On the Road in New Hampshire

Culvert Repair

New Hampshire law classifies a 10 foot clear span culvert as a bridge. Bridges that are “deficient”—in poor condition, with weight restrictions or with poor construction—are known as red-listed. According to Richard Lee, Public Works Director in New London, his town had a 10 foot culvert that was red-listed as “the culvert needed replacement because the bottom had rusted through.”

The New Hampshire Department of Transportation’s (NHDOT) Bridge Aid program allows a municipality to receive up to 80% reimbursement using state funds for the cost of design and construction of a bridge rehabilitation or replacement project. Richard completed an application for the NH Bridge Aid program and funds were set aside for the New London culvert in 2005.

As luck would have it, the NHDOT had a culvert to repair down-stream of Richard’s. The NHDOT Bridge Repair Crew contacted Richard and offered to fix his culvert while working on their own. It was easy for the NHDOT to repair Richard’s bridge while doing their own since they only had to mobilize and demobilize once for both culverts.

Richard’s luck continued as the NHDOT had Bridge Aid money available in 2003 and offered to fund Richard’s culvert repair.

To repair the deficient culvert, the NHDOT built a coffer dam and ran the water through the damaged culvert through smaller pipes. They cleaned the culvert, installed rebar, built forms around the culvert bottom, and then filled the forms with concrete. The whole process took about two months.

The town of New London is quite pleased with the result. It saved money, had their culvert repaired ahead of schedule, and kept the road opened during the repair. According to Richard it is an “ingenious way to fix a culvert without tearing it out of the ground.”

ALSO IN THIS ISSUE

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Employee Cell Phone Use

The New Hampshire Highway Safety Agency rates driver distraction as the number one cause of car accidents. Distraction is a steadily growing cause of accidents. However, studies show mixed results due to cell phones and accidents. In August 2004, AAA showed that the most potentially dangerous activity was "reaching or leaning." Cell phone use was ninth on the list.

More and more, employees conduct business on a cell phone while driving. Employers may be aware of the benefits of giving employees cell phones to use while driving, but they should be aware of their liability. There are a growing number of lawsuits involving employer liability for traffic accidents caused by employees talking on cell phones while on the job.

Lawsuits

Cell phone risks fall into two categories: claims by third persons and claims by employees. Third party claims result from a plaintiff trying to sue the employee and employer. The employer may be indirectly liable if an accident occurred from use of a cell phone by an employee acting "within the scope of employment." Typically, making a business call is considered to be within the scope of employment.

Employees may make claims for health problems allegedly stemming from cell phones. Although studies are inconclusive, some employees contend that radiation emitted during cell phone usage may lead to various forms of brain cancer or other illnesses. Worker Compensation claims and lawsuits have been filed based on this theory.

Minimizing Employer Liability

Here are the following tips to reduce municipal liability:

- Develop a cell phone policy and train employees about the dangers of talking on a cell phone while driving. Have employees sign a written acknowledgment of policies when issued a cell phone to limit an employer's potential liability.
- Require employees to observe all applicable laws regarding cell phone use while driving.
- Provide cell phones only to essential personnel.
- Check with the insurance company as to liability issues concerning employees and cell phones.
- Keep things in perspective. Consider whether it is worth the risk to have employees using a cell phone.

continued on page 11
New Hampshire Roads Scholars

We are pleased to recognize those who have achieved the following levels in the UNH T² Center Roads Scholar Program during the Spring of 2005.

**Master Roads Scholar.** Participated in UNH T² Center training activities which totaled 100 contact hours and covered the range of topics required for Roads Scholar II.

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Alex Cote</td>
<td>Deerfield</td>
</tr>
<tr>
<td>Ronald Hansen</td>
<td>Eastman Community</td>
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<tr>
<td>Mark Ober</td>
<td>Ashland</td>
</tr>
<tr>
<td>Tom Woodley</td>
<td>Claremont</td>
</tr>
</tbody>
</table>

**Senior Roads Scholar.** Participated in UNH T² Center training activities which totaled 70 contact hours and covered the range of topics required for Roads Scholar II.

<table>
<thead>
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<tr>
<td>Douglas Almon</td>
<td>NHDOT</td>
</tr>
<tr>
<td>Albert Anderson</td>
<td>Hancock</td>
</tr>
<tr>
<td>Scott Brooks</td>
<td>Freedom</td>
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<tr>
<td>Michael Clarke</td>
<td>New Durham</td>
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<tr>
<td>Gregg Eastman</td>
<td>New Ipswich</td>
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<tr>
<td>Henri Frechette</td>
<td>Claremont</td>
</tr>
<tr>
<td>Dean Hooper</td>
<td>Claremont</td>
</tr>
<tr>
<td>Carl Knapp</td>
<td>Weare</td>
</tr>
<tr>
<td>David Leel</td>
<td>New Ipswich</td>
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<td>Robert Lovering</td>
<td>Merrimack</td>
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<tr>
<td>Steve Lucier</td>
<td>Bradford</td>
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<tr>
<td>Michael Sousa</td>
<td>Enfield</td>
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<tr>
<td>Paul Wallace</td>
<td>Nashua</td>
</tr>
<tr>
<td>Donna Walton</td>
<td>Nashua</td>
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</tbody>
</table>

**Roads Scholar II.** Participated in UNH T² Center training activities which totaled 50 contact hours and covered a set of minimum subject areas including road design and construction basics, other technical, tort liability and safety, and supervision or personal development.

**Name**
- David Almon
- Harold Fife
- Larry Gay
- Jim Mountford
- Steve Rougeau
- Sumner Weeks

**Affiliation**
- NHDOT
- Northfield
- Merrimack
- NHDOT
- Milford
- Northfield

**Roads Scholar I.** Participated in UNH T² Center training activities which totaled 30 contact hours.

**Name**
- Mark Avery
- Joe Boucher
- David Brown
- Bruce Caillouette
- Scott Daley
- Jay Davini
- Jesse Eames
- Dennis Ford
- Jess Forrence
- Carl Gagnon
- Leonard Heath
- Robert Hebert
- Randall Heglin
- Norman Holden
- Jason Kimball
- Matthew Kimball
- Terry Miller
- Zach Montoya
- Charles Morrill
- Gerald Morse
- Todd Murray
- Dustin Muzzey
- Carl Oehler
- Joe Toupin
- Ed Tourville
- John Trythall
- Fred Wallace
- Dennis White
- Troy Wilmott
- Allen Young

**Affiliation**
- NHDOT
- Dover
- NHDOT
- Danville
- Merrimack
- Manchester
- NHDOT
- NHDOT
- Hudson
- Nashua
- Merrimack
- NHDOT
- Jaffrey
- Freedom
- Merrimack
- Deefield
- Claremont
- Hooksett
- Freedom
- NHDOT
- Claremont
- Gilford
- Deerfield
- Bow
- Enfield
- Merrimack
- NHDOT
- NHDOT
- Walpole
- Hancock
Master Roads Scholars

Master Roads Scholar
Ron Hansen

Ron Hansen is the Property Manager and Golf Course Superintendent at Eastman Community Association in Grantham. He has worked at Eastman Community for 16 years. He is a certified Golf Course Superintendent, working in golf course management for over 30 years. Ron has worked for private golf clubs in Massachusetts, New Hampshire, Vermont, and Iowa. Ron holds an Associates Degree from the University of Massachusetts and a Bachelors in Agronomy from the University of Georgia.

Achieving the status of Master Roads Scholar is important to Ron because it demonstrates his and Grantham’s commitment to learning. He believes that training has made him a more effective manager and valued employee. Ron says that, even though he has reached the highest Roads Scholar status, he will continue to take classes. In Ron’s experience, the UNH T² Center workshops “connect classroom instruction to fieldwork.” Ron says it is very important for everyone to become aware of the “how” and “why” we do things.

Ron is pleased that his employer provides funding and support for him to learn. When he is able to apply what he has learned in the classroom to his job duties, then everyone benefits. Ron says his career has been using soil as a means to grow plants. The UNH T² Center training has enabled him to expand his duties. He now uses the soil and aggregates for building safe and effective roads.

Ron currently lives in Lebanon. He has been married to his wife, Heather for 30 years. They share four sons.

Master Roads Scholar
Mark Ober

Mark Ober is the Road Agent in Ashland. He has worked for the town for 32 years. Mark began working for the town as a road crew member and became Road Agent about 27 years ago. Previously, Mark made a living by selling hay and milk from his farm which he still owns. He continues to raise beef and sell hay in the summer. Mark’s day starts at 4 on weekdays so he can feed the animals and take care of them before going to work for the town. Mark admits that he sleeps in on the weekends, but he still has to get up early enough to tend the animals.

Reaching Master Roads Scholar status is important to Mark. It has been his goal since he began classes. Mark is proud of his achievement; he says that he will continue to take classes.

Mark is the only Master Roads Scholar in Ashland. It is a memorable achievement among the crew. Another crew member is taking classes and Mark hopes to have another Master Roads Scholar in Ashland. Mark is happy to see the department involved with training and education.

Mark has been married for 12 years and has four kids plus two step-children. Mark’s main hobby is caring for the farm. He has worked the land since he was very young and enjoys it as much as working for the town.
Master Roads Scholar Tom Woodley

Tom Woodley has been Highway Superintendent in the City of Claremont for one year. Previously, Tom has worked for the NHDOT as a construction inspector, owned a recycled asphalt products business for 7 years, and has been the Public Works Director in the Town of Henniker and the City of Franklin.

For Tom, becoming a Master Roads Scholar is secondary to the opportunity to learn from the UNH T² Center classes. When he began taking classes, he just wanted to learn and to apply the newly acquired knowledge.

Tom says his department values training opportunity of the UNH T² Center Roads Scholar Program. He says that the “city has many Roads Scholars, including several seniors, one other Master, and several more on their way.” Tom will continue to take classes since achieving the highest level, he is registered for several this fall.

Tom says, ‘Thank you’ to the UNH T² Center and FHWA and NHDOT for providing valuable training and resources. He believes that his department has benefited from the opportunity to learn and share knowledge.

Tom has many hobbies and interests. In the winter he likes to spend his time woodworking. In the summer, Tom fishes from his boat on Lake Winnipesaukee, Webster Lake, or various rivers throughout the state.

Accessible Sidewalks and Curbs Ramp
An Update

According to ADA Accessibility Guidelines (ADAAG) all newly constructed or reconstructed sidewalks must have a 24-inch wide strip of raised truncated domes at the bottom of all curb ramps. (See Road Business, Summer 2004). In 2002, the New Hampshire Department of Transportation (NHDOT) began research on detectable warning devices for sidewalks. Concerned about the harsh winter conditions of New Hampshire, the research tested how well the domes survive sidewalk plows.

After the first winter, researchers recommended two products. The products wore well and complied with ADAAG, but even the best performer had failed, after the third winter.

Since their initial research many other truncated dome product are available. The NHDOT now specifies a cast iron product that uses materials similar to a man-hole cover. NHDOT staff notes that the cast iron product will rust but foresees no other deficiencies.

The City of Manchester uses truncated domes throughout the city, particularly in the downtown area. Kevin Sheppard, Deputy Director of Public Works says that ‘in the beginning we were concerned with winter maintenance and how the domes would survive. We have had a good experience with our installations.’

Copies of the new NHDOT specification is available through the UNH T² Center.
A chip seal or seal coat is a single layer of asphalt binder covered by embedded aggregate (one-stone thick). Chip seals are the most often used preventive maintenance (PM) treatment. Effective on structurally sound pavements, they are popular because of low initial cost compared to thin asphalt overlays.

Chip seals seal the fine cracks in the pavement’s surface and prevent water from getting into the subgrade and base. They prevent distresses resulting from oxidation as well as enhance skid resistance for vehicles.

Chip seals do not provide structural capacity to pavement. For badly cracked or weathered pavement surfaces, road managers should reconstruct, rehabilitate, or apply a conventional overlay.

PM is a proactive approach to preserve and extend a pavement’s life. Its purpose is to maintain pavement before it develops major distresses. Therefore, to achieve the most benefit, cities and towns should apply a chip seal early in the pavement’s life. It can be beneficial to apply three or four chip seals to a pavement before it reaches the end of its design life. This article will discuss the elements of a successful chip seal: weather, pavement preparation, application, rolling, and sweeping.

Elements of a Successful Chip Seal

Poor weather may cause newly constructed chip seals to fail. Ideally, weather will have low humidity, no wind, and sustained high temperatures. High humidity results in poor adhesion between the binder and the aggregate.

Warmer air temperatures create a better bond between the binder and aggregate, and the pavement surface. Pavement temperature affects the viscosity of the binder and the speed at which it will set. It should be more than 70°F and less than 130°F.

Rain will cause chip seal failure. If unexpected rain occurs crews must immediately spread sufficient aggregate to cover the binder. If possible, they should close the road to traffic, or keep traffic speed low because adhesion between the binder and aggregate is at risk. They should reduce or stop the rolling while the aggregate is wet as the binder may be picked up on the wheels of the roller.

Pavement preparation is crucial for a good chip seal. A well-prepared pavement is uniformly textured and smooth, with only minor defects. To prepare the pavement surface for a chip seal:
- Patch all holes and depressions,
- Fill and seal all cracks 6 to 12 months before the chip seal to allow sealant curing,
- Level all bumps, waves, and corrugations,
- Remove excess asphalt on patches and joints, and
- Broom the full surface width to be treated.

The distributor is an asphalt tank equipped with spraying equipment mounted on a truck chassis. Crews must calibrate the distributor for the specified transverse application rate. Many distributors have parallel spray bars (also called wheel-path bars) that enable variable spray rates across the lane. When temperature and humidity are ideal, the time between binder and aggregate applications should not exceed 3 minutes or 300 feet.

The aggregate spreader applies an even layer of aggregate across the full width of the binder. Self-propelled chip spreaders are necessary for larger-scale projects. Tailgate box spreaders are usually sufficient for spot (strip) sealing. Self-propelled spreaders give the operator more control to create a uniform spread of aggregate. The Tailgate box spreaders do not lay aggregate as smoothly and continuously.
Many spreaders are equipped with computerized controls that allow the gates to open and close hydraulically, which will compensate for varying spreader speeds. Some models have a vibratory hopper that further improves the uniformity of the discharge.

Dump trucks hitches must match the spreader so the dump truck bed will not damage the spreader’s receiving hopper. This will also reduce spillage on the roadway. Sometimes, dump trucks or spreaders have aprons to control the dumping of aggregate into the spreader hopper.

In areas where extensive stopping and turning of traffic occurs, crews should apply some excess aggregate to reduce scuffing and rolling.

Rollers embed the aggregate into the binder and orient the chips so that maximum bonding occurs. Pneumatic (rubber-tired) roller weight provides the force needed to embed the aggregate firmly in the binder. To ensure good embedment and orientation, rolling should occur right after aggregate application.

Operators should roll at a speed that will not displace stone. They should make at least three passes to embed the aggregate into the binder.

Static steel-wheeled rollers have a smooth-surface steel drum. Agencies should use with caution because they can crush the aggregate. If used when the underlying pavement has ruts, the roller bridges over ruts and will not properly seat the aggregate in the wheelpaths.

Sweeping cleans the existing road surface and removes excess aggregate from constructed chip seals. Two types of sweepers are used in chip seal construction: rotary brooms and pickup or vacuum sweepers.

Rotary brooms remove excess aggregate from the chip seal surface without dislodging the embedded particles. Too much downward pressure will cause the broom’s bristles to remove the aggregate with a flicking action. Crews should use steel bristles prior to chip seal construction. After, plastic bristles are less likely to damage the new chip seal.

Rotary brooms move the excess aggregate to the roadside. They generate dust and may affect visibility for traffic. Usually the aggregate ends up back in the traveled way by either rain or vehicles using the shoulder for parking.

Pickup sweepers minimize dust and remove all excess aggregate from the project. A pickup sweeper features a broom that sweeps the aggregate to a suction head into a storage tank. Pickup sweepers are useful in urban areas to remove aggregate accumulating in gutters or along the roadway edge.

The recommendations in this article will provide a long lasting chip seal. Chip seals typically provide good performance on roads for 4 to 7 years. Chip seals done correctly reduce wind shield damage from kicked up stones, tire noise, prolonged traffic during construction, flushing, streaking due to non-uniform binder application, and premature failure.

Source:
Participants Manual for Preventive Maintenance Treatments Workshop, UNH T² Center, November 1996

Photo:
Far left: Spray bar applying binder
Left: Aggregate spreader proximity of distributor
Stopping Sight Distance
By Alyssa K Rezendes, Project Assistant

“Sight Distance” is the length of roadway that a driver can see ahead. “Stopping sight distance” (SSD) is the minimum sight distance required for a driver to stop a vehicle on wet pavement after seeing an object without hitting the object. SSD determines minimum lengths of vertical curves and minimum radii of horizontal curves.

The American Association of State Highway and Transportation Officials (AASHTO) establish the minimum SSD. The SSD in Table 1 are for passenger cars and do not consider the distance necessary for trucks to safely stop. Generally, separate stopping sight distances for passenger cars and trucks are not considered. The extra sight distance provided by the higher seat position of a truck driver compensates for the extra distance needed to safely stop.

To measure sight distance on an existing road, one person stands in the center of the travel lane sighting from the top of a sighting rod, while another holds a target rod at a length away in the direction of travel record the distance at the point in which the bottom two feet of the target rod moves out of view of the person with the sighting rod. They compare this distance with the minimum required stopping sight distance in Table 1.

The easiest way to prevent sight distance problems is to avoid them by ensuring new roads adhere to the minimum standards for stopping sight distance. Sight distance improvements may be costly but necessary in places where inadequate sight distance has resulted in crashes. Agencies should consider improvements when the recorded distance is less than the minimum requirement. It is most cost effective to combine sight distance improvements with other road improvements to make more cost effective. Traffic control devices, creating no passing zones, and establishing public awareness campaigns are techniques to improve the safety at locations where there is poor stopping sight distance.

Source:
Mearkle, Jim, Nuggets & Nibbles, Cornell Local Roads Program, Vol XXII, No. 4
Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, Washington, DC 2004
“Stopping Sight Distance,” Bay State Roads Program, Tech Note #25, 2004

Table 1. Minimum Required Stopping Sight Distances 2004 AASHTO Green Book

<table>
<thead>
<tr>
<th>Vehicle Speed (mph)</th>
<th>Reaction Distance (feet)</th>
<th>Braking Distance (feet)</th>
<th>Summed Distance (feet)</th>
<th>Stopping Sight Distance (feet)</th>
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<tr>
<td>15</td>
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<td>25</td>
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<td>45</td>
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<td>238.9</td>
<td>405.5</td>
<td>644.4</td>
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</table>

Note: Brake reaction distance predicated on a time of 2.5s, deceleration rate of 11.2 ft/s² used to determine calculated sight distance.
The following publications are available from the UNH T² Center. Consult the web http://www.t2.unh.edu/video_pub/publist.html for the most current information. Most publications are free. However, when ordering a publication with a charge, please include a check made out to: UNH Technology Transfer Center. To request by mail indicate selection, fill out the form, staple closed, affix stamp, and mail. The completed form may also be faxed, 603-862-2364, or emailed, t2.center@unh.edu. To request by telephone, 603-862-2826 or 800-423-0060 (in NH only).

The following materials are available for free:

___Driveway Permits. This document details the process of driveway permit issuance and other decisions regarding access to the state highways. Information is included on driveway limitations, right-of-way restrictions, drainage, and maintenance responsibilities. NHDOT

___Erosion Control Handbook for Local Roads. This manual provides guidelines and methods for effective erosion control practices on low volume roads. Minnesota Local Road Research Board.

___Rating Unsurfaced Roads. Explains importance of maintenance, time-frame to follow, how to divide the road into sections for maintenance, inspecting, and how to calculate distress measurements. US Army Corps of Engineers CRREL.

___Review of the Signalized Intersections. This guide contains information on intersection assessment and potential improvement measures. FHWA.

___Roundabouts: An Informational Guide. This guide provides information on roundabout definitions, how to identify appropriate sizes, application ideas, design detail, public acceptance, and legal issues.

___Salt Storage Building Design. Illustrates the design of salt storage buildings used by the NHDOT to prevent sodium chloride infiltration into the ground and surface waters.

___Series of Quick Guides for NH Towns. This diverse set of information includes topics such as culvert installation and maintenance, ditch construction and maintenance, cut and fill slopes, stormwater inlets and catch basins, mowing and brush control, and snow and ice control.

___Stormwater Outreach Materials. This information was created for state and local governments to customize and use in their own stormwater outreach campaigns. EPA.

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Material Request

Name: ________________________________
Position: ______________________________
Affiliation: __________________________
Mailing address: ________________________

Town/City: ______________________________
State: ____________________ Zip: __________
Phone: __________ Fax: ________________
Email: ________________________________
The following videos are available from the UNH T2 Center. Consult the web http://www.t2.unh.edu/video_pub/vidinfo.html for the most current information. 5 videos may be borrowed at one time for a two week period at no charge. To request by mail indicate selection, fill out the form, staple closed, affix stamp, and mail. The completed form may also be faxed, 603-862-2364, or emailed, t2.center@unh.edu. To request by telephone, call 603-862-2826 or 800-423-0060 (in NH only).

____DC-241. Covered Bridges, 8 min. This video explores basic covered bridge construction and available options. SHRP.

____ST-245. Motor Grader Operations: Parts 1-4, 72 min. This video discusses techniques of the motor grader, including blade position and operation. NE Dept. of Roads.

____M-221. Operator Daily Maintenance of Asphalt Distributors, 17 min. This video discusses the preventative actions and daily maintenance of asphalt distributors. It properly illustrates the four main aspects of distributing asphalt, including preparation (pre-startup), startup, typical operations, and shutdown. FHWA.

____M-277. Pavement Structure Repair Techniques: Maintenance of Gravel Roads, 27 min. This video describes the techniques used with a motor grader on a gravel road. NC Institute.

____M-233. Regraveling, 17 min. This video portrays necessary steps to take when regraveling a gravel road. It emphasizes road conditioning before applying the new gravel. FHWA.

____M-207. Signals: Read 'em or Weep, 20 min. This video illustrates the proper signals to use when communicating an equipment problem. Caterpillar.

____DC-230. Timber Bridges, 20 min. This video emphasizes the benefits of replacing rural bridges with timber bridges by examining rural bridge designs and structures. Videosyncracies, VT.

____DC-253. Understanding Superpave Mix Design, 13 min. This video examines the characteristics of the Superpave mix design. It discusses how binder grade, aggregate type, and temperature affect pavement design and the performance of Superpave equipment tests. NAPA.

____DC-235. Work Zone Traffic Control Course, Parts 1-4, 58 min. This video explains nighttime safety precautions and the reasons for extra precautions at night. Examples of workzones are illustrated, including the rebuilding of a freeway in Pittsburg, PA and the repairing of I-95 in VA. FHWA.
Milestones:

SB138 (relative to motor vehicle liability for municipal workers) was signed by Governor Lynch in May 2005. Its effective date is January 1, 2006.

Kelly Butler has joined Enfield as the Highway Supervisor.

Richard Crocker, former Director of Public Works in Amherst died this past winter.

Tom Dubey is the new Road Agent in Thornton.

Clark Hackett, Master Roads Scholar, has retired from Farmington.

Byron McSharry has joined Alton as the Highway, previously he was the Road Agent in Gilmanton.

Paul Moynihan is the new Director of Public Works in Laconia.

Jim Wheeler, Public Works Director in Berlin is becoming the Facilities Director at the Androscoggin Valley Hospital.

Websites:

Highway Communication Exchange for Detectable Warning Devices.
http://knowledge.fhwa.dot.gov/dw

NCHRP Detectable Warning Device Report
http://maintenance.transportation.org/Assets/Download/DetectableWarning20-7(177).pdf

NHDOT Detectable Warning Devices Report
http://docs.nas.edu/00942591.pdf#search='FHWA NHRDMPS20022'

Presentation assistance is available at www.indexine.com/index.html

Stormwater.
www.StormwaterAuthority.org

continued from page 2

Sources:
Dickson, Rebecca Tsaros. “Distracted driving claiming more lives; Cell phones, radios, passengers blamed.” http://www.concordmonitor.com/apps/pbcs.dll/article?AID=/20050105/REPOSITORY/501050304/1001/NEWS01 May 2, 2005
http://www.axcessnews.com/technology_010804.shtml May 2, 2005

PW.NET

Want to know what is happening in other towns? Learn the very latest in regulations? Need a place to ask questions of other public works officials? Want to be the first to receive notifications of UNH T2 Center workshops? Then, subscribe to PW.NET. It’s free. Send an email message to: kclaytor@cisunix.unh.edu

In the body of the message type:

Add pw.net your name

For instance: Add pw.net John Doe

RunOff.Talk

RunoffTalk is listserv for NH public officials and managers, and private parties, to discuss NPDES II issues and concerns. Its purpose is to enable a dialogue that will help clarify the federal permits, and determine the best technical management actions for compliance. It is an easy way to announce meetings and conferences, and inform others of useful information. It’s free. Send an email message to:

ListProc@lists.unh.edu

Leave the subject line blank, and in the body of the message write: subscribe runoff.talk yourname

For instance: subscribe runoff.talk John Doe
## Calendar

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