

Meeting Minutes - Swan River Bridge SC #3

◇ **Date:** 5/16/2016
Time: 1:00 PM

Facilitator: Wade Salyards / Kathy Harris
Minutes CC: Attendees, Russ Lay

Attending:

Name	Organization	Phone Number	E-Mail
Ed Toavs	MDT-Missoula District	406-523-5800	etoavs@mt.gov
Shane Stack	MDT-Missoula District	406-523-5830	sstack@mt.gov
Vicki Crnich (Phone)	MDT Planning	406-444-7653	vcrnich@mt.gov
Chris Hardan (Phone)	MDT Bridge	406-444-9221	chardan@mt.gov
Jon Axline (Phone)	MDT Helena Environmental	406-444-6258	jaxline@mt.gov
Pam Holmquist	Flathead Co Commissioner	406-758-5508	pholmquist@flathead.mt.gov
Dave Prunty	Flathead Co Public Works	406-758-5790	dprunty@flathead.mt.gov
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	jedfisher@flathead.mt.gov
Walter Kuhn	Citizen Representative	406-837-4550	wkuhn@k-mmi.com
Paul Mutascio	CFBB	406-261-1049	pmutascio@centurytel.net
Susan Hansen	Citizen Representative	406-250-4685	btrfly@montanasky.net
Kathy Harris	KLJ	406-441-5784	kathy.harris@kljeng.com
Steve Grabill	KLJ	406-441-5783	steve.grabill@kljeng.com

Note: Action Items are shown below in italics.

Agenda Topics

The third Steering Committee (SC) meeting was held on May 16, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to continue project SC discussions relative to the purpose and need for the Swan River Bridge, and to discuss preliminary criteria (objectives) to be used for bridge concept selection.

- 1) **Discussion on Historic Listing of Swan River Bridge.** Jon Axline, MDT's historian, attended the first portion of the meeting to talk about the historic (NHRP) listing of the bridge. The following summarizes the key discussion points:
 - a) The bridge is a 4f property and would need to go through the Section 106 process.
 - b) The bridge was listed on the Historic Register under:
 - i) Criterion A for historic value to the Bigfork community and its development
 - ii) Criterion C for structural integrity as all original structure features are still intact.
 - c) Jon was unsure when the sidewalk or guardrails were added. He said most historic bridges have guardrail replaced, so retaining the original guardrail was not a significant issue. Jon noted the current guardrail could be considered an historic element as it is at least 50 years old, but is not part of the original structure.

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- d) The trusses are the most important feature for the listing.
 - i) Widening of the truss more than a nominal amount (few feet) would be considered an adverse effect on the listing. An adverse effect would need to be mitigated which would require discussions with the County to determine appropriation mitigation.
- e) Jon offered replacement of the following features would likely not affect the historic listing:
 - i) Foundation
 - ii) Stringers/floor system
 - iii) Wooden decking. Wood is preferred but not required and may be replaced by pavement.
 - iv) Steel pin connections. This is a pin-connected truss while current steel trusses are riveted.
 - (1) Dave Prunty noted the County prefers not to be responsible for maintenance of the pins and prefers to omit pins when possible. It was noted that replacement pins could require less maintenance if replaced with a high strength metal.
 - v) Guardrail. Jon offered it would be nice if the guardrail were replaced with a system that appears (visually) more like the original rails.
 - vi) Repair or replacement of damaged members of the bridge (due to vehicle strike)
 - vii) Pedestrian Walkway. Jon said the choice of solutions for the walkway would not impact the historic listing of the current bridge. Paul Mutascio noted it was important to maintain the separation of the walkway from the bridge.
- f) Input on retaining historic listing:
 - i) Replacement of the bridge with a new truss would lose the historic designation.
 - ii) Bridge rehabilitation may not necessarily lose its historic registration. (See section e above).
 - iii) There is no specific percentage threshold of change that dictates loss of listing.
 - iv) Placing the (overhead) truss onto a new concrete structure would likely lose the historic designation, in part as the truss' structural role would be lost.

Jon was asked to follow up with SHPO on this approach and confirm if the listing would be lost.
 - v) Sue Hansen restated her thought that the historic listing is important to the community, in part to ensure the County is limited in replacement options for the bridge.
 - vi) Walter Kuehn noted the historic appearance was more important to him than the listing.
 - vii) Pam Holmquist noted the County's concern that the bridge needs to function safely and seeks to avoid a closure of the bridge (due to safety). The County supports the single-lane width but offered slight widening could be acceptable.
 - viii) Paul restated that widening the bridge was getting away from the community desires and the traffic calming effect. He thought the historic designation was important to the extent that it defines what can be built now. Paul supported removing the truss, fixing everything below and reinstalling the truss.
 - ix) Dave noted his concern about replacing the pins and a preference for a concrete deck and pedestrian facility, and to reuse the truss members for visual only. Walter concurred with this approach.
- g) Other discussion:
 - i) The Boulder River Bridge recently lost its historic eligibility when the bridge truss was replaced with a widened bridge. The existing truss was reused to provide an aesthetic overhead truss which was also widened to a double lane (note this distorts the original scale). The mitigation provided documentation through the Historic Engineering Bridge Records.



- ii) Jon said that MDT is considering installing a new truss bridge (in two other locations), similar to the original truss appearance, and using riveted instead of pin connections.
- iii) Jon talked about the historic Dearborn High Bridge. The truss bridge was taken off the foundation and new, high quality steel pins that looked like the old ones were installed. The bridge now functions better and is still listed on the Register. Another good example is the Natural Pier Bridge at Alberton.
- iv) Use of metal from the Kearney Rapids Bridge was discussed. Jon indicated that use of that metal might be a good way to mitigate changes. Kathy stated that substitute metal may have the same corrosion problems as the current bridge or other 100-year old weaknesses.

2) Old Business

- a) Review SC Meeting #2 Minutes. There were no comments on the meeting minutes.
- b) Public Meeting Summary.
 - i) A draft summary from the April 12 public meeting was provided for general information. This will be finalized and included in future project reports.
 - ii) The SC felt the public meeting was good and was adequately advertised.
 - iii) KLJ was conducting traffic counts over the past weekend.
 - iv) KLJ is working on the Environmental Scan and has not identified any significant issues yet.

3) New Business - Review & Revise Project Needs and Objectives

- a) The previous SC meeting confirmed the Swan River Bridge Needs. Since the last SC meeting, KLJ refined Need 3 (Constructible and Maintainable) based on KLJ's understanding of process needs.
- b) The Needs Statement (now summarized in Table 1 below) highlighted three categories: Provide Safe Crossing of Swan River, Maintain Historic Truss Appearance, and Constructible and Maintainable. The SC discussion, direction and feedback are detailed in Attachment 1.
- c) Within each of these Needs, KLJ suggested objectives (which will become the comparison criteria between bridge options) for SC comment, concurrence, change or removal. A column designating whether each objective was required or desired was also provided. The table also listed the source of each objective, whether they came from MDT, County, SC or Public.



Table 1. Swan River Bridge Needs and Project Objectives - Updated

Need	Required / Desired	Objectives	Source			
			MDT	County	SC	Public
1. Provide Safe Crossing of Swan River						
	R	Provide structurally adequate bridge	X	X	X	X
	R	Provide one-vehicular lane (minimum)	X	X	X	X
	R	Provide pedestrian area (ADA walkway and railing)	X	X	X	X
	R	Increase Load Rating	X	X	X	X
	D	Maintain slow vehicular speeds			X	X
	D	Provide 75 Year Bridge Life	X	X		
	D	Maintain vertical clearance above river			X	
	D	Improve other design standards	X	X	X	X
	D	Improve Guardrail (approach)	X	X		
2. Maintain Historic Truss Appearance						
	R	Maintain historic appearance of overhead truss			X	X
	D	Maintain historic integrity /NHRP listing of bridge			X	
	D	Enhance historic bridge appearance w/ walkway			X	
	D	Keep silver paint color				X
	D	Replicate (existing) overhead truss dimensions				X
3. Constructible and Maintainable						
	R	Funding for rehab or replacement	X	X	X	
	R	Permit-able (construction)	X			
	R	Permit-able-stormwater from bridge	X			
	R	Maintainable by County Road/Bridge Dept.	X	X		
	D	Remove wooden deck	X	X		X
	D	Reduce special maint. needs (snow, paint, etc.)		X		
	D	Reduce bridge degradation into river		X	X	
	D	Avoid right of way acquisition	X	X	X	
	D	Minimize utility costs	X	X	X	

4) Schedule Next/Future Meetings

- a) The next SC meeting will review six preliminary bridge concepts and rate them for each of the project needs and objectives.
- b) Another SC meeting to review bridge alternatives was set for Wednesday, July 27 at 1:00, if needed.
- c) A public meeting is set for the August 16.



Attachment 1 (dialogue for confirming objectives)

Need #1: Provide Safe Crossing of Swan River: Dave recounted a conversation at the public meeting where a citizen thought the bridge should only accommodate pickups, but he responded that the bridge wouldn't be able to handle a fire truck. In his conversation, the resident agreed it was important to increase the load rating. Chris joined the meeting at 3:10. Chris said that with new construction, the bridge would consider seismic activity in design. The decision was made not to include seismic as an objective.

There was a discussion on whether lighting should be included as a project objective. The county did not want to maintain lighting on the bridge. The lighting on the bridge approaches may be upgraded in cooperation with the utility company who maintains the current street lighting and will not be added as a comparative criteria.

Required / Objectives Desired?	Source				Evaluation Criteria
	MDT	County	SC	Public	
Provide Safe Crossing of Swan River					
R	Provide structurally adequate bridge	X	X	X	X
R	Provide one-vehicular lane (minimum)	X	X	X	X
R	Provide pedestrian area (ADA walkway)	X	X	X	X
R	Increase Load Rating	X	X	X	X
D	Maintain slow vehicular speeds			X	X
D	Provide 75 Year Bridge Life	X	X		
D	Maintain vertical clearance above river			X	
D	Improve other design standards	X	X	X	X
D	Provide ped. railing to current standards				X
D	Improve Guardrail (approach)	X	X		
D	LIGHTING				

Handwritten notes:
 - "RAILING" with an arrow pointing to the "Increase Load Rating" row.
 - "full pool - meet min recreational clearance" with an arrow pointing to the "Maintain vertical clearance above river" row.
 - "LIGHTING" written below the "Improve Guardrail (approach)" row.



Need #2: Maintain Historic Truss Appearance: SC members said the first objective should be “Maintain historic appearance of overhead truss”. Keep “Maintain historic integrity/NHRP Listing of bridge” as a desired project objective. “Keep silver paint color” as a desired project objective. Use “Replicate existing overhead truss dimensions” as a desired project objective.

There was significant discussion on whether the structure would look better with the pedestrian walkway inside the truss, or keeping it outside the truss. No clear outcome of those discussions came as a result.

The “Walkway enhances historic bridge appearance” was added as a desired project objective.

Need	Required / Objectives Desired?	Source				Evaluation Criteria
		MDT	County	SC	Public	
Maintain Historic Truss Appearance						
R	historical Maintain appearance of overhead truss			X	X	
D	Maintain historic integrity of bridge					
D	Maintain <u>NHRP Listing</u>					
D	Keep silver paint color				X	
D	Replicate (existing) dimensions oh truss				X	
D	WALKWAY ENHANCES HIST BRIDGE APPEARANCE					



Need #3: Constructible and Maintainable: Sue asked whether it was known what is fundable. Wade and Ed said there is no way to answer that yet, at least until the bridge options have been developed. Pam discussed that funding may need to be negotiated between MDT and the County. Shane said if the community and the County agree on what should be done, it is much easier for MDT to program it to be funded.

Kathy pointed out that DEQ stormwater and water quality standards would apply. Having stormwater discharge directly into the Swan River from the bridge is not currently permit-able. With a wooden or open deck, the runoff cannot be captured.

All SC members agreed the bridge needed to be maintained by the County Bridge Department and the objective pertaining to county maintenance should therefore be required. The SC felt that “Remove wooden deck” should be a desired objective. The SC wanted the feasibility report to explain why a wood deck does not compare favorably with other deck alternatives.

The SC asked to change “Reduce steel disintegration into river” to “Reduce bridge degradation into river” as a project objective. The SC asked to include “Avoid right of way acquisition” and “minimize utility costs” as desired project objectives.

Need	Required / Objectives Desired?	Source				Evaluation Criteria
		MDT	County	SC	Public	
Constructible and Maintainable						
R	Funding for rehab or replacement	X	X	X		
R	Permit-able (construction)	X				
R	Permit-able-stormwater from bridge	X				
R or D	Maintainable by County Bridge Dept. <i>ROAD / BRIDGE PATH</i>	X	X			
D	<i>AVOID R/W ACQUISITION</i>					
D	<i>MINIMIZE UTILITY COSTS</i>	X	X		X	
D	Keep /Remove wooden deck <i>≈ CO MAINT.</i>					
D	Reduce special maint. needs (snow, paint, etc)		X			
D	Reduce steel disintegration into river <i>BRIDGE DEGRADATION</i>		X	X		