BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting
DATE OF CONFERENCES: May 13, 2021
LOCATION OF CONFERENCE: John O. Morton Building
Due to the Covid 19 Event, this meeting was a scheduled Zoom Meeting

ATTENDED BY:

NHDOT
Sheila Charles
Ron Crickard
Chuck Corliss
Jill Edelmann
Arin Mills

NHDHR/NHDNCR
Laura Black
David Trubey \

PROJECTS/PRESENTATIONS REVIEWED THIS MONTH:
(minutes on subsequent pages)

Statewide (Hart's Location) 40595-2 (no federal number)..... 1

Statewide (Hart's Location) 40595-2 (no federal number)
Participants: Arin Mills, Chuck Corliss, NHDOT

Initial consultation on the proposed design and construction of repairs to the Harts Location railroad stone arch bridge which carries the Conway Scenic Railroad over Kedron Brook within Crawford Notch State Park.

Arin Mills, DOT Environmental Manager, and Chuck Corliss PE, DOT Railroad Operations Engineer presented the slope failure project adjacent to a stone arch bridge #81.82 which carries the Conway Scenic Railroad (CSRR) over Kedron Brook in Harts Location. Arin showed maps of the project location which is located within Crawford Notch State Park along a remote portion of rail line not accessible by roads. Chuck provided some background information to the rail line, including that the line is operated by the CSRR under a lease agreement, and provides seasonal tourist service between Conway and Crawford Notch Station (and occasionally to Whitefield NH). The line is owned and maintained by NHDOT, with construction of the track and bridge dating to 1886. The Class II track has a max speed of 25 mph and a right-of-way width of 49.5' each side of centerline.

Arin provided a summary of previous coordination on the project to include DLMT on September 8, 2020, SLMT on February 2, 2021, Natural Resource Agency Meeting on January 20, 2021 and a RPR submission on April 22, 2021. Both a Land and Water Conservation Fund (LWCF) and NH Department of Environmental Service (NHDES) wetlands permit are pending. Photos were shown of the project

area, including the failed slope near the NE wing. Chuck described project challenges including rail only access (no road), the location between 2 large railroad bridge structures which limits movement of large equipment for repair, excessive slope steepness and limited staging area for material and equipment storage. Arin showed a map of the proposed access path from Rte US 302 and through an undeveloped portion of Crawford Notch State Park, but mentioned this review would focus on the slope failure repair as previous meetings have discussed access and no concerns were raised by DHR for access to site. Proposed staging area will include Arethusa Falls parking area. The project is within the Maine Central Mountain Division Railroad linear corridor (ZXT-MCRR), determined eligible for the National Register (1994).

Chuck described the current design method for the slope repair, to include development of staging area north of the failure, estimated 250' in length and 75' wide, and to include removal of trees and slope overburden. Equipment will develop a shelve/ramp into the NE slope for excavator access to the stream. The establishment of slope base with Class 5 rip rap (stone) will be placed up to and above the 100-year flow potential. 12" minus stone will be placed above the 100-year flow to the top of the slope. Concrete blocks will be placed at top to control slope steepness to rail system. Once complete the staging area will be re-established with vegetation. Chuck said the removal of the top 3-4 layers of block to the end portion of the top of the NE wing will allow for matching of the newly established grade, although this is worst case as the blocks may be able to remain. It will need to be an onsite decision during construction. Chuck further stated the slope would not be vegetated due to steepness.

Laura asked what is thought to have caused the failure? Chuck said it is suspected the wings were not originally constructed long enough to allow for the steep slope adjacent to the wing and thus caused failure over time. Laura mentioned it appeared the entire structure is constructed of granite, with no concrete blocks. Chuck showed drawings which include the use of 2 rows of concrete block at the top in the repair. Laura asked why the removal of the top wing wall blocks was necessary. Chuck explained DOT specs require a slope no steeper than 1.5:1 and do not want stone above the grade for safety concerns. Laura suggested the granite blocks remain in place as a best practice when possible and do not cause a safety concern. She further mentioned it is best practice to leave the granite onsite if removed. Chuck said he could leave the stones where possible, and they will remain onsite and be incorporated into the wall if removed. Laura asked if the concrete blocks would be visible from the railroad and Chuck said there is no view from the train from a riders angle of site and there is no hiking on the tracks. Laura asked that the use of blended concrete color be investigated to lessen the visual impact of the new concrete blocks. Chuck said he could look into possible color options and availability.
Laura asked if the original arch included the use of mortar. Chuck said the mortar is a mixture of both old and new. Laura asked the BMP #2 under the National Park Service Preservation Brief be used for both color and application of mortar. She also mentioned the Marton and Vitanza *Guidelines for Rehabilitating Historic Covered Bridges* (https://www.nps.gov/hdp/CoveredBridgeGuidelines2019.pdf) may also be helpful for the repair work.

Laura said both the repair and access would likely result in No Adverse Effect based on the discussions. Laura further asked for photos of the site both before and after the project for documentation, Arin and Jill will work together to achieve the photo documentation requested.

Dave said there are no archeology concerns. Laura said the decision of replacement of blocks could be made onsite at the time of construction, with the understanding that it is preferred the blocks remain if possible and Chuck concurred.