

G. D. Nitz Associates, Inc.

Engineering ♦ Commercial Building Design Ph 906-643-7060
W1353 Pointe LaBarbe Road, Saint Ignace, MI 49781 GDNginer@GDNcapital.com

May 2, 2012

Michilimackinac Historical Society
334 N. State Street
Saint Ignace, MI 49781

ATTN: Nancy Dandona, President
RE: Chief Wawatam Railroad Dock

Dear Nancy,

Doug Taylor of the Friends of the Chief Wawatam requested that I inspect the Chief Wawatam Railroad Dock to determine the feasibility of preservation. Since there appears to be an interest in the community to preserve the dock and the Michilimackinac Historical Society is the entity to administer such a preservation, this report of my findings is addressed to you.

Background

When the Chief Wawatam Railroad Dock was taken out of service it appears that the bridge deck was left in suspension such that the cables were in tension and the A-frame was in compression supporting the cantilevered end of the deck. Over time some of the wood framing has decayed and eventually the outer A-frame collapsed last August which swung the counter-balance to the inside of the deck. As a result the bridge deck dropped to piers and framing below, toppling the inward A-frame. Some of the wood cribbing under the pinned end of the deck is decayed and compressed causing the pinned end to be out of alignment. It appears that the cables are still in tension and present a public safety concern.

Current Condition

It is my understanding that the City of Saint Ignace has an insurance claim to demolish the structure and is concerned with public safety and the ensuing possible liability. Not having seen the insurance policy, my experience has been that the insurance company will probably pay for repairs up to but not exceeding the cost of demolition. While steps should be taken to make the structure safe, at this juncture demolition is premature without determining the cost of renovating the structure. Since the structure is of historical significance but not needed to be functional, the Chief Wawatam dock could be preserved to be mostly aesthetically correct.

Renovation/Preservation

Due to the size and weight of the structural members of the dock, a crane on a barge would be needed to dismantle the structure regardless of whether it was demolished or repaired. And rather than have the members placed on a barge for scrap they could be displayed on the pier between the

guard and the break wall out towards the lighthouse. The entire bridge deck could then be removed and placed on the pier adjacent to it while repairs are made to the supporting structure. All of the pieces would be on the pier behind the existing guards and would no longer pose a threat to public safety. Once all the damaged and loose material is removed from the lake shore dock area, rip-rap would no longer be needed as there would be nothing to protect and the cost of the rip-rap in the initial demolition cost would be used towards preservation. Due to the cost of demolition, the city will most likely be required to solicit bids and could easily request an alternate bid to disassemble the structure and place the pieces on the pier as described above.

In terms of being preserved "mostly aesthetically correct", a combination of piles, beams, and a new crib could be constructed as a foundation for the dock. The bridge deck, A-frames, counter-balances and cables would then be reinstalled to be representative but not functional. Ultimately a guard could be constructed around the perimeter of the bridge deck so that the public could walk on the Chief Wawatam Dock and see it up close and personal.

If the cost of renovation is greater than demolition, the members could be left on display on the pier and plaques could be placed describing the piece and its function. All while grant writing and fund raising would be ongoing to eventually reconstruct and preserve the Chief Wawatam Dock.

While Mr. Taylor and I have discussed other repair methods I find the method described above to be the least intrusive to the newly landscaped park. Should you wish to further discuss this report please feel free to contact me.

Regards,

A handwritten signature in black ink, appearing to read "Gary D. Nitz". The signature is fluid and cursive, with the first name "Gary" being the most prominent.

Gary D. Nitz, P.E.