BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: February 17, 2010
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Alex Vogt
Cassandra Gardner
Cathy Goodmen
Chris Carucci
Christine Perron
Craig Green
Dave Smith
David Scott
Jason Tremblay
Jon Evans
Kathy Corliss
Kevin Nyhan
Marc Laurin
Mark Hemmerlein
Matt Urban
Michael Hazlett
Mike Dugas
Nancy Spaulding
Pete Stamnas
Ron Grandmaison
Steve Johnson
Tony Weatherbee
Wayne Brooks

Federal Highway Administration
Jamie Sikora
Martha Alunkal

Army Corps of Engineers
Rich Roach

EPA
Mark Kern

NHDES
Brandon Kernen
Gino Infascelli
Jocelyn Degler
Lori Sommer
Muriel Lajoie

NH Fish and Game
Carol Henderson

DRED – NH Natural Heritage Bureau
Melissa Coppola

DRED – Trails Bureau
Jennifer Codispoti

OEP
Steve Walker

City of Nashua
Leon Kenison

Nashua Regional Planning Commission
Tim Roache

HSI
John Vancor

VHB
Frank O'Callaghan
Pete Walker

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

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

Finalization of January 20, 2010 Meeting Minutes 3
New Ipswich, 15366 (Non-Federal) 3
Dover-Rochester, 15582 (Non-Federal) 3
Stratham, X-A000(848), 15653 5
Plaistow, X-A000(849), 15654 6
Peterborough, X-A000(890), 15698 7
Swanzey, X-A000(899), 15697 7
New Castle-Portsmouth, X-A001(037), 15916 8
Enfield, BRO-X-0145(003), 12967 9
Dummer, X-A000(969), 15805 11
Nashua, NRBD-5315(21), 10040A 12
Salem-Manchester, IM-IR-93-1(174)0, 10418C 13

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

NOTES ON CONFERENCE:

Finalization of January 20, 2010 Meeting Minutes

A one-week extension for review was requested. Comments received via e-mail were incorporated into the January 20, 2010 meeting minutes which were finalized February 24, 2010.

New Ipswich, 15366 (Non-Federal)

The proposed project consists of the removal and replacement of the arch bridge that carries Smithville Road over the west branch of the Souhegan River (*Br. No. 113/074*). The project was presented by Steve Johnson and Tony Weatherbee. The proposed maintenance is a full replacement of an existing Steel Multi-plate Arch structure, 12 ft wide by 6 ft high. S. Johnson and T. Weatherbee proposed the installation of a 12 ft wide by 6 ft high concrete box structure.

S. Johnson introduced the Natural Resource agencies to the project location using topographical maps and aerial images of the area. S. Johnson indicated that the Steel Multi-plate Arch structure is listed on the State Red List as a result of severe invert deterioration. S. Johnson described how the arch currently has a temporary bridge over the arch until a permanent fix is in place for public safety.

S. Johnson explained that there is a dam located downstream of the West Branch of the Souhegan River, (2nd order stream). Due to the proximity of the dam, S. Johnson is not proposing to embed the box structure. The Resource Agencies were okay with this proposal.

Gino Infascelli asked if the proposed box would have cut-off walls. S. Johnson informed G. Infascelli that the design does include cut-off walls to prevent and scour at the side of the box.

Rich Roach stated that the project would qualify for coverage under the NH Programmatic General Permit.

(*NHB09-2346*) *This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

Dover-Rochester, 15582 (Non-Federal)

Chris Carucci presented an initial review of the project. The proposed project consists of repair/ replacement of culverts at six (6) locations along the Spaulding Turnpike (NH Route 16). Two of these locations were originally part of the Portsmouth 15304 project.

Mile Marker 7.1
This is a location that was previously reviewed as part of the 15304 project. This is a 42” x 170’ pipe (2% slope) on an unnamed perennial stream. The drainage area is 67 acres and the current capacity of the pipe is acceptable for the Q50. Sections of the pipe are separating. The project will

remove end sections that have separated, shorten the pipe to 150', slipline with a smooth cured-in-place liner (1" thickness), construct headers and add stone at the inlet and outlet for scour protection.

Mile Marker 9.5
This is a 36" x 270' pipe on an unnamed inlet to the Bellamy River Reservoir. The only work proposed consists of repairing the headers and the addition of stone at the inlet and outlet for scour protection. Impacts would be temporary except for the areas of stone fill.

There is a 15" x 18' pipe with a metal sluice located in the Southbound barrel that outlets into the same wet area as the 36" pipe. The project will remove this pipe and metal sluice and construct a 15" reinforced concrete pipe along with stone at the outlet for scour protection. Impacts associated with this pipe will be temporary except the area of stone fill.

Mile Marker 10.8
This is a 48" x 160' pipe on an unnamed perennial stream. Work will consist of repair of the headers and addition of stone at the inlet and outlet for scour protection. Impacts would be less than 3,000 sq. ft.

Mile Marker 13.7
This is a 54" x 170' pipe on Reyners Brook. Headers would be repaired, and there are sinkholes behind the headers that will be repaired. Stone will be placed at the inlet and outlet for scour protection, and the pipe may need some interior joint repair. Impacts will primarily be temporary.

Mile Marker 14.6
This site consists of twin 72" pipes on Blackwater Brook. Stone will be placed at the inlet and outlet for scour protection. Melissa Coppola noted that there is an exemplary floodplain forest just downstream from the outlet of the pipes, and asked if any tree clearing would be necessary. C. Carucci said that there would be some clearing from the edge of pavement down the slope to the pipes; however, additional access needs have not yet been discussed with Construction. The trees near the outlet are primarily 4-12" in diameter. If an access road is necessary, the normal practice is to restore the area after construction.

Mile Marker 15.3
This site consists of twin 72" x 270' pipes on Clark Brook. This is a location that was previously reviewed as part of the 15304 project. The pipes have MRM headers that need to be replaced. However, replacing the headers would require cofferdams and excavation of the steep slope, which would result in increased impacts and would potentially destabilize the slope. Instead of replacing the headers, the ends of the pipes will be extended 4' and new concrete headers will be poured in front of the existing headers. This will result in approx. 2,500 sq. ft. of impacts (about half of which would be permanent impacts).

M. Coppola that an exemplary floodplain forest is located just downstream from the outlet of these pipes as well, and she would like to continue coordination on these two areas until impacts are better known. C. Carucci suggested that she attend the field review when Construction and Design assess access needs and any associated impacts. Christine Perron will keep her informed.

Rich Roach stated that the work as proposed might be considered exempt from Army Corps jurisdiction, as it involved maintenance of existing structures. If not exempt, the work would certainly qualify for coverage under the NH Programmatic General Permit.

(*NHB07-1791, NHB07-1790, NHB09-2338, NHB09-2339, NHB09-2340 & NHB09-2341*) *This project was previously reviewed (as Portsmouth-Dover-Rochester, 15304) on the following date: 2/20/2008*.

Stratham, X-A000(848), 15653

Chris Carucci presented an initial review of this project and the potential alternatives. This project was part of the Statewide Culvert Rehab Program; however the Department recently learned that federal funds cannot be used on roads below a certain federal classification. This 66" x 40' corrugated metal culvert carries Jewell Hill Brook under Squamscott Road, which is a local road with low traffic volumes. Jewell Hill Brook is a tidal stream. District 6 has not told Design of any flooding issues at this location. However, the Piscataqua Region Estuaries Partnership (PREP) recently called the Bureau of Environment to explain that this culvert has been identified as one that restricts tidal flows.

The slope of the pipe is close to 0% and the drainage area is 850 sq. ft. The pipe does carry a 50-year design flow.

Three alternatives have been studied:

1) Sliplining – This alternative would decrease the capacity of the pipe slightly and is the least desirable alternative. However, the pipe is severely deteriorated and it's not known how long the pipe will last. Sliplining provides the fastest treatment. Estimated cost is $75,000.
2) Twin pipes – This alternative would consist of sliplining the existing pipe and installing a second 60" pipe adjacent to it to increase capacity. Estimated cost is $120,000.
3) Concrete box – This alternative would install a 6'x8' concrete box culvert (embedded 1'). This alternative would take longer to construct and would require closing the road. Estimated cost is $300,000.

Rich Roach asked if the pipe is enough of a restriction that it constrains tidal movement upstream. If a larger pipe were installed, would tidal flows move further upstream and impact upstream properties? C. Carucci said that this issue still needs to be researched. R. Roach added that the DES Coastal Program should be consulted. In addition, he suggested looking into grants from the National Marine Fisheries Service and US Fish & Wildlife Service (FONSI) to help fund the project as a tidal marsh restoration. Kevin Nyhan asked Jamie Sikora if federal funds could be used to fund this culvert project as mitigation for another project. The answer to this is unknown at this time.

Gino Infascelli asked about the size of the upstream culverts. C. Carucci does not know at this time. G. Infascelli added that the Coastal Program contacted him about this project and their preference is for restoration.

Christine Perron said that the project was presented at the Cultural Resource Agency Coordination meeting and the State Historic Preservation Office (SHPO) considers a larger structure the least preferred alternative at this time due to concerns about visual impacts on this scenic area.

Melissa Coppola said that there are rare plants and exemplary natural communities in the project area. Restoring tidal flows would be beneficial. Carol Henderson asked if any animals were reported by the NHB review. Nelson's sharp-tailed sparrow, saltmarsh sharp-tailed sparrow, and osprey all occur downstream of the project area near the Squamscott River.

The consensus of the group was that a larger structure was the preferred alternative and that there needs to be additional coordination with coastal groups, including PREP and the DES Coastal Program.

(*NHB09-1152*) *This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

Plaistow, X-A000(849), 15654

Chris Carucci presented an initial review of the project and the potential alternatives. This project is part of the Statewide Culvert Rehab Program. The culvert is a 103" wide x 71" high x 40' long metal arch that carries Kelly Brook under NH Route 121A. The roadway consists of two 11' travel lanes and 1' shoulders, with an average of 12,000 vehicles per day. The metal arch pipe is deteriorating. The slope of the pipe is approximately ¾ % and the stream has relatively low velocity. The drainage area of the pipe is 3.3 sq. miles.

Three alternatives have been studied:

4) Sliplining – This alternative would decrease the capacity of the pipe slightly. Estimated cost is $90,000.
5) Twin pipes – This alternative would consist of sliplining the existing pipe and installing a second pipe adjacent to it, to increase capacity. Estimated cost is $110,000.
6) Concrete box – This alternative would install a 7'x10' concrete box culvert (embedded 1', 6' x 10' clear opening). If the road could be closed during construction, the estimated cost of this alternative is $350,000. However, given the high traffic volumes and lack of a convenient detour, the road would not be closed. Keeping the road open during construction would require temporary widening to allow for alternating one-way traffic. This would increase wetland impacts, and project costs would increase to $500,000. The entire Culvert Rehab Program has an annual budget of only $1 million.

The project will also replace the existing cable guardrail and pave the existing unpaved platforms on either side of the road to provide 4' shoulders.

The stream is ponded on both sides of the pipe; therefore fish passage is not impeded.

Carol Henderson asked how the second alternative would increase flow. C. Carucci explained that an adjacent pipe would provide flood flow. The second pipe would be placed 15 to 20 feet away from the existing pipe and the invert would be set at a slightly higher elevation.

C. Carucci said that the State Historic Preservation Office (SHPO) asked for more information about the stone headers. If the headers prove to be a historic resource, the Department would likely prefer Alternative 2 to avoid impacting the existing headers.

Gino Infascelli stated that this sounded reasonable. He also asked how an overflow pipe as proposed would impact the downstream culvert under Route 125. C. Carucci said that there are no reported flooding problems at this location, meaning the existing culvert is passing the existing flows without overtopping the road. A second pipe would replace the capacity lost by sliplining, and reduce the elevation of water ponded by the crossing. Adding the second pipe will not significantly increase the total flow passed by the crossing.

Rich Roach stated that the project would qualify for coverage under the NH Programmatic General Permit. He added that he understands that costs need to be taken into consideration, especially with the number of culverts in the program, and he would not be opposed to sliplining this particular pipe.

(*NHB09-1153*) *This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

Peterborough, X-A000(890), 15698

This project was presented by Cathy Goodmen and Mike Dugas. The proposed project consists of safety improvements at the NH Route 101/NH Route 123/ Old Street Road intersection. Improvements will likely include selective clearing and adjustments to the roadside grading. This project will be funded by the Highway Safety Improvement Program (HSIP). The sight distance at this intersection is poor and motorists at Old Street Road and NH Route 123 have a difficult time entering NH Route 101. There have been numerous accidents at this intersection most of which resulted from a failure to yield to oncoming traffic. There are no current plans, but the proposals include clearing vegetation, moving a stonewall away from the travel way and some roadside grading. There is currently a blinking light at this location, which will most likely remain.

The only natural resource identified in this area, that may be impacted, is a small wetland on the southeast corner of the intersection. If necessary a wetland permit will be obtained prior to construction. No concerns were expressed with the proposed project. The project will not need to be presented to the resource agencies again unless the proposal changes substantially or any other resources of concern are identified within the project area.

(*NHB09-2495*) *This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

Swanzey, X-A000(899), 15697

This project was presented by Cathy Goodmen and Mike Dugas. The proposed project consists of safety improvements at the NH Route 12/ Lake Street intersection, including the construction of

either traffic signals or a modern roundabout. This project will be funded by the Highway Safety Improvement Program (HSIP). The sight distance at this intersection is poor and motorists at Lake Street and Factory Road have a difficult time entering NH Route 12. There have been numerous accidents at this intersection, most of which resulted from a failure to yield to oncoming traffic. There are no current plans, but the proposals include signalizing the intersection or constructing a single-lane roundabout. The Town has indicated that they would prefer the roundabout option. A hearing will be needed, property acquisition may be necessary. Alternative concepts for a traffic signal and a roundabout will be prepared for public comment. The signal alternative will likely remain within the existing pavement limits of the roadway and would likely not result in an increase in impervious surface area. The roundabout alternative may result in a reduction of impervious surfaces.

Two water bodies have been identified in proximity to the project area; Wilson Pond to the south and a small pond probably associated with the old Factory to the northeast. Neither of these water resources will be impacted by this project.

The only natural resource identified in this area, that may be impacted, is a small wetland on the southern corner of the intersection. If necessary a wetland permit will be obtained prior to construction. No concerns were expressed with the proposed project. The project will not need to be presented to the resource agencies again unless the proposal changes substantially or any other resources of concern are identified within the project area.

(*NHB09-2492*) *This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

New Castle-Portsmouth, X-A001(037), 15916

This project was presented by David Scott. The 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*). The concrete encased steel piles of these bridges were re-jacketed with fiber reinforced polymer last summer. The proposed project consists of fixing the rusted pile/cap interface at over a half-dozen locations on the bridges. D. Scott handed out a photograph showing an example of the exiting conditions. The loose concrete at the interface will be knocked out and replaced and steel plates will be secured to the deck with brackets to add rigidity to these interfaces. The bridges will be stripped and re-painted. No work will occur within the water but the Department is unsure at this time if barges will be used for the painting operation. Appropriate measures will be taken to ensure that no concrete or paint will enter the river. There were no concerns regarding fisheries or endangered species expressed by Carol Henderson or Melissa Coppola. The project will not impact any areas within the jurisdictions of the Wetlands Bureau or the Army Corps. Rich Roach stated that the Bridge Section of the Coast Guard should be contacted to ensure that a Coast Guard permit is not necessary. A Coastal Zone Consistency Finding will be needed.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Enfield, BRO-X-0145(003), 12967

Kathy Corliss began by giving a brief overview of the project. This project involves the reconstruction of approximately 0.6 miles of NH Route 4A and 0.4 miles of Main Street in Enfield. Work also includes the replacement of the bridge that carries Main Street over Lake Mascoma, and the replacement/removal of the Northern Railroad Recreational Trail Bridge over Main Street. She indicated that the Lake Mascoma Bridge has been 'red listed' for over 20 years. The Lake Mascoma Bridge and its Main Street approaches will be constructed with 10-foot travel lanes and 5-foot shoulders. A sidewalk will be constructed on the north side of the bridge and bump-outs for recreational use will be constructed on the south side.

Feedback received from the 2004 Public Hearing resulted in modification of the proposed NH Route 4A roadway section from reconstruction to resurfacing between Evenchance Road and Main Street. This has resulted in reduced slope impacts and eliminated the need for property acquisitions in this section. The remainder of work along NH Route 4A, from Main Street to LaSalette Shrine, will involve roadway reconstruction and a slight shift to the west to allow for the construction of 11-foot travel lanes and 4-foot shoulders. The existing culverts will be replaced and/or extended and their outlets and inlets will be stabilized. A standardized ditch along the western side of NH Route 4A will be established/reestablished to provide improved water quality treatment. The guardrail throughout the existing project will be replaced. Permanent acquisitions on NH Route 4A are no longer required, as the necessary work will be completed within the existing and proposed permanent drainage and slope easements.

K. Corliss noted that construction of the project would require a temporary construction easement as well as a minor slope easement on the Enfield Town Beach to the northeast of the NH Route 4A/Main Street intersection. She also noted that there is a public boat launch to the southeast of this intersection, which is owned by the Department and operated by the Town of Enfield; the boat launch was developed by the Roads to Public Waters Program. She indicated that there would be some minor slope impacts to this property, which would require a portion of the parking lot to be reconstructed. The boat launch itself will not be impacted by the project. To the maximum extent practicable, impacts to both properties will be conducted during off-season periods so as not to disrupt their recreational operations.

Jon Evans and Alex Vogt indicated that the existing Northern Railroad (Rail-Trail) bridge will be removed and replaced with an at-grade crossing of Main Street. The original proposal, at the request of the Town of Enfield, involved replacing this bridge with an updated structure that maintained the grade separation. The Town has since re-evaluated their position and requested the proposed bridge be instead replaced with an at-grade crossing. As a result of this request the Department is currently designing an at-grade crossing. J. Evans indicated that the details of this change are still being coordinated with the Rail-Trail constituents, NHDHR and FHWA.

J. Evans also noted that one property (Parcel 2) to the west of NH Route 4A was obtained by NH Fish & Game using New Hampshire Land Conservation Investment Program (LCIP) support. Several temporary and permanent easements are needed on this property and as a result, the Department is working with NHF&G and OEP to determine the appropriate mitigation and to obtain the necessary approvals for these impacts.

J. Evans passed out a sheet containing the recently updated wetland impact totals. The project is expected to require a total of approximately 164,014 s.f. (3.77 acres) of permanent, temporary and jurisdictional bank impacts. These impacts consist of approximately 61,742 s.f. (1.42 acres) of permanent wetland impacts, 51,487 s.f. (1.18 acres) of permanent ditch impacts, 23,531 (0.54 acres) of permanent bank impacts and 27,272 s.f. (0.63 Acres) of temporary impacts.

J. Evans noted that the last time this project was brought in front of the Resource Agencies was in February 2004. At that time the current wetland mitigation rules were not in effect and therefore a formal mitigation plan was not proposed. He indicated that mitigation at the time consisted of minimizing impacts to the maximum extent practicable and providing improved water quality treatment.

During recent discussions with Gino Infascelli it was established that any wetland ditches that would be impacted and reconstructed could be considered mitigation as they would hopefully improve the water quality treatment of these structures. As a result the ditch impacts could be removed from the total impacts which would require mitigation. Lori Sommer indicated that she agreed with this approach. J. Evans indicated that based on these guidelines the total permanent impacts requiring mitigation would be approximately 85,255 s.f. (1.96 acres).

J. Evans indicated that the project is expected to advertise in July of 2010 and that a wetland permit application should be submitted within the next month. As a result there is little time to examine and implement a wetland mitigation plan that would include either a preservation or creation component. For this reason the Department's preferred proposal is a payment in-lieu of mitigation to the NHDES Aquatic Resource Mitigation (ARM) fund. Based on the above noted impacts this would require a payment of approximately $251,070.

J. Evans noted that during discussions with NHF&G and OEP regarding the previously mentioned LWCF impacts it was determined that NHF&G is looking for funding to obtain a large property adjacent to their existing parcel. NHF&G indicated that if NHDOT was looking for potential wetland mitigation options, they would entertain contributions towards this purchase. NHF&G did acknowledge that negotiations with the current property owner had not earnestly begun, that the deal may not go through and that the timing of NHDOT's project may not match up.

L. Sommer indicated that the Department should contact the Enfield Conservation Commission to hear what their preferences for mitigation are. Mark Kern and L. Sommer felt that although the NHF&G proposal sounded beneficial they were concerned with the timing, particularly if the property purchase fell apart. They felt the Department should proceed with an ARM fund proposal and amend the proposal later should the conditions of the NHF&G proposal become more favorable.

Rich Roach indicated that since the combined permanent and temporary impacts total more than 3 acres (3.23 acres) an Individual Army Corps Permit would be necessary. This would require an ACOE permit application, a 30-day public notice and a Joint Public Hearing with NHDES. G. Infascelli noted that as the project includes fill within public waters the project would also require approval by the Governor and Council. He also noted that areas of disturbance within 250' of the

lake and outside the existing roadway structure, which are not included in the wetland permit application, would require a Shoreland Permit.

Jennifer Codispoti indicated that she was concerned that the grade separated rail-trail crossing of Main Street was removed and that an at-grade crossing was now being proposed. She noted that this was a change from what was presented in 2004 and that DRED was concerned with the safety of an at-grade crossing. A. Vogt indicated that the traffic volumes on Main Street are relatively low (approximately 2,000 vehicles per day) and as a result the Department feels that an at-grade crossing will not jeopardize safety. J. Codispoti requested that DRED be provided plans for review. J. Evans and A. Vogt indicated that plans were still under development but that they would be provided to DRED as soon as they were available.

(*NHB10-0404*). *This project was previously reviewed on the following dates: 10/20/1999, 6/18/2003 & 2/18/2004.*

Dummer, X-A000(969), 15805

This project consists of repairing and realigning a ½ mile portion of NH Route 16 that was closed due to an August 3, 2009 slope failure along the Androscoggin River. Work also includes stabilization of a failed slope. Ron Grandmaison presented the proposed permanent fix that follows the temporary repair resulting from the NH Route 16 slope failure. R. Grandmaison confirmed that the Natural Resource Agencies were familiar with the project area due to the previous work. He briefly described the new alignment, slope and drainage improvements that had been completed.

R. Grandmaison then proposed that the Department would like to follow up with a permanent solution that includes:

- Adding a 1½" wearing course on the alignment that was established with the emergency repairs and re-striping to provide two 11-foot lanes and 4-foot shoulders (11-4 typical).
- Cutting the back slope to a 1¾:1 at the upper section of the sloughed area.
- Cutting or removing fallen trees at the base of the sloughed area, leaving roots in place where possible (this work will be done using manpower (chainsaws) and/or a winch located at the top of the slope).
- Reestablishing the recreation trail located at the base of the sloughed area along the river (located on DES property).
- Stabilizing the sloughed area using a tackifier to help anchor seeds until vegetation is established (area of approximately 13,600 sq. ft.).
- Placing humus and seed on the stone lined slope installed along the new alignment (area of approximately 41,000 sq. ft.).
- Removing pavement from the original alignment, placing humus, and vegetating with native species (area of approximately 31,345 sq. ft.).

R. Grandmaison informed the Natural Resource Agencies that the remaining efforts are not anticipated to require any wetland impacts and therefore a wetlands permit would not be necessary but that the Department was in the process of obtaining a Shoreland Permit.

Christine Perron described proposed mitigation. The realignment resulted in 20,524 square feet of wetland impacts, of which 9,042 sq. ft. were impacts to a wet roadside ditch. A new ditch line was incorporated into the design of the new alignment; therefore the 9,042 sq. ft. of ditch impacts do not need to be included in the calculation of the in-lieu fee. This was confirmed by Lori Sommer. Impacts to be mitigated by payment of an in-lieu fee total 11,482 sq. ft. According to the ARM fund calculator available on the DES website, the in-lieu fee for 11,482 sq. ft. of impacts is $30,708.68. There were no objections to mitigation as proposed.

No other issues, comments or concerns were raised.

(*DES wetlands #2009-01872*) (*DES shorelands #2009-01888*) (*NHB09-1625*) *This project was previously reviewed on the following dates: 8/19/2009 & 10/29/2009.*

Nashua, NRBD-5315(21), 10040A

Peter Walker (VHB) provided an overview of this project which is known as the Broad Street Parkway project. This project proposes to construct approximately 1.8 miles of new urban connector from downtown Nashua to the F.E. Everett Turnpike through the Nashua Millyard.

P. Walker explained that the project has already been through the NEPA process with a Final EIS and a Record of Decision issued in 1997. To explain the roadway layout, Peter used a large-scale color map showing the current roadway proposal known as "Option 2." The main differences between Option 2 and the EIS Selected Alternative were summarized as follows:

- The number of lanes has been reduced from four lanes to two;
- The alignment of the roadway has been revised through the historic Nashua Millyard to eliminate one bridge spanning the canal;
- The configuration of the new bridge spanning the Nashua River at the Millyard has been changed; the proposed bridge is shorter and would fill in the river bank rather than be cantilevered over the bank; and
- An at-grade, signalized intersection at Sergeant Avenue was eliminated.

VHB is currently compiling environmental analysis in support of a written re-evaluation of the Final EIS and ROD. The evaluation is considering: (1) the approved project (i.e., the Selected Alternative) as per the ROD, (2) the No-build Alternative, and (3) the Option 2 design. The City has spent a great deal of time working with the NH Division of Historical Resources to address concerns about impacts to the Millyard historic district as well as other historic concerns.
In terms of other environmental impacts, Peter summarized the following issues:

- Wetlands. The FEIS stated that there would be no impacts to wetlands other than the Nashua River. Since that time, VHB has conducted a field review which did find one wetland within the project corridor. Both the FEIS Selected Alternative and Option 2 would impact this wetland. Including the Nashua River, the total wetland impact associated with the project would be:
    - 0.4 acre for the FEIS Selected Alternative

  - 0.3 acre for Option 2
  - Because the impacts are now likely to exceed 10,000 square feet, mitigation will be required. Although the project is not yet in a permitting phase, the City would appreciate any feedback the agencies have on potential mitigation projects.
- Floodplains. As a result of the change in the design of the new Nashua River bridge, floodplain impacts associated with Option 2 are slightly greater than the FEIS Selected Alternative. Specifically, the FEIS Alternative would have filled about 1,400 cu. yds of 100-year floodplain, whereas Option 2 would fill about 1,750 cu. yds.
- Rare Species. Since publication of the FEIS, a population of blunt-leaved milkweed has been recorded in the railroad right-of-way near the project. It is unclear at this time whether this population would be impacted. A population survey would be conducted during the next phase of the project (i.e., design and construction) likely to occur this summer.

During the meeting, the following questions were asked:

- Lori Sommer asked about whether Prime Wetlands would be impacted. P. Walker replied that the entire Nashua River, including the associated mill canal, is a designated Prime Wetland.
- Mark Kern asked if a permit had been issued. P. Walker replied that no permit was apparently applied for or granted. The City is assuming this would be a new permit application.
- Carol Henderson pointed out that water chesnut has invaded the Nashua River and that the project should consider this to prevent the spread of this species.
- Lori Sommer asked if the team has discussed wetland mitigation with the Conservation Commission. P. Walker replied that the team had not yet approached the Conservation Commission, but would do so prior to developing a mitigation proposal.

This project was previously reviewed on the following dates: 7/18/2001 & 5/16/2007.

Salem-Manchester, IM-IR-93-1(174)0, 10418C

This project involves widening Interstate 93 between Salem and Manchester. Peter Stamnas stated that the Department is investigating locations for the Exit 3 park-and-ride site which are different from the location identified in the 2004 FEIS as a result of concerns with the amount of rock excavation (250,000 to 450,000 CY) and ROW issues. A Site Evaluation summary was handed out and Nancy Spaulding presented an overview of the sites.

Option 1 would utilize the former Dinsmore property, located on the west side of I-93. This property is a 30-acre undeveloped and forested remnant of state-owned land. This option would have a 1,700-foot long drive on an 8% grade from the relocated NH 111. Given the topography of the site, retaining walls would be necessary and the implementation of stormwater treatment measures would be problematic. The existing site conditions are not conducive to the use of pervious pavement. This option would require 210,000 CY of ledge excavation and ±0.4 acres of wetland impact.

The Option 2 site is located within the existing ROW along the east side of I-93 between the existing northbound on-ramp and I-93. This option would be directly adjacent to and visible from NH 111 and NH 111A and would not require any ledge excavation. It would require wetland impacts of approximately 3.4 acres. This option would also allow for the use of pervious pavement for stormwater treatment.

Marc Laurin described and compared the functions and values of the wetlands, and the uplands that would be impacted by each option. Rich Roach inquired about keeping the existing Wall Street park-and-ride site operational in addition to a new smaller one. Pete clarified that the Wall Street property has been sold, and is further away from the interchange.

Discussion of the Options ensued. R. Roach and Carol Henderson inquired about reducing the size of the park-and-ride at the northbound on-ramp site and conserving the 30 acres at the Dinsmore site or in-lieu fee compensation. Peter Stamnas replied that the Department would evaluate an initial reduction in the number of parking spaces at the northbound on-ramp site from the proposed 500 to around 300 spaces while still maintaining the possibility for future expansion should it be determined necessary. He also indicated that the Department would consider conserving the remainder of the Dinsmore property as potential mitigation for wetland impacts. The design will be further reviewed with the natural resource agencies as it is being developed. He anticipated that the park-and-ride would be constructed in 2014. The in-lieu fee determination for the site was handed out by M Laurin.

Brandon Kernen (DES Water Supply Protection Bureau) expressed concerns with Option 1 as it would require a large amount of blasting which could result in Nitrate loading impacts to down gradient drinking water wells. He expressed similar concerns with the site originally identified in the FEIS given its proximity to Canobie Lake and the Pennichuck public water supply well. Consensus was reached by all that the Department should focus on the northbound on-ramp location.

R. Roach stated that rather than getting a new permit, the existing 404 permit would need to be modified to account for the additional impacts. Mark Kern did not have a concern with this approach. Gino Infascelli and Lori Sommer were concerned about whether this additional impact, as well as others that have occurred for the I-93 widening, would exceed 10% of what was permitted in the DES wetlands permit. They indicated that if this were to occur, consideration for obtaining a new permit would need to be made.

Mark Hemmerlein presented a table and graph of the actual wetland impacts for the 11 construction contracts that have been or soon will be constructed (out of the 24 that are anticipated for the completion of the entire Salem-Manchester project). Presently there is an increase of ±9 acres of impacts over what was permitted within these contracts. There have been 5.5 acres of totally new wetland impacts that were not accounted for in the 2004 wetland application. This is due to a re-delineation effort undertaken in 2006 and better mapping of the impacts. The remaining ±3.5 acres are due to a number of factors that occurred during the final design process. These include a 90 foot westward shift of the northbound lanes south of Exit 3, expansion of the previously identified wetlands due to the 2006 re-delineation, necessary redesign to accommodate additional permanent water quality treatment areas and more accurate mapping.

M. Hemmerlein noted that prior to the last 3 contracts, which are located in the Exit 3 area where the shifting of the mainline occurs, the impacts were tracking reasonably well with the application numbers. P. Stamnas pointed out that the 13933I contract shifted the southbound lanes onto existing alignment so there may be a reduction in impacts when the design is finished for this contract. Additionally retaining walls built at the Exit 5 Pond have resulted in reduced impacts in this location than were originally anticipated. In response to an inquiry of the overall final impacts, M. Hemmerlein stated that the Department really needs to complete final design for a few more contracts before an accurate total can be established. The Department anticipates to have most of the southern area design established by the end of the year. R. Roach and L. Sommer agreed that this is an aspect of basing the permit on preliminary design. The Department will continue to monitor the estimated impacts versus the actual impacts and provide the information to the Corps and Wetlands Bureau.

P. Stamnas informed the resource agencies that the Department is working on responses to the DSEIS comments and that the FSEIS is anticipated to be published by the end of May 2010. He also mentioned that due to funding issues the completion date for the I-93 widening has been pushed back to 2020.

Responding to P. Stamnas' inquiry on the Corps' formal acceptance of abandoning of the Salem WWTP mitigation site in favor of pursuing the Haigh Avenue mitigation, R. Roach stated that he would pursue a modification to the permit. Both R. Roach and G. Infascelli agreed to provide written concurrence for the plan.

Melissa Coppola asked if it would be possible for the Department to send NHNHB the shape files of the Haigh Avenue area to better evaluate the location of any threatened or endangered species in the area. M. Laurin will coordinate with her on what can be provided.

P. Stamnas provided an update on the status of the Alternate Giovagnoli mitigation site (Alt 44). He indicated that, as an appropriate easement holder could not be found and as a result of continued opposition to the alternate proposal from the Crystal Lake Association, the Department will no longer be pursuing this as site as a potential mitigation option. The Giovagnoli family has informed of this decision. The Department will proceed with the original 2004 FEIS concept of preserving 19 acres owned by the Giovagnoli's along Mosquito Brook (Site 44). Marc Laurin handed out the latest matrix that shows the status of the mitigation, this will be reviewed at the next meeting.

This project was previously reviewed on the following dates: 8/10/1995, 1/10/1999, 2/16/2000, 5/17/2000, 6/14/2000, 7/19/2000, 8/10/2000, 9/20/2000, 10/18/2000, 1/17/2001, 2/14/2001, 3/21/2001, 4/18/2001, 5/10/2001, 8/15/2001, 9/19/2001, 10/17/2001, 11/21/2001, 1/16/2002, 2/20/2002, 5/15/2002, 6/18/2003, 10/15/2003, 12/17/2003, 10/20/2004, 11/17/2004, 1/18/2006, 12/19/2007, 2/20/2008, 10/15/2008, 12/17/2008, 1/21/2009, 4/15/2009 5/20/2009 , 7/15/2009, 8/19/2009, 10/29/2009 & 1/20/2010.