![SCDOT logo]

APPENDIX B.   PROJECTWISE SEARCH FUNCTIONALITY

The ProjectWise system includes search functions that allow users to filter documents in folders based on contextual keywords or document associated Attributes. The document associated Attributes are especially useful for users needing to collect and identify documents meeting specific parameters. Examples of such cases are outlined below.

Search Examples:

- Compile a list of all documents with the term "LR_SF" in the File Name, Document Type, or Description.
- Identifying the total number of Critical Findings between two dates.
- Compile a list of all Maintenance Manuals in the Bridge File by searching for a Document Type of "Proc_Maintenance."

B1 Building a Search Form

To perform a customized ProjectWise search, users should follow the steps outlined below:

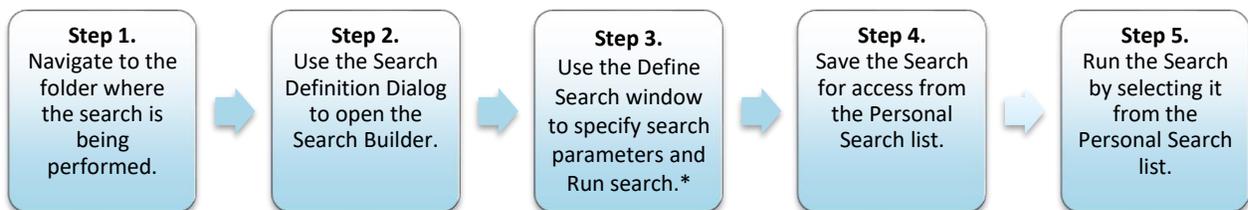| Step 1. Navigate to the folder where the search is being performed. | Step 2. Use the Search Definition Dialog to open the Search Builder. | Step 3. Use the Define Search window to specify search parameters and Run search.* | Step 4. Save the Search for access from the Personal Search list. | Step 5. Run the Search by selecting it from the Personal Search list. |

Figure B1.1 Steps to perform a customized ProjectWise search using the Search Builder.

Note: Search parameters can include the type of document being searched, the defined Attribute View, or specific Attributes being searched.

The steps are described in detail with an example search to identify all documents with the keyword "LR_SF" in the Document Type.

Step 1 (Figure B1.2)

1. Access the Advanced Search Wizard by navigating to the "Bridge Data" folder. (Or any desired search folder such as a County or other subfolder.)
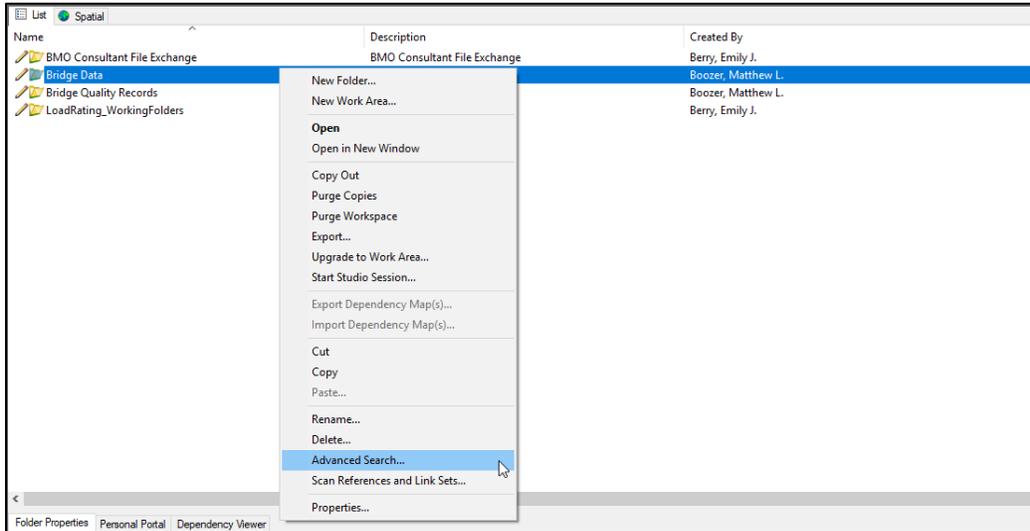2. Right-click and select the "Advanced Search…" option.

Figure B1.2. Menu when right-clicking folder. Select the "Advanced Search" option.

Step 2 (Figure B1.3)

From the "Select Search Definition Dialog" window, select the "Search Builder" icon and click "OK".
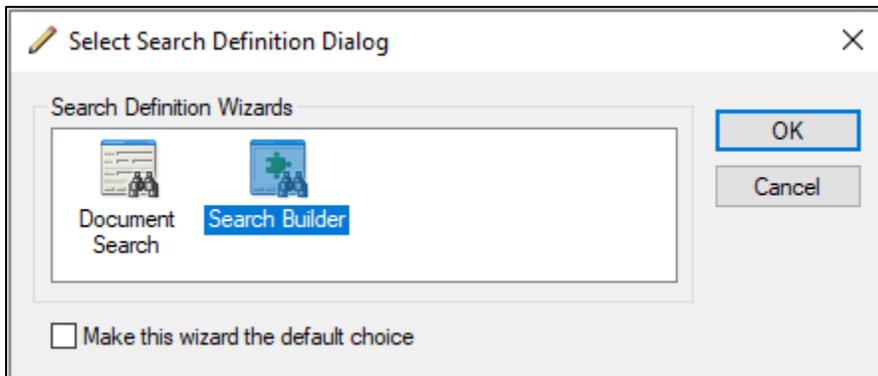

Figure B1.3. Search Definition Dialog box. Select the "Search Builder".

Step 3 (Figure B1.4)

The search window shown in Figure B1.4 describes the four sections of the search window. For each search item, perform the following steps:

1. Identify the "View" being used for the search data.
2. Define the Criteria being searched by first identifying the Criterion Type, Property/Environment, and lastly the Attribute.
3. Specify the Value being searched with the appropriate Relation search terms.
4. Repeat Steps 2 and 3 for each Criteria being searched.
5. Run search.

"Specify what are you looking for and the view for search results" section specifies what is being searched and which Environment is being used to display Attributes.

"Find documents that match these criteria" section lists the search terms used in the search.

The folder where the search will be performed is defined by default as the folder selected in Step 1. In this case, the folder is the 'Bridge Data' folder and all subfolders.

"Define criteria" section details the types of Attributes available for searching.

This section allows a user to save a search.

Figure B1.4. Description of "Define Search" window sections.

> **Step 3-1: Identify the "View" being used for the search data. (Figure B1.5)**
>
> 1. Select "Documents" in the "Look for:" section
> 2. Define the Environment View. For this example, select "Maintenance_Bridge" as the View.

This example and guide focus on looking for Documents.

The "View" option describes the Environments that can be used to view specific Attributes. For additional information on Views, see section B2Error! Reference source not found..

For the example, use the "Maintenance_Bridge" View. (For custom views, see section B2.)

Figure B1.5. Information for the types of Views.

Custom views can be defined by the user. Refer to section B2 for instructions on creating a custom view.

Step 3-2: Define the Criteria being searched by first identifying the Criteria Type, Property/Environment, and lastly the Attribute. (Figure B1.6)

To accurately identify documents in a search, users must specify the type of data to consider in a search. For most Bridge File searches, the type of data searched will be an Environment Attribute.

1. From the Criterion Type drop-down, select "Environment Attribute."

The "Define criteria" section details the types of Attributes available for searching.

Criteria Type: This identifies the type of criteria being searched.

For the example, select the "Environment Attribute" type.

Figure B1.6. Criterion Type drop-down used to define criteria.

Step 3-2: Define the Criteria being searched by first identifying the Criteria Type, Property/Environment, and lastly the Attribute. (Figure B1.7)

When "Environment Attribute" is selected as a Criterion Type, the second search criteria drop-down will list all available Environments. Selecting the Environment facilitates the document Attributes being searched.

For Bridge File documents, the applicable environments are: "Maintenance_Bridge" and "Maintenance_Bridge_QualityRecords."

    2.   From the "Environment" drop-down, select "Maintenance_Bridge."

The "Environment" drop-down allows users to select an Environment where Attributes are defined.

For the example, use the "Maintenance_Bridge" Environment to search based on Attributes defined when uploading files.

Figure B1.7. Environment list drop-down used to specify where data is searched.

Step 3-2: Define the Criteria being searched by first identifying the Criteria Type, Property/Environment, and lastly the Attribute. (Figure B1.8)

The selection of the "Maintenance_Bridge" Environment will populate the third drop-down of Attributes. These Attributes are related to data automatically and manually assigned from the Wizards detailed in preceding sections. Examples of automatically populated data include County, District, and Asset ID. Examples of data manually assigned with the Wizards includes Document Type, Document Date, and Freeform.

3. From the Attributes drop-down, select the applicable Attribute for the search.

The Attribute drop-down populates based on the defined environment. Users will recognize several of the Attribute names from the wizard descriptions.

*It is useful to refer to the **Folder Structure and Wizard Companion** for specific Document Type Attributes.*

For the example, select "DOCUMENT TYPE:" from the drop-down.

Figure B1.8. Attributes list drop-down with all available Attributes within the specified Environment.

Step 3-3: Specify the Value being searched with the appropriate Relation search terms. (Figure B1.9 & Figure B1.10)

When the Search Criteria is specified, the "Value" search field (blue box shown below) is available for inputting specific search terms.

1. Select the button (red box shown below) for the Criteria window. The search Value will populate in the "Value" box shown in Figure B1.9.
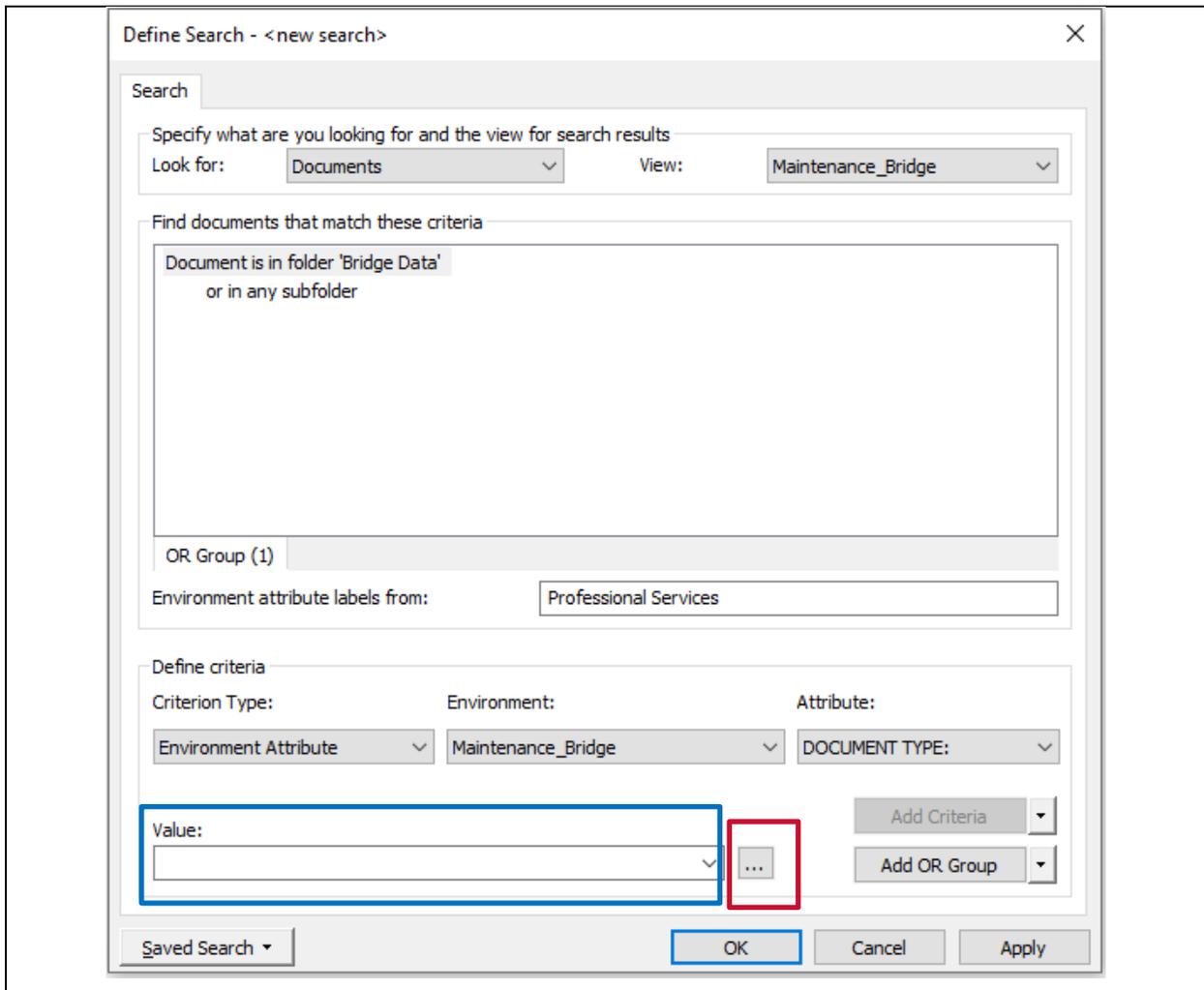

Figure B1.9. Search window when all Criteria is defined.

Step 3-3: Specify the Value being searched with the appropriate Relation search terms. (Figure B1.9 & Figure B1.10)

A specified search "Value" is a keyword that will be used to parse available data. The keyword may be further categorized using the "Relation" drop-down. The "Relation" categories are Boolean search terms used to specify or broaden a search. For certain and specific searches, the equal sign is used to search the term. When searching for a similar Value, the "Like" Relation may be used.

Wildcard term: An asterisk (*) may be used to include other similar Values. For example, when searching all LRSF's, a user might search for "LR_SF*" to identify all Documents with a Document Type beginning with "LR_SF".

2. Enter the search term.
3. Define the Relation.
4. Select "OK."

For the example, input "LR_SF*" in the Value field and select "LIKE" as the relation.
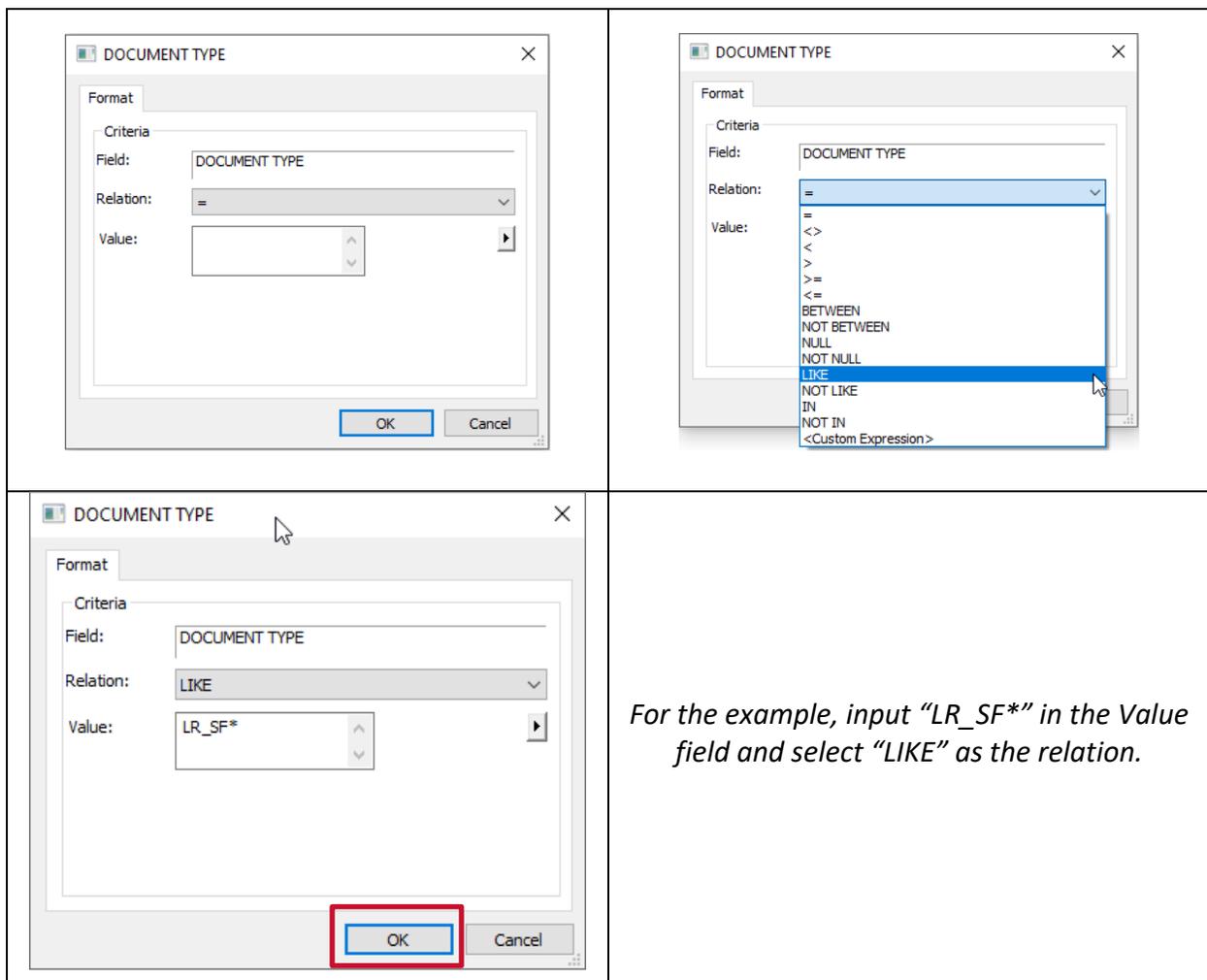
Figure B1.10. Search window to input keywords.

Step 3-3: Specify the Value being searched with the appropriate Relation search terms. (Figure B1.11)

When a search term is specified, it will appear in the Value bar.

5. Select the "Add Criteria" button to add it to the search list. It will then appear in the "Find documents that match these criteria" section.
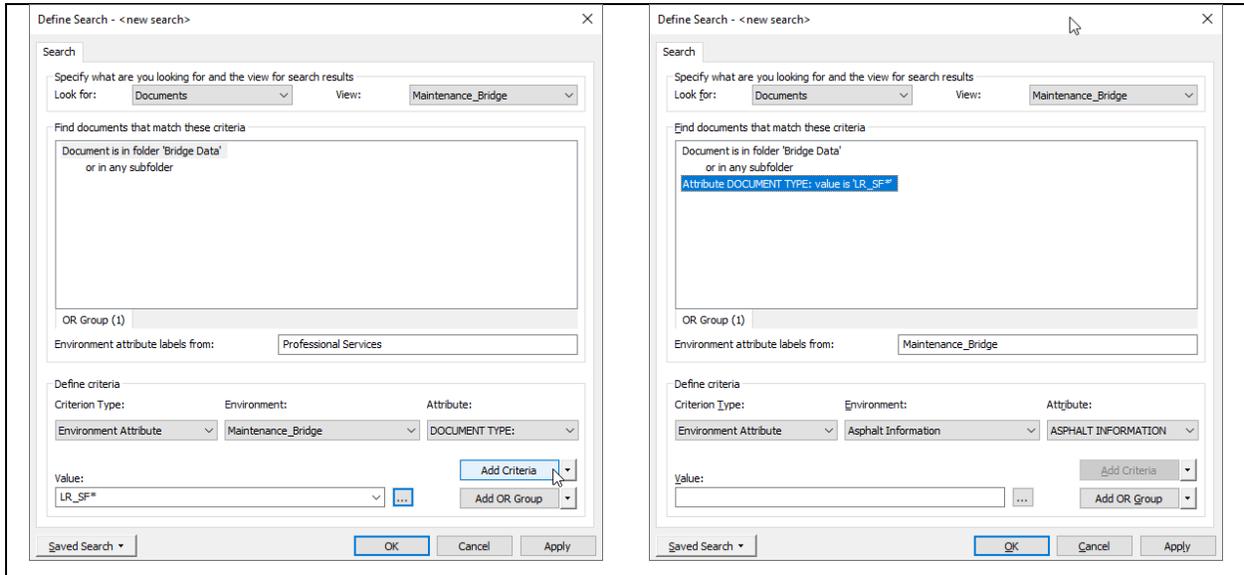

Figure B1.11. Search window when adding criteria.

Step 3-4: Repeat Steps 3-2 and 3-3 for each Criteria being searched.

Additional search criteria may be added by repeating Steps 3-2 and 3-3.

Step 3-5: Run Search. (Figure B1.11 & Figure B1.12)

To run the search, select "Apply" or "OK" from Figure B1.11.

Selecting "Apply" will run the search while keeping the Search Window open.
Selecting "OK" will run the search and close the Search Window.

Results will be shown as in Figure B1.12.
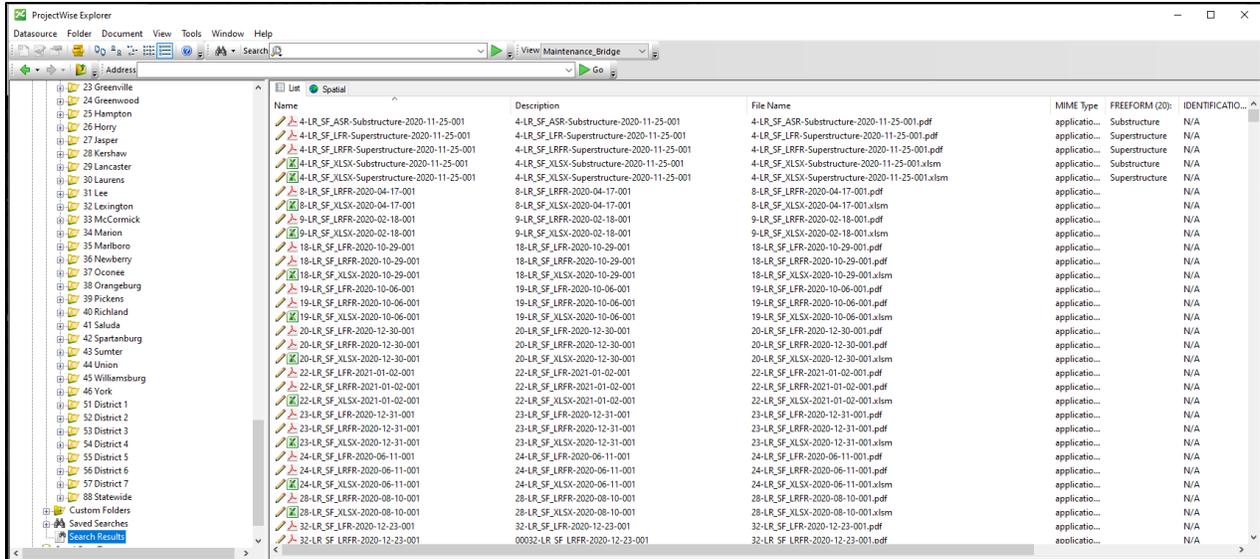
Figure B1.12. Search results when searching "LR_SF*" within the Document Type.

Step 4 (Figure B1.13)

Users may save search forms to re-run them without repeating the steps to build the search form.

1. To save a search, select the "Saved Search" button (red box) as shown in Figure B1.13.
2. From the drop-down list, select the "Save As" option.
3. In the "Save Search" window, input a custom name in the "Saved Search Name" box to save the search in the "Personal" list.
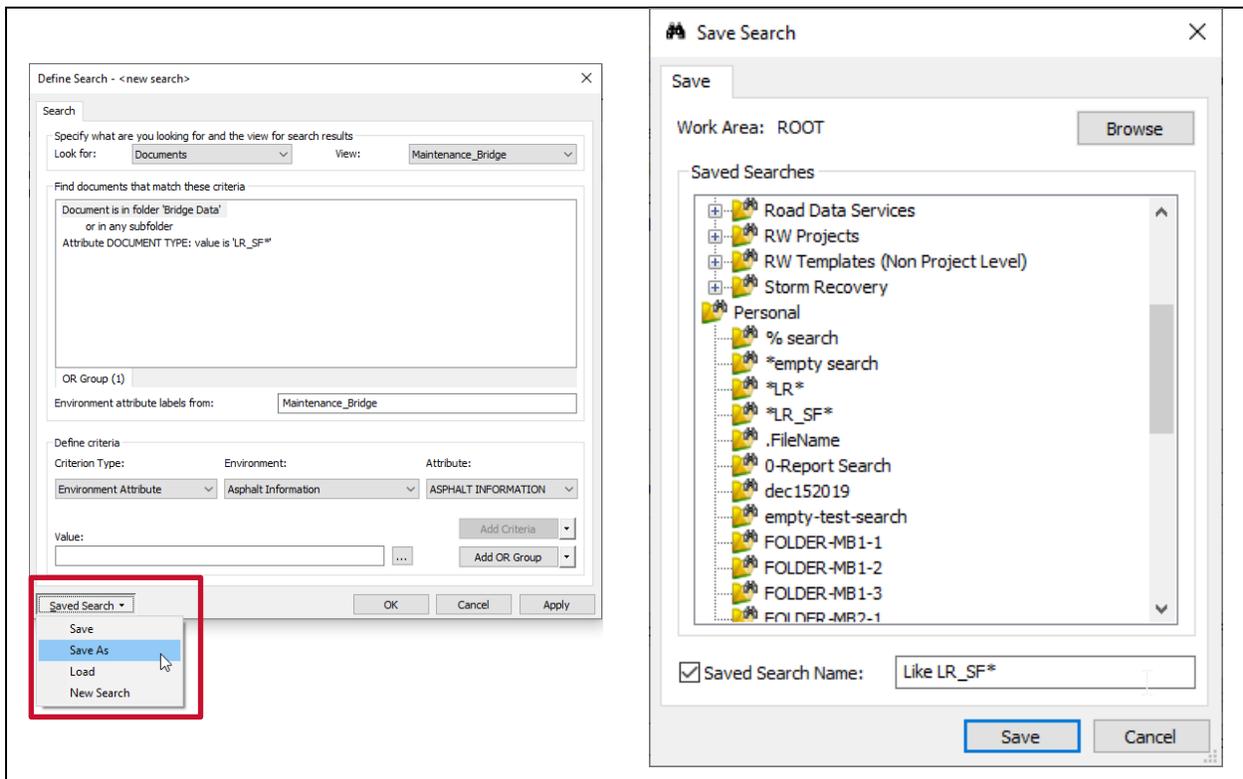
Figure B1.13. Window for saving a search.

Step 5 (Figure B1.14)

A Saved Search can be found under the parent folder of Saved Searches > Personal. The Saved Search will be identified by the designated name.

When the Search Name is selected, the search will run automatically and show the results.
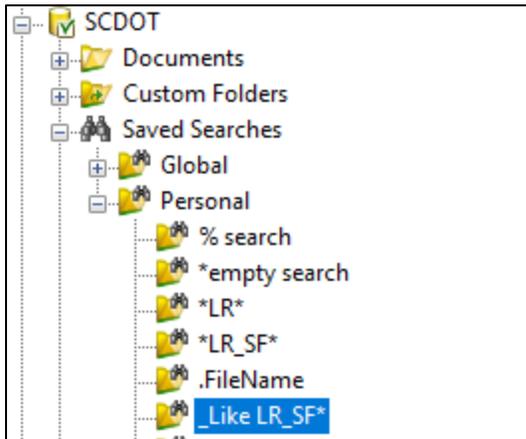
Figure B1.14. Saved Search list in Personal folder.

B2 ProjectWise Environment, Views, and Customizations

For ease of viewing Attributes, users may create custom Views that include the desired Attributes in the ProjectWise List View. The specified Attributes will appear as columns in the ProjectWise List View.

| **Step 1.** Navigate to the Manage Views window. | **Step 2.** Using the Create View window, specify the customized view name, and identify the source Environment Attributes. | **Step 3.** Define the Attributes of the custom View. | **Step 4.** Save the Attributes of the custom View. | **Step 5.** Access the custom View in the View drop-down list. |
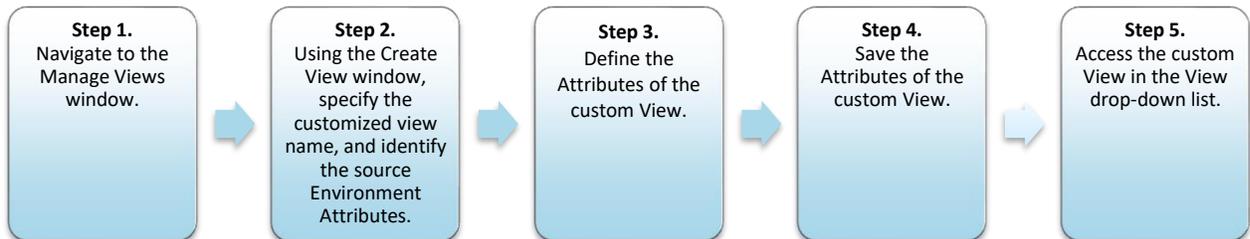
Figure B2.1. Steps to create a customized View using Manage Views.

Step 1 (Figure B2.2)

1. Navigate to the View drop-down and select "Manage Views…"
2. From the Manage Views Window, select "New"
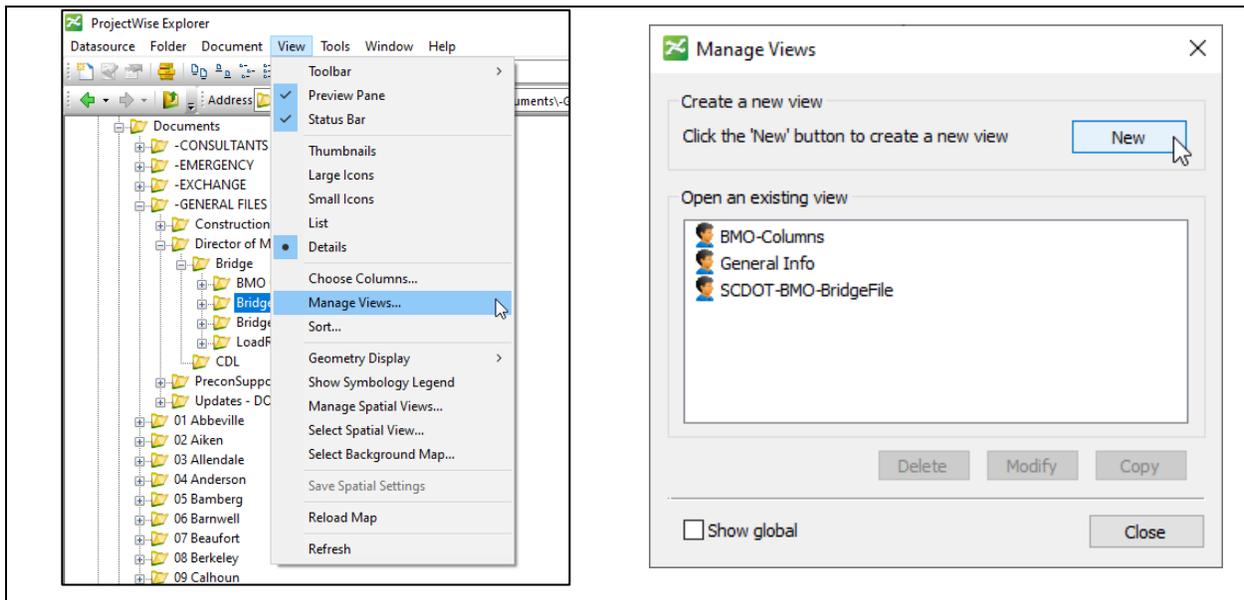
Figure B2.2. Manage Views windows.

Step 2 (Figure B2.3)

1. From the Create View Window, input a custom name for the View in the "View name" box.
2. From the "Select an Environment" drop-down, select "Maintenance_Bridge." This will populate the type of Attributes available for selection.
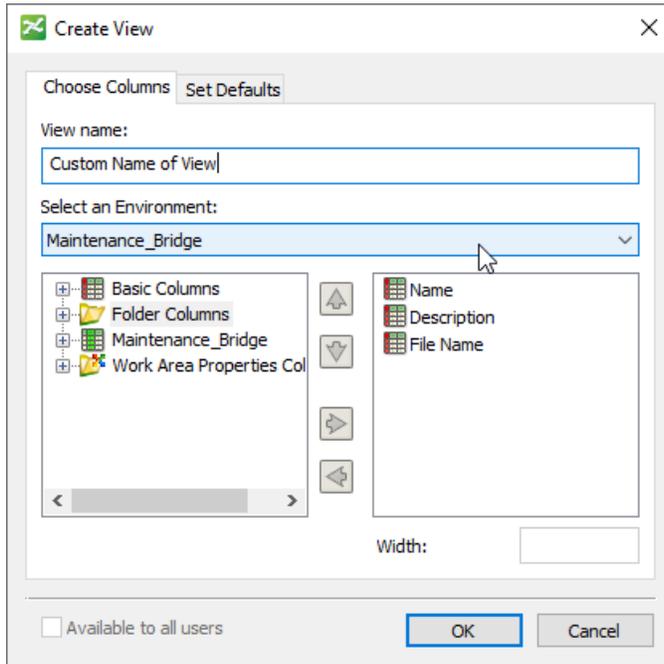

Figure B2.3. Create View window.

Step 3 (Figure B2.4 through Figure B2.8)

The Create View window shows two lists.

The list on the left includes available types of Attributes for selection. Four types of Attributes can be defined based on the properties of a file, folder, Environment, or work area. The expanded lists are described in Figure B2.4 through Figure B2.8.

The list on the right includes the selected Attributes for the custom view.

From the list on the left select the desired types of Attributes by using the Right green arrow button to move them to the right. (Figure B2.8).
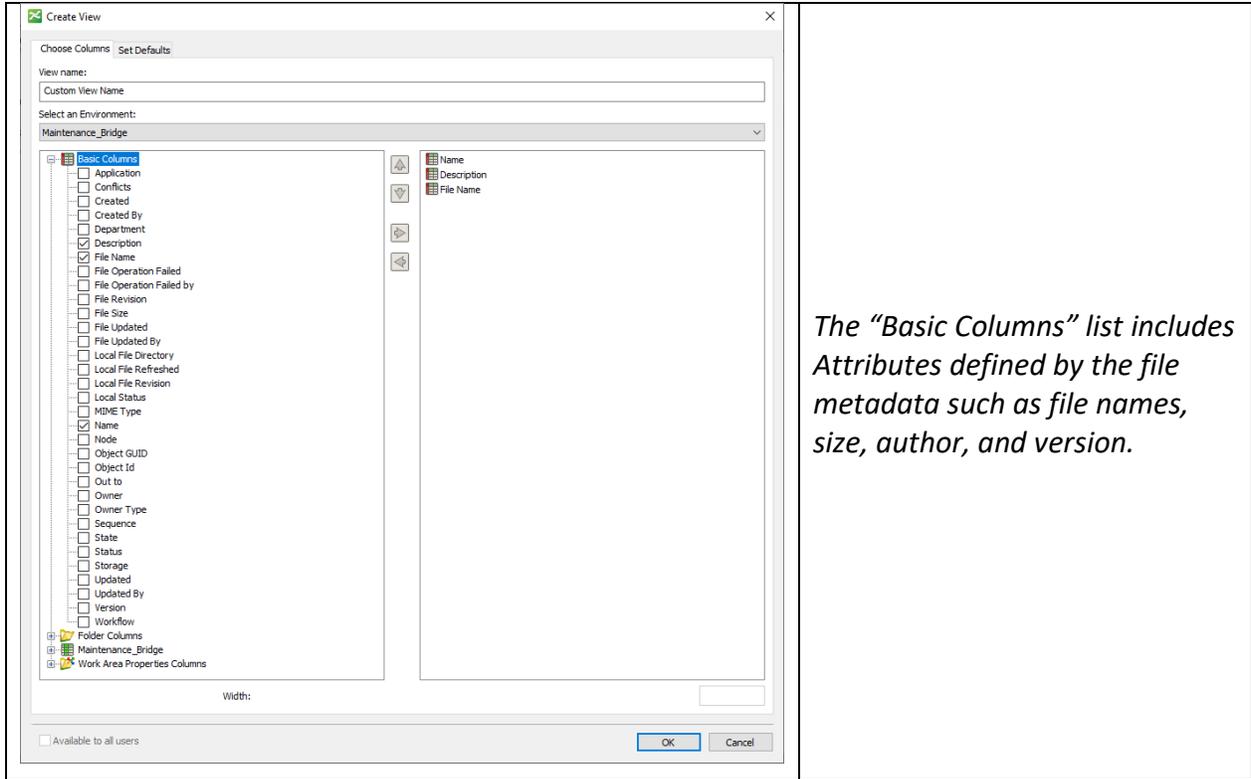
Figure B2.4. Basic Columns expanded list.

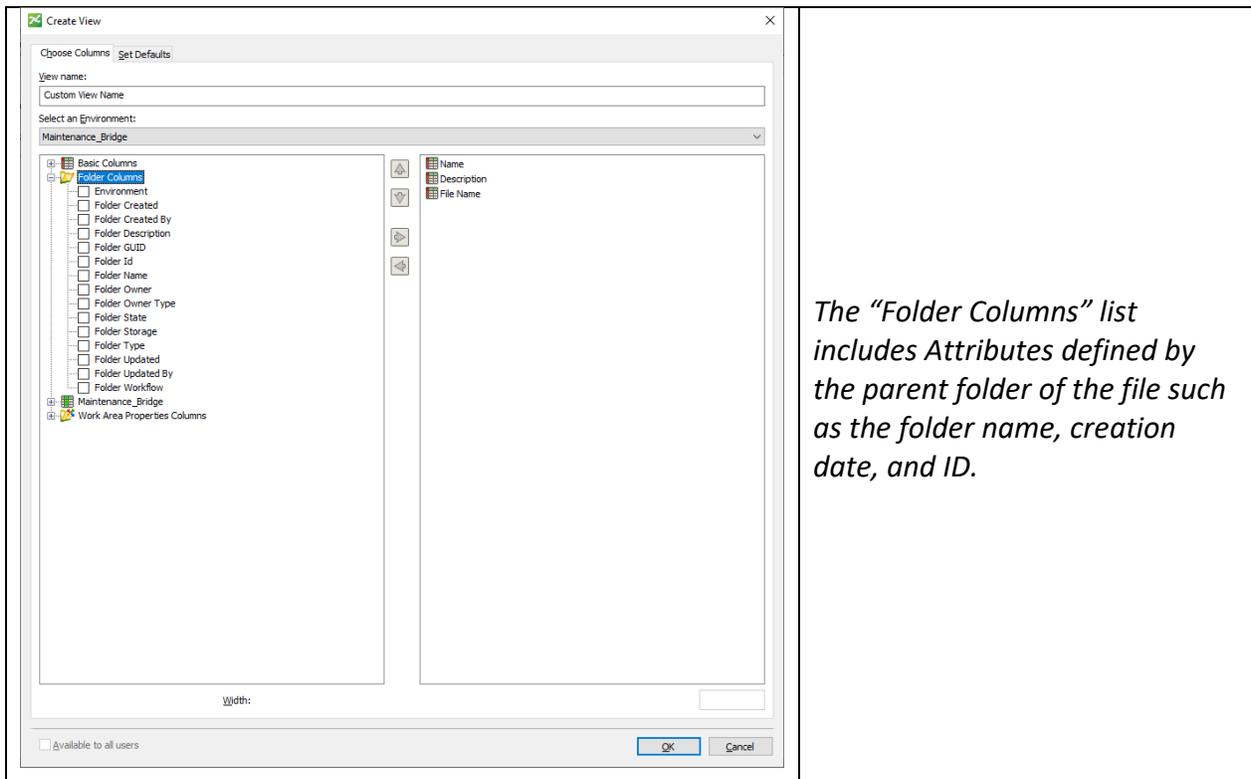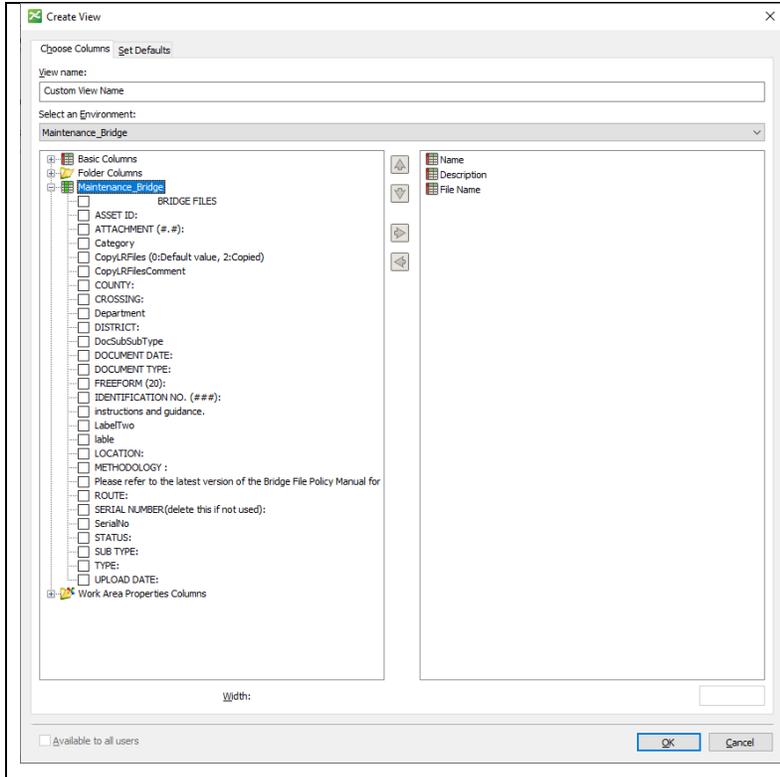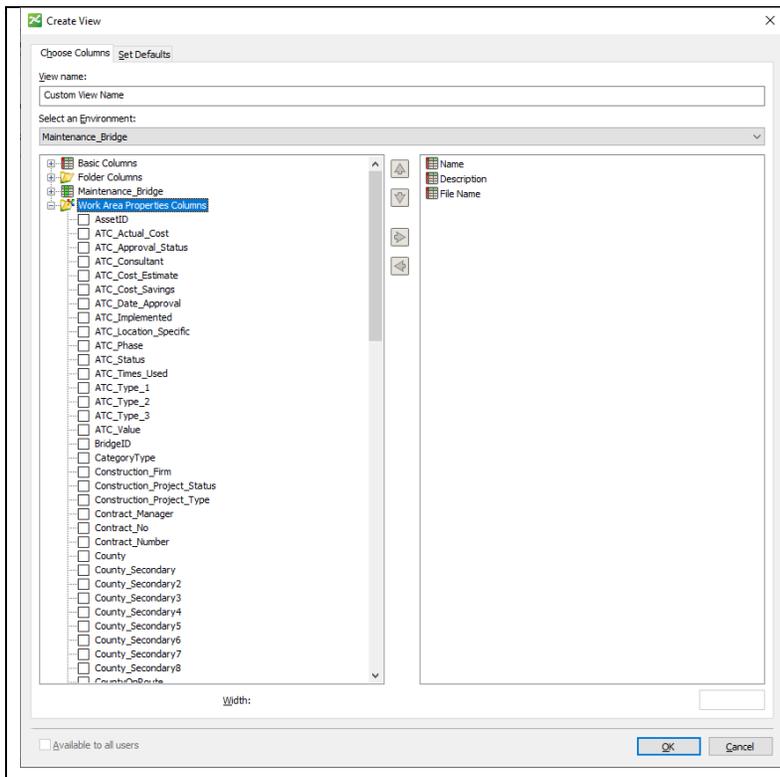*The "Basic Columns" list includes Attributes defined by the file metadata such as file names, size, author, and version.*

Figure B2.5. Folder Columns expanded list.

The "Folder Columns" list includes Attributes defined by the parent folder of the file such as the folder name, creation date, and ID.

Figure B2.6. Maintenance_Bridge expanded list.

The "Maintenance_Bridge" list includes Attributes defined during the file upload process.

Figure B2.7. Work Area Properties Columns expanded list.

The "Work Area Properties Columns" list includes Attributes defined by the work area such as the Bridge ID or County.

This list is not commonly used for Attribute selection.
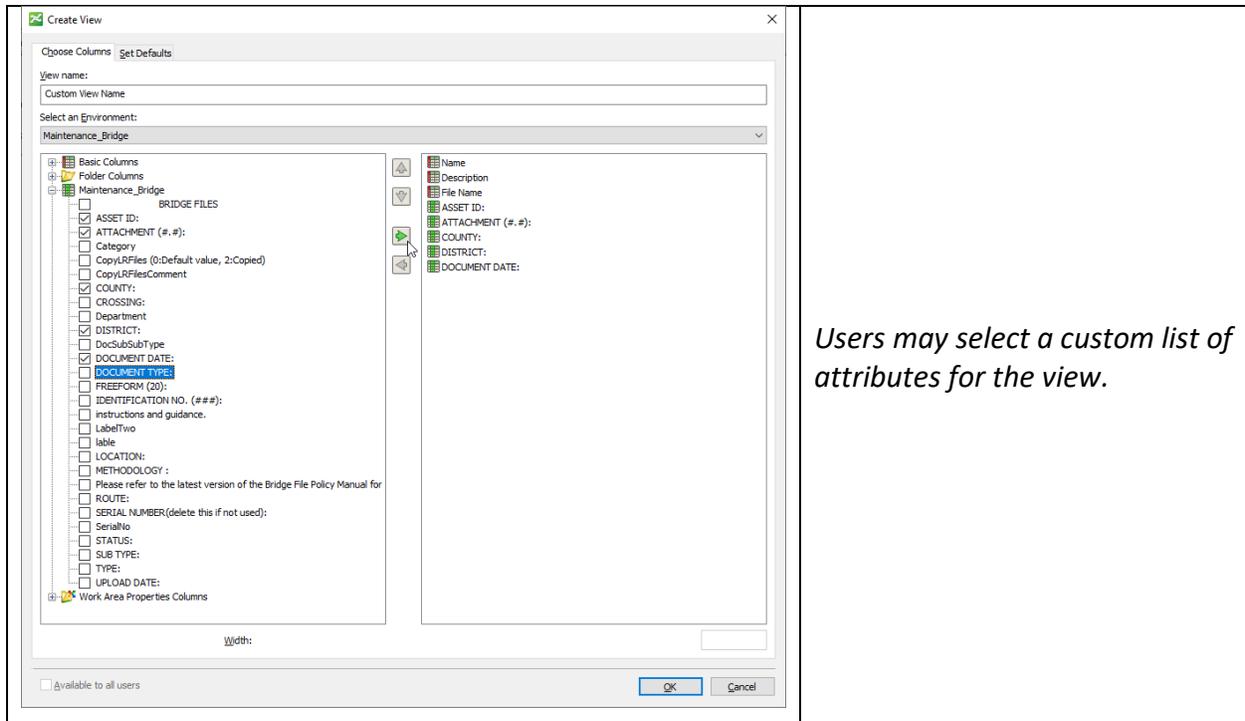
Users may select a custom list of attributes for the view.

Figure B2.8. Create View window for selecting Attributes and Manage Views Window to confirm view list.

Step 4 (Figure B2.9)

1. Once the list on the right is populated, select the "OK" button.
2. The new custom view will now appear in the list of existing views. Select the "Close" button to exit the Manage Views window.
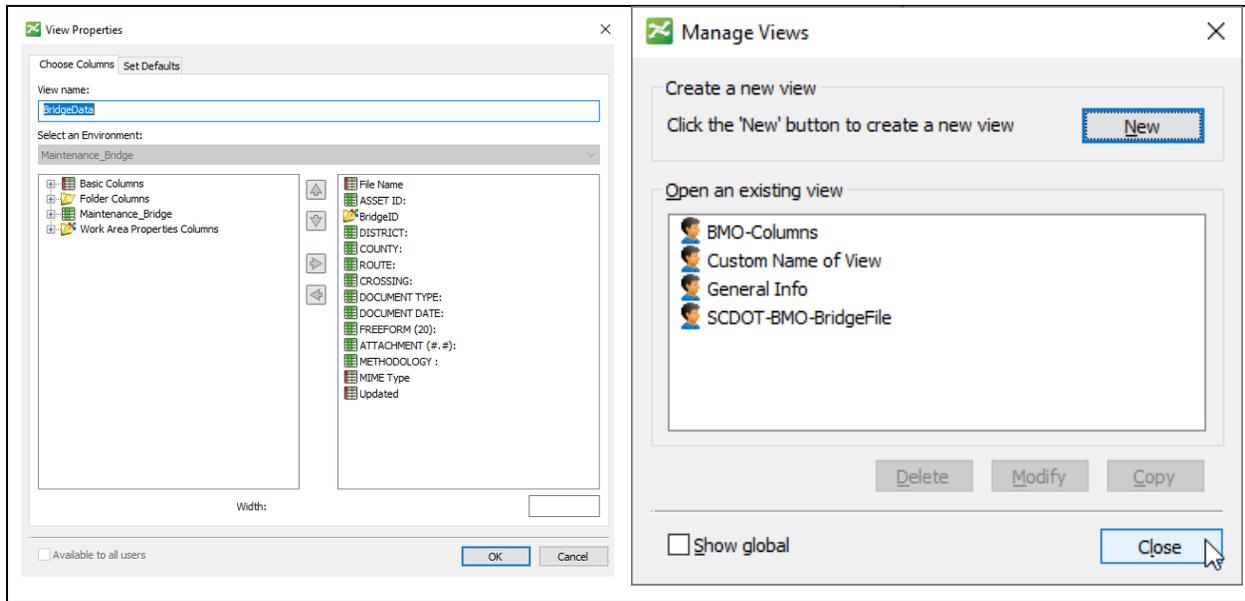
Figure B2.9. Create View window for selecting Attributes and Manage Views Window to confirm view list.

Step 5 (Figure B2.10 & Figure B2.11)

For ease of access to the various Views, users can turn on the Toolbar for Views by navigating to the View Menu > Toolbar > and selecting "View." (Refer to Figure B2.10).

Using the toolbar to view the ProjectWise List using the custom view, select it from the drop-down list of views. This will automatically populate the data in the selected view as shown in Figure B2.11.
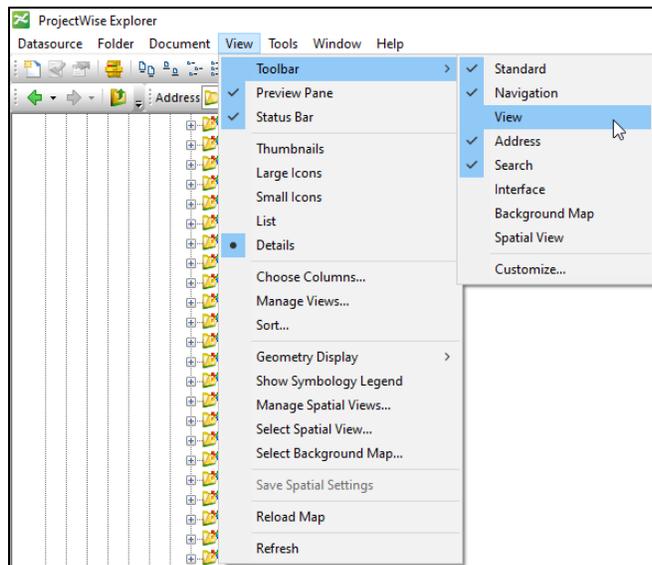

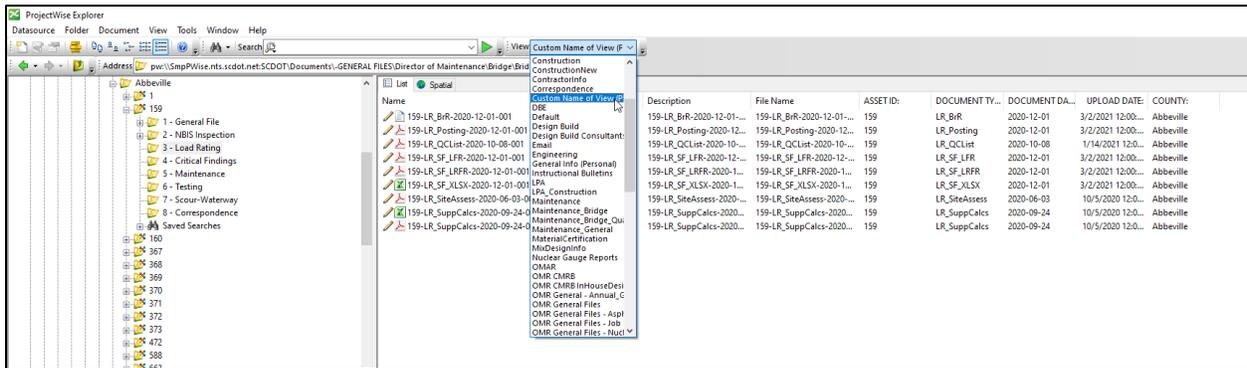Figure B2.10. ProjectWise Explorer Toolbar drop down options.

Figure B2.11. Custom View selection from View drop-down list.

B3 Exporting Search Results

The following steps illustrate how to export a search result produced from a custom search and using a default or custom View to a text editor application file that can be used in a spreadsheet program like Excel.
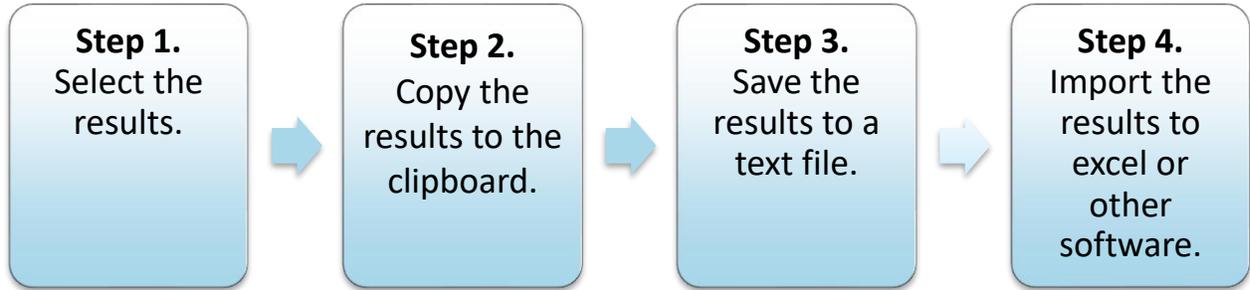
| Step 1. Select the results. | Step 2. Copy the results to the clipboard. | Step 3. Save the results to a text file. | Step 4. Import the results to excel or other software. |

Figure B3.1 Steps for exporting a search.

Step 1 (Figure B3.2)

After a search has been completed, select all the results and right-click.

File Name	ASSET ID:	BridgeID	DIST...	COUNTY:
Enter text here	Enter te...	Enter text here	E...	Enter text h...
6141-LR_BrR-2020-09-15-001.xml	6141	3110002000500	1	Lee
6141-LR_QAList-2020-10-02-001.pdf	6141	3110002000500	1	Lee
6141-LR_QCList-2020-09-15-001.pdf	6141	3110002000500	1	Lee
6141-LR_SF_LRFR-2020-09-15-001.pdf	6141	3110002000500	1	Lee
6141-LR_SF_XLSX-2020-09-15-001.xlsm	6141	3110002000500	1	Lee
6141-LR_SiteAssess-2020-09-15-001.pdf	6141	3110002000500	1	Lee
6141-LR_SuppCalcs-2020-09-15-001.xmcd	6141	3110002000500	1	Lee
6141-LR_SuppCalcs-2020-09-15-002.pdf	6141	3110002000500	1	Lee

Figure B3.2. Selected files from a search.

Step 2 (Figure B3.3)

In the right-click context menu, navigate to and select the "Copy List To" > "Clipboard Tab Separated" option.
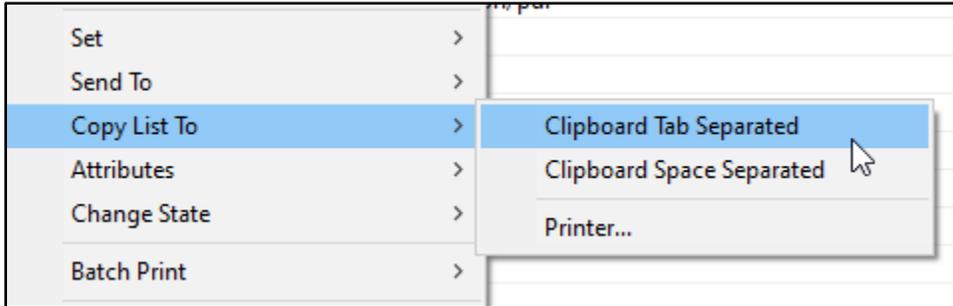

Figure B3.3. Menu when right clicking a search result. Select the "Clipboard Tab Separated" option.

Step 3 (Figure B3.4)

Immediately after copying the search information, paste it to a text editor application file (such as Notepad). Save the file for access by other applications.
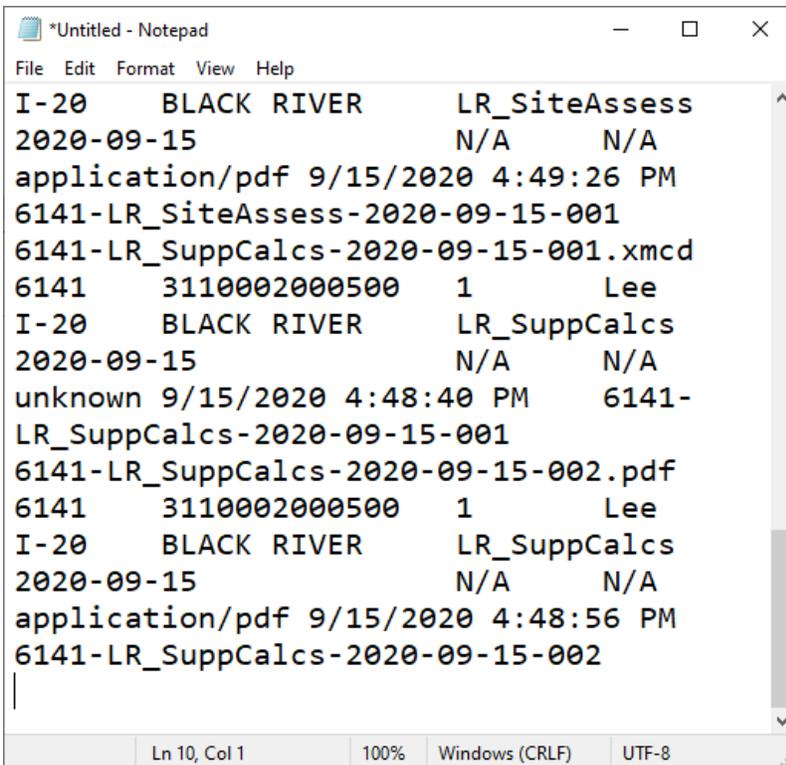

Figure B3.4. Paste the copied information to a text-editor application file such as Notepad.

Step 4

The saved text application file may be imported as a CSV to any spreadsheet program (such as Excel).

For assistance in importing a CSV file to Excel, refer to Microsoft support online such as Import data from a CSV, HTML, or text file.

The following steps illustrate an example import process for Microsoft 365 Excel.

1. In Excel, navigate to Data > From Text/CSV (Figure B3.5)
2. Select CSV file from saved location and Import (Figure B3.6)
3. In the Import window, select the "Load" option (Figure B3.7)
4. The information from the file will be loaded to an Excel table (Figure B3.8)
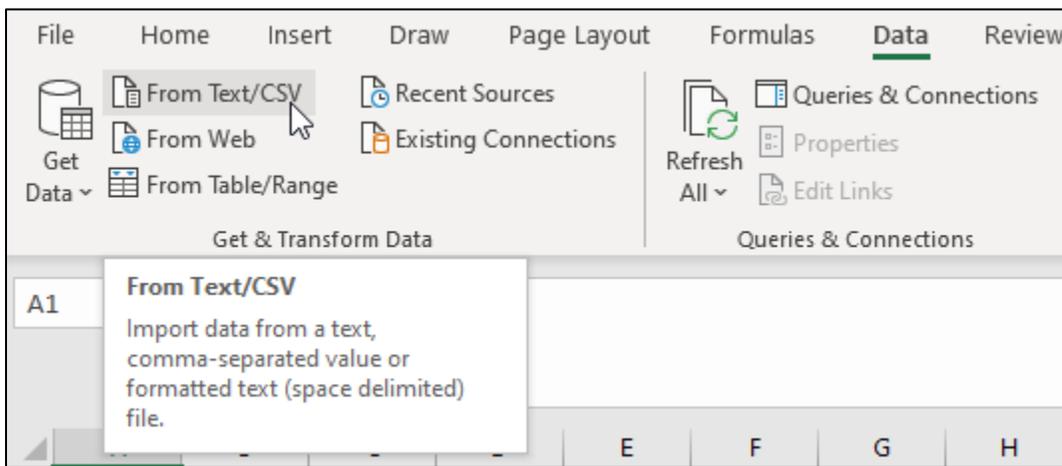

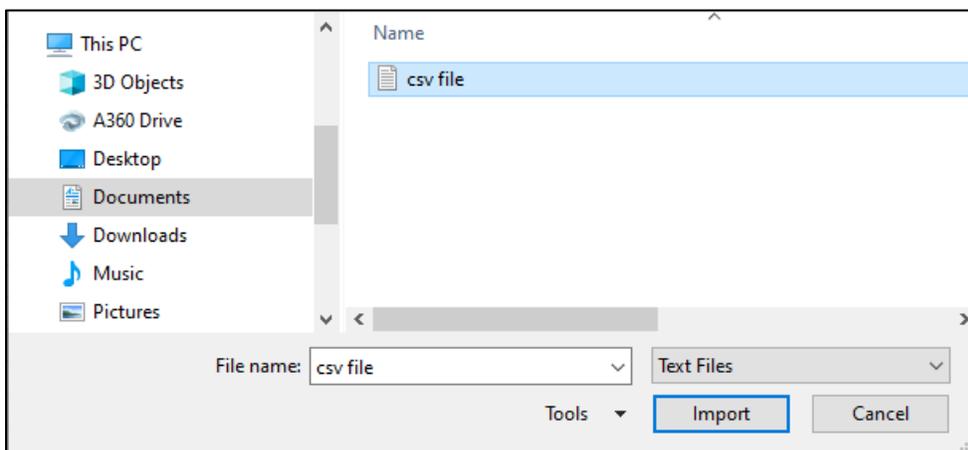Figure B3.5. In Excel, navigate to Data ribbon and select "From Text/CSV."

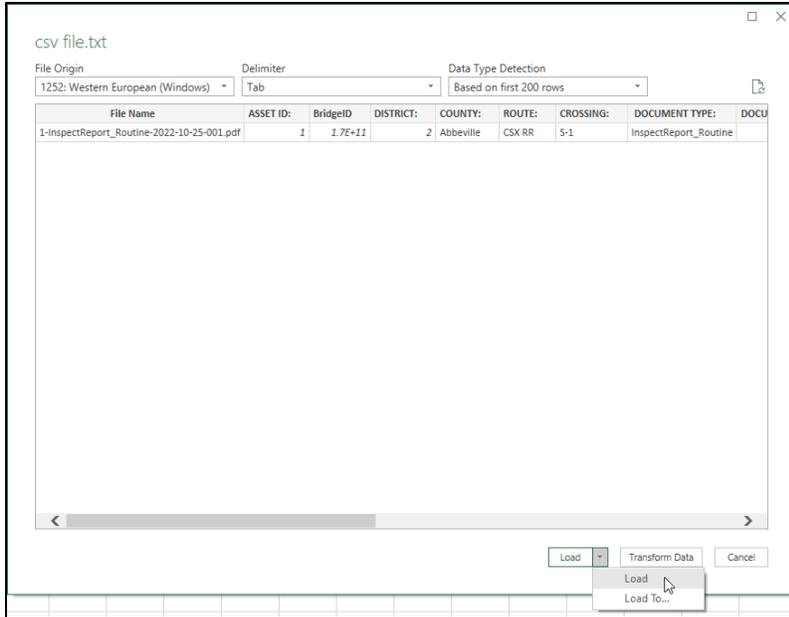
Figure B3.6. Select the CSV file from the folder location.
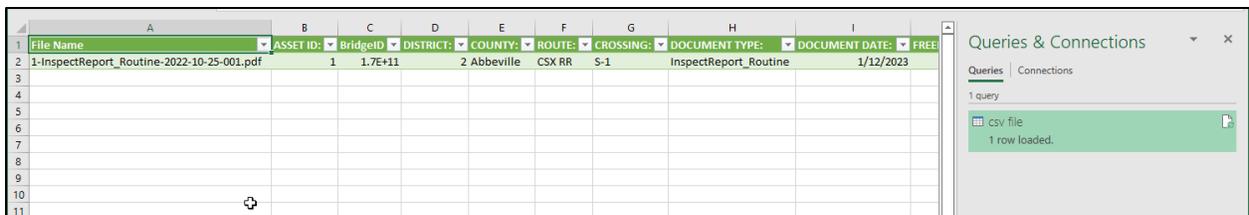
Figure B3.7. In the pop-up window, select the "Load" button.

Figure B3.8. The data from the CSV file loaded into a table.