



# **SNOW AND ICE CONTROL PLAN**

*2024*

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PUBLIC WORKS DEPARTMENT  
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# LEYDEN TOWNSHIP

## Snow and Ice Control Plan

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## I. SNOW FIGHTING PLAN

The Township's Public Works Department is responsible for the safe flow of traffic throughout the Township's network of streets. Leyden Township's current roadway system, within its maintenance jurisdiction, includes about thirty-three miles of pavement. There are three ways snow and ice are managed. Firstly, pavement treatments may be utilized prior to the event to prevent the initial snow fall from adhering to the road surface, secondly, road salt may be applied before, during, and after a storm, and lastly, roadway plowing is performed to remove accumulations from the roadway surfaces. These three tools may be utilized in various combinations dependent upon the variables of the storm, tool effectiveness in each circumstance, and financial accountability.

The Illinois Department of Transportation (IDOT) plows and maintains the five main State routes within our corporate limits which include Grand Avenue, Belmont Avenue, Fullerton Avenue, Wolf Road, and Mannheim Road. However, since we are situated at the edges of five IDOT divisions, we must regularly provide service to those routes within our boundaries at times when the State's response is insufficient.

Municipalities that overlap our jurisdiction also manage snow and ice control routes within our corporate limits. These roads may also occasionally require our attention.

### Weather Prediction

Prediction of impending storms is important in the control of snow and ice. The Public Works Department subscribes to a live, internet-based weather radar service, and a 24-hour staffed weather prediction service. All these efforts, and others, as required, keep the Township's Public Works Department directly aware of the storms' impact and evolution. These types of data access are also used by IDOT and most other communities to provide accurate tracking of storms. Each year our storm data access potential is reviewed and adjusted, especially as technology evolves. An impending storm warning will initiate the assignment of snow and ice control tasks at the discretion of the supervisor in charge. Pending storm data is also related to the snow and ice teams to best prepare them for deployment.

### Plow Routes

To coordinate snow and ice control effectively, the Township is divided into three (3) sections, Section 1 is East of Mannheim Road, South of Fullerton Avenue, North of Armitage Avenue and West of 25<sup>th</sup> Avenue. Section 2 is East of Wolf Road, South of Grand Avenue, North of Palmer, and West of Mannheim Road. Section 3 East of Rhodes Street, South of Belmont Avenue, North of Grand Avenue and West of Lee Street, with snowplow routes assigned throughout the zones. Each truck is assigned a specific plowing route to maintain within a zone. Plow routes are balanced according to the number of miles serviced and the time required to complete each route. This ensures that each route is completed in the same amount of time. All Public Works Department equipment is available for utilization in the snow removal effort. Most all able equipment is assigned and utilized, with back up units available should units break down, or the nature of the event requires additional deployment.

Whenever conditions call for a full plowing effort the Highway Commissioner oversees all snow removal operations. The Director and Assistant Director of Public Works are assigned as the snow and ice control supervisors. The Highway Commissioner or designee are charged with the responsibility of keeping pertinent records of the event, responding to calls and concerns from residents or Police and Fire Dispatch, and making all decisions related to managing the storm.

## Alerting Snow and Ice Control Personnel

The Highway Commissioner will manage snow and ice control operations, the Highway Commissioner is responsible to observe the upcoming and continuous snowstorm, determine whether snow and ice control teams are necessary and call and deploy the proper personnel.

## Plowing Policy

The goal of the Public Works Department is to clear the Township's streets as effectively and efficiently as possible by utilizing an effective combination of snow and ice control methods. In the interest of protecting the environment and controlling costs, storm duration application of deicers will be performed sparingly, and typically only when mechanical plowing methods fail to provide desired results, or when hazardous conditions exist.

Streets most heavily traveled are considered higher on the list of priority streets and serviced first once those are plowed and/or de-iced. The next order of priority is the plowing and/or deicing of the local roads. These roads are to be cleared while keeping a watchful eye on the condition and drivability of the heavily traveled roads. Township owned and maintained parking lots and sidewalks will be on separate routes and will be given appropriate attention based on use and need.

Cleaning a typical street consists of making one pass with the plow in each direction. This procedure may be done on several streets before the plow returns to push back the remaining snow accumulation to the approximate right of way. If a snowstorm is extremely heavy this procedure may be repeated multiple times before the streets can be cleared completely.

The amount of snow, weather conditions, and the travel time required between zones within the route may dictate the need for some modification of the plowing routines in actual practice.

The Highway Commissioner, or his/her designee, will coordinate the snow fighting effort. Utilizing our weather prediction resources, the Highway Commissioner will track the storm as well as possible and provide pertinent updates to field personnel. The Director of Public Works will drive the streets to appraise the plowing activities, monitor progress, and assist with emergency repairs and breakdowns, as they occur. An assigned team will assist with all Township properties snow removal. This function will aid in the more efficient and timely clearing of the Township's streets and properties.

## Salting Policy

The Township utilizes an eight hundred (800) ton salt storage facility located at the Public Works Complex at 2545 Mannheim Road. This facility allows the Public Works Department the necessary reserves of salt. In our commitment to controlling costs, salt is applied as sparingly as able, typically two to three hundred (200-300) pounds per lane mile, as needed. With a mix of salt & sodium chloride we have increased our ability to deal with colder temperatures, but often a combination of tire traffic and/or sunshine is needed to enhance the workability of these treatments. The increased ability to melt snow and ice is still limited. Salt alone is effective fifteen (15) degrees Fahrenheit. If street surface temperatures drop below this temperature, salt becomes ineffective. Sodium chloride works best at temperatures ranging from fifteen to twenty (15) to (20) degrees Fahrenheit but has the power to melt ice at temperatures as low as five (5) degrees Fahrenheit.

## Township Lots and Sidewalks

Snow removal teams are assigned under this current plan to handle snow removal from all Township owned parking lots and sidewalks abutting Township owned properties.

All Township properties will be handled as a 24-hour responsibility. An assigned snow removal team will first provide access clearance to the Township Office Building, the Cook County Sheriffs Police Department substation parking lot, Community Center, Senior Center, and parks and ensure safe ingress and egress to the facilities. Depending on the time of day or night, teams may shovel and de-ice the walkways, as required for 24-hour access to prepare for the days business. Once all critical areas of the facilities are opened for reasonable access, the teams will rotate between assigned locations on the route while ensuring that all Township owned properties parking lots and sidewalks are maintained in a manner that provides consistently reasonable access for employees and the public. Once the event is complete, teams will push snow back to the curbs, perform a final detailing of all site parking lots and walkways at all Township properties.

### Desired Results

All communities that publish a *Snow and Ice Control Plan* utilize this document to set a goal, or standard, for their specific operation. That standard is a measurement of effectiveness on how quickly the roadways within the jurisdiction can be cleaned to bare pavement after all snowfall has ceased.

Although we strive to clear all roads down to bare pavement, we may be unable to guarantee this due to extreme conditions and limits to workforce and equipment.

To that end, we need to cautiously set our standards high, but consider our current limitations. Leyden Township's overall goal in this *Snow and Ice Control Plan* is to clear all its roadways of all snow accumulation within eight (8) hours after the snow has stopped. This policy dictates snow removal on all roadways, with an additional standard of bare pavement on all roads, curves, and intersections, within the specified eight (8) hour period.

Ideally, this axiom would be met every time; however, because of uncontrollable variables, a truly attainable result would be to meet the standard of a 12-hour completion for 80% of the storms in any given season. Performance evaluation feedback is built into the reporting system; hence, the results of the snow removal operation will be evidenced shortly after implementing the plan.

### Property Damage

Throughout the course of operations of snow and ice removal, a certain amount of damage may occur on Right of Ways. The Public Works Department will repair damage with the use of pulverized dirt and seed in the spring when weather permits. If the sod is rolled back in such a way that it could be restored, this will be done by the repair crews. The responsibility of watering repairs will fall to the adjacent homeowner.

If any private property is damaged by snow removal operations, a Public Works representative will be sent to inspect the damage. If there is evidence of damage:

- 1) The Public Works representative will report back to the Human Resource Department at the Township.
- 2) The Township will investigate and contact the property owner.

### Assistance to Private Property

Under no circumstances will a Township employee be allowed to use a Township vehicle to push, pull, or tow a private vehicle. Township employees should notify the Public Works Director if there is any possibility of a hazard. Likewise, under no circumstances should a Township vehicle be used to clear snow from private, (unless the homeowner is signed up with the Senior Snow Removal Program) or commercial property, and no employee is allowed to use privately-owned equipment during working hours.

### Departure from Policy

In recognition of the possibility of unusual or unexpected conditions, the Township authorizes departure from these general policies. In extreme cases where conditions warrant, the Highway Commissioner may order departure from these general rules.

### No Duty or Right Created

The purpose of this policy is to establish goals for snow and ice control. It is not to be construed to create any duty to any individual or entity. The policy does not provide or promise any special protection or service to any individual or group of individuals. No additional rights shall be granted any individual or entity by adoption of strikes, equipment breakdown, weather conditions, inadequacy of equipment, state or federal regulations, shortage of personnel, and any unforeseen, uncontrolled, or unanticipated acts.

## II. SNOW REMOVAL RESPONSIBILITIES

Responsibility for snow and ice control is shared by everyone throughout the Township. The most efficient snow removal plan requires coordination of all Township personnel as well as the cooperation of local businesses and residents.

### A. POLICE AND EMERGENCY DISPATCH

The Cook County Sheriffs Police Department, Leyden Fire Protection District and NORCOMM perform an important and integral role in the snow fighting operation. Their critical functions include:

- Notifying the Public Works Department when street conditions become slippery and dangerous, especially when this occurs after hours.
- Assisting in keeping streets clear of parked vehicles during snow removal.

All parties are in constant communication reporting unsafe roadway conditions in the wake of a snow and ice event to Public Works.

#### Notification

The prompt notification of the Public Works Department is critical in the snow removal and ice control operation. When conditions warrant, The Cook County Sheriffs Police Department, Leyden Fire Protection District and NORCOMM personnel should implement the *Public Works Department On-Call Procedure* by contacting the Public Works Department, to provide timely notification and details concerning the situation at hand. The Highway Commissioner will determine the proper response.

All unsafe roadway conditions must be relayed to the Public Works Department. Unsafe conditions include glare ice, accumulated snow, blowing, and drifting snow blocking travel lanes, freezing rain, and select other conditions that may create a need to provide risk reduction. If applicable, the Cook County Sheriff's Police officers should make frequent checks of cornering traction, braking traction, and general driving confidence; notification should be immediate when it is determined these activities become difficult or impaired. The Public Works Department should always be alerted before greater than one (1) inch of snow has been allowed to accumulate on roadway surfaces.

The Public Works Department urges the Cook County Sheriff's Police Department to lean to the conservative when making assessments of weather-related conditions. Conferring between officers and/or sergeants and shift commanders may assist in making an appropriate judgment on street conditions and when to initiate notification to the Public Works Department. It is the intent of the Public Works Department to make our roadways safe for travel as soon as possible following the occurrence of a snow or ice event.

Finite quantities of ice control materials and/or conditions that may render ice control ineffective, make for extremely complex decisions about when, where, and how much material to apply. These decisions must rest with the Highway Commissioner. The Highway Commissioner will attempt to respond to all problem areas, but sufficient stores of material must be preserved for the more dangerous and more heavily traveled roadways.

#### Parking

Parking is regulated by the Cook County Sheriff's Police Department and Leyden Township's Code Enforcement Officer.

**3-2-18: MOTOR VEHICLE PARKING:**

*No motor vehicle shall be parked on any lot unless parked on a concrete or asphalt driveway. (TO-2022-1, 2-8-2022)*

**3-3-3: PENALTIES:**

*A. Any person or entity who shall violate any provision of this Public Ways Property Maintenance Code shall be fined not less than twenty-five dollars (\$25.00) nor more than five hundred dollars (\$500.00) for each offense, plus any attorney fees and court costs. A separate and distinct offense shall be deemed committed on each day during which a violation occurs or continues.*

Working in concert with the Cook County Sheriff's Police Department to ensure motorist safety will make all our jobs much easier and our snow removal efforts timelier and more efficient. Our program cannot be a success without the working relationship between The Cook County Sheriffs Police Department, Leyden Fire Protection District and NORCOMM. This commitment is to provide safer roads and will make the Public Works Department's snow and ice removal operations much stronger.

**B. PUBLIC WORKS DEPARTMENT**

***All Public Works staff are considered an important part of the snow and ice control efforts of the Township. As required, all employees are expected to participate in this important aspect of this public work.***

**Snow Removal**

The type of storm, anticipated weather conditions, and the general use of the Public Works Department On-Call Procedure will determine who and how many employees are called in to respond to a particular situation. Most storms will result in a combination of the two call-out procedures, as salting precedes most plowing operations.

Employees will proceed to their plow routes, or zones, and proceed to clear the snow in the method described in Section I of this document, *Snow Removal Plan*. Employees will remain on the routes until one of the following occurs:

- All routes or assigned areas are completely serviced.
- An individual driver has plowed for approximately 12 hours.
- An individual driver is too tired to plow.

When a driver finishes his assigned area, he will check with the Highway Commissioner for reassignment until all routes are cleared. Snow and ice operations are not considered complete until all streets are cleared of snow, intersections are pushed back for visibility, and all critical Township properties are accessible. When plowing and/or salting is completed, the driver shall wash the salt off the outside of his truck, remove any trash and debris from the cab interior, and make sure that the truck is loaded with salt and fuel, if necessary, for any more predicted storms. If no further winter weather is anticipated, the trucks should be left clean and empty of salt, making sure that the auger, spinner, and box are completely free of salt and residue. Once the truck has been stowed properly, the driver should check-in with their supervisor prior to leaving for home.

During snow and ice removal operations, the Fleet Manager will be responsible for general maintenance

of trucks and equipment and is responsible for minor repairs as needed. The Highway Commissioner or designee may assign the driver to another truck if the repairs are not minor and require too much time to get the truck back on the road.

## Supervisors

During a snow event, the Highway Commissioner will be charged with the responsibility of keeping pertinent records of the event, responding to the calls and concerns from residents, the Cook County Sheriff's Police Department, Leyden Fire Protection District or NORCOM, and making all decisions related to managing the storm. The Highway Commissioner will also be expected to patrol the Township during the operation to look for problem areas, assist where and when needed, and stay in constant communication with the drivers to determine progress of the snow removal effort. The current phone system allows voice messages to go directly to the Highway Commissioner's voice mail. His, or her designee, will check the contents of the voicemail during events at a maximum of three (3) hour intervals throughout the storm. An adequate response to each call will be provided by either ensuring that the problem is resolved or by contacting the caller personally to provide information relative to their concern.

### C. HOME AND BUSINESS OWNERS

Snow and Ice Control Plans are valuable tools adopted by Public Works agencies to define snow and ice removal standards under their direct control. However, the operation is only partially successful if it is not supported with a cooperative effort from each resident and business owner within the community. Leyden Township Code of Ordinances states:

#### 3-3-5: DEPOSIT OF SNOW OR ICE UPON PUBLIC HIGHWAY; PROHIBITION:

It shall be unlawful for any person or entity to remove or cause to be plowed or removed snow or ice from private property onto property belonging to the Township, including but not limited to parkways, streets, sidewalks, easements, and rights-of-way under the jurisdiction of the Highway Commissioner.

Home and business owners must refrain from depositing snow or ice from private property or public aprons on to streets at any point in time. This practice creates an unnecessary hazard for motorists and pedestrians and costs the Township taxpayers additional expense to send drivers back into areas to remove such deposits.

### D. MOTORISTS AND PEDESTRIANS

We demand that our plow drivers follow all the rules of the road, at a minimum, and take extra caution as conditions and situations demand. The motorist, on the other hand, may be at the end of an already long commute and wants nothing more than to get home, not to be caught behind a "lumbering" plow truck. Poor decisions on the part of motorists to pass, tailgate and even cut-off a snowplow vehicle often create considerable danger for the motorist and the plow driver. Snow equipment operators must always be aware of the road around them and be ready to defend against mistakes and random acts of indiscretion by the motoring public.

It is in everyone's best interest for snow removal to be completed as quickly and safely as possible. The best decision a motorist can make in a winter storm situation is to not be a motorist at all. Stay at home

whenever possible, until the road conditions allow for safe travel. When driving during a winter storm is necessary, please remember to use extra caution and leave plenty of additional time to reach your destination; rushing in treacherous conditions is always a mistake. Motorists are asked to adhere to the following:

- Maintain a safe distance between snow removal equipment and your vehicle.
- Give snow removal equipment the right-of-way whenever possible.
- Never attempt to pass snow removal equipment on a Township roadway. The only safe time to pass a plow vehicle is on a multiple lane highway when there is an open travel lane to the left side of the equipment. When passing snow removal equipment, check to make sure that the driver is aware of your presence and that you leave sufficient distance from the equipment to your vehicle before moving back in front of the plow.
- Do not use high beams when driving behind snow removal equipment as the bright light can shine in the driver's side mirror and interfere with the operator's vision.
- Do not park on Township Streets overnight.
- Residents should keep all vehicles in private driveways.
- Snowmobiles and all-terrain vehicles are prohibited from being operated on Township roadways and properties.

Pedestrians, particularly children, should observe the following precautions in winter storm conditions:

- Walk during the daylight hours whenever possible. If walking at night, wear bright or reflective clothing to stand out against the surroundings. Do not walk during blowing and severe conditions when visibility is decreased.
- Shovel snow to the right side of your driveway (as you face the street). This will limit the amount of snow that the plow deposits in your driveway as the streets are cleared of snow. The pile of snow, being on the right side of your driveway, will not block sight lines from oncoming traffic moving along your street.
- Discourage children from playing on, and around snow piles near the street. Backyards are the best location for children during and after winter storms, particularly when snow removal operations are underway.

### III. WORKFORCE AND EQUIPMENT

This *Snow and Ice Control Plan* is only as valuable as the people who implement it, and is simply rhetoric without the proper equipment to perform the tasks at hand. The Township has made great strides forward in hiring top-notch personnel to perform the duties laid out in this document. The Township Supervisor and Board has been committed to replacing and modernizing the snow and ice removal fleet. Both practices, hiring talented individuals and purchasing quality equipment, must continue as a matter of practice and policy to provide a safe experience for the motoring public, while continuing to work to minimize our impact on the environment. The Public Works Department continues to monitor and assess its snow and ice removal program to consistently improve practices, policies, and procedures. Only in consistent assessment will we continue to provide the most effective and responsible service to our citizens.

#### Personnel

As previously stated, snow and ice control is the responsibility of every employee of the Public Works Department, as required. All drivers are equipped with cell phones and two-way radios. All Public Works supervisors also have cell phones for enhanced communication during snow plowing operations.

#### Vehicles and Equipment

Various equipment is assigned to manage the effort Township-wide.

To ensure that equipment will be available to meet the goals and standards set forth in this *Snow and Ice Control Plan*, the following parameters should be established and followed in the future:

- Trucks capable of plowing residential streets is required.
- Vehicles should be replaced, ideally, on a twelve-year cycle due to the highly corrosive environment and adverse conditions in which they operate.
- Equipment should be continuously maintained.

To prepare for the winter season, each year, during the month of October, Public Works Department, in a cooperative effort with the Fleet Manager, will inspect, repair, and otherwise prepare all snow removal equipment for service potentially beginning in October. Snowplows, salt spreaders and spreader boxes should be attached to the trucks, calibrated, and tested no later than November 1<sup>st</sup> of each year. Once all equipment has been inspected, mounted, tested and is certified as ready for operation, the assigned drivers should operate the vehicles over their routes. This will typically take place as part of the annual snow and ice control training meeting held in October. All equipment should be tried and tested on a dry run in good weather to ensure that it is ready for service when the weather turns foul. Any equipment failures or suspected problems should be written up and reported immediately to the Public Works Director via the current work order submission processes. Repairs should be initiated as soon as possible, and equipment retested.

#### Spreader Calibration

No later than November 1<sup>st</sup> of each year, every salt spreader must be calibrated, and the calibration settings loaded into the current computer operating system in each truck. Calibration is essential for controlling application rates. Different materials will spread at different rates, so spreaders should be calibrated with the material intended to be used. Each spreader must be calibrated separately because even the same model spreaders can vary widely in their performance and spreading capacity. Spreaders

operate in a very hostile climate (low temperatures, excessive moisture, and corrosive chemicals) so they must be cleaned and checked regularly to guarantee proper operation.

### Route Marking

When drivers hit the field for their annual dry runs, they should familiarize themselves with the designated route course and look for any potential problems that will not be apparent when the route is blanketed with snow. Both primary and secondary drivers should drive the route together with route sheets and route maps in hand and discuss the most efficient and effective method for attacking the route. Any proposed changes to the route order-of-priority should be recorded on the route sheet and discussed with the Director of Public Works following the dry run. Approved changes can then be made to the route sheets and maps, only with the concurrence of the Township Supervisor.

Plowing hazards should be noted during the dry run, marked on the route map, and recorded in a list for future reference by any substitute, or alternate drivers who may need to plow that route. Such hazard may include raised manholes, broken curb, offset intersections, vertically shifted pavement, potholes, bridge approach expansion joints and any number of other roadway anomalies that could unexpectedly catch a plow blade during an actual snow removal operation. These areas of concern should be marked with flexible, reflective markers prior to the time the snow flies. These markers should be inspected and maintained by the route drivers throughout the winter season.

### Driver Notification

Each Public Works employee is required to have a cell phone which will accept text message and email communications. The Highway Commissioner can use a cell phone, or any internet-enabled computer to send specific snow and ice removal instructions to all, or any individual, employee, no matter what their location.

### Smart Phones

Smart phones expedite communication during a snow or ice event. These devices are invaluable for calling in truck repairs from the field, requesting towing services, or communicating directly with the public works offices or the Township office. Each device has many different venues of communication allowing for expedited services.

### Customer Service Requests

The Public Works Department also has a digital phone system with voice mail capability. The main number for citizens to contact with snow-related concerns or questions is **(847) 455-8616**. This number will be staffed Monday through Friday, 8:00 a.m. to 5:00 p.m. The current phone system allows voice messages to go directly to the Highway Commissioner's voicemail. His/her designee will check the contents of the voicemail during events at a maximum of three (3) hour intervals throughout the storm. Additionally, customers may also submit requests via email and online submissions through the Township website. An adequate response to each call will be provided by either ensuring that the problem is resolved or by contacting the caller personally to provide information relative to their concern. During major events, the Public Works Department request systems may be staffed during off hours at the discretion of the Highway Commissioner.

## IV. USE OF DEICING CHEMICALS

The Township purchases rock salt (sodium chloride) through an RFP. Salt has proven over time to be the fastest, cheapest, and most effective deicer for winter pavement management. Most Public Works managers will agree that we are not in the snow plowing business, we are in the “bond breaking” business and rock salt is the product of choice to make us successful in that venture. Rock salt, in addition to being an effective deicer, is also an abrasive that provides improved traction for vehicle tires when applied to road surfaces.

Once bonded to pavement, ice cannot be removed by plowing without damaging the road surface or plowing equipment. Salt is used as a deicer because it lowers the freezing point of water. It is usually applied in conjunction with plowing because it will penetrate snow and ice left on the pavement. Brine prevents water from freezing into ice and bonding to the pavement. Salt must sometimes be used alone when there is insufficient snow accumulation to permit plowing. The action of vehicle tires passing over brine and hard snow or ice will break up surface ice and gradually move it toward the pavement’s edge.

Most ice storms and snowstorms occur between twenty-six (26) and thirty-two (32) degrees Fahrenheit. Often after the storm ends, high pressure weather systems move into the Chicago area and temperatures drop dramatically, sometimes reaching well below zero (0). Therefore, it is important to apply salt early in the storm when it will be most effective as a melting agent and will prevent ice and hard pack snow from bonding to the pavement.

### Chemical Application Guidelines

Because air temperature, type of precipitation, and road surface condition affect snow removal operations, the following guidelines have been instituted to assist with the decision-making process concerning chemical application:

**CONDITION 1** Temperature near thirty (30) degrees Fahrenheit; precipitation of snow, sleet, or freezing rain; road surface is wet.

- If snow or sleet, apply wetted salt at a rate of one-hundred (100) pounds per lane mile. If snow and sleet continue and accumulates, plow and salt simultaneously.
- If freezing rain, apply wetted salt continuously at a rate of two hundred (200) pounds per lane mile. If rain continues to freeze, reapply salt at a rate of two hundred (200) pounds per lane mile, as required.

**CONDITION 2** Temperature below thirty (30) degrees Fahrenheit or falling; precipitation of snow, sleet, or freezing rain; road surface is wet or sticky.

- Plow snow and apply salt at a rate of two hundred (200) pounds per lane mile depending upon accumulation rate. If freezing rain, continually apply wetted salt at a rate of two hundred to three hundred (200-300) pounds per lane mile.

**CONDITION 3** Temperature below twenty (20) degrees Fahrenheit and falling; precipitation is dry snow; road surface is dry.

- Plow as soon as possible. Do not apply salt. Continue to plow and check for wet, packed or icy spots and treat them with wetted salt applications at a rate of two-hundred to three-hundred (200-300)

pounds per lane mile.

CONDITION 4 Temperature below twenty (20) degrees Fahrenheit; precipitation of snow, sleet, or freezing rain; road surface is wet.

- Apply wetted salt at a rate of two hundred to three hundred (200-300) pounds per lane mile, as required. If snow or sleet continues and accumulates, plow and salt simultaneously. If temperature starts to rise, apply salt at a rate of two-hundred to three-hundred (200-300) pounds per lane mile and wait for wetted salt to react before plowing. Continue until safe pavement is obtained.

CONDITION 5 Temperature below ten (10) degrees Fahrenheit; precipitation of snow or freezing rain; road surface has accumulation of packed snow or ice.

- Apply wetted salt at a rate of two hundred to three hundred (200-300) pounds per lane mile, or utilize salt treated abrasives (anti-skids) at a rate of one-hundred fifty to two hundred (150-200) pounds per lane mile. When snow or ice becomes mealy or slushy, begin plowing. Repeat applications and plowing, as necessary.

## V. STORM CLASSIFICATIONS

Snow and ice removal operations are nothing more than a battle against the weather. As unpredictable and unstable as Chicago-area weather patterns tend to be, the Public Works Department needs to take whatever advantage it can to win the upper hand in proper management of the events. Satellite weather tracking, the Internet, and Cable TV are all sources utilized to ensure that we stay apprised of developing storm conditions. Also, for the purpose of record keeping, the Township will utilize the National Salt Institute's system of snowstorm classification. This will provide a consistent benchmark against which we can gauge the severity of each event and our performance in each case.

The Public Works Department will classify all storms into one of the three following categories:

### **CLASS A**

A *Class A* storm is characterized by any storm event with two or less inches of accumulation and it involves salting operations with limited plowing.

In the event of a **Class A** storm, the Highway Commissioner will only provide the equipment and workforce necessary to keep the roads clear and safe in accord with the *Snow and Ice Control Plan*. During freezing rain, additional trucks with spreaders may be dispatched to salt all roadways.

### **CLASS B**

A **Class B** storm is characterized by a storm event or an expected storm event with snowfall accumulations of between two and eight inches. A **Class B** storm involves both plowing and salting operations.

In the event of a **Class B** storm, all primary workforce and equipment will be clearing each zone as specified by the Highway Commissioner. The Highway Commissioner will assess any workforce shortages and equipment breakdowns as soon as possible. This is so that planning can take place for the use of alternate drivers. Before the storm arrives, the Highway Commissioner will have as many trucks as possible loaded with rock salt and stored in the Public Works Garage. In this way, the salt will be warm and facilitate the melting of snow as it is applied.

### **CLASS C**

A **Class C** storm will be triggered by a storm event, or an expected storm event, with eight (8) or more inches of accumulation in a twenty-four (24) hour period. A **Class C** storm event can create a severe situation. Life threatening situations can arise because the movement of emergency vehicles can be restricted by accumulating snow.

If an impending **Class C** storm appears imminent, the Township Supervisor and Township Administrator will remain constantly informed of snow removal activities. Preparation for handling the storm will begin as soon as possible. Public Work Employees will be called out as soon as they can be useful. If possible, de-icing operations will begin before the storm arrives. This will help as the storm progresses, and in subsequent clean-up operations. As the storm progresses, the snow fighting effort will concentrate on keeping major roadway arterials and intersections clear until the storm activity slows.

Public Works Administration, located at 2501 Mannheim Road, will serve as the Snow Command Center during a **Class C** storm to answer residents' inquiries, and to communicate any emergency information to the Department of Public Works. After the storm, snow clean-up procedures will begin as soon as possible.

## Snow Alerting Procedures

Because effective snow and ice control begins with a good prognosis of road and weather conditions, the Public Works Department has contracted with an internet-based weather service to provide accurate and detailed storm and road condition warnings. When a storm is expected, the Highway Commissioner can analyze weather conditions by viewing the up-to-the-minute information provided by the weather tracking service. Depending upon the severity of the storm, the Highway Commissioner will decide at what point the snow fighting operations will begin. At times, snow fighting may even begin with a salt spreading application before the storm arrives.

## VI. ACCIDENTS AND SAFETY

### Collision with Another Motor Vehicle

If an employee is involved in an accident while driving a Township owned vehicle, they must contact the Director of Public Works immediately. Human Resources should be notified of any injured victims. The Director of Public works will contact the Cook County Sheriff's Police Department to request that the police, and, if necessary, the paramedics respond to the scene. Any injured individual should be comfortable and protected from traffic; however, do not move an injured person. Reassure the person(s) that a rescue vehicle will be arriving shortly. Do not move vehicles unless directed by the police, or the Director of Public Works. Write down any details of the accident that can be remembered while waiting for the police to arrive. For insurance reasons, do not discuss the accident with the other party. The Public Works Director should notify Human Resource Director of the incident as soon as possible. A complete accident report will have to be completed per the Township's current Accident/Injury Reporting Policy. If any parked vehicle is struck, the same procedures will apply. As CDL drivers we are subject to the Township policy on accidents by CDL drivers in relation to drug testing and procedure. This policy will be followed in any incident that occurs.

### Collision with Other Objects

If garbage cans or other such small objects are damaged by an employee operating a Township vehicle, the employee shall document the occurrence and submit the information to the Director of Public Works immediately. Data provided should include the address, the time the damage occurred, and an explanation of what happened. If the damage involves other than minor incidental snow and ice control incidents, the situation must be immediately communicated to the Director of Public Works.

### Requests for Reimbursement

If a resident inquires about damage to their property potentially caused by a snow removal effort, this information shall be related immediately to the Director of Public Works. The information shall include the complainant's name, address, phone number, and a summary of the claim. The Director of Public Works will investigate the claim, make the appropriate notifications to the Human Resources Directors, file appropriate paperwork, and ensure timely follow-up with the resident.

### Safety

The following safety procedures shall be followed:

- 1) Prior to operation, employees will always thoroughly inspect vehicles and equipment.
- 2) Employees shall report all mechanical problems to their supervisor immediately.
- 3) Employees shall obey all traffic laws and will not exceed the speed limit or use excessive speed and will be certain to stop for all stop signs and traffic signals.
- 4) Employees shall be as helpful and courteous as possible to those who are stranded or those stuck in the snow. Employees shall not pass up a stranded motorist without offering some type of assistance or ensuring that they have help on the way. To ensure the safety of the motorist, employees shall immediately notify the supervisor if the situation requires a police or fire department response. **Drivers shall not risk injury by attempting to manually push a vehicle out of the road. Employees shall never use a Township vehicle to push or pull a privately owned vehicle that has become stuck or stranded.**
- 5) Plowing speeds shall not exceed fifteen (15) to twenty (20) miles per hour (25 is allowed on outskirt streets away from residences). Plowing speed along the curb should be reduced to ten (10) miles per hour. Salt spreading speed should not exceed twenty (20) miles per hour.

Driver performance must ensure the safety of the public and the diligent minimization of potential damage to the equipment.

- 6) As a matter of policy, no public works snow and ice control driver shall drive for more than twelve (12) hours without at least eight (8) hours off work.

### Drug and Alcohol Testing Procedures

Drug and Alcohol testing is performed per the Township's current Drug and Alcohol Testing Policy.

For the purposes of snow and ice control operations, when an accident occurs, anytime someone is injured and/or there is property damage, the driver must take a drug and alcohol test. Supervisors will document the incident via the current Accident/Injury Reporting Policy.

### References

Since drivers, routes, maps, and policies are reviewed and adjusted with frequency, they are not included in this document, but are available upon request.