# **Supplementary Materials**

# Project

Identifying a Collections Management System for Tower Bridge

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# Appendix A: Collections Management System Criteria Checklist (CMSCC) created by Canadian Heritage Information Network (CHIN)

Example of two parts of section A in the abridged spreadsheet.

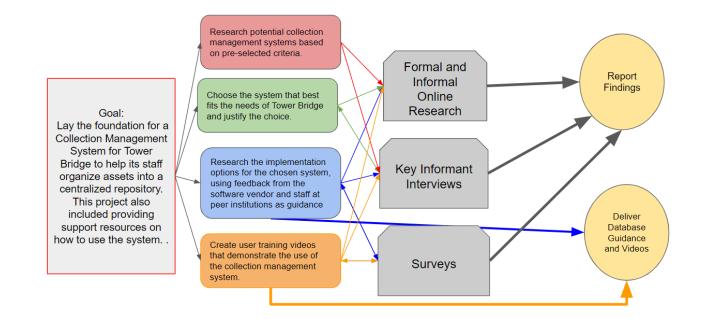
Item	Criteria	Description	Mandatory	Nice to Have
Sect	ion A: Core co	llections management criteria		
(Spe	ctrum primar	y procedures)		
	Object Entry	The management and documentation		
A.1		of the receipt of objects that are not		
		currently part of the collections. These		
		objects may or may not eventually be		
		accessioned		
A.1.1	Uniquely identify objects on deposit	The system can uniquely identify newly received objects or object lots, and assign a unique local deposit number which can be differentiated from accession numbers.		
A.1.2	Entry reason	The system can record a reason for an object or group of objects physically entering the organization.		
A.1.3	Unique system number assigned	The system can ensure that a unique system number is assigned to all objects or object lots (accessions, loans, temporary custody).		
A.1.10	Current owner	The system can record details of the owner of a loaned or temporarily deposited object, or other object in the organization's custody which does not belong to the organization.		
A.1.12	Entry date	The system allows recording of a date on which an object or group of objects enters the organization.		
A.1.18	Objects returned to owner	The system can record that deposited objects or object lots have been returned to the owner as required (for example, track that the objects have been returned with a return date).		
A.1.20	Return date	The system can record the date an object is due to be returned to or collected by the current owner or depositor.		
	Acquisition	The management and		
A.2	and	documentation of the addition of		
	accessioning	objects or object lots to the collection		

	Accession by lot	The system can accommodate accessioning by object lot.	
A.2.1		This means that it can assign a unique local number to a	
A.2.1		group of objects that are being accessioned together. The	
		separate objects in the lot may eventually be numbered	
		separately.	 
	Unique system	The system can ensure that a unique system number is	
A.2.2	number assigned	assigned to all objects or object lots.	
	Local unique numbers	The system can accommodate non-system local unique	
A.2.3		numbering systems (for example, accession numbers in a	
		wide variety of formats, Borden numbers).	
	Object number	The system can record a unique number identifying an	
A.2.4		object or specimens, including any separated parts.	
	Object name	The system can record a description of the form, function	
A.2.9		or type of object.	
	Title	The system can record the name assigned to an object or	
A.2.10		group of objects by the artist/creator or collector at the	
		time of origin or subsequent titles either specifically	
		assigned or generally understood to refer to it.	
	Brief description	The system can record a text description of an object in	
A.2.11		approximately one sentence; normally used for	
		administrative and identification purposes. It records the	
		most important information from a number of separate	
		descriptive units of information.	
	Source	The system can record source information (for example,	
A.2.13		acquisition source, title, surname, address) about objects	
		or object lots.	
	Acquisition date	The system can record the date on which the object or	
A.2.24		objects are acquired.	
	Acquisition conditions	The system can record any conditions on the acquisition	
A.2.26		of the object, such as donor access or display	
		requirements.	

The full spreadsheet can be found at

https://www.canada.ca/en/heritage-information-network/services/collections-management-sys tems/software-criteria-checklist.html

## Appendix B: Graphic of project goals and methods



## **Appendix C: Weighted Value Analysis**

	Visualizing search results 1 is no visuals, 10 is very visual	Simplicity 1 is less simple, 10 is more simple	Layout/Ease of use 1 is hardest to use, 10 is easiest to use	Total Score
Weight (1-100)	50	40	90	
System 1	4	5	3	670
System 2	8	7	8	1400
System 3	3	7	6	970
System 4	8	3	6	1060
System 5	5	5	4	810

Example of a weighted value analysis:

The final score is determined by multiplying the score by the weight and summing all the criteria. In this example, System 2 would be chosen.

# Appendix D: Interview Protocol for Insights on Collections Management Systems

These interviews investigated how different institutions used collections management systems, and what considerations they took when selecting and developing the system they chose.

### Considerations

- Interviews will be held over Zoom or Microsoft Teams
- We will be interviewing people that work with collections management systems
- Biases
  - We will ask open-ended, neutral questions to allow the interviewer to guide the conversation and remove our biases
  - We will consider that different institutions may have different needs from Tower Bridge
- Validity
  - We will interview people at credible institutions that have done extensive work with collections management systems to ensure that we are receiving expert advice

#### **Sample Interview Format**

#### **Introduction and Consent Script**

Hello \_\_\_\_\_. We are students from Worcester Polytechnic Institute doing an IQP to develop a Collections Management System for Tower Bridge, a historical site in London. We would like to interview you on the evaluation and selection of Collections Management Systems. Would it be okay to record this interview on Zoom to make sure we capture your responses? If you would rather not, it's perfectly fine, we can just take notes instead. Do we have your permission to quote you in our report? Any information you share with us is completely confidential and will only be used for research purposes with your permission. You can also remain anonymous and we will not record any of your personal information. We will not identify you by name in any of our writing to make sure the information you share with us is confidential unless you would like to be quoted.

#### Questions

- What collections management software is being used at your institution?
- How did you research and evaluate potential options for software before choosing?
- What criteria are most important when choosing software for collections management?
- What are the strengths and weaknesses of the CMS options?
  - $\circ$  Cloud-Based
  - Local Based
  - Web-Based
- Can you provide any insight on the IT side of managing the server hosting the CMS?
- Does the system use a metadata scheme that you would recommend?
- What are some techniques for effective data entry and metadata development?
- What recommendations would you give for writing a proposal for software?

### Conclusion

Thank you for meeting with us today. Is there anything else you care to share with us about CMS? Do you have any questions for us or how we will use the information gathered in this interview? Would you be okay with further inquiries if they come up? Would you like to receive a copy of our final report? Thank you for your time, if you have any more questions feel free to reach out over email.

### Appendix E: Survey on important criteria to consider for CMS options

This section will include the survey that will be sent to Tower Bridge staff on the criteria they consider important in a potential management system.

# Tower Bridge Collection Management System Criteria Survey

You are invited to participate in an online survey relating to the development of a Collection Management System (CMS) for Tower Bridge. This is a project being conducted by a team of four students at Worcester Polytechnic Institute in Worcester, Massachusetts, USA.

The goal of our project is to lay the foundation for a CMS for Tower Bridge to help its staff organize assets into a centralized repository. We will be collaborating with Tower Bridge staff to inform the selection and development of this system.

To accomplish this goal, we would like to learn more about the importance of certain criteria that can be used to evaluate and compare CMS options. The questions that follow will ask you to rank various criteria that will help us determine what things will be most important for us to consider when selecting a CMS.

#### PARTICIPATION

Your participation in this survey is voluntary. You may exit the survey at any time. You are free to decline to answer any particular question you do not wish to answer for any reason. It should take approximately 15 minutes to complete.

#### BENEFITS

Your responses will help us learn more about the important criteria for a CMS for Tower Bridge. We intend to use these responses to help develop a robust analysis of various CMS options, leading to a final decision on the system that we will help Tower Bridge implement.

#### RISKS

There is minimal risk to partaking in this survey. We are asking you to share with us information on CMS criteria, and your responses will not contain any identifying information.

#### CONFIDENTIALITY

Your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

#### CONTACT

If you have questions at any time about the study or the procedures, you may contact us at: <u>gr-TowerBridgeC21@wpi.edu</u>

3 of 10											
Exhibition Management The management and documentation of temporary exhibitions and permanent displays from the curatorial and Tower Bridge collections management perspective											
	1	2	3	4	5						
Not at all important	0	0	0	0	$\bigcirc$	Very Important					
Discipline features Data fields and tasks related to specialized Tower Bridge collections, topics or disciplines relevant to Tower Bridge collections											
	1	2	3	4	5						
Not at all important	0	0	0	0	0	Very Important					
Public access features Some systems can provide pu	Public access features Some systems can provide public access via the internet.										
	1	2	3	4	5						
Not at all important	0	0	0	0	0	Very Important					

The full survey can be found at <u>https://forms.gle/aiaXmiBZUu44ths98</u>

### **Appendix F: Weighted Value Analysis Survey**

This survey allowed Tower Bridge staff to score the demonstrated systems on the key criteria from the weighted value analysis.

# Weighted Value Analysis Survey

You are invited to participate in an online survey relating to the development of a Collection Management System (CMS) for Tower Bridge. This is a project being conducted by a team of four students at Worcester Polytechnic Institute in Worcester, Massachusetts, USA.

The goal of our project is to lay the foundation for a CMS for Tower Bridge to help its staff organize assets into a centralized repository. We will be collaborating with Tower Bridge staff to inform the development of this system.

To accomplish this goal, we would like to learn more about your opinions on our CMS options. The questions that follow will ask you to rank each of our CMS options on a scale of 1 to 10 based on 6 criteria.

#### PARTICIPATION

Your participation in this survey is voluntary. You may exit the survey at any time. You are free to decline to answer any particular question you do not wish to answer for any reason. It should take approximately 15 minutes to complete.

#### BENEFITS

Your responses will help us learn more about how well our implementation for the CMS suits the needs of Tower Bridge. We intend to use these responses to help develop a user friendly CMS.

#### RISKS

There is minimal risk to partaking in this survey. We are asking you to share with us information on user preferences, and your responses will not contain any identifying information.

#### CONFIDENTIALITY

Your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

#### CONTACT

If you have questions at any time about the study or the procedures, you may contact us at: <u>gr-TowerBridgeC21@wpi.edu</u>

# Weighted Value Analysis Survey

Proficio											
How would you rate Proficio's layout and how easy it will be to use?											
	1	2	3	4	5	6	7	8	9	10	
Hard to use	0	0	0	0	0	0	0	0	0	0	Easy to use
How would you rate Proficio's scalability or potential uses in the future?											
Difficult to Sc	ale	1	-		-	-		-	-	10	Easy to Scale
How would you rate Proficio in terms of its scope and how well it fits the needs of Tower Bridge?											
Too few or featu		any		2 3 DO(	4 5 DO(	67 00	89 00	10	Mat		ower Bridge's eeds

The full survey can be found at <a href="https://forms.gle/Ytp5LFiqwpVDJeyVA">https://forms.gle/Ytp5LFiqwpVDJeyVA</a>

## **Appendix G: Interview Protocol for SSL**

These interviews investigated how CollectionsIndex+ could be implemented at Tower Bridge and what steps would need to be done next.

## Considerations

- Interviews will be held over Zoom or Microsoft Teams
- We will be interviewing people that work with Collections Management Systems
- Biases
  - We will ask open-ended, neutral questions to allow the interviewer to guide the conversation and remove our biases
  - We will consider that different institutions may have different needs from Tower Bridge
- Validity
  - We will interview people at SSL that have done extensive work with CollectionsIndex+ to ensure that we are receiving accurate information on the system

### Consent

Over email, we asked permission to use the content of our conversations with SSL as a part of our IQP report and received written consent to use to do so.

### Questions

- 1. What steps will Tower Bridge have to take to get the CMS up and running?
- 2. What initial information will need to be provided for customization?
- 3. Is it possible to continue customizing after the CMS instance is running?
  - a. If so, what parts/how much?'
  - b. Can mandatory fields be changed at a later date?
- 4. Does SSL provide the manual to prove Spectrum compliance or is Tower Bridge expected to create its own?
- 5. Is there any important information you would like to share with us to help Tower Bridge with the setup process?

## Appendix H: Questionnaire regarding the use of CollectionsIndex+

This questionnaire was distributed to institutions in London using CollectionsIndex+ to investigate their implementation of the system, customizations requested, and the satisfaction of the system and services provided by SSL.

#### Consent

Over email, we asked permission to use the content of the questionnaire responses as a part of our IQP report and received written consent to do so.

#### Introduction

Tower Bridge is considering introducing Collections Index+ to manage its collections. We would appreciate your help by answering a few questions on how you use the system, and which feature you find particularly helpful. Thank you for your support.

#### Questions

- Which modules do you have in the system (MuseumIndex+, AssetIndex+, ContentIndex+, etc.)?
- 2. Can you comment on the user training provided by SSL?
- 3. Can you comment on the customer support and maintenance provided by SSL?
- 4. Which fields show up in your search results list view? For example (see below):
  "Image, Repository, Reference Code, Title, Level, etc." (*A screenshot of the search results would be helpful*)

Search results										
15 archives found	1234	· View all	View as: list   grid	Folder:	Untitled folder (0)				*	ø
Image	Repository	Reference code	Title			Level	Activities	Cont	rols	
	Unassigned	972						view	edit	2
0	Robert Aickman Collection	972.0020	Montgomeryshire Canal man in car Locks water is very low	noe 'Cheswardine' at	top of Cwmbran	File		view	edit	Ę
	Robert Aickman Collection	972.0021	Montgomeryshire Canal at Pontney locks canoe 'Cheswardine' on bank			File		view	edit	E
	Unassigned	992						view	edit	E
	Michael Ware Collection	992.1207	Great Ouse River / Deriver sluice k	ocks		File		view	edit	6
0	Unassigned	ARC75817	Photographs of waterways: of unkn	own provenance				view	edit	E
0	Unassigned	BM Images	BM Images					view	edit	E
0	British Waterways Archive, Gloucester	BW120	Sharpness New Docks and Glouce Company	ster and Birmingham	Navigation	Fonds		view	edit	G
0	British Waterways Archive, Gloucester	BW120/14	Worcester and Birmingham Canal			Series		view	edit	
0	British Waterways Archive, Gloucester	BW120/14/4	Diglis Wharf and Locks			Sub- series		view	edit	6

- 5. Do you have any custom views set up for asset summaries? If so, what data fields are associated with each display? (*Screenshots would be helpful*)
- 6. What have you found to be the most important feature of CollectionsIndex+?
- 7. Is there anything you would like to share about the customisation process with SSL?
- 8. How long have you been using Collections Index+, and do you have any comments on updates and longevity of the system?
- 9. And finally, do you have any other notes, comments or recommendations you wanted to share?

Top Choice	Yes	Kes	Yes	Yes	Kes	Ŷ	Ŷ	٥N	٥N	No	Ŷ	°N
Summary	Affordable option that may have a large learning curve	Affordable open source option that will allow for a lot of customization, but may require a lot of work and technical knoweldge for setup and changes	Many features and customization options, though it is somewhat complex and quite expensive.	Expensive option with a very visually pleasing user interface	System with a proven history of use in Loadon museums with additional modules available for purchase and a high initial cost	Affordable option with a scope that seems reasonable for Tower Bridge's needs, but not Spectrum compliant	Affordable open source option that will allow for a lot of customization, but may require a lot of work for upkeep	Expensive web-based system with many customization options.	Somewhat expensive system that seems more useful for collections with lots of physical artifacts and a need for condition checking.	Somewhat expensive system that is more focused on public access features but can work well as an internal resource.	Affordable option with an inultive user interface, but limited customization.	Very affordable option targeted for smaller institutions, but less robust search feature
Demonstration Status	Demo done on 3/29, steps for logging into the online demo are linked here: link	usemame. demo password: demo <u>link</u>	Completed demonstration with Qingliang Zhang on 3/19	Contacted Axiell, they have an online demo: <u>ink</u> Username: CollectionsDemo Password: @Xiell2017	Completed demonstration on 4/1 https://demo11-we.collect ionsindex.com/ Username: guest1 Password: guest1	Demo available, but videos on website seem to show most functionalities <u>link</u>	Can get a 30-day free trial, demo available: <u>link</u>	Requested demonstration		Contacted	Viewer perspective available: <u>link</u>	Online demo available
Cost	205 USD monthly / £1780 annually for Profilo Elements (10240) 5 concurrent uses: 100GB storage limit 10 USD/month for each additional 50GB 2415 USD / £1790 (one-time) for Proficio Elements (Local) freet concurrent user sessions	Free if hosted locally 115 USD / £126.60 monthly if hosted on the cloud with 100GB storage	5645 USD / £4083 annually for the first user, 1600 USD / £1158 annually for each additional user	E6700 annually with cloud hosting £10,250 one time with local hosting	One time. E1500 + VXT for 4 concurrent users E1500 for extended media module Annually. E2000 for cloud hosting Additional on-stine fees (around £3000) Additional on-stine fees (around £3000)	1245 USD one time setup 1245 USD annually for 20 users and 1000GB stroage	Open source but low cost (not free), quote from vendor needed	7500 USD annually	85 USD per user per month	300€/month for medium package, the full CMS software will probably be more	<b>1200 USD annually</b> for 50GB storage and 20 users	800 USD annually for 200GB storage and 100,000 entrias
Key Features	Unlimited Users Each user gats their own login credentials and permissions Highy versionizable sets search & data entry Designed for eacy user interaction and expedited vorkflow Different libraries (art, history, archives)	Includes a SPECTRUM-compliant installation profile Very councilabilith interface and features Easy importexport Excert Previous data with Sweard CMS Standards Preset up dean of tresting May meed a long-term software developer(engineer at Tower Bridge for mathemane Bridge for mathemane variable with fees High micro estup	Full set of configurable UI heatures Term searching and configurable users with additional & Museum module Import/export features for Excel, CSV Softweet peddes and endmatic feat/ups Softweet peddes and endmatic feat/ups	Flexible user interface with many customization options Keyword and advanced search Digital asset managment Importexport features for Excel, CSV	British Museum, V&A. GAG use this Fixelioh brosting - can host data locally or SaaS Fixelioh arboration - can host data locally or SaaS Import and arboration manages used use that supports public discloses of how an aurique module that supports public access on the web and manages user generated content can and audits.	Basic and advanced search Add people and creators Less tournizable interfact Less tournizable interfact Public access available Atommatic updates and beckup	No licenses or fimits on user accounts Keyword and advanced eastch Open source Digidal search management, Importexport features for Excel. CSV	Friendly UI Flexible are change many fields Request management and loans Can offer public access Can offer public access	Customizable fields and reports Document ana manage schibitions Built-in aeroode support IOS motile app	Customizable entry forms Support for rigital asset managment Import export	Web based with attractive U Importexport factures for Excel CSV Potential to publish records online Hosting and backup Secure web pages and two factor authentication	
Spectrum Compliant	Yes	Ŷ	Yes	Yes	Yes	Ŷ	No	°N N	Yes	Yes	No	°N N
Software Type	Web browser	Web browser	Web browser	Web browser	Desktop software or Web browser	Web browser	Web browser	Web browser	Web browser	Desktop software	Web browser	Web browser
Storage Hosting Solution	Local or Cloud	Local or Cloud	Cloud	Cloud	Local or Cloud	Cloud	Local or Cloud	Cloud	Cloud	Cloud	Cloud	Cloud
Collections Trust Description			<u>TMS</u> Collections Description	Description	Description				Description	Description	Description	
CHIN Review	Review	Review		Review for older version		Review for non-web version	Review	Review			Review	
Vendor Website	Website	Website	Website		Website	Website	Website	Website	Website	Website	Website	Website
Option	Proficio	CollectiveAccess	TMS Cataloguer	Axiell Collections Website	CollectionsIndex+	PastPerfect Web	CollectionSpace by Lyrasis	Argus	Collector Systems	Coeli	eHive	Catalogit

## Appendix I: Full Spreadsheet of Potential CMS Options

## **Appendix J: Rates for Axiell Support Services**

## <u>Day Rates</u>

Day rates for the following project personnel for additional services, should they be required.

Personnel	Day Rate
Training	£ 900 (on-site) / £650 (webinar)
Project Management	£ 900
System Configurations /integration	£ 900
Data preparation/migration support	£ 900
API support	£ 900

## **Appendix K: Setting Up CollectionsIndex+ Deliverable**

This document delivered to Tower Bridge describes the process for setting up and customizing CollectionsIndex+, including the potential for future expansion to include public access.



# **Setting Up CollectionsIndex+**

Matthew Frey, Michael Gobran, Colin Stevens, and Jarius Thomas

## Introduction

The WPI team has formally recommended CollectionsIndex+ by System Simulation (SSL) as the Collections Management System for Tower Bridge. Due to time constraints, the WPI project team will not be able to set up CollectionsIndex+, however, we have created this document to aid that process. After Tower Bridge secures funding for the system, this document can be used as a guide explaining the setup process and the open-ended options that SSL provides for customization.

## **Cost Analysis**

The main costs associated with CollectionsIndex+ are as follows:

- The one-time License Fee: £5000
- CollectionsIndex+ Support: estimated at 15% of initial costs
- Setup Installation: £375
- Customization £375 per half-day
- Annual Cloud Hosting: £2000 per year
  - $\circ$  Additional Users: £500 per user
- AssetIndex+: £5000
- Office Export Module: £1500
- CollectionsOnline: £3000
  - Support fee £450 per year

The following figures break down the price of CollectionsIndex+ and additional modules:

			Installation	C	loud hosti	ng		One-off pricing for license			
	Summary	Users		license per year	ie license per year per user	add. license	license one-off	add.cost		license per user	add. license
CollectionsIndex+ with Extended Media	100GB Ext. Media allows audiovisual media, PDF etc.	4	£375	£2,000	£500	n/a	£5,000	£1,500 (Extended Media) £1,500 (Office Export for reports) £tbc (data transfer)	£8,000	£2,000	£350
CollectionsIndex+ with Asset Index+	100GB AssetIndex+ allows full media functionality	4	£375	£2,000	£500	n/a	£5,000	£5,000 (AssetIndex+) £1,500 (Office Export for reports) £tbc (data transfer)	£11,500	£2,875	£350

Figure 1: Cost Comparison for CollectionsIndex+ with Extended Media & CollectionsIndex+ with AssetIndex+

			Installation	Cloud hosting	One-off pricing for license	Cı	imulative Co	ost
	Summary	Users	set-up	license per year	total licence one-off + add.cost	Cost after 1 year	Cost after 2 years	Cost after 3 years
CollectionsIndex+ with Extended Media	100GB Ext. Media allows audiovisual media, PDF etc.	4	£375	£2,000	£8,000	£10,375	£12,375	£14,375
CollectionsIndex+ with Asset Index+	100GB AssetIndex+ allows full media functionality	4	£375	£2,000	£11,500	£13,875	£15,875	£17,875

Figure 2: Cumulative Cost Comparison for CollectionsIndex+ with Extended Media & CollectionsIndex+ with AssetIndex+

			Addit	tional Cost	S	Public Access		
	Summary	Users	configuration to Spectrum standards	training	support	public access per year	setup for public facing side	
CollectionsIndex+ with Extended Media	100GB Ext. Media allows audiovisual media, PDF etc.	4	£750	£750	15% of contract value	£3,000	n/a	
CollectionsIndex+ with Asset Index+	100GB AssetIndex+ allows full media functionality	4	£750	£750	15% of contract value	£3,000	n/a	

Figure 3: Additional Costs for CollectionsIndex+ with Extended Media & CollectionsIndex+

with AssetIndex+

#### **Data Migration**

When setting up CollectionsIndex+, the first step is an optional service called Data Migration. Data Migration is a service SSL provides in which they browse an institution's pre-existing records, determine which field titles and terminologies they use for cataloguing, and map these terms into the appropriate location in the database. Once the data mapping scheme is put together, SSL will plan a meeting to confirm they have included all the important field titles that the customer wants. At this point, the Tower Bridge team could suggest changes to the arrangement of the CMS and SSL would make sure to make those adjustments.

When the data mapping scheme is finalized, SSL will initialize an instance of CollectionsIndex+ just for Tower Bridge. Using the documents or spreadsheets you provide, they will begin a batch entry that adds each of the recorded assets to the database. If any of the information you provided to SSL was incomplete or underdocumented, the records can be completed through CollectionsIndex+ once the system goes online.

#### **Streamlining Data Migration**

For Data Migration, SSL would prefer to receive a spreadsheet in a unified format, meaning the records you provide would all have the same information fields cataloged. If Data Migration is of interest to Tower Bridge, do this:

1. Collect all the asset records that Tower Bridge has available

Our team has been led to believe that there are various different records of the assets at Tower Bridge. Collect as many of these records as possible, so the CMS can be customized to fit with the field names and descriptions contained in these records

2. Aggregate all of the cataloguing terms that are relevant to the assets

When enough of the records are identified, the next step is to create a list of the cataloguing terms (fields) that are relevant to Tower Bridge's cataloguing system. If a field in the records is important for organization, include it in the list so it can be included in the CMS. Likewise, if a field in the records is unimportant, do not include it in the list.

3. Assure that all spreadsheets have the same format; or alternatively, create a new spreadsheet that contains all of the cataloguing terms as the column titles

This is the step that will make SSL's Data Migration faster and less expensive. Firstly, you would need to ensure all the spreadsheets have the same format. This means that each of the spreadsheets you sent to SSL should include all of the fields identified in Step 2. The spreadsheets **do not** need to be completely filled out in this phase, because any information withheld or left blank can be completed digitally once the CMS is launched.

Making a new spreadsheet is possibly the easiest way to streamline Data Migration. A new spreadsheet can be set up with all of the fields identified in Step 2, and the information from existing records can be copied and pasted into the appropriate location. Once again, each cell **does not** need to be fully documented in this phase, because any information withheld can be completed digitally once the CMS is launched.

#### **Skipping Data Migration**

If Tower Bridge decides not to use Data Migration, that is fine. In this case, you would not be able to use SSL's batch entry to populate the CMS. If Data Migration is skipped, then Tower Bridge's first step would be customization - this process requires internal communication, to figure out which fields are a good fit, and external communication with SSL to request modifications as needed.

### Customization

#### **Field Titles**

SSL is able to customize the names of fields - for example, you could change a term like "Title" to "Asset Name" if it makes cataloguing more effective. It is also possible to completely remove certain fields from the database or make any field mandatory. If the fields that are provided by default are not a good fit, SSL can have them changed before launching the CMS. They are also able to make changes after the CMS goes online, but this will result in a period of downtime where the system temporarily goes offline for a few hours. The cost of customization depends on the amount of work involved - SSL charges £375 per half-day of customization. This fee also applies to customization of the Search Results Page and the Dashboard.

#### **Search Results Page**

The Search Results Page can also be customized. Before SSL activates the CMS, Tower Bridge should let them know which fields to show on the Search Results Page.

Collections	Index+				gue	est1 log ou
Archives						
Browse Archive						
Quick search:	in Free text	✓ Search Clear				
Advanced search						
Add a new archive item						
Search results						
218 archives found	1 2 3 4 · View all	View as: <u>list   grid</u>		Folder: Untitled folder (0)		× @-
Image	Repository	Reference code	Title	Level	Activities	Controls
	Unassigned	972				view edit 📷
	Robert Alckman Collection	972.0020	Montgomeryshire Canal man in canoe 'Cheswardine' at top of Cwmbran Locks water is very low	File		view edit 📷
	Robert Aickman Collection	972.0021	Montgomeryshire Canal at Pontnewydd Five locks at a pound between to locks canoe 'Cheswardine' on bank man and boy on lock gate beam	File		view edit 📷
	Unassigned	992				view edit 📷
	Michael Ware Collection	992.1207	Great Ouse River / Denver sluice locks	File		view edit 📷
0	the sector of	40075047				

Figure 1: The Search Results Page with no customization

By default, the Search Results Page shows Repository, Reference Code, Title, and Level, but you can decide which fields are most relevant to show on this page. Like the field titles, requests for the search page should be provided to SSL before the CMS is launched if possible. Changing this page after the CollectionsIndex+ is online will also result in downtime.

Our project team created a questionnaire asking other institutions how they have customized their search pages, but so far we have only heard back from the Guildhall Art Gallery. As more institutions fill out this questionnaire, we encourage Tower Bridge to consider the responses when deciding how to set up this page.

#### Dashboard

The blue links on the Dashboard can also be customized. At SSL, they call this a *behavioral* change. Behavioral changes are not recommended by SSL, but they can do it for any customer who wants it. We recommend removing any blue links from the Dashboard that are unlikely to be used, and keeping the rest.

#### Views

A view is an alternate display that limits the fields that show up on an asset's page. Views are especially helpful for the different departments that may have different uses for the CMS. By using views, you can hide unimportant fields while avoiding sending the CMS into downtime. The following screenshots shows a sample asset in the default view and the same asset in a minimalistic view:

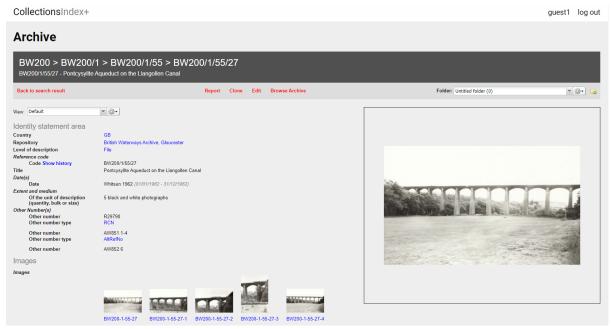


Figure 3a: A sample asset in Default view

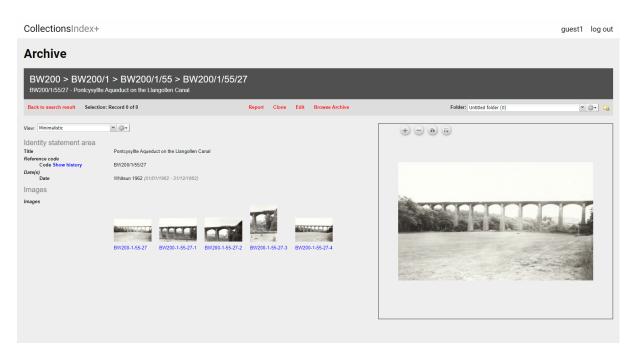


Figure 3b: The same sample asset in Minimalistic view

The fields that are hidden in the minimalistic view are still in the database, but they are not displayed in this view. Using views to cut down the visible fields is an easier and cheaper alternative to having SSL remove fields from the system.

On any asset's page, you can click the dropdown box next to "View" to see the available views. Additionally, when you can click the gear next to the dropdown and press "Manage views", you can go into the Views editor. The Views editor allows you to edit existing views and customize new ones. For more information on using the Views editor, please reference our video on Views.

## 

Figure 4: The Views editor

### **Public Access Module**

SSL's CollectionsOnline module costs £3000 and includes a base level of configuration: SSL can add a logo, font, a custom colour scheme, and Tower Bridge's choice of fields to display. Additionally, there is a £450 annual support fee, which provides support on the same terms as CollectionsIndex+ support.

If Tower Bridge needs a more comprehensive styling job, or additional website functionality, SSL can facilitate this. The cost is dependent on the amount of time needed, and the licence fees for any extra modules supplied by SSL. Because website development can happen after the CollectionsOnline site is launched, Tower Bridge can start by taking the standard out-of-the-box CollectionsOnline module and customize it as needed.

#### Conclusion

After months of research and preparation, the WPI project team is excited to see that Tower Bridge is moving forward with CollectionsIndex+. We'd like to give credit to Richard Beales and Rebecca Arnott at SSL who have been our contacts throughout our project term. They can continue to answer your questions about CollectionsIndex+ and the modules SSL offers. They can be contacted via email: richard@ssl.co.uk and rebecca@ssl.co.uk are their respective email addresses.

Going forward, we wish Tower Bridge the best of luck setting up CollectionsIndex+ and reopening the exhibit!

## **Appendix L: Spectrum Compliance Deliverable**

This document delivered to Tower Bridge describes the process for achieving Spectrum compliance.



Matthew Frey, Michael Gobran, Colin Stevens, and Jarius Thomas

## Introduction

For museum accreditation, Tower Bridge will need to follow Spectrum procedures. In order to show this and easily have everyone follow the procedures, it is recommended you create a manual laying out steps that follow each procedure. First, we will go over these requirements with a brief explanation of the procedure overall and links to more guidance on the procedure. The links to requirements outline what is the minimum to be compliant and why those requirements are important. The procedure guidance shows a guideline/example of a workflow to follow the procedure. Then, we will go over recommendations for the manual going forward.

## Procedures

Spectrum has nine primary procedures that must be followed for museum accreditation:

## **Object Entry**

This procedure is the requirement to document all objects that come into your care, whether they be a loan or acquisition.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/object-entry-the-spectrum-standard/

Link to procedure guidance:

https://collectionstrust.org.uk/resource/object-entry-suggested-procedure/

## **Acquisition and Accessioning**

This procedure is the process by which you take legal ownership of objects and the formal commitment that you have to care for them.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/acquisition-and-accessioning-the-spectrum-standard/

Link to procedure guidance:

https://collectionstrust.org.uk/resource/acquisition-and-accessioning-suggested-procedure/

### **Location and Movement Control**

This procedure is simply keeping track of the location of the object and updating it as it moves.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/location-and-movement-control-the-spectrum-standar <u>d/</u>

Link to procedure guidance:

https://collectionstrust.org.uk/resource/location-and-movement-control-suggested-procedure/

### Inventory

This procedure is about ensuring the basic information for all objects in your care is recorded, and how you will tackle any backlog in this process.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/inventory-the-spectrum-standard/

Link to procedure guidelines:

https://collectionstrust.org.uk/resource/inventory-suggested-procedure/

## Cataloguing

This procedure is about managing the information about your collection to allow recording and retrieving what is known about your objects.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/cataloguing-the-spectrum-standard/

Link to procedure guidelines:

https://collectionstrust.org.uk/resource/cataloguing-suggested-procedure/

## **Object Exit**

This procedure is the requirement to record when objects leave your building or your direct care.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/object-exit-the-spectrum-standard/

Link to procedure guidelines:

https://collectionstrust.org.uk/resource/object-exit-suggested-procedure/

Additionally for this procedure Collections Trust has forms you can purchase or use as a baseline for your forms:

https://collectionstrust.org.uk/resource/object-exit-suggested-procedure/

## Loans in

This procedure is managing borrowed objects, these should have an end date listed at which it is either renewed or returned.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/loans-in-borrowing-objects-the-spectrum-standard/ Link to procedure guidelines:

https://collectionstrust.org.uk/resource/loans-in-borrowing-objects-suggested-procedure/

#### Loans out

This procedure covers assessing requests for you to lend objects and managing the lending process until loans are returned.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/loans-out-lending-objects-the-spectrum-standard/ Link to procedure guidelines:

https://collectionstrust.org.uk/resource/loans-out-lending-objects-suggested-procedure/

#### **Documentation planning**

This procedure is the overall and more general process of continually improving your documentation systems by enhancing what information they contain.

Link to procedure requirements:

https://collectionstrust.org.uk/resource/documentation-planning-the-spectrum-standard/ Link to procedure guidelines:

https://collectionstrust.org.uk/resource/documentation-planning-suggested-procedure/

## Manual

	All museums		
To meet the standard, you'll need	Why is this important?	What evidence is needed?	
5.2 To follow the Spectrum primary documentation procedures	The Spectrum primary procedures are essential for managing collections effectively, providing accountability to your governing body, stakeholders and funders, and enabling you to make them accessible to those who wish to use them. It's important for stakeholders to know collections are documented adequately and that the museum is following museum standards for collections information.	Your documentation procedural manual should cover the primary documentation procedures in the Spectrum standard: • Object entry • Acquisition and accessioning • Location and movement control • Inventory • Cataloguing • Object exit • Loans in (borrowing objects) • Loans out (lending objects) • Loans out (lending objects) • Documentation planning You should plan to improve the accuracy and usability of documentation over time. You'll need to confirm that you've implemented the Spectrum primary procedures and that you have a manual outlining the step-by-step instructions for completing the procedures at your museum. You'll need to tell us whether you've completed the Spectrum standard for Inventory and if not, when you expect to complete this.	

If we ask, you'll need to provide your written documentation plan. If we visit you, we'll ask to see your documentation procedural manual and ask you to demonstrate the procedures in practice.

https://www.artscouncil.org.uk/sites/default/files/download-file/Accreditation\_Guidance\_Mar \_2019\_0.pdf section 5.2

To create a documentation plan/manual to show how you achieve the procedures, it will be best to start by looking at your current processes, formal or informal, evaluating them to see if they match any of the procedures, and sort them accordingly. This is also a valuable opportunity to condense protocols where needed if some are found to be redundant. Once you have matched your existing protocols to procedures and written them out, investigate the remaining procedures and decide how you wish to fulfill them. You can closely follow the examples provided by the collections trust, create them yourselves entirely based on what they require, or even reach out to other museums and get an idea for how they do things.

In the final, full manual there are a few options for organization. It can be organized by what procedure it fulfills, if all protocols fill only one procedure, or just by protocol and noting somewhere what procedure(s) it fills. The first option makes it easy to show and explain how it complies, but can be irrelevant to some users. The second option gives a more unified and easy-to-follow workflow but can complicate showing where each procedure is fulfilled. Ultimately it will come to the preference of the users for which type of manual is best. In order to decide which type to go with and evaluate how easy it is to understand we recommend doing surveys on people's preferences for which type. Once the first draft is created we recommend allowing discussion on the procedures and how easy they are to follow in order to refine them. It may take some time to finalize but this step is later on in the accreditation process so there is plenty of time to get at least the most basic version in order before it is needed.

## **Appendix M: Table of Authorship for Report**

Section	Author	Editor
Introduction	All	All
Background	-	•
Background Introduction	Michael	Jarius
From Private Collections to Public Exhibitions: The History of Museum and Their Visitors	Michael	Colin & Matthew
Implementation of Digital Technology to Increase Public Engagement with Museums	Colin	Michael
Databases for Internal Use in Museum	Jarius	Matthew & Colin
Identifying Options for Collections Management System	Matthew	Jarius
Tower Bridge and Its Need for a Collections Management System	Michael & Jarius	Matthew
Methods		
Goals and Methods	Michael	Jarius
Objective 1: Researching potential Collections Management Systems	Michael	Jarius
Objective 2: Choosing the system that best fits the needs of Tower Bridge	Colin	Michael
Objective 3: Configuring a prototype database	Matthew	Colin
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Findings from our Research	All	All
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Identifying and Filtering Out Systems that are Suitable for Tower Bridge	Matthew	Jarius
In-depth Research into Potential Systems	Colin	Matthew

Using Input from Tower Bridge Staff to Decide on a CMS	Michael	Colin			
Implementing CollectionsIndex+ for Tower Bridge	Michael	All			
Conclusion					
Future Recommendations for Tower Bridge	Colin	All			
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