

Standard Operating Procedures

Weare, New Hampshire

No: 2003-001

Date: November 17, 2004

Policy: Snow Removal and Ice Control

Governing Laws: RSA 231:92-a, RSA 507-B:2-b; *(include any local parking bans or local ordinances)*

Approval Date:

Next Review Date: *(recommended reviewing every couple of years)*

OBJECTIVE: It is the goal and intent of the Town/City of Weare, NH to provide timely, efficient and cost-effective winter maintenance, snow removal and ice control on the roadways of the municipality for the safety and benefit of the Town's/City's residents and the general motoring public.

PROCEDURE: The objective stated above will be achieved by implementation and execution of the procedures and tasks outlined in the Town of Weare Winter Operations Snow Removal and Ice Control Procedures. Due to the many variables that are inherent in New England weather, each storm and/or weather event may require slightly different effort and/or emphasis on any number of maintenance tasks, which together, determine the overall winter maintenance, snow removal or ice control strategy.

LEVEL OF SERVICE: It is not possible to maintain a black snow and ice-free road during a storm. It is the intention of the Town to provide practical, safe access to homes, businesses and municipal facilities during winter storms.

The Public Works Director or his assign shall establish and maintain a procedure by which the existence of hazardous road conditions is communicated to the Highway Department. This can be accomplished in any number of ways . . . actual field observations by the Public Works Director or his assign, notification by the State Dept. of Transportation that State roads within Weare are being treated, and also through our local Police Department.

All full-time Highway employees shall be responsible for alerting the Public Works Director or his assign, of hazardous conditions created by weather conditions.

The Public Works Director or his assign shall provide road condition information to school representatives as requested.

WINTER STORM MAINTENANCE: Upon notification of a winter storm, the Public Works Director or his assign will call out the appropriate Highway employees and equipment to surface treat roads in the following manner:

1. At the onset of the snow storm, the Public Works Director or his assign shall have salt/sand spreaders treat the initial 1 to 2 inches of snowfall on our tar road surfaces. This will prohibit additional snow accumulations from bonding to the road surfaces. It will enable our tar roads to remain free as possible from ice or snow pack, during the actual storm as seen effective, and following the storm. It should be noted that salt has a much slower effect on melting snow and ice at temperatures below 25 degrees, and may not be applied until it is warmer.
2. As the storm develops and 2 ½ to 3 inches of snow has accumulate, all of the drivers and available equipment will begin to plow their assigned routes (including gravel roads providing that the roads have become frozen to a degree that prevents a plow from digging into the road surface). Trucks that have sand spreaders will spread sand on slippery areas after they clear away the snow. The operators of trucks that do not have spreaders will notify their supervisor when that route is ready for treatment for sand and/or salt mix. There are times when weather conditions are such that snow plowing will not take place until after the storm has ended. For example, snowfall has occurred or is occurring and the weather forecast is for a change to freezing rain. Plowing operations might be suspended to allow traffic some traction without the “glazing over” of a cleared surface. At the end of the freezing rain, normal plowing operations would begin again providing accumulations of ice and/or snow get to a point that traveling is determined to be hazardous by the Public Works Director or his assign.
3. When a storm has ended, all road surfaces will be treated if needed, as determined by the supervisor in charge. Fire cisterns/fire ponds may not be plowed until the following day after the storm. Gravel roads are treated with sand only. Tar roads are treated with salt and/or salt/sand mixture (depending upon the severity of buildup on the asphalt surface). Salt is applied at a rate of approximately 500 lbs per lane mile. Weather conditions may require changing to another option and will be the responsibility of the Public Works Director or his assign.

COMMAND: Direction of all winter maintenance activities for the Town of Weare, NH is vested with the Public Works Director or his or her designee.

EXECUTION: The policy outlined above is intended to serve as the normal operating procedures for winter maintenance, snow removal and/or ice control for the Town of

Weare, NH. One or more of the following, which may delay or prevent the implementation of this policy, may affect all or any part of this Policy:

- Equipment Breakdown
- Snow Accumulation in Excess of 1" Per Hour
- Freezing Rain or Other Icing Conditions
- Traffic Congestion
- Emergencies
- Personnel Illness

ADOPTION: The Town of Weare, NH has adopted the Winter Operations Snow Removal and Ice Control Policy effective November 17, 2003. All residents are encouraged to familiarize themselves with the content as it describes the condition that one might expect to encounter before, during and following a winter storm event.

BOARD OF SELECTMEN
WEARE, NEW HAMPSHIRE

It is vital that the City/Town Counsel reviews and comments as to the content and defensibility of this policy prior to municipal adoption.

WINTER OPERATIONS

SNOW REMOVAL AND ICE CONTROL PROCEDURES

(Includes Highways and Parking Areas)

EQUIPMENT: The Highway Department utilizes all the assets of the department as needed to address snow emergencies. A list of the current rolling stock assets is included in the appendices of this policy.

ROUTES: Currently, the Town is divided into twelve (12) major plow and/or treatment routes. Additionally, is one small truck with a 4-way plow used to maintain municipal parking areas, to assist in support of trucks assigned specific routes and for attending to broken trucks and/or equipment.

MANPOWER: The Town of Weare has twelve (12) full-time personnel assigned to its winter maintenance operations.

MATERIALS: The Department uses approximately 2,500 tons of rock salt and 6,000 cubic yards of sand each season. The sand is used as an abrasive and is applied to the road to improve the public's motor vehicles traction. Salt is employed by the Department as a de-icing and anti-icing agent. The entire supply of sand is stockpiled at the Highway Department. The material is stockpiled untreated. Rock salt is purchased from a supplier as needed. The Highway Department stockpiles a quantity of up to approximately 500 tons. Unless weather conditions require a different approach, winter maintenance routes are treated with a mixture of sand and salt. The mixture is maintained at a minimum of one part salt to three parts sand. The mixture is applied to the roadway where traffic can work the mix traveling either way. The mixture, in conjunction with traffic action, creates a watery brine melting snow and/or ice, and resisting snow and ice packing on the roadway. The road crown further assists with the spreading of the mixture brine. The sand/salt mixture is only effective to approximately 20 degrees Fahrenheit. Other deicing agents are effective to lower temperatures, but cost and need for specialized equipment have forestalled their use to this time.

COMMUNICATIONS: The majority of the Public Works rolling stock is equipped with low band radios capable of transmitting and receiving on a frequency of 156.19500. Each plow and equipment operator is assigned a unique call number. A list of all call numbers is displayed in each piece of equipment or truck. Radios are also maintained at the Highway Department garage, along with the operator's ability to communicate with the Public Works Director and some radios are able to communicate with the Fire Department and Base 100 dispatch.

SCHOOLS: The Highway Department does not have the responsibility for the clearing of snow and winter treatment of the Town schools access road and parking lots. On days

when school is in session, winter maintenance efforts must be timed to coincide with bus routing and delivery.

- A. The school superintendent or designated official representative and/or School Bus Company shall contact the Public Works Department to determine the condition of the municipality's roads in order to determine the safety of students using school buses. The school representative(s) shall make the decision to cancel or postpone school for that day.
- B. It is important to have it determined who is canceling or postponing school. It is recommended that procedure be documented and signed as being agreed upon by both parties. Further, it is recommended that as the snow and ice removal policies change for whatever reason, they be redistributed to all parties.

PARKING: The Town has enacted a winter parking ban effective from November 15th to April 1st of each year. This ban prohibits parking in or on the Town's roads or rights of way (ROW). The Town has the right to tow or ticket violators. The purpose of this winter parking ban is to allow winter maintenance crews unobstructed snow removal and ice control routes, as much as possible, to maintain the maximum effectiveness of their efforts.

ROADS AND OTHER AREAS NOT RECEIVING WINTER MAINTENANCE: The Town of Weare does not maintain a number of roadways and other areas as part of the ongoing winter maintenance activities. The areas not maintained by the Town include:

- A. Town roads classified as Class VI roads.
- B. Private Roads
- C. Each specific plow route is depicted on the map (or list) attached to this policy. (A map or list depicting the various routes with assigned route numbers will assist the public identify the plan, and hopefully understand the severity of the problem of snow clearance.

SALT FREE AREAS: The Town of Weare has established the following roadways or portion of roadways as "salt free" areas to protect drinking water resources or other natural resources which is believed to have been damaged in the past due to roadway salt. A "salt free" area is one in which the municipality has determined it will not use salt as part of its ice control efforts for winter maintenance. The Town will post the area to warn traveling motorists that they are in a "salt free" area.

- A. Gravel roads will not be treated with salt at any time. (This is to prevent the frozen gravel from melting)

DAMAGE TO PRIVATE PROPERTY: It should be noted that the municipality isn't held responsible for damage to private property that is located within the public right of

way. (RSA 231:92-a) The right of way (ROW) is often 50' wide, and is often confused by property owners as their own property. In most cases, the ROW often extends 10 to 20 feet of either side of the paved or gravel road. Some homeowners often cultivate extensions of their lawns, place mailboxes, erect fences or stone walls in these areas, which improves the appearance of the street greatly, but is obstructive to good maintenance from being conducted on the roadway.

The snow windrow must be pushed back as far as possible for many reasons such as:

1. Traffic safety
2. Space for future snow storage
3. Prevention of melting snow water from running onto the pavement
4. To permit maximum possible view of traffic of the roads

The Town cannot assume the responsibility for striking or burying them, or pushing them over due to the weight of the snow windrow. Mailboxes located within road limits exist by sufferance only with the responsibility assumed by the owner.

It is not possible for the Town to replace or repair any type of structure erected by an abutting land owner within the right-of-way that has been damaged as a result of highway maintenance or construction work.

In the event of personal property damage, the Town of Weare will only be responsible to repair or replace damaged property having been in actual contact with the snow removal equipment that is on private property and not within the public right-of-way.

To promote the safe and orderly passage of the motoring public on the Town's roads, free from obstructions and obstacles created by the removal or depositing of snow, the Town of Weare hereby adopts the following ordinance.

Pursuant to RSA 236:20, RSA 47:17, Paragraph VII, and RSA 41:11, it shall be unlawful to plow snow across any and all Town Roads, including Class 5 & 6, or to deposit snow within the traveled portion of Town Roads.

Definitions:

Across Town Roads – shall mean pushing snow from one side to the other where snow would be deposited within the Right of Way of any road.

Traveled Portion – shall mean any part of the roadway in which vehicles would travel or within the shoulders of said roadway.

Any person who violates the provisions of this will be guilty of a violation, subject to a \$100.00 fine. Subsequent offenses shall be subject to a fine of up to \$500.00.

APPENDIX A

SNOW PLOW ROUTES

T-6	T-10	T-1	T-5
Salmen Road	Rockland Road	Perkins Pond Rd	Peaslee Road
Hatfield Road	River Road	Mountain Road	Birchwood Drive
Meadow Drive	Clough Park Rd	Lawrence Road	Barnard Hill Road
Elm Drive	Deerhaven Road	Etta Lane	(River Rd End)
Burnt Hill Road	Jamie Drive	Bartlett Drive	Roosevelt Road
Lufkin Road	Guys Lane	Mntn School Rd	Chuck Street
Sugar Hill Road	Greenwood Road	Bogue Road	Jennifer Lane
Beech Hill Road	Boisvert Road	Balch Hill Road	Worthley Road
Weaver Place	Colby Road	Lorden Lane	Hillcrest Drive
Windsong Heights	High Rock Road	Abbie Drive	Bart Clough Road
So. Sugar Hill Rd	Riverdale Road	Cram Road	Barnard Hill Road
Lyndsey Lane	N. Riverdale Road	Lull Road	(Rt. 114 End)
Cross Road	Depot Street	Old Francestown	
Sewell-Hoyt Road		Road (tar)	
Cilley Hill Road			
Boyce Road			
Sherwood For. Rd			
Boulder Hill Rd			

T-8	T-2	T-7	T-3
Renshaw Road	Quaker Street	Bog Hill Road	Maplewold Road
Orchard Hill Road	Walker Hill Road	John Connor Rd	Orchard Path Rd
Gould Road	Woodland Drive	Buzzell Hill Road	Wallingford Terr.
B & B Lane	East Road	George Moody Rd	Lafrance Road
Old Town Road	Thorndike Road	Pondview Road	Mt Dearborn Rd
Carolyn Place	Pine Hill Road	Martin Road	Beaver Pond Rd
Wayne Drive	Center Brook Ln	Brown Ridge Rd	Short Street
Newman-Wilson Rd	Center Road	Hemlock Drive	Irving Drive
Twin Bridge Road	Peaslee Hill Road	Mt William Pond Rd	
Norris Road	Hodgdon Road	Woodbury Road	
Josef Drive	Carding Mill Road	Duck Pond Road	
Hoit Mill Road			
Apple Way			
Gen. Knox Road			

G-2	G-1	T-4	P-1
Peacock Hill Rd	West Quaker St	Flanders Mem. Rd	Town Hall
Poor Farm Road	Tiffany Hill Road	Shady Hill Road	Town Office
Old Francestown Rd	Nichols Road	Buckley Road	High Street
Helen Dearborn Rd	Paige Hill Road	Flint's	Paige Memorial Ln
Oak Hill Road	Craney Hill Road	Abijah Bridge Rd	Clark Mill Road
Oak Ridge Road	Chipmunk Falls Rd	Tobey Hill Road	Legion
Ridgeview Road		Del's Way	
Buxton School Rd		Dudley Brook Rd	
Forest Road		Reservoir Drive	
		Chevey Hill Road	
		Lafrance Road	

APPENDIX B
SANDER ROUTES (PAVED ROADS)

T-6	T-10	T-1	T-5
Sugar Hill Road	River Road	Perkins Pond Rd	Rockland Road
Beech Hill Road	No. Riverdale Rd	Mountain Road	Birchwood Drive
Weaver Place	Riverdale Road	Etta Lane	Barnard Hill Rd
Windsong Heights	Jennifer Lane	Bartlett Drive	(River Rd end)
So. Sugar Hill Rd	Depot Street	Mt. School Road	Bart Clough Road
Lyndsey Lane	Colby Road	Bogue Road	Roosevelt Road
Cross Road	Greenwood Road	Balch Hill Road	Chuck Street
Sherwood Forest	Clough Park Road	Abbie Drive	High Rock Road
Boulder Hill Road	Deerhaven Road	Lorden Lane	Worthley Road
Lufkin Road	Jamie Drive	Lull Road	Hillcrest Road
	Guy's Lane	Old Francestown Rd	

T-8	T-2	T-7	T-3
Gould Road	Quaker Street	Flanders Memorial Rd	Maplewold Road
B & B Lane	Thorndike Road	Center Road	Orchard Path Rd
Old Town Road	Hodgdon Road	Mt. William Pond Rd	Wallingford Terrace
Wayne Drive	Peaslee Hill Road	Pondview Road	Mt. Dearborn Rd
Carolyn Place	Buzzell Hill Road	Brown Ridge Rd	Irving Drive
Josef Drive	Carding Mill Road	Duck Pond Road	Beaver Pond Rd
Newman-Wilson Road	Paige Hill Road	George Moody Rd	Oak Hill Road
Twin Bridge Road	Tiffany Hill Road	Moody Pond Road	Oak Ridge Road
Hoit Mill Road	East Street	Town Hall	Knox Road
Renshaw Road		Town Offices	General Knox Rd
Barnard Hill Road		High Street	
(off Route 114)		Short Street	
		Ridgeview Road	

T-9	T-4		
Walker Hill Road	Reservoir Drive		
Hatfield Road	Del's Way		
Meadow Road	Abijah Bridge Rd		
Elm Drive	Shady Hill Road		
Salmen Road	Chevey Hill Road		
Pine Hill Road	Emery Lane		
Bog Road	Upper Craney Hill Rd		
Woodbury Road			
Hemlock Drive			
Grandview Drive			

APPENDIX C
SANDER ROUTES (DIRT ROADS)

T-6	T-10	T-1	T-5
Boyce Road	Barnard Hill Rd	Cram Road	Buzzell Hill Road
Ciley Hill Road	(River Rd end)	Lawrence Road	Clark Hill Road
Sewell-Hoyt Road	Bart Clough Road	Poor Farm Road	Bog Hill Road
Lufkin Road	Chuck Street	Old Francestown Rd	Woodland Road
Burnt Hill Road	Boisvert Road	Helen Dearborn Rd	Peaslee Road
		Peacock Hill Road	

T-8	T-2	T-7	T-3
Norris Road	Paige Hill Road	Brown Hill Road	Maplewold Road
Newman-Wilson Rd	Craney Hill Road	Chase Hill Road	Mt. Dearborn Rd
Forest Road	Chipmunk Falls Rd	Tiffany Hill Road	Lafrance Road
Orchard Hill Road	Winslow Road	West Quaker St	Forest Road
Apple Way	Waterman Road	Nichols Road	Buxton School Rd
Ridgeview Road	Upper Craney Hill Rd		

T-9	T-4		
Duck Pond Road	Dudley Brook Rd		
Martin Road	Abijah Bridge Rd		
John Connor Rd	Tobey Hill Road		
Center Brook Ln	Buckley Road		
Woodbury Rd	Flint's		
	Lafrance Road		
	(off Hodgdon Rd)		

APPENDIX D

TERMINOLOGY

In an effort to avoid confusion, the following standardized terminology with activity definitions is established. When directed to do so, operators will perform winter maintenance tasks in accordance with these definitions.

Treat Roads	Roads will be spread with a mixture of sand and salt. The Road Agent or his or her designee will determine the proportion of the sand/salt mixture. Mixture will be spread along the centerline of the roadway in a width of two to four feet.
Sand Roads	Roads will be spread with “straight” sand over the travel width of a gravel road. It may be necessary to spread in both directions to get a complete coverage.
Treat Route	Go over assigned route spreading a sand/salt mix on all roads, intersections and cul de sac in such a manner that one backtracks as little as possible.
Treat Main	Treat just the high traffic volume roads. Depending on conditions, drivers
Drags	may be requested to do side streets.
Open	Just keeps the center of roads open; not spending a lot of time clearing routes, intersections or turn arounds. This normally will be requested while snow is falling and there is a need to finish the drivers’ routes in as short a time as possible. (One-inch per hour would result in three to four inches of snow at the beginning of routes before a truck gets back to it.)
Open	As snow gets deeper, the driver will need to make extra passes at routes/intersections to allow vehicle traffic to flow better. This is also aimed at intersections getting the whole route done in as short a time as possible.
Cleanup	Clean up and push back all roads. Clean-up intersections, turn arounds, routes and cul de sacs. Some areas may require more than one pass.
Slush Off	Scrape off any snow/ice that has loosened up from treating with salt. Normally, it will require one pass each way unless advised to slush off and clean up.
Push/Back	After several large storms it may be necessary to send a truck or the grader out to shelf or back snow windrows. A loader will normally go along to clean up driveways and intersections.