



Small Town. Real Life.

## Snow and Ice Removal Plan

The mission of the city of Duvall is to provide safe and passable roads to the best of our ability during the winter season. A mechanism for providing effective snow and ice removal services is outlined in this plan known as the “Snow and Ice Removal Plan”. The plan sets out procedures to provide the safest possible roadway system and access routes for motorists, public schools, fire, police, and aid vehicles. The city will provide such control in a safe and cost effective manner, keeping in mind staff as well as public safety, budget, personnel, and environmental concerns. The city will use city employees, equipment, and/or private contractors to provide this service. We will provide the service to the best of our abilities to mitigate the impacts as well as we can however it may not eliminate the effects or impacts of all items that may be related to a snow and / or ice emergency.

### **Citizen Preparedness**

Please be prepared for the upcoming winter conditions. Have your vehicle winterized and make sure you have adequate traction devices for the conditions you’ll be driving in. Please be patient and courteous to other drivers when traveling in hazardous conditions. Drive only when necessary and plan for delays, child care or other family needs. Please learn the “snow route” and become familiar with it prior to a snow event and make sure you know other routes to get around Duvall if the road you normally use is closed.

### **What type of equipment does the City use?**

- (1) 2006 Ford F550 HD 4x4 equipped with plow and sander;
- (1) 1986 Ford F800 5-yard dump truck equipped with plow and sander; and
- (1) 2007 Ford F250 truck equipped w/plow and deicing applicator (added for 2009)

### **When will the City start snow or ice control operations?**

The Public Works Superintendent and Supervisor in conjunction with weather reports, field staff and police department observations will decide when to begin snow or ice control operations on a case by case basis. The criteria for those decisions are:

- A. Weather forecasts & temperatures;
- B. Snow accumulation;
- C. Drifting of snow that causes problems for travel;
- D. Icy conditions which seriously affect travel; and
- E. Time of snowfall in relationship to heavy use of streets.

### **City Preparedness**

Starting in December the snow plow equipment is all fully assembled and operational. We place the three plow vehicles on standby so they are available as soon as we need them. When an advanced snow alert is given, the city public works crews will prepared the snow and ice removal equipment

during normal work hours and determine if a stand-by crew will be needed. All road closure and detour signs will be pre-placed at the common road closures for immediate use if needed. The city has added a signage plan that will be installed throughout the city.

Typically these areas are as follows: Stephens Street, Bruett Road, Big Rock Road, and 3<sup>rd</sup> Avenue (Snow route).

### **Priorities and schedule for which streets will be plowed**

The city has classified city streets based on the street function, traffic volume, and importance to the welfare of the community. Those streets classified as “Snow Routes” will be plowed first. These are high volume routes, which connect major sections of the city and provide access for emergency fire, police, medical services, and school bus routes this also will include the metro bus loop in the Historic Downtown area.

The second priority streets are those streets providing access to schools and commercial businesses. The third priority streets are low volume residential streets, and city parking lots.

The City will prioritize levels of service so the public will know which areas will be taken care of first. Below is the Priority Schedule:

- Priority 1-Snow route as show on plan, hills, school bus routes, and known problem shady areas (De-icing, sanding, and plowing);
- Priority 2- Arterial roads (Second response needed, around the clock service, sanding, plowing, de-icing);
- Priority 3- Arterial collector roads (Around the clock service, sanding, plowing, and de-icing);
- Priority 4- Residential collector roads (When snow and ice event is winding down, up to a 72-hour delay); and
- Priority 5- Residential roads (During daylight operations only, unless medical, police, or fire request help. Can run around the clock based on weather forecasts, personnel available and notification of the Public Works Director)

Upon first notification of road closures, the Engineering department will work together to post closures and alerts on the City’s website, TV station, to the school district and RPIN (Regional Public Information Network – a free email subscription service) and we will additionally contact KC metro if a road closure will affect a bus route. See the Snow and Ice removal plan for more information.

### **Events**

The Public Works department was authorized to acquire a deicing applicator and additional snow plow for an existing Public Works truck this year. We have added deicing liquid storage of 1,500 gallons and additionally for rare events, four (4) tons of salt for the upcoming snow season based on the record snowfall we encountered last year. We have not previously used such materials but will be experimenting in select locations this winter season. De-icing solution can also be utilized on our equipment and sand at the maintenance yard to limit the potential for freezing of the sand. In extreme cold temperature situations, colder than 24° F, deicing liquid is ineffective. We’ll be salting at that point should it happen. Additionally we will not be able to apply deicer if it is raining prior to a forecasted freeze event. The solution would be washed away before the freeze occurred, making it ineffective. When we do apply salt, salt lowers the freezing point of water so snow and ice will melt faster and even when it is still below freezing.

Salt does have a negative effect on metals (i.e. cars) so it would be wise to rinse your car after a major event. WSDOT will be applying a lot of salt to the state routes this year so rinsing your car will be a good idea in general after snow / ice events.

**Tier I-** Major event (Large projected snowfall, sustained below freezing temps.)

The goal for staff is to begin work as soon as we have a strong forecast we feel is reliable. We'll begin with intersections and the snow route with salt or de-icing treated sand depending on rain or snow fall. De-icing solution washes away and salt doesn't for the case where it rains first and then turns freezing / or to snow for an extended period of time. The scale of these efforts will be reflected in the resources that we have available which are not that great.

Snow will be plowed in a manner so as to minimize any traffic obstructions focusing on the major intersections and areas designated on the snow route. The center of the roadway will be plowed first. The snow shall then be pushed from left to right. The excess shall go onto the right hand shoulder of the street. In times of extreme snowfall it will not always be possible to immediately clear streets completely of snow and rows of snow will likely be left in front of the side streets. We would intend to try to remove the snow row ASAP but the arterials are our first priority.

**Tier II-** Above average snowfall event (Normally projected snowfall, sustained freezing temps.)

Snow will be plowed in a manner so as to minimize any traffic obstructions focusing on the major intersections and areas designated on the snow route. The center of the roadway will be plowed first. The snow shall then be pushed from left to right. The discharge shall go onto the right hand shoulder of the street. In times of extreme snowfall it will not always be possible to immediately clear streets completely of snow and rows of snow will likely be left in front of the side streets. We would intend to try to remove the snow row ASAP but the arterials are our first priority.

**Tier III-** Sustained freezing temps. (no snow accumulation, just extended cold temps)

Roadway traction will be the emphasis of our efforts (sanding). This will be an experimental case with salt or de-icing solution based on resources available at the time.

Roads will be sanded to maintain safe travels aiding in minimizing the potential for accidents.

**Tier IV- Normal event (Normally projected snowfall, around freezing temps.)**

Roadway traction will be the emphasis of our efforts (sanding).

Snow will be plowed, clearing intersections and major arterials as designated in on the snow route. Sustained snow is not expected and work would likely start around 3am to prepare for the workday commute. Depending on time of year and remaining resources, weekend efforts may not be employed but the weather forecast will be part of that decision. De-icing solution will only be applied to the equipment.

## **Weather Conditions**

Snow and ice control operations will be conducted only when weather conditions do not endanger the safety of city employees and equipment.

Factors that may delay snow and ice control operations include: severe cold; significant winds; and limited visibility.

### **Property Owner's Responsibility**

Property owners will be responsible to clear away snow from all walkways adjoining their property as well as individual driveway entrances. The city does not have the personnel to remove snow from these areas and are not part of the Public Works Department's Snow Removal Plan. If in the rare event the snow is piled up from plows along parking lots, parking stalls, corners of intersections, the city will remove the snow to another remote location, only after all other services are performed.

### **We kindly request your patience**

The city has a reasonable but limited amount of equipment to plow, sand or de-ice approximately 40 miles of roads.

How can you help? Residents can help by moving their cars off of the street and into their driveway when an event is on its way. The clearer the street the quicker and better it can be plowed. It is inevitable that cars and driveways may be blocked with snow from the plow. Please understand that this is unavoidable at times. Snow removal in Duvall can be a monumental task with limited resources. The Public Works Crew is dedicated to the safety of the community and will do the best they can around the clock to maintain the city streets.

**We have added a snow/ice hotline. Please call 425.788.1156, if an attendant does not pick up please leave a message. For snow related vehicular emergencies dial 911. The Duvall Police Department keeps Public Works staff apprised of snow/ice conditions after hours.**

**For questions or comments regarding the City of Duvall's Snow and Ice Removal Plan please contact the Public Works Department at 425.788.3434.**

### **Reference information- Snow Plow Priority Routes (see Snow Route Figure)**

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| <p>A. MAJOR ARTERIALS &amp; SNOW ROUTES</p> <ul style="list-style-type: none"><li>• Big Rock Road</li><li>• NE 143<sup>rd</sup></li><li>• Third Ave</li><li>• Cherry Valley Road (Main St to Third Ave)</li><li>• Stewart St (Main St to First Ave)</li><li>• First Ave (Stewart St to Stephens St)</li><li>• Stephens St</li><li>• Second Ave (Bird St to Taylor Park)</li><li>• NE Park St (Second Ave to Third Ave)</li><li>• Bruett Rd</li></ul> | <ul style="list-style-type: none"><li>• 275<sup>th</sup> Ave NE</li><li>• NE 150<sup>th</sup> St</li><li>• Batten Rd (NE 150<sup>th</sup> to Roney Rd)</li><li>• Roney Rd</li></ul> <p>B. RESIDENTIAL STREETS</p> <ul style="list-style-type: none"><li>• Collector Streets (High Volume)</li><li>• All other streets</li><li>• Police parking lot</li></ul> <p>C. LOW PRIORITY</p> <ul style="list-style-type: none"><li>• City parking lots</li><li>• City parks</li><li>• Paved walking trails</li><li>• School parking lots</li></ul> |
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