BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting
DATE OF CONFERENCES: February 4 and 11, 2010
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Chris Carucci
Jill Edelmann
Jon Evans
Cathy Goodmen
Doug Gosling
Bob Hudson
Tom Jameson
Doug King
Larry Keniston
Marc Laurin
Steve Liakos
Don Lyford
Joyce McKay
Phil Miles
Kit Morgan
Kevin Nyhan
Christine Perron
David Scott
Jason Tremblay
Matt Urban

Federal Highway Administration
Jamie Sikora
Martha Alunkal

NHDHR
Edna Feighner
Jim Garvin
Beth Muzzey
Linda Wilson

DRED
Jennifer Codispoti

Bureau of Public Works
David Goulet
Dina Pinnell

City of Berlin
Pamela Laflamme (via phone)

CLD Engineers
Jason Beaudet
Daniel Hudson

Town of Dublin
Ed Germain
Bill Raymond

FST Engineers
Kevin Gagne

IAC, LLC
Kathy Wheeler

Past Designs
Lucinda Brockway

Smart Associates
Jennifer Riordan

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

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

Dover, X-A000(013), 15870 2
Stratham, X-A000(848), 15653 2
Plaistow, X-A000(849), 15654 3
Dublin X-A000(300), 14318 and X-A000(301), 14319 4
Advertisement of Buildings for Sale 5
New Castle-Portsmouth, X-A001(037), 15916 7
Hopkinton, STP-TE-X-000S(450) 13483A 7
Manchester-Hooksett, A000(461), 14604 7
Westmoreland/Walpole 8
Woodstock, X-A001(019), 15885 10
Concord, A001(024), 15902 (ARRA2) 10
Andover, X-A000(023), 15901 (ARRA2) 11
Manchester, 14966 11
Milton, X-A001(027), 15905 (ARRA2) 13
Berlin, X-A000(052), 12958B 13
Franklin 15860 14
Bath 14290 14
New Ipswich, X-A000(403), 14465 15

(When viewing these minutes online, click on a project to zoom to the minutes for that project)

February 4, 2010

Dover, X-A000(013), 15870
Participants: Christine Perron, David Scott, NHDOT

David Scott presented the project. This is a bridge pile repair project on Gulf Road over the Salmon Falls River. The bridge straddles the NH-ME state line and was built in 1938 with timber bents. In 1970, NHDOT built a causeway into the river, shortening its side of the bridge. In 1980, the timber bents on the NH side of the bridge were replaced with steel H-piles encased in concrete. This concrete has deteriorated and no longer protects the steel piles. The subject project consists of removing the existing concrete and re-encasing the piles with new concrete. The concrete will extend below the mud line as it does now. Dimensions of the piles will not change.

Edna Feighner asked for a copy of the 1970 and 1980 plans for DHR files.

No one in attendance had any cultural resources concerns with the project as proposed. A No Historic Properties Affected Memo can be signed.

Stratham, X-A000(848), 15653
Participants: Christine Perron, Chris Carucci, NHDOT

Christine Perron and Chris Carucci presented the project. This project is part of the Statewide Culvert Rehab Program. The project consists of the rehabilitation or replacement of a 66-inch corrugated metal pipe located on Squamscott Road over Jewell Hill Brook. This is a tidal area. Alternatives being considered include sliplining the existing pipe and repairing headers; installing a 5' diameter pipe adjacent to the existing pipe; replacing the existing pipe; and leaving both pipes in place permanently; and replacing the existing pipe with a box culvert, which would require the use of sheet piles and cofferdams. In addition, guardrail would be installed for approximately 100 feet on either side of the pipe in all four quadrants.

Beth Muzzey said that this area of Stratham has a long history of tidal farming and the farms tend to have large acreage. If the project extends outside the existing right-of-way, further review of abutting properties will be necessary. C. Carucci explained that permanent ROW acquisitions are not likely to be required. At the most, a temporary construction easement would be obtained.

Edna Feighner had no concerns regarding archaeology. However, she stated that the box culvert is the least preferred alternative given its greater disturbance to the area, changes to the roadway profile, and more obtrusive aesthetic impact.

B. Muzzey asked if a public informational meeting would be scheduled. C. Carucci explained that he did not expect a lot of public involvement in this project given the limited options available. C. Perron added that she would be sending letters to local officials and organizations to seek input on the project as part of the normal environmental review process.

C. Carucci asked for input on proposed guardrail. Linda Wilson said that local residents might want to comment on guardrail. Jamie Sikora pointed out that while this is not a historic district,

the public should still be asked for comments. B. Muzzey stated that she did not have enough information about the area but did know that it is a very scenic area. Therefore, guardrail and culvert alternatives should strive to protect the area's scenic qualities. C. Carucci added that guardrail alternatives were limited but he did have a few options for materials.

The project should be reviewed again once an alternative has been selected and impacts are known. Additional photographs of the surrounding area should be provided at that time.

Plaistow, X-A000(849), 15654
Participants: Christine Perron, Chris Carucci, NHDOT

Christine Perron and Chris Carucci presented the project. This project is part of the Statewide Culvert Rehab Program. The project consists of the rehabilitation or replacement of a 72-inch metal arch pipe that is partially buried. The pipe is located in a relatively developed area on NH Route 121A over Kelly Brook. Construction date is unknown, although the pipe is likely 20 to 30 years old given its condition.

Alternatives being considered include sliplining the existing pipe and repairing headers (however, this alternative is least preferred since the existing pipe is already under capacity); installing a new pipe adjacent to the existing pipe, replacing the existing pipe, and leaving both pipes in place permanently; and replacing the existing pipe with a box culvert, which would require the use of sheet piles and cofferdams. Impacts from a box culvert would extend as much as 50' beyond the existing roadway. In addition, guardrail would be installed in all four quadrants and would need to be steel beam and steel post due to the high traffic volumes. C. Carucci said that the town needed to be contacted regarding the possibility of a road closure and detour for a culvert replacement.

Edna Feighner and Beth Muzzey said that more information was needed on the landscape surrounding the project area. If the footprint of the pipe expands (i.e. box culvert), then an archaeological survey may be necessary.

B. Muzzey stated that more information is needed on the stonework at the ends of the pipe. She suggested either an inventory form or better photographs that show the extent of the stonework. Jamie Sikora added that if the sliplining alternative were chosen, then further information on the stone work would not be necessary since it would not be impacted. C. Perron said that she would take additional photographs before leaf-out to more clearly show the area. Linda Wilson suggested that the white pine blister rust maps might be helpful in determining historic surface features such as stone walls, culverts, and foundations.

The project should be reviewed again once an alternative has been selected and impacts are known. Additional photographs of the surrounding area and the stonework should be provided at that time.

Dublin X-A000(300), 14318 and X-A000(301), 14319
Participants: Kevin Gagne (Kgagne@fstinc.com), FST Engineers; Cindy Brockway, Past Designs; Ed Germain and Bill Raymond, Town of Dublin; Tom Jameson and Bob Hudson, NHDOT

Kevin Gagne recapped the Dublin project process to date and introduced attendees. The previous Cultural Resources meeting for this project was in May 2009 when the project's impacts to historic properties throughout the corridor were discussed. The 2009 meeting was concluded as follows:

> *The treatment of the area within the oval will be of utmost importance to the success of this project element. This means that the landscaping layout and materials within the oval must be well thought out.* ***NHDOT will stipulate that a Landscape Historian, be consulted as a condition of the "no adverse impact" project classification.*** *....The design for the oval should be reviewed at a later meeting. It was concluded that if the above stipulations were followed the project would have a no adverse effect with a de minimis 4(f).*

Cindy Brockway, the Landscape Historian, discussed the efforts and rational behind the oval restoration design, as documented in her memo regarding the design proposal:

The design team worked diligently to gently guide the safety and aesthetics of the Oval into the twenty-first century. Throughout the design process, the team carefully considered both its original design, and its design evolution from 1916 to the present. We believe that the proposed design has done the best job of stewarding this important landscape feature into a new era, respecting its historic design changes and ensuring public safety on an ever-increasing busy stretch of Route 101. Throughout the process, the historic design details informed the proposed design. Cindy discussed the following in detail:

Feature Analysis
In December 2009, Lucinda Brockway (Past Designs) did a feature analysis of the Oval's design changes, carefully studying the changes in lighting, signage, furnishings, plantings and dimensions.

Proposed Design (Note that the manner in which the current design compliments the original designs is noted in the no adverse effect memo.)
The proposed landscape design, therefore, has considered all of these historic changes, and used them to inform the new design. This proposed design meets the aesthetic considerations of the community, the town, national lighting codes for exterior illumination for this type of intersection, and the safety standards for a traffic thoroughfare, while furthering the historic design intent of the Oval's earliest designers. Specifically:

- The width of the Oval will be enlarged
- A new cross walk is required west of the Oval
- The flagpole will remain in its existing location
- The c. 1930's gothic light fixtures and poles will be removed from the Oval and replaced with full cut off, Dark Sky friendly radial wave fixtures positioned inside the sidewalks on both sides of the roadway surrounding the Oval.
- The rock at the west end of the Oval and the post 1952 historic marker have been relocated to a prominent position in front of the Town Hall.

- To improve the prominence of the Bicentennial historic marker, this sign has been relocated behind the rock in front of the Town Hall.
- The planting scheme in the Oval restores the low clipped evergreen hedge from the 1916 landscape design
- The 3' setback between the hedge and the curb will be planted with massed groundcover perennial blue geranium
- Similarly, blue and gold perennials (Catmint and Black Eyed Susan cultivars) will provide color from June to October in the center of the Oval under the flagpole.
- The central field of the Oval is to be planted with a mat-forming Sedum
- In addition to these landscape features, signage will direct traffic around the Oval and its channelization islands. These new channelization islands are to be constructed of concrete w/ beveled granite
- The design team has worked hard to replicate historic features of the Oval wherever possible while maintaining lighting and traffic design standards that ensure safe passage for vehicles and pedestrians through the center of Dublin.

Tom Jameson asked if District 4, who is in charge of winter maintenance along Route 101, has been made aware of the hedge plans, and has approved the design plan. K. Gagne will contact District 4 for their input.

Linda Wilson expressed her satisfaction with the project efforts and outcome. She discussed with Mr. Germain and Mr. Raymond the Town's efforts and reactions to this process, including recent discussions regarding the removal of the rock.

In conclusion FST will send meeting minutes and a partially filled out Effect Memo by week ending 2/5/10. The No Adverse Effect Memo will be signed by FHWA and DHR at their 2/11 meeting.

Advertisement of Buildings for Sale
Participants: Phil Miles

Phil Miles from ROW was asked to speak about the timeframe concerning the sale of historic buildings. There seems to be a discussion/ruling of advertising these properties with covenants for a month. The following are P. Miles notes that he used as talking points for the meeting:

In my 12+ years in my current position in the NHDOT, Right of Way advertising/selling these types of structures, we have never had a incidence where we advertised these structures for a 4-week consecutive period. The process to sell historic buildings to be removed was determined years back by Harry Kinter, formerly of FHWA. The Department was to advertise the building even it was felt it had some value was for a 2 week period with historic covenants.

Recently I have received a call from engineering companies working for municipalities that are advertising the sale of historic bridges that are telling me that they are being told to advertise the structure one month with covenants and one month without. I explained that I never advertise these properties for that long. Recently, for the sale of an historic barn in Newington, I was told that we are required to advertise for one month with historic covenants and one month without.

These extra weeks appear to make a long process even longer, which could cause problems with tight advertising schedules.

When we previously advertised the sale a historic building to be removed, the Department would place a add in the newspapers once a week for a two week period, then two weeks later have a open house so interested parties can get into the building to review the structure, take measurements etc, then there would be a two week period before the bid opening so they can estimate moving cost/ determine if the purchase would be practical etc.

So in all, it would be a 5-week period from first add appears in newspapers to bid opening.

It would seem to me that 4 weeks of consecutive advertising in the newspaper is a long time and would be an added expense. For the better historic buildings that we attempt to sell for removal, there is usually word in the historic preservation community about the building and who would have a sincere interest in it. Usually, any interested parties would step forward. With a longer timeframe, we may be attracting bidders who are not serious or do not have the historic integrity of the structure in mind. If a buyer were to acquire the building but not follow the process or covenants, this would disrupt the project schedule. It is possible that this timeframe was determined in the last few years after Harry's retirement by those who did not remember the timeframe and did not ask NHDOT ROW's opinion.

I also want to remind you that after we receive a bid on the property, a Committee would review all the bids to determine what bids are worthy of consideration and bring in those folks in to discuss their proposal for the building. Once we select the best proposal, the NHDOT still needs to receive Governor and Executive Council approval and prepare documents for this sale. Thus, we are looking at 2 months or longer from time of receiving a bid to the earliest time we could sell the property.

It was asked of the committee if NHDOT really needs to advertise the sale of buildings with historic covenants for 4 consecutive weeks, then again for 4 consecutive weeks without covenants.

For future historic building, I would ask that you request the group to please consider only advertising these buildings in newspapers for a 2 week period. These building would still be advertised for an additional 2-week period to purchase without historic covenants.

Another subject for discussion is the reimbursement of demolition cost to the successful bidder to be placed towards removal / rebuilding of an historic structure. In the past, we never gave this incentive towards removal of historic buildings, this was only done for bridges. How do we want to move forward with this question?

Finally, what would be a minimum bid price for these types of structures? Normally the amounts were set $1000.00 for a historic building and $1.00 for an historic bridge.

P. Miles indicated that he would provide a bulleted outline of typical procedures that he has followed in the past, which will be provided to DHR for comment. L. Wilson added that a written procedure would also be helpful to potential bidders, and that the DHR would be willing to include such a list in their NHDHR NewsFlash.

New Castle-Portsmouth, X-A001(037), 15916
Participants: Marc Laurin and David Scott, NHDOT

This project consists of repairing the interface of the pile bents with the concrete pier caps, as necessary, on two NH Route 1B bridges spanning the Piscataqua River Estuary in Portsmouth and New Castle (*Br. No's: 241/053 & 031/142*). Dave Scott gave a brief description of the proposed project. The bridges seem to have been built in 1954. Last summer the concrete pylons were re-jacketed with fiber reinforce polymer. The proposed project is to fix the rusted pile/cap interface at a half-dozen locations on the bridges. He handed out photograph showing the concern. The loose concrete at the interface will be knocked out and replaced, flat steel plates will be secured to the underside of the deck and bolted to the flange of the H-piles to add rigidity to these interfaces. The bridges will be stripped and re-painted. No work will occur within the water.

There were no concerns about cultural resources indicated by NHDHR. Edna Feighner requested that an RPR form be submitted. [Marc Laurin sent the completed form to DHR on February 5, 2010.]

Hopkinton, STP-TE-X-000S(450) 13483A
Participants: Jim Garvin, NHDHR; Dave Goulet and Dina Pinnell, Public Works; Tom Jameson and Bob Hudson, NHDOT

The purpose of the meeting was to discuss the possibility of using approximately $2,700 that remains from the original $10,000 allowance of the fire protection budget to repair leaks that were discovered in the roof of the Contoocook Covered Railroad Bridge during the project. Jim Garvin explained that the leaks have two potential effects on the fire protection project in addition to their obvious danger to the wooden bridge. First, water may affect the electrical wiring and lighting fixtures that are attached to tie beams under the roof of the bridge. Second, the fire retardant chemical that was applied to the roof of the bridge is water-soluble and will be rendered ineffective by prolonged leakage. Jamie Sikora noted that this sum is a small percentage of the $149,000 project budget. He offered to discuss the request with Dave Hall and Leigh Levine of FHWA. If Messrs. Hall and Levine concur, FHWA will suggest that Tom Jameson, DOT's Transportation Enhancement project administrator, permit the balance to be used for roof repairs, subject to the submission of an estimate from the contractor (3-G Construction), and to an approved change order for the work.

February 11, 2010

Manchester-Hooksett, A000(461), 14604
Participants: Christine Perron

This project was a late addition to the agenda. Christine Perron and Joyce McKay met with Edna Feighner prior to the regular meeting to discuss potential concerns. The project is located on Interstate 93 from the Hooksett town line north to the I-293 interchange. This is an ARRA project. Work will involve repaving and bridge deck replacements. To accomplish this work, crossovers need to be constructed for traffic control. These crossovers will require the installation of

drainage, which requires excavation in certain areas up to a depth of 9 feet. In addition, topsoil in these areas would be removed prior to placing fill for the crossovers.

Edna said this area has landscape features that are similar to nearby archaeological sites. Buried resources have been found elsewhere in the median of I-93. She was concerned about staging, excavation, and even the stripping of topsoil, and asked for a Phase IA/IB survey within the median. J. McKay recommended that the median be surveyed along the entire length of the project instead of focusing on areas of proposed excavation only. She thought that Phase I could be completed prior to the May advertising date. Any resources that are found during Phase IB may require additional survey in Phase II/III or may require avoidance or recovery.

Westmoreland/Walpole
Participants: Larry Keniston, Doug Gosling, Kit Morgan, and Christine Perron, NHDOT
Jennifer Codispoti, DRED

Larry Keniston, Doug Gosling, and Kit Morgan discussed two failing stone arch culverts on the Cheshire Branch RR. The rail line is owned by the State of NH and cooperatively managed by NHDOT and DRED. There is a significant amount of fill over each of these culverts, and both structures are starting to collapse.

Westmoreland
This arch culvert is 170' in length. The outlet has been scoured over time and started collapsing in 2003. Some stabilization was undertaken at that time, and a concrete invert was installed where no scour had yet occurred. Currently, much of the headwall is gone and stones are falling out 40' into the culvert. The concrete invert has prevented deterioration further into the culvert. Trees and roots have fallen through the structure near the outlet, and the hydraulic capacity of the culvert is now substantially reduced. Rail & Transit and Bridge Maintenance propose to take 40' off the outlet end of the culvert and reduce the slope from 1 ½ :1 to 2:1 by lowering the rail corridor 20' over a 500' section (250' on either side of the culvert). The inlet portion of the culvert is undamaged, and no work is proposed within 60' of the inlet. Shortening the culvert by 40' at the outlet end would remove only the damaged portion. A new concrete header and wingwalls would be constructed. A contractor would do excavation. Regardless of what is done to the culvert, the fill over the structure will need to be removed.

Beth Muzzey asked why concrete would be used for the new header and wingwalls. D. Gosling explained that concrete could be installed quickly when compared to stone work. While the structure could be repaired in kind, he estimates that doing so would take a year and would cost approx. $1 million. He cannot commit his crew to doing work of this magnitude, and there is no funding for such work.

B. Muzzey asked how these structures were constructed. D. Gosling said that construction of these structures required real craftsmen. Scaffolding or an arched form was used to place stones, the keystone was set in place, and the structure was then loaded with fill to hold the stones in place. Forty feet of fill or more was placed over these structures. D. Gosling noted that this large amount of fill is a concern with these failing culverts. The large amount of fill creates a situation similar to the Warren River in Alstead when a pipe plugged during a 100-year flood event. Water

ponded behind the pipe and eventually washed out the fill and caused major downstream impacts. With the coming snow melt and spring rains, there is a serious concern that the failing stone arch culverts will lead to similar flood event. It was further noted that the fill typically used for the railroads was the material that was easiest to get, which means that most of the fill is sandy and therefore more susceptible to getting washed out.

Walpole

This failing arch culvert was discovered about a week ago. The middle of the structure has deteriorated, and material and trees are now falling into the structure, creating a 100' diameter sinkhole. DRED has cut all trees from around the sinkhole. The culvert is approximately 75% blocked. The stream through this culvert is more substantial than the stream through the Westmoreland structure, with a depth of about 4'. Because this damage was only recently discovered, the Department has not yet designed a solution.

B. Muzzey asked if any other problems were known to exist along this line. Jen Codispoti said that nothing else has been found. She noted that her office has over 300 miles of recreation corridor to cover and a small staff. Problems are not usually found until they have become an issue for the trail.

Linda Wilson asked if these culverts were included in the DOT culvert survey, or in the TNC Ashuelot watershed culvert survey. Joyce McKay said that only highway culverts were surveyed by DOT. Christine Perron said that she would check with Doug Bechtel (TNC) to find out if these culverts were surveyed as part of the Ashuelot project.

B. Muzzey noted that the stone arch culverts are very historic features on the landscape and that the Cheshire Branch RR is eligible for the National Register. For these reasons, any repairs will need to follow the Section 106 process if a federal agency is involved. She stated that the damage to the Westmoreland culvert is an adverse effect. The repairs as proposed would be an adverse effect as well. While the repairs are beneficial to the structure, they would still take away from the original design. Other historic features of the Cheshire Branch include the fill and the grade of the rail line. The proposed repairs for Westmoreland do, at least, maintain continuity of the line. She explained that Section 106 requires avoidance, minimization, and mitigation of impacts to historic features. Reusing the remaining granite stones on the new header and wingwalls would minimize impacts. Mitigation may consist of a maintenance and monitoring plan for the Cheshire Branch.

There was much discussion about the feasibility of regular monitoring along the line to catch small failures while they can be repaired. J. Codispoti said that it would be too difficult to accomplish with her limited staff and she was reluctant to mandate user groups to monitor. L. Wilson noted that Cheshire County is the center of concern for stone structures in the state. There may be local groups interested in helping with monitoring. J. Codispoti agreed that this may be a good option, and L. Wilson agreed to get contact information for local groups.

It was reiterated that both of these pipes pose a serious safety concern. B. Muzzey stated that the Section 106 process does not interfere with public safety. However, DOT/DRED still need to work through the process for both culverts.

A suggestion was made to consult John Wastrom for an assessment of what has caused the existing problems and how to make appropriate repairs. Christopher Morgan questioned the need to consult a stone mason since Bridge Maintenance has experience with stone arches (Stoddard, Hillsboro, Pelham). Linda Wilson noted that John is an acknowledged leader in the field who could share insight into the latest techniques for repairing stone structures. She felt it would be a relatively small investment for a large infusion of knowledge. J. Codispoti was concerned that consulting John would be costly and would further delay progress on the repairs. B. Muzzey said that John is generally very responsive. D. Gosling reiterated that he agreed these were beautiful structures, and it was possible to save them. However, to do so would require putting out a contract, which is a big risk because this type of work has so many unknowns. He used the example of the Hillsboro stone arch contract, which had no bidders and Bridge Maintenance ended up doing the work. C. Morgan explained that in order for this to become a project that is contracted out, an appropriation by legislation would be required because highway funds cannot be used on railroads. D. Gosling added further that the estimated $150,000 for his crew to complete the repairs might even be a problem given the limited railroad budget.

D. Gosling said that the excavation of the fill needs to be done as soon as possible to lessen the risk of a catastrophic failure. B. Muzzey asked if other culverts or structures were in close proximity to the proposed excavation. D. Gosling said that there is a stone wall nearby but it would not be impacted. The placement of the fill still needs to be determined. J. Codispoti said that DRED is looking into temporary storage areas. E. Feighner will need to review the area to which the fill will be relocated to ascertain whether it has archaeological sensitivity.

B. Muzzey said that someone needs to check with FHWA about these repairs since federal funds may have been used to purchase the line. She also noted that as the design of the Walpole repairs progress, an alternative that saves as much of the structure as possible needs to be considered. She asked if it were possible to incorporate the collapsed stones into the repair of the Westmoreland Culvert.

Woodstock, X-A001(019), 15885
Participants: Kevin Nyhan

Dave Scott presented this project, which consists of partial and full-depth deck repair of three bridges that carry NH Route 175 over the Pemigewasset River (#197/085, 195/091, 195/093). The bridges were constructed in 1976. The SHPO determined that the project would result in No Historic Properties Affected.

Concord, A001(024), 15902 (ARRA2)
Participants: Kevin Nyhan

This project consists of the replacement of the deck of the I-Beam with concrete deck bridge that carries Delta Drive over Interstate 93 (#142/161). The bridge was constructed in 1958. Fill was placed at the time of construction approaching the bridge. Work will be contained within the limits of prior disturbance, which relieves any concern for archaeological impacts. Given that it is

located along the interstate, it is exempt from Section 106 review. SHPO determined that this project would result in No Historic Properties Affected.

Andover, X-A000(023), 15901 (ARRA2)
Participants: Kevin Nyhan

Kevin Nyhan discussed this project, which consists of the replacement of the deck of the bridge that carries NH Route 11 over the Bog Pond Outlet/Blackwater River (#050/093). Work includes drainage work to the west of the bridge in the location of a previous intersection. Edna Feighner requested that historical maps be reviewed to determine the prior level of disturbance in areas where drainage is proposed. She indicated concern about the presence of mill-related remains in the area. L. Wilson suggested that Kevin contact Ed Hiller as a source for information. The bridge was constructed in 1959, but was not considered potentially eligible. However, as the scope of drainage improvements was not known, the Section 106 determination of affect could not be made. K. Nyhan will return with the project once drainage information is available.

Manchester, 14966
Participants: Jon Evans and Bob Landry; Kathy Wheeler, IAC; and Jenn Riordan, Smart Environmental (jriordan@smartenvironmental.com); Dan Hudson (danh@cldengineers.com) and Jason Beaudet, CLD

The purpose of the meeting was to discuss the findings of the Phase IA Archaeological Study, discuss work that would be proposed under the Phase IB Study, and to determine if potentially eligible buildings in the project area would require review. A copy of the Phase IA report had been given to NHDHR and NHDOT for review prior to the meeting. The current conceptual plans were presented at the meeting.

Dan Hudson gave an overview of the project and the conceptual plan, explaining that the project will replace or rehabilitate five bridges, add an additional southbound lane for exiting and entering traffic, and widen the roadway shoulders on I-293 in the project area. The additional lane and shoulder widening are being added to provide the bridge widening required for temporary traffic control and to improve safety on the corridor.

Jenn Riordan distributed photos of the buildings in the project area, along with a photo location map. Joyce McKay asked if there is a large buffer of trees between I-293 and the residential properties in the project area. Jenn said that there is a buffer. It was noted that only limited tree clearing would be required. She asked if any properties would be purchased. Dan replied that there would likely be an easement on the Econo Lodge property to construct a retaining wall, as well as one on Bass Island to construct slope work and a stormwater treatment device. There will also be an easement or acquisition adjacent to Cleveland Street and the West Side Sewer pump station, both owned by the City of Manchester.

J. McKay asked if the Econo Lodge building and the brick building adjacent to it were originally part of the same complex. J. Riordan replied that she didn't know, but the buildings are very similar in appearance. The brick building adjacent to the Econo Lodge was determined to be

eligible for the National Register under another study by Lisa Mausolf. J. McKay indicated that if there is a permanent easement on the property, a determination of eligibility for the Econo Lodge building would need to be done if this study had not been completed through the earlier project. Dan mentioned that a sound wall might need to be constructed near the Exit 4 southbound off-ramp. This would involve tree clearing in the area between the ramp and the residential buildings. This clearing may result in negative impacts. If the sound wall is proposed, photos of the buildings in the area should be provided to NHDHR to determine if a review is required.

Kathy Wheeler presented an overview of the Phase IA Archaeological Report. She said that the Merrimack River is known to contain many Native American archaeological sites. During the Phase IA surveys, IAC looked for areas with level/natural terrain. Many areas have large amounts of fill that were placed when I-293 was constructed. Even though shovel test pits (STPs) are normally not conducted under a Phase IA, they were conducted for this study due to the high probability of resources in the project area. Felsite flakes were found in a single shovel test pit along the west bank of the Merrimack River at 3 feet below the surface. Other resources may be present beneath the fill prisms supporting the bridge abutments, but they are not accessible. K. Wheeler also mentioned that two buildings were shown between I-293 and the Merrimack River on a 1915 map. The foundation of one of these buildings is still present, however it was not investigated since it was being used as a homeless camp.

Dan mentioned that the detention basin areas referred to in the Phase IA report are broad areas that could potentially be used for stormwater treatment. The treatment areas have changed since the Phase IA report and are now smaller and located on the west side of I-293 as well as the area bounded by the northbound off-ramp. This may eliminate the need for testing in the area identified as DB-5. Some modifications may need to be made to the existing drainage crossings near the Merrimack River. Additional testing would be needed in these areas. J. McKay recommended conducting Phase IB testing on both sides of these ditches to cover the areas and allow for design changes.

Edna asked if the areas around the bridges would need additional testing. Kathy showed on the plan where additional testing near the bridges is needed (#153/061, #149/063, #146/064, and #144/066). Dan mentioned that a swale might be constructed west of I-293 on Bass Island. Additional testing would be needed at that location as well. E. Feighner indicated that they would need to know where IAC plans to do Phase IB studies. The Phase IB study should extend to the edge of all easements. Kathy said she would put together a list of all the areas that will be included.

No further questions were asked or issues were raised.

***NEXT STEPS*:**

IAC will develop a list of the areas that need further testing under Phase IB. The Smart Associates and CLD will determine if the easement near the Econo Lodge will require an architectural history review. If a sound wall is proposed near the southbound off-ramp, The Smart Associates will provide NHDHR and NHDOT with photos of the area to determine if an architectural history review is needed.

Milton, X-A001(027), 15905 (ARRA2)
Participants: Cathy Goodmen, Steve Liakos

This project is to rehabilitate the bridge that carries NH Route 125 over the BMRR. It is bridge no. 212/128 and is on the state Red List since the deck is in poor condition.

The bridge was built in 1954 and is a 3-span, steel girder and with concrete deck. The length is 153 feet and the curb-to-curb width is 28 feet. The proposal is to replace the deck, the bridge rail, the approach rail, and the expansion joint. The steel will be evaluated and may be repainted or partially replaced. There will be minor rehabilitation to the abutments and piers. There may be a need to repair or replace the drainage. Work will be on one half of the bridge at a time, so alternating one-way traffic with temporary traffic signals will be needed.

NHDHR stated that there are no archaeologically sensitive areas or above ground concerns with the proposed work. A No Historic Properties Affected Memo can be signed at the next cultural resources meeting.

Berlin, X-A000(052), 12958B
Participants: Don Lyford, Marc Laurin, NHDOT; Pamela Laflamme, Berlin Planner (conference call)

J. McKay handed out the revised version of the MOA. Since the last review the Purchase and Resale with Covenants of Dwelling in the District (Stipulation IV) has the most revisions, the others have very minor revisions. Also a paragraph on human remains was added to the Archaeological Investigation stipulation as a precaution. The City of Berlin's Code Enforcement Inspection forms will also be attached to the MOA. L. Wilson asked if the International Established Building Code is being used by the City. Pam Laflamme will check to see if it is part of the City's code enforcement. The MOA was reviewed and consensus reached on wording for a number of items, including: making sure that Certificate of Occupancy was properly labeled as Appendix D; clarifying the marketing by DOT and advertising by the City; removing DHR and only using NHSHPO throughout; removing the date from Jeff Taylor's proposal; changing would to shall; revising to make clear that 9 months time-frame in Stipulation IV. I. would not apply to when the buyer does not follow the stipulations; elimination of the reference to a stewardship development plan; installation of the historic marker within 1 year after construction; and user-friendly web site to be up not later than 1 year after construction.

Beth Muzzey inquired as to the language of the minimum bid and how it will be written up in the advertisement. J. McKay will let ROW develop the language. B. Muzzey stated that DHR review of the documentation of the properties would take 45 days. A discussion of the schedule ensued. The Charrettes and Workshops would be conducted prior to construction, most likely in the fall of 2010. J. McKay is waiting for comments on the MOA from Peter Michaud. When received, she will send the final version of the MOA based on all the comments received. Jamie Sikora asked that the signatures of this final version be expedited and not necessarily wait until the next monthly meeting. All agreed.

Franklin 15860
Participants: Christine Perron and Doug King, District 2

Christine Perron and Doug King presented this project. The project consists of constructing a catch basin on the west side of US Route 3, and installing a 30" x 90' pipe at the catch basin. The pipe would extend under the rail corridor and would outlet on the bank of a ditched stream. Edna Feighner reviewed the wetland permit application at an earlier date, and she reviewed the project again just prior to this meeting (she was unable to attend this meeting). J. McKay stated that Edna did not have any concerns about disturbance between the road and the rail corridor. Installing the pipe under the rail corridor would be acceptable as long as the corridor was restored to its original condition. If any posts or mile markers are disturbed, these should be replaced in the same location. E. Feighner did, however, have concerns about any disturbance between the rail corridor and the Merrimack River. B. Muzzey reiterated that this is a very sensitive area.

D. King explained that there would be some excavation on the west side of the rail corridor. The area of excavation necessary to install the pipe would be approximately 20 feet long, 8 feet wide, and 3 feet deep. B. Muzzey stated that an archaeological survey would need to be completed prior to construction. C. Perron asked if J. Edelmann or J. McKay could simply monitor construction since this was a District maintenance project with limited funds. She would like to talk to Edna about the additional information regarding the extent of excavation. J. McKay explained that the area is too sensitive to simply monitor construction and that a survey could probably be completed in about a day, at a cost of approximately $400.

D. King said that the NHDOT Commissioner's Office is directing District 2 to complete this work due to complaints from an abutter about poor drainage impacting his trees.

B. Muzzey will discuss the additional details on the project with E. Feighner, who would then follow up with C. Perron. (Subsequent to the meeting, E. Feighner indicated to J. McKay that an archaeological survey would not be necessary.)

Bath 14290
Participants: Christine Perron and Doug King, District 2

Christine Perron and Doug King presented this project. A stone retaining wall is located along NH Route 135 along the Connecticut River in an area known as "the Narrows." The wall is at least 1000' in length, and its age is unknown. Photographs found on the Internet indicate that the road was built in 1827. D. King received photographs and a newspaper article from a former member of the Bath Historical Society. The article shows a photograph of the road being widened in 1936. This photo and other "pre-widening" photos do show a stone retaining wall.

The southern segment of the wall has a concrete slab at the top of the wall with beam guardrail. District 1 installed this guardrail in the late 1990s. The northern segment of the wall (approximately 400 feet) has older cable guardrail that is in poor condition. This guardrail is attached to a thinner concrete beam at the top of the wall that would not likely hold a car in the event of a collision. D. King explained that District 2 would like to excavate 2' from the top of the wall and install a thicker concrete slab that could withstand a collision and anchor new beam

guardrail. In addition, there is a metal drainage pipe that outlets out of the face of the wall. This pipe is severely rusted and needs to be replaced. D. King stressed that the intent of the project is to minimize impacts to the wall. He would next be meeting with the NHDOT Commissioner's Office and then with the Town of Bath. The Connecticut River Joint Commissions, Conservation Commission, and Historical Society would all be asked for input on the project. B. Muzzey asked that her office be kept informed of any concerns raised by these local groups.

B. Muzzey stated that the wall is definitely potentially eligible. The goal needs to be to disturb the wall as little as possible and ensure that any new construction avoids compromising the wall by allowing water in or adding pressure that the wall is not able to withstand.

There was some discussion on mortar. D. King indicated that some areas of the wall appear to have mortar. Beth Muzzey said that this would not be concrete mortar if the wall had been built prior to 1900. She asked if this project would involve pointing the wall. D. King said that was not the intent of the project. B. Muzzey stated that a mortar analysis would need to be completed if any pointing would take place. It is important to distinguish between later mortar and original mortar because adding mortar of a different strength could compromise the wall. D. King reiterated that District 2 would be reluctant to touch the face of the wall and that re-mortaring was beyond the scope of this project.

D. King suggested that District 2 could replace the drainage pipe before tackling the guardrail. This would provide an opportunity to see what is under the road and behind the wall, and would allow more informed decisions to be made regarding the proposed concrete slab and guardrail. B. Muzzey agreed that the drainage pipe could be replaced because it was in the best interest of the wall. She only asked that District 2 give her office advance notice of the pipe replacement so that someone from DHR could be on site to observe the work. She stressed that any work in this area should minimize disturbance to the wall and ensure that no additional moisture gets into the wall. Linda Wilson asked how the water currently drains off the roadway in this area. D. King explained that the curb directs water down the road and away from the wall.

D. King said that survey has recently been completed along the entire length of wall so that he can best understand grade changes in this area. B. Muzzey asked if changing the grade of the road would allow more of the wall to be saved. D. King said that he wouldn't know an answer to that until seeing the results of survey.

New Ipswich, X-A000(403), 14465
Participants: Jason Tremblay; Don Lyford; David Scott; Matt Urban, NHDOT; Jim Garvin, NHDHR

This project was previously reviewed by the Cultural Resources Committee in March of 2008 and January of 2010. David Scott and Jason Tremblay provided a brief overview of the project. Plans were presented and Design members oriented the group displaying NH Route 123/124, the bridge, the mill building, and the proposed detour amongst other detail.

Jim Garvin stated that he was quite familiar with this area in New Ipswich and that he had done some research prior to attending this meeting. He brought with him a few historic photos going as

far back as he could find. He then described how he compared those photographs with current photographs looking for specific characteristics such as large stones that can be identified in each photograph to determine if there has been any structural shifting and or modifications. In J. Garvin's expert opinion, he believed that the bridge and its arch appeared to be in good condition. The shifts that may have occurred over the centuries have been so minimal that they are nearly undetectable.

J. Garvin believed that the existing weight of the bridge might be aiding in the structural integrity of the arch structure at this time. He feels that it would be best if the Department could leave the concrete pads in place to maintain as much weight on the structure as possible. J. Garvin was very appreciative for the geo-technical report that was prepared by the Department.

J. Garvin also noted that the parapet appeared to have been taken down and reconstructed at the time when the existing bridge deck was installed. This confirmed the Departments beliefs. D. Scott asked if it would be an adverse effect to take the parapet down to its former deconstructed state during construction and reconstruct it after completion of the new bridge. SHPO indicated that this approach would be acceptable since the top of the wall had already been disturbed in the past.

J. Garvin asked if the proposed bridge structure would be a single span so that no weight would be on the arch structure itself. David Scott confirmed that the intent is to build a single span structure.

J. Garvin brought up the iron oxide stains on the face of the rocks that have been caused by water draining from the bridge scuppers. J. Garvin and Beth Muzzey from SHPO would like to see the scuppers eliminated from the bridge design if possible. Bridge Design stated that they try to eliminate scuppers as a standard now. J. Garvin mentioned that he was unsure what the chalking referred to by the geo-technical report would have been caused by. Most likely it would have been caused by the centuries of weathering in his opinion. J. Garvin thought that the chalking could have been referring to the Portland cement mortar that appeared to have been placed inside the arch in 1959. The original mortar would have been lime-based. He noted that the Portland concrete would likely be harder than he would recommend for this masonry.

J. Garvin and SHPO suggested the possibility of implementing some strain monitors to start monitoring stress on the stone arch. The biggest concern would be any vibrations during construction. Design ensured that vibration monitoring would be implemented throughout construction.

J. Garvin mentioned that in his opinion a polymer injection would not necessarily be the best solution. To do nothing may be better, as he reiterated that this has been standing for hundreds of years and appears to be in pretty good condition. He had some concern for clogging the transmission-quality of the wall that allows water to pass through it. The wall should remain pervious to water. Nevertheless, he did not feel that further research and discussion with the polymer company would be a bad idea. B. Muzzey suggested that John Wastrom, an experienced stonemason, look at the arch.

Jason and David mentioned that there was also an interest to puncture or remove a section of the inactive penstock. The owner has given permission, and it is the only viable way to install the abutments for the new bridge structure to safely construct a single span structure in this location. J. McKay mentioned that this penstock would be identified in the archeological report. SHPO was agreeable to this design approach so long as the structure was documented.

J. McKay confirmed that she would continue to work with the consultants to move forward with historic and archaeological surveys as required. She also stated that she would provide Design with a map of contributing and non-contributing properties of the Historic District. [The map was subsequently provided.]

As an end note, J. Garvin felt that the Department has given this project a great deal of thought and appreciates the sensitive approach that has been taken.

****Memos/MOA's**: Dublin 14318 & 14319; Dover, 15870

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

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