

CITY OF HIGHLAND PARK

SNOW AND ICE

CONTROL MANUAL

2018/2019

Department of Public Works
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Highland Park, Illinois
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1A INTRODUCTION- TRANSMITTAL MEMO

September 1, 2018

To: Ghida Neukirch, City Manager

From: Ramesh Kanapareddy, Director of Public Works

Subj: Snow and Ice Control Procedures: **ICE AND SNOW CONTROL MANUAL 2018 - 2019**

To ensure that the City is able to respond in a timely manner to this coming winter's snow and ice, the Department of Public Works' has prepared the **ICE AND SNOW CONTROL MANUAL 2018 - 2019**.

Snow and ice control is the single most visible and short-term important task performed by Public Works. It is also a task that has no room for failure; timely response and effective execution against variable conditions are essential. This plan formalizes the guidance and procedures for the employees in Public Works and other City agencies. In addition, the plan provides essential information to allow City Officials to explain the City's approach to snow and ice removal. Additional detailed maps and information is available at the Public Services Building.

This manual details the resources, (material, equipment, and personnel) plans, and procedures that will be followed under various weather conditions.

The following levels of effort are detailed in this plan:

1. Initial deicing effort, which includes salting all arterial streets, emergency locations (hospital), bus routes, bridges, known "trouble" spots, and areas identified by the Police, is normally handled with two trucks and is usually sufficient for snowfalls of less than one half inch.
2. Once initial routes have been salted, residential routes are salted as appropriate.
3. Snowfall projections of an inch or more, begins full salting and snowplowing operations, which involve ten trucks.
4. When the snowfall is anticipated to exceed four inches, four additional trucks may be assigned to plow the "short plow routes" (alleys, short streets and dead end routes).
5. When the storm is severe, four trucks will plow the main routes in tandem with additional trucks committed to the main routes as resources allow.

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6. During business hours, an additional plow truck may be assigned to the business area to help clean the streets.
7. Thirty-nine (39) parking lots and other parking areas are plowed by a contractor under the supervision of the Public Works Department.
8. Salt and salt-brine are applied to help break the bond of snow/ice from the street surface which expedites the snow removal and improves driving conditions.
9. There are six (6) residential sidewalk routes established to plow snow from all sidewalks throughout the City. These are plowed following snowfalls in excess of four (4) inches by a contractor under the supervision of the Public Works Department.

Additionally, there are two (2) sidewalk plow routes through the business districts. Sidewalks on City properties, in the CBD and in the vicinity of the train stations are hand shoveled by contract. The sidewalk-clearing contractor also will clear openings in the CBD onto the streets from the sidewalks (curb-cuts).

1B DECLARATION OF EMERGENCY CONDITIONS

To facilitate passage of emergency vehicles, transportation of school children and to promote commerce, the City of Highland Park declares the removal of snow and ice from public right-of-way to constitute an EMERGENCY ACTIVITY. Snow and ice removal is for the benefit of the residents of this municipality and is not intended to impose criminal or civil liability by virtue of compliance or non-compliance with the snow plan.

1C SNOW AND ICE CONTROL OBJECTIVES

GOAL: The goal is to maintain safe vehicular and pedestrian traffic on publicly maintained streets and sidewalks. Traffic movement on all arterial streets will receive priority attention before cleaning residential streets.

To support this **GOAL**, the following **OBJECTIVES** have been established.

1. The designated initial salt routes (arterial, bus routes, emergency sites and “trouble spots”) are to be salted within two (2) hours of call out. Residential routes (salting only) will be complete within four (4) hours of call out.
2. The first cycle of plowing on the designated main routes will be completed within three (3) hours after initiation of plowing operations. These routes will continue to be plowed until snowfall abates.

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3. The initial plowing of all residential plowing routes will be accomplished within five (5) hours after the initiation of plowing operations. Additional plowing effort will be required to "curb" the snow and fully open up the streets.
4. All "short plow routes" will be completed within eight (8) hours, once started.
5. All designated commuter parking lots will be plowed by 6:00 a.m. each weekday morning after a snowstorm has abated. The remaining parking lots will be cleaned by 9:00 a.m.
6. For snowfall totals greater than four (4) inches, all designated sidewalk-plowing routes will be completed within 24 hours on a weekday after the street plowing operation has been completed.
7. All designated sidewalks in the CBD will have had an initial path plowed by 8:00 a.m. each morning after a snowfall of at least one-half (1/2) inch of snow.
8. The City contractor will shovel sidewalks and curb openings throughout the CBD.
9. All sidewalks adjacent to City properties and designated sidewalks within the Central Business District and Ravinia Business District will have an ice melting product or rock salt applied after being shoveled.

In order to maintain safe vehicular traffic, snow and ice removal emphasis will be on the primary street routes (arterial). Although bare pavement is desirable, it is not attainable; and even after the removal effort has been completed, bare pavement may still not be possible due to environmental factors. While all residential streets will be plowed and salted, the amount of salt applied will usually not result in bare pavement.

The City's snow removal budget includes funds for at least the minimum required purchase of 2,800 tons of salt. Salt brine will be applied to the salt during application to reduce salt usage and to activate the deicing process. When the City's salt inventory drops to 500 tons, the salt application procedure may be sharply reduced to require a mixture of 2 parts sand and 1 part salt applied only at intersections and problem points.

If requested, the City will store salt to be used by School Districts 112 & 113, the Park District of Highland Park, and the City of Highwood. The City is reimbursed salt costs at the end of the snow season.

1D ON-STREET PARKING RESTRICTIONS

Sec. 72.015 Parking prohibited in certain places.

(C) No person shall stop, stand, or park a vehicle, except when necessary to avoid conflict with other traffic or in compliance with the directions of a police officer or traffic control device, in any of the following places:

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(15) In excess of 15 minutes upon any street or any public parking lot between the hours of 2:00 a.m. and 6:00 a.m. on any day during the months of December, January, February, and March; provided, however, that this Subparagraph 72.015(C)(15) shall not apply to vehicles parked in the parking areas provided in Subparagraph 72.020(B)(1)(a)(i) of this Chapter or to attended vehicles for hire in areas marked by City Traffic Signs as a taxicab stand or a public loading platform. (Ord. 15-02, J. 28, p. 57-62, passed 4/8/02)

1E RESPONSIBILITIES

The monitoring of winter storms and the task of keeping vehicular traffic moving on Highland Park's 156 miles of street during the storm is the responsibility of the Public Works Department with the Director of Public Works having overall responsibility for ensuring effective and efficient implementation of this plan.

Selected actions include:

1. Analysis of storm warnings.
2. Initiation of the type, timing and amount of effort.
3. Assignment of personnel.
4. Initiation of snow plowing of the six (6) sidewalk routes.
5. Administration of the Sidewalk Shoveling, Snow Removal Services (parking lots), and Snow Hauling Contracts.
6. Inclusion of all available Public Works employees.
7. Ensuring that all pieces of designated snow control equipment are properly outfitted, ready for use during snow operations and repairing critical equipment immediately for additional use.

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1F HOLIDAY AND TIME-OFF POLICY

Date: September 1, 2018
To: All Public Works Employees
Fm: Ron Bannon, Deputy Director
Subject: 2018/2019 Winter Vacation Policy

Although employees are entitled to take vacations during the holiday periods, the City’s residents are entitled to receive prompt and efficient responses to all emergencies, including the removal of snow and ice. As has been done in the past, limitations on the number of employees on vacation during selected time periods have been established to reduce conflicts.

During the below listed periods, maintenance personnel assigned to the Streets, Sewer and Water Sections will be permitted to be on approved vacation in the shown percentages of available full and part-time maintenance workers as per the following:

Section	11/21 thru 11/26*	12/21 thru 01/02**	All other dates***
Streets/ Sewer/ Water	25%	25%	12.5%

- * November 21 (Wednesday) beginning at 3:30 p.m. and ending November 26 (Monday) ending at 7:00 a.m.
- ** December 21 (Friday) beginning at 3:30 p.m. and ending January 2 (Wednesday) at 7:00 a.m.
- *** November 1 (Wednesday) beginning at 7:00 a.m. and ending April 16 (Monday) at 7:00 a.m.

Employees desiring to have time off during these periods should discuss them with their supervisor and then submit a vacation request to the Superintendent for approval. Approvals are **on a “first come, first serve basis”**.

Once the numbers of vacation requests for any day are filled, additional employees can take time off but with the understanding that they will be required to return to work when called.

Employees exercising this option will not be shown on the schedules that are posted by the time clock.

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2. STORM WARNINGS AND ALERTS

- A. GENERAL
- B. NON-FORECASTED ALERTS
- C. CALL OUT
- D. CONTINUING OPERATIONS

2A GENERAL

The analysis of storm warnings which support the decisions regarding the extent and timing of operations is the least tangible but perhaps the most vital of all elements of an ice and snow control operation.

On-line weather information is used to determine the impact of storms and the need for salting operations. The weather information includes the type of storm expected, timing and duration, amount of precipitation, temperature and wind conditions.

The Street Foreman supervises the snow and ice control operation during regular hours of operation. The Duty Foreman will supervise the snow and ice operation outside of regular operating hours. Should a second emergency task arise, the designated back-up supervisor is contacted to assist in the management of either the snow and ice control operation or the other emergency. The follow-on Duty Foreman will take over snow and ice operations upon the activation of a 2nd Shift to continue uninterrupted snow and ice operations.

2B NON-FORECASTED ALERTS

Since every storm and its impact cannot be forecasted, the Public Works Department is prepared to respond to unanticipated storms in an organized and timely manner. The following procedures are to be followed under such conditions:

1. The Police Dispatcher will notify the Duty Foreman whenever icing problems are noted. The dispatcher will contact the Duty Foreman of the problem by telephone.. The Duty Foreman will determine the appropriate level of response.
2. Two (2) Public Works trucks with full salt loads will be pre-positioned for ready activation during any potential winter storm period. The Duty Foreman will dispatch the salt truck operators.

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3. Should the two salting vehicles be unable to handle the icing conditions, the Duty Foreman will be advised of the problem and additional personnel will be called in to assist.
4. Should full activation of ten or more vehicles be required, the Director and Deputy Director will be notified.

2C CALL OUT

All Public Works Maintenance Workers are to support the snow removal requirements. Order of call out is determined by a weekly, rotating on-call list. The personnel "On-Call" will be posted in the Public Works building. Depending upon the severity of the storm, the Duty Foreman will contact the appropriate number of personnel to respond to the emergency.

Since snow and ice control constitutes an Emergency Event for the City, personnel assigned to the on-call list must respond when called within five (5) minutes and arrive at Public Works building within one hour unless other guidance is provided by the Duty Foreman. A detailed description of the call-out procedure including the Snow and Ice Removal Team Policy is identified in Appendix "a".

The Small Truck Team may be comprised of City employees other than full-time maintenance workers who are available for back-up support.

The Duty Foreman will initiate the call-out, supervise the snow removal activities and notify the designated Follow-on Foreman (if required to supervise the following snow removal shift).

Salting personnel are identified on the On-Call list.

It is the responsibility of the Duty Foreman to notify the parking lot contractor to initiate the plowing of the parking lots.

It is the responsibility of the Duty Foreman to notify the sidewalk contractor to initiate the plowing of the six sidewalk routes (after four inches of accumulation).

For plowing the two trackless routes, the Duty Foreman will utilize capable employees available from the On-Call list.

2D CONTINUING OPERATIONS

When the accumulation of snow exceeds four inches, the Duty Foreman will ensure that the designated City-wide sidewalks routes are cleared. The Duty Foreman will also advise the sidewalk shoveling contractor to begin shoveling as per the contract which includes clearing the landing at the railroad stations, the sidewalks of City-owned facilities, and those sidewalks designated within the CBD.

3. ICE CONTROL PROCEDURES

- A. GENERAL
- B. SALT APPLICATIONS
- C. SALT STORAGE
- D. REPORTING

3A GENERAL

The initial response for ice control is to spread rock salt (sodium chloride) treated with liquid salt brine and with calcium chloride, if required. This salting response for Mains and Arterial Streets will continue as required to support safe vehicular traffic. Due to many factors, the application of deicing agents will not guarantee bare pavement conditions.

If the snowfall is projected to be an inch or greater, the plow trucks may be required to cease salting and to begin solely plowing when pavement conditions require. Salting will begin again once the snow fall is completed and any salt placed on the roadway will not be plowed off.

Liquid calcium chloride will be sprayed onto the salt when salt is to be applied to streets when the outside temperature is lower than 20 degrees Fahrenheit (20° F). Under more favorable temperatures, rock salt with brine solution can melt up to two inches (2") of snow and reduce the bond of compacted snow to the pavement, making the plowing operation more effective.

When temperatures are below 10° F, and where the temperature is not predicted to rise shortly, sand may be mixed with salt in order to provide traction. Once the temperature rises, the salt will be effective.

Rock salt treated with calcium chloride is not effective below 5° F.

When there is less than 500 tons of salt in storage, salt application may be limited to intersections, known trouble spots and main arterial roads. The Director of Public Works will approve the issuance of all salt when the inventory is below 800 tons.

3B SALT APPLICATIONS

All salt spreaders are calibrated and rated in terms of pounds per single lane mile.

The Deputy Director or designee is responsible for ensuring that each salt spreader is calibrated so the following application rates can be followed.

Type of Storm

Procedures

CONDITION 1

Temperature - at or above 30° F
Precipitation - snow, sleet
or freezing rain
Pavement Condition - wet, ice
or snow

On Primary Routes, if freezing rain, apply salt/brine at 300 lbs. per lane mile. If sleet or wet snow, apply salt at 400 lbs. per lane mile. For sleet or snow conditions for residential routes, apply salt at 300 lbs. per lane mile, if needed for safe travel. Otherwise, salt at the intersections and known trouble spots.

CONDITION 2

Temperature - below 30° F or
falling to above 20° F
Precipitation - snow, sleet
or freezing rain
Pavement Condition - ice or
Snow

On Primary Routes, apply salt at 400 lbs. per lane mile. If snowfall continues and accumulates beyond 1 inch in depth, plow and repeat salt application at 350 lbs. per lane mile after snowfall abates. For Residential Routes, apply salt at 300 lbs. per lane mile if needed for safe travel. Otherwise, salt at intersections and known trouble spots.

CONDITION 3

Temperature - below 20° F and
falling to above 5° F
Precipitation - snow, sleet
or freezing rain
Pavement Condition - ice or
Snow

For Primary Routes, apply salt at 400 lbs. per lane mile. If snowfall continues and accumulates beyond 1 inch in depth, plow and repeat salt application at 300 lbs. per lane mile after snowfall abates. For Residential Routes, apply salt at 300 lbs. per lane mile for sleet or snow if needed for safe travel. Otherwise salt at intersections and known trouble spots.

CONDITION 4

Temperature - below 10° F and
Falling
Precipitation - snow or
freezing rain
Pavement Condition - ice or
Snow

For Primary Routes, apply abrasives with salt at a rate of 400 lbs. per lane mile. When snow or ice becomes slushy, remove by plowing. Repeat application at a rate of 400 lbs. per lane mile and plow as necessary. For Residential Routes, apply abrasives with salt at 300 lbs. per lane mile if needed for safe travel. Otherwise, salt at intersections and known trouble spots.

3C SALT STORAGE

The salt dome at the Public Works Campus will store about 2,200 tons of salt. Annual average salt usage is about 4,000 tons. With the utilization of Salt Brine the City has reduced its salt usage to between 75 and 100 tons of salt for an "average" winter storm. During salting operations, a front-end loader will be located at the salt dome to facilitate the loading of salt into the trucks. As noted earlier in this manual, two trucks will be loaded prior to the end of each day's work shift.

3D REPORTING

For the purpose of performance evaluation, as well as the necessity to document the ice control operations, accurate information on the work accomplished must be kept. Since private streets are plowed and salted on a reimbursable basis, and to document all operations, the **STORM SUMMARY REPORT** will be prepared and submitted, as shown in Appendix "j".

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4. SNOW PLOWING PROCEDURES

- A. GENERAL
- B. EQUIPMENT
- C. PLOWING ROUTES
 - o Tandem Routes
 - o Residential Routes
 - o Short Plow Routes
- D. PRIVATE STREETS
- E. EMERGENCIES AND COMPLAINTS
- F. POLICE EMERGENCIES
- G. REPORTING

4A GENERAL

Highland Park (Chicago area) is situated within the "moderate" snowfall band. Based upon data beginning in 1884, the annual average snowfall is 33.5 inches with a high of 89.7 inches (1978-79) and more recently 82.0 inches (2013-14) and low of 19.8 inches (2011-12).

The Director and Deputy Director will be advised of all plowing operations.

In general, plowing operations will begin when snow or slush accumulations have reached approximately one (1") inch. The plowing operations will be initiated by the Duty Foreman mobilizing ten (10) plow trucks for the ten Residential Routes. During the weekday period an additional truck may be assigned to plow snow throughout the business district.

If the snowfall is projected to reach four (4) inches, four additional trucks may be mobilized to plow alleys, short streets and dead ends. This additional effort will be timed to occur near the latter part of the main plowing effort and when the depth of snow makes travel on these short streets difficult.

4B EQUIPMENT

The City possesses 24 street plowing vehicles, all of which are equipped with salt spreaders. Other support equipment is detailed in Appendix "b". In general, sufficient plowing vehicles are available to handle the Main and Residential routes simultaneously. However, due to manpower limitations, equipment breakdown, or the necessity to augment the Main Plow Routes, some of

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the Residential Routes may not be plowed until the Main Route plowing actions are proceeding satisfactorily.

All of the plow trucks have quick coupling plow mounts so the front-end plows can be mounted quickly. In addition to the street plowing vehicles, the City has two front-end loaders, two snow blowers (non-trackless), and four trackless sidewalk plows.

Each truck operator will be required to check their assigned vehicle before and after use and to make out repair tickets as needed when the vehicle is returned to the garage at the end of the shift. It will be the responsibility of the Equipment Section Foreman to determine if a vehicle can be operated safely prior to the correction of deficiencies.

At the conclusion of the snowplowing event, all equipment will be cleaned.

At the completion of each plowing shift, each operator must complete the daily plowing report. This information will be consolidated into the SALTING/PLOWING EVENT REPORT (Appendix "j").

4C PLOWING ROUTES

MAIN ROUTES: The initial response begins with the plowing of two designated Main routes, as shown in Appendix "c", which generally parallel the two salting routes. The Main Routes include the arterial streets, bus routes and emergency routes and are configured so four plow trucks can plow independently while residential routes are being plowed.

If the snowfall is intense, tandem plowing will be implemented on the two Main Routes. The tandem plowing operation consists of the lead plow truck (2½-ton) in the center lane followed closely by a 5-ton plow truck that moves the snow to the curb. The 5-ton truck will apply salt at the prescribed rate. Each of the tandem routes is approximately 34 miles long and can be plowed at approximately 15 MPH. At this speed, each Tandem Route will be plowed in approximately 1½ to 3 hours per route. If required, the Main Routes will be plowed in tandem until the storm abates and/or the routes are cleaned. Once the need for the tandem plowing has abated, the Duty Foreman will assign these plow trucks to the Residential Route system.

RESIDENTIAL ROUTES: The City is divided into 10 Residential Routes as shown in Appendix "d". Depending upon the time of day, snowfall, availability of manpower and equipment, the Residential Routes will usually be plowed at the same time as the Main Routes. Streets will be plowed in both directions and will frequently require 3 to 4 passes in order to move the snow to the street's edge. Each of the Residential Routes is about 15 miles long (about 45 to 60 plowing miles). Residential Routes will be plowed at an average speed of 8 to 10 MPH, so most routes will be completed in about 6 hours if the plowing is uninterrupted.

The initial street plowing will typically not push the snow to the curb. After the first pass of the plow to open up the street, the operator will begin clearing the street by plowing the snow to the curb. With the storm drain inlets exposed, the melt water can drain away from the street.

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SHORT PLOW ROUTES: A significant number of streets are too narrow or so configured that the use of the smaller standard 2½-ton plowing vehicle is not efficient. These streets are listed on four short plow routes as detailed in Appendix "e" and are plowed with pick-up and one-ton dump trucks. The streets on the Short Plow Route are numbered sequentially. With each new storm, the plow operator will begin plowing 10 streets ahead of the first street plowed in the prior storm. Each of these routes takes about 8 hours to complete. Salt will then be spread with one-ton trucks because the pick-ups do not have salt spreading attachments. The salting should take about four hours to complete.

Depending upon the manpower available, the Short Plow Route may not be plowed early in the storm.

4D PRIVATE STREETS

The City will plow private streets on a cost reimbursable basis under the following conditions:

1. The residents from the street must enter into an Agreement with the City.
2. The street must be of sufficient width to enable a plow to clear the street without damaging the adjacent plants, trees and other private property.
3. A contact person, representing the street residents, will be designated to permit coordination with the Department.
4. The City will provide the contact person with an estimate of costs for the plowing service based upon the past winter period. The City costs reflect both equipment and labor charges that are applied to any work performance on private streets.
5. All residents on the street must agree to the plowing.
6. Costs will be billed in one-half hour increments. An invoice will be sent to the street representative at the conclusion of the winter season.

Depending upon the location of the Private Street, the plowing may be incorporated into the most logical Plow route for that area. (See City Code Chapter 93: Section 93.346 Service and Maintenance of Private Roads)

4E EMERGENCIES AND COMPLAINTS

The established snow plowing routes provide quick and efficient overall removal of snow. Deviations from these routes result in a less efficient overall removal of snow. Consequently, no plow operator will deviate from the designated route unless so directed by the Director or Deputy Director of Public Works, or designee. If police, fire or medical emergency requires an interruption of a normal plowing operation, the request must be made through the Duty Foreman who will direct a particular snowplow to respond to the emergency request. During a full

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mobilization, a separate salting/plowing vehicle may be assigned to respond to the emergency requests.

Due to the inability to change the orientation of the plow blade, snow is frequently pushed across driveway entrances. Snowplow operators who clean out private driveways will be disciplined. Complaints concerning the plowing in driveways are normally the most numerous. **ALL REQUESTS TO CLEAN OUT PLOWED DRIVEWAYS WILL BE POLITELY REFUSED.** Should a caller refuse to hang-up during a snow event, the call may be terminated in order to open up communication lines for other service requests or emergencies.

Specific complaints will be handled as soon as practical but shall not interfere with the expeditious completion of the plowing operations underway. Normal complaints will be handled only after operations have been completed.

4F REPORTING

Reporting requirements for plowing are to be included in the **PLOWING/SALTING EVENT REPORT** and will be prepared and submitted, as shown in Appendix "j".

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5. SIDEWALK PLOWING PROCEDURES

- A. GENERAL
- B. EQUIPMENT
- C. OPERATIONS
 - o Sidewalk Plowing and Trackless CBD Routes
 - o Streetscape Sidewalks
 - o Commuter Access
 - o City Properties
 - o Other locations
- D. CALL OUT
- E. REPORTING

5A GENERAL

In order to facilitate pedestrian travel following snowstorms, the Public Works Department has developed six sidewalk snowplowing routes covering approximately 120 lineal miles of sidewalks. In the event snowfall has accumulated to 4” or greater, all City sidewalks will be plowed. Sidewalks have been prioritized based upon the following criteria:

PLOWING ONLY

1. Sidewalks leading to schools where a minimum of ten elementary school children (grades K through 5 for District 112) might walk.
2. Commercial area sidewalks in the Central Business District and Ravinia Business District.
3. Other sidewalks in front of City-owned property including City buildings, parking lots, and Ravinia Train Station.
4. Sidewalks on one side of the street, within a one-half mile radius of each of the train stations.

PLOWING /HAND SHOVELING AND SALTING

1. Streetscape sidewalks – only plow with trackless. Private contractor clears the sidewalks fully.
2. Streetscape curb cuts – hand shoveling.
3. Braeside Station – walks and stairs.
4. Ft. Sheridan Station – sidewalk on City side.

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5. Central Station – walks, stairs and all approaches.
6. Ravinia Station – walks, stairs, platforms and all approaches.
7. Block 15 Parking Garage - walks, stairs and all approaches.

In general, the above tasks are focused on the high pedestrian volume sidewalks. Areas or other sidewalks that are **not** plowed by the City are the responsibility of the abutting property owners or merchants.

Salt will routinely be applied after hand shoveling, if icy sidewalk sections of City Properties are identified, additional salt will be applied. The application of salt is intended to improve the area but does not ensure “bare” sidewalks.

5B EQUIPMENT

To clear the School Plowing Routes, three Sidewalk Plows with mounted “v” plows are used.

5C OPERATIONS

SIDEWALK PLOWING AND TRACKLESS CBD ROUTES

These routes are designated for snow plowing only; no salting or other ice control measures are undertaken on these routes. It must be noted that the sidewalk snowplows can not remove the snow to bare pavement. Often an inch of snow will remain after plowing is completed. The Sidewalk Route master map is shown in Appendix “f” and the CBD Trackless Plow Route is shown in Appendix “g”.

STREETSCAPE SIDEWALKS

Select sidewalks in and adjacent to the CBD from Hickory Street to Sheridan Road will be hand shoveled by the City’s sidewalk contractor. Non-corrosive ice-melt product is used in areas where there are brick pavers and rock salt is used on the concrete sidewalks.

COMMUTER ACCESS

Within one-half mile of each train station, sidewalks will be plowed for commuter traffic. The City sidewalks in the vicinity of the Fort Sheridan train station area are included in this plowing plan.

CITY PROPERTIES

The sidewalk adjacent to the City-owned buildings and parking lots will be cleared and salted.

OTHER LOCATIONS

Other locations which include crosswalks in the commercial areas, handicapped ramps, train station steps at the Central and Braeside Stations (but not platforms), as well as the Ravinia Station including the train platform, etc., will be hand-shoveled and salted.

A private contractor, under contract will perform hand shoveling with the City for the CBD sidewalk intersection corners, City properties and other special areas identified in Appendix “h”.

5D CALL OUT

The Duty Foreman initiates the sidewalk snow and ice control activities. A Public Works Department employee will inspect the sidewalk shoveling contractor’s work.

Salting on City properties will usually be completed by 7:00 a.m.

The plowing of the sidewalk routes will be initiated when snowfall is projected to exceed four inches (4”) in depth.

5E REPORTING

The Duty Foreman will record the starting time of the initiation of each route and the time of completion. The sidewalk contractor will submit a summary of work performed at the conclusion of each event and this will detail work performed each day of the shoveling event.

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6. PARKING LOTS

- A. GENERAL
- B. CALL OUT PROCEDURE
- C. INSPECTIONS

6A GENERAL

The plowing of City operated parking lots is contractual:

1. Contractual plowing of 39 lots and parking areas by Public Works Contractor, as shown in Appendix “i”.

The standards for snowplowing of City operating parking lots are:

1. All commuter lots are to be plowed by 6:00 a.m. and all other lots plowed by 8:00 a.m.
2. Plowing will start when snowfall is projected to exceed two inches (2”) in depth.
3. If snowfall continues during the day, all lots are to be plowed again before 6:00 a.m. the following day, if required.
4. For permit parking, where cars are parked all night on Monday, Wednesday, Friday and Sunday nights – cars park on east and north side of lots.
5. For permit parking, where cars are parked all night on Tuesday, Thursday, and Saturday nights – cars park on the west and south sides of lots.
6. Plow **all** snow to the ends of the lots to facilitate easy removal. Several spaces will be utilized to store plowed snow, which is to be removed as quickly as possible.
7. For long parking lots, pile the snow at both ends, using as few stalls as possible.
8. If there is an excessive amount of snow, leave a windrow of snow down each side of the lot in front of bumper blocks.
9. Never push snow over end curbs or side curbs in order to minimize damage to shrubbery and parking meters.
10. If a parking meter is damaged, the Duty Foreman will be notified as soon as possible, so the damage can be repaired before a vandalism claim is filed or revenue is lost.

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11. Salting of lots will be completed by Public Works' crews prior to 6:00 a.m., or upon completion of plowing. Salting procedures follow those outlined for Street operation, i.e. whenever the streets are salted; the adjacent parking lots will be included.

6B CALL OUT PROCEDURE

The Duty Foreman, who will call the parking lot contractor, implements the call out procedure. The contacted parking lot contractor will mobilize sufficient crews necessary for the plowing operations.

6C INSPECTIONS

The Duty Foreman will inspect parking lots prior to 6:00 a.m.

7. SNOW HAULING

- A. LOCATIONS
- B. OPERATIONS
- C. DISPOSAL SITES
- D. REPORTING

7A LOCATIONS

The City will haul snow from the Central Business District and the Ravinia Business when snow accumulations are interfering with the access to the adjacent businesses. Snow will also be hauled from all city-operated parking lots when snow accumulations interfere with access to meters or when parking spaces have been temporarily utilized for snow storage. Hauling from parking lots is often the last operation of a snow event.

7B OPERATIONS

During normal plowing operations, snow is plowed to the curb and end parking stalls for storage. The snow will be hauled as a night operation. Snow will be moved from the curb area onto the street utilizing a combination of City employees operating City equipment and the snow shoveling contractor utilizing approximately 30 laborers. This operation will normally begin at 9:00 p.m. in the CBD. Contractual trucking operations begin at 10pm in the CBD utilizing a minimum of 6 trucks for 8 hours. Windrowing will be accomplished by utilizing the loader. The trucks will be loaded with front-end loaders and/or the Snow-Go Blower.

7C DISPOSAL SITES

All hauled snow will be stored at designated parking lots, including, but not limited to; the Water Plant, Ravinia Park west lot, the Aqua Park and the NSWRD at Clavey Rd. Since snow hauling utilizes residential streets, every effort will be made to reduce noise during the nighttime operations.

7D REPORTING

Reporting requirements for snow hauling are to be included in the **SNOW HAULING SUMMARY REPORT** and will be prepared and submitted, as shown in Appendix "k".

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8. EMERGENCY COMMUNICATIONS CENTER

- A. GENERAL
- B. EMERGENCY COMMUNICATIONS CENTER
- C. STAFFING
- D. STATUS REPORTING

8A GENERAL

Activating the Emergency Communications Center (ECC) will be rare because the vast majority of snowstorms are less than eight inches (8”) in depth and most events can be managed without implementing special communications procedures.

The objectives of the ECC are:

1. To centralize the monitoring and control of on-going storm operations for operational decision making.
2. To provide a central point of public contact for the issuance of information.
3. To provide a single contact point to news media for accurate status information.
4. To provide a central location from which accurate information can be provided to the City Administration and City Officials

8B EMERGENCY COMMUNICATIONS CENTER

The ECC will be located in the Public Works Building, 1150 Half Day Road, first floor, in the main office.

TELEPHONES: The ECC will utilize the following telephone numbers

1. Public Access Number 847-432-0807 “rolls over” to three other telephone lines. The main telephone consoles, at the Public Works administrative desks, can monitor many additional telephone lines.
2. The employees unpublished number 847-926-1157 will ring to voice mail and will record all incoming calls.

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RADIOS: The ECC will be equipped with two radio desk sets, allowing direct radio contact with the Duty Foreman, Public Works snow removal equipment operators, and the police dispatcher. The police dispatcher will monitor the Public Works radio band.

8C STAFFING

Upon the declaration of an emergency situation, the ECC will be staffed to answer all calls received on the public line (847-432-0807), and assist in the direction and coordination of snow control operations. If the number of telephone calls and/or severity of the snowstorm necessitate, additional personnel will be called in to assist in the ECC.

8D STATUS REPORTING

The Duty Foreman will record the start and completion times of the ten Snow Plow Routes and pass this information to the ECC. All snow plow operators will be required to provide periodic reports upon request.

The ECC operation will be terminated only after the emergency has abated. The Director will initiate termination.

APPENDIX

- a. SNOW AND ICE REMOVAL TEAM POLICY
- b. EQUIPMENT INVENTORY
- c. ARTERIAL SALT ROUTES (East & West Routes)
- d. SALT AND PLOW ROUTES
- e. SHORT PLOW ROUTES
- f. RESIDENTIAL/SCHOOL SIDEWALK PLOWING ROUTES
- g. BUSINESS DISTRICTS “TRACKLESS” SIDEWALK ROUTES
- h. HAND-SHOVELING ROUTES (School crossings and secondary routes)
- i. PARKING LOTS UNDER CONTRACT
- j. SALTING/PLOWING EVENT SUMMARY REPORT
- k. SNOW HAULING SUMMARY REPORT

Appendix “a”

MEMORANDUM

September 1, 2018

To: All Public Works Employees

Fm: Ron Bannon, Deputy Director

Subject: Snow and Ice Removal Team Policy

Every year, the City Council approves the annual Snow and Ice Control Plan. This Plan details the functions performed by employees assigned to Public Works.

Elements of the Snow and Ice Control Plan are the following:

- a. The Snow and Ice removal season will be from November 1, 2018 through April 15, 2019 (per CBA terms).
- b. There will be two plowing teams designated as Yellow and Blue. The Yellow Team will be the primary team, comprised of the first 10 employees to be called in a snow and ice event. The Blue Team will be comprised of the next 10 employees in the rotation, which will be called when the snow plowing operation expands, or the operation goes to 12 hour shifts. A Small Truck Team may be assembled to work in conjunction with the Yellow and Blue Teams, based on available personnel and operational needs. Yellow and Blue Team employees will be rotated on a weekly basis.
- c. The top two (2) Yellow Team employees are designated for first response salting operations and will be rotated weekly.
- d. If the salting requirements increase, additional employees will be called in to assist. Ten (10) employees, utilizing the Yellow Team members first will perform full salting/plowing.
- e. When the piled snow in the parking lots and streets creates a substantive parking problem, it will be hauled away, usually on the next evening following the completion of that snow plowing event.
- f. Every Monday morning, the Winter Call Out List will be posted by the time-clock and in the Foreman’s office.
- g. The contact with each employee will be made by calling the individual’s designated emergency/after hours telephone number.
- h. Each employee is required to keep their emergency/after hours contact information up to date on the list and with management. Failure to do so, will not relieve the employee from his/her responsibility of being on call or responding when called.

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- i. Once advised, the employee contacted has one hour (unless so advised to the contrary by the Duty Foreman) to report for duty at the Public Works Building. In the event the call is missed, the employee **IS REQUIRED** to contact Public Works within five (5) minutes of being contacted to acknowledge notification of the call and receive the necessary information regarding the reason being contacted.
- j. Employees able to efficiently operate the sidewalk plows will be identified on the Team listings.

RESPONSIBILITY:

YELLOW TEAM

These are the first 10 employees who will be called to respond to the first shift of snow removal. Within this team are identified specific employees who will perform the initial salt spreading operations.

BLUE TEAM

These team members are the next Public Works Maintenance Workers who will be called to augment the YELLOW Snow Removal Team. The listing of employees will be rotated each Monday morning effective 7:00 a.m., unless other direction is received. Although each employee will be required to respond to every call, absence can be scheduled in advance if approved by the Deputy Director or designee. Once approved, the team roster will be annotated to show that the absence is authorized.

SMALL TRUCK TEAM

A Small Truck Team may be assembled to work in conjunction with the Yellow and Blue Teams, based on available personnel and operational needs.

SIDEWALK PLOWING PERSONNEL:

Select Maintenance Workers from the Winter Call Out List have been designated as being qualified to efficiently operate the various sidewalk plows and they are required to respond when contacted. Operation of the Trackless machinery will be limited to the few employees who have had substantial experience in its operation. As needed, the trackless operator(s) may need to exchange with other employees in order to complete the necessary sidewalk plowing.

ROTATION OF EMPLOYEES

- The Yellow and Blue Team members will be the rotated weekly with the Yellow Team being called first.
- The Small Truck Team members will NOT rotate.

EQUIPMENT MAINTENANCE SUPPORT

The Duty Foreman will contact the designated equipment maintenance employee to ensure that adequate equipment maintenance support is present during the snow plowing/salting activities. The Deputy Director or designee will ensure that at least one employee is present during all snow plowing events.

SUPERVISORY SUPPORT

If needed, the Duty Foreman may contact the designated supervisor, who will augment the administration of the snow removal operation.

OTHER EMERGENCIES

When other emergencies occur, an attempt will be made to use the normally responsible division's employees.

DISCIPLINE

Every employee is expected to respond when contacted. Failure to respond to a call-out will be reviewed for possible disciplinary action. The employee will meet with the Duty Foreman, the Deputy Director and the Director to discuss the facts of the failure to report for work. Disciplinary action may be taken with an employee up to and including termination.

VACATION REQUESTS

Employees desiring vacation need to submit their vacation requests to the Public Works Deputy Director or designee for review. The approved vacation schedules will be posted on rosters by the time clock.

A separate memorandum will be posted advising all Public Works employees of the numbers of employees who can be absent at any one time.

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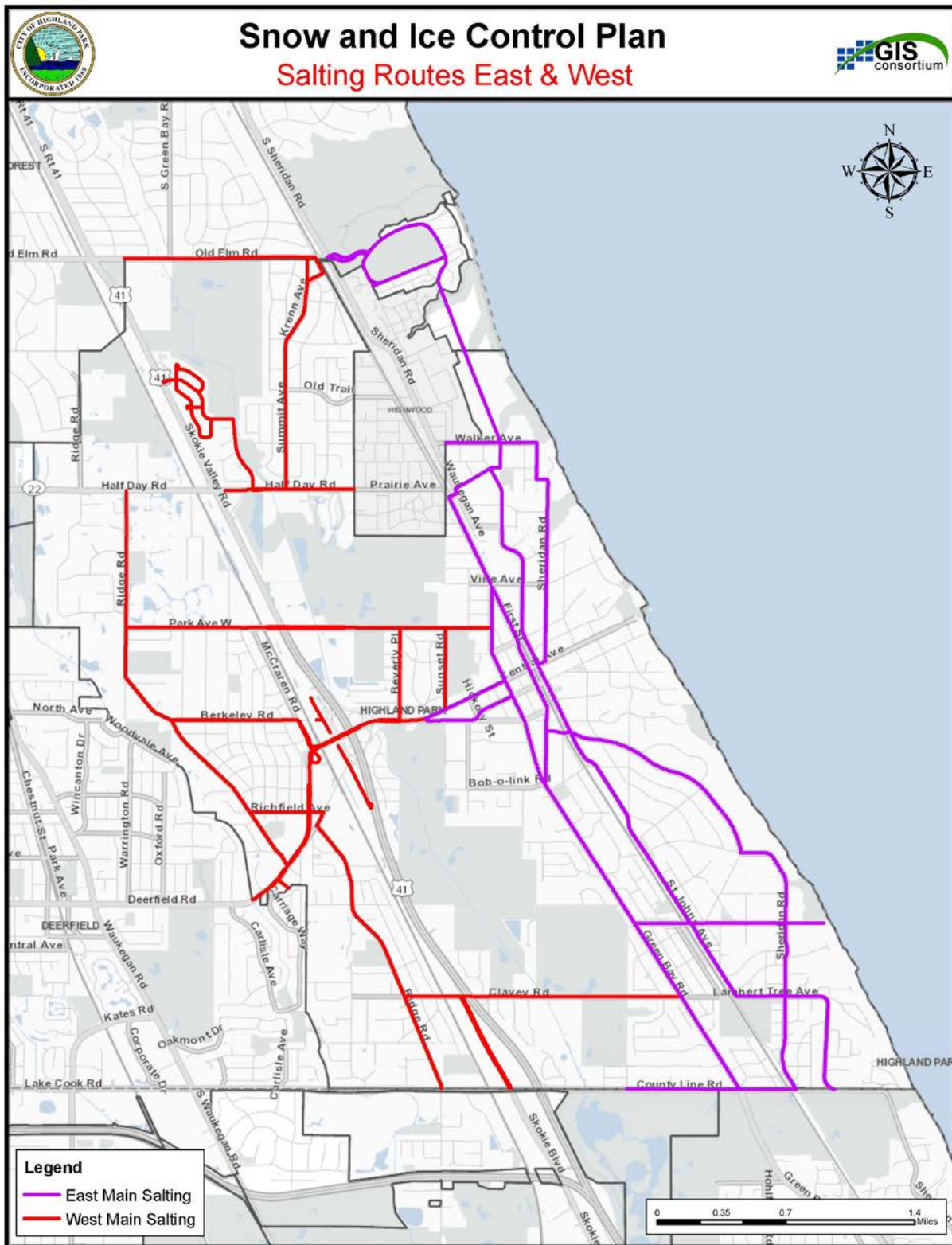
SNOW AND ICE CONTROL MANUAL 2018 – 2019

Appendix “b”

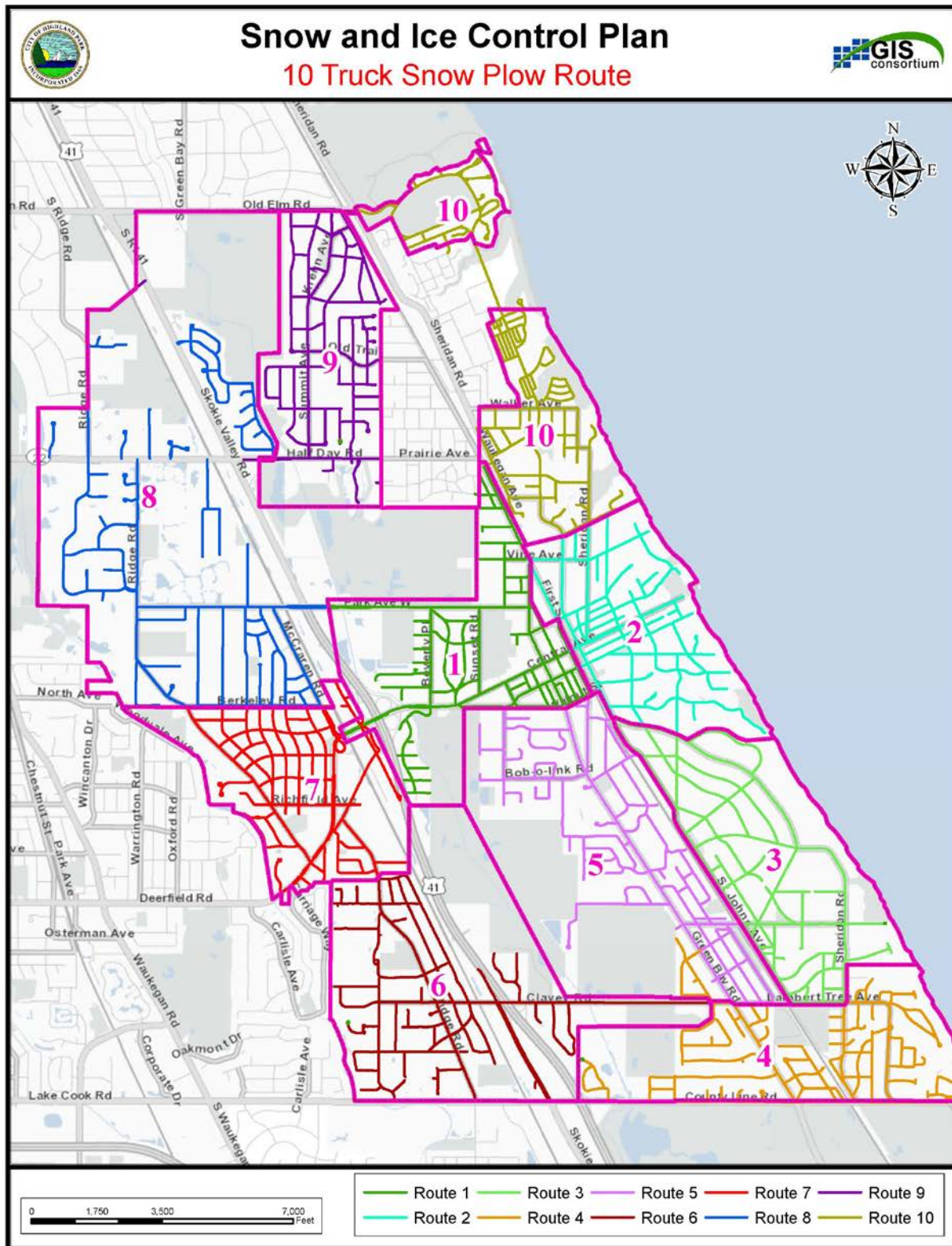
SNOW REMOVAL EQUIPMENT INVENTORY

<u>EQUIPMENT #</u>	<u>SIZE</u>	<u>SPREADER</u>	<u>PLOW</u>
655	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau- Reversible
656	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
557	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
346	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
549	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
529	5 Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
333	2 ½ Ton Dump Truck	Henderson V-Box Spreader	Wausau - Reversible
342	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
343	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
344	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
345	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
347	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
648	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
362	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
364	2 ½ Ton Dump Truck	Flink Tailgate w/ Prewet	Wausau - Reversible
326	1 Ton Dump Truck	none	No plow
354	1 Ton Dump Truck	Flink Tailgate	Western - Reversible
369	1 Ton Dump Truck	none	No plow
623	1 Ton Dump Truck	none	No plow
652	1 Ton Dump Truck	Flink Tailgate	Western - Reversible
341	1 Ton Dump Truck	Flink Tailgate	Western - Reversible
351	1 Ton Dump Truck	Flink Tailgate	Western - Reversible
521	1 Ton Dump Truck	Flink Tailgate	Western Reversible V
325	Holder Sidewalk Tractor		Plow and Snowblower
324	Holder Sidewalk Tractor		Plow and Snowblower
327	Trackless Sidewalk Tractor		Plow and Snowblower
329	Trackless Sidewalk Tractor		Plow and Snowblower
381	Deere 4-Yard End Loader		
391	Skid Steer Mounted Snow Blower		
392	Loader Mounted Snow Blower		
380	Case skid steer		
374	Deere 4-Yard End Loader		
581	Case ¾ Yard Loader/Backhoe		
690	Case Skid Steer		
383	Case Skid Steer		
391	Skid Steer Snow Blower		
582	Case Skid Steer		

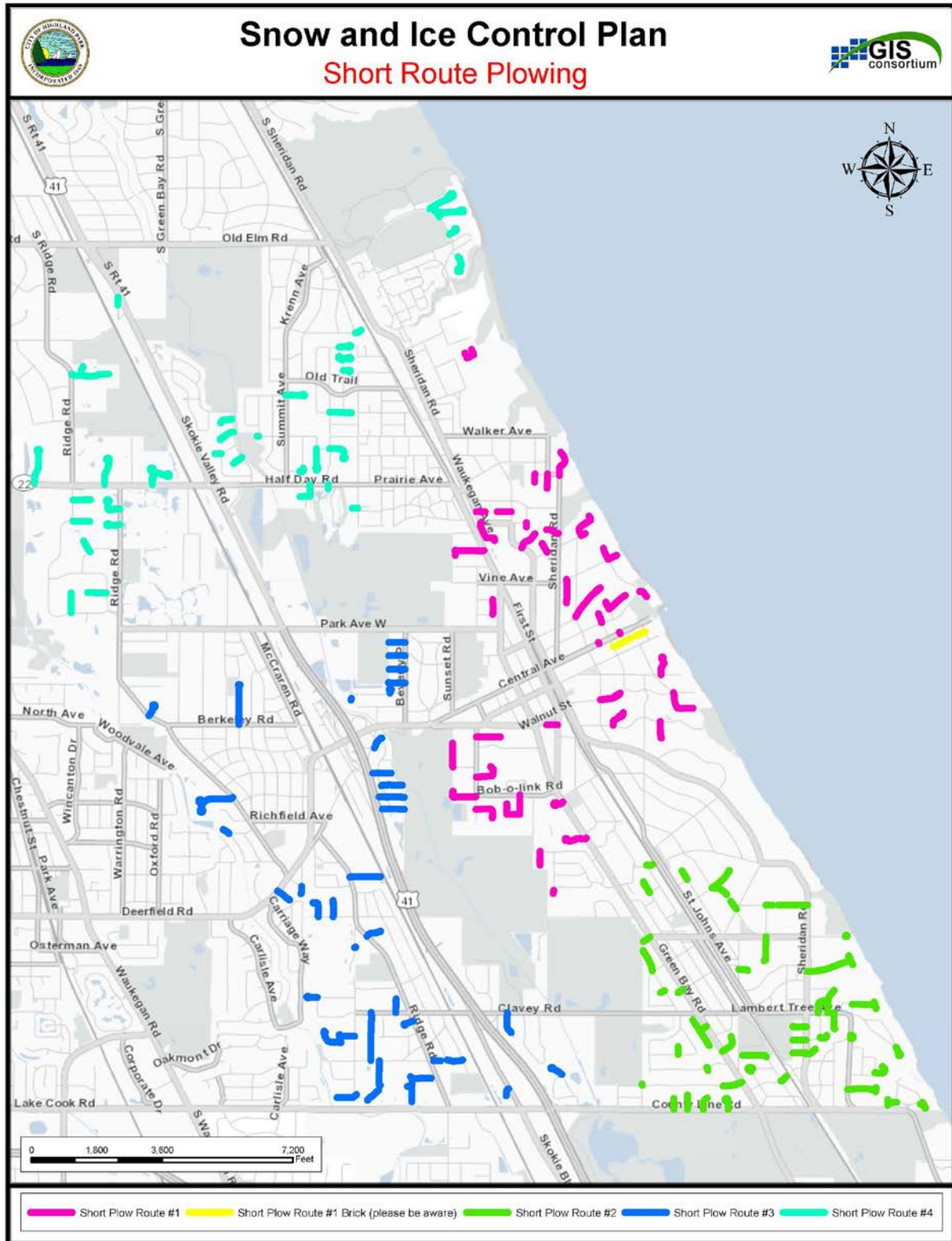
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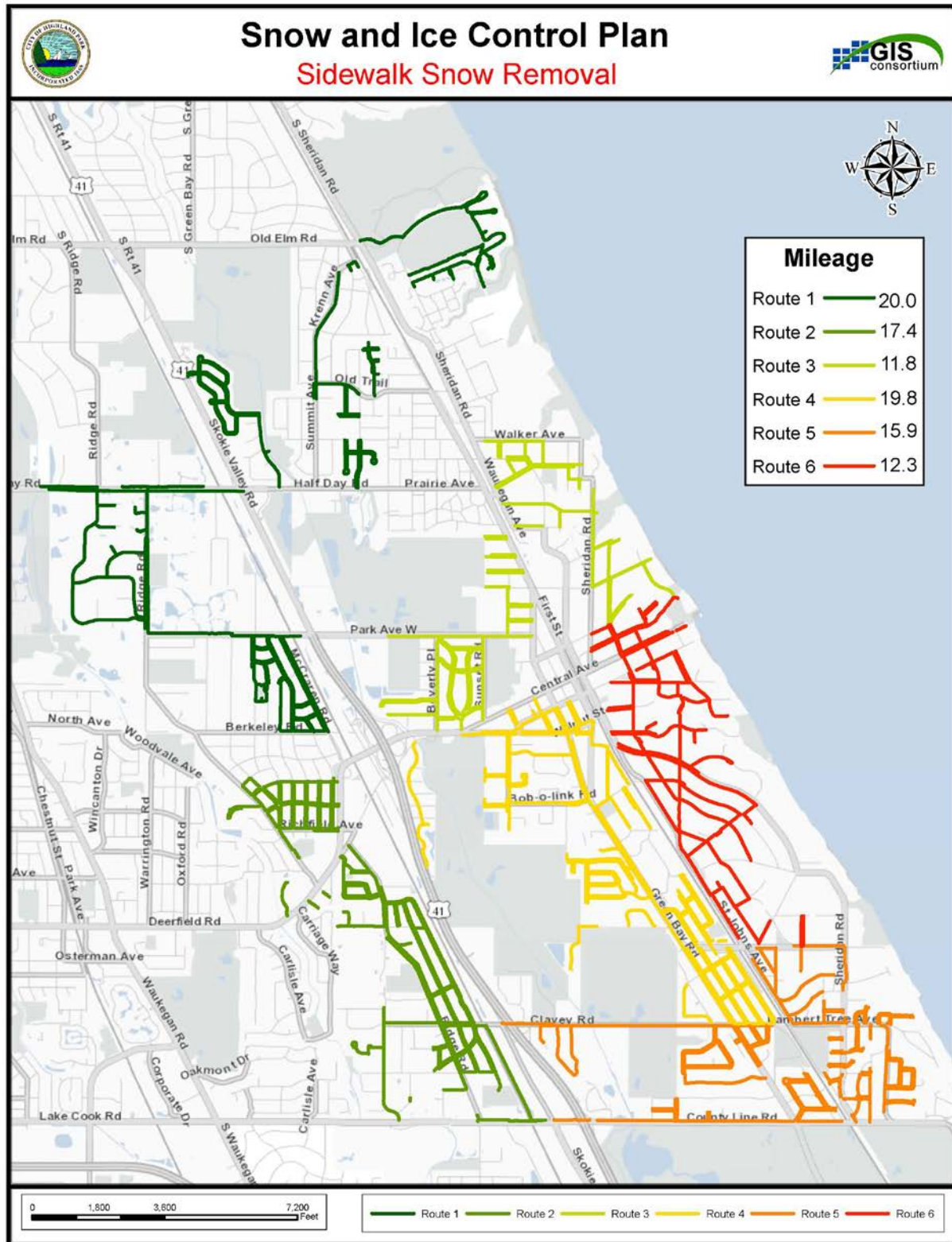
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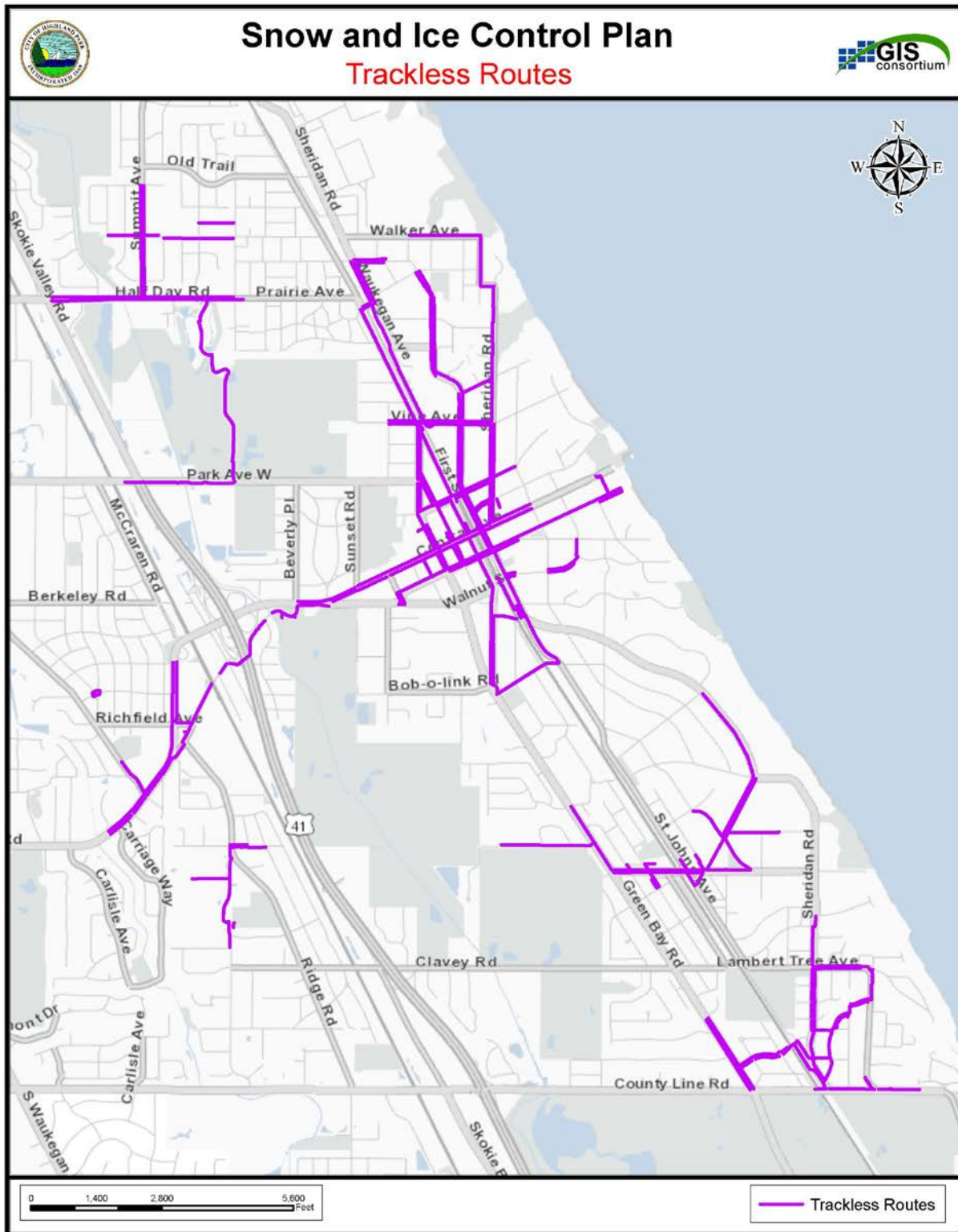
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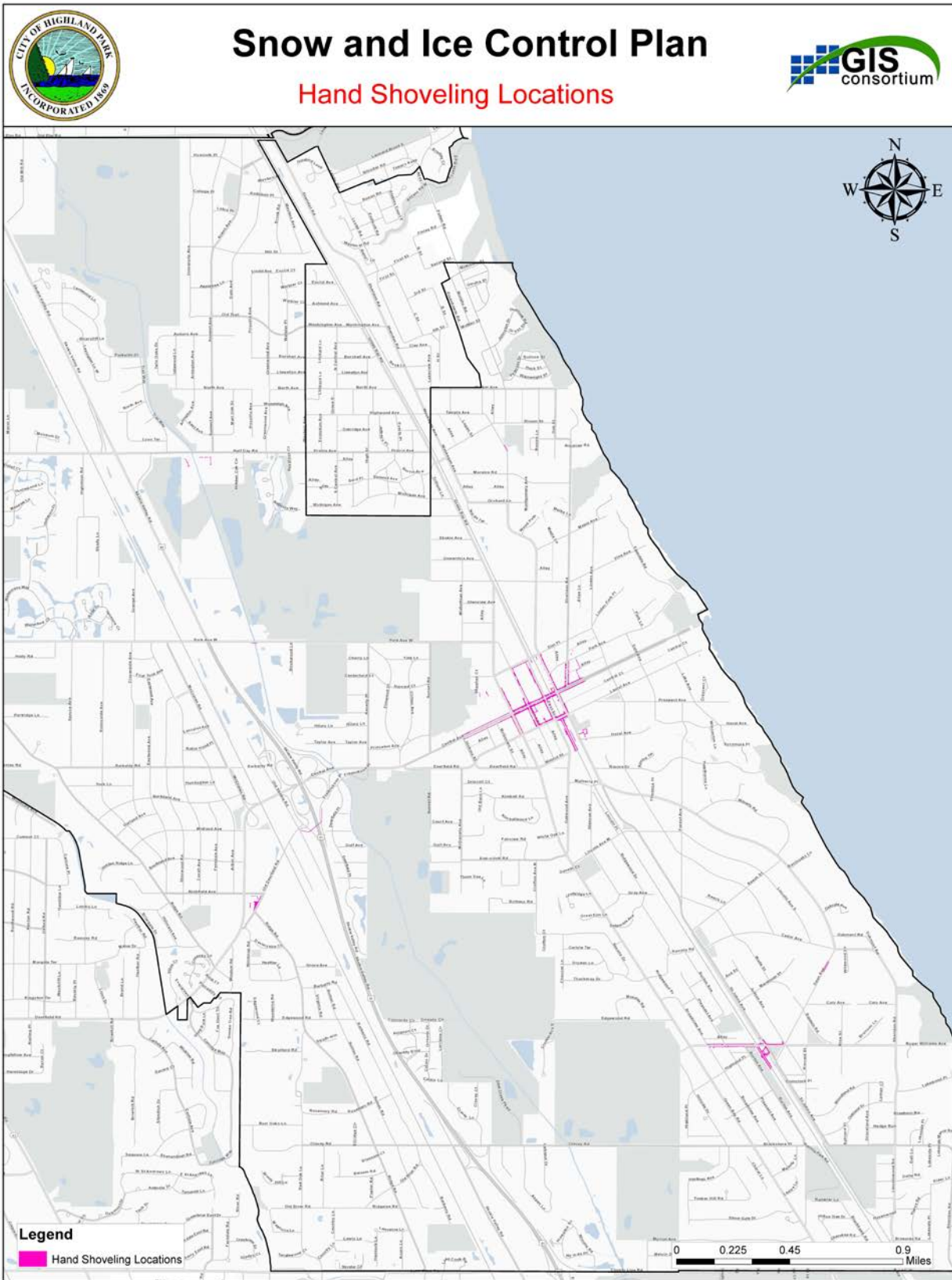
Appendix “F”



Appendix “g”



Appendix “h”



Appendix “h”

SCHOOL CROSSWALKS

These corners will be cleared of snow and slush by City crews during the workday AFTER the snow plowing demands have been satisfied. Salt will be applied at that time.

Corners

- A. Red Oak School
 - 1. Rosemary and Ridge NW & NE
 - 2. Clavey and Ridge NW, NE, SW, & SE
 - 3. Edgewood and Ridge SW & SE

- B. Braeside School
 - 1. Sherwood and Elder NW & NE
 - 2. Brownville and Lincolnwood SW & SE
 - 3. Braeside and Lincolnwood NW, NE, & SE
 - 4. Braeside and Pierce NW, NE, & SW
 - 5. Brownville and Pierce NW, NE, SW, & SE
 - 6. Havenwood and Lincolnwood NW & SW

- C. Ravinia School
 - 1. Baldwin and Dean NW, SW, & SE
 - 2. Baldwin and Roger Williams NW & NE
 - 3. Roger Williams and Kincaid NE & SE
 - 4. Roger Williams, Dean and Judson intersection

- D. Lincoln School
 - 1. Mulberry and Glencoe NW & SW
 - 2. Glencoe and Lincoln W NW, NE & SE
 - 3. Oakwood, Bob-O’ Link, and Green Bay intersection

- E. Edgewood School
 - 1. Edgewood and Green Bay NW & NE

- F. Elm Place School
 - 1. Linden and Elm NW, NE, SW, & SE
 - 2. Sheridan and Elm NW, NE, SW, & SE
 - 3. St. Johns and Elm NW & NE

- G. Highland Park High School
 - 1. St Johns and Vine NW, NE, SW, & SE
 - 2. Sheridan And Vine NW, NE, SW, & SE
 - 3. Maple and St Johns NW, NE, SW, & SE
 - 4. Green Bay and Vine NW, NE, SW, & SE
 - 5. First and Green Bay NW, NE, SW, & SE

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- 6. Green Bay and Bloom SW & SE

- H. Highlands Subdivision Schools Area
 - 1. Summit and Auburn NE & SE
 - 2. Summit and North NW, NE, SW, & SE
 - 3. Mid-block Crosswalk on Summit between Auburn and North
 - 4. Burchell and Pricilla Crosswalks

Appendix “h”

SECONDARY HAND SHOVELING ROUTE

This route is to be completed by City crews after the snow plowing requirements have been the order satisfied in which the locations are listed below. This route will be worked during a normal workday after the School Crosswalk corner list has been completed.

- 1. South side of Bloom St. from Green Bay Rd. to Waukegan Rd.
- 2. East side of First St. from Vine Ave to the crosswalk
- 3. North-east corner of Green Bay Rd. and Second St
- 4. Crosswalks on the Central Ave. median strip from St. Johns Ave. east to theater.
- 5. Hickory St. and Laurel Ave. Island
- 6. Deerfield Rd. and Laurel Ave points
- 7. Central Ave. Deerfield Rd. Island
- 8. Public Safety Center Points
- 9. Eastwood Ave. Southland Ave. and Sunnyside Ave. Island
- 10. Behind White Hen Pantry in Ravinia
- 11. Pierce Rd. point
- 12. County Line Rd, and Sheridan Rd. point
- 13. County Line Rd., Green Bay Rd. and Indian Tree point
- 14. Ellridge Circle right-of-way
- 15. Barberry Lot
- 16. North side of Clavey Rd. from Hillside to Crosswalk
- 17. Pedestrian Bridges
 - a. Hazel Ave
 - b. Carey Ave
 - c. Baldwin Ave
- 18. Viaducts
 - a. Bloom St.
 - b. Vine Ave.
 - c. Mulberry Pl.
 - d. Braeside Tunnel - St. Johns Ave/Cherokee Road
- 19. Blow south side of Deerfield Rd from Winthrop, west to City Limits.

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Appendix “j”

Salting/Plowing Event

Date:

Foreman:

2 Man Routes	Truck #	Driver #	Time Started	Time Ended	Buckets of Salt	Gallons of Brine	Remarks
1							
2							

10 Man Routes	Truck #	Driver #	Time Started	Time Ended	Buckets of Salt	Gallons of Brine	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Small Plow Routes	Truck #	Driver #	Time Started	Time Ended	Buckets of Salt	Gallons of Brine	Remarks
1							
2							
3							
4							

Sidewalk Routes	Plow #	Driver #	Time Started	Time Ended		Remarks
1						
2						

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Appendix “k”

Hauling Event

Date: _____

Foreman: _____

PW Equip	Equip #	Operator #	Time Started	Time Ended	Assignment
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Salt Trucks	Truck #	Driver #	Time Started	Time Ended	Remarks	Buckets of Salt	Gallons of Brine
1							
2							
3							
4							

Trucking	Contractor	Total # of Trucks	Time Started	Time Ended	Remarks
1					
2					

Hand Shoveling	Contractor	Total # of Laborers	Time Started	Time Ended	Remarks
1					