EIV TECHNICAL SERVICES

Record of Meeting

Purpose of Meeting: North Hero-Grand Isle Drawbridge Public Information Meeting

Date: 1/12/2016

Location: North Hero Elementary School Gymnasium

Time Started: 6:00 PM

Time Ended: 7:00 PM

Participants	
Dannyl Landry, VTrans Project Manager	Mark Zagrobelny, Cianbro, Project Superintendent
Pete Davis, HDR Project Director	David Leslie
Jacqueline Dagesse, EIV, Project Outreach Manager	Janine Banks
David Banks	Liz Hill
Claire Lavoie	Ken Bassett
Susan Davis	Bob Cook
Freddie Mahlmann	Marilyn Lagrow
Malcom Allel	Jeff McKenna
Pat McKenna	Bob Ayers

Topics to be discussed
• Introductions • Project Status • Selected Alternative • CMGC Delivery Process • Discussion / Questions

Topic #	Presentation
1.	**Introductions** • Pete Davis, HDR, Project Director • Dannyl Landry, VTrans, Project Manager • Mark Z., Cianbro, Project Superintendent • Jacqueline Dagesse, EIV, Project Outreach Manager *Dannyl Landry:* We are in the design process and plan to have preliminary plans within the next few months. Our current focus is emergency repairs to maintain the bridge until this project begins. We are delivering this project through the CMGC process, where we have not only hired HDR as the consulting design engineer but also the contractor, Cianbro. This is a difficult project to stage, so it is very helpful to have the contractor involved at the onset of the project to make the process more efficient.

2.	**Project Status** *Pete Davis:* What is fun and challenging about this project is the constraints that this project has to be built within. This bridge was built in 1953 and at the end of its useful life. It's a historic structure that needs to comply with federal regulations, traffic management during construction and environmental impacts for alignment. There is information on the project website for you to contact us, provide comments and receive a current project status throughout the process. What we have completed to date: Local Concerns Meeting – 5/2014 Scoping Report Development – 4/2015 Alternative Selection – 6/2015 Concept Design – 9/2015 CMGC Selection – 10/2015 The majority of design will be completed by September of this year so that we can begin construction in May 2017 with substantial completion by October, 2019.
3.	**Selected Alternative** *Pete Davis:* The selected alternative is a twin leaf bascule bridge (same type of bridge as the existing structure). The replacement structure will have two travel lanes with 11-foot width, and 5 ft of clearance on each side, and maintain the historic look of the previous structure. We need to maintain one lane of traffic at all times during construction. The selected alternative will include: Stage 1: Remove one lane and transition to single lane of traffic. This will allow us to build the new substructures for the new bridge. Marine traffic will be maintained with a temporary structure. Stage 2: Construct new span, single lane on new leaf and install a new control tower. Marine traffic will be maintained. Stage 3: Remove lane 2 and remove old leaves. Again, marine traffic will be maintained through all stages of construction. The roadway detour will be through a complicated staged construction process. We will maintain the context of the bridge while keeping a twin leaf bascule bridge. As the only navigational route with unobstructed access, a temporary operating system will maintain marine traffic.
4.	**CMGC Delivery Process** *Pete Davis:* Typically, a project follows a design-bid-build process. With the CMGC process, it brings the designer and contractor together during the design phase in a collaborative effort. By bringing the contractor and engineer together, we can design a structure that takes advantage of the contractor's specific skills and considers the specific site conditions. It also allows us to understand the construction risk during this process prior to the contractor bidding the project and adding those costs in their bid. It also allows the owner to get exactly the project they want. This is important because this is a movable bridge with a design life of 75 years, so long-term reliability and ability to maintain this bridge is important and a cost that is considered. The process for determining the cost of the project, includes an Independent Cost Estimator (ICE) who develops a cost estimate and works out issues with the contractor to develop a guaranteed maximum price for construction. Once the price is agreed upon, we will then begin construction.

	Next steps: • 60% design in May, 2016 and 100% design in October, 2016. • Award or New Bid Prices • Field Construction
5.	**Discussion / Questions** **Will marine traffic have limited access?** No, we will be able to maintain marine traffic throughout all phases of construction. **Is the operator's house moving to a different location? Why?** We need to build the new operator house on the opposite side to allow for construction. The plan is that the tender house remains as is. We will provide an access means so that the operator will not need to cross the roadway to get to the operator house. **Will roadway and bridge elevation remain the same?** The roadway elevation will be raised slightly. Right now maintenance crews cannot get to span locks, and the new design will allow access with this increased elevation. **Will the existing air draft under the bridge be the same?** Yes, the navigational clearance will remain the same. **What part of the year will construction be going on?** All year. Our goal is to get construction started in late winter / early spring 2017, and construction will take approximately 2-years. There are certain aspects where we may be able to begin during the winter or when the channel is not being used. **Was night work considered?** It's possible. It's likely there will be some night work, but they tend to be less productive. It also depends on the type of work you are completing. **Once this is completed, everything from 1953 will be gone?** Yes, pretty much. We are still working out some of the substructure issues. The tender's house will remain. Those are some of the details we are trying to work out. **What are some of the repairs that are needed now?** The drive motors are at the end of their useful life, and this bridge has no backup span drive so we will install a backup span drive. The opening of the bridge was limited last season so that we could get through the season until we can complete these repairs. We plan to complete these repairs prior to May 15th, and if so, we would be able to return to the typical schedule.

What is the duration for one-lane traffic? It's dependent on how we build the project. I suspect it will be months, perhaps a year. There will most likely be alternating traffic lights.

You said you will be raising the elevation, by how many feet? Less than 5 feet. We still need to determine the actual change in elevation during the design process. That is driven to be able to maintain the structure properly.

How difficult is it for the replacement parts? Difficult. The parts are from 1952 so you can't just order them. We are planning to be able to have the repairs completed by May 2016.

Why not construct a fixed span structure? Several reasons, coast guard requires a 60 ft vertical clearance. There are permit constraints and Act 250 for this type of structure. This would also take longer to design and there would be additional cost.

How do you have a 75 service life? It is determined by materials, construction, design and specifications. The current one has been in service for 63 years, and this new design will have better maintenance considerations.

Did anyone consider a tunnel underneath the water? Yes, it is about 2 orders of magnitude more expensive than this selected alternative.

There is a lot of pollution in the Lake in this area. Would better water flow better clean up the lake? We don't want to change the hydrology of water flow through this location. We do not want to try and clean up the Lake with this bridge. That is a complicated subject.

David Leslie –I have spent 33 years working in Canada solving problems. I have a problem that I would like addressed, which I spoke with Dick Mazza this morning. I also am Vice Chair of the regional planning transportation committee and I am deeply involved in water quality of the Lake.

There is deep water from the west side of the island and there is a marina inside that causeway. That area (Pea Lot's Bay) has 12 ft of depth and this area has about 8 ft of depth. My approach is to have this proposed design bridge put north between North Hero and Alburgh, and a fixed span here (North Hero-Grand Isle). Your result will be better navigation. If this becomes fixed then North Hero has no obstruction to travel to Burlington, so traffic flow is improved along US Route 2. I ran into Chuck Worster, previous park supervisor. He is currently living in the 'GUT' – very poor water quality at this location. When you do the fixed span bridge here you could improve the water quality for the GUT. Someone should do the flow calculations so that this area could be cleaned up. The farmer that owns the south end of the railway by the GUT wants to sell it. We need to have a much longer view looking at this broader area. This solution may even save money than what you are proposing now. The only issue we would need to solve is ability for boat traffic to make it to Ladd's Landing Marina.

	Water quality is absolutely #1 for this State. This would require substantial permitting and would take years and years and years to change. If we don't do this project quickly this bridge would be closed. The bridge you mentioned in Alburgh will be entering scoping phase, but it will be a few years before we know what they would like to do there. **I apologize I only came up with this idea 6 weeks ago, but I would like you to consider this idea.** **Who makes decisions on water quality?** That is the State Agency of Natural Resources, Governor, legislators, etc. We are not here to solve that problem.