



# Meeting Minutes



Missoula County  
South Avenue Bridge Project

BR 9032(65)  
CN 6296000

Subject:	Preliminary Resource Agency Meeting	Meeting Location:	HDR Engineering Inc. Office 700 SW Higgins Street, Suite 200 (Clark Fork Conference Room)
Meeting Date:	August 18th, 2016 9 AM to 12 PM (Mountain)	Conference Call Information:	Call-in: (866) 583-7984 Code: 9457685

## Attendees:

Mike McGrath – USFWS	Todd Klietz – Missoula County
Nathan Green – US Army Corps of Engineers	Erik Dickson – Missoula County
Brian Hasselbach – FHWA (in Helena)	Bob Schweitzer – Maclay Bridge Alliance
Terry Voeller – MDT (in Helena)	Fred Stewart – Maclay Bridge Alliance
Heidy Bruner – MDT (in Helena)	Mike Burnside – Maclay Bridge Common Sense Coalition
Susan Kilcrease – MDT	Don Stevenson – Maclay Bridge Common Sense Coalition
Joe Weigand - MDT	Jon Schick – HDR
Larry Shock – MT DNRC	Dustin Hirose – HDR
Bob Storer – MT DNRC	Dan March – HDR (in Bozeman)
Christie Hollenbeck – MT DNRC	Chris Kelly - HDR
Ladd Knotek – MT FWP	

## Meeting Purpose:

The purpose of this meeting was to discuss the permitting and construction of the new South Avenue Bridge over the Bitterroot River in Missoula, MT. The intent was to discuss resource-specific concerns and regulatory requirements well in advance of project implementation in an attempt to inform the design process moving forward and ultimately streamline the permitting process.

## Topics Discussed:

### Project Overview and Schedule

- Refer to the attached presentation
- MDT has indicated this project will be added to their STIP this year and 2020 is the earliest construction funding will be available.

### Preliminary Bridge and Roadway Design

- Draft Type, Size & Location (TS&L) Study submitted to Missoula County
- 4-span bridge (no-rise scenario), 750 feet long is the preferred alternate on Alignment 1
- Pending comments from Missoula County and MDT, the TS&L study will be finalized and plans for alignment and grade will be completed
- Alignment developed to maintain a minimum 50-ft to 100-ft buffer from O'Brien Creek
- River Pines Road will be realigned to a T-intersection
- Will make a recommendation at next TDC meeting regarding the preferred typical section

### Hydraulics Analysis and Floodplain

- Revised Floodplains
  - The corrected hydraulic model will be submitted to reviewing agencies in conjunction with the project-specific bridge hydraulic analysis for concurrent review
  - HDR will update the DFIRM within the project reach analyzed

- Todd Klietz and Dan March to discuss further when it's time to do the final mapping. "Islands" excluded in the 100-yr floodplain could be shown as in or out (it's high enough to be shown as out but small enough to be mapped in).
- LOMR/CLOMR
  - The removal of Maclay Bridge and the addition of a new bridge will require LOMR
  - Todd Klietz indicated it is best practice to go through the CLOMR process in this case regardless of whether or not we have a rise in the BFE. Todd suggests a CLOMR regardless of no-rise analysis results.
- O'Brien Creek
  - The changes to the road prism on River Pines Road may impact the O'Brien Creek floodplain. The area is Zone A.
  - Base flood elevations for O'Brien Creek have not been modeled. HDR will investigate and discuss further with Todd Klietz.
- East Overbank Excavation
  - An area underneath the proposed bridge on the east bank would require excavation to meet the 'no rise' condition.
  - Excavation would be minimal: Approximately a foot in depth with 40:1 slopes.
  - Rip rap of this area is not anticipated. It would be planted with riparian vegetation.
  - 5- to 10-year flooding events would access/inundate this east overbank area. Sediment transport would be low and maintenance is anticipated to be minor.
  - The excavation area, if required, will be included in the right-of-way easement and maintained by the county
- The new bridge may need more than two feet for freeboard over the BFE.

#### Maclay Bridge Removal

- Preliminary bridge removal plan was reviewed
- FWP would like to see a bio-engineered approach to bank restoration once abutments are removed (not rip rap)
- DNRC suggested grading back/removing as much of the old west abutment area as possible that currently extends out into the river channel.
  - This could add hydraulic capacity and potentially help the no-rise situation.
  - Once the bridge piers are removed water will be directed more toward the far bank, which could potentially create erosion issues on the east bank in the vicinity of the bridge. Increased erosion could pose a hazard to the homes located on the east bank downstream and/or call for additional bank stabilization. Removal of as much of the west abutment area could alleviate potential downstream safety/maintenance issues resulting from increased erosion.
- Removal of existing piers will be to 3-ft below the thalweg. Cofferdams will likely be required for pier removal.
- The intent would be to retain the vegetated island/existing root mass around Pier 3. River morphology will likely affect the island over time.
- Special provisions will address demolition including measures to avoid/minimize debris in river and lead-based paint on structure.
- Historic status and Section 106
  - Maclay Bridge is eligible for listing on the National Register of Historic Places. It is currently in the nomination process.
  - Maclay Bridge will go through the Adopt-A-Bridge program per the MDT/SHPO programmatic agreement for historic bridges to find a potential new owner. The structure can likely be moved/removed intact.
  - MDT would take lead in Section 106 process. The USACE would like to be a signatory on the MOU.
  - The cultural resources work to date has included documentation of Maclay Bridge following Historic American Engineering Record (HAER) Level II standards.

#### Environmental Documentation

- The project includes preparation of a Categorical Exclusion (CE) level of environmental document
  - FHWA, MDT, and Missoula County have made determination early on that this project qualifies for a CE. The MDT corridor planning process and FHWA's Planning and Environmental Linkages (PEL) initiative support this decision.

- DNRC has specific obligations under NEPA/MEPA and operates under a different scope of rules and regulations regarding CEs. A CE prepared for new construction may not meet DNRC regulations.
- Under MEPA, MDT has their own implementation rules. MDT will provide the draft environmental document for DNRC review including all supporting analysis. DNRC may need additional analysis to meet their agency requirements under MEPA.
  - It was noted that DNRC has never had an instance where an MDT-prepared environmental document has not met their needs
- The environmental document will include analysis of the new bridge and removal of Maclay Bridge

#### Water Quality and Stormwater

- The current approach is to convey stormwater from the bridge away from the active river channel and dispense onto the east overbank. There may be a need for a detention facility on the west side. Further design is required to determine stormwater requirements.
- A closed system for stormwater conveyance is not being considered.
- If a west-side detention facility is required, consideration should be made to minimize impacts or return flow potential to O'Brien Creek and Big Flat Ditch through buffers and/or appropriate sloping. The irrigation ditch is siphoned under O'Brien Creek and this project should avoid impacts.
- The abandoned segments of River Pines Road will be obliterated: asphalt removed, re-graded, re-vegetated. This effort may provide for developing additional riparian buffer for mitigation.
- Any effects to the ditch and/or O'Brien Creek will be addressed in the environmental document.
- The project is partially within Missoula's MS4 area. HDR will go through standard MDT process and their Low Impact Development worksheet for project compliance.
- Any form of stormwater detention facilities need to be included in floodplain permit

#### In-stream Construction

- Pier type and configuration
  - The pier type is currently undetermined and will likely be either drilled shaft or driven piles. This configuration may include a two-column pier (drilled shaft foundation) or a wall type pier (pile foundation or shafts)
  - The pier configuration being recommended includes 2 piers in the active channel and is shown in the attached presentation (Alternate 1B).
- Scour protection
  - The bridge design will account for scour.
- Temporary structures
  - Temporary structures (work bridge) are likely required and will depend on contractor means/methods.

#### Timing restrictions

- Per MDT special provisions addressing Migratory Bird Treaty Act (MBTA) compliance, vegetation clearing will be limited to Aug 16 – April 15.
- USFWS typically recommends a July 1 – Aug 31 work window for in-stream construction. This window may be increased due to high river temperatures during summer, but also need to consider whether the mouth of O'Brien is being used as cold water refugia during the summer months.
  - FWP noted no bull trout documentation in past 25 years

#### Wildlife and Aquatic Species Consideration

- Osprey nests exist within the project area
  - The MBTA special provision will minimize impacts to osprey
  - Alternative nesting sites could be installed during non-nesting season in advance of construction
  - A special provision will be developed to instruct the contractor to coordinate with FWP representative Kristi DuBois prior to construction to locate nests and determine mitigation approach.
- FWP noted need for cutthroat trout considerations. Ladd will work with HDR to provide conservation measures. It won't be prohibitive, but may have requirements to protect the congregations.

#### Endangered Species Act (Section 7 consultation)

- The removal of Maclay Bridge and construction of the South Avenue Bridge are seen as one project. The Biological Assessment (BA) will need to address means/methods for construction, and assume the worst case scenario (i.e., driven piles with coffer dams). A detailed project description, including construction methods (to the level of detail that can be provided), will assist the USFWS in their analysis.
- The Biological Assessment being prepared focuses on bull trout and bull trout critical habitat and the yellow-billed cuckoo (YBC). Other federally-listed species for Missoula County are a non-issue due to lack of suitable habitat.
- FHWA is the lead agency regarding the project's federal nexus (i.e., federal funds involved).
- YBC have been documented in the project vicinity. USFWS has provided HDR information.
  - USFWS recommends project timing to avoid disruption (June/June exclusion), which leaves August for work window
  - Suggests surveys a year prior to construction to determine occurrence of YBC in area
  - Conducting surveys requires specific qualifications and permits. Permit needs to come out of Denver office or be approved by Denver office.
- USFWS confirmed that conservation measures similar to what have been used for bridge projects in the vicinity should be expected.

#### Utilities

- An exposed gas line exists on Maclay Bridge.
- No coordination with utilities has occurred. Missoula County will coordinate with utilities.
- MDT has a process for permitting if the gas company wants to attach to an MDT bridge.
  - DNRC would like to stay in the loop on that, in case it doesn't attach to the bridge and there will be separate permitting and easements.

#### Environmental Permitting

- Missoula County will be the applicant on environmental permits. MDT will review permit applications as necessary prior to agency submittal.
- Permit applications will need to be submitted prior to construction (at least 6-9 months in advance).
- Section 404
  - This project is anticipated to be covered under either Nationwide Permit (NWP) 14 or 23.
  - Anticipated wetland impacts are well below the 0.5-acre threshold for NWP 14. NWP 23 doesn't have an acreage limitation.
  - NWP 14 already has 401 Certification and may be a more logical permit to use
  - Temporary impacts should be addressed in the permit application.
    - It is standard practice for MDT to submit permit applications prior to bid letting. MDT doesn't apply for temporary impacts as to no limit contractor means/methods. Contractors are required to obtain permit coverage for temporary impacts.
  - Additional wetland survey will be required prior to permit submittal. Include OHWM delineation. The report can be submitted in advance of the permit for verification.
- DNRC Easement
  - Any permanent disposition of Trust Land (land below low water mark of Bitterroot River) needs to go to the Land Board for approval. The permitting schedule should account for review time.
  - DNRC would require a land use license (LUL) (i.e., temporary authorization for removal of old structure and any additional areas needed for construction that fall outside the permanent easement required for the new bridge). Applies to temporary staging, work bridge, etc., if outside easement footprint. Could likely wrap those into one LUL.
- SPA 124
  - FWP concerns relating to impacts to the bed and banks of the Bitterroot River and O'Brien Creek have been provided to the project team.
  - Ladd will provide necessary conservation measures to the project team sometime next month
- Storm Water (MPDES) and MS4
  - Project will require a SWPPP, which would be a contractor responsibility.
  - Dewatering is contractor responsibility.
- Floodplain permit
  - See discussion under Hydraulics Analysis and Floodplain

#### Additional Geotech

- Final geotechnical recommendations are not available to determine pier type.
- Additional geotechnical borings may be necessary within the river channel
  - If required, independent ESA consultation would be required
  - Additional permitting would be required
- Access would occur via barge

#### Recreation

- River access and parking
  - The project as currently scoped does not involve adding parking or improving access on either side of Maclay Bridge.
  - Small areas for temporary parking will remain following bridge/abutment removal to allow for limited access
  - Discussions between CAPS and FWP should occur soon to address access improvements
- Floater impacts during construction
  - This will be addressed through special provisions. HDR to work with Pat Saffel (FWP) to write appropriate special provisions.

#### Restoration and Revegetation

- Special provisions will include re-vegetation requirements and reseeding

#### Project Limits and Potential Future Improvements

- The project limits are between Hanson Drive and River Pines Road.
- The City is conducting independent study of South Avenue related to Fort Missoula development and future improvements.
- There is potential to use County maintenance funding for improvements, which will be phased in with County's other funding (based on 2020 construction funding available through MDT).

#### Public Involvement and TDC

- An overview of the county's public involvement process was provided. Refer to meeting presentation for detail.