MEMORANDUM



TO: CLAY PEARSON, CITY MANAGER ROB HAYES, DIRECTOR OF PUBLIC SERVICES/CITY ENGINEER FROM: SUBJECT: WINTER MAINTENANCE LEVEL OF SERVICE IMPROVEMENT 9/6/2011 DATE:

SEPTEMBER 2, 2011

To: Mayor and City Council members Briefing memo on plans and preparations for winter snow maintenance of City public roads and sidewalks. There are a few policy and ordinance referrals suggested for your consideration. Clay

This memorandum discusses the status of outstanding items related to winter maintenance - four of which are proposed to be considered at the September 12 City Council meeting (policy discussion on major snowplowing routes, policy discussion on sidewalk/pathway clearing, dump truck procurement, and emergency snow plowing contract extension). As background, you may recall that DPS provided a series of recommendations earlier this year in an effort to improve the level of service for roadway maintenance during major winter storms. Included in the set of recommendations were additional equipment procurements, contracting enhancements and operational changes.

The status of implementing recommendations in each of these categories is discussed below, along with additional recommendations in regard to augmenting major snow plow routes and a more practical approach to clearing City sidewalks/pathways.

Equipment Procurement Recommendations

Dump Trucks. Two heavy dump trucks (one replacement single axle, one new tandem axle) were approved in late FY2010/2011. Since that time, DPS staff have thoroughly evaluated various truck and non-OEM equipment options and developed specifications based on those options (i.e., V-box beds, enhanced liquid capacity for brine storage, automated spreader controls, and on-board reporting capability that will be integrated with the recently-approved AVL system). Competitive bids from heavy truck vendors were received on August 30th and procurement of the two trucks from the lowest responsive bidder will be recommended as part of the September 12th agenda. Delivery will take place within three to five months (building a truck requires approximately 1.5 months and equipping it with all specialized equipment can take up to another 3.5 months).

Box Blades. Two large box blades, which will be mounted on front end loaders to more efficiently clear snow from City parking lots, were procured in June and are now stored at the Field Services Complex.

V-Plow. A V-plow for one of the City's small Kubota tractors, which is to be used to more efficiently clear sidewalks under the City's jurisdiction, was also purchased in June and is stored at the Field Services Complex.

GPS-based Automated Vehicle Locating (AVL) System. The AVL system will be used on DPS's dump trucks to better facilitate reporting, command and control during all winter storm events. City Council approved procurement of the AVL system at the August 22nd meeting. All AVL equipment is slated to be on-hand in the next couple of weeks and installed by the vendor by mid-October.

Snowblower. Bids for a tractor-mounted snowblower, which will also be used to clear City sidewalks, have been received and a purchase order issued to the lowest responsive bidder. We anticipate delivery/mounting of the snowblower sometime later this month once we no longer need the tractor for summer maintenance work.

Contracting Enhancement Recommendations

At the September 12th Council meeting, DPS will present an agenda item to extend by one year the contract with the emergency snow removal contractor used in FY2010/2011, Rotondo Construction, Inc. Rotondo's services would again be engaged when labor/equipment resources are insufficient to meet the demands of clearing City roadways during abnormally large winter storms. Rotondo will maintain the same pricing for FY2011/2012 as was used in the original contract. Also, Rotondo will take on the clearing of an additional major snow plow route, as discussed in the next section.

In addition, two other private contractors have been identified via a Request for Quotation process and we are currently in the process of reviewing their pricing. If pricing is reasonable, then DPS will work with the City Attorney to draft a Memorandum of Understanding (MOU) with each company should additional emergency services be needed from either this winter. Because we cannot guarantee any volume of work to either firm, entering into a contract that is amenable to both parties is not realistic; therefore, using a MOU would be a more pragmatic approach in this case.

Finally, contracting snow clearing for the Ice Arena's parking lot and drive will be bid separately, and it is anticipated that a service contractor will be retained by mid-October. Contracting this work out will free-up DPS workers to focus on clearing roadways during major winter storms. As was the City's practice last winter, snow removal at other municipal parking lots and driveways will be provided as follows:

- Civic Center: DPS personnel (using new box blades)
- Police Station: DPS personnel
- Fire Stations and CEMS Facility: Fire Department personnel (using pick-up mounted plows) supplemented by DPS on an as-needed basis.

Recommended Operational Changes

Best Practices Consulting Services

A Request for Proposals has been issued to operations management consulting firms that specialize in roadway winter maintenance operations. DPS will secure the services of a consultant to assist in improving DPS's winter operations plan, and to develop and

refine best practices and procedures – all in an effort toward improving overall winter roadway maintenance efficiency beginning this winter. It is anticipated that work will begin work by late September, with submittal of a final report by mid-December.

Major Snow Plow Routes

Traditionally, DPS has used five snow plow routes to clear the City's major roads (these five routes are depicted via color-coding on the attached map titled, "2011-2012 City of Novi Major Snow Plow Routes"). Beginning this winter, we propose to add a sixth major route (shown as Route 6 in yellow on the map) to address various factors that justify clearing selected neighborhood collector streets at the same time as major roads, but ahead of other neighborhood streets during major winter storms. DPS's backup snow removal contractor, Rotondo Construction, will be assigned to clear Route 6 as needed. The rationale for clearing selected neighborhood collector streets concurrent with the City's major roads during heavy storms is presented below:

Connectivity/Proximity to Major Roads. Several neighborhood collector streets that traditionally get cleared after major roads have a direct connection to major roads and provide outlets to several subdivisions. Doing these streets concurrent with major roads will provide a better/earlier cleared connection to major roads. Streets in this category proposed to be cleared as part of the new Route 6 are:

- Kingsley/Paisley/Kingswood in Section 1.
- Bristol/Norwich/South Lake in Section 4.
- Cider Mill/Fairway Hills in Section 21.
- White Pines/Midway in Section 27.
- Barclay/Stratford in Section 33.

Obstacles Created by On-Street Parking. Some neighborhood collector streets that typically have an abundance of cars parked along them are extremely difficult and dangerous to clear. In some instances this past winter, DPS had to delay clearing some subdivisions until cars were moved by owners. The most challenging streets in this category are also proposed to be cleared as part of Route 6 and are:

- Petros/Buckminster/Christina in Section 22.
- Cherry Hill/Park Ridge/Kings Pointe in Section 23.

Under the City's current ordinance, the only way to address this problem is to declare a City-wide Snow Emergency. Because doing so would be unnecessary when only a handful of streets pose on-street parking problems, we recommend that City Council designates only these particular streets as "Snow Routes" to automatically prohibit on-street parking when an accumulation of snow of at least four inches occurs. This would be consistent with the City's policy of clearing local streets with overtime labor once the 4-inch threshold has been met. An ordinance would need to be developed to address when parking is prohibited on snow routes, and signage posted to effectively designate them.

We recommend that there be a policy discussion as part of the September 12th agenda to provide staff guidance on major snow plow routes.

Labor Resources

Supplementary Labor

DPS has 28 full-time employees who operate heavy snow plow trucks - a staffing level that has four fewer operators than were available in 2009. These workers are trained and qualified in the areas of safety, plow operations, salt loading, and salt and brine application. To address potential shortfalls in staffing during persistent major storms, non-DPS workers from the MAPE bargaining unit have been contacted to determine if any of these workers desire to be included on an overtime call-in list. These individuals do not have commercial driver licenses and therefore cannot operate heavy dump trucks and equipment; however, they could be trained to operate pickup trucks with front plows, small dump trucks, and small tractors to help clear municipal parking lots, pathways and cul-de-sacs. Once a list of supplementary workers is developed, those individuals will be trained by DPS staff. In addition, Administrative staff will be sought to be trained to operate light vehicles and equipment to supplement MAPE workers on an as-needed basis and when all other options have been exhausted.

Revised Contract Language

As part of ongoing MAPE contract negotiations, City Administration is continuing its work to get MAPE contract language revised so that a minimum level of mandatory overtime acceptance is established, and that allows part-time labor to be used when there are employees on lay-off in the bargaining unit. Both of these items would help to ensure that there would be an adequate number of workers available regardless of the size of a winter storm.

Sidewalk/Pathway Clearing

The City's ordinance states that owners must clear adjoining sidewalks/pathways of snow and ice within 24 hours after the end of each accumulation of snow greater than two inches. DPS currently clears 19.3 miles of sidewalks and pathways throughout the City, of which only 5.6 miles (or 29%) actually adjoin City-owned parcels as highlighted in yellow on the attached map titled "Sidewalk Snow Clearing". While the adjoining parcel owners and homeowners associations should be clearing the remaining 13.7 miles of sidewalks/pathways that do not adjoin City property (highlighted in blue), DPS has traditionally cleared this additional mileage because it is typically along walking routes that connect neighborhoods to schools, or along routes that get a significant amount of pedestrian traffic during the winter months.

The system of the City picking-up additional sidewalk mileage that is not next to Cityowned property creates confusion and disparate service levels. For major storms, it has been impossible for DPS to abide by the ordinance's 24-hour clearing requirement (for our own sidewalks let alone the additional walks that have been on our list) because resources are fully committed to clearing roadways first. Beginning with this winter season, our recommendation is to clear only the sidewalks/pathways that adjoin City parcels within 24 hours. It may have made sense at one time for the City to do all 19.3 miles (such as when the City was not as built-up as it is now), but resource constraints make it impractical now. Of the 13.7 miles of sidewalk segments shown in blue, a total of 1.6 miles are the responsibility of school districts to maintain, and Novi Community Schools and Walled Lake Consolidated Schools have been contacted and notified that each will have to begin to provide sidewalk maintenance along their frontage beginning this winter season. Both districts have indicated that sidewalk clearing will be built into their plans starting this winter.

We recommend that there be a policy discussion as part of the September 12th agenda to provide staff guidance on the clearing of sidewalks and pathways going forward.

On a separate but related matter, we would like to request a referral now to the Ordinance Review Committee a set of recommendations for potential changes to the ordinance as they relate to sidewalk and pathway maintenance and repairs. Future policy discussions by City Council are expected to follow based on recommendations made by the Ordinance Review Committee (refer to attached memorandum from Charles Boulard dated August 9, 2011).

Please feel free to contact me at any time if you have any questions, concerns or comments in regard to this matter, or the items we propose to bring forward for consideration at the September 12th City Council meeting.

cc: Victor Cardenas, Assistant City Manager Matt Wiktorowski, Field Operations Senior Manager Tom Lindberg, Deputy Police Chief Tia Gronlund-Fox, Human Resources Director Charles Boulard, Director of Community Development

2011-2012 City of Novi Sidewalk Snow Clearing Map



MAP INTERPRETATION NOTICE Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Pleased contact the City GIR Manager to confirm source and accuracy information related to this map.

Feel 2.000

Stephanie Sambrook, City GIS Technician Date August 18, 2011



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MEMORANDUM

CITY OF	TO:	Clay Pearson, City Manager Victor Cardenas, Assistant City Manager
	FROM:	Charles Boulard, Community Development $\mathcal{M}^{\mathcal{M}}$
NOVI	SUBJECT:	Sidewalk and Pathway Maintenance
cityofnovi.org	DATE:	August 9, 2011

Background:

Heavy snowfall during the winter months as well as the public comments surrounding the proposed 9 Mile Road Pathway project brought a number of issues to the forefront regarding maintenance of sidewalks and pathways. Adding to the conversation is the recommendation regarding maintenance included in the adopted Non-motorized Transportation Plan. While the possibility of falling snow is hopefully a distant concern, many organizations contract for services in the early fall and it may be in the best interest of our residents and businesses to have their responsibilities clarified within the next 90 days. This memorandum addresses sidewalk and pathway maintenance in terms of snow and ice clearing as well as pavement repair.

As at least one City Council member had mentioned in the past, these issues are likely to be Policy discussions and determinations of City Council and are raised with that possibility in mind.

Current Ordinance Provisions:

Sec. 21-55. - General definitions. (selected)

Exterior property. The open space on the premises and on adjoining property under the control of owners or operators of such premises.

Owner. Any person, agent, operator, firm or corporation having a legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding title to the property; or otherwise having control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.

Premises. A lot, plot or parcel of land including any structures thereon.

Sec. 21-56. - Responsibility.

The owner of the premises shall maintain the structures and exterior property in compliance with these requirements, except as otherwise provided for in this division. A person shall not occupy as owner-occupant or permit another person to occupy premises which are not in a sanitary and safe condition and which do not comply with the requirements of this chapter. Occupants of a

dwelling unit are responsible for keeping in a clean, sanitary and safe condition that part of the dwelling unit or premises which they occupy and control.

Sec. 21-57. - Exterior property areas.

(a) Sanitation. All exterior property and premises shall be maintained in a clean, safe and sanitary condition. The occupant shall keep that part of the exterior property which such occupant occupies or controls in a clean and sanitary condition.

(b) Grading and drainage. All premises shall be graded and maintained to prevent the erosion of soil and to prevent the accumulation of stagnant water thereon, or within any structure located thereon. Exception: approved retention areas and reservoirs.

(c) Sidewalks and driveways. All sidewalks, walkways, stairs, driveways, parking spaces and similar areas shall be kept in a proper state of repair, and maintained free from hazardous conditions.

(d) Accessory structures. All accessory structures, including detached garages, fences and walls, shall be maintained structurally sound and in good repair.

(e) Swimming pools. Swimming pools shall be maintained in a clean and sanitary condition, and in good repair.

Sec. 21-126. - Sidewalks to be cleared.

The occupant of every lot or premises adjoining any street or the owner of such lot or premises if the same are not occupied, shall clear all ice and snow from sidewalks adjoining such lot or premises within the time required in this section. Within twenty-four (24) hours after the end of each accumulation of snow greater than two (2) inches, the owner or occupant of every property shall remove the accumulation from the adjacent public sidewalk and walks and ramps leading to a crosswalk. The accumulation may be from any source including precipitation and drifting. Immediately after the accumulation of ice on such sidewalk, it shall be treated with sand, salt or other substance to prevent it from being slippery and the ice shall be removed within twenty-four (24) hours after accumulation.

Practical Issues: (snow and ice removal)

- Currently DPS clears a specific portion of the existing sidewalks and pathways located along certain major roads, but has recently been working to reduce the scope with the intention of eliminating most of this service at some point in the future.
- Because of the need to clear City roadways first, many times DPS is not able to clear walks and pathways either to the degree (removal of ice) or in the same time period expected of residents and businesses.
- Many pathways along main roads are actually along residents "back yards" and may be up to 8 feet in width. In some cases, the

Neighborhood or Condominium Associations take over responsibility for having a contractor maintaining the paths, but in other cases individual homeowners are responsible.

- In some cases the City or County may have ownership of the "adjoining property" or have assumed certain maintenance responsibilities in exchange for ROW (CSX for example). We need to be evenhanded and keep our own house in order.
- In some cases, residents have and will assert that previous administrations committed to City snow removal when a path or sidewalk was installed
- City or other snow plowing forces may stack snow in the right of way over walks and pathways.
- Current Ordinance remedies ultimately include issuance of a citation with the potential for Court fines. This can be difficult where the occupant is not the owner. Realistically, and particularly in the case of bank owned properties, this action rarely results in the clearing of the snow and ice before it would have otherwise melted.
- Section 4.5 of the recently adopted Non-Motor Mater Plan includes specific recommendations for maintenance. (attached)

Options: (not mutually exclusive)

- Pathways and sidewalks over a certain width and fronting main roads could be cleared of snow and ice by the City. This would require commitment of additional equipment and personnel at a significant cost.
- Revise 21-126 to include Pathways and Sidewalks, extend the time period for abatement to 48 hours or more to allow the City to meet our expectations of others, and revise the acceptable abatement for ice to include salting or treatment with a specified outcome.
- Remove the City from all but minimal snow clearing responsibilities and communicate the policy to residents and businesses as soon as possible to allow planning/contracting for winter maintenance.
- Revise 21-126 to allow abatement by a City contractor at the expense of the property owner after a certain notice period. Notice by publication and posting and collections by special assessment added to property taxes if not paid when billed.
- Section 4.5 of the recently adopted Non-Motor Mater Plan includes specific recommendations for maintenance. (attached)
- Maintain the status quo.

Practical Issues: (pavement repairs)

 Property owners are given responsibility by Ordinance (see attached memo dated January 22, 2008) for maintenance and repair of sidewalks (and pathways) on and adjacent to their property including those in the public right of way. This does not eliminate City responsibility however and as the number of miles of sidewalks and pathways increase, so does the need for maintenance.

- Currently, pavement maintenance is handled on a complaint basis and occasionally as part of larger street reconstruction projects. Complaints are coordinated in DPS with the Ordinance Enforcement staff sending notice to property owners. If inspection verifies a defect the City makes the repair of any imminent public safety hazard or intersection curb ramps. At this point in time, property owners have not typically been asked to make walkway or path repairs unless within the limits of their driveway.
- The City does not currently have a regular program for inspection and pavement maintenance of public sidewalks and pathways.
- One of the questions that arose during the recent discussions and public comment regarding the 9 Mile pathway was if the adjacent property owners would be responsible for replacement of the wide pathway at some future date in addition to the sidewalks in "front" of their homes.
- Section 4.5 of the recently adopted Non-Motor Master Plan includes specific recommendations for maintenance. (attached)

Options: (once again, not mutually exclusive)

- Many communities embark on a yearly effort to review the condition
 of a portion of their walks and pathways. Property owners are notified
 of any deficiencies adjacent to their properties and if suitable repairs
 are not made in a timely manner, the City contracts to have the work
 done, passing on the cost plus an administrative fee to the property
 owners. Unpaid costs are added to the taxes. (see attached example
 of the City of Warren Ordinance) This would require an Ordinance
 change. While deemed to be a necessity by many municipalities,
 these programs can be quite unpopular with property owners
- The City of Novi could embark on a rotating yearly inspection program similar to that above and simply dedicate the funds to make the repairs. This would likely be popular with property owners but at a significant cost.
- Maintain the status quo



Route 6 (All Trucks) 14.77 Lane Miles	Route 5 (All Trucks) 51.33 Lane Miles	Route 4 (One-Ton Dumps) 13.03 Lane Miles	Route 3 (All Trucks) 41.45 Lane Miles	Route 2 (All Trucks) 51.39 Lane Miles	Route 1 (All Trucks) 74.37 Lane Miles