

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** February 16, 2011

**LOCATION OF CONFERENCE:** John O. Morton Building

**ATTENDED BY:**

**NHDOT**

Brian Wilmot  
Carol Niewola  
Christine Perron  
Jim Kirouac  
Joe Patusky  
John Robinson  
John Sargent  
Jon Evans  
Kevin Nyhan  
Margarete Baldwin  
Matt Urban  
Mike Pouliot  
Steve Johnson  
Steve Kjellander  
Tom Jameson  
Tony Weatherbee

**Army Corps of Engineers**

Rich Roach

**EPA**

Mark Kern

**NHDES**

Gino Infascelli  
Lori Sommer

**NH Fish and Game**

Carol Henderson

**NH Natural Heritage  
Bureau**

Melissa Coppola

**City of Manchester**

Jessica Fleming

**Town of Randolph**

Ted Wier

**City of Concord**

Martha Drukker

**Hoyle, Tanner**

Matt Low  
Sean James  
Steve Goddard

**Maguire Group**

Tony Ciolfi

**HEB Engineers**

Jay Poulin

**Oak Hill Environmental**

Daniel Geiger

**McFarland Johnson**

Jed Merrow

**The Smart Associates**

Glenn Smart  
Jenn Riordan

**FST**

Stephen Riesland  
Tracey Tufts

**Jacobs Engineering**

John Gorham

**New England Central  
Railroad**

Jonathan Sturges  
Ron Bocash

**Atlas Construction**

Craig Krause

**Mount Washington  
Regional Airport**

Edward Stevens

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

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## **NOTES ON CONFERENCE:**

### **Finalization of January 19, 2011 Meeting Minutes**

The January 19, 2011 meeting minutes were finalized.

### **Manchester, X-A000(352), 14412**

Sean James of Hoyle, Tanner & Associates presented the proposed project. City of Manchester Project Manager Jessica Fleming and NHDOT Project Manager Tom Jamison were also in attendance. The Piscataquog River Trail Phase IV is a continuation of previously improved sections of the former Goffstown Branch Railroad. This project includes regrading and paving a portion of an abandoned rail bed from Electric Street in Manchester to the Goffstown Town Line. It also includes possible rehabilitation, modification or replacement of a timber trestle bridge over the Piscataquog River.

The trail portion of the project will include the addition of gravel to the top of the rail bed, a 10' paved section with wood railing in some portions. This will complete the final phase of this project within the City of Manchester limits. It is anticipated that all work will be within the existing disturbed area of the rail bed and the only proposed excavation will occur behind the existing bridge abutments. There is some erosion of the existing rail bed behind the south abutment that will be reestablished and protected. The area around the south abutment and the bridge are the only anticipated wetlands impacts. The Natural Heritage Bureau was checked for sensitive, threatened or endangered species and the response provided to Hoyle, Tanner indicated that while there were known species in the area, they were not expected to be impacted by the proposed project.

The existing timber trestle was constructed by the Boston and Maine Railroad shortly after the previous bridge in this location, a timber covered bridge, was lost to fire. The bridge consists of six timber bents that support longitudinal steel beams and cross ties above. Dry laid stone abutments, approximately 160 feet apart, support the ends of the trestle.

Three options are being investigated for the bridge portion of the project. The first option would rehabilitate the existing trestle and install a new deck and railing. The second option would be similar to Option 1 but would remove one or two of the existing bents. The bents are being considered for removal due to the large amount of debris that is caught between them each spring. Removal of this debris is an added maintenance cost to the City and can also be dangerous depending upon the water flow at time of removal. The third and final option being considered is removal of the timber trestle and replacement with a new steel truss bridge supported on the existing abutments. The project was presented to the NHDOT Cultural Resource Committee on January 13, 2011.

Gino Infascelli noted that the proposed project would add impervious surface and that a Comprehensive Shoreland Protection Act Permit would be required. S. James responded that he was aware of this and that the Piscataquog River is a designated river. Kevin Nyhan said that the

chair of the Piscataquog River Local Advisory Committee was notified of this meeting but was not in attendance.

Carol Henderson inquired why the trail was being paved. Jessica Fleming responded that this is the treatment for the previously completed portions of the trail. The trail is intended for use by pedestrians as well as bicyclists and this is the recommended treatment for these uses.

C. Henderson noted that this was the initial review for the project and asked if it would be presented again. Rich Roach indicated that it would qualify for a SPGP and he did not feel an additional presentation would be necessary. It was then agreed that additional review by this group would not be required.

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

### **Lisbon, X-A001(172), 16184**

This project involves the reconstruction of an unstable slope on the south side of US Route 302 near the intersection of Catterall Road. As a result of the slope failure, the roadway was open to alternating one-way traffic until Class B stone could be placed to stabilize the sloughed area and the road could be shifted away from the slope. The subject project will affect a more permanent solution and proposes to stabilize 1,000 feet of roadway slope. Drainage improvements will also be constructed.

Christine Perron started the discussion by explaining that the project was following up on the temporary fix that District 1 completed under an Emergency Authorization from the DES Wetlands Bureau. She also stated that no records were reported by the Natural Heritage Bureau. Maggie Baldwin gave an overview of the project. This is a slope stabilization project located on US Route 302 approximately 5 miles west of I-93 Exit 42. A section of slope on the south side of the roadway failed after heavy rains in fall 2010. The road was constructed in the 1930s on a concrete slab and the slope washed out right to the edge of that concrete slab. Additional areas along the slope started sloughing but did not result in complete failure. Water from north of the roadway drains toward the road and through the base courses, resulting in a saturated roadway slope on the south side of the road. The slope failure in October resulted in the closure of the southbound lane and District forces set up signals to maintain one-way alternating traffic. This, however, would have been difficult for winter maintenance, so District forces temporarily shifted the roadway to the north to allow for two lanes of traffic. The sloughed area was also filled with stone fill as a temporary stabilization measure, the existing guardrail was repaired, and some minor drainage adjustments were made.

The subject project involves 1,000 feet of slope reconstruction to address the unstable slope on the south side of US Route 302. The existing slope that will be addressed is 1½:1. The Department's Bureau of Materials & Research recommends reconstructing a stone-lined 2:1 slope. A slope that is any steeper would run into issues with bedrock and keying in at the toe of the slope. The project proposes Class C stone for the top of the slope to armor against drainage running through the roadway base courses, and Class B stone for the bottom of the slope. The existing cable guardrail

will be replaced with beam guardrail. To improve drainage, aggregate underdrain will be installed at a depth of 5 feet on the north side of the road approximately 7' off the edge of pavement (within existing ROW) for approximately 1,000'. Construction access is still being evaluated and is not yet shown on the plans, but will be along the bottom of the slope and will likely result in temporary wetland impacts. There is an existing ditch line at the bottom of the slope that will be re-established. Existing drainage pipes under Catterall Road and US Route 302 may be addressed as part of the project but this is still being evaluated. Jim Kirouac added that the proposed underdrain will likely drain toward the existing pipe at Catterall Road, and the existing pipe would be upsized. Using this existing crossing would prevent the need to trench through the concrete slab in multiple locations along the roadway.

Wetland impacts from the proposed slope work are estimated at just over 12,000 sq. ft. at this time. C. Perron added that the wetland is not a high quality area, is located on a roadway slope, and is not connected to other wetland systems. The ditch line would be recreated; therefore impacts to the existing ditch would not be counted toward potential mitigation as the lost functionality is being replaced. The impacts at this time are still preliminary.

Rich Roach asked if the stone fill could be backfilled with soil (such as sandy loam) so that vegetation could grow on the slope. Jim Kirouac said that this would be reviewed with Materials & Research to determine if it could be done without compromising the integrity of the slope.

Mark Kern stated that an in-lieu fee should be paid for mitigation. Gino Infascelli agreed that an in-lieu fee would probably be appropriate if impacts remained over 10,000 sq. ft. R. Roach stated that since impacts would be over 10,000 sq. ft., mitigation would be required. M. Kern added that even if impacts were reduced to less than 10,000 sq. ft., he still wanted to know about all temporary impacts. His concern was that impacts would be reduced to some amount that was scarcely under 10,000 sq. ft. If this happened, he implied that he could be inclined to ask for an Individual Permit for the project with mitigation as a requirement. However, if an in-lieu fee is paid to satisfy requirements for state mitigation, he would be agreeable to allowing coverage under the Programmatic General Permit.

There was also lengthy discussion on taking wetland value into consideration when determining when mitigation was required. The regulations do not take value into account, and M. Kern indicated that the in-lieu fee process avoided this issue. It was also pointed out the intent of the 10,000 sq. ft. threshold for mitigation was to encourage applicants to minimize wetland impacts.

G. Infascelli asked about the location of the sloughed material that got washed out. J. Kirouac replied that District forces removed ten truckloads of the material during the temporary fix, and the subject project would further clean up the area.

It was agreed that J. Kirouac and C. Perron would review the wetland impacts, temporary and permanent, and return with updated numbers at the March meeting. It would be determined in March if mitigation would be needed depending on total impacts.

J. Kirouac stated that the goal is to construct this year. The slope is sloughing in other areas and its future stability is in question.

Agency File Numbers: *Natural heritage: NHB10-2498, DES Wetlands Bureau: #2010-02887*

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

### **Littleton-Waterford, A001(041), 15926**

Tony Ciolfi of Maguire Group provided an overview of the project, which involves work at three bridges. Bridges 105/135 and 104/135 carry the northbound and southbound barrels of Interstate 93 over the Connecticut River. Both bridges will be rehabilitated and will have scour protection installed at all piers. Bridge 109/134 carries NH Route 18 over the Connecticut River. Work at this bridge will involve only the installation of scour protection at each pier. The entire project consists of work at 10 piers, 7 of which are located in NH. Scour protection will consist of precast modular A-Jacks interlocking concrete armor units. These units would be placed in an interlocking pattern to create a mat-type unit that would be placed on the channel bottom around each pier. The plans currently show the scour protection extending 20' around each pier, which is the maximum extent that is expected to be necessary. As final design progresses, pending results of a study of existing substrate, the extent of scour protection around each pier may be reduced. Staging for the project will be from a boat launch area off NH Route 18. A barge would be used to transport the armor units to the piers. Temporary impacts will be shown on the wetland impact plans to allow for mooring of the barge throughout the project area as needed.

Preliminary impacts consist of approximately 24,000 sq. ft. of permanent channel impacts in NH and 132,000 sq. ft. of temporary impacts. A VT Stream Alteration Permit would be required for Vermont impacts. T. Ciolfi coordinated with Mike Adams at the Vermont Project Office of the Army Corps of Engineers, and Mike Adams said that all the project impacts in VT and NH would qualify for coverage under the NH Programmatic General Permit.

Christine Perron summarized additional coordination that had been completed. The US Coast Guard would not require a permit for the project. An Essential Fish Habitat Assessment was completed and the National Marine Fisheries Service had no comments on the project. The US Fish & Wildlife Service had no concerns with the project since dwarf wedgemussels do not occur in this section of the river. The Natural Heritage Bureau does have records of rare species near the project area. C. Perron explained to Melissa Coppola that a small area of temporary bank impact at the edge of the boat launch had been added to the plans since they last discussed the project. M. Coppola asked to see photographs of the area that would be impacted, but added that it was unlikely she would have concerns regarding rare species.

Rich Roach commented that the NH Programmatic General Permit only authorizes fill in NH that is permitted by NHDES. He suggested that Mike Adams be contacted again to clarify coverage of Vermont impacts under the VT PGP.

C. Perron asked for confirmation that mitigation would not be required since impacts are the result of the protection of transportation infrastructure. Gino Infascelli said that was probably true and suggested that this be discussed with Lori Sommer (DES). He later added that the impacts as

currently proposed should not be a problem, but that impacts should always be minimized when possible.

Mark Kern asked if all impacts would be to the river bottom. C. Perron replied that all permanent impacts would be to the river bottom, and there was one small area of temporary bank impact. M. Kern agreed to go along with whatever the State agreed to. R. Roach stated that the project would qualify for coverage under the NH Programmatic General Permit.

*This project was previously reviewed on the following date: [11/17/2010](#).*

### **Pinkham's Grant, 16022 (non-Federal)**

This project consists of the replacement of the bridge that carries Patrol Shed Road over Stony Brook (Br. No. 069/080). The bridge provides access to a NHDOT patrol shed immediately adjacent to NH Route 16. The replacement bridge will be a carbon fiber/ concrete composite arch bridge immediately upstream of the existing bridge. This type of bridge is often referred to a "bridge-in-a-backpack." This is a Tier 2 stream crossing with a contributing watershed of 0.68 sm.

Steve Johnson provided an overview of the project. The project involves the use of new technology, a carbon fiber/concrete composite arch bridge, that was developed at the University of Maine Composites Center. This technology has been used by Maine DOT and photographs of that installation were shown. NHDOT would be installing a bridge of this type for the first time in Pinkham's Grant, on a Patrol Shed access road off NH Route 16, where there would be no significant impact to the traveling public if something did not work out as planned. The location also allows the Department to monitor and test the system since it will carry a substantial number of heavy trucks.

This technology allows for rapid bridge construction. The bridge can be installed quickly, has less overall impact to the stream, and is should last longer than a typical bridge. The technology consists of multiple hollow carbon fiber tubes that are filled with concrete. Stay-in-place forms are placed between the tubes and concrete is placed creating a ribbed concrete arch structure. This type of bridge is often referred to as a "bridge in a backpack." The Department will also test fiberglass sheetpiling for the headwalls and wingwalls to speed up construction and further reduce the potential for corrosion.

The new bridge will be placed just upstream of the existing bridge. The old bridge will be removed. The new bridge will be 18' rail to rail, and will be slightly wider than the existing bridge so the rail posts are not immediately adjacent to the fiberglass headwalls. Some riprap will be placed at the edges of the channel for scour protection. There is a paved swale just to the south of the existing bridge that outlets toward the stream. The swale carries water only when there is a snow curb. This project will redirect the swale to provide better treatment before entering the stream.

If the bridge works well in this location, this technology could be used elsewhere in the State at locations that require longer spans. The University of Maine has estimated a 100-year life span for

these bridges. Rich Roach asked if there was any steel in the concrete, and he was told that the carbon fiber acts as the reinforcing material.

Christine Perron discussed permitting issues. This is a Tier 2 crossing with no history of flooding. The project meets the general design criteria of the new stream crossing rules and will not diminish hydraulic capacity. For these reasons, the project is expected to qualify as a minimum impact project as an upgrade to an existing Tier 2 crossing. The bankfull width just downstream from the bridge is 14.7' and the stream can be classified as a Type A stream. According to the Stream Crossing Guidelines, crossings at Type A streams can be designed at, or even slightly less than, bankfull width; therefore, if the proposed bridge was a new crossing, it appears that it would fully comply with the stream crossing rules.

Gino Infascelli asked if the bridge would have wing walls. S. Johnson said that U-back wing walls would be installed.

Rich Roach stated that it sounded like a good project with minimal impact, and it would qualify for coverage under the NH Programmatic General Permit.

Carol Henderson asked how deep the tubes would extend into the concrete blocks, and when the project would be constructed. S. Johnson explained that the tubes would only go about one foot into the concrete. Construction would take place in July or August, depending on when the permit was issued and crew's work schedule. C. Perron said that John Magee from Fish & Game had expressed an interest in being on site to watch construction. S. Johnson did not have a problem with this.

G. Infascelli commented that he did not know for sure if the project qualified as a minimum impact project under the stream crossing rules.

*Agency File Numbers: Natural heritage: NHB10-1241*

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

### **Rye, 99405Z (non-Federal)**

This project consists of toe wall repair on the center pier of the bridge that carries Brackett Road over Berry Brook (Br. No. 235/153). The proposed project is located off of Brackett Road over Berry Brook in the Town of Rye. Work as proposed that was presented to the Resource Agencies consists of a concrete toe wall that will be installed around the entire footing of the existing pier. Temporary sandbag cofferdams will divert the water during low tide. During excavation, temporary stabilization will be in place prior to the incoming tide overtopping the cofferdam.

Matt Urban from the Bureau of Environment, Anthony Wetherbee and Steve Johnson from Bridge Maintenance, presented the subject project. M. Urban introduced the project by orienting the agencies to the location and stating that this is a very minimum impact project but due permanent impacts within a tidal channel the project would most likely need to be processed as a major

impact project. The total permanent impacts equal 67 sf. and consist of concrete repair to the toe of the center pier for bridge (235/153). Carol Henderson asked when the work was scheduled. Steve Johnson stated that the Department would like to do the work this summer. C. Henderson stated that there may be some coordination that would be beneficial due to the migration of brown trout in the salt water. Rich Roach asked if the Department has coordinated with the United States Coast Guard. M. Urban stated that the Department has not, but will. He also noted that he did not think Berry Brook was a large enough to be considered a navigable water.

R. Roach indicated that the project would at least qualify for coverage under the NH Programmatic General Permit and may actually be considered exempt from requiring Corps authorization.

C. Henderson asked how long the project would take to construct. S. Johnson thought that if the Department had a permit work could begin in July and extend through August. M. Urban stated that the Department did conduct a Natural Heritage Bureau Search for the project. The results revealed numerous records of plant species. The Department has coordinated with the NHHNB and has determined that the preferred access down the roadway embankment would not result in any NHB concerns. M. Urban mentioned that there will be temporary impact associated with the temporary access to the pier and at the bank of the channel some rock may need to be adjusted to obtain access. Gino Infascelli stated that this project would need to go through Governor and Council due to tidal impacts.

Agency File Numbers: *Natural heritage: NHB10-2781*

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

### **Lebanon, X-A000(235), 13558A**

Matthew J. Low, P.E., SECB of Hoyle, Tanner & Associates, Inc. began by introducing the project, which involves the replacement of a functionally-obsolete, structurally deficient bridge structure (Br. No. 062/117) over the state-owned railroad, realignment of NH12A and the construction of a new local access drive for the Westboro railyard. The project has been in development for about 10 years, but has undergone a major transformation in the past few years. The City desires to redevelop the abandoned roundhouse area of the railyard, therefore, the local access drive was needed. Adding this access drive, complicated the geometry of the project, for relocation of NH12A onto previously undisturbed areas. The relocation of NH12A also complicated a conventional bridge layout, therefore, a bridge "tunnel" concept has been introduced. The tunnel is approximately 200 feet long and has many benefits. The approximate project cost is \$5M, and the funding through the State Aid bridge program with federal funding through the surface transportation program.

At this point, the design is approximately 25% complete and a 30% submission is envisioned in the near future. Environmental permitting is anticipated to include the following:

- Non-programmatic Categorical Exclusion (CE)
- Alteration of Terrain Permit

- Standard Dredge and Fill Permit
- Comprehensive Shoreland Protection Act (CSPA) Permit

The Standard Dredge and Fill Permit is expected to be a minor permit as the area of fills is 17,177 square feet (less than 20,000 sf) but with mitigation (greater than 10,000 sf).

Natural Heritage Bureau records indicate the presence of the Dwarf Wedge Mussel in the Connecticut River and a 1998 Bald Eagle sighting near the Wilder Dam, approximately 1 mile upstream of the project.

Carol Henderson asked what the existing clearances of the bridge are. Matt Low responded that the existing vertical clearance is approximately 17 feet, but will be raised to 19 feet per coordination with the NHDOT Bureau of Rail. Carol Henderson asked what the length of the tunnel would be and Matt Low responded it would be approximately 200 feet. Carol Henderson asked that the project consider animal migration through the tunnel, which may be hampered due to the length and lack of light.

Richard Roach asked if a non-programmatic Categorical Exclusion (CE) was appropriate or whether an Environmental Assessment (EA) may be needed. Kevin Nyhan responded that this project would meet FHWA's definition of a non-programmatic CE project.

Richard Roach asked if there were any other streams in the vicinity that flowed into the Connecticut River. Steve Goddard of Hoyle, Tanner stated there were none.

Gino Infascelli commented that wetland mitigation for this project will likely be an in-lieu fee as has been the case on other projects in Lebanon.

Matt Low suggested that after the design was more advanced, presentation at a subsequent meeting would be warranted. The Committee agreed.

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

### **Randolph, 16098 (non-Federal)**

This project proposes to reconstruct approximately 1.7 miles of Randolph Hill Road, including associated drainage improvements. The limits of work are from the intersection of US Route 2 to High Acres Road. HEB Engineers presented an initial project review including wetland impacts and sought resource agency approval in order to proceed with design and construction.

#### **Discussion:**

Jay Poulin presented an overview of the current state of the Randolph Hill Road Reconstruction project:

- Project consists of reconstruction of Randolph Hill Road from the Intersection of Route 2 to High Acres road. Total length of reconstruction is approx. 1.7 miles.

- Reconstruction will be completed in kind; no horizontal or vertical alignment modifications proposed.
- Improvements will generally consist of removal and replacement of pavement substructure along with drainage improvements.
- Natural Resource impacts include 13 separate wetland impacts; all due to either culvert replacement or drainage ditch improvements.
- The 13 wetland impacts total 4,500 sf.
- NHB research revealed no records of sensitivity in the project area.
- Project is being funded through SAH program with a budget of \$1.5 million.
- Environmental permitting includes NHDES Wetlands Standard Dredge & Fill and NHDES Alteration of Terrain.

**Questions:**

G. Infascelli: Have wetlands been classified? Yes (JP)

Are any classified as perennial streams? I believe one is (JP)

If so, the culvert installation will have to meet new stream crossing guideline.

Jay Poulin noted NHDES Wetland Permit is being submitted very soon.

**Actions:**

HEB was authorized to proceed as currently proposed. It is anticipated that the wetland impacts will be permitted under the SPGP program. No further action from the resource agencies is needed.

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

**NECRR Track 1 Upgrade (no project numbers)**

The overall project involves maintenance and upgrades of the existing New England Central Railroad (NECR) line from southeastern to northwestern Vermont, including 24 miles in New Hampshire from Walpole to Cornish. The work involves adding and cleaning ballast, replacing ties and rail, reconstructing certain switches, turnouts and road crossings, and repairing and strengthening bridges. According to Ridge Mauck, the ballast work would be covered under the Alteration of Terrain Permit by Rule provisions and would not require an AOT permit.

The only area in the New Hampshire segment that clearly involves work in aquatic resources is at a historic stone arch culvert over the Little Sugar River on the railroad line in North Charlestown, NH. The arch was constructed in 1848 and is a contributing element of the North Charlestown Historic District, which is listed on the National Register. The watershed at the arch is about 30 square miles. The river is part of the Atlantic salmon restoration program.

The floor of the arch is made up of timbers laid perpendicular to the channel, extending under the walls on each side. In the downstream portion of the channel within the arch, the timbers have broken off and a large scour hole has developed. The scour hole has extended under the stone wall on one side, undercutting the wall and causing some stones to settle or crack. The scour hole also continues downstream in the channel, beyond the face of the structure. The channel must be stabilized to preserve the integrity of the structure. Removing and replacing the structure is not an option due to cost and to its historic significance.

The proposed means of stabilizing the channel and the structure is to reinforce the walls and floor in the scoured area with concrete. The existing broken timbers would be cut back to the wall, material under the edge of the walls would be removed, and reinforced concrete would be poured under the wall and would extend about three feet up the sides of the walls. The scour hole would be filled with stone, with rip rap tapering into the stream channel beyond the stone arch face. Reinforced concrete would be poured in the floor area to be repaired. Further upstream in the structure, where floor timbers and arch wall stones are intact and in better condition, no work is proposed. The work is proposed to be done this year under low flow conditions.

The work will require a state wetland permit. Because the structure is narrower than the stream's bankfull width and because of the need to stabilize the channel and the structure, it will not be possible to fully meet the requirements of the stream rules (Env-Wt 900). The requirements will be met to the maximum extent practicable in accordance with Env-Wt 904.09, Alternative Designs. Meeting attendees felt the most important issue is fish passage, and NH Fish & Game fisheries biologists should be consulted regarding suitable designs. MJ will discuss design options with John Magee of NHF&G and will also coordinate with NHDES staff. There was discussion of ways to allow fish passage, including lowering the floor in the channel to match the current stream profile (possibly including the entire channel in the structure); incorporating stone in the concrete so that it protrudes above the concrete; and installing baffles. Gino expressed concern about the potential for scour at the interface of the new concrete with the existing timbers, and suggested a cutoff wall at the joint. The construction sequence, including stream diversion, should be included with permit applications.

The work may be a minor or major state wetland permit, and is expected to fall under either the minor or major Army Corps Section 404 Programmatic General Permit categories. No shoreland permit will be needed if the disturbance stays within state wetland jurisdiction.

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

### **Mt. Washington Regional Airport, SBG 17-05-2010**

Stephen Riesland of Fay, Spofford & Thorndike (FST) presented the project, which is in the beginning stages and consists of the preparation of an Environmental Assessment (EA) to evaluate the potential impacts of short-term development projects at the Mt. Washington Regional Airport in Whitefield, NH. The development projects include installation of an Instrument Landing System (ILS), which provides electronic horizontal and vertical guidance to pilots. Its installation will reduce the approach minimums (distance and height above the runway thresholds). The proposed components of an ILS at the Mt. Washington Regional Airport include installation of a localizer located approximately 1000 ft beyond the end of Runway 28, installation of a glide slope antenna located approximately 1000 ft downwind of the approach end of Runway 10, extension of a parallel taxiway to the end of the runway, obstruction removal to the Runway 10 approach to achieve a clear 34:1 approach surface, and the installation of an approach lighting system (MALSR) to Runway 10.

The grading of the localizer critical area and construction of the taxiway will each require approximately 5.5 acres of wetland impacts. It was noted that these numbers are conceptual and will be updated as the design progresses. The 34:1 obstruction clearing will impact approximately 28 acres, but the pocket wetlands located within this area will not be grubbed. It was explained that there are no airports north of Laconia, NH, which have an ILS. The closest airports with an ILS system are Auburn/Lewiston in Maine to the east and Montpelier State Airport in VT to the west, and having an ILS in Whitefield will fill a vital safety role in the aviation system.

R. Roach asked what alternatives were considered and S. Riesland responded that the proposed design and no build have been the only alternatives. R. Roach stated that both on and off-site alternatives would need to be evaluated and documented, and questioned the cost and feasibility of constructing the ILS elsewhere. C. Niewola stated that other airports were evaluated, but they were either not interested in an ILS or were not a good candidate for an ILS due to topography and mountainous terrain. R. Roach asked that these evaluations/conclusions be documented in the EA.

S. Riesland explained that the project is in the data gathering stage with an anticipated Draft EA submittal in July. The project was presented at the Cultural Resources meeting last week. S. Riesland stated that although the site plan shows a future 1000 ft runway extension, it is not part of the project at this time. It is part of an on-going discussion that may be many years out beyond the life span of the EA.

M. Kern asked what type of wetlands would be impacted and which areas would be mowed/maintained. J. Riordan indicated that there are emergent wetlands with some shrub scrub along the proposed taxiway, forested wetlands on the east end of the airport in the vicinity of the localizer and forested with some emergent wetlands in the obstruction clearing area. M. Kern stated that temporary and secondary impacts would need to be identified, as well as existing and proposed areas to be cleared. A discussion ensued on the merits of maintaining pockets of wetlands between the runway and taxiway and whether there would be any remaining value, or if the wetlands should be filled in as suggested by R. Roach. M. Kern referred to an ACOE publication, which details this scenario.

M. Coppola asked if endangered species had been addressed and J. Riordan responded that the response from NHB indicated that the northern harrier is present in the vicinity of the project, which is adjacent to the Pondicherry Wildlife Refuge. C. Henderson recommended that Jillian Kelly of the NHF&G regional office be contacted for more information on the northern harrier. L. Sommer added that coordination should take place with the local contact for the USF&WS in regard to the Pondicherry Wildlife Refuge. It was also recommended that the Society for the Protection of NH Forests and the Nature Conservancy be contacted to ask about potential mitigation projects in the area.

R. Roach stated that the EA should include a discussion on the future runway extension and its cumulative impact on the environment. He also asked if there were any other build out plans proposed. S. Riesland indicated that other plans, such as new hangars and buildings, would be outside of jurisdictional wetlands. K. Nyhan questioned if the runway extension is needed as part of the project and C. Niewola responded that all project components could function without the

runway extension. L. Sommer asked if the localizer would need to move and C. Niewola responded that it would be dependant on the timeframe of the potential runway extension.

G. Infascelli stated that any new culverts would need to meet the stream crossing requirements and questioned if the existing twin 48" culverts under the runway would be upgraded to meet these requirements. He mentioned that the area near the taxiway has deep organic soil and provides good water quality functions.

C. Henderson stated that the Wildlife Action Plan should be reviewed. She also asked if a public meeting would be held and S. Riesland responded that two public meetings were planned, but not yet scheduled. R. Roach stated that a public meeting should be held in spring before submittal of the Draft EA.

R. Roach stated that mitigation for this project would be difficult. J. Riordan asked if the in-lieu fee could be applied to this project even though the NH Wetland Rules state that the in-lieu fee is only for projects with less than one acre of impact. Lori Sommer replied that an in-lieu fee could be used for projects with more than one acre of wetland impact, but the proponent would first have to prove that creation, restoration, and preservation were not practicable options. M. Kern responded that an in-lieu fee could be applied to this project and possibly for all impacts. R. Roach asked if the FAA was the lead federal agency and C. Niewola responded that it was, with the NHDOT being the recommending authority.

E. Stevens gave a brief discussion on the existing topography and land use surrounding the airport, and also noted that there are no zoning restrictions and few residential areas nearby. He discussed the economic benefit that the project would bring to the area and why the Mt. Washington Airport is well suited for an ILS. R. Roach stated that the EA should explain the economic potential that the ILS would provide for the area.

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

### **Concord Airport EA, SBG 04-05-2010**

This project consists of the preparation of an EA for development projects at the airport, including rehabilitation of Taxiway A, new Hold Bay construction for Runway 35, new parallel Taxiway B to Runway 12-30, conversion of abandoned Runway 3-21 to Taxiway C, expansion of based aircraft tie-down parking apron, expansion of paved itinerant aircraft parking apron, development of T-hangar site, and construction of Regional Drive business development.

- NHDOT moderator provided a project introduction.
- John Gorham (JG) noted the 2 purposes for presenting the EA projects:
  - 1) To provide the agencies a status report of the EA;
  - 2) To seek feedback on the alternatives regarding any potential natural resources affected by the EA projects.

- JG provided an overview of the eight projects being studied in the EA. These projects were identified in the 2006 Airport Master Plan. JG used a drawing with the 2006 Master Plan projects placed over the Airport aerial view to describe the projects.
- JG briefed the outcome of the data collection efforts that started in May and ended in Oct 2010. The collection effort involved surveying plants, Karner Blue butterfly eggs, birds, and snakes.
- JG noted that the project team has held several informal consultations with resource agencies since September 2010. Following initial consultations, the project team developed 17 alternatives for the 5 projects that fell within designated conservation zones defined within the Conservation Management Agreement (CMA). JG briefly explained how the CMA identified both development and conservation zones. JG noted that there were no alternatives for the 3 projects in the development zones.
- JG briefly described the Alternatives Impact Analysis table. The purpose of the table is to tabulate the impacts for each alternative for comparison purposes and aid in visually identifying the least environmentally damaging practicable alternative(s).
- JG stated that based on the Impact Analysis, preferred alternatives were selected with the resource agencies input. JG used a plan that illustrated the preferred alternatives laid out over an aerial view of the Airport to describe the alternatives. JG presented a detailed summary of the differences between the Master Plan projects and the preferred alternatives, including: reconstructing Taxiway A with centerline lights as opposed to edge lights; adding a holding bay to serve Runway 35 – this project was identified at a public information meeting and its operational need was confirmed; no changes to the tie-down apron expansion; shifting Taxiway B 55' further away from the Runway 12-30 centerline to avoid sensitive resources; and truncating the length of Taxiway C as well as shifting the alignment of Taxiway C to the center of the abandoned runway. JG stated that the truncation of Taxiway C meets the near term need and the City may want to reconstruct the full length in the future. JG noted that there was a minor change made to the size of the transient aircraft ramp expansion, which is in the development zone, based the runway approach surfaces. JG also noted that there was no change to the T-hangar and non-aviation development adjacent to Regional Drive on the north side of the Airport.
- JG briefly described a table presenting the impacts of the preferred alternatives. JG noted that the disturbance to the conservation zone was reduced from 24.29 acres to 16.84 acres with the preferred alternatives, and that the disturbance to the blue lupine habitat was reduced from 4.02 acres to 0.71 acres.
- JG reviewed the EA's next steps: formal consultation with the USF&W to prepare the biological opinion; preparing and circulating a draft EA report in March; conducting a 2nd public information meeting in March; seeking agency review and comment on the draft EA in April; and publishing the final draft of the EA in May.
- JG gave an overview of the Taxiway B project that is currently being scoped for design. JG noted that an NHDES AoT permit is the only required permit for this taxiway project

because of the project disturbance area exceeds the AoT threshold. JG also noted that habitat mitigation measures would be included in the project. JG noted that there are no wetlands and therefore no wetlands impact, including the work in the drainage ravine.

- Rick Roch with the ACOE asked if the ravine area is wet? Jennifer Riordan with the Smart Associates stated that the ravine was not wet and the Smart Associates did not consider this area jurisdictional wetlands. JG noted that the ravine has a pitch with an approximate fall of 80' vertical in 800' horizontal distance to the Soucook River.
- JG noted that no Shoreland Protection permit appears to be needed. The distance from the project to the Soucook River is greater than the 250' trigger, and the steep embankments near the Soucook river keeps the river's reference line close to the river. JG said he plans to be back in the fall to present the preliminary design of Taxiway B.
- JG asked if there were any resources being impacted from the agency's purview that had not been identified in the briefing? There were no responses from the agencies.
- Martha Drukker with the City of Concord pointed out that archeological and historical evaluation work is also part of the EA, and those studies and results will be presented next month at the NHDOT Cultural Resources meeting.

Presentation Materials:

- Master plan alternatives (Plan)
- Impacts of Alternatives (Table)
- Preferred Alternatives (Plan)
- Impacts of Retained Alternatives (Table)
- Taxiway B – Alternative B3C Layout (Plan)

*Agency File Numbers: Natural heritage: NHB10-0226*

*This project was previously reviewed on the following date: [1/20/2010](#).*