

**CITY OF WEST RICHLAND  
PUBLIC WORKS DEPARTMENT**

**SNOW AND ICE CONTROL  
Policy and Procedure**

**November 2013**

# SNOW AND ICE CONTROL

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## 1.0 PURPOSE

- 1.1 The Public Works Department provides snow and ice control for the City of West Richland to our citizens with a reasonable level of mobility during adverse weather conditions. The City does not provide snow and ice control for sidewalks or other public walkways. Snow and ice control for these areas is the sole responsibility of the adjacent property owner.
- 1.2 The snow and ice control program is comprised of various pieces of equipment, manpower assignments, selection of appropriate materials, and a procedure for implementation. Each component of the plan will be addressed in the following sections.
- 1.3 Beginning the winter season of 2006-2007, Public Works implemented an anti-icing program to augment its traditional snow and ice control practices. Anti-icing is the practice of preventing the formation of bonded snow and ice by timely applications of a chemical freezing-point depressant. Anti-icing is well suited to routes with a higher level of service. The preventative nature of anti-icing can also support higher service level objectives such as maintaining bare pavement throughout a storm or returning to bare pavement as soon as possible following snow pack formation. As a positive consequence, anti-icing has the potential to increase traffic safety at a low cost. Public Works continues to evaluate immersing anti-icing alternatives with a primary focus of improving driving conditions to the maximum extent practical during storm events while attempting to use environmentally conscious products.

## 2.0 EQUIPMENT

- 2.1 **Sanding – City Wide:** The City maintains three (3) truck mounted sand spreaders for use in snow and ice control.
- 2.2 **Plowing:** When conditions warrant, plows are installed on the three larger trucks to remove snow from the traveled roadway. Average time to install a plow is approximately 15 minutes.
- 2.3 **Anti-Icing:** The City has a 300-gallon truck mounted dispenser for anti-icing chemical application. The tank is mounted on a 1-ton truck and distributes anti-icing agent onto City streets and bridges utilizing drip nozzles.  
(See Appendix C – Ice Control and Snow Removal Equipment)

## 3.0 PERSONNEL

- 3.1 The entire manpower resources of the Public Works Department are

available for snow and ice control.

- 3.2** Hours of operations are 7:00 am to 4:30 pm Monday through Thursday and 7:00 am to 3:30 pm on Friday. During freezing fog, frost, or snow conditions, the on-call person will operate a sander or anti-icing equipment as necessary.
- 3.3** During major storm events, manpower is reassigned to provide 24-hour coverage, seven days a week.

#### **4.0 MATERIALS**

- 4.1** Two major materials used in snow and ice control are coarse sand and anti-icing agents. Coarse sand is used as a traction aid while anti-icing agents are used to expedite the melting process of snow and ice from the street surface.
- 4.2** Coarse sand used is typically a ¼" minus sand. Public Works utilizes sand as it tends to stay in place when spread and provides better traction.
- 4.3** The City has maintained its efforts to use environmentally friendly anti-icing products. The City currently utilizes "Calcium Chloride with Boost" which is considered to have limited environmental impact and is to the most widely used product in the State.

#### **5.0 PROCEDURES**

##### **5.1 Operating Procedure – ICE:**

- 5.1.1 Anti-Icing:** in order to successfully and efficiently prevent the formation of an ice-pavement bond, the Supervisor or designee must ensure the proper timing of the application of the anti-icing agents. A priority route for the application of the anti-icing agent has been adopted. This includes major hills, round-a-bouts and bridges within the City limits. The Supervisor or designee will make the determination of when and where to apply anti-icing agents.
- 5.1.2 Sanding:** During the winter season icing normally occurs during the early morning hours. The on-call worker is available to handle icing conditions. This will consist of spreading sand on icy surfaces utilizing one of the available sanders. When icing occurs, the on-call worker will notify the on-call supervisor, who will inspect the situation and make the determination if additional employees are needed. Priority routes will be followed, with the first priority being major arterials (see map of Priority Routes). These routes are laid out in advance,

and will be followed unless an emergency situation arises. Emergency situations will be determined by the Police Department and the Supervisor in-charge. As time and/or conditions permit, other areas may be sanded.

## **5.2 Operating Procedure – SNOW**

**5.2.1 Anti-Icing:** When snow conditions are expected, the Supervisor will make the decision as to the commencement of 24-hour operations as listed above. The Supervisor will make the decision on when and where anti-icing agents are to be applied.

Priorities for anti-icing operations are shown on the map

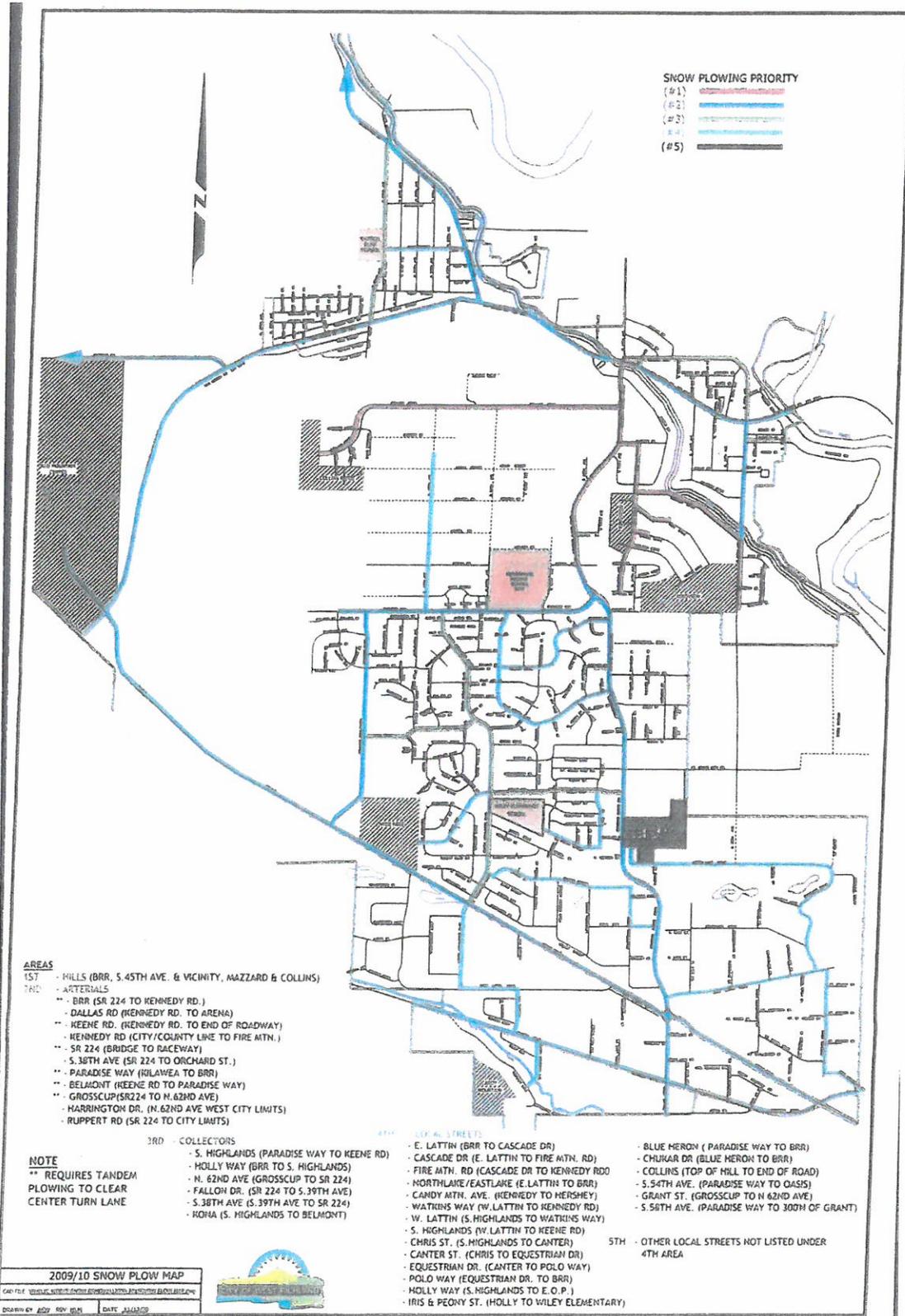
**5.2.2 Sanding:** When snow conditions exist after hours the Supervisor will be notified by the on-call worker prior to performing any snow and ice control. The Supervisor will make the decision as to when crews will be called to begin sanding, and determine if 24-hour operations are necessary. If 24-hour operations are necessary, the assigned crews will be divided into three 8-hour shifts, and will operate accordingly until the storm event has past. Any 24-hour operations will be considered an emergency and other appropriate policies will be followed.

Priority routes will be followed, with the first priority being major arterials (see attached maps of Priority Routes). These routes will be followed unless an emergency situation arises. Emergency situations will be determined by the Police department and the Supervisor in-charge. As time and/or conditions permit other areas will be sanded.

**5.2.3 Plowing:** When snow has accumulated to a depth of approximately three inches, and snow is forecasted to continue, snow plowing will begin. The Supervisor may elect to commence plowing operations prior to three inches of accumulation if existing and forecasted conditions warrant it and in the event of drifting snow. Snow will be plowed to the edges of the roadways. Four-lane roads may be opened. Public Works crew WILL NOT clear sidewalks or driveways. Side street entrances will be cleared only after the priority routes are completely plowed. Initial priority routes following map. These routes are laid out in advance, and will be followed unless an emergency situation arises. Emergency situations will be determined by the Police department and the Supervisor in-charge. As time and/or conditions permit, other areas may be plowed.

These routes are laid out in advance, and will be followed unless an emergency situation arises. Emergency situations will be determined by the Police department and the Supervisor in-charge. As time and/or conditions permit, other areas may be plowed.

Appendix A – Snow Plowing Priority Route Map



## Appendix B – Snow Plowing Routes

- 1<sup>st</sup> Route: Bombing Range Road from Van Giesen (SR 224) to Paradise Way.  
Collins Road  
Bombing Range Road and Everett then 45<sup>th</sup> Dr  
King Dr  
Laurel Dr  
Melinda Dr  
Ironton Dr  
Hampton south up 38<sup>th</sup> Ave and Mazzard  
Candy Mountain
- 2<sup>nd</sup> Route Bombing Range Road from Paradise South to Round-a-Bout  
Keene Rd  
Paradise Way from Bombing Range Road to Belmont Blvd  
Belmont Blvd  
Open all Schools: Tapteal (62<sup>nd</sup>) Wiley (South Highlands) Enterprise  
(Paradise Way)  
38<sup>th</sup> ave from Van Giesen (SR224) to Hampton  
Grosscup  
Ruppert Rd  
Kennedy Rd
- 3<sup>rd</sup> Route Holly Way  
Kona Dr  
Fallon Dr
- 4<sup>th</sup> Route: Blue Heron Blvd  
Chukar Dr  
Iris  
Peony  
Canter  
Northlake  
Eastlake  
East Lattin  
Cascade  
Fire Mountain  
West Lattin  
Watkins Way  
58<sup>th</sup> Ave

**Appendix C – Ice Control and Snow Removal Equipment**

<b>Equipment Number</b>	<b>Make</b>	<b>Description</b>	<b>Attachments</b>	<b>Primary Use</b>
16		5-Yard Dump Truck	Snow Plow and Sander Spreader	Sanding/Plowing Follow Map Emergency Requests
22	International Truck	5-Yard Dump Truck	Snow Plow and Sand Spreader	Sanding/Plowing Follow Map Emergency Requests
36	International Truck	10-Yard Dump Truck	Snow Plow and Sand Spreader	Sanding/Plowing Follow Map Emergency Requests
31	Ford Truck	¾ Ton Truck	Sand Spreader	Sanding Follow Map Emergency Requests
	Dodge Truck	1-Ton Truck	Sand Spreader	Sanding Follow Map Emergency Requests
	Chevy Truck	1-Ton Truck	Tank and Anti-Icing Applicator	Distribution of Anti-Icing Chemical
	310 John Deere	Backhoe	None	Loading Sand Truck
	410 John Deere	Backhoe	None	Loading Sand Truck