Field Inspection Reports:

Review Stay-In-Place

Objective

Access to Stay-In-Place

Navigate through the windows in the Stay-In-Place sub-module
Overview

- This HiCAMS module is used to record results for the Stay-In-Place forms used on the bottom of a bridge deck.
- The Stay-In-Place Detail module handles one Material Type per Report with one corresponding Material.
- The Contract Number and Location information fields are required.
- A Gage Code table is used to determine the validity of the Metal Thickness.

Access for Review Stay-In-Place

Step 1: Choose Field Inspection Reports from the Functions menu in HiCAMS.

![Figure 1 - Access to Review Field Inspection Reports](image)

Step 2: To access a NEW Stay-In-Place Report, select a valid Contract, click the Report Name field, and select Stay-In-Place from the drop down menu. Review the following examples:
Figure 2 - Selecting a valid Contract number for Stay-In-Place

Figure 3 - Selecting a Report Name for a NEW Stay-In-Place Report

Step 3: Click the New button and the General tab is displayed:
Step 4: To access an EXISTING Stay-In-Place Report, follow Step 1 above and Double-click the desired report from the list displayed. The Details button is also available to click, after highlighting the desired report.

Note: To further aid in the retrieval of an EXISTING report, there are filtering functions available in HiCAMS. These filter functions are especially helpful when choosing from a very large listing of reports. See Field Inspection Reports: Overview - Retrieval Tips for all Field Inspection Reports for details using these functions.
Step 5: The **Stay-In-Place Report Details Window** is displayed as shown in the example below:

![Figure 6 - Initial Review Stay-In-Place Details Window (General Tab Window)](image)

**General Tab - Review Stay-In-Place Detail**

The following is available to enter or select:

- **Material Type**
- **County**

**Note:** The **County** is automatically defaulted according to the Contract number that is selected. If there is more than one county encompassed within the contract, the user must select the appropriate county.

- **Material**
- **Line Item number/ description**

**Note:** The **Line Item** is defaulted from the Contract, Material Type, and Material selections when only one exists. If multiple materials exist, the user must select.

- where the **Sample** is from. The default for Stay-In-Place is **Project**.
- **Testing Category.** The default for Stay-In-Place is **Acceptance**.
- Accepted and Rejected quantities
- Station
- Location
- Search by the Plant ID

**Note:** Entering a Plant ID and pressing the Enter key will automatically insert a Producer into the field. The Search by Plant ID field acts as a filter for selecting a Producer by a specific Producer's ID number.

- Section
- Producer
- the Fabricator
- the Inspection Results data

All information is completed by using the various drop-down menus and data entry fields on the **General** tab:

![Figure 7 - Stay-In-Place Details General Tab](image)

**Results Tab - Review Stay-In-Place Detail**

The **Results Tab** Window is used to enter From Stock and Accessory information. The header information is defaulted from the selected Contract data.
HiCAMS

Review Stay-In-Place

Step 1: To insert a new row for From Stock information entry, select the blank area in the top section of the window, and click the Insert button and a blank row will be inserted.

Step 2: To delete a row, select the appropriate row and click the Erase button:

Figure 8 - Stay-In-Place Details Results Tab Window

Step 3: To select the Gage, click the Gage field and select from the drop-down list.

This list currently includes the numbers 8 through 22 inclusively. The Gage code is based on the material unit of measure. Each Gage number has a specific minimum, maximum, and tolerance range value based on the unit of measure.

To verify these gage ranges in HiCAMS, perform the following:

1 Select the Admin $\equiv$ Codes Tables menu. A list of codes tables used in HiCAMS displays.

2 Scroll through the list and select "FIR Gage" from the list. The list of minimum/maximums for each gage
range is listed, along with the acceptable tolerance for each.

**Step 4:** To enter **Metal Thickness and Avg. Zinc Reading** values, enter the appropriate numeric value. See example below.

The minimum and maximum specification range on the Gage code table is used to determine the validity of the Metal Thickness entered for a Gage number. If the Metal Thickness is not within the valid range, an asterisk will appear next to the data. See example below.

![Figure 9 - Metal Thickness, Asterisk - Invalid Range](image)

**Step 5:** The **Zinc Coating** field is calculated as follows:

- For English Contracts, the Zinc Coating (ounces per square foot) is calculated by dividing the Zinc Reading by 1.7. The coating must be 1.65 or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field.

- For Metric Contracts, the Zinc Coating is calculated by taking the reading off the magna gage, multiply by 25.4 then multiply by 179.706. The coating must be 503.58 (grams per meters squared) or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field, (similar to Metal Thickness.)

**Step 6:** To enter the **Pitch vs. Depth Description**, select the field and insert the Pitch vs. Depth numeric values.

**Step 7:** To enter **Length and Width**, select each field and enter the dimensions.
Figure 10 - Stay-In-Place Details Results Tab Window - From Stock Area.

Step 8: To insert a new row for entering Accessories information (lower portion of the window), first click the Accessories area, then click the Insert button, and a blank row will be inserted.

Step 9: To delete an Accessories information row, select the appropriate row and click the Erase button:

Figure 11 - Stay-In-Place Details Results Tab Window - Accessories Area.

Step 10: To select the Gage, click the Gage field and select from the drop-down list.

Note: This list currently includes the numbers 8 through 22 inclusively. The Gage code for a specific is based on the material unit of measure. Each Gage number will have a specific minimum, maximum, and tolerance range value based on the unit of measure.
Step 11: To enter **Metal Thickness** and **Avg. Zinc Reading** numeric values, select each field and enter the appropriate numeric value. See example screen below.

The minimum and maximum specification range on the Gage code table will be used to determine the validity of the Metal Thickness entered for a Gage number. If the Metal Thickness is not within the valid range, an asterisk will appear next to the data.

![Figure 12 - Metal Thickness Invalid Range - Asterisk](image)

Step 12: The Zinc Coating field is calculated by HiCAMS as described:

- For English Contracts, the Zinc Coating (ounces per square foot) is calculated by dividing the Zinc Reading by 1.7. The coating must be 1.65 or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field.

- For Metric Contracts, the Zinc Coating is calculated by taking the reading off the magna gage, multiply by 25.4 then multiply by 7.1. The coating must be 503.58 (grams per meters squared) or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field, (similar to Metal Thickness.)

Step 13: To enter **Mark** data, select the field and enter the data from the Contractor's specifications.

The Mark data cannot be captured as a predefined list due to the variety of data that is dependent upon the contractor specifications. The Mark field displays a description of the accessory.

Step 14: To enter **Dimension** information, select the field and enter the dimensions for the accessory.
Step 15: Save the record, click the **Save** button.

The saved record captures all data that has been entered and the fields become uneditable. The fields once again become editable for data entry when the Report's status is changed and the record is re-saved by an authorized user.

![Report Status Drop-Down menu](image)

**Figure 13 - Report Status Drop-Down menu**

**Note:** Saving a record can be performed at any point. If the record save is interrupted at any point, it is usually as a result of incomplete data entry. There are various messages that the system may display based upon what is required to be entered in order to save the record. The following is one example:

![Typical Advisory Message, Required Information](image)

**Figure 14 - Typical Advisory Message, Required Information**

To rectify the saving error, click the **OK** button, enter the required data mentioned in the message, and click the **Save** button.
Report Tab - Review Stay-In-Place Details

The Review Stay-In-Place Details report is under the Report Tab window.

Step 1: To view the entire report, use the scroll bars or use Print Preview:

![Figure 15 - Stay-In-Place Detail Report Tab Window](image)

Note: Each material from the Results Tab window will be displayed on the report.

Step 2: To print the report, click the Print icon on the toolbar. HiCAMS will generate a printable version of the report. The Report on Stay-In-Place window will display:
Step 3: Click the print icon once again to print the report. The Print setup window will display. Click the **Print** button to print the report:

![Print Setup Window](image)

**History Tab - Review Stay-In-Place Details**

Actions that have been performed for an individual Stay-In-Place Details report are listed located under the **History Tab** window. The Tab includes the Action, Action Date/Time, Status, and Who performed the action. This area also contains historical comments that may have been entered during processing of Stay-In-Place Details.

**Step 1:** To view the individual comments for each action, click the Comment row:
Figure 17 - Stay-In-Place Details History Tab Window
STAY-IN-PLACE BRIDGE PROCESS FLOW

1. **Material Receipt Record (MRR) is recorded in HiCAMS**
   - HiCAMS notifies the SMS that the material has been received
   - SMS receives notification to inspect the material by phone and/or HiCAMS
   - Inspector is notified to inspect the material

2. **Form 411 results entered into HiCAMS**
   - Inspector performs field tests and records results on form 411
   - SMS is notified that the material has been received
   - Inspector is notified to inspect the material
   - Metals Inspector, Concrete Technician

3. **Form 411 results entered into HiCAMS**
   - Inspector performs field tests and records results on form 411
   - SMS is notified that the material has been received
   - Inspector is notified to inspect the material
   - Metals Inspector, Concrete Technician

4. **SMS reviews results**
   - Does material meet specs?
     - Yes: SMS authorizes the results and selects a status of Meets Specs
     - No: SMS authorizes the results and selects a status of Does Not Meet Specs

5. **HiCAMS notifies the Inspector, RE and M&T Record Specialist**

6. **Reproduction Specialist can print and mail copy of form 404 to people on cc list**

7. **HiCAMS notifies MOE to review the results and NOR**
   - MOE reviews forms to ensure significant info is recorded about the failure
   - HiCAMS will generate NOR with key data from form 411.

8. **Modify Results and/or Status?**
   - Yes: Reproduction Specialist can print and mail copy of form 404 to people on cc list
   - No: Report remains as is with a status of Does Not Meet Specs

9. **End**

**MOE** - Materials Operation Engineer
**RE** - Resident Engineer
**SCE** - State Construction Engineer
**SMS** - Section Material Specialist