 + 1) = 2,054.54
 ASPHALT CEMENT FOR DAY = 2,054.54 × 0.0500 = 102.73
 TOTAL NO. OF SAMPLES TAKEN FOR DAY = 5
 TONS PER SAMPLE FOR DAY
 (FOR DEMERITS) = 102.73 ÷ 5 = 20.55

LAB NUMBER	DEMERITS	\$/DEMERIT	X	TONS	=	\$/SAMPLE	PASS / FAIL
2016-00067	22	525.00	X	20.55	=	525.00	Fail
2016-00068	19	200.00	X	20.55	=	4,110.00	Fail
2016-00069	23	525.00	X	20.55	=	525.00	Fail
2016-00089	0		X	20.55	=	0.00	Pass
2016-00090	4	40.00	X	20.55	=	822.00	Fail
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
			X	0.00	=	0.00	
TOTAL TONS =				<u>102.75</u>			
						<u>5,982.00</u>	

Rev 06-17

Figure 24-40: Liquidated Damages for Failing Asphalt Cement Calculation Worksheet

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
LIQUIDATED DAMAGES FOR FAILING ASPHALT CEMENT

ITEM NO.: 999 CONTRACT NO.: 3583 MATERIAL COST: \$ 700.00 (Refer to *Special Provisions*, Section 402.05.01, for the material cost.)
 TYPE OF MATERIAL: PG Grade (a) PG Grade (b) NAME OF MATERIAL: PG 64-28NV
 (Refer to *Standard Specifications for Road and Bridge Construction*, Section 109.02, for the material type/name.)

LAB TEST #	DATE SAMPLED	SAMPLE #	CATG. #	TONS	DEMERITS	LD \$ PER TON	TOTAL	EST. #	CUT-OFF DATE
2016-00067	07/17/2016	3	1	20.55	22	525.00	\$ 10,788.75	12	07/29/2016
2016-00068	07/17/2016	4	1	20.55	19	200.00	\$ 4,110.00	12	07/29/2016
2016-00069	07/17/2016	5	1	20.55	23	525.00	\$ 10,788.75	12	07/29/2016
2016-00090	07/17/2016	7	1	20.55	4	40.00	\$ 822.00	12	07/29/2016
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		
							\$ 0.00		

CATG.# = CATG.# = CATG.# = CATG.# = CATG.# = GRAND TOTAL: \$ 26,509.50

NDOT 040-077 (Rev 03-16)

Figure 24-41: Liquidated Damages for Failing Asphalt Cement (Form No. 040-077)

*EXAMPLE OF LIQUIDATED DAMAGES FOR PLANTMIX FAILING LOTTMAN

Refer to Subsections 401.02.02, (*Plantmix Bituminous Pavements – General*) *Materials – Composition of Mixtures* and 109.02, (*Measurement and Payment*) *Scope of Payment*, of the Standard Specifications for details.

The calculation of Liquidated Damages for Failing Lottman are represented by wet tons per shift.

The items needed to calculate damages for plantmix Lottman are:

- Test result number(s) Lottman Test Report (Figure 24-42) from the Materials Division.
 - Original Tensile Strength, PSI
 - % Retained Strength
- The Liquidated Damages for Failing Lottman Test Report Calculation Worksheet (Figure 24-43), found in the SharePoint Construction Forms, Area - [Construction Admin - Payment Forms](#). Complete the blue cells.
 - Requirement and Rejection Limit number (by type of material), found in Subsection 401.02.02, (*Plantmix Bituminous Pavements – General*) *Materials – Composition of Mixtures*, of the Standard Specifications.

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 of the letter to the Construction Division.

Liquidated Damages for Failing Lottman Test Report Calculation Worksheet and all backup documentation will be saved to the appropriate Contract Files\Contract\07 Estimates\7.# LD - Mat 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"> 1 DISTRICT ENGINEER 1 RESIDENT ENGINEER 1 CONSTRUCTION ENGINEER 1 LAB FILES 1 BITUMINOUS LAB 	



Figure 24-42: 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 x MAX DEMERITS 21 = 2.9

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

Note: Refer to Standard Specifications for Road and Bridge Construction

401.02.02
Page 145 & 147

109.02
Page 69

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

Rev 05-17

Figure 24-43: Liquidated Damage for Failing Lottman Test Report Calculation Worksheet

FUEL ESCALATION - AWP PRICE ADJUSTMENT INDEX

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.

At the start of the contract, Construction Admin Services staff will set up the contract’s Fuel Escalation in AWP. The AWP software designates an escalation as a Price Adjustment Index. The Price Adjustment Index automatically calculates Fuel Escalation when a Payment Estimate is processed. Refer to subsection 109.05, (Measurement and Payment) Asphalt Escalation, of the Standard Specifications for details on how the AWP software calculates Asphalt Escalation.

Note: The AWP software starts calculating Fuel Escalation (Price Adjustment Index) starting with the first Payment Estimate. Refer to subsection 109.05, (Measurement and Payment) Fuel Escalation, of the Standard Specifications for details.

ASPHALT ESCALATION - AWP PRICE ADJUSTMENT INDEX

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 500+ 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 set up the contract's Asphalt Escalation in AWP. The AWP software designates an escalation as a Price Adjustment Index. The Price Adjustment Index automatically calculates Asphalt Escalation when a Payment Estimate is processed. Refer to subsection 109.04, *(Measurement and Payment) Asphalt Escalation*, of the Standard Specifications for details on how the AWP software calculates Asphalt Escalation.

Note: The AWP software starts calculating Asphalt Escalation (Price Adjustment Index) starting with the first Payment Estimate. Refer to subsection 109.04, *(Measurement and Payment) Asphalt Escalation*, of the Standard Specifications for details.

EMULSIFIED ASPHALT ESCALATION - AWP PRICE ADJUSTMENT INDEX

Emulsified Asphalt Escalation is an adjustment to minimize the impact of price uncertainty to the Contractor and the Department for "Emulsified Asphalt" used in accordance with Sections 404, 406, 407, 408, and 418, for the construction of the contract. The quantity of asphalt used in escalation calculations for emulsified asphalt is based upon the minimum residue (MR) percentage with the specified dilution factors for the particular type of emulsion bid and supplied by the Contractor in accordance with Subsection 703.03.04. Refer to subsection 109.09, *(Measurement and Payment) Emulsified Asphalt Escalation*, of the Standard Specifications for details.

At the start of the contract, Construction Admin Services staff will set up the contract's Emulsified Asphalt Escalation in AWP. The AWP software designates an escalation as a Price Adjustment Index. The Price Adjustment Index automatically calculates Emulsified Asphalt Escalation when a Payment Estimate is processed. Refer to subsection 109.04, *(Measurement and Payment) Asphalt Escalation*, of the Standard Specifications for details on how the AWP software calculates Asphalt Escalation.

Note: The AWP software starts calculating Emulsified Asphalt Escalation (Price Adjustment Index) starting with the first Payment Estimate. Refer to subsection 109.09, *(Measurement and Payment) Emulsified Asphalt Escalation*, of the Standard Specifications for details.

CONTRACT CLOSEOUT

This chapter contains the following sections:

Overview	25-3
Contract Closeout Tasks	25-3
Closeout Documents	25-5
Closeout Helpful Hints	25-17

OVERVIEW

Contract Closeout verifies the completion of all the required documents throughout the contract life-cycle to ensure fulfillment of all state and federal requirements (23CFR 635.123). The guidelines and documentation requirements detailed in this chapter apply to Design-Bid-Build and Construction Manager at Risk (CMAR) contracts, NOT Design-Build contracts.

Timely contract closeout is crucial to the following:

- Release of the Contractor's retention and bonds allowing the Contractor to pursue future projects.
- Limit Department exposure to potential Contractor issues/claims.
- Ensure the availability and accuracy of contract documents.
- Increase Department efficiency by freeing up critical resources.
- Meet Federal end date and related funding obligations.

Closeout begins when a contract is awarded and continues throughout construction by adhering to the following guidelines:

- Proper contract setup per Chapter 2, Contract Startup, in this Manual.
- Saving contract source documents to the appropriate EDOC Contract Files directory.
- Follow the AWP Sampling and Testing Status Report (STSR):
 - Ensure there are adequate Materials Division samples and tests for quantities placed.
 - Ensure there are adequate field samples and tests for quantities placed.
 - Certificates of Compliance are submitted to the Materials Division when received via Cert Sample Records.
- Review item quantities for accuracy and mark as completed. Refer to Chapter 4, Contract Items, in the [AWP User Guide With Materials](#) for details.

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

- Review payment quantities with contractors bi-weekly.
- Update the As-Built plans as the contract progresses.
- Request a mid-point audit from Construction Admin Section staff.

Note: A Contract Closeout Helpful Hints section is included at the end of this chapter.

CONTRACT CLOSEOUT TASKS

The following is guidance for the Resident Engineer and Office Engineer on the tasks required to closeout construction contracts. All documents mentioned in the closeout work flow are detailed in the Closeout Documents Section in this chapter.

- Crew Office completes the AWP Semi-Final Payment Estimate. Refer to Chapter 10, Field Closeout, in the [AWP User Guide With Materials](#) for details.
- Resident Engineer adds the Closeout Change Order, balances all Completed Items, and enters detailed Explanations for any balanced item that is +/- \$50,000. This Change Order is left in Draft status and the Resident Engineer contacts Construction Admin staff that it is ready for their review. Refer to Chapter 10, Field Closeout, in the [AWP User Guide With Materials](#) for details.
- Resident Engineer completes the Contract Pickup Memo (Figure 25-4) and the EDOC Crew Checklist for the Final Pickup & Review (Figure 25-5 through Figure 25-7). Email them both to the Construction Admin section at Const.Admin@dot.nv.gov.
- Construction Admin Services staff work with the Resident Engineer/Office Engineer to schedule a date to perform the field (job) pickup.

- Construction Admin Services staff arrive on-site and work with Resident Engineer and Office Engineer to collect the following:
 - Flash drive with file index spreadsheet and relevant EDOC Contract File directories and Materials and Testing Files directories. (Figure 25-1) Refer to Chapter 2, Contract Startup, in this manual for details. The records in the index spreadsheet need to match the divisions (the directory and sub-directory names). It is acceptable to have non sequential sub-directory numbers in the case that a sub-directory was not needed and was deleted. Do not include empty sub-directories.

EDOC Contract Files Directories

- 02 - General Correspondence
- 03 - Multimedia
- 04 - Claims
- 06 - FA
- 07 - Estimates
- 08 - Daily Record of Scale Weights
- 09 - Survey
- 12 - Miscellaneous
- 13 - Stormwater
- 16 - Shop Drawings

Materials and Testing Files Directories

Divisions 1-3 and 5 & 6 - Anything which is an **original** document that has not been submitted.

Figure 25-1: EDOC Contract Files Required for Pickup

- Original documents that cannot be scanned and saved to the EDOC Contract Files directories.
- Construction Admin Services staff will complete an Item Posting Tracking BI Report noting DWR corrections to be addressed. This BI report will be sent to the Office Engineer so they can make the required corrections.

Note: During the Contract Closeout process the use of DWR Notes can be used.

Non-Quantity Error in an DWR.

When a non-quantity error is made in a DWR in the below Tabs/Fields and the DWR has been included in a Payment Estimate, create a DWR Note in the DWR with specific details of the correction for the error.

- **General Tab:** Weather, Temperature, Remarks Type or Remarks
- **Equipment Tab and Personnel Tab:** Number, Hours or Comments (Description and Name)
- **Postings Tab:** Stationing/Location, Offsets, Line Destination or Comments

Note: During the Contract Closeout process the use of DWR Notes can be used.

Quantity Error in an DWR.

When a quantity error (Only) is made in a DWR and it has been included in a Payment Estimate, a new DWR must be created to correct the quantity.

Use the DWR Notes to cross-reference both DWRs.

- In the Note for DWR with the quantity error, provide details on the specific error and the following information from the correcting DWR: Item number and Description, Stationing/Location, Inspector, and the details of the correction that was applied.
- In the Posting comments for the correcting DWR, reference the following information from the DWR where the error occurred: DWR Date, Inspector, Item Number and Description, Stationing/Location and the details on the specific error and provide details on the correction applied.

- When the Resident Engineer determines the contract is substantially complete, he/she will request an on-site review from the District Engineer.
- After completion of the on-site review, if the District Engineer finds the work in compliance, he/she sends the District Acceptance Letter (Figure 25-8) to the contractor and the Construction Division.
- The following items MUST be submitted before Construction Admin Services staff can begin their final payment process:
 - Final Payroll Letter (Figure 25-9)
 - Material Division's Acceptance of Contract Letter (Lab Clearance)
 - Final Sampling and Testing Status Report (STSR)
 - As-Built Plans
 - Pit Release (if applicable)
 - Material Deposit Usage Report (if applicable) (Figure 25-10)
 - Guardrail Inventory Data Sheet (if applicable) (Figure 25-11)
 - Contractor Past Performance Rating (CPPR) (Figure 25-12)

Note: Construction Admin Services staff will review all the contract source documentation to ensure it was completed per the requirements detailed in this manual.

- When all the required documents have been approved, and accepted by the appropriate division, Construction Admin Services staff will facilitate the closeout process and final payment.

CLOSEOUT DOCUMENTS

The following section provides information and guidance to the Resident Engineer on required closeout documents. All closeout forms mentioned in this section are found in the SharePoint [Construction Forms](#) Area.

CLOSEOUT CHANGE ORDER

The Closeout Change Order reconciles (balances) the quantities of all items in a contract. It includes a detailed justification for all items with overruns/underruns greater than \$50,000/-\$50,000. This type of modification will be the last modification prepared by the Resident Engineer after the Semi-Final Payment Estimate is Approved. Refer to Chapter 8, Change Orders, in the [AWP User Guide With Materials](#) for details.

Refer to [Change Order Examples](#) in the Construction Crew Portal of the Construction Division SharePoint for various examples of completed Change Orders.

CONTRACT PICKUP MEMO

The Contract Pickup Memo (Figure 25-2) is the required document to initiate a contract pickup. If there are any questions, contact the Construction Division.



795 E. 4th Street
Winnemucca, Nevada 89445
Phone: (775) 623-8070
Fax: (775) 623-0369

MEMORANDUM

Construction Crew 920

November 30, 2016

To: Sharon Foerschler, Construction Engineer

From: David Schwartz, Resident Engineer 

Subject: Contract 3603 - Final Pickup

Contract 3603, Project number SPSR-0140(014), is ready for final pickup. Attached, please find the completed check list. Please schedule the final pickup at your earliest convenience.

If you have any questions or need additional information, please feel free to contact my office at (775) 623-8070. Thank you for your cooperation in the above matter.

cc: Dave Lindeman, Assistant District Engineer
File

Figure 25-2: Contract Pickup Memo

EDOC CREW CHECKLIST FOR THE FINAL PICKUP AND REVIEW

A completed EDOC Crew Checklist with AWP Materials (Figure 25-3 through Figure 25-5) is required to accompany the Contract Pickup Memo.

- Office Engineer will check all the appropriate boxes. Check the "Yes" box when each item is verified as being complete in accordance with this Manual. If the item is not applicable, they must check the **N/A** box.
- Resident Engineer will sign and date (Page 2 of the Checklist) after all items have been verified by the Office Engineer, and documentation is in accordance with this Manual.
- Construction Admin Section will complete their final closeout audit and resend the Checklist through DocuSign for the Resident Engineer and District Engineer for final comments, signatures & dates.

EDOC CREW CHECKLIST - With AWP Materials

CONTRACT NO: SELECT ONE: Mid-Point Review Final Pickup & Review

<u>FILE ORGANIZATION</u> (* items collected @ pickup)	OFFICE			HQ	COMMENTS
	YES	NO	N/A		
Organize & maintain Contract Files as shown:					
01 - Info Furnished at Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
02 - General Correspondence*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
03 - Multimedia *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
04 - Claims *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
05 - CO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
06 - FA *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
07: Estimates *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
08 - Daily Record of Scale Weights *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
09 - Survey *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10 - Agreements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11 - Contract Compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12 - Miscellaneous *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 - Stormwater *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14 - RFI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15 - Submittals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16 - Shop Drawings *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17 - As-Builts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
01 - 03 & 05 - 06 Materials & Testing (all originals sent in)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>FORCE ACCOUNT</u>	YES	NO	N/A	HQ	COMMENTS
Must have the following for EACH Force Account:					
Completed F.A. sheet (Form 040-008)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Contractor's Equipment Listing (Form 040-033)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Printed page from Equipment Watch for each piece of equipment and completed EW Recap.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Completed Fringe Benefit Statement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Completed Force Account Recap.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>LETTERS OF AUTHORIZATION</u>	YES	NO	N/A	HQ	COMMENTS
Original LOAs and justifications are filed in Division 7 in Contract Files.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>LIQUIDATED DAMAGES</u>	YES	NO	N/A	HQ	COMMENTS
Oil Damages are listed on the appropriate LD Form and failing test reports are attached to the LD worksheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All other damages including backup are filed in Division 7 of the Contract Files.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>CALCULATION SHEETS</u>	YES	NO	N/A	HQ	COMMENTS
Cross-reference each calc sheet to the DWR date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cross-reference the DWR date to the calc sheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Each DWR/calc sheet has all required information for measurement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Save all calc sheets to Division 7 with correct naming convention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>COMPUTERIZED TICKETS</u>	YES	NO	N/A	HQ	COMMENTS
Moistures are done on base course aggregate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All required information is placed on the tickets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stations match load sheets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stations include line designation, left, right or centerline.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Waste (incl. "0") is recorded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Last ticket of the day scanned and saved to 08.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Figure 25-3: EDOC Crew Checklist With AWP Materials for the Final Pickup & Review (Page 1)

<u>E-LOAD SHEETS & RECORDS OF DELIVERY</u>	YES	NO	N/A	HQ	COMMENTS
Beginning & ending station on each sheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
If there is a line change, an equation is provided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Time recorded every 5th load.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Inspector and checker initials on each page.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Waste (incl "0") is recorded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Explanation for all waste other than 0.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Stations include line designation, left, right or centerline.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Stations match stations in DWR postings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Record TICKET numbers only (No load numbers).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

<u>CERTS & B/Ls</u>	YES	NO	N/A	HQ	COMMENTS
All B/Ls have certs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
A completed B/L calc worksheet for all mix designs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ensure enough B/Ls to cover what was used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Only the B/Ls are filed in Division 8 of the Contract Files.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

<u>MISCELLANEOUS</u>	YES	NO	N/A	HQ	COMMENTS
All duplicate correspondence has been removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NDOT or Contractor's Stakeout Data (e-file, file or book).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Two sets of As-Builts (1 set to HQ; 1 set to District).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Final Payroll Letter (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Confidential Past Performance Ratings (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Final Sampling and Testing Status Report (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Guardrail Inventory (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Material Usage Report (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Safety Inspection Checklist Form 040-028 (Date Sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
District Acceptance (Date sent).*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

* Required to be submitted prior to the completion of final pickup.
 Make sure to cc: HQ Construction on all items that have the original going to another department

All of the above items have been checked and verified, and documentation is in accordance with the NDOT *Documentation Manual*.

Resident Engineer: Date:

Construction Division / HQ Comments

Reviewed By: Date:

Figure 25-4: EDOC Crew Checklist with AWP Materials for the Final Pickup & Review (Page 2)

RE Comments

Reviewed By: _____

Date: _____

District Comments

Reviewed By: _____

Date: _____

Figure 25-5: EDOC Crew Checklist With AWP Materials for the Final Pickup & Review (Page 3)

DISTRICT ACCEPTANCE LETTER

The District Acceptance Letter (Figure 25-6) is the notification to the contractor the items of work were found acceptable and completed within substantial compliance with the Contract Plans and Specifications. This letter, in most cases, includes the Release of Maintenance.

DocuSign Envelope ID: F7683E89-80A2-46E4-83A0-855974CE3484



BRIAN SANDOVAL, Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

District II

310 Galletti Way

Sparks, Nevada 89431

(775) 834-8300 - FAX (775) 834-8390

RUDY MALFABON, P.E., Director

May 17, 2016

Granite Construction Company
1900 Glendale Ave.
Sparks, NV 89431

Contract No. 3612
Project No. SPFR-WA06(002)
Re: Relief of Maintenance –
District Acceptance

Attention: Mr. Marty Powers, Project Manager

Dear Sir:

Reference is made to Contract No. 3612, For Constructing a Portion of the State Highway System On FRWA06, Sparks, Nugget Avenue, Pyramid to McCarran

A field inspection was recently conducted for this project and all items of work were found acceptable and completed within substantial compliance with the Contract Plans and Specifications. Therefore, you are hereby granted full Relief of Maintenance as well as District Acceptance, in accordance with Subsections 105.16 and 107.15 of the Standard Specifications for Road and Bridge Construction, 2014 Edition.

If you have any questions or concerns, please feel free to contact me at (775) 834-8300.

Sincerely,

DocuSigned by:
Rick Bosch
7147A892213E43C
Rick C. Bosch, P.E.


rcb:sal

DocuSign: Mr. Thor Dyson, P.E., District II Engineer
Ms. Sharon Foerschler, P.E., Chief Construction Engineer
Mr. Stephen Lani, P.E., Assistant Chief Construction Engineer
Mr. Michael Fuess, P.E., Assistant District II Engineer, Maintenance
Mr. Sam Lompa, P.E., Resident Engineer
File: 3612

Figure 25-6: District Acceptance and Release of Maintenance

FINAL PAYROLL LETTER

The Final Payroll Letter (Figure 25-7) is a list of final payroll numbers for the Contractor and all Subcontractors, including the last payroll number and week ending date. Resident Engineer emails this letter directly to HQ Contract Compliance at ContractComplianceProjects@dot.nv.gov with a copy to Construction Admin Services staff at Const.Admin@dot.nv.gov. This letter initiates the Contract Compliance Clearance.



BRIAN SANDOVAL, Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

District Three
795 E. Fourth Street
Winnemucca, Nevada 89445
December 6, 2016

RECEIVED
CONSTRUCTION DIV.

DEC - 7 2016

RUDY MALFABON, P.E., Director

Contract No. 3646
Project #SPSR-0796(001)
Final Payrolls

Rudy Malfabon, Director
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712

Attention: Dennis Shinn, Contract Compliance

Dear Mr. Shinn:

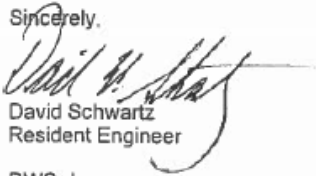
Reference is made to Nevada Department of Transportation Contract No. 3646, Project No. SPSR-0796(001) on SR 796 Winnemucca Airport Road and on FRHU 15 Frontage Road.

The following are the final payroll numbers and week ending dates for the above referenced contract

<u>Prime Contractor's Name</u>	<u>Final Payroll No.</u>	<u>Week Ending</u>
Road and Highway Builders	7	10/29/16
<u>Subcontractor's & Service Providers</u>		
55 Trucking	4	10/16/16
George DeLong Construction, Inc.	2	10/01/16
Pavement Recycling Systems	8	11/12/16
Nevada Barricade and Sign Co	5	10/22/16
Ellis Profiling	2	10/22/16
Daniel Merle Quimby	4	10/14/16
Kenner Concrete - Sub to materials provider. Cert payrolls not required.		
DT Trucking - Sub to materials provider. Cert payrolls not required.		

Please review and provide an acceptance letter to me so this contract can be closed out. If you have any questions or need any additional information, please contact my office at (775) 623-8070.

Sincerely,



David Schwartz
Resident Engineer

DWS:ck

cc: Dave Lindeman, Assistant District Engineer
Sharon Foerschler, P.E., Construction Engineer
File

Figure 25-7: Final Payroll Letter

ACCEPTANCE OF CONTRACT LETTER (LAB CLEARANCE)

The Acceptance of Contract letter (Lab Clearance) is required on every contract. It is the Materials Division acceptance of the materials used on the contract.

Near the contract completion, the Resident Engineer will contact the Materials Division to make sure all certifications and samples have been received. If samples were inadvertently omitted, the Resident Engineer must write a memo to the Materials Division explaining the circumstances and send a copy to the Construction Division. If certifications were not received by the Materials Division, another copy of the certification must be sent. Contact the Materials Division if there are discrepancies. Compare the Material Division's Acceptance of Contract letter with failures on the STSR to ensure all items are addressed.

AWP SAMPLING AND TESTING STATUS REPORT (STSR) FOR CLOSEOUT

The AWP Sampling and Testing Status Report (STSR) will be used to document Material Agency View tests which are deficient in meeting the minimum required sampling and testing. A final signed STSR is required on every contract, even if there were no failures. Remarks on the STSR are required for all Materials Division failures, as well as all field acceptance test failures. For failing materials that are allowed to remain in place, a failing Remark as to why they were allowed to remain in place will be required. This includes failures for sieves, compaction, plantmix (stability, air voids, etc.), asphalt, concrete, glass beads, etc., even if there is no means of assessing liquidated damages. Compare the STSR with failures on the Material Division's Lab Acceptance of Contract letter to ensure all items are addressed. IA personnel and construction crew personnel should work together to resolve any current sampling, testing and crew qualification issues. They should also discuss any potential sampling and testing issues and develop a plan for resolution.

RESIDENT ENGINEER RECONCILIATION FOR THE STSR CLOSEOUT PROCESS

1. All Sample Records for the contract shall have a Sample Status of Complete - Pass, Complete - Fail or Void (only used if a Sample Record cannot be deleted). Refer to the Field Testing Guide, Section, Preparation for STSR Job Closeout for details.
2. Crew completes the semi-final pay estimate.
3. Resident Engineer (RE) creates the closeout Change Order, updates as appropriate, and notifies Admin Services staff.
4. Admin Services staff approves the closeout Change Order.
5. Admin Services staff sends an e-mail to the RE, QA Headquarters staff (Staff 1, Sup 3 and Manager 1 positions) letting them know to start the reconciliation for the STSR closeout process.
6. RE generates the STSR for ALL bid items.
7. RE will create failing Sample Records for all "Field" and "FHQ" Agency View tests which have failed to meet the minimum required frequencies as reported on the STSR. RE will add a Sample Record Test Remark for each failure and Authorize all "Field" Sample Records.
8. RE will send e-mail to Materials Lab Services staff and Cc QA Headquarters staff (Staff 1, Sup 3 and Manager 1 positions) listing all "FHQ" Sample Records created in step 6. This email must contain the Sample Record IDs, Material Code Name and Material Description.
9. Materials Lab Services staff will forward the email to the appropriate Materials Lab for them to add appropriate Sample Record Test Remarks and Authorize the "FHQ" Sample Records created in step 6.
10. Once the Materials Division Lab staff have Authorized ALL these Sample Records they will notify Materials Lab Services staff who will in turn "Reply to All" in the email from step 4 and state all Sample Records have been Authorized.
11. RE will send an email to the QA/IA Headquarters Staff 2 and Cc the Supervisor 3 and Manager 1 positions letting them know the reconciliation for the STSR closeout process is completed.
12. QA Headquarters Staff 2 will generate the STSR to review for accuracy and will work with the RE and Materials Division Lab staff for any corrections needed.
13. QA Headquarters Staff 2 will create a PDF of the completed STSR and load into DocuSign for required signatures.
14. QA Headquarters Staff 2 will attach the signed STSR PDF file in the appropriate AWP Contract Materials Acceptance Actions Summary Component Attachments.

Refer to the **AWP Sampling and Testing Status Report (STSR) User Guide** found, in the [Construction Crew Portal - Materials User Guides](#) SharePoint page for details on the RE Reconciliation Process for the STSR Closeout process.

AS-BUILT PLANS AND SHOP DRAWINGS

As-Built plans are an official record of the project at the time of construction completion. As-Built plans are required for each contract. They can be completed in hard-copy form (two complete sets) or electronically (PDF format only). They MUST be submitted at the time of the final job pickup. If the crew decides to complete hardcopy as-built plans, one set is for the Construction Division and one set is for the District Engineer. If the crew decides to complete a PDF as-built plan, send a copy to the Construction Division and a copy to the District Engineer.

Retain and set aside two sets of the original hard-copy “as-designed” contract plan and the special provisions as “designated As-Built plans” or save a PDF file of the original contract plan and special provisions. The PDF files are found on the e-Bidding Portal in the Contract Documents tab for the contract. These are to be modified to show all additions, deletions and other changes made throughout construction. Diagram any physical changes (e.g., pipe, guardrail, fence, electrical items, typical section changes, Bill of Material, Structure list, etc.). Accurate As-Built drawings are important for project operation, maintenance, and future modifications, particularly for work completed underground. These modifications are also reviewed when designing future projects.

NDOT’s Records Management Section scans each set of hard-copy As-Built plans, assigning a corresponding bar code for each section. This assists in the process of recording and storage of files. It is important to submit the As-Built plans properly to ensure accurate record of the drawings. Ensure ALL pages are accounted for in the “Index of Sheets” before submitting As-Built plans.

The following are formatting guidelines for As-Built plans:

- For hard copy, all changes must be identified and made in BLUE INK on the effected sheet(s), including any construction notes on individual sheets.
- Electronic copies can use all colors, except for black, for making changes.
- If sheets are omitted, or there’s a break in the numbering sequence, it needs to be noted on the “Index of Sheets”.
- If sheets are added, they need to be in numerical order and noted on the “Index of Sheets”.
- Use red press board folders with the ACCO fasteners supplied with each folder (posts are not allowed). Each As-Built folder will be less than 2” thick, separate volumes at a section break. (If there are multiple volumes, indicate on the “Index of Sheets” which sections are included in each volume.)
- Each press board folder shall be identified, with the following information, on the front cover of the As-Built folder:
 - As-Built Drawings
 - Contract #
 - Project #
 - Volume # (Volume 1 of 1, etc.)
- If there are additional sheets sent without a specified sheet number, assign a sheet number in the same series of numbers of the work the plan sheet represents and insert it (e.g., profile, landscape, lighting, etc.). Revise the *Index of Sheets* accordingly. (This does not apply to a supplemental or revision – see below).
- DO NOT INCLUDE 8-1/2” x 11” sheets.
- If a supplemental or revision sheet is added, REMOVE & REPLACE the original sheet. The revised sheet should show changes in BLUE INK (hard copy only).
- If there are no field changes to the plans, write **No Field Changes** on the title sheet inside the front cover.
- If changes were made, the working As-Built plans shall show correct grade, elevations, cross-section, or alignment of roadway, earthwork, structures or utilities on the appropriate plan sheet.
- Any changes due to Change Orders need to be noted on the effected plan sheets, with the Change Order number referenced. DO NOT insert a copy of the Change Order in the As-Built plans.
- DO NOT TAPE any changes made on smaller pieces of paper to the plan sheets, as they interfere with scanning the plan sheets.
- When Shop Drawings change any part of the original plans, they need to be incorporated into the As-Built plans.

PIT/PROPERTY OWNER RELEASE

A property owner must submit a Pit/Property Owner Release letter to the Resident Engineer in the case when aggregates or borrow are obtained from a private property. This letter must indicate the property owner is satisfied with the condition the property was left in at the end of construction

and releases NDOT from any further liability. The Resident Engineer will send the original letter to Construction Admin Services.

MATERIALS DEPOSIT USAGE REPORT

The Material Deposit Usage Report (Form No. 040-087) (Figure 25-10) will be completed by the Resident Engineer and distributed according to the distribution list at the bottom of the form at the close of each project. The Material Deposit Usage Report is only required for state pits. Completely fill out all information.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
MATERIAL DEPOSIT USAGE REPORT

Contract No.: _____ Pit No.: _____
 Date: _____ Application No.: _____
 Resident Engineer: _____ Milepost No.: _____

Type of Material Produced:	Yes/No	Approx. Quantities Used	Production Problems (If yes use remarks)	Yes	No
Plantmix Aggregate	<input type="checkbox"/>	_____		<input type="checkbox"/>	<input type="checkbox"/>
Concrete Aggregate	<input type="checkbox"/>	_____		<input type="checkbox"/>	<input type="checkbox"/>
Base Aggregate	<input type="checkbox"/>	_____	Behind the Paver Problems (If yes use remarks)	<input type="checkbox"/>	<input type="checkbox"/>
Shoulder Material	<input type="checkbox"/>	_____		<input type="checkbox"/>	<input type="checkbox"/>
Borrow	<input type="checkbox"/>	_____	Reclamation Completed	<input type="checkbox"/>	<input type="checkbox"/>
Granular Backfill	<input type="checkbox"/>	_____	Stockpiles Remaining on Site	<input type="checkbox"/>	<input type="checkbox"/>
M.S.E. Backfill	<input type="checkbox"/>	_____	Type of Stockpiles	_____	
Riprap	<input type="checkbox"/>	_____			
Other (Use Remarks)	<input type="checkbox"/>	_____			

Approximate Acreage Disturbed: _____

REMARKS: _____

NDOT 040-087 Rev. 10/08
 Resident Engineer _____
 Distribution: Headquarters Construction, District, Materials Division, Right of Way Engineer Supervisor, Resident Engineer

Figure 25-8: Material Deposit Usage Report

GUARDRAIL INVENTORY DATA SHEET

The Maintenance and Asset Management Division is performing a statewide guardrail inventory. The Resident Engineer will contact the Maintenance and Asset Management Division at the completion of every contract to see if a Guardrail Inventory Data Sheet (Figure 25-11) is required. If the data sheet is required, it will be completed by the Resident Engineer and sent to the Maintenance and Asset Management Division, with a copy sent to the Construction Division.

NEVADA DEPARTMENT OF TRANSPORTATION GUARDRAIL INVENTORY DATA SHEET

CONTRACT _____		DATE _____
ROUTE _____	COUNTY _____	
BEGIN G/R MILEPOST _____	END G/R MILEPOST _____	
DIRECTION OF TRAVEL _____	SPEED LIMIT _____	SIDE _____
TYPE OF G/R _____	G/R HEIGHT _____	
DISTANCE FROM EDGE OF OIL _____	DISTANCE FROM TRAVEL LANE _____	
DAMAGED YES NO	PROPER INSTALL YES NO	
POST TYPE _____	POST SPACING _____	
PRESENT LENGTH OF NEED _____ <small>(ADQ, SUB, UNK)</small>	LENGTH OF NEED SEVERITY _____ <small>(MINOR, MODERATE, SEVERE)</small>	
TYPE OF HAZARD _____	DISTANCE TO HAZARD _____	
LENGTH OF HAZARD _____	WIDTH OF HAZARD _____	
APPROACH END TREATMENT TYPE _____	PARABOLA _____ FLARE _____	
APPROACH LENGTH _____	APPROACH WIDTH _____	
TRAILING END TREATMENT TYPE _____	PARABOLA _____ FLARE _____	
TRAILING LENGTH _____	TRAILING WIDTH _____	
PLANTMIX DIKE _____	HEIGHT OF DIKE _____	
BEGIN DIKE MILEPOST _____	END DIKE MILEPOST _____	
RAIL CONNECTION TYPE _____	RAIL CONNECTION CONDITION _____	
INTERCHANGE _____	RAMP NO _____	
RAMP GORE REFER _____ <small>(MILEPOST)</small>	LENGTH OF RAMP G/R _____ <small>(FEET)</small>	
COMMENTS _____		

Figure 25-9: Guardrail Inventory Data Sheet

CONTRACTOR PAST PERFORMANCE RATING (CPPR)

The Resident Engineer is responsible to complete a Contractor Past Performance Rating (CPPR) (Form No. 040-044) (Figure 25-12) for the Prime Contractor upon the completion of work. The rating is a fillable PDF with an automated calculation for the score (rating). There is a "Narrative Rating" with a 10-point bonus. The intent is to allow the Resident Engineer the flexibility to grant additional points if the contractor has performed well in an area not already addressed in the CPPR. The use of this narrative rating is not required.

The CPPR is also used as a tool during execution of contracts to address any shortcomings by the contractor that need to be addressed. If the contractor is struggling to properly execute the contract and work, the contractor should be put on notice that if they do not rectify the situation, it could lead to poor rating. For example, complete an interim rating and share with the contractor what their potential rating will look like if corrective action is not taken.

The Resident Engineer will use the DocuSign template, Const Prime Contractor Past Performance Rating, to properly address the distribution (Resident Engineer, ADE, ACE and Contractor) of the rating. The intent of the template is to insure the rating is distributed to the appropriate Divisions as well as documenting receipt of completion for contract closeout.

The contractor can request a review of the rating by the District Engineer. If this should happen, Construction Admin Services staff will forward the rating to the District Engineer for the review. If a review is not requested, Construction Admin Services staff will forward the rating to Administrative Services Division as required.

This report is provided to the Director by Administrative Services Division and is utilized in the evaluation of prequalifications for bidding department contracts greater than \$250,000.

Use the following guidelines for filling out this form:

- Total # of Change Orders – The number of Change Orders, excluding those that are in a “DELETED” status and the Administrative Types 25 through 35.
- Total Change Order (\$) – Exclude the Change Order totals from the Administrative Types 25 through 35.
- Award Amount (\$) – The Awarded Price from the Contract Record document found in the E-Bidding Portal.
- Final Payment Amount (\$) – The Paid To Date amount from AWP.

Contractor Past Performance Rating

Contract Number:		Resident Engineer:		Date:	Score: 0.00
Contractor Name:			Route:	County:	Project ID:
Notice to Proceed Date:		Work Starting Date:	Contract Working Days:	Working Days Added by Change Orders:	Working Days Charged:
Construction Engineering \$ to Date:		Liquidated Damages Assessed (\$):	Total # of Change Orders:	Total Change Order (\$):	
Description of Work:			Award Amount (\$):	Final Payment Amount (\$):	

Notes: Check the corresponding box for each line item. When the "N/A" box is checked for an item, the associated points are removed and subtracted from the Points Total for the section. In addition, these points do not factor into the rating for the section or the overall score, as reflected in each item's Rating.

I. Numerical Rating								
A. Administration/Management/Supervision (15 Points Total)	N/A	Inadequate	Below Std	Standard	Above Std	Superior	Points	Rating
Efficient management of Subcontractors and Suppliers. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Sufficient labor force for the project requirements. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Project was equipped properly. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Items of deficiency and/or incomplete work were addressed timely and in accordance with Subsection 104.05 and 108.09 of the Specifications. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor's Quality Control (Q/C) plan was submitted and in a timely manner. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Material Certifications were submitted and in a timely matter. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Section A Total							0.0	0.00 %
B. Quality of Work (25 Points Total)	N/A	Inadequate	Below Std	Standard	Above Std	Superior	Points	Rating
Contractor Q/C and testing results were submitted in a timely matter. (5 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor was effective in implementation and utilization of their Q/C Plan. (5 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor maintained control over material consistency. (5 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor maintained control over material placement. (5 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor workmanship required zero rework. (5 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Section B Total							0.0	0.00 %
C. Progress of Work (15 Points Total)	N/A	Inadequate	Below Std	Standard	Above Std	Superior	Points	Rating
Preliminary and Baseline Schedules were submitted in accordance with Section 108.02 of the Specifications. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Weekly look ahead schedules accurately represented the ongoing work. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Contractor provided an accurate 2-3 week look ahead. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Monthly updates (for project over 120 working days) were submitted timely and accurately represented the ongoing and upcoming work. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Subcontractors and Material Deliveries were scheduled appropriately. (2 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Schedules accurately matched workflow and material availability. (3 pts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.00 %
Section C Total							0.0	0.00 %

NDOT
040-044

Figure 25-10: Contractor Past Performance Report (Page 1)

CLOSEOUT HELPFUL HINTS

PREPARATION FOR THE FINAL CONTRACT PICKUP

- Crew Office completes the Semi-Final Payment Estimate, per Chapter 10, Field Closeout, in the [AWP User Guide With Materials](#).
- Review EDOC Contract Files and Materials & Testing Files for accuracy of content and formatting.
- Resident Engineer will send the Contract Pickup Memo and a completed EDOC Crew Checklist to the appropriate Construction personnel to schedule a date for final pickup.

EDOC CONTRACT FILE DIRECTORIES REQUIRED AT JOB PICKUP

EDOC Contract Files Directories

- 02 - General Correspondence
- 03 - Multimedia
- 04 - Claims
- 06 - FA
- 07 - Estimates
- 08 - Daily Record of Scale Weights
- 09 - Survey
- 12 - Miscellaneous
- 13 - Stormwater
- 16 - Shop Drawings

Materials and Testing Files Directories

Divisions 1-3 and 5 & 6 - Anything which is an original document that has not been submitted.

Figure 25-11: EDOC Contract Files Directories for Job Pickup

ITEMS REQUIRED PRIOR TO CONTRACT PICKUP

- Complete the EDOC Crew Checklist with AWP Materials form.
- Make sure all duplicates of correspondence and paper clips have been removed from the files. All mix designs, JMF, shop drawings, Request to Sublet, and Subcontract Agreements (Contract Compliance items) are filed in the appropriate Divisions (refer to Chapter 2, Contract Start-up), in this Manual.
- Prepare two sets of As-Built Plans (1-set to Dist. & 1- set to HQ)
- Make sure all completed Force Account(s) have been checked by appropriate Construction Division personnel, if required, then scanned into appropriate Contract Files\06 FA directory.

ITEMS REQUIRED PRIOR TO A REMOTE CONTRACT PICKUP

- The EDOC Contract Files directories with Index spreadsheet copied to a flash drive.
- A copy of the completed EDOC Crew Checklist with AWP Materials form.
- One set of As-Built Plans (take the other set to District).
- Make sure the Calculation Sheets are scanned into the appropriate EDOC Contract File Division Folder.

ITEMS TO COMPLETE FOR FORCE ACCOUNT

- The following documents must be included with the force account file:
 - Force Account sheet(s) (Form No. 040-008)
 - Fringe Benefit Statement
 - Force Account Equipment Listing (Form No. 040-033)
 - Force Account recap (one for each AEB (category))
 - Extended Invoices (original or copy) and/or affidavit (original)
- Check the following on Force Account (FA) for Highway Patrol:
 - NHP is providing uniformed officers.
 - Payment is made on the Force Account (Form No. 040-008).
 - Payment is total invoice + 10% and the information is placed in the materials section on the Force Account form (Form No. 040-008).
 - Calculations are correct, the invoices have been checked and initialed, and are attached to the completed force account sheet.
 - Force Account recap sheet is complete.
- Scan the original Force Account documents into Contract Files\06 FA directory.

ITEMS REQUIRED ON THE LAST SCALE TICKET FOR THE DAY

- Date and Type of material.
- Pit information.
- Contract and category number.

- Ticket total must be checked, initialed, and circled.
- Stations match the load book and the plant report for the appropriate day.
- Waste must be explained and deducted from the accumulative (ticket) total.
- Waste is recorded and circled in Red, including '0 waste'.
- Total placed must be circled.
- Resident Engineer's signature, not initials.
- Checker's initials
- Optimum/actual moistures are shown for base course aggregate and calculations are done if required.

ITEMS TO CHECK ON THE RECORD OF DELIVERY SHEETS

- Item No., Item, Plan Qty, and the Sig. Fig are complete.
- Verify date is complete.
- Truck and trailer number.
- Bill of Lading number or control number. If a control number is used, make sure it is noted in the Remarks column.
- Tons delivered matches the B/L. On Emulsified (diluted) make sure the tons delivered are shown as raw tons on the Record of Delivery.
- Every load is initialed.

ITEMS TO CHECK ON THE BILL OF LADINGS

- Contract number, delivery date and Inspector's initials is written in the right-hand corner of the ticket.
- Weights have been checked and initialed.
- Tons delivered matches what is entered on the e-load sheet (Record of Delivery).
- If the B/L for Emulsified (diluted) comes to the job diluted, make sure the B/L states either 60/40 mix or it shows water and oil weights separately.
- All calculations are checked and initialed.
- The B/L is filed in the Contract Files\Contract\08 Scale Weights directory.

ITEMS TO CHECK ON THE ASPHALT PLANT RECORD

- Item No., Item, and the Sig. Fig. are complete.
- Sample number is listed and matches the Field No. on the Transmittal for Asphalt Sample (Form No. 020-016).
- Complete date and matches the Date Sampled on the Transmittal for Asphalt Sample (Form No. 020-016).
- Time has PM or AM listed with the time.
- Every load is initialed.

VERIFYING SUFFICIENT B/LS TO COVER PRODUCTION

- Obtain the mix design(s) used.
- Take the percentages on the mix design for the asphalt and mineral filler.
- Enter the oil%, mineral filler %, and RAP% in the worksheet (obtained from SharePoint) to find out how much asphalt and mineral filler was used, as illustrated in Chapter 10, Plantmix and Recycled Surface Items, in this Manual. Calculations will be based on the total mix. Do not deduct waste.
- Compare the quantity delivered to the used and see if there is enough B/Ls to cover, if there are not enough B/Ls collected, the Resident Engineer must contact the Contractor to see if more B/Ls can be submitted. Make sure the new B/Ls are not duplicates and are in the correct time frame as the paving operation. If no more B/Ls can be collected, then contact the Construction Division to see what the next step will be.
- The total delivered on the Liquid and Emulsified Asphalt will be compared to the total on the e-load sheet (Record of Payment) verify if there are enough B/Ls to cover what has been used. If there are not enough B/Ls to cover what was used and if no more B/Ls can be collected, then a deduction by means of an AWP DWR posting stating, "there was not enough B/Ls to cover what was used". Make sure to take the total raw tons from the e-load sheet (Record of Delivery) and multiply by the appropriate manufacture recommended dilution factor.
- Gallon meter records and/or weigh-back tickets are required to calculate the app rate used. Verify the weights on the weigh-back tickets are applied to the correct date.

- When using the total B/L make sure the tons do not exceed the max that can be paid.
- When reading the gallon meter, a temperature correction factor must be used. Check the factor by using the graph in Chapter 11, Liquid and Emulsified Asphalt Items, in this Manual.
- Assure the category numbers are correct.
- Station to station does not necessarily equal length. Length must be measured or calculated.
- Width must be measured or calculated (“Varies” is not acceptable).
- Inspector’s initials are required.

ITEM TO CHECK ON LETTERS OF AUTHORIZATION

- The original LOA backup documents are scanned into the appropriate Contract Files\07 Estimates directory.

ITEM TO CHECK ON LIQUIDATED DAMAGE FOR TIME

- Make sure there is a copy of the letter to the Contractor scanned into the Contract Files\07 Estimates directory.

ITEMS TO CHECK ON PRICE ADJUSTMENT LIQ. DAM. FOR ASPHALT

- Obtain the e-load sheet (Record of Delivery), the Plant Record, the scale tickets, the Liquidated Damage e-form obtained from SharePoint, and the failing test reports from the Lab.
- Compare the failing test report to the plant record to match the field sample number and the date the sample was taken.
- Make sure the Lab Test #, Date Sampled, Sample #, and Demerits compare to the Liquidated Damage spreadsheet. (Print form from SharePoint).
- Compare the demerits on the Liquidated Damage spreadsheet to the demerits shown in the Silver Book to assure the deduction per ton on the spreadsheet is correct.
- Calculate how much asphalt was used on the days that had failing asphalt. The percent of asphalt is based off the mix design.
- If there was more than one sample taken on a particular day, take the asphalt used and divide by the number of samples taken to get the tonnage each sample represents, whether the sample failed or passed. This will be the quantity used on the Liquidated Damage spreadsheet under Tons.
- Make sure the Liquidated Damages spreadsheet is complete and the calculations are correct.
- Save the Liquidated Damages spreadsheet with all the backup test reports from the lab in the appropriate Contract Files\Contract\07 Estimates directory.
- Calculate how much asphalt was used on the days that had failing asphalt. The percent of asphalt is based off the mix design.
- If there was more than one sample taken on a particular day, take the asphalt used and divide by the number of samples taken to get the tonnage each sample represents, whether the sample failed or passed. This will be the quantity used on the Liquidated Damage spreadsheet under Tons.
- Make sure the Liquidated Damages spreadsheet is complete and the calculations are correct.
- Save the Liquidated Damages spreadsheet with all the backup test reports from the lab in the appropriate Contract Files\Contract 07 Estimates directory.

ITEMS TO CHECK ON PRICE ADJUSTMENT LIQ. DAM. FOR LIQUID AND EMULSIFIED ASPHALT

- Obtain the Liquidated Asphalt e-load sheet, the failing test reports from the Lab, and the Liquidated Damage spreadsheet.
- Compare the Lab Test #, Date Sampled, Refinery #, Truck #, Trailer #, and demerits to the Liquidated Damage spreadsheet.
- Compare the demerits on the Liquidated Damage spreadsheet to the demerits shown the Silver Book to assure the deduction per ton on the Liquidated Damage spreadsheet is correct.
- To check the tons damaged based on what was used of the load. Remember emulsified asphalt is based on diluted tons.
- Make sure the Liquidated Damages spreadsheet is complete and the calculations are correct.
- Save the Liquidated Damages spreadsheet with all the backup test reports from the lab in the Contract Files\Contracts 07 Estimates directory.

ABBREVIATIONS

Contents:

Abbreviations	A-3
----------------------------	------------

ABBREVIATIONS

Common abbreviations used at NDOT are listed below:

AEB	Agreement Estimate Breakout
AP	Agreed Price
AWP	AASHTOWare Project Construction & Materials™
B/L	Bill of Ladings
BMP	Best Management Practices
Catg	Category (A.K.A. AEB)
CCC	Contract Compliance Clearance
CL	Center Line
CMP	Corrugated Metal Pipe
CP	Contract Payment
CPM	Critical Path Method
CTB	Cement Treated Base
DI	Drop Inlet
FA	Force Account
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GASB	Governmental Accounting Standards Board
GM MS	Ground Mounted Metal Supports
GM TS	Ground Mounted Timber Supports
HMA	Hot Mix Asphalt
LOA	Letters of Authorization
LS	Lump Sum
LT	Left Line
MSDS	Material Safety Data Sheet
MEAS	Measure
MP	Milepost
PBS	Plantmix Bituminous Surface
PCCP	Portland Cement Concrete Pavement
PoDI	Projects of Divisional Interest (Federal)
Pmt	Payment (refers to Contractor progress payments)
Qty	Quantity
RCB	Reinforced Concrete Box
RCP	Reinforced Concrete Pipe
RE	Resident Engineer
RT	Right Line
Sig. Fig.	Significant Figure
SID	Special Improvement District
STSR	Sampling and Testing Status Report

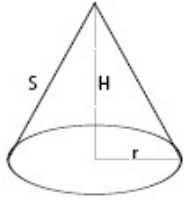
SWPPP	Stormwater Pollution Prevention Plan
UOM	Unit of Measure

CALCULATION FORMULAS

Contents:

Volume Calculations	B-3
Area Calculations	B-4
Calculation Sheet	B-6

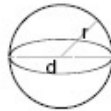
VOLUME CALCULATIONS



Volume of a Cone

$$\text{CUFT} = 1/3 \Pi r^2 H$$

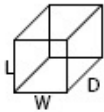
$$\text{CUYD} = [1/3 \Pi r^2 H] / 27$$



Volume of a Sphere

$$\text{CUFT} = 4/3 \times \Pi r^3$$

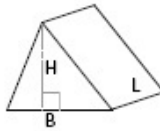
$$\text{CUYD} = (4/3 \times \Pi r^3) / 27$$



Volume of a Cube

$$\text{CUFT} = L \times W \times D$$

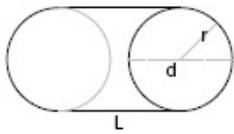
$$\text{CUYD} = (L \times W \times D) / 27$$



Volume of a Triangle

$$\text{CUFT} = 1/2 (B \times H \times L)$$

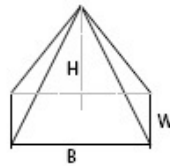
$$\text{CUYD} = [1/2(B \times H \times L)] / 27$$



Volume of a Cylinder / Pipe

$$\text{CUFT} = \Pi r^2 \times L$$

$$\text{CUYD} = (\Pi r^2 \times L) / 27$$



Volume of a Pyramid

$$\text{CUFT} = 1/3 (B \times W \times H)$$

$$\text{CUYD} = [1/3 (B \times W \times H)] / 27$$

The below calculations are only used when weights (computerized load tickets) cannot be obtained for an item paid by the ton.

Cubic Yards

Unit Weight* = Pounds per Cubic Foot

Pounds per Cubic Foot X 27 = Pounds Per Cubic Yards

Length' X Width' X Depth'/27 = Cubic Yards

Cubic Yards X Pounds per Cubic Yards = Pounds

Pounds/2000 = Tons

Cubic Foot

Unit Weight* = Pounds per Cubic Foot

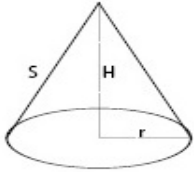
Length' X Width' X Depth' = Cubic Feet

Cubic Feet X Pounds per Cubic Foot = Pounds

Pounds/2000= Tons

*Unit Weight is based on theoretical or the actual unit weight for the material being placed.

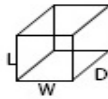
AREA CALCULATIONS



Area of a Cone

Surface Area (SQFT)=
 $(\pi r S) + (\pi r^2)$

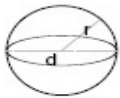
Surface Area (SQYD)=
 $[(\pi r S) + (\pi r^2)] / 9$



Area of a Cube

Surface Area SQFT =
 $(L \times W \times 2) + (L \times D \times 4)$

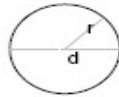
Surface Area SQYD =
 $[(L \times W \times 2) + (L \times D \times 4)] / 9$



Area of a Sphere

Surface Area (SQFT) = $4 \pi r^2$

Surface Area (SQYD) = $(4 \pi r^2) / 9$



Area of a Circle

SQFT = πr^2

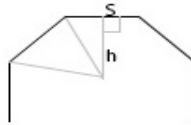
SQYD = $\pi r^2 / 9$



Area of an Ellipse

SQFT = $\pi a b$

SQYD = $(\pi a b) / 9$

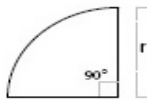


Area of a Polygons

SQFT = $1/2 (N h S)$

SQYD = $[1/2 (N h S)] / 9$

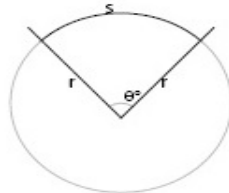
N = number of sides



Area of a Quadrant

SQFT = $\frac{\pi r^2}{4}$

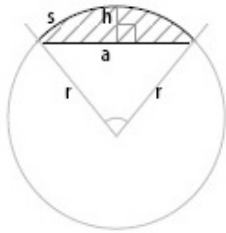
SQYD = $[\frac{\pi r^2}{4}] / 9$



Sector of a Circle

SQFT = $1/2 (\frac{\theta \pi}{180}) r^2$

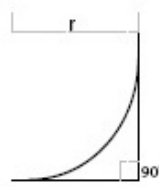
SQYD = $[1/2 (\frac{\theta \pi}{180}) r^2] / 9$



Segment of a Circle

$$SQFT = 1/2 [s r - a (r - h)]$$

$$SQYD = 1/2 [s r - a (r - h)] / 9$$



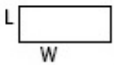
Area of a Spandrel

$$SQFT = 0.2146 r^2$$

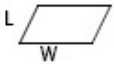
$$SQYD = (0.2146 r^2) / 9$$



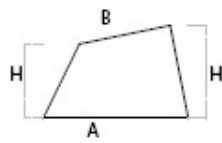
Area of a Square, Rectangle and Parallelogram



$$SQFT = L \times W$$



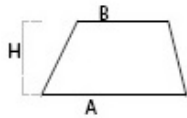
$$SQYD = L \times W / 9$$



Area of a Trapezium

$$SQFT = \frac{(H + H_1) \times (A + B)}{2}$$

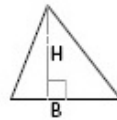
$$SQYD = \left[\frac{(H + H_1) \times (A + B)}{2} \right] / 9$$



Area of a Trapezoid

$$SQFT = 1/2 H \times (A + B)$$

$$SQYD = [1/2 H \times (A + B)] / 9$$



Area of a Triangle

$$SQFT = 1/2 (B \times H)$$

$$SQYD = [1/2 (B \times H)] / 9$$

Proration Example:

Pipe plan = 40 LFT

Pipe field measure = 45 LF

Structure Excavation plan = 120 CUYD

$45 \div 40 = 1.125 \times 120 = 135$ CUYD new quantity for structure excavation

CALCULATION SHEET

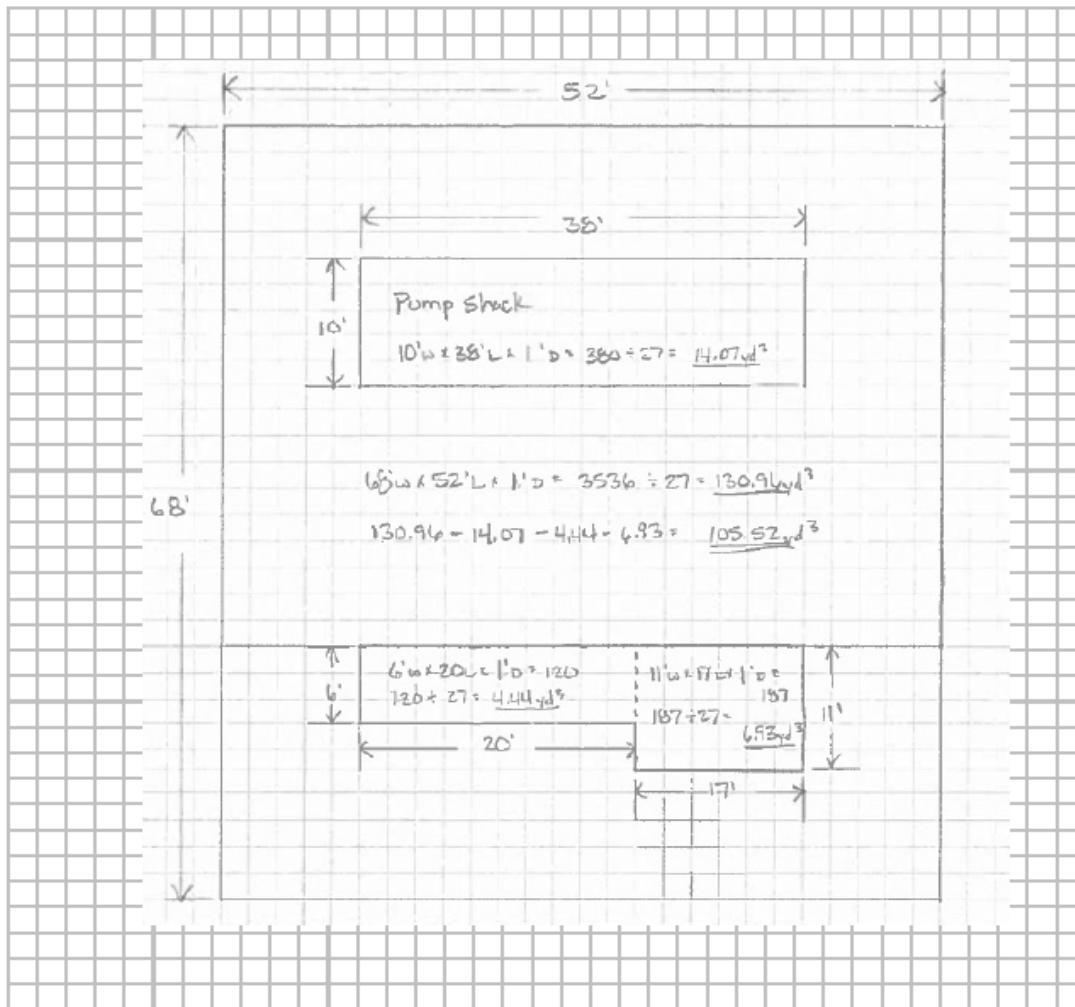
Calculations made for determining pay quantities (final or estimated) for contract items requiring computations too extensive to place in the remarks section in an DWR, will be made on a Calculation Sheet (Figure B-1). These sheets will be scanned and saved in the Contract Files, Division No. 7 - Construction Pay Estimate and Related Data, 7.10 DWR Calc Sheets directory. Name these sheets using this standard naming convention; YYYY-MM-DD.DWR.inspector initials (i.e. 2016-06-07.DWR.ACR.pdf).

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
CALCULATION SHEET

Contract No: 3583 Insp. Name: A. Rogers Checked By: KMM IDR Date: 10/30/16

Description: Remove composite surface

Location: District II Maintenance yard - Diesel fuel island



NDOT
040-034
12-2016

Figure B-1: Calculation Sheet

FORMS LIST AND DISTRIBUTION

Contents:

Construction Crew Forms	C-3
Independent Assurance Forms	C-5

CONSTRUCTION CREW FORMS

1 = Resident Engineer, 2 = District, 3 = Construction, 4 = Materials, 5 = Contractor

O = Originals, X = Copies

FORM NO	REV DATE	DESCRIPTION	1	2	3	4	5
018-001	01-20	Construction Site Stormwater Inspection Form (SharePoint Only)	O				X
040-000	08-18	Vehicle Weight Limit (SharePoint Only)	O		X		
040-002	01-22	Record of Authorization to Proceed with Extra Work (SharePoint Only)	O	X	X		
040-008	04-21	Daily Costs of Force Account w Standby (SharePoint Only)	O				X
040-009	08-16	Daily Record of Scale Weights (SharePoint Only)	O				X
040-011A	02-22	Daily Plant Inspector's Report (SharePoint Only)	O				
040-011B	02-22	Daily Paving Inspector's Report (SharePoint Only)	O				
040-012	03-06	Contractor Traffic Log (SharePoint Only)	O				X
040-015	03-23	Request for Payment for Materials on Hand (SharePoint Only)	X		O		
040-018	08-06	Compaction Report for PBS Drilled Core Data (SharePoint Only)	X	X	O		X
040-019	06-05	Dowel Bar Placement Worksheet (SharePoint Only)	X	X	O	X	X
040-020	01-19	Inventory of Standard Testing Equipment - Construction Field Labs (SharePoint Only)	X	X	O		
040-024	04-05	Concrete Evaporation Rate and Cure Monitoring (SharePoint Only)	X	X	O		X
040-025	07-04	Transit Mix Concrete Delivery (Stockroom)	O		X		X
040-027	06-05	Rock Compaction Inspection Report (SharePoint Only)	X	X	O		X
040-028	01-22	Safety Inspection Checklist – Contractors Operations (Share-Point Only)	X				O
040-031	05-15	Nuc Gauge Transfer and Packing Form (SharePoint Only)	X		O		
040-033	02-16	Contractor's Force Account Equipment List (SharePoint Only)	O				
040-034	12-16	Calculation Sheet (SharePoint Only)	O				
040-038	03-16	Hotplant Calibration Sheet (SharePoint Only)	X	X	O		X
040-040	02-16	Equipment Watch Recap Sheet (SharePoint Only)	O				
040-042	02-16	Weekly Trainee Report (SharePoint Only)	O		X		
040-044	03-19	Contractor Past Performance Rating (CPPR) (SharePoint Only)	X	X	O		
040-045	07-07	Daily Hotplant Worksheet (SharePoint Only)	X		O		

1 = Resident Engineer, 2 = District, 3 = Construction, 4 = Materials, 5 = Contractor

O = Originals, X = Copies

FORM NO	REV DATE	DESCRIPTION	1	2	3	4	5
040-046	11-05	Monthly Summary of Plant Establishment (SharePoint Only)	X	X	O		X
040-049	09-96	Haul Ticket (Stockroom)	O				
040-051	01-97	Field Report for CTB Strength Tests (SharePoint Only)	X	X	O		X
040-052	03-97	Daily Report for CTB Mixture (SharePoint Only)	X	X	O		X
040-056B	05-15	Workzone Traffic Control Checklist (SharePoint Only)	X		O		X
040-058	11-16	Foundation Piling Driving Record (SharePoint Only)	X	X	O	X	X
040-059	11-16	Continuous Pile Driving Record (SharePoint Only)	X	X	O	X	X
040-060	01-17	Drilled Shaft Inspection Report (SharePoint Only)	O			X	X
040-061	02-17	Drilled Shaft Drilling Slurry Inspection Report (SharePoint Only)	O			X	X
040-063	10-20	Pull-Off Test for Polymer Concrete (SharePoint Only)	X	X	O	X	X
040-064	09-03	Pavement Core Record (SharePoint Only)	X	X	O		X
040-067	05-09	Water Volume Calculations for Sand Cone and Meas. Vessel (Hat) (SharePoint Only)	X	X	O		X
040-068	03-09	Sand Density Calculation (SharePoint Only)	X	X	O		X
040-077	08-16	Liquidated Damages for Failing Asphalts (SharePoint Only)	O		X		X
040-081	10-16	Calibration of Unit Weight Measure	X	X	O		X
040-084	07-20	Ride Pay Adjustment Calc. Sheet (SharePoint Only)	X		O		
040-087	10-08	Material Deposit Usage Report (SharePoint Only)	X	X	O	X	
040-088	06-16	Daily Biological Field Report (SharePoint Only)	X		O		X
040-090	04-19	Dispute Process Documentation	X	X	O	X	X
070-052	03-93	NDOT Transmittal (Stockroom)					

INDEPENDENT ASSURANCE FORMS

1 = Resident Engineer, 2 = District, 3 = Construction, 4 = Materials, 5 = Contractor

O = Originals, X = Copies

FORM NO	REV DATE	DESCRIPTION	1	2	3	4	5
040-005	01-22	Audit Report Form for Compaction Curve (SharePoint Only)	X	X	O		
040-022	01-22	Field Lab Inspection Report (SharePoint Only)	X	X	O		
040-055	10-20	Field Lab Safety Equipment Inspection (SharePoint only)	X	X	O		
040-071	01-22	Auditor's Report of Concrete Tests (SharePoint Only)	X	X	O		
040-072	01-22	Report Form for Two Way Audits (SharePoint Only)	X	X	O		
040-074	10-16	Equipment Repair Form Utilized by the I.A. Lab	X	X	O		
040-079	01-22	Visual Audit Report Form (SharePoint Only)	X	X	O		
040-085	08-03	Field Lab Inspection (SharePoint Only)	X		O		
040-086	08-03	Nuclear Personnel Inspection (SharePoint Only)	X		O		
040-089	01-22	Visual Audit for Nuclear Density Gauge - Plantmix (SharePoint Only)	X	X	O		
040-089A	01-22	Visual Audit for Nuclear Density Gauge - Soils (SharePoint Only)	X	X	O		
040-091	01-22	Audit Report form for In-Place Density of Treated and Un-treated Soils and Aggregates (SharePoint Only)	X	X	O		