Location Intelligence
Infrastructure Asset Management

Confirm®

Condition Survey

v26.30a.AM

Information in this document is subject to change without notice and does not represent a commitment on the part of the vendor or its representatives. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, without the written permission of Confirm.

© 2026 Confirm. All rights reserved.

Products named herein may be trademarks of their respective manufacturers and are hereby recognized. Trademarked names are used editorially, to the benefit of the trademark owner, with no intent to infringe on the trademark.

Open Source Attribution Notice

The Confirm suite of products contain the following open source software:

- Feature Data Objects v 3.5.0, which is licensed under GNU Lesser General Public License, Version 2.1, February 1999 with the unRAR restriction. The license can be downloaded from: **http://fdo.osgeo.org/licenceAndGovernance.html**. The source code for this software is available from **http://fdo.osgeo.org/content/fdo-350-downloads**
- MrSID software (specifically the mrsid32.dll) is used under license and is Copyright © 1995-2002, LizardTech, Inc., 1008 Western Ave., Suite 200, Seattle, WA 98104. All rights reserved. MrSID is protected by U.S. Patent No. 5,710,835. Foreign patents are pending. Unauthorized use or duplication prohibited.

  Patented technology in the Software was developed in part through a project at the Los Alamos National Laboratory, funded by the U.S. Government and managed by the University of California. The U.S. Government has reserved rights in the technology, including a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced throughout the world, for or on behalf of the United States, inventions covered by the patent, and has other rights under 35 U.S.C. § 200-212 and applicable implementing regulations.

  For further information, contact Lizardtech.

- NodaTime, version number 1.3.10, which is licensed under the Apache license, version number 2.0. The license can be downloaded from http://www.apache.org/licenses/LICENSE-2.0 . The source code for this software is available from http://nodatime.org/.
- Chromium Embedded Framework, version 3, which is licensed under the New BSD License. The license can be downloaded from http://opensource.org/licenses/BSD-3-Clause. The source code for this software is available from http://code.google.com/p/chromiumembedded/downloads/list.
- Xilium.CefGlue, version 3, which is licensed under the MIT License (with portions licensed under the New BSD License). The licenses can be downloaded from http://opensource.org/licenses/MIT and http://opensource.org/licenses/BSD-3-Clause. The source code for this software is available from http://xilium.bitbucket.org/cefglue/.
- D3 Data Driven Documentation, version 3.4.1, which is licensed under the New BSD License. The license can be downloaded from from https://github.com/mbostock/d3/blob/master/LICENSE. The source code for this software is available from http://d3js.org/.
- OpenLayers, version 8.1, which is licensed under the BSD 2-Clause Licence. The license which can be downloaded from https://github.com/openlayers/openlayers/blob/master/LICENSE.md The source code for this software is available from https://github.com/openlayers/openlayers.
- Proj4js, version 1+, which is licensed under the Apache License, Version 2, January 2004. The license can be downloaded from http://www.apache.org/licenses/LICENSE-2.0.html. The source code for this software is available from http://trac.osgeo.org/proj4js/.
- requireJS, version 2.1.2, which is licensed under the MIT License or the New BSD License. The license can be downloaded from https://github.com/jrburke/requirejs/blob/master/LICENSE. The source code for this software is available from http://requirejs.org/.
- Apache Cordova, version 11.1.0, which is licensed under the Apache License, Version 2, January 2004. The license can be downloaded from http://www.apache.org/licenses/LICENSE-2.0.html. The source code for this software is available from http://phonegap.com/download/.
- Xilium.CefGlue, version 75.1, which is unlicensed. The source code for this software is available from https://gitlab.com/xiliumhq/chromiumembedded/cefglue.

- Chromium Embedded Framework, version 75.0, which is licensed according to the following criteria:

  Copyright (c) 2008-2014 Marshall A. Greenblatt. Portions Copyright (c) 2006-2009 Google Inc. All rights reserved.

  Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

  * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

  * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

  * Neither the name of Google Inc. nor the name Chromium Embedded Framework nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

  THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

  The source code for this software is available from http://opensource.spotify.com/cefbuilds/index.html#

October 02, 2026

Table of Contents

Condition Survey

Pre-requisites for Condition Survey 7

Carrying out a Condition Survey 8

Inspection Batch 9
- Copy button 10
- Comp button 10
- Jobs button 11
- Detail button - Inspection Batch Feature 11
- Document Links 14

Print Inspection Batch 19

Defects 20
- Defect buttons 23

Print External Defect Notification 31

Structures Toolkit Data Export 32

Select Features for Inspection 33

Inspection Reports 34
- Feature Inspection History Report 34
- Feature Inspection History Summary 34
- Inspection Performance Report 34
- Inspection Route Feature List 35
- Inspection Batch Feature List 35
- Overall Feature Condition 35
- Feature Defect Rating Report 36
- Structures Condition Reports 36
- Site History Report 38
- Defect Default Priority List 39

Condition Survey Lookups 40
Action Officer 40
Organisation 43
Organisation Group 45
Defect Type 45
Defect Category 48
Defect Default Priorities 48
Operational Attribute Types 48
Inspection Type 51
Inspection Route 53
Condition Survey System Settings 58
Condition Survey Seed Numbers 61
Bridge Condition Indicator System Settings 61
Bridge Inspection Pro Forma System Settings 64
Structures Toolkit Export System Settings 66
Bridges and Structures - step-by-step 71
Step 1 - Configuring the Lookups 71
Step 2 - Update Scripts 72
Step 3 - BCI Calculations 72
Step 4 - Secondary Sign-off of Inspections 72
Step 5 - Structures Toolkit Data Export 73

Condition Survey

The Condition Survey module provides the tools for inspecting Features and assigning a Condition Grade to them. Where a problem is found which is so serious as to require work to be done, a Defect is raised which can lead to a Job and an Order.

Reports can then be made on the Condition of Features and on the Defects raised against them.

Condition Surveying may be carried out by downloading information from the computer or network (Host) to a mobile device. The mobile device is then used to record the results of the inspection on site - and in some cases to raise Jobs. These can then be uploaded back to the host. These notes will not deal with Condition Surveying using mobile devices, since the method will vary depending on the type of device being used.

In this section

Pre-requisites for Condition Survey	7
Carrying out a Condition Survey	8
Inspection Batch	9
Print Inspection Batch	19
Defects	20
Print External Defect Notification	31
Structures Toolkit Data Export	32
Select Features for Inspection	33
Inspection Reports	34
Condition Survey Lookups	40
Bridges and Structures - step-by-step	71

Pre-requisites for Condition Survey

Before carrying out Condition Survey Inspections you will need to have completed the following libraries:

1. Observation Types
2. Observation Parameters
3. Observation Impact

These lookups are found in the Feature Lookups. See "**Asset Register\Feature Lookups**" for information on completing these lookups.

You will need to have assigned the Observation Types you wish to use to the Features to which they are relevant. This may be done by assigning the appropriate Observation Types to the relevant Feature Group. Weighting can also be assigned to the Feature Group for each Observation Type added to it.

You will also need to check the 'Select for Ad Hoc Inspections' check box in the Feature Group form, for each Feature Group that contains Features that may be subject to an Ad Hoc inspection.

Asset Register\Feature Lookups\Feature Group

You may also wish to use SOR Groups to put together SORs that will be used on Jobs to correct Defects.

Asset Register\SOR Item Lookups\SOR Group

Carrying out a Condition Survey

The following notes describe preparing a batch and entering the Inspection results, on the Confirm client.

Prepare the Inspection Batch

- Enter a Batch Description, select a Route and an Officer.
- Click Save.

Print the Batch

- Carry out the Inspection and record results.

Enter Inspection results

- Recall the Inspection Batch
- Click on Detail to view the Inspection Features
- Record the Inspection results, as Defects on the Defect tab (with Job if required) and/or as Condition Grades on the Condition tab.

Complete the batch:

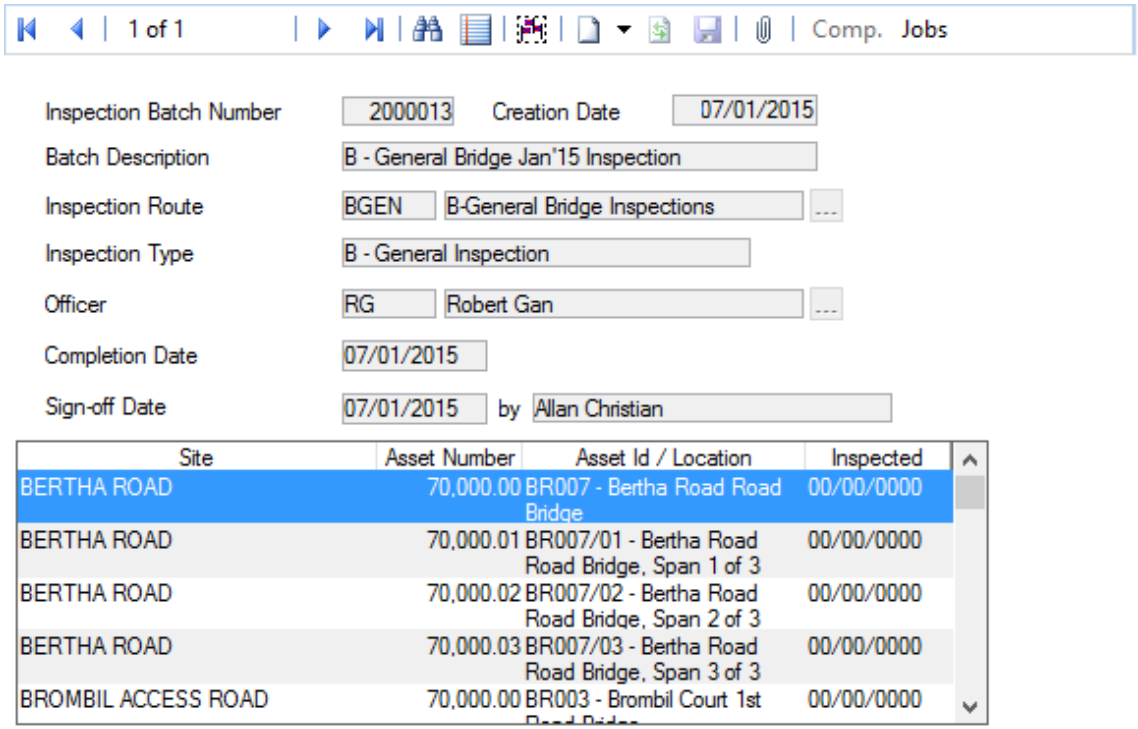
- Use the 'Comp' button on the Inspection Batch Header to close the Batch, or, set the Completion Date.

Survey\Inspection Batch

- Reset the Route to begin the Route again in the next inspection cycle.

Inspection Batch

Inspection Batches contain completed inspections, and collect together the required Features for a particular Inspection. The Batch uses an Inspection Route to define the Features that must be inspected, and assigns the Inspection to an Action Officer.



Inspection Batch Number:	Automatically assigned by the system from Seed numbers when the batch is saved. Seed numbers are set in the 'Condition Survey Seed Numbers' lookup.
Creation Date:	The current date is automatically entered. The date can be amended.
Batch Description:	Up to 40 characters.
Inspection Route:	Select the appropriate Route from the pick list. The pick list references the Inspection Route Lookup.
Inspection Type:	A read-only field showing the Type of the Inspection Route.
Officer:	Select the appropriate Officer from the pick list. The pick list references the **Action Officer lookup**.
Completion Date:	Leave blank when Batch is created. This date will be assigned when all the items in the batch have been inspected.
Sign-off Date:	Some types of Inspection require a second Inspector to review the results before they are updated to the Feature. These types of Inspection have the 'Sign-off Required' setting ticked on the Inspection Type lookup. Completed Inspections which are not signed-off, can be edited. This can be done by: • The user associated with Action Officer who carried out the Inspection. OR • The user who has rights to 'Can Sign-off Inspection Batch (Security)'.

The Sign-off Date will be enabled when the completion date has been set. The Sign-off Date can only be set by a second Inspector who has the following:

- The logged in User has rights to 'Can Sign-off Inspection Batch (Security)' in **System Administration\User Security**.
- The logged in User is different to the User associated with Action Officer who carried out the Inspection.

Setting the Sign-off Date will update the Features current Conditions.

Leaving the Sign-off Date blank will not have any effect on the calculation of the Next Inspection Date of the Features within the Inspection Batch.

By: When the Sign-off Date is set the By field will be automatically set to the logged in User.

Click on the 'Save' button to save the Inspection Batch. When the batch is saved, the live Features in the selected Inspection Route will be added to the batch and displayed in the lower pane.

Note: Where an Inspection is carried out using a mobile device, the Inspection Batch is created on upload of completed Inspection items.

After upload, the Conditions will be copied over to the Feature if the Inspection Type does not require Sign-off. If the Inspection Type does require Sign-off, then the Conditions will not be copied over to the Feature on upload. Conditions will then only be copied over once the Inspection Batch has been Signed-off.

Calculation of Bridge Condition Indicator scores

(Condition Survey - BCI Reports module)

When an Inspection is carried out or Signed-off against a Span Feature the BCI (Average and Critical) scores will be calculated and stored against Observation Types if:

- The BCI Average Observation Type and BCI Critical Observation Type are populated on the Bridge Condition Indicator System Settings screen.
- The selected Observation Types are also associated with the Feature Group of the Span Feature being inspected.

These Observation Types are then added to the Inspection Batch with their BCI scores and these in turn are updated against the Span Features current Condition.

This behaviour will remain same for Inspection Batches imported using Import Anything Agent and Inspections carried out using ConfirmConnect®.

Copy button

Use the 'Copy' button to Copy the currently selected Inspection Batch.

Comp button

Click on the 'Comp' button to display the Complete Inspection Feature filter.

Use the filter to define the Inspection Features which are to have an 'Inspected' date entered against them, and therefore will be completed.

Note: If Features, which are part of this batch have been flagged as 'Dead', they will not have an Inspected date entered against them by default. The 'Dead' dropdown should be set to either 'Yes' or 'Both'.

Inspected Date: The date entered in this field will be the date entered against each Inspection Feature, which is closed as a result of this filter selection (Inspection Features that already have an 'Inspected Date' entered will not have the date changed). The current date is entered by default, this can be edited.

Click on OK to set the date. You will be warned that Inspection Features cannot be edited once the Inspection date is set.

The Inspection date will also be set as the 'Completion Date' on the Batch Header. This can be returned to zero before saving the Header, if you do not wish to close the batch.

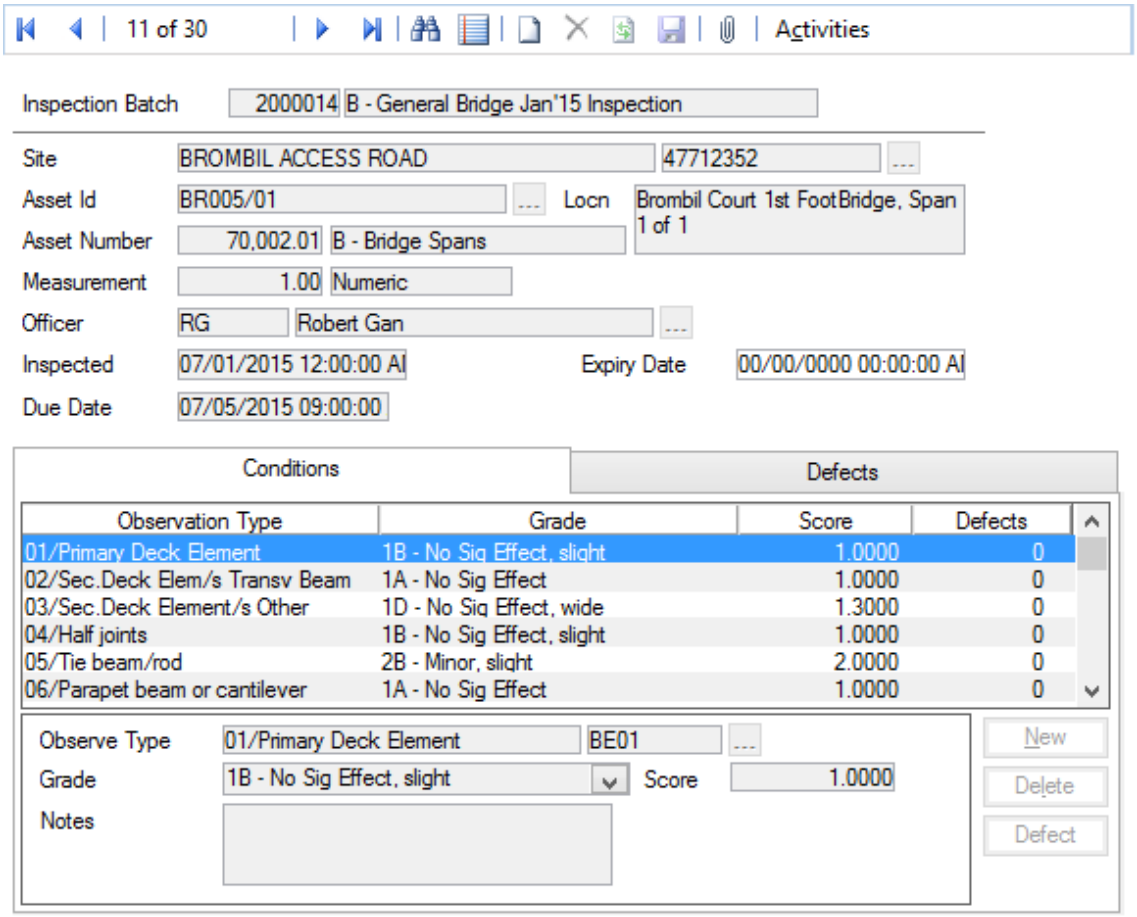
Jobs button

(Jobs from Defects module)

Click on this button to display the Create Jobs from Defects Filter. See **Maintenance Management - Non Routine Works\Job\Create Jobs from Defects** for more information on creating Jobs from Defects.

Detail button - Inspection Batch Feature

To view individual Inspection items, and to enter the results of the Inspection, click on the 'Detail' button. The Inspection Batch Feature form is displayed:



The upper part of the form is completed with the details of the Batch, and of the selected Inspection Feature. Only the Officer and Inspected fields can be edited. The Officer will default from the Inspection Batch.

Officer: The Officer assigned to the batch is entered by default. This may be edited by selecting a new Officer from the pick list. The pick list references the Action Officer Lookup

Condition Survey\Condition Survey Lookups

Inspected: A date may be entered to reflect the date the inspection was carried out, after the results of the Inspection are entered on the Defect or Condition tabs.

Note: Entering and saving an inspection date 'closes' this Inspection Item, that is, existing Defects and Condition cannot be amended and no new Defects or Observation Types can be added. However, if Inspection Type requires a Dual Sign-off then Grades, Notes, Defects corresponding to Observation Type can be amended and new Defects can be added.

The date will be automatically entered when the batch is completed with the 'Comp' button on the batch header.

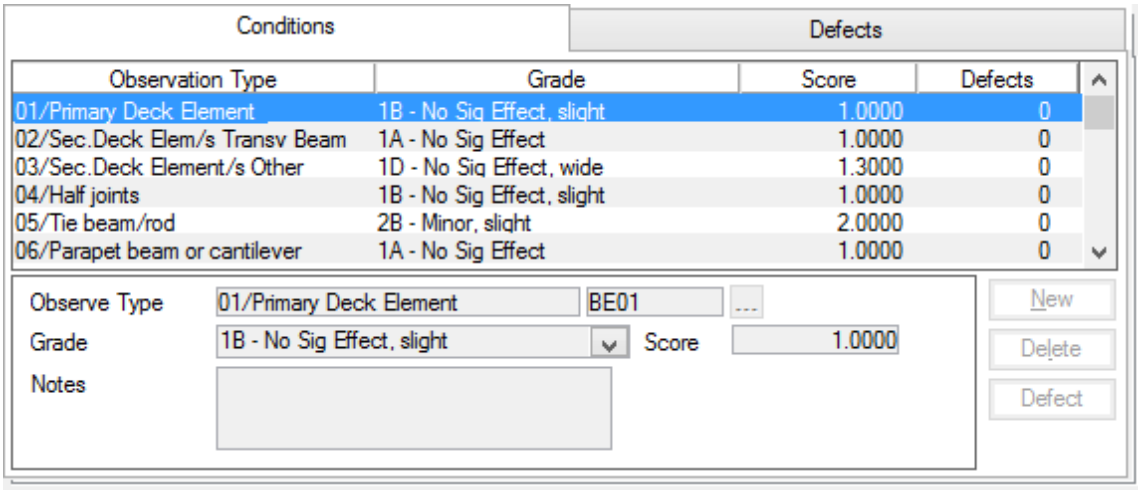
Due Date: Displays the date that this Feature was due for Inspection.

Note: This field is not populated for Inspection Routes belonging to Inspection Types with Due Date Rules set to "None" or "From Last Inspection".

Expiry Date: Where an inspection is only valid for a period, enter the date on which the inspection is no longer valid.

Conditions tab

The Condition Tab will display any Observation types that have been associated with this Feature. (By assigning Observation Types to the Feature Group which contains this Feature Type, and by assigning Observation Types to the Inspection Type in the Condition Survey Lookups.)



The current Condition Grade and Score for the currently highlighted Observation Type will also be displayed. Where the Observation Type has been assigned, but not graded yet, the Condition Grade will be the "NA" grade.

Observe Type: If an Observation Type is already assigned, this will be entered by default. Where there is no default Observation Type, the field will be blank.

To select an Observation Type click on the pick button. The pick button references the Observation Type lookup.

Asset Register\Feature Lookups

Grade: This field will be available to edit if 'Pick List' has been selected in the Observation Type Lookup for the selected Observation Type.

Select the appropriate Condition Grade from the drop down list. The drop down list references the Observation Parameters associated with this Observation Type.

Asset Register\Feature Lookups

Where the field is not editable, the appropriate Grade will be entered when a Score is entered in the 'Score' field.

Score: This field will be available to edit if 'Numerical Value' has been selected in the Observation Type Lookup for the selected Observation Type.

Where the field is editable you may enter a score and the related description will be entered in the 'Grade' field.

Where the field is not editable, the Score associated with the Grade (in the Observation Parameter Lookup) will be automatically entered.

Notes: An optional free text field.

New Button

Click on the 'New button to add a new Observation Type with its associated grade.

Delete Button

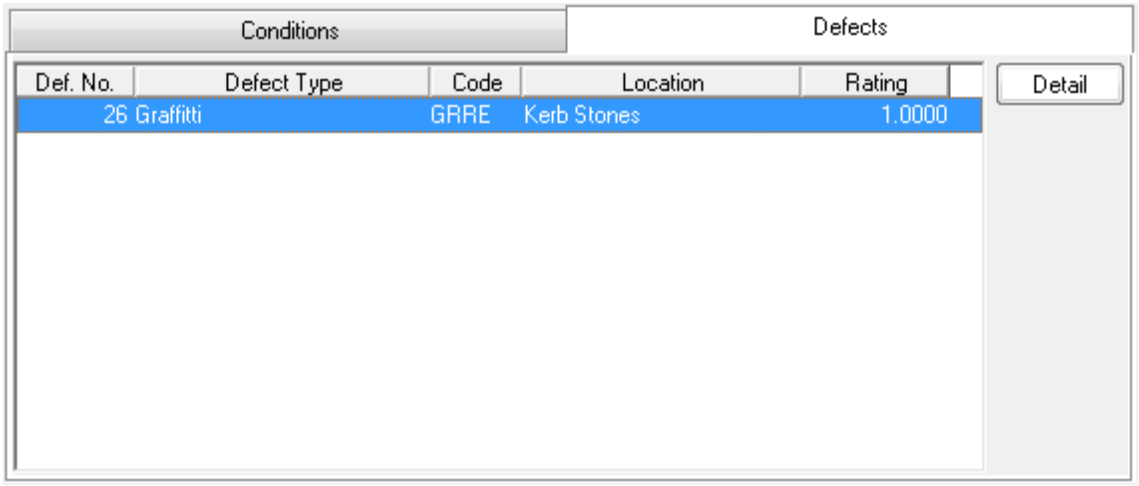
Click on the 'Delete' button to delete the currently highlighted Observation Type and Grade.

Defect

Click on the 'Defect' (or 'Fault') button to display Defects currently associated with the currently highlighted Observation Type. A blank Defect form will have the currently highlighted Observation Type entered as the related Observation Type.

Defects tab

To enter Defects, click on the Defects tab and then on the 'Detail' button. The Defect screen is displayed. Use the Defect screen to enter the Defects found for this Feature on this Inspection.



The 'Raised by Officer' will be set by default to the Action Officer from the Inspection Batch when created manually.

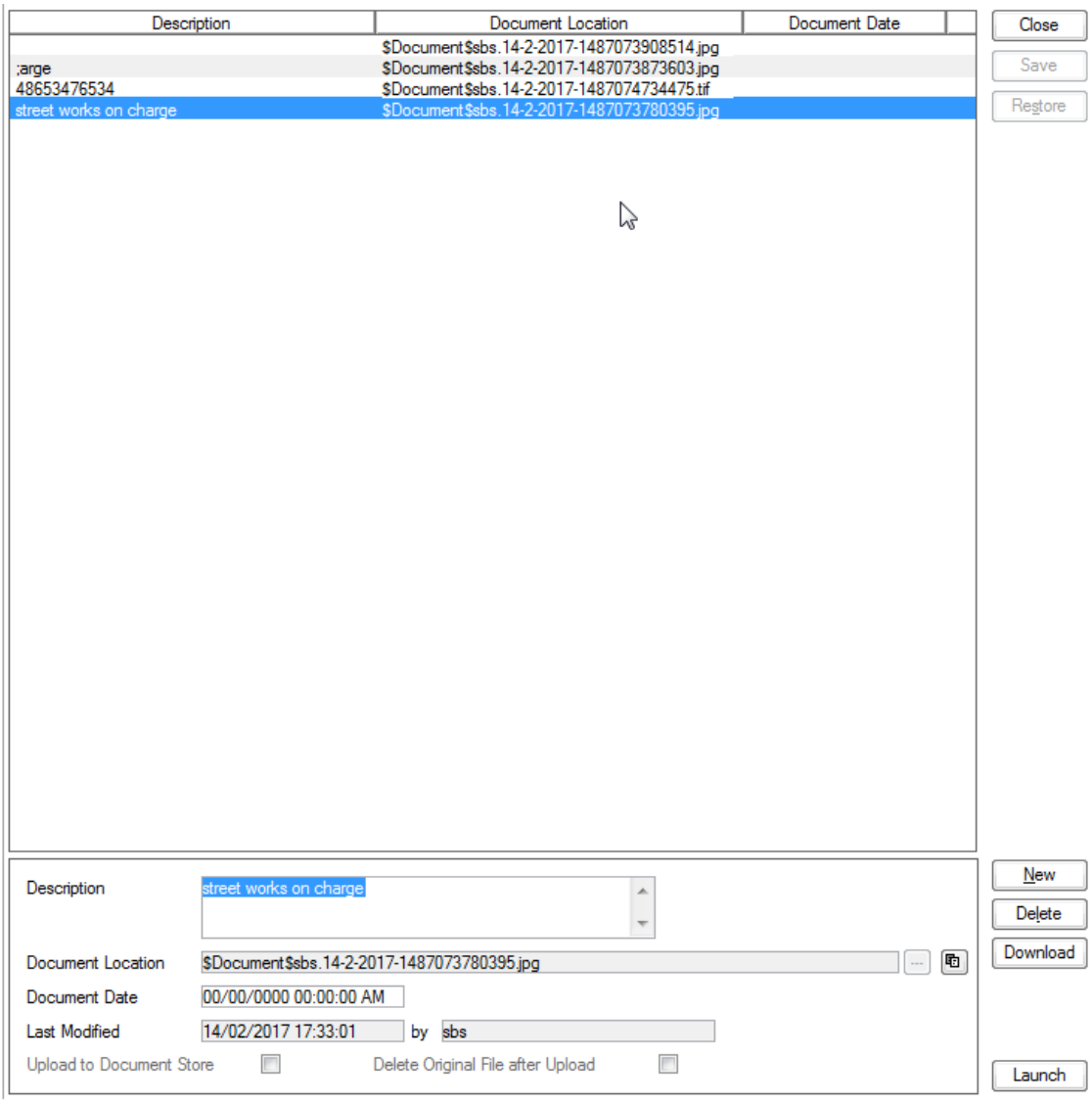
Document Links

Document Links can be created to point to any file in the system, allowing relevant photographs or text documents to be associated with a record.

Click the Links button

todisplay the Document Links form, listing the documents linked to the corresponding record. If there are already Document Links associated with the record then the Links button will be highlighted with a border

.



The screen lists the currently linked files. The fields below the list give specific information about the selected Link.

Note: For Documents Links created from Street Works Notice, Inspections and Fixed Penalty Notices an extra column will be displayed. This column will notify whether this document was received via EToN or not. This column will not be displayed for Document Links on Features, Enquiry or Jobs.

To add new Links:

Click on the New button and enter the document details .

Description	A free text field used to annotate the file.This field is required while publishing a document from Street Works, otherwise it is optional.
Document Location	Enter or select the path to the required document. Copy Button: This button will copy the fully-qualified path of the Document Location to the clipboard, resolving any location prefixes.

Document Date	A date and time for the Link. This defaults to the current system time but can be edited freely.
Last Modified (by)	The date and time when this Link was last modified, and the User who made the change. This cannot be edited.
Upload to Document Store	This is only available if a 'Document Store Folder' or a 'Web Service URL' has been specified in the **Document Link System Settings** screen. If this is ticked, the Document will be transferred from its current location to a central document store when the screen is saved. After uploading the file to a central document store the 'Document Location' value will be changed to reflect the new location of the document, and depending on the type of document store being used the location may be prefixed with either '$Document Store$' if the central document store is set to 'Folder', or '$Document URL$' if set to 'Web (PUT)' or 'Web (POST)'. This prefix will be applied to all links uploaded to a Folder document store, but this may not be true for a 'Web' document store if no part of the returned URL matches the 'Document Link URL Prefix'. For more information on Document Stores see **Document Link System Settings**.
Delete Original File after Upload	This is only available if Upload to Document Store is ticked. If this is ticked, the local file will be deleted after it has been successfully transferred to the Document Store.
Download	Allow to browse to an accessible location and download the attachment.
Identification Image	This is only available when viewing Feature Document Links, where the Feature belongs to a Feature Group for which an image is shown on the Feature screen. By default, the first appropriate Document Link in the list will be used as the image. This field may be ticked to override this behaviour and choose a specific image for display. The Description of the Document Link record will be updated to show that this has been done. For more details see **Feature Identification Image**.
Dead	*This option is only available when viewing Job Type or Site Document Links.* This option is enabled only when 'Reference' is selected in the 'Document Copy To' option. When checked, it will prevent any further linking while creating or updating Jobs.
Document End Date	*This option is only available when viewing Job Type or Site Document Links.* By default, the Current Date is populated when the 'Dead' field is checked. Once populated, it will automatically end date the document after the specified date.
Document Copy To	*This option is only available when viewing Job Type or Site Document Links.* The options are: • None • Copy • Reference By default, 'None' is selected, No document link is copied to the Job. If 'Copy' is selected, both the document link and the document itself is copied to the specified Document path of the Job, with the description of the copied document link including the suffix 'Copied from Job Type/Site'.

	If 'Reference' is selected, only the document link is copied to the Job and the document is referenced from the actual Document path, with the description of the copied document link including the suffix 'Referenced from Job Type/Site'. **Note:** The Job Standard Document functionality will only be available when the Document Store setting is set to "Folder".

Once the details for one or more Links have been entered, click Save to store the details.

Document Location Prefixes

If a document was selected for transfer to a central document store, or was a Street Works link that was published, then part of the path or URL to that file is often replaced with a prefix. There are several prefixes in use and each has a different value.

$Document$	This is used for photos uploaded from a hand held device via the Confirm connector. Its value is equivalent to the 'Document Store Folder' setting in the Document links System Settings screen.
$Document Store$	This is used for documents uploaded to a central document store that is set to be a 'Folder' type. Its value is also equivalent to the 'Document Store Folder' setting in the Document links System Settings screen.
$Document URL$	This is used for documents uploaded to a central document store that is set to be a 'Web (PUT)' or 'Web (POST)' types. Its value is also equivalent to the 'Document Link URL Prefix' setting in the Document links System Settings screen.
ORG_PREFIX	This is specific to Street Works document links and is used when a document is Published. It's value is dependant on the Organisation that the document link is related to. The value is equivalent to the 'Attach. URL' setting in the Organisation screen, for the Organisation that the link is related to.

To modify an existing Link:

Click the link in the list and modify the Description or Document Location as required, then click Save.

To view a currently linked file:

With the required file highlighted, click on the 'Launch' button. The associated program is launched and the file displayed.

To delete a Link:

Click the link in the list, then click the 'Delete' button. The link will be removed from the list, but the file will not be deleted.

Security of Linked items:

There is a generic User Security option which can be used to selectively prevent Users from either adding, deleting or modifying (e.g. changing the Description or Document Location) items linked to entities in Confirm. This option appears in the Security section of the menu when configuring privileges on the User Security and Group Security screens.

Document Links in Street Works

The document links feature within Street Works has extended functionality. Refer to the document links section of the Street Works help for more information.

Street Works\Document Links

Problems Uploading to the Document Store

Problems may be encountered when using the 'Upload to Document Store' setting, especially when using a web service document store, where the document may travel across a network to an external application.

If problems do arise then any changes made to the document link details, such as dates and description, will still be saved to the Confirm database, however the document link will not be updated and the document will remain in its original location. It will not be deleted, even if 'Delete Original File after upload' was selected.

Uploading to a Web Service is highly dependant on external applications, and it is not possible for Confirm to interpret all of the possible errors that may arise once the document is sent out. If an error does occur then Confirm will display "Failed to upload - the following error was returned by the Web Service:" followed by the error message that is returned to it from the external application.

Document Visibility

When a new document is uploaded in Confirm Enterprise,it will default to private if no specific user or tenant-level settings are configured.

Additionally users now has the ability to tag documents on entities as "Public" or "Private" using the Confirm Web Interface. To change the default enterprise visibility setting, users can switch the document's visibility through the Confirm Web Interface. For more information, please refer to the Confirm Web Help Documentation for Document Links.

Print Inspection Batch

The 'Print Inspection Batch' utility will print out all the selected Inspection batches, including 'Completed' and 'Inspected' Inspection Features. The print out can be used as a record of Inspection results, or as a list of outstanding inspections.

Defects

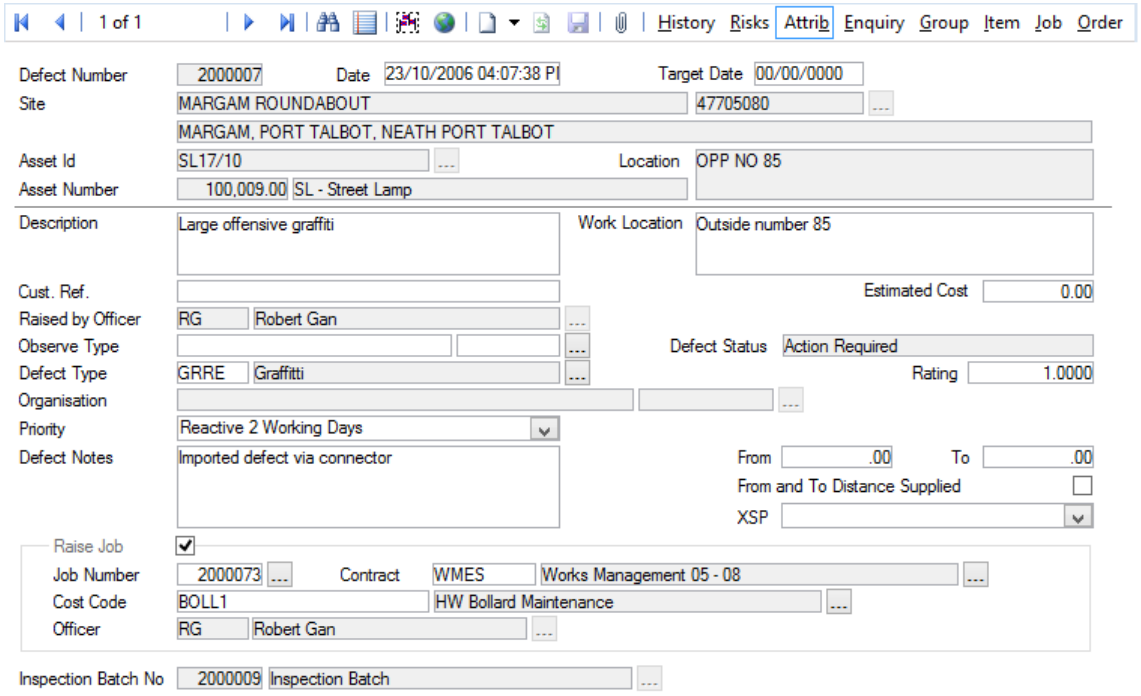
A Defect is a record of a problem with a Feature, which may require some sort of further action - usually a Job to repair the Feature.

Defects are numbered from the Condition Survey Seed Numbers, and held in the Feature History for the Feature against which they were raised.

Jobs and Orders can be raised from Defects, using the information entered in the Defect form.

Note: The Defect form is also accessed from the Inspection Batch Feature in two ways:

- By selecting an Observation Type on the Conditions tab and clicking on the 'Defect' button
- By selecting the Defect tab and clicking on the 'Detail' button.



Defect Number:	Will be automatically assigned from the seed numbers when the Defect is saved. Enter the number of an existing Defect to recall the record.
Date:	The current date is entered by default, this may be edited. **Note:** If a change is made to the Date, a message will be displayed requiring Notes to be entered/edited to explain or justify the change, before it can be saved.
Target Date:	(Optional) The date by which the Defect should be fixed. This may be used in reporting on future required works, and will be entered as the Estimated Completion date for a Job raised from this Defect

Site details, Feature Id, Plot number and Location will be already entered from the Inspection Feature details if the Defect form has been accessed from the Inspection Batch Feature form.

Where the Defect form has been accessed from the 'Defect' Explorer item, complete the details of the Feature against which the Defect is to be recorded.

Description:	A free text field used for describing the problem. The details entered in this field will be entered into the Description field of the Job form.

Work Location: A free text field used for describing the location of the problem. The details entered into this field will be entered into the Work Location field of the Job form.

Note: Description and Location will also be displayed on External Defect Notifications.

Cust Ref: A free text field for the entry of an external customer's reference. These details will be used in the Cust Ref field of a Job raised from this Defect.

Estimated Cost: A free text number field for the entry of an estimated cost of the proposed works.

Officer: Select an Action Officer. The pick list references the Action Officer lookup.

Condition Survey\Condition Lookups

The Action Officer entered on the Defect will become the Action Officer for the Job.

Supersedes Defect: Only available with ConfirmConnect®

Shows the defect that the current one supersedes. When not applicable this field is not displayed. Refer to the ConfirmConnect® help for further details on Superseding Defects.

Observe Type: (Optional)

An Observation Type may be selected to link this Defect to the Observation. If an Observation Type is selected then the selection of Defect Types in the Defect Type field will be restricted. The Pick list references the Observation Type lookup.

Defect Type: The pick list references the **Defect Type lookup** and determines whether a Defect is classified as Internal, External, or No Defect Found.

Rating: The rating associated with this Defect Type will be automatically entered. This can be manually changed.

Organisation: Where an 'External' Defect Type has been selected, this field will become available for the details of the responsible Organisation to be entered. The pick list references the **Organisation Lookup**.

The Organisation entered in this field is the one to whom the External Defect Notification will be addressed.

Priority: A default Defect Priority may be set automatically for new Defects according to the Site Classification of the Feature and the Defect Category of the Defect Type. The defaults are configured in the **Defect Default Priorities lookup**.

If the Feature or Defect Type is changed before the new Defect is saved, the Priority default will also update. A Defect Priority will not be updated if the Feature or Defect Type is altered for an existing Defect.

If a Job is raised from this Defect then the Priority entered here will default to the Job, but any subsequent changes to either the Defect Priority, or the Job Priority will not update the other.

The drop down list references the Priority lookup.

Asset Maintenance\Maintenance Lookups

Note: The Priority will default the 'Raise Job' flag on the Defect, depending on whether the 'Raise a Defect Job' flag is set in the Priority Lookup for the selected Priority.

Note: If a change is made to the Priority, a message will be displayed requiring Notes to be entered/edited to explain or justify the change, before it can be saved.

Defect Status: This field will be automatically set to 'Action Required' or 'No Action Required' based on the Classification of the Defect Type (Internal, External, or No Defect Found), as described below.

Note: Where the defect has been superseded this will show the superseding defect number. Although not displayed, any Defect with a Status of "Superseded by" will actually be set as "No Action Required". This is only available with ConfirmConnect®.

Defect Notes: An optional free text field.

Note: When the Defect is saved, the system will issue a warning that there is a possible duplicate Defect if there is another Defect for the same Site and Features with the same Defect Type.

External Defect:

The lower portion of the form will be disabled and not editable. The defect should be saved at this point. The Defect will initially show a Status of 'Action Required' and this will be updated to 'No Action Required' once an External Defect Notification has been printed.

Internal Defect:

An Internal Defect can be saved at this stage with no further action. The Defect will be logged against the Feature, and the Job fields will remain open. A Job can be raised at a later date if necessary. The Defect will initially show a Status of 'Action Required' once a Job has been raised against the Defect and this will be updated to 'No Action Required' if a Defect is linked to Archived and Completed Job or linked to a Committed Job.

Job Number: A number will be automatically assigned from the Job seed numbers.

Priority: Select from the drop down list. The drop down list references the Priority lookup.

Asset Maintenance\Maintenance Lookups

Cost Code: Select a Cost Code only where the default Feature Cost Code is not to be used. Select from the pick list. The pick listf references the Cost Code Lookup

Site Register\Site Lookups\Operational Lookups

Contract: Select the Contract under which the work is to be carried out from the pick list. The pick list references awarded term Contract and Non Term Contracts.

Contract Preparation\Contract

No Defect Found:

The lower portion of the form will be disabled and not editable. The Defect should be saved at this point. The Defect will show a Status of 'No Action Required' as soon as it has been saved.

Defect buttons

Copy

Click on the Copy button to copy the Defect.

Where the original Defect has a Job against it (or the Raise Job flag set), you may make a copy of the Job also on saving the new Defect.

An Ad Hoc Inspection batch is created for the new Defect.

The Defect Date defaults to the current time. Jobs created via this Copy button have default values as per the **Copy button on the Job** itself.

The Copy button is disabled for Defects on completed Inspection Batches.

Risks button

Saving a Job directly in Confirm with a Feature or Inventory Item selected carrying an Attribute value flagged for 'Risk Warning' will display the Risk Assessment screen.

The Risk Assessment screen can be opened at any time by selecting the 'Risks' button. Each time the 'Risks' button is selected Confirm will check the Attribute lookups to see if there are any additional assessments to display. This will be done until the Job is 'Archived'. If any 'Risk Warnings' are no longer applicable (removed from the Attribute Values) these will not be removed from the Risk Assessments for this Job.

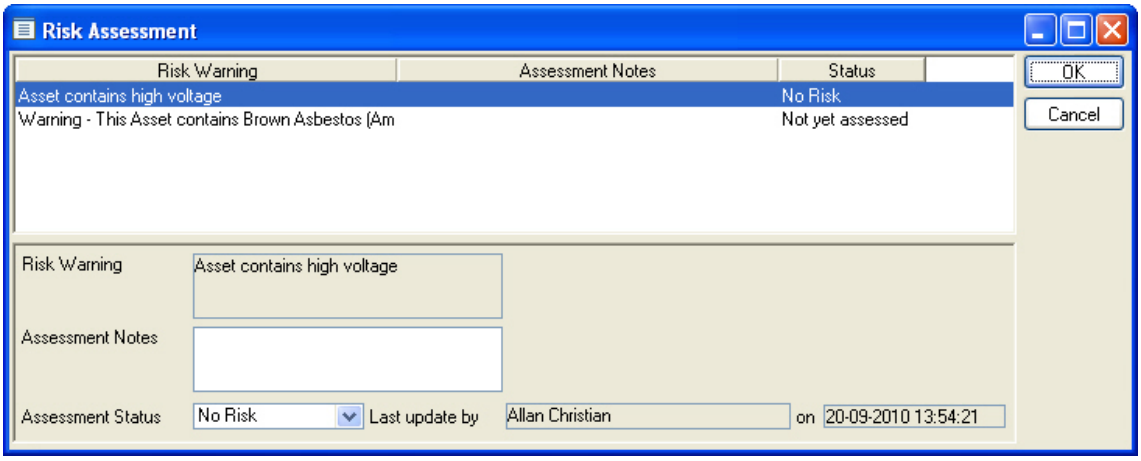
Assessments will only be removed (after warning the User) if the Feature is changed.

Each 'Risk Warning' applicable to the selected Feature or Inventory Item will be listed allowing the User to specify if the warning is applicable for the Job being carried out i.e. The Feature contains a certain Risk but the Job being carried out would not be affecting it.

The presence of Risks will not prevent an Order from being Committed.

Risk Assessments can be printed using the 'Risk Assessments' list option from the Job or Defect screens.

The Risk Assessments screen carries its own User Security option so individual Users can be prevented from Updating assessments.



Risk Warning: This is populated from the Risk Warning field on the Attribute Value and is not editable.

Asset Register\Feature Lookups\Attribute Type

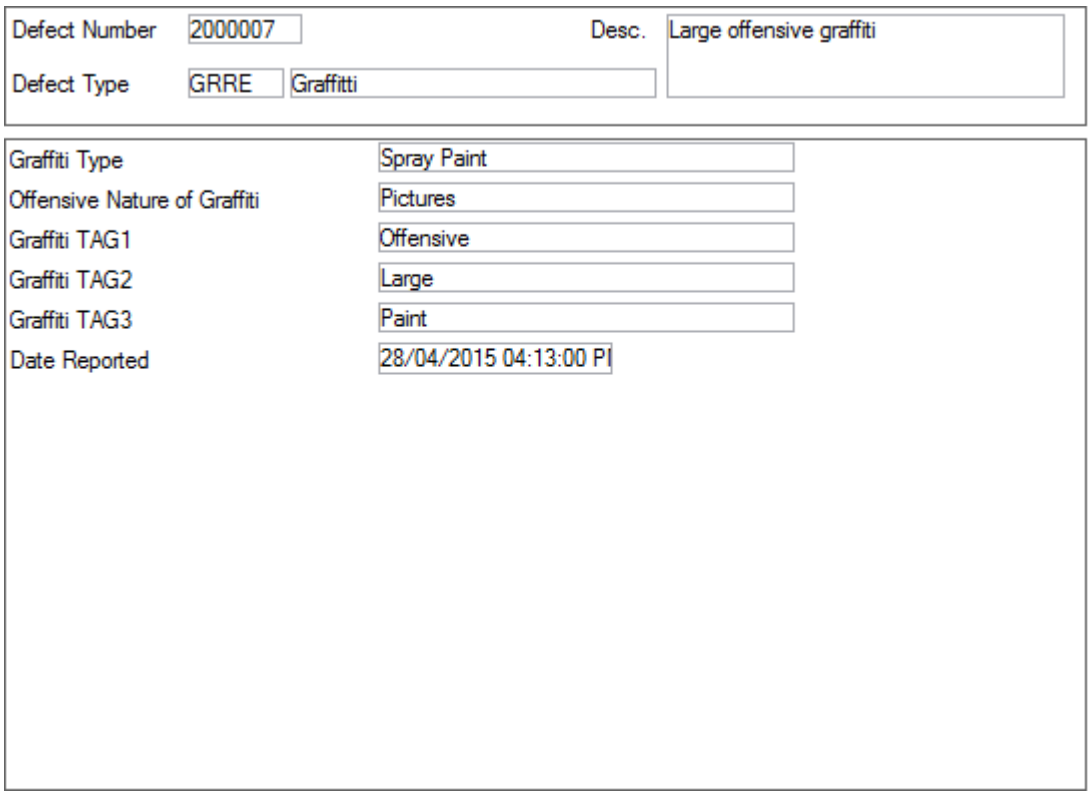
Assessment Notes:	Provide Notes to justify/explain the reason for the Assessment Status.
Assessment Status:	Select from: 'Risk' - The Risk Warning is applicable to this Job and the necessary precautions have been taken. 'No Risk' - The Risk Warning does not apply to this Job. 'Not Yet Assessed' - This Risk Warning is outstanding and needs to be assessed - this is the default value.
Last update by... on...:	Displays the name of the User who last updated the Assessment Status or Assessment Notes with the date and time.

Attributes

(0510 - Defect Attributes)

Clicking the 'Attrib' button displays the Defect Attribute screen. Here any Operational Attributes that have been assigned to the selected Defect Type are displayed.

Defect Attributes can also be imported with the Import Anything Agent, which can then be viewed in this screen.



Attributes may be added to this Defect by clicking the 'Add' button. The Attribute filter will be displayed for selection of the required Attribute. The Attribute will be added to Defect Attribute form, with the default value, and may be assigned a value according to the Attribute's type and rules.

Previously added Attributes may be removed (excluding attributes linked with the Defect Type) by selecting the Attribute and clicking on the 'Remove' button.

Note: If the Defect Type is changed, Attributes entered are retained if they are relevant to the new Subject, or if they have been changed from their default value.

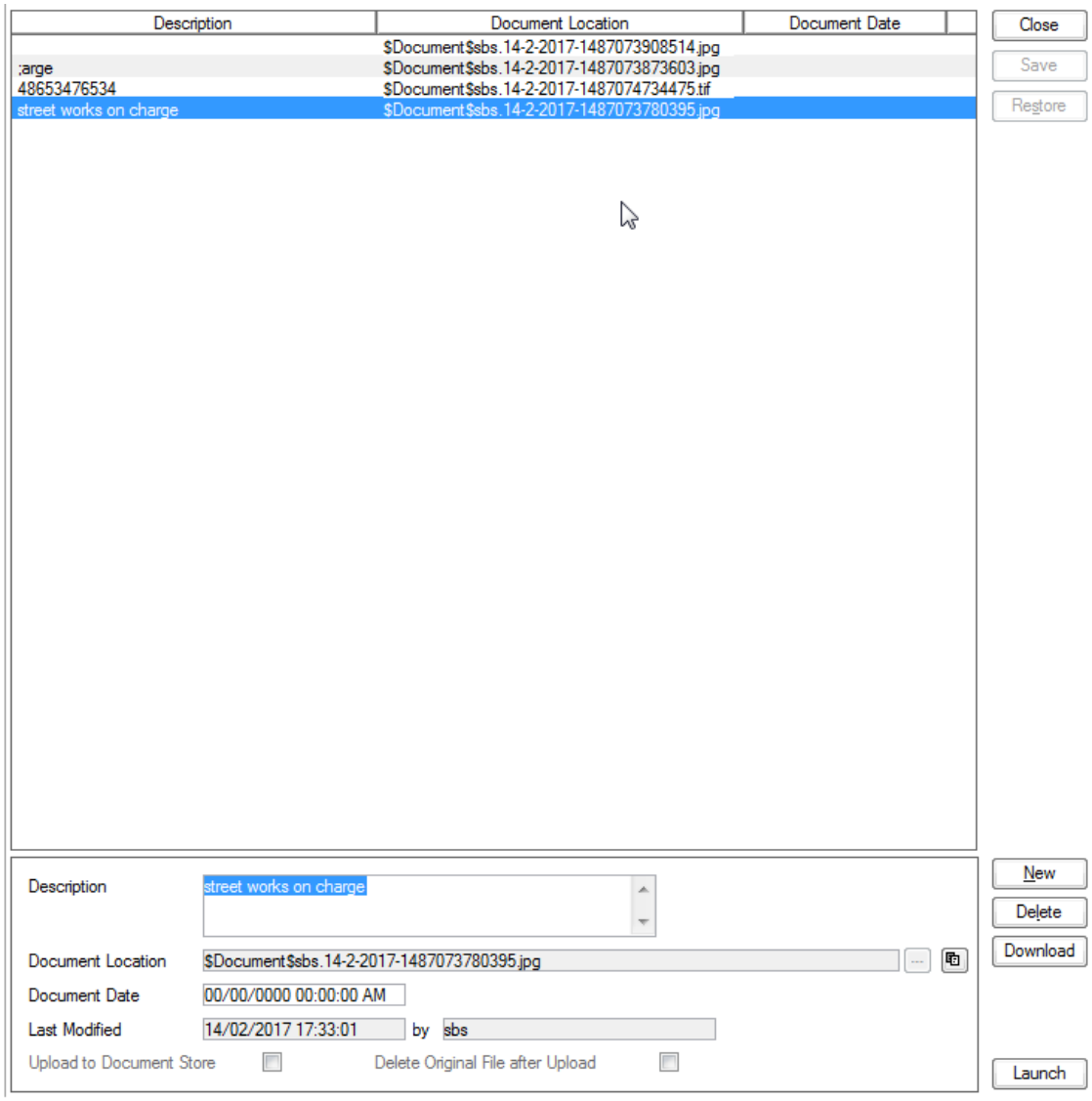
Automatically assigning Job Attributes

When a Job is created from a Defect, the Defects Attributes will be added to the **Job Attributes** list.

Document Links

Document Links can be created to point to any file in the system, allowing relevant photographs or text documents to be associated with a record.

Click the Links button todisplay the Document Links form, listing the documents linked to the corresponding record. If there are already Document Links associated with the record then the Links button will be highlighted with a border .



The screen lists the currently linked files. The fields below the list give specific information about the selected Link.

Note: For Documents Links created from Street Works Notice, Inspections and Fixed Penalty Notices an extra column will be displayed. This column will notify whether this document was received via EToN or not. This column will not be displayed for Document Links on Features, Enquiry or Jobs.

To add new Links:

Click on the New button and enter the document details .

Description	A free text field used to annotate the file.This field is required while publishing a document from Street Works, otherwise it is optional.
Document Location	Enter or select the path to the required document.  Copy Button: This button will copy the fully-qualified path of the Document Location to the clipboard, resolving any location prefixes.
Document Date	A date and time for the Link. This defaults to the current system time but can be edited freely.
Last Modified (by)	The date and time when this Link was last modified, and the User who made the change. This cannot be edited.
Upload to Document Store	This is only available if a 'Document Store Folder' or a 'Web Service URL' has been specified in the **Document Link System Settings** screen. If this is ticked, the Document will be transferred from its current location to a central document store when the screen is saved. After uploading the file to a central document store the 'Document Location' value will be changed to reflect the new location of the document, and depending on the type of document store being used the location may be prefixed with either '$Document Store$' if the central document store is set to 'Folder', or '$Document URL$' if set to 'Web (PUT)' or 'Web (POST)'. This prefix will be applied to all links uploaded to a Folder document store, but this may not be true for a 'Web' document store if no part of the returned URL matches the 'Document Link URL Prefix'. For more information on Document Stores see **Document Link System Settings**.
Delete Original File after Upload	This is only available if Upload to Document Store is ticked. If this is ticked, the local file will be deleted after it has been successfully transferred to the Document Store.
Download	Allow to browse to an accessible location and download the attachment.
Identification Image	This is only available when viewing Feature Document Links, where the Feature belongs to a Feature Group for which an image is shown on the Feature screen. By default, the first appropriate Document Link in the list will be used as the image. This field may be ticked to override this behaviour and choose a specific image for display. The Description of the Document Link record will be updated to show that this has been done. For more details see **Feature Identification Image**.

Dead	*This option is only available when viewing Job Type or Site Document Links.* This option is enabled only when 'Reference' is selected in the 'Document Copy To' option. When checked, it will prevent any further linking while creating or updating Jobs.
Document End Date	*This option is only available when viewing Job Type or Site Document Links.* By default, the Current Date is populated when the 'Dead' field is checked. Once populated, it will automatically end date the document after the specified date.
Document Copy To	*This option is only available when viewing Job Type or Site Document Links.* The options are: • None • Copy • Reference By default, 'None' is selected, No document link is copied to the Job. If 'Copy' is selected, both the document link and the document itself is copied to the specified Document path of the Job, with the description of the copied document link including the suffix 'Copied from Job Type/Site'. If 'Reference' is selected, only the document link is copied to the Job and the document is referenced from the actual Document path, with the description of the copied document link including the suffix 'Referenced from Job Type/Site'. **Note:** The Job Standard Document functionality will only be available when the Document Store setting is set to "Folder".

Once the details for one or more Links have been entered, click Save to store the details.

Document Location Prefixes

If a document was selected for transfer to a central document store, or was a Street Works link that was published, then part of the path or URL to that file is often replaced with a prefix. There are several prefixes in use and each has a different value.

$Document$	This is used for photos uploaded from a hand held device via the Confirm connector. Its value is equivalent to the 'Document Store Folder' setting in the Document links System Settings screen.
$Document Store$	This is used for documents uploaded to a central document store that is set to be a 'Folder' type. Its value is also equivalent to the 'Document Store Folder' setting in the Document links System Settings screen.
$Document URL$	This is used for documents uploaded to a central document store that is set to be a 'Web (PUT)' or 'Web (POST)' types. Its value is also equivalent to the 'Document Link URL Prefix' setting in the Document links System Settings screen.
ORG_PREFIX	This is specific to Street Works document links and is used when a document is Published. It's value is dependant on the Organisation that the document link is related to. The value is equivalent to the 'Attach. URL' setting in the Organisation screen, for the Organisation that the link is related to.

To modify an existing Link:

Click the link in the list and modify the Description or Document Location as required, then click Save.

To view a currently linked file:

With the required file highlighted, click on the 'Launch' button. The associated program is launched and the file displayed.

To delete a Link:

Click the link in the list, then click the 'Delete' button. The link will be removed from the list, but the file will not be deleted.

Security of Linked items:

There is a generic User Security option which can be used to selectively prevent Users from either adding, deleting or modifying (e.g. changing the Description or Document Location) items linked to entities in Confirm. This option appears in the Security section of the menu when configuring privileges on the User Security and Group Security screens.

Document Links in Street Works

The document links feature within Street Works has extended functionality. Refer to the document links section of the Street Works help for more information.

Street Works\Document Links

Problems Uploading to the Document Store

Problems may be encountered when using the 'Upload to Document Store' setting, especially when using a web service document store, where the document may travel across a network to an external application.

If problems do arise then any changes made to the document link details, such as dates and description, will still be saved to the Confirm database, however the document link will not be updated and the document will remain in its original location. It will not be deleted, even if 'Delete Original File after upload' was selected.

Uploading to a Web Service is highly dependant on external applications, and it is not possible for Confirm to interpret all of the possible errors that may arise once the document is sent out. If an error does occur then Confirm will display "Failed to upload - the following error was returned by the Web Service:" followed by the error message that is returned to it from the external application.

Document Visibility

When a new document is uploaded in Confirm Enterprise,it will default to private if no specific user or tenant-level settings are configured.

Additionally users now has the ability to tag documents on entities as "Public" or "Private" using the Confirm Web Interface. To change the default enterprise visibility setting, users can switch the document's visibility through the Confirm Web Interface. For more information, please refer to the Confirm Web Help Documentation for Document Links.

Enquiry

The Enquiry button will open the Enquiry screen with any Enquiries linked to the current Defect. It will only show Enquiries already linked to the Defect. Any Enquiries created in the opened Enquiry screen will not automatically be linked to the Defect, this must be done manually from the Enquiry screen. See **Customer Services - Fast Entry Issues** for further information.

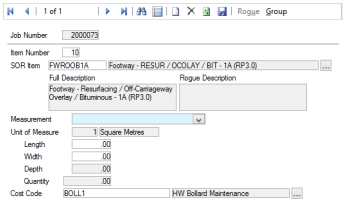
Group

The Defect Job Item filter allows the selection of the appropriate SOR Group and the application of quantities for use in the Job.

Defect Type:	Entered by default from the Defect.
SOR Group:	Select the appropriate SOR Groups from the pick list. Only the SOR Groups with at least one SOR Item included in the BOQ of Contractor and Price Factor can be selected. The pick list references the SOR Group(s) associated with this **Defect type**.
Length, Width, Depth, Quantity:	The default entry is 1.00 in each field. This can be amended by overtyping. **Note:** the quantity will be applied to whichever Units of Measure the SORs use.

Item

The Items button displays the Job Item form. This may be used to amend (add or delete) items already added as an SOR Group, or to add Items from scratch.



See "**Maintenance Management\Job Form\SOR Item tab**" for information on completing the Job Item form.

Job

The Job button displays the Job form with the available details entered. Where a Job is already raised, the Job will be displayed.

Maintenance Management\Job

Note: The Job form may be completed directly without using the 'Group' button, or the 'Items' button.

Order

Displays the Job Order form.

Maintenance Management\Job\Job - Order button

Note: The Job Order form may be completed directly without using the 'Group' button, the 'Items' button, or the 'Job' button, where only one SOR Group is associated with the Defect Type.

History

Click on 'History' to view an Entity History Report for all the Historical Log entries associated with this Defect record.

See '**History Report**' for more information on Entity History Report.

Print External Defect Notification

Where Defects have an 'External' Defect Type assigned, the responsibility for correcting the Defect lies with an external Organisation. In this case the Organisation can be sent an 'External Defect Notification'.

Use the filter to select the criteria for the Notices to be printed. Filter option include:

Status:	Select from:
	'Action Required' - Defects that have not had a notice previously sent.
	'No Action Required' - Defects that have had a notice previously sent.
	'All' - All Defects, whether a Notice has previously been sent or not.

Click OK to view the Preview. Use the print button in the Preview window to print the Notice(s).

Structures Toolkit Data Export

The purpose of the Structures Toolkit Data Export utility is to export Structure Features, Attributes and Inspection result data from Confirm to a spreadsheet that can be input directly into the Structures Toolkit spreadsheet. The Structures Toolkit spreadsheet is used to calculate the following values:

- Gross Replacement Cost (GRC) – the total value of the Structure Features (or their new equivalent).
- Depreciated Replacement Cost (DRC) – the current remaining value.
- Annual Depreciation – the drop in value each year.

A Named Selection of all the Structures that need to be included in the export will be required, and the configuration as described **Structure Toolkit Export System Setting** must be completed in order to export the correct data.

Feature Named Selection:	Select from the pick list a Named Selection containing all of the Structure Features that should be included in the export. This is a mandatory field. **Asset Register\Feature Lookups**
Export File Path:	Specify the path of where the export file should be created. This is a mandatory field.

Click the 'OK' button to export the Structures data to the specified file path.

A set of 2 files will be created:

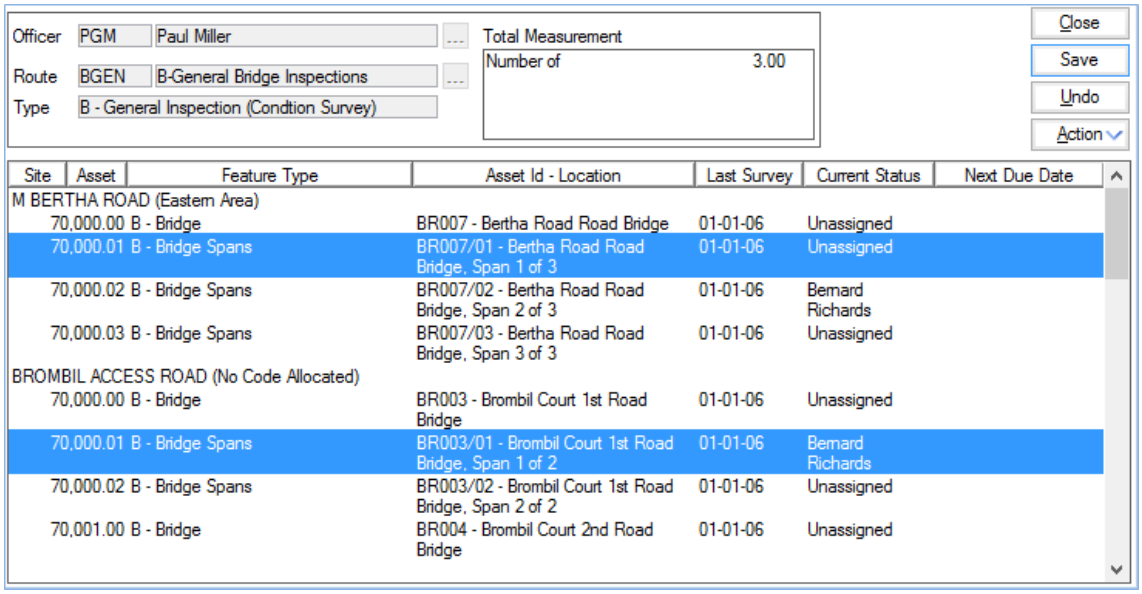
- Filename.csv : This will contain all the the data required for Structures Tab of the Structures Toolkit.
- Filename_element.csv: This will contain all the data required for Elements Tab of the Structures Toolkit.

These spreadsheets will be in a format so that the data can be easily copied and pasted into the Structures Toolkit spreadsheet.

Select Features for Inspection

(Asset Survey / Condition Survey modules)

Use the Select Features for Inspection utility to select Features to be downloaded to a mobile device for inspection.



Officer:	Pick an Officer from the pick list. The pick list references the Action Officer Lookup. **Asset Maintenance\Maintenance Lookups**
Route:	Pick a Route from the Pick list. The pick list references the 'Visual' Inspection Routes in the Inspection Route Lookup. **Condition Survey\Condition Survey Lookups**
Type:	Will be populated on selection of a Route to show the Inspection Type assigned to the Route in the Inspection Route Lookup. **Condition Survey\Condition Survey Lookups**
Total Measure-ment:	Will be populated on selection of an Action Officer, derived from the primary Measurement of all the Features contained on the Routes for the selected Action Officer.

On selection of a Route, the lower part of the form will list all the live Features present on the Route. On initial selection of the Route, all Features will be 'Unassigned'.

The Last Surveyed Date displayed is the date that the Feature was last included on a completed Inspection Batch and is not unique to the Route or Inspection Type. This date can also be seen on the Feature form on the Additional Tab.

The Next Due Date displayed is the date that the Feature is next due for inspection on the specific Route that has been chosen. It is calculated based on the Last Inspected Date and/or the previous Due Date, according to the rule specified on the Inspection Type screen. This date can also be seen on Inspection Route screen.

Inspection Reports

There are different kinds of Inspection Reports that can be used to easily view Feature details. Feature Inspection History reports detail the Inspections carried out within the stated Site. The Inspection Performance report will report on Inspection Routes and return figures on the progress of the Inspections. Overall Feature Condition, and Feature Defect Rating Reports will extract Feature based information on the Condition, or Defects raised, in terms of the score or Defect rating.

There are also a number of Structure related reports for printing out data in specific formats.

Feature Inspection History Report

This report gives details of Inspections carried out on Features in the selected Site.

Filter options include:

Site:	A Site must be entered. Select from the pick list. The pick list references the Site Register.
Plot Number:	You may limit the report to a particular plot.
List Details from/to:	You may limit the report to Inspections carried out between the given dates.
Report Type:	Select from: Assessment - to display, asset by asset, the details of Conditions and Defects logged against the Feature in Inspections carried out during the specified Period. Maintenance - to display, plot by plot, all Inspections carried out in the specified period, and any Defects raised in those Inspections.

Feature Inspection History Summary

This report lists all the Features selected in the filter, giving the date and type of the last inspection against those Features which have been inspected since the date entered in the filter.

Filter options include:

Inspection Type:	Select from the drop down list to restrict the report to an Inspection type. The drop down list references the **Inspection Type Lookup**. Leave the field empty to run the report for all Inspection types
No Survey Since:	Enter a date to exclude Features, which have been inspected since that date.
Dead:	Select No, Yes, or Both to exclude dead Features, show only dead Features, or include all Features.

Inspection Performance Report

This report gives information based on the number of Inspection items flagged as 'Inspected' against those still un-inspected for a Route. The information is matched with the specified period to give a progress report based on percentage of the period elapsed, against percentage of Inspection Items still outstanding.

Note: the selection of Inspection Items will depend on the Route having been correctly re-set at the beginning of the relevant period.

Filter options include:

Number of Days in Period:	Enter the number of days over which the calculation is to be based.
Date of first Inspection:	Enter the date on which the calculation is to be started.

For example: supposing that today is 16th January 2005, and a report is required on the progress of a monthly Inspection. If 31 days is entered for a period beginning 01/01/05, the system will base the calculation on the number of the Items in the Route which are 'Inspected' and compare it with the number of days which have elapsed in the specified period - that is - 15 full days.

Inspection Route Feature List

The Inspection Route Feature List details the Features which are assigned to Inspection Route(s). The report will show which Action Officer is currently assigned to inspect the Feature(s), when the inspection is due and if it is overdue.

Inspection Batch Feature List

The Inspection Batch Feature List details the Features contained in an Inspection Batch and when they were inspected. The report will also display when the inspection was due and how many days it was early or late by (if it has been completed).

Overall Feature Condition

This report will list Features, by site, with the survey date, and the ratings. The ratings are totalled for the Site.

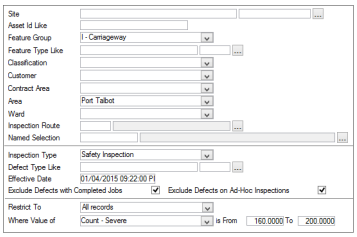
Note: a Condition Rating is calculated by multiplying the score for a Condition Grade applied, by the Weighting set for that Feature Group. All the Condition Grades that the Feature carries are added together to give an overall Feature Rating

Filter options include:

Route:	Select a Site Route (not an Inspection Route) from the pick list. The pick list references the Site Route Lookup. **Site Register\Site Lookups\Operational Lookups**
Total Ratings:	Enter a range of Ratings to limit the report to Features within that band of Overall Ratings
Report Type:	Select from: Summary - a simple list of Plot Number, Feature Type, Survey dates and overall Rating. Detailed - also shows each Observation Type, the grade applied and the Rating.

Feature Defect Rating Report

This report depends on each Defect Type carrying a rating. Additionally, if a rating has been defined for a 'Severe' Defect in the Condition Survey System Settings, those Features classified as having a 'Severe' Defect will be listed separately.



The top section of the filter defines the Features on which to report.

The central part of the filter can be used to limit the report to a particular Inspection Type and/or Defect, and to restrict the information to un-actioned Defects raised as a result of a planned inspection.

The bottom section of the filter uses the Defect Rating to limit the report to Defects within the specified range of ratings, calculated in various ways, according to the selection in the 'Where Value of' field:

Count - Total Count - Rated Count - Severe	'Count' will base the report on the number of Defects a Feature carries, and therefore the entry in the 'is From/To' fields should be for the number of Defects. The selection can be for the total number of Defects, or only for Rated Defects, or only where the Rating exceeds the rating set as the 'Severe Defect' rating.
Rating - Total Rating - Severe	'Rating' will base the report on the ratings that have been applied to the Defects, and select Features whose rating falls within the bands set in the 'is From/To' fields. The selection can be for the total Rating for a Feature, or for Features whose rating exceeds the rating set as the 'Severe Defect' rating.
Count - Total per Unit Count - Rated per Unit Count - Severe per Unit	These options are similar to the 'Count' option above, but are intended for linear assets, where the number of Defects will be divided into the primary measurement (usually a linear measurement such a linear metre) and provide a number of Defects per (measurement) Unit. The entry in the 'is From/To' fields will therefore reflect a selection being made not on overall Defects for the Feature, but Defects per Unit.

Structures Condition Reports

(Condition Surveying - BCI Report module)

The Structures Condition Reports will use Condition information to derive a weighted sum of all the Conditions (either Feature Conditions or Inspection Conditions depending on the context) on a Feature. Only those in the Inspection Type specified in the Bridge Condition Index System Settings are included.

A critical score is obtained by summing all of the above that use a particular Parameter (also specified as a System Setting).

The reports show Features with their Conditions, i.e. Spans rather than Bridges. Where a Bridge is made up of multiple Spans, each is treated as if it were separate.

Inspection Pro Forma Reports

(Condition Survey - BCI Reports module)

The Inspection Pro Forma reports may be used to take on-site when carrying out Structure inspections. The filter for each report allows the selection of the relevant Structure to be printed, and the detail of each report is picked according to the values set in the **Bridge Inspection Pro Forma System Settings**.

It is possible to filter by Inspection Route for each report, so it is advised that Structure specific Routes are set up to allow the correct selection.

There is a section at the top of Page 2 of each Pro Forma that allows multiple defects to be recorded against an element.

Structures Condition Indicator List

This report displays the current Inspection Batch for any Features that has at least one Inspection Condition included in the Inspection Conditions for the Inspection Type specified in the **Bridge Condition Indicator System Settings**.

If the 'Show Historical' flag is checked then the report will display all of the Inspection Batches against the Features that have at least one Inspection Condition included in the Inspection Conditions for the Inspection Type specified in the **Bridge Condition Indicator System Settings**.

BCI Scores are stored as Observation Types against the Span Features. The Structures Condition Indicator List will get the Observation Types specified on the Bridge Condition Indicator System Settings and display the BCI Scores.

The report will calculate the BCI scores for the parent Feature, Feature Group and Overall BCI Score for all Span Structures, based upon the BCI Scores of the Span Features.

If the Observation Types defined on the Bridge Condition Indicator System Settings screen are not present against the Span Feature, the BCI Scores will be displayed as blank.

Note: If any of the Span Structures within the Inspection Batches returned by the Structures Condition Indicator List do not have the BCI Observation Types specified against them, then these will be added and their Score calculated automatically. This is done for all of the Span Structure's historical Inspections Batches as well regardless of whether the Structures Condition Indicator List returned them in the filter criteria. The automatic calculation of the BCI Scores will only occur if the BCI Average and BCI Critical Observation Types are specified on the Bridge Condition Indicator System Settings, and these same Observation Types exist against the Feature Group of the Span Structure.

Structures Condition Inspection Report

(Condition Survey - BCI Reports module)

The Structures Condition Inspection reports prints out previously completed Inspections in a Pro Forma style report. Conditions are recorded whether a Defect has been raised or not. If a Condition has not been inspected the current value recorded against the Feature will not be displayed and instead the 'Not Inspected' grade will be shown. Conditions added to the Feature since the Inspection will not be shown on the report.

When the 'Most Recent Inspection' checkbox is checked on the filter only Inspection Features with no Expiry Date will be selected, otherwise all matching Inspection Features are returned.

Inspector's Comments, Engineer's Comments and Work Required fields will also be populated from the Conditions existing on the Feature as per the Observation Types specified on the Bridges Pro Forma System Settings screen.

The filter for each report allows the selection of the relevant Structure to be printed, and the detail of each report is picked according to the values set in the Bridge Inspection Pro Forma System Settings. Additionally the following settings need to be set:

- For **Bridges**:

System Settings	Field Name
Bridge Condition Indicator System Settings	Bridge Span > Feature Group
	Bridge Span > Span Length Measurement
	Bridge Span > Span Width Measurement
Structures Toolkit Export System Settings	Bridge > Feature Group

- For **Retaining Walls**

System Settings	Field Name
Bridge Condition Indicator System Settings	Retaining Wall Panel > Feature Group
	Retaining Wall Panel > Length Measurement
Structures Toolkit Export System Settings	Retaining Wall > Feature Group

- For **Sign/Signal Gantry**

System Settings	Field Name
Bridge Condition Indicator System Settings	Sign/Signal Gantry Span > Feature Group
	Sign/Signal Gantry Span > Length Measurement
	Sign/Signal Gantry Span > Width Measurement
Structures Toolkit Export System Settings	Sign/Signal Gantry > Feature Group

Site History Report

The Site History Report will give details of all activities on the selected Site(s).

The report will return data on the selected Site(s) for the date range specified in the 'Effective From and To' fields. Action Officer and Plot numbers may also be optionally entered.

The Action Officer can be omitted from the Report by unchecking the 'Display Action Officer' check box.

The second section of the filter allows the User to specify the Sites to be included in the report. All fields are optional and leaving these fields blank will return results for all live Sites in the database.

Condition Survey

Check this to return a list of all inspections carried out, and Defects raised, within the date range specified at the top of the filter. The date referenced is the 'Inspected' date entered on the Inspection Batch Feature.

Selection may be limited by Batch number ranges and or Batch description.

Customer Services

Check this to return the details of Enquiries raised within the date range specified at the top of the filter. The date referenced is the 'Logged' date for the Enquiry. The report will show Enquiry Number, Logged By and date, Service, Subject, Classification, Location, Description and Contact. The default selection is for archived (not outstanding) Enquiries. This may be changed by selecting 'Both' or 'Yes' from the 'Outstanding' filter drop down list. The selection may be limited by Service, Subject, Classification or Status.

Note: Enquries not linked to a Feature but present on Site being searched will always be retireved.

Maintenance Management

Check this to return the details of Jobs on the selected Features. Jobs will be included if they overlap with the date range specified at the top of the filter, in other words if they are raised during or before the specified date range, and if they have an Actual Completion Date during or after the date range, or no Actual Completion Date.

Note: This means that Jobs in Confirm that are very old or no longer relevant, but have no Actual Completion Date, will show on the report, until they have been Archived.

The filter default is for selection of Live Jobs; this may be changed by selection from the 'Status' drop down list. The selection may be limited by Job or Order number ranges, Contract, Priority and Job Status. The report shows Description, Location, Officer, Priority, Status and Date.

Street Works Inspections

Check this to return Inspection details within the date range specified at the top of the filter. The date referenced is the 'Inspected' date. The report includes Inspection Date, Inspection Notes and Defect notes, and Signing Lighting and Guarding Inadequacies. The selection may be limited by Organisation and Ref Number, Site number, Category, Outcome and Outcome Status.

Defect Default Priority List

This list will display all Default Priorities which have been set up in the Defect Default Priorities lookup. Combinations of Defect Category and Classification which have not been set with a Default Priority will not be displayed by this report.

Condition Survey Lookups

The Condition Survey Lookups provide the libraries and settings for Condition Survey.

Action Officer

Action Officers have responsibility for certain actions carried out within Confirm. For instance: Jobs are assigned to Action Officers, and each stage (Status) of the Job's life is associated with an Action Officer.

Action Officers can be linked to Users, so that when a User logs in to Confirm they are recognised as a particular Action Officer. Action Officers need not be users - they can be created independently of User logins.

Code:	Up to four alphanumeric characters
Inactive:	Tick this to prevent new records from being assigned to the current Action Officer. Confirm will not allow an Action Officer to be 'Inactive' if it is used on the Enquiry Subject or Enquiry Subject Site records. If an Action Officer needs to be active again, untick this setting. If the linked User is also 'Inactive' Confirm will request that the User is activated first before the Action Officer can be.
Name:	Up to 30 characters
Telephone Number:	(Optional) Up to 20 alphanumeric characters
External Ref.	(Optional) Up to 20 alphanumeric characters. A reference used by external systems to identify this Action Officer
Corresponds to User:	(Optional) Select a User to link this Action Officer to. By linking an Action Officer to a User, Confirm will know which Action Officer to use by default when using various entry screens within Confirm. The User ID can be typed directly into the field or the pick button can be used to search for a User to link the Action Officer to. **System Administration\Security** **Note:** Contractor Users are not able to remove the value in this field.
Work Group:	Where the Action Officer is linked with a User - the Work Group to which the User belongs is entered and the field cannot be edited. Where an Action Officer is not linked with a User - a Work Group must be selected. The drop down list references the Work Groups list. **System Administration\Security**
Enquiries Data Key:	Setting this value gives Enquiries assigned to this Action Officer additional security.

Where an Enquiry is assigned to an Action Officer with this Data Key set, only Users with Data Key access to the Enquiry Subject and the assigned Action Officer's Enquiries Data Key will be able to view the Enquiry.

Inspecting Officer: (Performance Monitoring module)

Where Monitoring Batches are created automatically at Request Checking, the Action Officer associated with the last Job Status log on the Job is used to determine who should be the Inspecting officer based on the entry in this field.

Device Settings

Default Priority: (Optional - ConfirmConnect® - Condition Survey)

Enter the Priority that will be assigned to Jobs raised through the 'Fast Defect' functionality in Condition Survey on the device.

Device Data Key: (Confirm Connector)

Optionally specify a Data Key to restrict which Users will have this lookup available on the device. Please see **the Confirm Connect manual** for further details.

Note: This lookup will still be transferred, it will simply be hidden from the User when logged into the device.

Device Job Officer: (Jobs in the Field module)

Check this to set the current Action Officer as an Officer which will have 'Job' tasks sent to the device when they transfer their tasks.

Task Redirect Officer: Redirect Tasks to the selected Officer in case of absence. It is only possible to redirect to an Officer in the same Workgroup.

Note: It is possible to redirect multiple Officers to the same Officer. If the Officer has other Officers redirecting to them, it will not be possible to redirect this Officer to another. Use the Action Officer List to view any existing Officer Redirects.

Street Works Settings

Route: (Optional - Street Works module)

Select a Route. The pick list references the Site Route lookup.

Site Register\Site Lookups\Operational Lookups

Note: The Route provides a default entry for Inspection Sampling in Street Works. It is not relevant in any other context.

No of Inspections: (Optional - Street Works module)

Enter the maximum number of Sampled Programmed Inspections an Action Officer may have outstanding at any time. This limit does not include non Sampled Programmed Inspections, such as Defect Follow Up Inspections, which are already assigned to the Action Officer.

Note: Street Manager Performance Based Inspection Sampling for Category B and C will be downloaded and automatically assigned to an Officer using the following rules: -

- If the Sampled Inspection's Site is in a Route, which is assigned to one or more active Officers, then the Officer with the highest remaining number of Inspections will be allocated this Inspection.
- Should more than one Officer, have the same remaining number of Inspections, the inspection will be allocated by Officer Code.
- If the Sampled Inspection's Site is not in a Route or there are no Officers assigned to a Route, that covers the Site, then the Officer will be set to the **Sample Inspection Default Action Officer** (Confirm Web Settings).

  Note: An empty value is treated as 0 and the first Inspection allocated to the Officer is exceeding their quota.

Organisation: (Optional - Street Works module)

Enter an Organisation to provide a default entry in the 'From' field of the Street Work Notice window for this Action Officer

Note: The default is only provided where the Action Officer is linked to a User, since the identification of the Action Officer is made by reference to the User who is currently logged in.

Labour Type: (Optional - Works Management module)

Select the Labour Type for the Action Officer if they are the member of a Gang. The pick list references the Labour lookup.

Works Management\Works Costing\Works Costing Lookups

Cost per hour: (Optional - Works Management module)

This will override the Cost per hour specified in the linked Labour Type. Cost per hour on Action Officer is multiplied with Cost per hour multiplier on the Labour Type Lookup to determine the Action Officer’s labour rate.

Action Officers can be assigned an area of specialism defined by Feature Groups, with the Asset Specialist module. Please see the **Specialist** section for details.

Action Officer - Specialist

(Asset Register - Asset Specialists module)

(Not used by Confirm Mobile or ConfirmConnect®)

Action Officers can be made 'Specialists'. This is defined as a list of Feature Groups they may modify. They will be able to view all Features their Work Group allows them, but they will only be able to modify those Features that are in the Feature Groups included in their 'Specialism'.

To set up Specialist Action Officers:

Select the required Officer in the Action Officer form and click on the Specialist button. The Officer Feature Group Specialist form for that officer is then displayed.

Tick the Feature Groups that this Officer should have rights to modify.

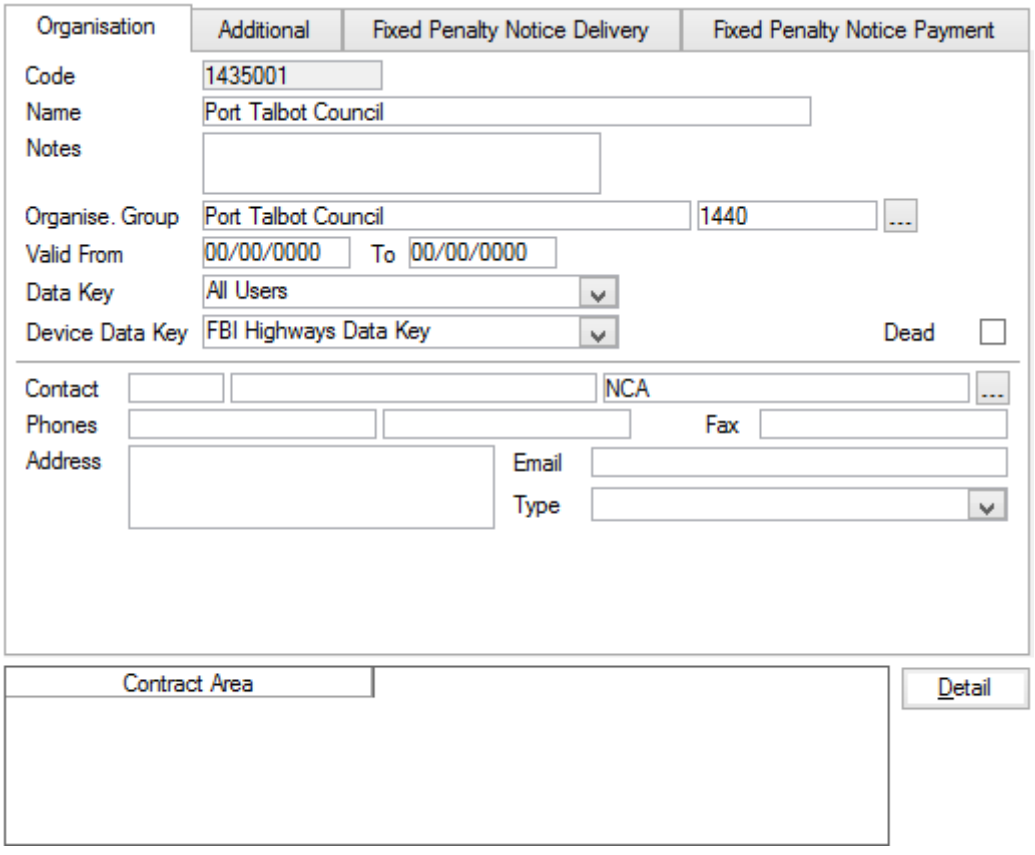
Feature Group Security must be enabled in the Feature Systems Settings by checking the 'Enable Feature Group Security' setting.

Asset Register\Feature Lookups

Note: This does not effect feature editing on Confirm Mobile or ConfirmConnect®. This would be achieved using Data Security Keys instead.

Organisation

Organisation records are created to store information about the Street Naming Authority, Highway Authority and Utility companies. Each record contains contact details and information about how data can be transferred to them. Organisation records are automatically created from the NSG Import import process and EToN OD transactions.



Code:	Up to 8 alphanumeric characters.
Name:	Up to 50 characters.
Notes:	A free text field.
Group:	Enter of Select from the pick list. The pick list references the Organisation Group lookup.

Note: When an Organisation is exported via EToN all Organisations part of the same Group will be exported.

Valid From/To: Dates when this record is valid.

Data Key: Set a Data Security Key in order to make this record available to Users with rights to this Data Security Key through their Data Security Group.

Select from the drop down list. The drop down list references the Data Security Key library.

System Administration\Security

Device Data Key: (Confirm Connector)

Optionally specify a Data Key to restrict which Users will have this lookup available on a mobile device.

Please see **the ConfirmConnect® manual** for further details.

Contact: The Contact can be entered directly into the fields, or picked from the Contact lookup. The Contact does not have to be present in the Contact lookup in order to be entered into these fields. Contact details manually entered will be automatically entered into the Contact lookup when the Organisation is saved.

If the Contact Lookup Adaptor module is active Confirm can link to an external Contact/Customer database when searching for a Contact. The external Contact database will merge with the results of the Confirm Contact Lookup, updating any details where the Contacts are the same as each other (identified by having the same Contact Reference). Once a Contact has been selected in the form and saved, the selected Contact will be updated within Confirm with the details from the external database if it already exists, if not then a new Contact will be created.

Phone: Optional text fields.

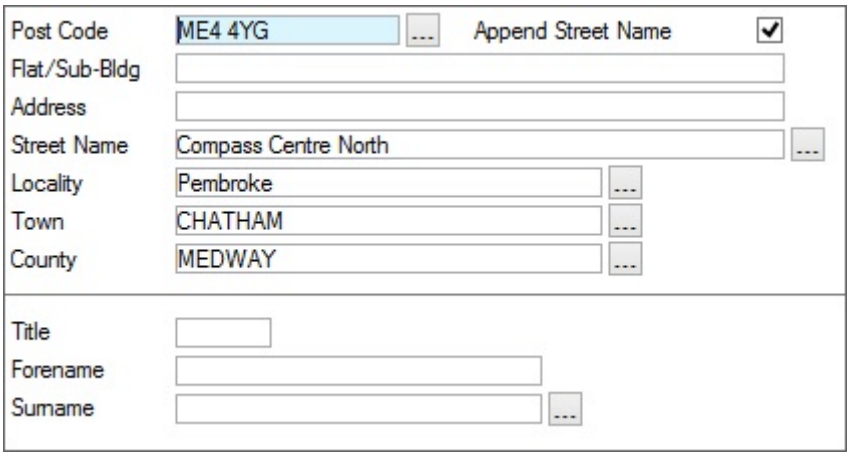
Fax:

E Mail:

Note: When exporting the Organisation details via EToN or to an OD XML file, the Phone Number is mandatory and must be supplied in a valid format e.g. 01634 880141.

Address: If the Contact Name was selected from the Contact Lookup, then associated Address information will be automatically entered into this Address field.

If no Address is entered, or the Contact was not entered from the Contact lookup, then placing the cursor in the Address field will launch the Address form.



Type the Address details into the fields. Click on OK to place the Address information into the Address field of the Organisation screen.

Note: When exporting the Organisation details via EToN or to an OD XML file, the Address must have a valid Postcode, and a minimum of 2 lines and a maximum of 5 lines specified.

Type: Optional field.

If the Contact Name was selected from the Contact Lookup, then associated Type information will be automatically entered into this field.

If no Type is entered, or the Contact was not entered from the Contact lookup, select an appropriate Type from the drop down list. The drop down list references the Customer Type lookup.

Asset Maintenance\Maintenance Lookups

Please see the Street Works manual for details of the additional tabs and buttons available on the Organisation screen.

Detail button

Contract areas can be (optionally) added to this record. This will restrict this Organisation to Users with rights to the Contract Area, if 'Restrict Organisations by Contract Area' is set in the **Street Systems Defaults**.

Organisation Group

All Organisations which are created in Confirm must be assigned to an Organisation Group. These are useful for filtering and reporting purposes.

When exporting Operational District (OD) data via EToN, all Organisations will be exported which are part of the same Group.

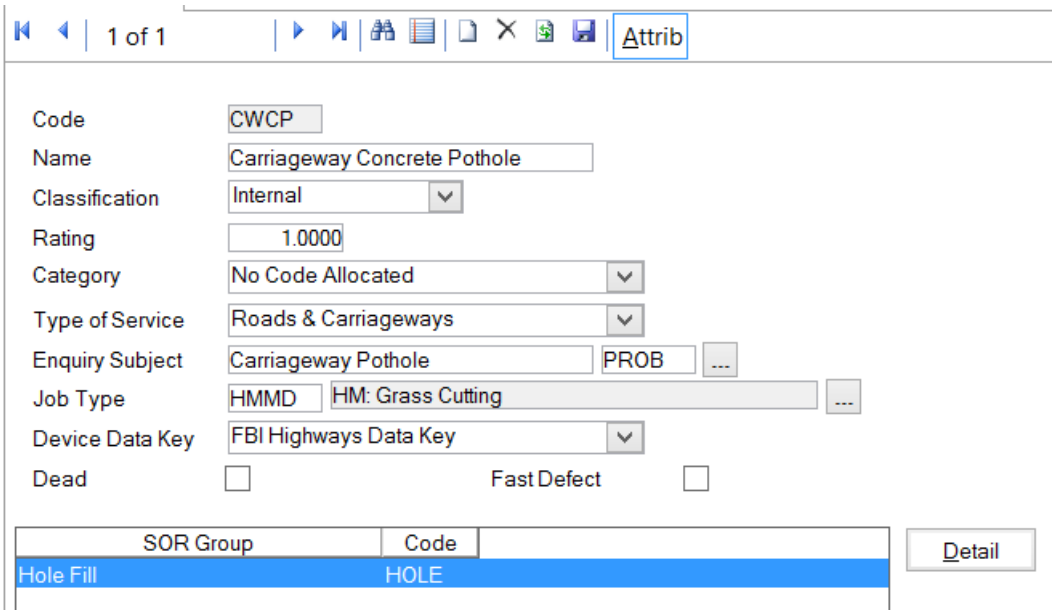
Code: Up to 8 characters

Name: Up to 50 characters

Defect Type

Defect Types define problems relating to Features, and will usually lead to some sort of action to resolve the problem. The action will depend on whether the Defect classification:

- Internal Defect Types are those which will be resolved by raising work within Confirm. Jobs may be raised on Internal Defects. They can have SOR Groups added to specify the work to be done to resolve the Defect.
- External Defect Types are the responsibility of another Organisation. External Defects will be resolved by sending an External Defect Notification to the responsible Organisation.
- No Defect Found Defect Types may be used to make a positive affirmation that no Defect was found at the time of inspection. These Defects do not need to be resolved, and no actions may be carried out from them.



Code: Up to 4 alphanumeric characters.

Name: Up to 30 alphanumeric characters.

Classification: The classification defines the type of Defect and restricts the actions that may be carried out from the Defect as described above.

Select from: 'Internal', 'External' or 'No Defect Found'.

Rating: An optional rating system using numbers to define the severity of the Defect. A 'Severe Defect' threshold can be defined in the **Condition Survey System Settings** for reporting purposes.

Category: Select from the drop down list the Category for this type of Defect. The drop down list references the **Defect Category lookup**.

Type of Service & Enquiry Subject: Defect Types can optionally be linked to a Type of Service and Enquiry Subject. Select an Enquiry Subject to automatically set the Type of Service. It is not possible to only specify an Type of Service.

Once set, the Action Officer of an 'Internal' Defect's Job will be set by the Enquiry Subject Site rules. If no rules exist then the Enquiry Subject's Action Officer will be used.

If these fields are not set, the Action Officer of the Defect's Job will default to the currently logged in User. If the current User is not linked to an Action Officer then this will remain blank.

This will also be used in the Customer Services module to set the Defect Type when a Defect is raised from an Enquiry. This will only be set if there is only one Defect Type assigned to the selected Service / Subject.

Job Type: Select a Job Type which will be used as a default for any Job created from a Defect of this Type. This lookup references the Job Type Lookup.

Asset Maintenance\Maintenance Lookups

Device Data Key: (Confirm Connector)

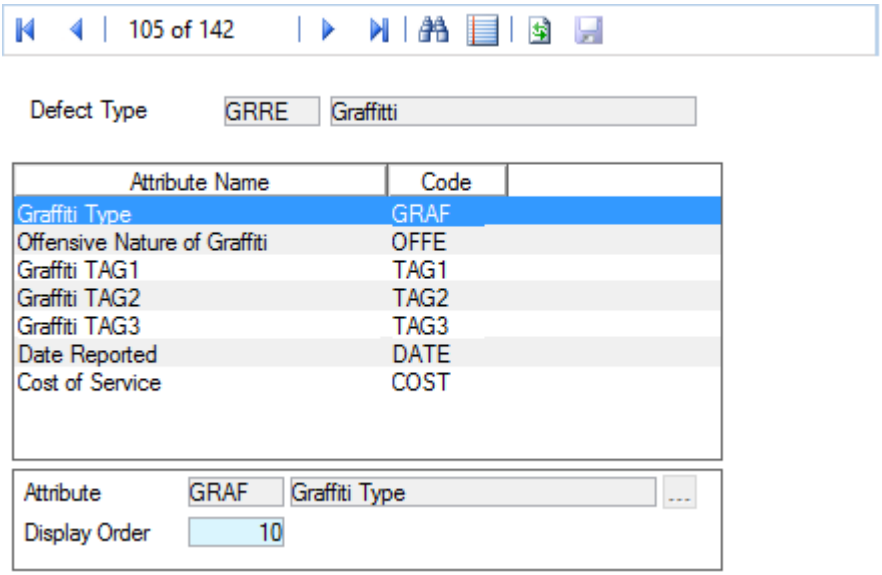
Optionally specify a Data Key to restrict which Users will have this lookup transferred to the mobile device.

Dead:	Set the 'Dead' flag to archive Defect Types.
Fast Defect:	Set the 'Fast Defect' flag to to enable a Defect Type to be chosen as Fast Defect on ConfirmConnect® when doing route survey

Attrib button

(0510 - Defect Attributes)

Click on the 'Attrib' button to add Operational Attributes to the Defect Type. These define the extra data that should be recorded for a Defect of this type. Once Attributes have been defined, the 'Attrib' button on the Defect screen will be enabled when the Defect Type is selected.



Attribute:	Enter the Attribute Code, or select from the Pick List the Operational Attribute that is to be recorded. Extra Attributes can be added with the 'Add' button. Adding extra Attributes will not affect existing Defects of this type. Attributes can be removed with the 'Remove' button. Removing an Attribute from the Defect Type will also remove it from any Defects that currently have the Attribute set to its 'Default' value. Confirm will ask the User if any Attributes which are not currently at the 'Default' value should be deleted.
Display Order:	Set the order in which the Attributes will be displayed on a Defect of this type.

Defect Type - Detail button

Click on the 'Detail' button to optionally add SOR groups. SOR Groups may be used to create Jobs. They will therefore only be relevant to 'Internal' Defaults.

Defect Type:	Copied from the Defect
SOR Group:	Select from the drop down list.

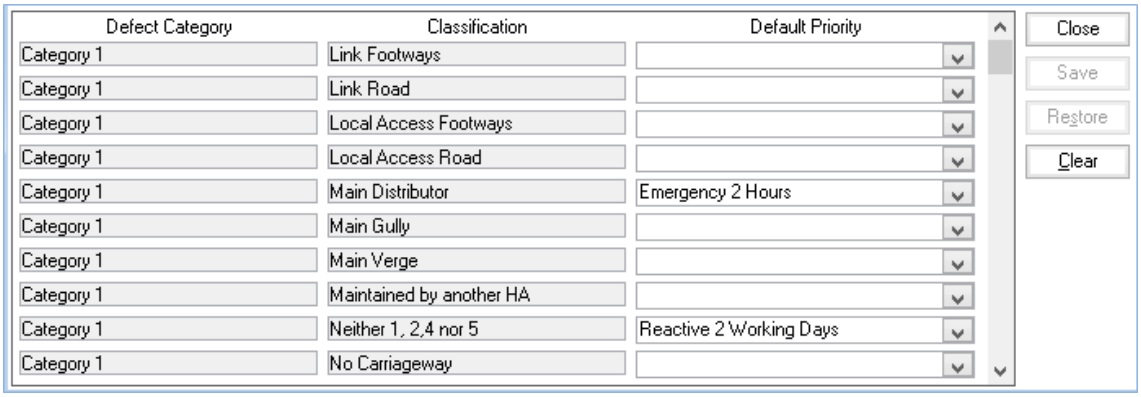
Defect Category

Defect Types can be grouped by creating Defect Categories. These Defect Categories can then be used to set a default Priority which will be used when raising Defects. This is configured in the **Defect Default Priorities** on page 48 .

Code:	Up to 6 alphanumeric characters.
Name:	Up to 30 alphanumeric characters.
Notes:	Free text field to provide further information on this Category.
Dead:	Tick this to archive this Defect Category. If this is ticked and there are live Defect Types with this Category then Confirm will warn the User that the relevant records in the Defect Default Priorities screen will be deleted.

Defect Default Priorities

The Priority of a Defect can be set by default for the User by setting up this matrix based on the Defect Category and Classification. The Defaults will be used when raising a Defect directly in the Defect screen,when raising FeatureDefect from IoT Connector and when using ConfirmConnect®.



Defect Category & Classification:	All Defect Categories will be listed against each available Classification.
Default Priority:	Optionally select a Default Priority which will be used when a Defect Type carrying this Category is raised on a Feature which carries this Classification.

Operational Attribute Types

(Modules 0510 - Defect Attributes, 0715 - Job Attributes, 1416 - CS - Extended Attributes)

The Operational Attribute Type lookup allows user defined Attribute Types to be set up to store Text, Number, Date and Pick List values against records. These Attribute Types may be used for the following types of operational records:

- Enquiry Attributes (Module 1460). Default Attributes for an Enquiry are specified on the Enquiry Subject.
- Defect Attributes (Module 0510). Default Attributes for a Defect are specified on the Defect Type.
- Job Attributes (Module 0715). Default Attributes for a Job may be specified on the Hazard Type if Module 2310 is present.

Code:	Supply a code of up to four characters.

Name: Supply a name for this Attribute which will be displayed to the user.

Description: An optional, free text field. This value is used in ConfirmConnect® to give further information about the Attribute Type in order to aid the setting of the Value.

Parameter Type: Select from:

Text: Select this to provide a free text field for the entry of values.

Selecting 'Text', provides the 'Must change Default' check box. Check this to force an entry to be made against this Attribute type.

For a Text entry you must also specify default text (what will be entered against the Attribute until specific text is entered).

Date: Select this to provide a date field for the entry of values. Selecting 'Date', provides the following checkboxes:

'Must change Default' - check this to force an entry to be made against this Attribute type.

'Default to System Date' - check this to enter the current date when this attribute is set.

Number: Select this to provide a number field for the entry of values. Selecting 'Number', provides the following checkbox:

'Must change Default' - check this to force an entry to be made against this Attribute type.

And

Default Value - enter the value to be entered by default when using this Attribute.

Min and Max fields - you may limit the values that can be entered by entering minimum and maximum values.

Pick: Select this to set up a Pick list from which the user must select a value. Selecting 'Pick' provides the following checkbox:

'Must change Default' - check this to force an entry to be made against this Attribute type.

You must also provide a default value for the pick list.

To enter values for the Pick list, click on the Detail button and use the Enquiry Attribute Value form to enter a code and a description for each of the values to be included in the pick list.

'**Priority multiplier on ConfirmConnect®**' in Attribute Value form is a numeric multiplier value which is used to calculate the defect priority in ConfirmConnect®.

Valid Range for priority multiplier: 0.01 till 9999999.99 (both values inclusive).

If this value isn't populated than the corresponding attribute won't be considered for **Defect Priority Calculation**.

Note: Pick attributes can be configured to allow multiple pick values to be selected from within Confirm Web Lookup Manager.

Category: Select the Category under which the Attribute Type will be shown in ConfirmConnect.

Note: Operational Attribute Categories will only display for Jobs in Confirm-Connect. Other task types will continue to show all attributes in a list.

Must Change Default: Select this to make an Attribute mandatory. This means that Confirm will prevent the save of an Enquiry, Defect or Job record where the Attribute is still set to its Default Value.

ConfirmConnect will prevent the sending of a task update if the attribute is set to the default value.

ConfirmConnect will ignore the attribute if the value is blank. Instead, the existing value will be retained when uploaded to Confirm. This is true even when Must Change default is enabled and contains a blank value.

Mandatory on ConfirmConnect® Jobs: (0715 - Job Attributes)

Set Mandatory Job (operational) attributes in ConfirmConnect® can be used to enforce when officers must enter a value on the chosen attributes in order to progress the Job.

Mandatory, for this setting, means that if the value is blank or set to the default value, then the Officer must enter a new value.

Note: Changing the default value is enforced even when the Must Change Default option is not enabled.

When this option is set to any value, other than Off, the attribute value will be cleared on the initial download of the Job. This means the officer will not see a value in this attribute when they first open the Job.

When an option below is selected, the corresponding button on the Job form in ConfirmConnect will be disabled and the attribute values will have been cleared:

- Off - Not Mandatory. Job may progress.
- On Start - Start button is disabled.
- On Start and Resume - Start and Resume buttons are disabled.
- On Pause and Complete - Pause and Complete buttons are disabled.
- On Complete - Complete button is disabled.

For example: When "On Start and Resume" is chosen, the Attribute value will be cleared and the Start button will be disabled preventing the Job from Starting and, if the Job was previously Paused, the Resume button will be disabled because the Attribute value will have been cleared upon Starting the Job.

The officer will also see warning messages indicating why the Job may not be progressed.

Show Inline on ConfirmConnect®: (Optional)

Only valid on Pick Operational Attribute Types containing three or fewer values. When checked the Attribute Type values display on ConfirmConnect® as an inline selection instead of a Pick List.

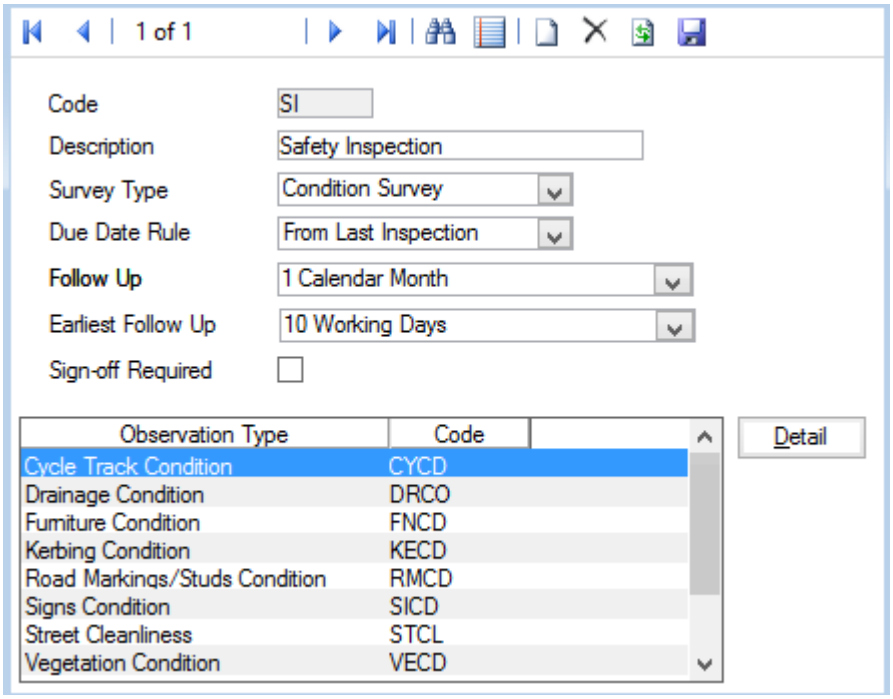
Default Value: This value will be used as the default value when a record is created. For a pick Attribute this defaults to 'NK' and 'Not Known' but the Code and Description may be changed.

For information on the configuration of Dependent Attributes, please see **Dependent Attributes**

Attribute Types can be marked as dead or have a Data Security Key set against them. These values can be set using the Lookup Manager in the Confirm web interface. Only non-dead attributes and attributes that a user has security access to can be added to Jobs, Defects and Enquiries.

Inspection Type

The Inspection Type defines the Inspection and sets the Observation Types that will be available for the Features included in the Inspection Route.



Code: Up to 4 alphanumeric characters.

Name: Up to 30 characters.

Survey Type: (ConfirmConnect®)

Determines the type of Survey, Select from:

'Condition Survey' - Select this for Inspection Types where the Inspector will be grading the current condition of Features.

'Asset Survey' - Select this for Inspection Types where the Inspector will be reviewing and updating Feature Details.

Due Date Rule: Confirm can calculate when Inspections are due for specific Features based on the Inspection Type. How the due date is calculated can be chosen. Select from:

- 'From Last Inspection' - The Next Inspection Due Date will be set from the Last Inspected Date plus the selected Follow Up, irrespective of the current Due Date and Inspection Due Date will not be stored against the Inspection Batch Feature.
- 'From Last Due Date' - The Next Inspection Due Date will be set to the current Due Date plus the selected Follow Up, irrespective of the Last Inspected Date.
- 'Later of Last and Due' - The Next Inspection Due Date will be set to the current Due Date plus the selected Follow Up if the Last Inspected Date is

before the current Due Date, or it shall be set to the Last Inspected Date plus the selected Follow Up if Last Inspected Date is after the current Due Date.

- 'Earlier of Last and Due' - The Next Inspection Due Date will be set to the current Due Date plus the selected Follow Up if the Last Inspected Date is after the current Due Date or it shall be set to the Last Inspected Date plus the Follow Up if Last Inspected Date is before current Due Date.
- 'None' (Default option) - Confirm will not calculate when Inspections are due for this Inspection Type and Inspection Due Date will not be stored against the Inspection Batch Feature.

Follow Up: Select the period of time that Inspections of this Type should be performed. The drop down list references the Follow Up lookup.

Asset Maintenance\Maintenance Lookups

Earliest Follow Up: Used to determine if the follow up period should be applied to the Due Date in the scenario where the Inspection was completed earlier than the **Due Date Rule**. This can happen if the inspection was allocated to the user via the Select Features for Inspection utility in Confirm.

Example:

Due Date rule = Last Due date, Follow up = 1 month, Earliest Follow up = 7 days

If the Inspection is Due on the 1st of October and the Select Features for Inspection utility was used to allocate the Inspection on the 20th of September, the inspection would appear on the device and could be completed. If this happens, the 20th of September is outside of the Earliest follow up period of 7 days and would not advance the due date by 1 month, leaving it as the 1st of October. Additionally, the Inspection batch created by this inspection would also list that no change was made. However, If the Inspection was assigned on the 24th of September, this is within 7 days and would advance the due date by 1 month.

Note: If **Earliest Follow up** is not specified then ConfirmConnect® will default to 25% of the **Follow Up** field's period.

Only applicable for ConfirmConnect®:

ConfirmConnect users who use the **Select Routes** option on the menu button or the **What's Going On Here Due Inspection** and **Routes** options will only see Inspection Features that are not already assigned and where their due dates are within this tolerance value.

Sign-off Required: This setting specifies whether Inspections of this Inspection Type require signing-off after being completed. Unsigned off completed Inspections do not update the current Conditions of the Feature until the Inspection has been signed-off.

The Inspection Batch can be signed off by a second Inspector who has the following:

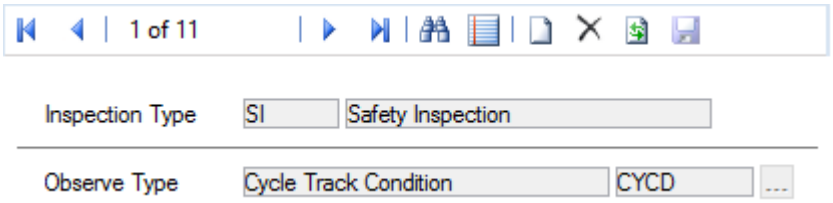
- The logged in User has rights to 'Can Sign-off Inspection Batch (Security)' in **System Administration\User Security**.
- The logged in User is different to the User associated with Action Officer who carried out the Inspection.

Note: Checking the 'Sign-off Required' setting will set the 'Sign-off Date' and 'by' fields for all existing completed Inspection Batches of this Inspection Type

whose 'Sign-off Date' is currently blank. The 'Sign-off Date' will be set as the same date as the Inspection Batch's 'Completion Date', and the 'by' field will be set to the current logged in User.

Inspection Type - Detail button

Click on the 'Detail' button to add Observation Types. Observation Types included against the Inspection Type will automatically be added to Inspection Items in a Batch using a Route linked with this Inspection Type (where the Observation Type has been linked to the appropriate Feature Group).



Inspection Type:	Copied from the Inspection Type
Observe Type:	Select from the pick list. The pick list references the Observation Type lookup. **Asset Register\Feature Lookups**

Inspection Route

An Inspection Route lists all the Features, in route order, that will be inspected during the course of an Inspection cycle. An Inspection Route Feature must be unique within an Inspection Route.

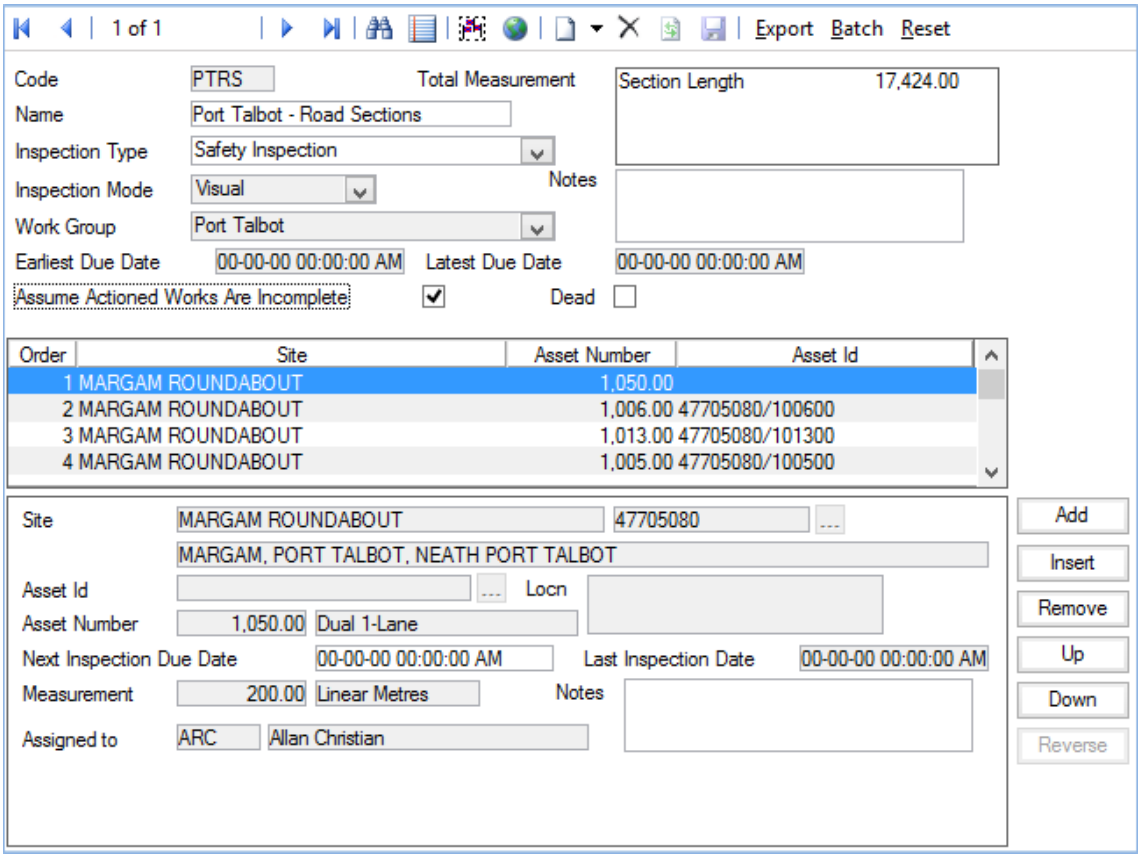
Inspection Routes can be set as either 'Visual' or 'Machine'.

- 'Visual' - Both Linear and Discrete Features (determined from Group Class on Feature Group) can be selected for an Inspection Route. These routes can be selected for Asset/Condition Survey.
- 'Machine' - Only Linear Feature Group Features can be added to these Inspection Routes - available with 'PMS - Observation Data' module (4010). These routes cannot be selected for Asset/Condition Survey.

Inspection Routes can be saved as Named Selections for use in other areas of Confirm.

Visual Inspection Routes

This is the Inspection Route in 'Visual' Inspection mode.



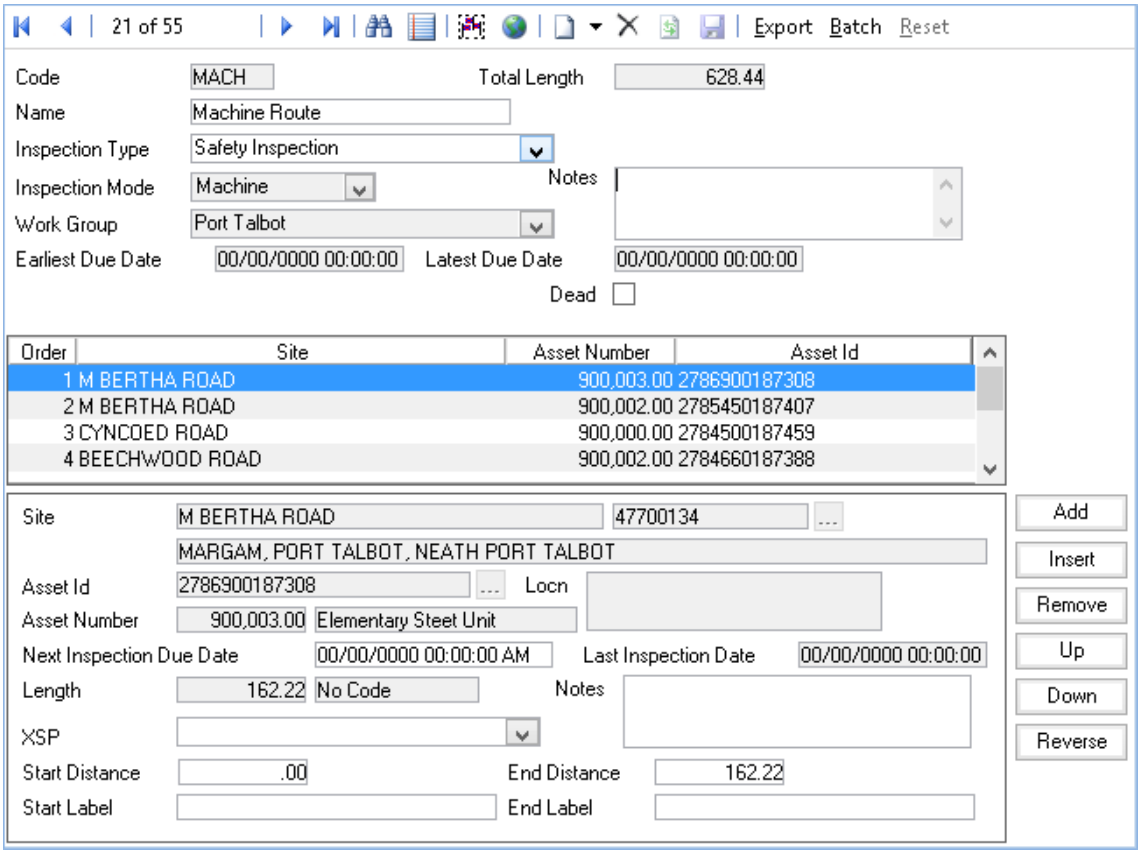
Code:	Up to 4 alphanumeric characters
Name:	Up to 30 characters
Inspection Type:	Select from the drop down list. The drop down list references the **Inspection Type Lookup**.
Inspection Mode:	Select from 'Visual' or 'Machine' Once the route has been saved, it will not be possible to change the Inspection Mode.
Work Group:	Work Group:Inspection Routes are restricted by Work Group throughout Confirm. If the “Can specify Workgroups for Routes” user security option is enabled the Work Group can be changed when copying or entering a new Inspection Route, and Inspection Routes belonging to other Work Groups can also be viewed. By default the Work Group will be set to the current users Work Group.
Earliest Due Date:	Displays the earliest Due Date of all Features on the Inspection Route.
Latest Due Date:	Displays the latest Due Date of all Features on the Inspection Route.
Assume Actioned Works are Incomplete:	(Condition Survey - FBI module) Legacy setting which is no longer used by ConfirmConnect®.
Total Measurement:	A summary of the measurements of all the Features included on the Route.
Notes:	A free text field.
Dead:	Check this to flag this Inspection Route as 'Dead'. It is not possible to flag an 'Adhoc' Inspection Route as dead.

Site:	Select from the pick list. The pick list references the Site library. The Town, Locality and County is displayed in a read only field below. **Site Register\Site**
Asset Id:	You may select the Feature by entering the Feature Id (if the Feature has an entry for Feature Id in the Feature Library) **Asset Register\Feature**
Plot Number:	Enter the plot number or select from the pick list (the plot number will be automatically entered if the plot has been selected by entering the Feature Id)
Next Inspection Due Date:	Displays the Date which the current Feature is next due for Inspection. This is calculated from the previous completed Inspection and will be set according to the rule selected on the **Inspection Type Lookup**.
Last Inspection Date:	Displays the Date which this Feature was last Inspected on this Inspection Route.
Measurement:	Copied from the Feature - cannot be edited
Assigned to:	The Action Officer to whom this Inspection Route Feature has been assigned (in 'Select Features for Inspection') is displayed and cannot be changed. **Note:** The 'Assigned to' field will be cleared when the Inspection Route is reset.

When a Visual Inspection Route is selected for an Inspection batch, the Features to be inspected, and the Inspection Type are automatically set for the batch.

Machine Survey Routes

This is the Inspection Route in 'Machine' Inspection mode.



Code: Up to four alphanumeric characters

Name: Up to 30 characters

Inspection Type: Select from the drop down list. The drop down list references the **Inspection Type Lookup**.

Inspection Mode: Select from 'Visual' or 'Machine'

Once the route has been saved, it will not be possible to change the Inspection Mode.

Work Group: Inspection Routes are restricted by Work Group throughout Confirm. If the “Can specify Workgroups for Routes” user security option is enabled the Work Group can be changed when copying or entering a new Inspection Route, and Inspection Routes belonging to other Work Groups can also be viewed. By default the Work Group will be set to the current users Work Group.

Total Length: A summary of the lengths of the Features included on the Route.

Notes: A free text field.

Earliest Due Date: Displays the earliest Due Date of all Features on the Inspection Route.

Latest Due Date: Displays the latest Due Date of all Features on the Inspection Route.

Dead: Check this to flag this Inspection Route as 'Dead'. It is not possible to flag an 'Adhoc' Inspection Route as dead.

Site: Select from the pick list. The pick list references the Site library. The Town, Locality and County is displayed in a read only field below.

Site Register\Site

Asset Id:	You may select the Feature by entering the Feature Id (if the Feature has an entry for Feature Id in the Feature Library) **Asset Register\Feature**
Plot Number:	Enter the plot number or select from the pick list (the plot number will be automatically entered if the plot has been selected by entering the Feature Id)
Next Inspection Due Date:	Displays the Date which the current Feature is next due for Inspection. This is calculated from the previous completed Inspection and will be set according to the rule selected on the **Inspection Type Lookup**.
Last Inspection Date:	Displays the Date which this Feature was last Inspected on this Inspection Route.
Length:	Copied from the Feature - cannot be edited
XSP:	Select the required Cross Sectional Position. This will be defaulted from the Network System Setting 'Inspection Route XSP' but can be overridden.
Notes:	A free text field.
Start/End Distance:	Select the length of the selected Feature that is to be Inspected. The End Distance will default from the Section values but can be overridden.
Start/End Label:	When a Feature is added to a machine Inspection Route which has Node information then the Node code at the appropriate change will be copied into the appropriate Start / End Reference Label field(s).

Inspection Route - Reset button

(Visual Inspection Routes)

When the Inspection Cycle is complete - that is, all the Inspection Items in the Inspection Batch have an 'Inspected' date logged against them; the Inspection Route must be reset before Features in it can be re-inspected in order to begin the cycle again.

To reset the Inspection Route, click on the 'Reset' button.

If not all the Features on the Route have been inspected, a warning will be displayed and Reset of the Route will generally be prevented. However, a User with the '*Can Reset Incomplete Inspection Route (Security)*' security privilege is able to force the reset of an Inspection Route even though Inspections are outstanding.

Confirm can be configured to not set Inspection Route Features as 'Complete' which means that they do not need to be 'Reset'. Please refer to the **Condition Survey System Settings** for further information.

Inspection Route - Batch button

The Batch button displays a filter which allows Features to be added to the Inspection Route in one step.

Filter options include:

Location Contains:	Enter a text string contained in the location field of the Features to be selected.
Include Inventory:	(Inventory module)

All Inventory Items will be listed and may be checked. This will include Features linked through the Inventory Items in this Inventory Type to those being selected in the Route.

Inspection Route Export

Select the 'Export' button to export the route.

Import file (.txt) format exports the route in import ready format. These files may be used for importing inspection routes and features after making any required changes to file data.

The following RTE format export are available only for ‘Machine’ inspection routes. Select from:

- 'TTS Route' (*.rte)
- 'SCANNER Route' (*.rte)
- 'DG Route' (*.lst)

The RTE format has the facility to include node-coordinates. These will be obtained from the easting and northing fields for the Node that connects to the Feature at its start chainage, and will not be determined from the Feature's GIS representation if it has one. If coordinates cannot be found then zero values will be outputted.

If a Section Label cannot be determined for a survey lane then a warning message will be presented and no further processing will continue.

The XSP value of the survey lane will be obtained from the Inspection Route Feature. If the XSP is not supplied then an XSP will be obtained from 'Inspection Route XSP' in the Network System Settings. If an XSP cannot be determined for a survey lane then a warning message will be presented and no further processing will continue.

If the end label of one Inspection Route Feature does not match the start label of the following Inspection Route Feature then it assumed that a dummy Inspection Route Feature would be outputted. However if either the previous features end label or the current features start label is empty then a dummy feature will not be inserted.

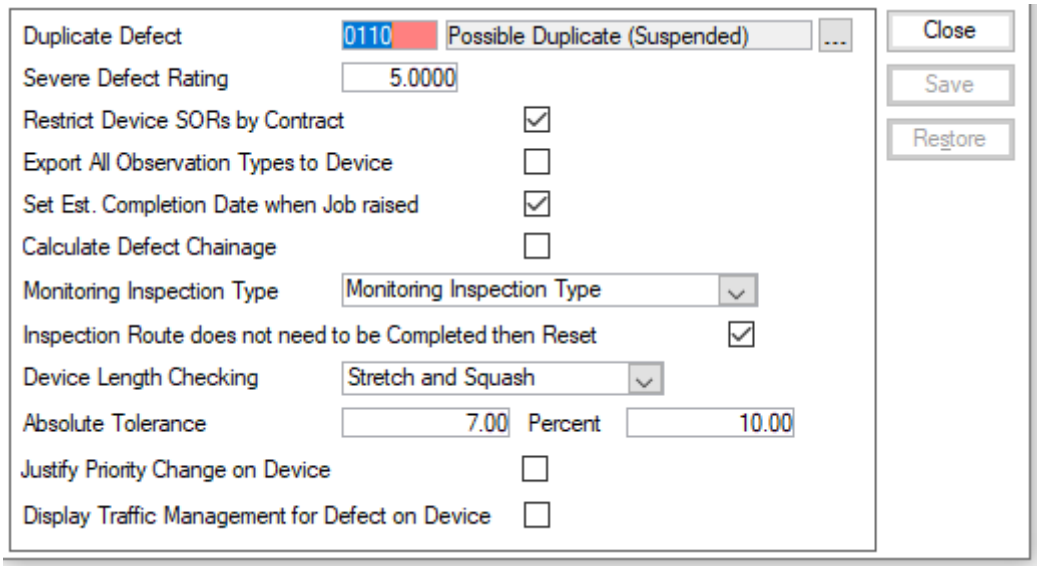
Inspection Route Feature buttons

The following buttons are available to edit the features on the Inspection Route.

Add:	Use this to add an Inspection Route Feature.
Insert:	Use this to insert a new Feature into the Inspection Route at the currently selected point.
Remove:	Use this to remove the selected Inspection Route Feature.
Up:	Use this to move the selected Inspection Route Feature up the route sequence order.
Down:	Use this to move the selected Inspection Route Feature down the route sequence order.
Reverse:	(Machine Inspection Routes only) Use this to swap the start and end chainages for the Inspection Route Feature i.e. the direction. The XSP will also need to be reversed as this relates to the direction of travel.

Condition Survey System Settings

The Condition Survey System Settings define defaults for Condition Survey.



Duplicate Defect: Select from the pick list, the Job Status which should be assigned to Jobs which the system recognises as a Duplicates (that is - live Jobs on the same Site, same Feature with the same Defect)

The pick list references the Status lookup

Asset Maintenance\Maintenance Lookups

Note: The Duplicate Defect Job Status will be applied to Jobs on import from ConfirmConnect®. For Defects raised on the host, there is a direct warning of possible Duplicate Defects.

Severe Defect Rating: Enter the numerical value above which the system will identify a Feature as having a 'Severe Defect' for reporting purposes.

Restrict Device SORs by Contract: Check this to restrict the SORs sent to a device to those SORs that are in the BOQs of Contracts that the Action Officer has rights to based on their Work Group (and the Contact Areas assigned to the Work Group).

Export all Observation Types: (Not used by ConfirmConnect®)

When checked, all Assessments/Observations associated with the Feature are downloaded to the device regardless of Inspection Type.

When not checked, only Assessments/Observations associated with the Feature that are also associated with the Inspection Route's Inspection Type are downloaded to the device.

Note: The 'Add Assessments' button on the Asset / Condition Survey task will always display all of the Observation Types in Confirm regardless of this setting.

Set Est Completion Date: Check this to set an estimated completion date (Job form - additional tab) when the Job is raised.

If this option is not checked, then the Estimated completion date is calculated on committal of the Job based on the committal date and the Completion set for the Priority.

Note: this check box is also found in the Job System Settings. It may be set in either place.

Calculate Defect Chainage:	Check this to set the chainage of the Defects raised via ConfirmConnect®. The Chainage in calculated based on the Defect X,Y and the asset geometry available in Confirm. The chainage value is set in XSP columns of the Defect This will only be applicable for the Defects that are raised on Linear Assets (part of Linear Feature Group) and the corresponding Assets have a defined geometry
Monitoring Inspection Type:	(1000 - Performance Monitoring module) The monitoring inspection type is used to determine the condition assessments that are sent down to the device for feature monitoring. The drop down list references the Inspection Type lookup.
Inspection Route does not ... :	When checked, Inspection Routes will not need to be 'Reset' before the Features can be selected for reinspection. The Select Features For Inspection screen will not set Features to 'Complete' when they have been inspected, they will be set to 'Unassigned'.
Device Length Checking:	(0180 - Linear Assets module) Select from: 'No Tolerance Check' - Confirm will check the supplied Defect chainage against the Feature length and reject anything outside of the length. 'Check only' - The tolerances specified below will be used to check the supplied Defect chainage against the Feature length. The User will be informed when the tolerances have been breached. 'Stretch and Squash' - (FBI Survey import) Confirm will check the Survey Length supplied in the import against the Feature length when updating the Feature. If it is different,Confirm will check it against the tolerances set below. **Note:** This setting is not used by ConfirmConnect®.
Absolute Tolerance / Percent:	(0180 - Linear Assets module) These settings are applied by Confirm if the above setting is set to 'Check only' or 'Stretch and Squash'. The values entered will be used to check the validity of the Chainage supplied for Defects entered in Confirm. The Percent value creates a buffer around the Feature lengths and the Absolute Tolerance sets a maximum distance. An example is shown below:
Justify Priority Change On Device	When checked, in ConfirmConnect® if the Priority of a Defect is changed from the default the reason must be entered in the Internal Notes field.
Display Traffic Management for Defect on Device	When checked, in ConfirmConnect®, the Traffic Management will be visible for the new Defect.

Example:

The Absolute Tolerance is set to 20 and Percent is set to 10.

Section Length	Check only	Stretch and Squash
50 Metres	The Percent tolerance is 5 metres so the Absolute is applied. A defect up to 70 metres is acceptable.	The Percent tolerance is 5 metres so Confirm will apply the Absolute value. A Surveyed Length between 30 and 70 metres is acceptable.
300 Metres	The Percent is applied so a Defect up to 330 metres is acceptable.	The Percent is applied so a Surveyed Length between 270 and 330 metres is acceptable.

Note: Confirm applies the greater tolerance not necessarily the greater setting when applying the check.

Condition Survey Seed Numbers

Seed numbers are set in Condition Survey Seed Numbers within each Work Group for:

- Inspection batches
- Defects

Two ranges are available allowing you to issues two batches of non-contiguous numbers.

Bear in mind that:

- Only Work Groups who will be raising Inspection Batches and Defects will need Seed numbers.
- Each Work Group must have a unique range of numbers, but if you issue one range to start with, which proves to be too few numbers, you can later come back and use the second range. You can also amend the 'Maximum' number to make room for a range of numbers for a new Work Groups.

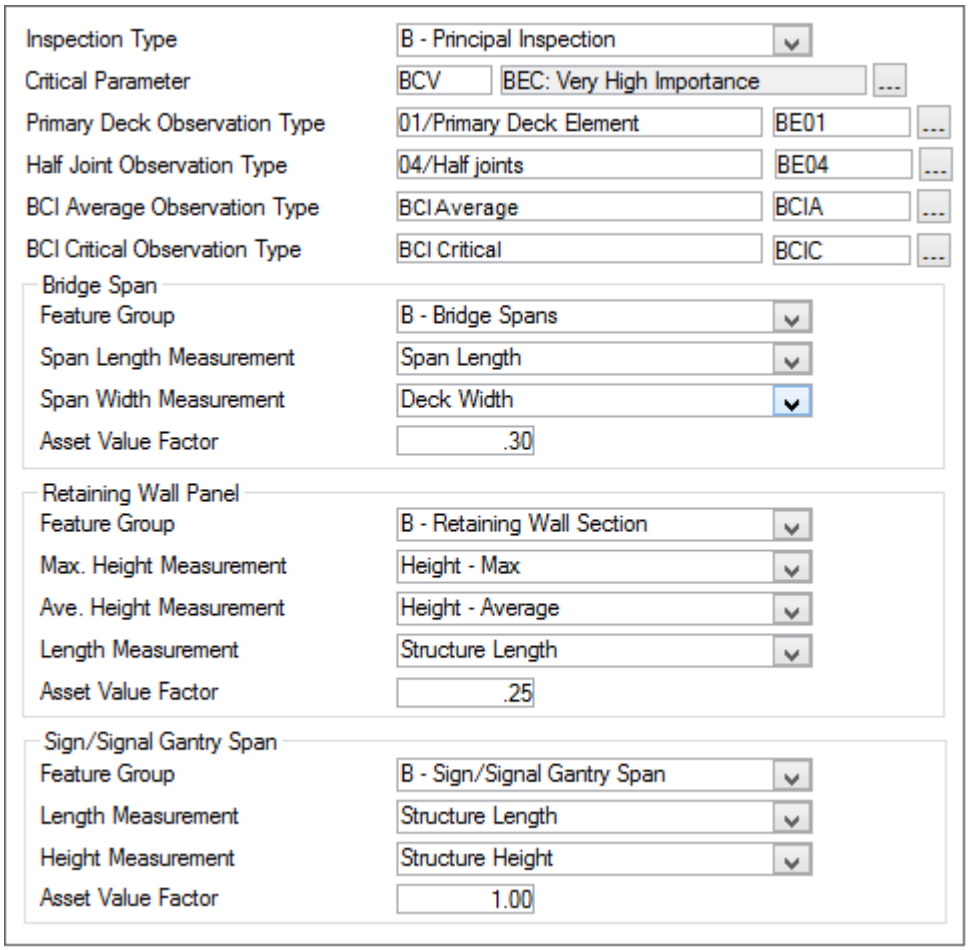
The total range of numbers is from 1 to 99999999. These numbers need to be distributed amongst the Work Groups working with Condition Surveying.

Work Group:	Enter a Work Group Code, or use the 'Find' button to recall all Work Groups. **System Administration\Security**
Adhoc Inspection Route:	Select from the pick list the Adhoc Inspection Route that will apply for this Work Group. The pick list references the **Inspection Route Lookup**. **Note:** The Adhoc Inspection Route provides a Route of all Features from which any Feature may be drawn for Adhoc Inspection.
Inspection Batch:	Enter the number ranges for this Work Group.
Defect:	Enter the number ranges for this Work Group.

Bridge Condition Indicator System Settings

(Condition Survey - BCI Report module)

The Bridge Condition Indicator System Settings define the Conditions on which the Bridge Condition Reports are to be based, and the Parameter to be used for the Critical Score.



Inspection Type: Set to an Inspection Type that has all Structure Observation Types. The Inspection Pro Formas will then only print out Structures that have at least one of these Observation Types linked to it.

Critical Parameter: Select the Parameter whose scores will be used in calculating the 'Critical Score'.

Note: The selected parameter must be used in at least one of the Observation Types linked to the Inspection Type specified in the Inspection Type field.

Primary Deck Observation Type: Set this to the Observation Type '01/Primary Deck Element' (BE01).

Half Joint Observation Type: Set this to the Observation Type '04/Half Joints' (BE04). Having both of these fields set ensures that only the worst of the 'Primary Deck Element' and 'Half Joint' elements is taken into account when calculating the Condition Indicator.

BCI Average Observation Type: Set this to the Observation Type 'BCI Average' (BCIA). This will be used to store the BCI Average value when creating or importing Inspections against Structures.

BCI Critical Observation Type: Set this to the Observation Type 'BCI Critical' (BCIC). This will be used to store the BCI Critical value when creating or importing Inspections against Structures.

Feature Group: Set this to the Bridge Span Feature Group.

Span Length Measurement: Set this to the Measurement Type on the Bridge Span that indicates the Span's Length.

Span Width Measurement:	Set this to the Measurement Type on the Bridge Span that indicates the Span's Width.
Asset Value Factor:	The Asset Value Factor weights one structure type against another, and should take values as follows (the Units are purely for information).

Structure Type	AVF for Overseeing Authority	AVF for Local Authority	Units
Bridge	0.30	0.20	m2

Unrecognised Features will have an Asset Value Factor of 0 to ensure they are not included in the Stock Condition summary value.

Feature Group:	Set this to the Retaining Wall Panel Feature Group.
Max. Height Measurement:	Set this to the Measurement Type on the Retaining Wall Panel that indicates the Panel's Max. Height.
Ave. Height Measurement:	Set this to the Measurement Type on the Retaining Wall Panel that indicates the Panel's Ave. Height.
Length Measurement:	Set this to the Measurement Type on the Retaining Wall that indicates the Wall's Length.
Asset Value Factor:	The Asset Value Factor weights one structure type against another, and should take values as follows (the Units are purely for information).

Structure Type	AVF for Overseeing Authority	AVF for Local Authority	Units
Retaining Wall	0.25	0.10	m2

Unrecognised Features will have an Asset Value Factor of 0 to ensure they are not included in the Stock Condition summary value.

Feature Group:	Set this to the Sign/Signal Gantry Span Feature Group.
Length Measurement:	Set this to the Measurement Type on the Sign/Signal Gantry Span that indicates the Span's Length.
Height Measurement:	Set this to the Measurement Type on the Sign/Signal Gantry Span that indicates the Span's Height.
Asset Value Factor:	The Asset Value Factor weights one structure type against another, and should take values as follows (the Units are purely for information).

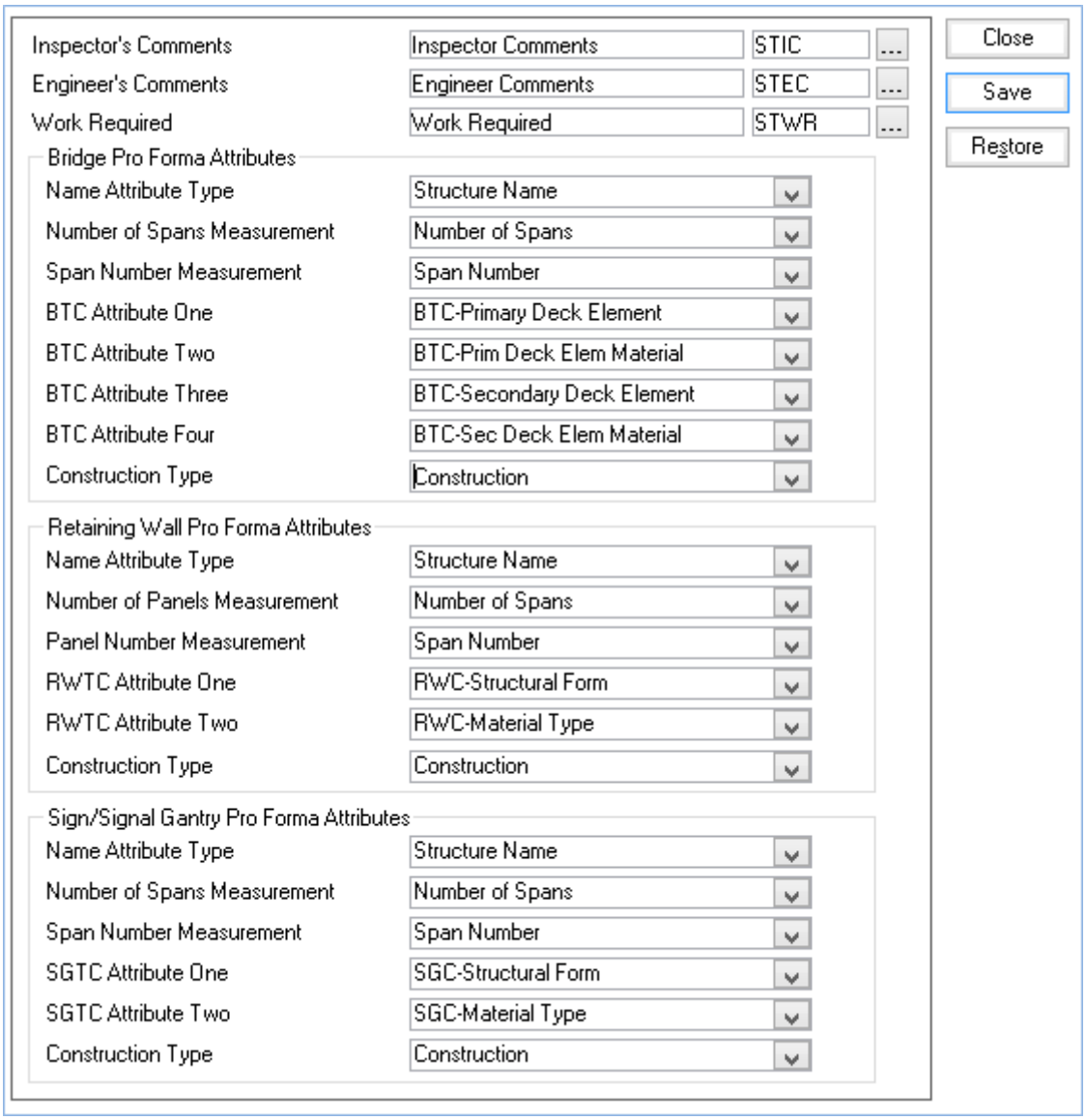
Structure Type	AVF for Overseeing Authority	AVF for Local Authority	Units
Sign / Signal Gantry	1.00	1.00	m

Unrecognised Features will have an Asset Value Factor of 0 to ensure they are not included in the Stock Condition summary value.

Bridge Inspection Pro Forma System Settings

(Condition Survey - BCI Report module)

The settings required for printing out Pro Forma reports are all contained on this screen.



Inspector Comments:	Set this to the Observation Type 'Inspection's Comments' (STIC). This will be used to populate the Inspection's Comments in Bridge Condition Inspection Report.
Engineer Comments:	Set this to the Observation Type 'Engineer's Comments' (SEIC). This will be used to populate the Engineer's Comments in Bridge Condition Inspection Report.
Work Required:	Set this to the Observation Type 'Work Required' (STWR). This will be used to populate the Work Required in Bridge Condition Inspection Report.
Name Attribute Type:	Set this to the Feature Attribute Type that represents the Structures Name. If this field is unpopulated then the Inspection Pro Formas will look at the Feature's Location to obtain the name of the Structure.

Number of Spans ...:	Select the Measurement Type which is used against Bridge Features to measure the number of Spans.
Span Number ...:	Set this to the Measurement Type on the Bridge that indicates which Span Number it is.
BTC Attribute One:	Select the Attribute Type which is used against Bridge Features to define the Bridge Type Code One.
BTC Attribute Two:	Select the Attribute Type which is used against Bridge Features to define the Bridge Type Code Two.
BTC Attribute Three:	Select the Attribute Type which is used against Bridge Features to define the Bridge Type Code Three.
BTC Attribute Four:	Select the Attribute Type which is used against Bridge Features to define the Bridge Type Code Four.
Construction Type:	Set this to the Attribute Type on the Bridge Span Feature that indicates the Construction Type.
Name Attribute Type:	Set this to the Feature Attribute Type that represents the Structures Name. If this field is unpopulated then the Inspection Pro Formas will look at the Feature's Location to obtain the name of the Structure.
Number of Panels ...:	Set this to the Measurement Type on the Retaining Wall that indicates the Number of Panels it has.
Panel Number ...:	Set this to the Measurement Type on the Retaining Wall Panel that indicates which Panel Number it is.
RWTC Attribute One:	Set this to the Attribute Type on the Retaining Wall Panel that indicates the Structural Form.
RWTC Attribute Two:	Set this to the Attribute Type on the Retaining Wall Panel that indicates the Material Type.
Construction Type:	Set this to the Attribute Type on the Retaining Wall Panel that indicates the Construction Type.
Name Attribute Type:	Set this to the Feature Attribute Type that represents the Structures Name. If this field is unpopulated then the Inspection Pro Formas will look at the Feature's Location to obtain the name of the Structure.
Number of Spans ...:	Set this to the Measurement Type on the Sign/Signal Gantry that indicates the Number of Spans it has.
Span Number ...:	Set this to the Measurement Type on the Sign/Signal Gantry Span that indicates which Span Number it is.
SGTC Attribute One:	Set this to the Attribute Type on the Sign/Signal Gantry Span that indicates the Structural Form.
SGTC Attribute Two:	Set this to the Attribute Type on the Sign/Signal Gantry Span that indicates the Material Type.
Construction Type:	Set this to the Attribute Type on the Sign/Signal Gantry Span that indicates the Construction Type..

Structures Toolkit Export System Settings

(Condition Surveying - BCI Reports module)

In order to seamlessly create the data required to populate the ‘Structure’ and ‘Element’ tabs of the Structures Toolkit spreadsheet, the export utility needs to know where the data for each of the required fields is coming from. Users who wish to export their Structures data to the Structures Toolkit spreadsheet will need to ensure that each of the required fields has the data correctly populated.

Structures Toolkit Export System Settings - Structures Tab

(Condition Survey - BCI Report module)

The table below lists each of the required fields for the Structures Tab alongside details of where the information will be populated from, such as an automatically generated field (Feature Key), or from System Setting fields.

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
Identifier of Structure or Group of Structures	N/A	N/A	Defaults to Feature Key.
Reference of Structure or Group of Structures	N/A	N/A	Defaults to Feature ID.
Name or Description of Structure or Group of Structures	**Bridge Inspection Pro Forma System Settings**	Name Attribute Type	If blank, defaults to Feature Location.
Structure Type for MEA	N/A	N/A	Defaults to External Reference on Feature Type.
Number of Structures in the Group	N/A	N/A	Defaults to 1.
Length (m) of Whole Structure or Whole Representative Structure for the Group	**Bridge Condition Indicator System Settings**	For Bridges: Bridge Span > Span Length Measurements. For Retaining Walls: Retaining Walls Sections > Length Measurements. For Sign/Signal Gantry: Sign/Signal Gantry Span > Length Measurements.	Should exist as a Measurement Type on linked Spans or Panels. This value will be calculated by adding the values of the Measurement Types against the corresponding Spans/Panels.
Average Width (m) of Structure or Representative Structure for the Group	**Bridge Condition Indicator System Settings**	For Bridges: Bridge Span > Span Width Measurements.	Should exist as a Measurement Type on linked Spans. This value will be calculated by adding the values of the Measurement Types and taking the Weighted Average

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
			based upon Length of the corresponding Spans/Panels.
Average Critical Headroom (m) of Structure or Representative Structure for the Group OR For Cantilever Road Signs, High Mast Lighting, Retaining Walls, Sign/Signal Gantries or Structural Earthworks, Average Height (m) of Structure or Representative Structure for the Group	For Bridges: Structures Toolkit Export System Settings > Structure Tab For Retaining Walls: **Bridge Condition Indicator System Settings** For Sign/Signal Gantry: **Bridge Condition Indicator System Settings**	For Bridges: Average Critical Headroom. For Retaining Walls: Average Height Measurement. For Sign/Signal Gantry: Height Measurement.	For Bridges, should exist as a Measurement Type on parent Structures and corresponding value will be exported. For Retaining Walls and Sign/Signal Gantry, should exist as a Measurement Type on corresponding Spans/Panels. Value to be exported will be calculated by adding the values of the Measurement Types and taking the Weighted Average based upon Length of the corresponding Spans/Panels.
Number of Spans of Structure or Representative Structure for the Group	**Bridge Condition Indicator System Settings**	N/A	This value will be the number of linked Spans/Panels within the Inventory of the parent Structure.
Location	Structures Toolkit Export System Settings > Structure Tab	Location	Should exist as an Attribute Type on the parent Structure.
Route Type Supported by or Adjacent to the Structure(s) OR For Retaining Walls / Structural Earthworks, Route Type Adjacent to the Top of the Wall/Earthworks OR For Spanning Sign/Signal Gantries, Route Type Crossed	Structures Toolkit Export System Settings > Structure Tab	For Bridges: Bridge > Route Type Supported. For Retaining Walls: Retaining Wall > Route Type Adjacent. For Sign/Signal Gantry: Sign/Signal Gantry > Route Type Crossed.	Should exist as an Attribute Type on the parent Structure.
Is Route Type Supported by or Adjacent to the Structure(s) OR For Retaining Walls / Structural Earthworks, Route Type Adjacent to the Top of the	Structures Toolkit Export System Settings > Structure Tab	Route Salted.	Should exist as an Attribute Type on the parent Structure.

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
Wall/Earthworks OR For Spanning Sign/Signal Gantries, Route Type Crossed salted?			
Traffic of Route Supported by or Adjacent to the Structure(s) OR For Retaining Walls / Structural Earthworks, Traffic of Route Adjacent to the Top or Foot of the Wall/Earthworks, Whichever is More Onerous OR For Spanning Sign/Signal Gantries, Traffic of Route Crossed	Structures Toolkit Export System Settings > Structure Tab	Route Traffic Level.	Should exist as an Attribute Type on the parent Structure.
Obstacle Crossed, if appropriate OR For Retaining Walls / Structural Earthworks, Route Type Adjacent to the Foot of the Wall/Earthworks	Structures Toolkit Export System Settings > Structure Tab	For Bridges: Bridge > Obstacle Crossed. For Retaining Walls: Retaining Wall > Route Type Adjacent to Foot. N/A for Sign/Signal Gantry.	Should exist as an Attribute Type on the parent Structure.
Is Obstacle Crossed OR For Retaining Walls / Structural Earthworks, Route Type Adjacent to the Foot of the Wall/Earthworks salted?	Structures Toolkit Export System Settings > Structure Tab	For Bridges: Bridge > Obstacle Crossed Salted. For Retaining Walls: Retaining Wall > Route Type Adjacent to Foot Salted. N/A for Sign/Signal Gantry.	Should exist as an Attribute Type on the parent Structure.
Heritage	Structures Toolkit Export System Setting > Structure Tab	Heritage.	Should exist as an Attribute Type on the parent Structure.
Conservation Area	Structures Toolkit Export System Settings > Structure Tab	Conservation Area.	Should exist as an Attribute Type on the parent Structure.
Environmentally Sensitive	Structures Toolkit Export System Settings > Structure Tab	Environmentally Sensitive.	Should exist as an Attribute Type on the parent Structure.
River, Coastal etc. Walls	Structures Toolkit Export System Settings > Structure Tab	Walls (River,Coastal etc.).	Should exist as an Attribute Type on the parent Structure.

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
Substandard Structure	Structures Toolkit Export System Settings > Structure Tab	Substandard Structure.	Should exist as an Attribute Type on the parent Structure.

Structures Toolkit Export System Settings - Elements Tab

(Condition Survey - BCI Reports module)

The table below lists each of the required fields for the Elements Tab alongside details of where the information will be populated from, such as an automatically generated field (Feature Key), or from System Setting fields.

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
Identifier of Structure or Group of Structures	N/A	N/A	Defaults to Feature Key.
Full Name of Element	N/A	N/A	The External Reference of the Observation Type against the Span Features will be exported. Observation Types with a Grade having a value of 'N/A' will not be exported.
Component/Material Type	Structures Toolkit Export System Settings > Elements Tab	Component/Material Type	Should exist as an Inventory Attribute Type on the parent Structure. Please see below for details.
Condition at the End of Year 0	N/A	N/A	This value will be the Grade set against the Observation Types on the Span Feature. Where multiple Span Features are present for a Structure then a weighted calculation is applied as per the Structures Toolkit rules. If the Grade calculated is 1B, 1C, 1D, 1E, 2A, 3A, 4A or 5A then the Grade exported will be 1A.

Structures Toolkit spreadsheet Column Header Name	System Setting Used	Field Name	Notes
Proximity to Traffic Spray Zone	Structures Toolkit Export System Settings > Elements Tab	Proximity to Traffic Spray Zone	Should exist as an Inventory Attribute Type on the parent Structure. Please see below for details.
Strategy to be Followed	Structures Toolkit Export System Settings > Elements Tab	Strategy to be Followed	Should exist as an Attribute Type on the parent Structure.

The 'Component/Material Type' and 'Proximity to Traffic Spray Zone' vary by 'Full Name of Element'. Therefore a mapping is required between these fields in order to export the data to the Structures Toolkit. This mapping needs to exist on the parent Structure as an Inventory folder. The Structures Data Export System Settings has settings to specify the Inventory folder, a 'Full Name of Element' Attribute Type which needs Attribute Values whose External Reference matches the External References on the Observation Types, and Attribute Types for 'Component/Material Type' and 'Proximity to Traffic Spray Zone'. Please contact Confirm for configuration import files to set the basic setup required.

Bridges and Structures - step-by-step

(Condition Survey - BCI Report module)

The Bridges and Structures area of Confirm is applicable to a range of Structures relating to Highways, including:

- Bridges
- Culverts
- Sign/Signal Gantries
- Retaining Walls
- Tunnels

There are two kinds of inspection carried out on Structures – a 'Principal Inspection' is done every 6 years and a 'General Inspection' every 2 years in between. The Inspections are done with a Safety Inspection process where a number of different elements of the Structures are assessed and graded on a range of 1A (as new) to 5E (very bad).

The Structures Toolkit allows Authorities in the UK to manage and plan the life cycle of their Structures. It enables what-if scenarios to be analysed, which would support the decision maker in identifying the appropriate level of funding required for future maintenance and ensuring the defined performance target for the Structures stock are met.

The Structures Toolkit calculates three figures which are the values Authorities need to report to the government:

- Gross Replacement Cost (GRC) – the total value of their Assets (or their new equivalent).
- Depreciated Replacement Cost (DRC) – the current remaining value.
- Annual Depreciation – the drop in value each year.

Here is a step-by-step guide to configure Bridges & Structures within Confirm in accordance with the information required for the Structures Toolkit.

Step 1 - Configuring the Lookups

(Condition Survey - BCI Report module)

The Structures Toolkit requires specific information about the Structures to be supplied to it, including Name, Location, Length, Width etc.

To create the Lookups required to configure Confirm to support Bridges and Structures, a set of import files that are supplied on the Confirm Media can be imported into Confirm. These import files will include creating:

- Feature Groups
- Feature Types, e.g. Bridge, Bridge Span, Retaining Wall Panels etc.
- Measurement Types, e.g. Length, Width, Critical Headroom etc.
- Attribute Types and Values, e.g. Heritage, Conservation Area etc.
- Inventory Types, e.g. linking Spans to Parent Structures etc.
- Observation Types, e.g. Primary Deck Element, Foundations etc.
- Observation Parameters, e.g. Grades 1A to 5E etc.
- Defect Types, e.g. Metalwork Section Loss etc.

The import files also link the corresponding entities such as Attribute Types and Measurement Types to the Feature Groups.

For users who have existing Bridges and Structures data already configured within their Confirm, a subset of the import files that just contain the configuration required to supply the Structures Toolkit can be found on the Confirm Media.

Step 2 - Update Scripts

(Condition Survey - BCI Report module)

The Structures Toolkit requires data supplied to it in a specific format. In order to provide this an External Reference field is available on the Feature Type, Observation Type and Attribute Value Lookups. The Confirm Media includes update scripts that will require running once, which will set the External Reference fields of a number of Lookups to be exactly what is required by the Structures Toolkit.

These update scripts also populate the Structure Toolkit System Settings required by the Structures Toolkit Data Export utility (which outputs Structures data in the correct format for the Structures Toolkit).

For users who have existing Bridges and Structures data already configured within Confirm, the update scripts also add the new Attribute Types and Measurement Types created via the import files to their existing Structures Features.

Step 3 - BCI Calculations

(Condition Survey - BCI Report module)

BCI Scores for Bridges and Structures will be calculated automatically when an Inspection Batch is created or Signed-off. This BCI Score is stored against two Observation Types, BCI Average and BCI Critical.

These Observation Types will be created by the import files and will also be added to the existing Bridges and Structures Feature Groups. These Observation Types will need to be set within the Bridge Condition Indicator System Settings.

Once this has been done run the Structures Condition Indicator List, specifying all of the Bridges and Structures Features within Confirm, and this will calculate the BCI Scores for all of the existing Inspection Batches against these Features.

Note: This may take some time to complete the first time it is run after upgrading to v14. Subsequent runs will be much faster.

Step 4 - Secondary Sign-off of Inspections

(Condition Survey - BCI Report module)

Some types of Inspection, such as Bridge Inspections, require the results to be reviewed before they are updated to the Feature. A flag called 'Sign-off Required' is available on the Inspection Type lookup, which specifies whether Inspections of this Inspection Type require signing-off after being completed.

If this behaviour is required then tick the 'Sign-off Required' checkbox on the 'Principal Inspection' and 'General Inspection' Inspection Types.

Checking the ‘Sign-off Required’ setting will set the ‘Sign-off Date’ and ‘by’ fields for all existing completed Inspection Batches of this Inspection Type whose ‘Sign-off Date’ is currently blank. The ‘Sign-off Date’ will be set as the same date as the Inspection Batch’s ‘Completion Date’, and the ‘by’ field will be set to the current logged in User.

Step 5 - Structures Toolkit Data Export

(Condition Survey - BCI Report module)

The Structures Toolkit Data Export utility exports Structure Features, Attributes and Inspection result data from Confirm to a spreadsheet that can be input directly into the Structures Toolkit spreadsheet.

A Named Selection of all the Structures that need to be included in the export will be required.

After creating the Named Selection, run the Structures Toolkit Data Export utility with the Named Selection created above and verify the data is exported correctly.

Confirm will export 2 files namely filename.csv and filename_elements.csv. The data within the exported spreadsheets needs to be copied to the Structures Toolkit.

For Structure Tab, Copy the data within the <filename.csv> in the Structure Tab of the Structures Toolkit. Copy columns 'A' to columns 'O' from <filename.csv> to column 'B' to column 'P' of Structure Tab. Copy columns 'P' to columns 'T' from <filename.csv> to column 'Y' to column 'AC' of Structure Tab.

For Elements Tab, Copy the Data within the <filename_elements.csv> in the Element tab of the Structure Toolkit.

Use the 'Check' columns in the Elements Tab to verify the correctness of the Data.

For assistance on ensuring the exported data is correct please refer to the **Structures Toolkit Export System Settings.**