



Florida Department of TRANSPORTATION



Earthwork Records System (ERS) Program Maintenance User ERS Project Instructions

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Chapter 1 – ERS Program Maintenance User ERS Project Functions

An ERS Program Maintenance User (PMU) creates the ERS Project in MAC and assigns the companies so a data entry user from one or more of the Quality Control (QC) companies can create the plots.

A. Creating an ERS Project



1. Select the Earthwork Records System menu option.
2. Select the Earthwork Records System submenu option.

The Earthwork Records System screen appears.



3. Select the Create New ERS Project option.

A Create New ERS Project dialog box appears.

A screenshot of the "Create New ERS Project" dialog box. It contains several fields and a button. The fields are: "Financial Project(s)" with a text input and a blue circle 4; "Log Book Type Code" with a dropdown menu and a blue circle 5; "Name" with a text input and a blue circle 6; and "Companies" with a text input and a blue circle 8. There is also a "+ Add Log Book" button with a blue circle 7. A "Save" button is at the bottom right. A mouse cursor is pointing at the "Save" button.

4. **Financial Project(s)** – enter the first Financial Project Number (FPN) and select it from the returned list. MAC will allow an ERS project to be for more than one FPN if they are all on the same contract number; however, do not create an ERS project for more than one FPN. Base thickness samples need to be logged under the FPN that it belongs to for Measurement and Payment purposes. You can enter more than one FPN, but if you decide to do this, any sample will be counted towards all FPNs unless the user indicates otherwise. Any findings on samples with multiple FPNs that has findings will appear under each FPN.

5. **Log Book Type Code** – select the logbook type from the dropdown list for the first logbook. At least one logbook type is needed to save the ERS project. Once an ERS project is created by an ERS PMU, the ERS PMU or QC data entry can add more logbook types.
6. **Name** – for any logbook type that is designated as ESB (everything but drainage), a name is optional. If more than one logbook type of the same type (for example, more than one Left Roadway) is selected, the field becomes a required field on all entries with that logbook type.
7. **Add Log Book** – select this indicator to get more fields to create additional logbooks.
8. **Companies** – enter the name of the QC company and select it from the returned list. New fields will appear.

9. **Companies** – as soon as you select the first company, another field will appear. Continue selecting all the companies until all QC, VT and the District Materials and Research Office (DMRO) responsible for IA Project Review are selected. More than one company can be selected for each company level.
10. **Company Level** – by each company, select the company level indicator; QC, VT, or IA.
11. Select the Save option to create the entry.

B. Updating ERS Project Information

1. Select the Update icon ().

An Update dialog box appears.

The 'Update' dialog box is shown. It has a title bar with 'Update' and a close button. The main content area is divided into two sections. The first section, 'Log Book Type Code', has a table with three rows: 'Drainage' with a dropdown arrow, 'Left Roadway' with a text input field, and 'Permanent Retaining Wall' with a table containing 'Wall 1' and 'Wall 2'. The second section, 'Companies', has a table with three columns: 'Company Name', 'Level', and 'Action'. The first row is 'ABC Road Contractors, Inc.' with level 'QC' and a dropdown arrow. The second row is 'XYZ Testing, Inc.' with level 'VT' and a dropdown arrow. The third row is 'District 5 Materials Office' with level 'IA' and a dropdown arrow. Below the table is a 'Save' button.

2. Add, update, or delete Log Book Types, names, companies, and company levels as needed.
- 3 Select the Save option.

NOTE: QC data entry cannot add or update companies. If a company needs to be added or deleted, it must be done by a PMU, DAC or system administrator.

C. ERS PMU Deleting an ERS Project

An ERS project can be deleted by an ERS PMU, in some cases, even after samples have been created.

The 'Delete ERS Project' dialog box is shown. It has a title bar with 'Delete ERS Project' and a close button. The main content area has a 'Go to' field with the text 'Type Project number'. Below the field is a 'Delete ERS Project' button.

1. Select the Delete ERS Project option.

A Delete ERS Project dialog box appears with a warning message that if samples exist, they will not be deleted. Samples can still be accessed on the Sample screen.

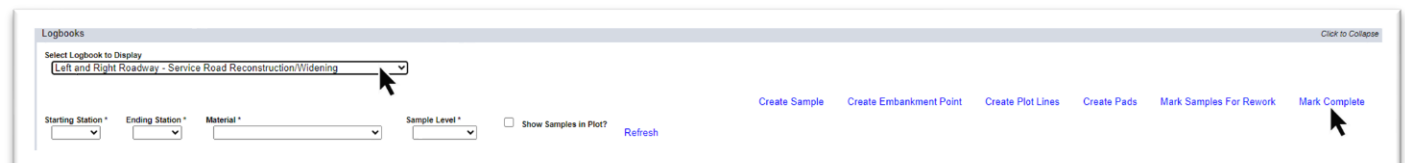
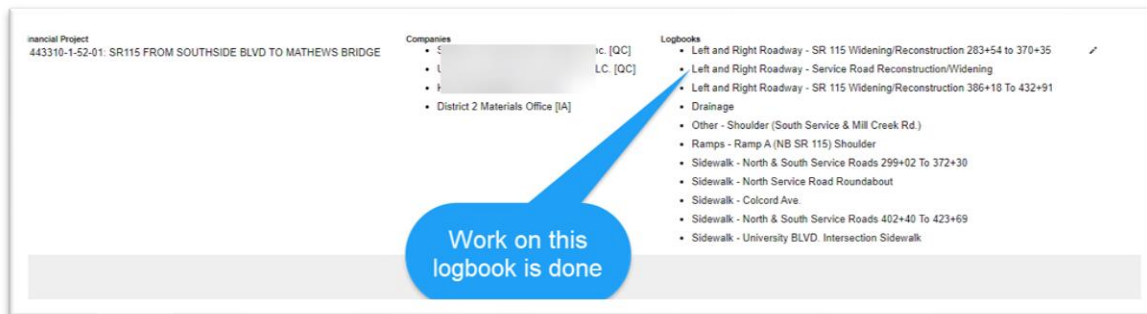
The 'Delete ERS Project' dialog box is shown. It has a title bar with 'Delete ERS Project' and a close button. The main content area has a warning message: 'Are you sure you want to delete this ERS Project? Note that Samples tied to this ERS Project will NOT be deleted.' Below the message is a 'Delete' button.

2. Select the Delete option.

The ERS project will be deleted.

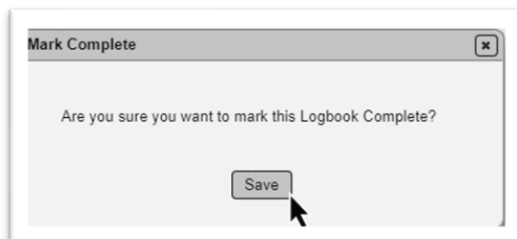
D. Marking a Logbook Complete

ERS PMUs can designate a logbook as complete. In cases where an ERS project has many logbooks, this feature is a helpful way to lock down the logbooks that are completed before the ERS project is completed. This eliminates the ERS PMU from having to continue to review completed logbooks to ensure no data has been added or changed since their final review.



1. Select the completed logbook from the Select Logbook to Display dropdown.
2. Select the Mark Complete option.

A Mark Complete dialog box appears.



3. Select the Save option to mark the logbook as complete.

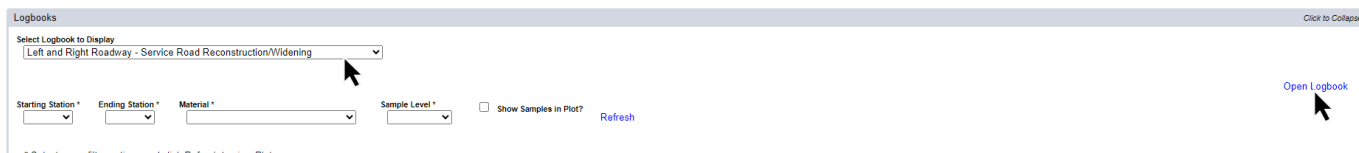
The logbook is designed as Complete. This function locks down:

- New samples cannot be added
 - Existing samples can still be updated within MAC sample life cycle rules
- Embankment points cannot be updated
- Lot data cannot be added or updated
- Pad data cannot be added or updated
- Water table line data cannot be added or be updated
- Plot lines cannot be added or be updated

This eliminates the need for the ERS PMU to continue to review logbooks where the review is complete.

E. Reopening a Completed Logbook

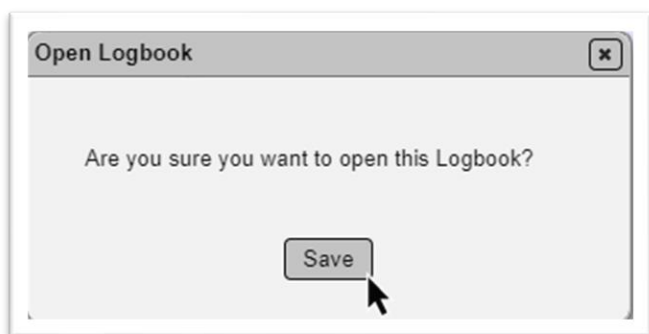
If you inadvertently complete an on-going logbook or if you discover one of the functions that was locked down by completing it needs to be updated or deleted, you can reopen the logbook.



The screenshot shows a web interface titled "Logbooks". At the top, there is a dropdown menu labeled "Select Logbook to Display" with the selected option "Left and Right Roadway - Service Road Reconstruction/Widening". Below this are four input fields: "Starting Station", "Ending Station", "Material", and "Sample Level", each with a dropdown arrow. To the right of these fields is a checkbox labeled "Show Samples in Plot?" and a "Refresh" button. In the top right corner, there is a "Click to Collapse" link and an "Open Logbook" button. A mouse cursor is pointing at the "Open Logbook" button.

1. Select the completed logbook from the Select Logbook to Display dropdown.
2. Select the Open Logbook option.

An Open Logbook dialog box appears.



The screenshot shows a dialog box titled "Open Logbook" with a close button (X) in the top right corner. The main text inside the dialog box asks "Are you sure you want to open this Logbook?". At the bottom center, there is a "Save" button. A mouse cursor is pointing at the "Save" button.

3. Select the Save option.

The logbook is reopened. All functions are available for updates and new entries.

Chapter 2 – ERS PMU IA Project Material Certification Review

The ERS PMU perform IA Project Review(s) in accordance with **Materials Manual Section 2.3 Volume I**. This review is a subset of the Materials Certification (MC) Review. Both the IA project and MC Reviews are performed by a user with the system role of PMU. ERS PMUs and MC Review PMUs (MC Reviewers) in each district work together to ensure the two reviews are coordinated. **Materials Manual Section 2.3 Volume 1 – Appendix A** has a comprehensive list of data to be reviewed. Many of the ERS reports can be used to facilitate the review.

MAC now creates automatic findings related to ERS. See the [ERS Program Maintenance User Materials Certification Review](#) instructions for detailed information. The instructions for MC Reviewers can be found in the [MC Review PMU Manual](#).

Chapter 3 – ERS Reports

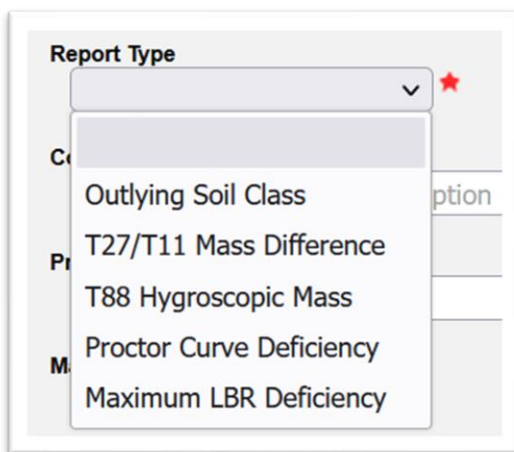
Many of the ERS reports have a dual purpose. One is for the project personnel to monitor sample status and health. The other is for ERS PMUs to find issues with ERS data before it becomes a finding. Here are the reports in MAC that can be used for ERS PMU review.

A. Project Tab Reports

These reports are listed under the Project tab on the MAC Reports page. Many of these reports were created as a stop-gap measure until MC Review for ERS was implemented. They are still good for checking certain issues.

1. ***Earthwork Non-Compliance***

This report assists with issues in the laboratory samples which can sometimes impact ERS field densities.



Report Type

- Outlying Soil Class
- T27/T11 Mass Difference
- T88 Hygroscopic Mass
- Proctor Curve Deficiency
- Maximum LBR Deficiency

2. ***Earthwork Sample Analysis***

This is a detailed report of the laboratory samples including test results, comparison results, and charts for gradation and proctor.

3. ***Earthwork Sample and LOT #***

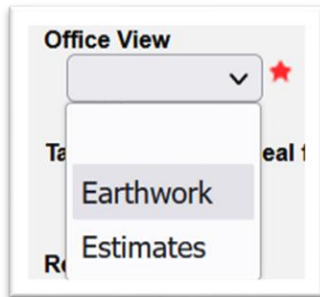
This is a sample summary report for laboratory that assists in determining if there are any missed frequencies.

4. ***Earthwork Summary of Proctors***

This report summarizes the proctor samples for an ERS Project.

5. **ERS – Base Thickness**

This report summarizes the ERS base thickness samples and it has two options. Under the Office View option, it can be generated at any time for ERS PMU as a sample status report by selecting the Earthwork option. For the final version when all ERS base thickness samples are complete, the Estimates option should be selected. The report then averages the base thicknesses in accordance with Final Estimates and **Specification** requirements.



6. **ERS - Density**

This report summarizes the FM 1-t 238 tests for a project, logbook, date range or station range.

7. **ERS – Gauge Calibration/Usage**

This is a report for gauge calibration data and usage on projects for a specific company. It is designed to assist ERS PMUs in identifying all projects a gauge has been used.

8. **ERS – Gauge Comparison**

This report summarizes the gauge comparisons on an ERS project.

9. **ERS – Gauge Error**

The purpose of this report is to check on all ERS projects in a managing district for gauges with errors showing in the ERS – Density report.

10. **ERS – Pit Proctor Tracking**

This report summarizes all the ERS density samples on a contract or project with a pit proctor designated on the density sample.

11. **ERS – Stabilizing Mixing Depth**

This is a report summarizing the stabilizing mixing depth samples on an ERS project.

12. ERS – Unqualified Technicians

This report identifies testing technicians being flagged as unqualified on ERS samples.

B. Sample Tab Reports

In conjunction with the ERS and earthwork specific reports, there are other reports that can be found under the Sample Tab which might be helpful for ERS PMUs.

1. Open Sample Report

This report is designed for PAs to be able to determine if project samples are still open. There is no Open status that appears on any sample screen. The [Project Sample User Manual](#) Chapter 1 describes the different stages of the sample life cycle and when a sample is considered to be closed. This report is based on that logic. In addition to samples that are still being processed through the sample life cycle, some samples are open if they are required to be in a comparison package. Based on the results of the comparison, they may still be considered to be open even after they are included in a comparison package. Because MAC does not display open sample findings until the Final Review is initiated, this report is helpful in monitoring the processing of open samples during the life of the ERS project. The report has many options. It has a feature for “ERS only”. It is currently not working as designed.