BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting
DATE OF CONFERENCES: November 4, 2010
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Chris Carucci
John Corrigan
Jill Edelmann
Steve Johnson
Bob Landry
Steve Liakos
Joyce McKay
Christine Perron
John Sargent

Federal Highway Administration
Jamie Sikora

NHDHR
Laura Black
Peter Michaud
Linda Wilson

City of Concord
Ed Roberge
Scott Sykes

FST
Paul Harrington
David McNamara

HEB Engineers
Jason Ross

Hoyle Tanner
Steve Goddard
Sean James

Town of Hudson
Gary Webster

NSPCB
David W. Wright

Oak Hill Environmental
Daniel Geiger

Town of Sanbornton
John Thayer
Bob Veloski

(When viewing these minutes online, click on an attendee to send an e-mail)

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Concord, X-A000(958), 15778
Participants: Ed Roberge, (eroberge@concordnh.gov) and Scott Sykes (ssykes@concordnh.gov), City of Concord; John Corrigan, NHDOT
Ed Roberge, City Engineer with Concord, NH, introduced Scott Sykes of the Engineering Services Division and reviewed the history and details of the project. As a result of a previous Safe Route to School grant funded project, the City completed a school travel plan, which outlined a number of priority projects in the school district. The proposed project involves streetscape improvements along South Street in the vicinity of the Conant/Rundlett School campus including the reset of the existing granite curb to narrow the existing pavement width, essentially eliminating on-street parking and drop-off/pick-up of students between the two main crosswalks along South Street. Ed Roberge noted that the appearance of the streetscape will generally look the same with the slight narrowing of the pavement width (about 3 feet) and that one of the three (3) driveways along South Street will be eliminated. The Concord School District is currently working on a consolidation plan, which includes the demolition of the existing Conant School. Engineering Services will be coordinating this project with the School District project and expects summer 2011 construction.

Laura Black of the Division of Historic Resources (DHR) noted that there has been a historic district established within the area, which includes Broadway in the vicinity of Rollins Park and includes sections of South Street from Carter Street to West Street. Ed Roberge noted that the proposed project includes curbing improvements in the vicinity of South Street and Carter Street but noted that the work was very limited with little impact to the existing conditions. Ed Roberge noted that a Request for Project Review (RPR) had not been forwarded prior to the meeting but did submit the completed form at the meeting.

Following brief discussion on the merits of the project, the members in attendance concluded that there would be no adverse effect on historic or archeological properties. Ed Roberge provided a Cultural Resources Memorandum of Effect form for signature but after brief review, a typing error on the form prohibited its signature at the meeting. Ed Roberge advised Joyce McKay that a revised form would be prepared and forwarded to the Bureau of Environment for later signature.

Concord (no project numbers)
Participants: Ed Roberge, (eroberge@concordnh.gov) and Scott Sykes (ssykes@concordnh.gov), City of Concord

Ed Roberge, City Engineer with Concord, NH, introduced Scott Sykes of the Engineering Services Division and reviewed the history and details of the project. As a result of flooding from the May 2006 and April 2007 severe storms, portions of the Rattlesnake Brook culvert failed and in doing so surcharged from the downstream outlet wall and caused significant erosion on the adjacent private property (formerly the Reino Elgland property). Ed Roberge reported that as part of the US Route 3 Corridor (North) Improvement Project (CIP35), the culvert crossing

under North State Street is deficient and in severe condition and requires replacement. Given that the existing culvert outlets through a significant retaining wall along the former Elgland property, the City was working with the previous owner to coordinate repairs within the City's right-of-way and the adjacent private property. When it became clear that the previous property owner did not have the wherewithal or the resources to complete restoration work on his property, the City through negotiation acquired the property. The City closed on the property in July 2010.

Final design by City Engineering staff began shortly thereafter, and the City has engaged the services of Stoney Ridge Environmental (SRE) to submit the necessary wetland permitting documents. Ed Roberge provided a variety of photos of the site and the existing residential buildings for review. With the intent of replacing the stone masonry box culvert within the North State Street right-of-way, the downstream culvert replacement is not possible without first removing the existing building structures and stabilizing eroded slopes. There are a number of existing utilities including water, sanitary sewer, storm drain, natural gas and underground telephone within the North State Street corridor, which need to be protected. The buildings on the site, including a dwelling, woodshed, barn, and garage, are in considerable disrepair and the residential building has experienced years of neglect. There are also mill ruins on the property, and there is a brick mill across the street from this property. Ed Roberge referred to the site construction plan indicating that culverts would be replaced within the existing City right-of-way as well as on City property. Wetland permitting is under review by NHDES at this time.

Ed Roberge reported that it is the intent to maintain the existing granite retaining walls and stone walls on the former Elgland property by retrofitting the new culvert within the downstream section of the pipe. Design plans indicate that once this downstream section is set, the remaining upstream sections of the existing culvert will be removed. Again, Ed Roberge noted that removal of the buildings is required given the inability to replace the drainage culvert structures without impact and given the severity of the unstable slope conditions at the site. A new 7' x 5' pre-cast concrete box culvert will be constructed under North State Street and a new 60" diameter reinforced concrete culvert will be installed on the City property outletting to a new headwall structure. A site restoration plan has been developed depicting the intent to restore the site to pre-disaster conditions.

Given that wetland impacts are limited to 331 SF of impacts, essentially limited to an expedited minimum impact permit, the City has been advised that it is not likely that the project will require US Army Corps of Engineers (USACOE) programmatic review. Linda Wilson of the Division of Historic Resources (DHR) noted that although NHDES may indicate that, ACOE Section 106 programmatic review might be required. With that, Linda Wilson noted that given the historic nature of the land use, site, and culvert facilities, a culvert form and individual form documenting the existing inventory of buildings and uses as well as a millrace should be provided for DHR review. Linda Wilson also requested that the City of Concord submit a Request for Project Review (RPR) so DHR staff can document the submittal requirements. If documentation is required, review by a historical archaeologist and an architectural historian will

likely be needed. Ed Roberge acknowledged the request and agreed to forward the RPR as soon as possible.

Note: Subsequent to the meeting, DHR, DOT, and the consultant agreed that a more holistic inventory form could be prepared that would incorporate how the whole site has evolved over time, with above-ground and archaeology (non-extant) components, and elements of the culvert inventory form.

Bath, X-A000(901), 14439
Participants: Sean James, Hoyle Tanner (sjames@hoyletanner.com); David Wright, Consulting Party; Steve Liakos, NHDOT

This project has previously been discussed at the 9/11/2008, 10/9/2008, 4/2/2009, 4/8/2010, 8/5/2010 and 9/9/10 Cultural Resource Committee meetings.

There was general discussion regarding the various memos, memorandums, and forms required for the project. J. McKay will forward a revised Effects Memo form to S. James who will revise the language in a draft Effects Memo based on suggestions from the Committee. The form will then be circulated for signature. The draft Memorandum of Agreement (MOA) previously submitted by Hoyle, Tanner was discussed. Comments have been received from FHWA and NHDOT regarding the MOA, which will be incorporated by Hoyle, Tanner. J. McKay noted that the discussion of continued consultation with NHDHR and consulting parties was listed in the MOA through the design phase and not through construction. S. James responded that this was in response to a comment from J. Garvin that the decisions related to the rehabilitation should be made in design, not during construction. NHDHR will discuss this comment and review the MOA within the next month. Hoyle, Tanner will begin the project CE and programmatic 4(f) during the next month.

The revised preliminary plans submitted by Hoyle, Tanner were discussed. The plans were submitted for review on September 29, 2010. The NHDOT responded in writing that they approved the plans. No comments were received from NHDHR. David Wright, a consulting party for National Society for the Preservation of Covered Bridges (NSPCB), submitted 7 pages of review comments to Hoyle, Tanner by fax on November 3, 2010. Copies of the comments were distributed and discussed.

The first NSPCB comment was regarding the siding. The preliminary plans include replacement of all the siding with new shiplap siding. It was generally agreed that the downstream siding and portions of the upstream siding were replaced in 1987. It was noted that Secretary's Standards would not require the town to keep siding that is less than fifty years old; they are not character-defining features. D. Wright noted that reuse was more responsible and thought that all portions of the bridge that can be retained would document history of the bridge through time. There was discussion regarding several contract options to allow the contractor to have a choice of replacing or retaining the siding. After some discussion, it was agreed that the plans will allow

the contractor the option of reusing the downstream siding or replacing with new siding. Any retained material would have to be in good condition, which would be defined in the contract plans. The contract plans will set a percentage of the upstream siding that must be retained with the balance being new or retained at the contractor's option. The percentage will be set based upon previous field review by Historic Documentation Company with the goal of retaining as much of the siding older than 1987 as possible.

The second topic discussed was a proposal by the NSPCB of an alternate floor framing plan. The town requested Hoyle Tanner to design the rehabilitation to a 10-Ton bridge. The current design uses glue-lam to reduce the dead weight of the bridge. The suggested plan introduces two beams, 14' apart, spanning longitudinally along the top of the existing floor beams. Each beam would consist of 3 – 4"x16" members through-bolted to the existing floor beams. The intent of this system is to improve live load distribution and increase the load rating of the existing floor beams. Since representatives of NHDHR had just received the sketch, they were not able to comment on whether such an addition would be acceptable from a historic perspective because no evidence of such a system in the bridge had been found. S. James mentioned several areas of concern with the plan including: 1) the question whether the added beams are stiff enough to distribute load; 2) the preferred alternative should not have a structural element that also acts as a curb since any damage (impact, rot, etc) will tend to reduce the bridge capacity; and 3) the design includes two bolts per floor beam and with over 180 floor beams, the maintenance of keeping them tight would be costly. It was agreed to table the discussion until the next CRC meeting discussion in December. NHDHR will also review the design and provide an opinion.

David Wright also introduced the idea of building sidewalks on both sides of the bridge rather than the existing one side. He believed he had a ca. 1930s photograph showing that configuration and will bring them to the next meeting.

Portsmouth, X-A000(417), 14493
Participants: David McNamara (dmcnamara@fstinc.com), Paul Harrington (pharrington@fstinc.com), FST

1.0 Introduction

1.1 Paul Harrington of FST gave a brief overview of FST's October meeting presentation. He described the existing bridge and its history, and presented the options FST has studied for rehabilitating or replacing the bridge. The existing bridge was constructed in 1940, slightly to the west of the original bridge, which had been built in 1850. The existing bridge has an open steel grid deck, with two variable depth steel girders. The bridge underwent significant repairs in 1984, replacing the majority of the floor beams, large sections of the open decking, and the rails. In 2005, the City completed some minor repairs to the structure that included additional bracing and securing loose bracing elements. During the spring of 2010, an interim repairs contract was completed, which included installation of supplemental floor beams and additional repairs to the decking. The bridge is currently posted for a 6-ton weight limit, and the repairs were completed in order to maintain the current posting.

1.2 The proposed bridge cross-section was described. The City is looking to construct 5' shoulders for bicyclists and one 5' sidewalk across the bridge. The area is very popular for pedestrians and bicyclists. To accommodate the proposed cross section, the width of the bridge must be widened from 33'-6" to 42'-6". In order to minimize impacts to natural resources in the area, the bridge widening is proposed entirely to the east, which utilizes the original Right of Way and the previously disturbed ground from the original 1850 bridge footprint. It is desired that a solid deck replace the open deck grating. Because the grating allows for runoff and storm water to fall directly on the bridge's superstructure, it accelerates the deterioration of those elements. Additionally, the open grating poses a significant safety hazard for bicyclists. The approach to the bridge from the north is down a long steep hill. The road is signed in advance of the bridge warning cyclists to walk their bikes, but some ignore the signs and the City has several incidents per year, where bicyclists fall and suffer injuries when they hit the steel grid decking.

1.3 A handout was provided, which showed elevation views of the bridge, photo renderings of the evaluated alternatives, the rehabilitation option cross-section, and a summary of the alternative costs. An additional handout including pictures of the existing condition of the various bridge elements was also made available. Included were photos of the steel rails and walkway, steel grid decking, floor beams, girders, bracing, piers, and abutments.

1.4 FST then presented the alternative costs, comparing the preferred replacement option and the rehabilitation option. (Costs were not discussed at the initial meeting in October 2010.)

2.0 Alternative Costs

2.1 Preferred Replacement – The preferred replacement option is a variable depth steel girder bridge. The cost of this bridge is approximately $7,736,000.

2.2 Rehabilitation - The rehabilitation option is estimated to be $9,349,000. There are several elements that increase the estimated construction cost substantially over the preferred replacement option. The following is a narrative describing the major cost differentials between the rehabilitation and replacement alternatives.

- Highway work – In order to maintain the existing vertical clearance, the existing roadway profile would need to be raised approximately 18". This is due to the need to increase the floor beams to modern standards, and also the increase in deck thickness, when eliminating the steel grating and installing a full depth concrete deck. This leads to increased costs of retaining walls, more full depth pavement section to match back to existing ground, and additional driveway and side road tie in work. The estimated increase is approximately $85,000.
- Bridge Removal – The removal of the existing bridge is significantly more extensive in the rehabilitation alternative. Care needs to be taken to preserve the steel girders, so they can be rehabilitated and returned to the site for re-use. Additionally, the pier foundations would need to be removed in their entirety to construct new piers, as the span lengths need to be maintained if re-using the existing steel girders. In the replacement option, drilled shafts could be installed behind the existing piers, minimizing the demolition work required. The removal work would increase by over $500,000 for the rehabilitation option.
- Bridge Superstructure – In order to re-use the existing girders, they would need to be shipped off site to be rehabilitated, have the lead paint removed, and be repainted. None of the other superstructure elements have any salvage value, or aren't sized properly for the proposed cross section, and thus would all be new, just as in a replacement option. Additional flange steel would also be required, in order to ensure the existing girders met

capacity. The additional work required to reuse the steel girders results in an increase of around $800,000.

- Bridge Substructure – Once the existing piers were removed, the new substructure in either a replacement or rehabilitation scenario is essentially the same, therefore there is no additional cost related to the substructure.

3.0 Technical Issues – Rehabilitation Option

3.1 The roadway profile would need to be raised to maintain existing vertical clearance, which is already a concern to the local fisherman who need to pass under the bridge. A change to the roadway profile would affect the approach work and increase cost of the project.

3.2 In the rehabilitation option, the horizontal clearance would be maintained as is, and the vertical clearance would require a change in profile to simply maintain the existing clearance. Further increases to the roadway profile to try and gain clearance in a rehabilitation scenario would exacerbate the profile impacts off the bridge.

3.3 The rehabilitation option would create an undesirable non-redundant structure type, with only two girders being utilized. They are now fracture-critical, and the beams have a shorted lifespan. The replacement option would provide additional girders, allowing a greater factor of safety, in the event one of the girders failed.

3.4 Using the existing girders, as opposed to new, will result in a lower fatigue life in the steel.

3.5 New flange steel would be required to increase the girder capacity in order to meet current loading criteria.

3.6 The need to locate the new piers at the same location as the existing results in more intensive work in the river in order to remove the existing.

3.7 The overall construction schedule would be increased by approximately 4 months, largely due to the handling and refurbishing of the existing girders. In a replacement option, the girders could begin fabrication early in the process, while under a rehabilitation scenario, it would need to be dismantled, shipped off site, worked on, and shipped back to the site, potentially holding up construction. An additional schedule impact is due to the extra demolition work at the piers.

3.8 The construction cost would be increased by nearly $1.5 million, while resulting in a bridge with a shorter fatigue life, and lack of girder redundancy.

4.0 Discussion

4.1 DHR asked if there had been any concerns raised by the public about impacts to the bridge, from a historic perspective. FST indicated that during the one public meeting prior to the emergency repairs work, there were only a few abutters present, and their concerns related to the minimal vertical clearance under the bridge and not concerns about the historic bridge itself. Abutters generally did not like the open grating, due to the constant noise of vehicles.

4.2 DHR asked if there would be any right of way impacts. FST indicated that none were anticipated. The work limits will remain within the existing ROW. The ROW in the area accounts for the original bridge, providing ample room to the east, for the proposed widening.

5.0 Conclusion

5.1 DHR found that the project would have an Adverse Effect on the eligible bridge. Given the disturbance in the area, the area of potential effect does not include archaeologically sensitive areas.

5.2 Mitigation was then discussed, with the following mitigation items being requested by DHR:

a. Develop a management plan for the remaining similar plate girder bridges in the state. This study will include inventory forms for the remaining bridges (believed to be 3 or 4), along with an analysis of general preservation methods that may be utilized to extend the life of these bridges. This study will be incorporated into a separate update of the statewide historic bridge inventory that is expected to get underway in the spring/summer of 2011. [It was later noted that NHDOT will prioritize the study of this bridge type when the overall project is commenced, rather than attaching it to a municipal effort].
b. Document the bridge prior to demolition. This requires the standard analysis, narrative, plans, and large format photographs for the bridge. It is anticipated that much of this work was completed as a part of the inventory form.
c. Market the bridge. The City will need to market the bridge for sale. DHR and NHDOT will follow up with FST on advertising details and similar sample contracts.

Westmoreland-Walpole, X-A000(944), 15749
Participants: Christine Perron, Kirk Mudgett, NHDOT

Kirk Mudgett provided an overview of the project. This is a rehabilitation project on NH Route 12 from NH Route 63 in Westmoreland to Main Street in Walpole, a distance of approximately 6.7 miles. The roadway typical is 12-8. Work will consist of resurfacing as well as the following:

- Minor scaling and tree removal at existing ledge cuts will occur.
- Replacement, and in some areas extension, of cable guardrail with w-beam rail, as well as replacement of existing w-beam in some locations.
- Replacement of underdrain in kind. Underdrain is located along the roadway in previously disturbed areas.
- Drainage improvements will consist of slip-lining three failing recent culverts near River Road. No excavation will be necessary and access will be across previously disturbed areas.

All work will be located within the existing right-of-way with the exception of a few locations that will require drainage easements for access. Jamie Sikora commented that any changes to the scope of work would require another review of the project given its location near the Connecticut River.

K. Mudgett described one particular area where guardrail and drainage improvements would occur adjacent to a potentially historic property. This area currently has cable guardrail that will be replaced with a longer run of beam guardrail. Some excavation and fill will be required to create a flat end panel; however, this work will be within the ROW and will not require any property impacts. In addition, drainage in this area will be reconfigured to address a concern raised by the property owner. Drainage pipe will be installed along the property, through a corner of the field, and down a wooded slope, where it will outlet above a stream bank.

Linda Wilson commented that the potentially historic property would not be adversely affected by the work as proposed. Laura Black asked if the property owners had any concerns with the work. K. Mudgett replied that the owners had only expressed concern about the existing

drainage; the proposed drainage work in this area was being done at their request. They have not been asked about the guardrail. Christine Perron added that the additional guardrail would be located behind trees and brush and would likely not be visible from the house.

L. Black agreed that the project would have no adverse effect. The DHR agreed that the Department could forego an inventory form for the potentially historic property. The physical address of the property would be given to Joyce McKay for the No Adverse Effect Memo. [E. Feighner later concluded that the project would not impact archaeologically sensitive areas.]

Portsmouth, 15731A (no federal number)
Participants: Steve Johnson, Bob Landry, John Sargent, NHDOT

Steve Johnson described a maintenance upgrade that would replace siding, windows, and roofing on the control house of the Sarah Mildred Long Bridge (251/108). This will be a betterment project with no federal funding. The existing vertical steel siding replaced earlier siding on the structure in 1970. The new materials would better protect the new electrical equipment including the computerized control system installed in 2008. The replacements would not substantially change the character of the building. The project will have a no adverse effect on the bridge.

Landaff 99404Z
Participants: Christine Perron, Steve Johnson, NHDOT

Steve Johnson, NHDOT Bureau of Bridge Maintenance, provided an overview of the project. A 1932 concrete rigid frame bridge carrying NH Route 112 over the Wild Ammonoosuc River is deteriorating and the concrete is spalling. The original concrete rail was replaced in the past with concrete curbs and aluminum rail, which is now in poor condition. Proposed bridge repairs included the installation of one foot of concrete facing on the entire substructure and on a portion of the wing walls and the installation of new curb and steel or aluminum bridge rail. The concrete facing will be installed by first removing the bad concrete and then drilling rebar and grouting to create a surface on which the new concrete facing would be pinned.

Joyce McKay pointed out that if no repairs were completed, the concrete would continue to deteriorate. Laura Black asked if concrete rigid frame bridges are a common type in NH. J. McKay replied that it is a fairly common type from the 1930s. Linda Wilson commented that it sounded as if the appearance of the bridge would not be appreciably different once the repairs were completed. S. Johnson agreed.

L. Black suggested that this might be a good opportunity to complete an inventory form on this bridge type, and L. Wilson added that this might be a good example to use as a benchmark for future forms on this type. Jill Edelmann commented that perhaps it would be more appropriate to document a bridge that has not yet been altered as much as the subject bridge. There was then

discussion on other known concrete rigid frame bridges and it was agreed that forms had been completed on at least two others of this type (Loudon 054/065, NH Route 106 over Wales Brook, 1934; Franconia NH Route 3 Bridge 134/085, 1941; Lincoln, NH Route 112 over the Pemigewasset River, 205/196, 1938; Bennington, NH Route 31 over the Contoocook River, 096/087, 1934). J. McKay commented that all concrete rigid frame bridges would be inventoried as part of the upcoming bridge inventory contract. Given that other more intact examples of this bridge type have already been documented, and that this type will be included in the future Bridge Inventory and Plan, all agreed the project would have no adverse effect, with the consensus determination that the bridge might be eligible for the State or National register. No form would be necessary prior to completing the proposed repairs.

Stratham 15653 (no federal number)
Participants: Christine Perron, Chris Carucci, NHDOT

Christine Perron and Chris Carucci presented the project, which has been previously presented at the meeting. This project is part of the Statewide Culvert Rehab Program and was first presented on February 4, 2010. The project consists of the replacement of a 66-inch corrugated metal pipe located on Squamscott Road over Jewell Hill Brook. The replacement pipe will be a 96-inch plastic pipe. The pipe will be embedded 30 inches so that the top of the pipe will be at the same elevation as the existing pipe and the roadway profile will remain the same. Concrete headers will be installed at the inlet and outlet, and beam guardrail will be installed approximately 100 feet on either side of the pipe in all four quadrants. This length of guardrail is the minimum length required. All work will be within the existing right-of-way. At the previous meeting, Edna Feighner stated that there were no archaeologically sensitive areas that would be impacted by the project. Photographs of the project area and surrounding landscape were shown. A potentially historic property is located to the east of the culvert.

Laura Black asked if the adjacent property owners had been contacted for input. While she personally did not have any issues with the project as proposed, she felt there should be coordination with the landowners. Linda Wilson added that people in this area could be particularly sensitive so coordination would likely be appreciated. The family that owns the adjacent property (Wiggin) has been at this site for generations. C. Carucci explained that once the scope has been set the Town would be contacted. If we make a presentation at a Town Selectboard meeting, the Town will be responsible for notification. If NHDOT holds a meeting, the abutters will be notified. The level of public involvement for this project has not been determined. C. Carucci will forward the recommendation for abutter notification to the Project Manager.

L. Black asked about the fence shown on the plan in the SE quadrant. C. Carucci said that it was the remnants of a wire fence.

L. Wilson stated that the project would have no adverse effect on the Wiggin Farmstead. No other concerns were raised.

Hudson (no project numbers)
Participants: Gary Webster (gwebster@hudsonnh.gov), Town of Hudson; Peter Michaud, NHDHR

The reason for the meeting is the Town of Hudson is proposing a new senior center at Bensons Park. The deed restrictions from the State of New Hampshire require that the Town of Hudson receive approval from the NHDOT and the Division of Historical Resources for work done in the park. The parcel on which we are proposing to put the center is outside the historic district of the park. We are trying to achieve the look of the old red barn that burned before the town acquired the land from the state. We were unable to locate the barn/Senior Center in its original location in the historic district due to parking and the need for proper ADA access. Thus, it does not have any historic value because it will be a new structure with the red barn look in an area of the park that is not historically significant. The new site has a much easier access and development cost will be a lot less because of access to utilities. Clearing the parcel will just removal of overgrowth. The parcel was cleared many years ago for the Benson's parking lot. G. Hudson noted that Nancy Mayville is checking with the attorney general about the deed and the location of the new senior center since its location is referred to as the former location of the old red barn in the deed. We are trying to meet some deadlines for submission of the warrant article if we get approval from both departments. The dates are as follows: Nov. 23 to the selectman for the approval of the warrant article, December 14 for approval from the Budget Committee to send it to the warrant, and January 4, 2011 is the last date for any warrant articles to be placed the agenda for presentation to the voters.

G. Hudson requested if there were any comments from the committee or concerns they might have. Joyce Mc Kay who had a lot of knowledge of the site indicated that the area had been a parking lot and it had later been extensively excavated during the remediation of hazardous wastes across the park. She suggested that this area was not sensitive for archeological resources. Peter Michaud of the Division of Historic Resources stated that under the Division's easement there was no impact to historical properties by this project since the Senior Center's location is visually separated from the district. The new center would fit in the park. There will be no historic properties affected. It was agreed that J. McKay would prepare an effect memo for the senior center only.

Hudson, X-A000(348), 14408
Participants: Gary Webster (gwebster@hudsonnh.gov), Town of Hudson; Peter Michaud, NHDHR

G. Hudson updated the committee about the railroad station that the town is rehabilitating. The town is in the process of getting a contract with Warren Street, which includes the additional work for the engineering and archaeological investigations. As town moves forward with the project, the town will have addendums to the contract for further work, for example to move the

station. P. Michaud asked about turning the station 90 degrees from the proposed direction. G. Hudson indicated that he would present that during the next meeting. The Bensons Committee determined at a meeting Thursday night that the depot would be used as an educational center for visitors that come to Bensons. They plan to install some displays using the collection of historic photographs and memorabilia of the Bensons Park. This will be a good use of the station at the location that is proposed.

Sanbornton 14443 (no federal number)
Participants: Steve Goddard (sgoddard@hoyletanner.com), Hoyle Tanner; Daniel Geiger, Oak Hill Environmental; John Thayer and Bob Veloski, Town of Sanbornton

1. The following were provided for the meeting: USGS Topo map, USGS Quad map with orthophoto, Sanbornton cemetery list, NRCS soils map, Site Specific soils maps, copy of 2007 Cultural Resources Memorandum showing no effect for adjacent Upper Bay Road and project, and photographs. They were and reviewed and discussed during the project presentation.
2. The Bay Road reconstruction project and work elements were described. The Bay Road project is anticipated to reconstruct the roadway in its current location and to its current pavement width of 21'. Work elements were listed on the RPR Form as:
   a. Pavement reclamation and pavement replacement in portions of the project.
   b. Pavement and underlying soils removal and construction of a road box with replacement pavement in other portions of the project.
   c. Minor tree and brush cutting within the Right-of-Way.
   d. Movement of existing overhead utility poles if/as required within the Right-of-Way.
   e. Cleaning/reshaping existing roadside ditches and/or creation of roadside ditches.
   f. Installation of underdrains where warranted.
   g. Installation of minor closed drainage systems where required to maintain a dry road box.
   h. Replacement of existing cross culverts and headwalls. Minor pipe upsizing may be required depending on hydraulic analysis.
   i. Installation of guardrail at select locations - primarily at localized culvert crossings.
   j. Roadside ditch and bank restoration and stabilization. Method to be dependent upon Right-of-Way width, backslopes and ditch profile grades.
3. Method of determining impacts to historical resources assumed that these impacts were within the existing prescriptive Right-of-Way. Right-of-Way as shown on 1974 Rte. 11 reconstruction plans was carried beyond 1974 Bay Road intersection project limits to Bay

Shore Road intersection based on locations of existing fences. Assumed Right-of-Way was then widened to 50' based on (9) pins with 25' offsets discovered during the site's survey. Right-of-Way was narrowed from Sta. 164+50 RT to Sta. 172+00 RT to accommodate a presumed prescriptive Right-of-Way line due to a partial stone wall at this location. No other stone walls appear to be present on Bay Road. Pictures of the existing stone wall were examined and the wall was briefly discussed. It was noted that the wall might have been disturbed in the past as it now resembles a "collection of stones" almost as much as a "stone wall".

4. Site soils information was discussed briefly.
5. There was some discussion of whether or not there might be any historical buildings or features in the area. Dan Geiger stated that there did not appear to be any evidence of historical fences, posts or other significant structures within the Bay Road corridor. Since the reconstruction work was intended to be contained within the existing Right-of-Way, it was agreed that there should be no historic resources impacted.
6. Steve Goddard was requested to prepare a Cultural Resource Memorandum of Effect showing the no historic properties affected and to submit it along with meeting minutes to Jill Edelmann via email.

Berlin 15792 (no federal number)
Participants: Jason Ross (jross@hebcivil.com)

The first project discussed was the Hillside Avenue Bridge over the Dead River in Berlin, NH. The bridge is NHDOT Bridge No. 232/066.

The bridge was originally constructed in 1931. It is 12.7-feet-long and 43-feet-wide. The original bridge has six (6) steel stringers with an integral concrete deck cast down to the bottom flanges in a "Jack Arch" configuration. At a later date, the roadway was widened and five (5) additional stringers and a new section of concrete deck were added to the downstream side of the bridge. The concrete in the Jack Arch section of the bridge is cracked with a great deal of efflorescence, especially on the upstream side of the bridge. Because of the configuration of the steel beams in the Jack Arch section it is impossible to inspect their condition. The exposed bottom flanges of the beams show heavy rusting with section loss. The bridge has cast-in-place concrete abutments that were cast on bedrock.

The bridge is on the NHDOT Municipal Red List of Bridges and is currently scheduled for FY 2017 funding under the NHDOT Municipal Managed State Aid Bridge Program. The city is advancing its construction.

Victoria Bunker, PhD, completed a Phase 1-A Short Form Study and found no evidence of significant archaeological resources in the vicinity of the bridge, which is not located in a historic district. The City of Berlin would like to remove and replace the existing structure with a precast concrete, rigid frame bridge. The project will stay within the existing right-of-way.

The committee decided that no historical or archeological properties would be affected by this project. The bridge retained limited integrity. No *Individual Inventory Form* is required for the

bridge. HEB will fill out a Cultural Resource Memorandum of Effect for Municipally Managed Projects, and the committee will sign it at their next meeting.

Sunapee 15836 (no federal number)
Participants: Jason Ross (jross@hebcivil.com)

The second project that we discussed was the Lower Main Street Bridge over the Sugar River in Sunapee, NH. The bridge is NHDOT Bridge No. 094/100.

The bridge was originally constructed in 1900, but it has been renovated or reconstructed more recently. The bridge is a 26-foot-long by 22-foot-wide steel "I" beam type bridge with a cast-in-place concrete deck. There is moderate to heavy section loss at the western end of the beams, and several of the stringers have advanced deterioration at the ends and have settled. There is a space between several of the beams and the bottom of the deck. The concrete deck is in fairly good condition with few cracks or spalls. The existing stone abutments have several cracked stones and voids. The Town of Sunapee would like to remove the existing bridge deck and rehabilitate the existing stone abutments by adding a new concrete bridge seat and a 6" thick concrete scour wall along the toe of the existing stone walls. The Town would also like to install a new glue-laminated timber bridge deck with a sidewalk on one side of the bridge. This will match the style of two other bridges in Town. The project will stay within the existing right-of-way. The committee asked if HEB could send photos of the other similar bridges in town. These photos were e-mailed to Joyce McKay on 11/10/10.

The bridge is on the NHDOT Municipal Red List of Bridges and is currently scheduled for FY 2017 funding under the NHDOT Municipal Managed State Aid Bridge Program.

The committee asked if this project is with a Historic District. They also asked if the Town of Sunapee has a Heritage Commission. After the meeting, HEB contacted Becky Rylander (president of the Sunapee Historical Society), Victoria Davis (Planner for the Upper Valley Lake Sunapee Regional Planning Commission), and Donna Nashawaty (Sunapee Town Manager) about the project. They all indicated that there is no Historic District Commission or Heritage Commission in the Town of Sunapee. They don't know of any local regulations for historical purposes in the area. This information was also e-mailed to Joyce McKay on 11/10/10.

Once the committee reviews this additional information, they will determine if any historical or archaeological properties will be affected by this project and if an Individual Inventory Form is required. It was determined that the project would not impact archaeologically sensitive area. HEB will then complete a Cultural Resource Memorandum of Effect for Municipally Managed Projects and the committee would sign it at their next meeting.

Freedom 15987 (no federal number)
Participants: Jason Ross (jross@hebcivil.com)

The last project that we discussed was the Ossipee Lake Road Bridge over the Danforth Bay Outlet in Freedom, NH. The bridge is NHDOT Bridge No. 115/074.

The concrete slab bridge was originally constructed in 1928. It is 21-feet-long and 23-feet- wide with a reinforced concrete deck supported by reinforced concrete abutments and wing-walls. The concrete deck has cracks and is spalling in several locations. The underside of the deck is in fair condition with minor cracks on the edges, which are exposing rebar. The bridge guardrail is attached to the side of the concrete deck curb. The deck curb has major cracks, and the guardrail is becoming detached from the concrete. The abutments and wing-walls are in good condition with no major signs of cracking or spalling and do not appear to have settled or twisted. There is some minor undermining of the abutments and wing-walls from the water on both sides. The Town of Freedom would like to remove the existing bridge deck, rehabilitate the existing abutments and widen the bridge approximately 10 feet on the downstream side of the existing location. They would also like to raise the profile of the existing roadway approximately 2 feet to improve sight distance east of the bridge. The new bridge deck will most likely consist of precast concrete planks. The project will stay within the existing right-of-way.

The bridge is on the NHDOT Municipal Red List of Bridges and is currently scheduled for FY 2019 funding under the NHDOT Municipal Managed State Aid Bridge Program.

The committee decided that no historical or archaeological properties would be affected by this project. No *Individual Inventory Form* is required for this project. HEB will fill out a Cultural Resource Memorandum of Effect (Municipally Managed Projects) and the committee would sign it at their next meeting.

****Memos/MOA's**: Randolph 16098 (no federal number); Bristol, X-A000(955),15776

Submitted by: Joyce McKay, Cultural Resources Manager
Jill Edelmann, Cultural Resources Assistant

http://www.nh.gov/dot/org/projectdevelopment/environment/units/technicalservices/crmeetings.htm