

# Winter Weather <br> Response Plan 

## Department of Public Works

11/28/2023

The purpose of the Winter Weather Response Plan is to provide for the safe flow of traffic in the City streets and protection of property in the City of The Dalles during ice and snow conditions, while staying within available financial and labor resources. The City, with the adoption of this plan, is establishing a high priority for maintaining safe traffic flow within the community during the winter months. When street sanding, deicing, snow plowing or snow removal are necessary, the first priority will be to open all arterial roadways, emergency routes, school bus routes, and selected collector streets. Some changes in this plan may be necessary as special weather conditions arise.

The City's work improves the safety of streets during winter weather conditions, but these efforts are not intended to replace proper use of traction tires or devices and safe winter weather driving practices.

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## Background

The Department of Public Works will respond to snow and ice events, within the resources available, as outlined in this Plan. Generally, first priority areas, as shown on the attached map in Appendix E, will be addressed first and then bus routes outside of first priority routes will be deiced plowed (if school is in session). It is to be understood that the City will not be able to maintain a definite time schedule due to the uncertainty related to ice and snow events. The City will post a copy of this plan on the City's website at thedalles.org/transportation so that citizens in the community may be better informed.

This Winter Weather Response Plan is intended to give general guidance for street sanding, deicing and snow removal. It is realized that special conditions may arise that will require a response out of a given sequence of this plan. Examples of these conditions may be extended snow fall events, drifting snow, funerals, flooding threats, freezing rains, and other special circumstances.

The Dalles Public Works Department uses the following functional classification system presented in the 2017 The Dalles Transportation System Plan (City of The Dalles, 2017) for prioritizing deicing and snow plow routes.

| Street Classification | Traffic Characteristics |
| :---: | :---: |
| Highways | - Generally carry long-distance traffic through a region <br> - Interstate 84 is the only freeway serving the City of The Dalles |
| Arterials | - The primary roadway network within and through a region. <br> - A continuous road system that distributes traffic between neighborhoods and districts <br> - High traffic volume with minimal local activity |
| Collectors | - Connect local neighborhoods or district traffic to the arterial network <br> - They are not designed to provide alternative routes to the arterial street system <br> - Medium traffic volume |
| Local Streets | - Provides direct access to adjacent land uses, such as driveways <br> - Short roadway distances, slow speeds, and low volumes. <br> - Offers a high level of accessibility; generally serving passenger cars, pedestrians, and bicycles, but not through trucks |

## Implementation

The primary objective of the Winter Weather Response Plan is to keep as many arterials as is feasible open and passable from onset to completion of the storm. In order for the City to achieve this objective it is necessary to tackle the work in phases outlined in this section. However, each winter storm presents a different set of conditions upon which the Department must act. Therefore, the sequence of the
phases may change to adapt to circumstances.

## Phase 1

Phase 1 will be implemented with the onset of the storm and all efforts, until snow fall or freezing rain has ended, will be concentrated on Phase 1. During the execution of Phase 1, the nature of the winter storm, emergency precautions, and forecasted conditions will be evaluated to determine the next sequence of the phases.

Priority City Activities for Phase 1 are to sand, deice or plow intersections at all stop signs and stop lights on arterials, emergency routes, and steep north/south arterials as well as school bus snow routes. Phase 1 includes deicing or snow removal from designated City sidewalks identified in Appendix C.

Priority Citizen Activities for Phase 1 are to deice, sand and/or shovel sidewalks adjacent to their homes or businesses. Safe passage is expected to be completely cleared within the first two hours of daylight each day that snow or ice has accumulated. Shoveled snow must be piled on private property, not in the street. Only business owners in the Downtown Area are requested to shovel snow into the street because there is no private property available for snow piles.

## Phase 2

When the storm ends and Phase 1 is complete, City crews will begin to sand, deice and plow collectors as well as those streets which are steep and would be otherwise unpassable or hazardous without sanding, deicing and/or plowing. Steep streets are classified as having grades in excess of 5\%. A high priority will be assigned to school bus routes located on Phase 2 street classifications if school is in session.

Citizens remain responsible for maintaining safe travel on sidewalks adjacent to their homes or businesses throughout the storm event. Snow on cars parked on city streets should be removed as City crews move into snow removal from neighborhood streets so that plow operators will see the car rather than a large mound of snow.

## Phase 3

When Phase 1 and 2 are complete, City crews can then respond to citizen snow plow, deicing and sanding requests on minor collectors and local streets. During Phase 3 the City will also maintain or restore parking along curb lines in the Downtown Area.

Citizens remain responsible for maintaining safe travel on sidewalks adjacent to their homes or businesses. City crews will not be able to respond to requests for deicing or snow removal from sidewalks other than those listed in Appendix C.

## Phase 4: Downtown Area (First, Second, Third, Fourth Streets \& Cross streets)

 Phase 4 of the plan is activated when snow depth and weather conditions are extreme. In addition to plowing and sanding/deicing, snow will be loaded into dump trucks and hauled away when:- Snow depth exceeds 8 - 12-inches
- Temperature conditions pose a threat of rapid melting and flooding.

Many businesses in the Downtown Area are at or below sidewalk grade so Phase 4 will be implemented as needed to maintain safe passage downtown, possibly before completion of Phase 2 or Phase 3.

## City Deployment Criteria

Crews will typically deploy sanding or deicing equipment early in a storm event. Street sanding/deicing will be implemented in phase listed order as determined to be necessary by the Department of Public Works with input from The Dalles Police Department.

Snow plow operations will generally begin when snow depth reaches 6 inches in the streets and the forecast predicts continuous snow fall.

When significant snow accumulations are anticipated, the Department of Public Works will evaluate whether full mobilization of resources is warranted. Additional personnel will be utilized to clear designated sidewalks and parking lots falling under the responsibility of the City.

Sanding or deicing street surfaces does very little good when it is snowing heavily. Sanding and deicing will be discontinued during heavy snowfall until such time as sanding or deicing once again becomes effective for traction control.

Once the major portion of the storm has passed and thawing begins, the City will evaluate the potential need for use of graders and/or loaders and dump trucks for snow removal. During these times, use of snow plows will be reduced. Snow plows do not have the versatility of removing and moving snow berms which can affect driveways and street intersections.

## Citizen Deployment Criteria

During any winter storm all citizens are needed to keep our streets and sidewalks safe for travel. Special attention should be given by the adjacent property owners to sidewalk wheelchair ramps, as the sloping grade of the ramp presents an extreme hazard to pedestrians during icy or snowy weather.

In accordance with City of The Dalles Municipal Code 5.04.080 Snow and Ice Removal: No owner or person in charge of property, improved or unimproved, will allow snow to remain on the sidewalk for a period longer than the first two hours of daylight after snow has fallen. Ice on sidewalks must be covered with sand, ashes or other traction assisting material to assure safe travel.

Any person injured due to the failure of an owner or person in charge of property to clear snow or ice from the sidewalk shall have a right of action against such owner or person in charge of property for damages. In the event that any action is filed against the City, the City shall have the right to indemnity from the owner or person in charge of property from the owner or persons in charge of the property for failure to comply with this section.

The full text of The Dalles Municipal Code 5.04.080 Snow and Ice Removal is included in this plan as Appendix D.

## Sanding/Deicing Work Schedule

When sanding or deicing is necessary, the work will usually be conducted in phase listed order. Sanding will normally be conducted prior to times in the community that experience the heaviest traffic.

Special conditions may require sanding or deicing outside of these time frames, such as freezing rain, funerals or special community events. Normally police patrols will identify areas of need and notify the Transportation Division if hazardous conditions exist.

## Snow Plow Work Schedule

When plowing is necessary, the work will usually be conducted in phase listed order. Snow plowing will normally be conducted on a 24 -hour basis according to the following schedule:

- During light storm conditions there will be three shifts scheduled.
- During heavy storm conditions work shifts for heavy snow or ice removal will be extended to increase the number of crew members on the road at any given time.
- Assistance from Water Distribution and Wastewater Collection Divisions may be utilized to handle snow removal activities associated with designated sidewalks and parking lots during any shifts scheduled.

Transportation Division personnel will work closely with the Police Department to respond to those areas that the police determine to be hazardous. Other emergencies may arise concurrently with a snow emergency which can hinder snow removal operations (i.e. sewer plug, pot holes, broken water mains, flooding, etc.).

More information about crew deployment is in Appendix A.

## Extreme storm conditions

Should the City Manager or his/her appointee find the need to declare an emergency, activation of the Wasco County Emergency Operations Center will occur to determine the priority of responses which would be implemented for community safety.

## Special Circumstances

## Access in the Downtown Area (First, Second, Third, Fourth Streets \& Cross streets)

For winter storms which are predicted to be of a short duration or with snow accumulations less than 10-inches, streets will be plowed to the curb line in the downtown area allowing for unobstructed travel lanes.

During times when snow fall is predicted to be sustained with accumulations of snow greater than 10inches, streets may be plowed to the center of the street in the Downtown Area to protect travel lanes, parking and turning movements on arterial streets.

Once the storm has abated and residential corridors have been opened (Phase 2 is complete), City crew efforts may then be directed to clear the downtown business area of residual snow on minor arterial streets. Whenever possible, snow removal will occur at night when cars are not parked on curb lines.

Side streets in the downtown business areas will be plowed to the curb line to allow for the retention of curb radii and turning movements to and from arterials and collector streets. Other streets in the area will have snow plowed off only if it is determined that melting will not remove the snow in a reasonable period of time, more heavy snow is expected, or special parking conditions create a hazard.

Only business owners in the Downtown Area are requested to shovel snow into the street because there is no private property available for snow piles.

## Alleys

Alleys in the Downtown Area have restricted access and very low traffic volume. Therefore, they will not normally have the snow removed unless the snow is expected to cause drainage or traffic problems. Any snow removal in the alley will have to be done with a truck and loader and will usually occur only after streets in residential areas have been opened (Phase 3).

Alleys outside of the Downtown Area will be assigned the lowest priority, so will not be plowed until Phase 3 is nearly complete.

## School bus routes

More than half of school bus routes will be plowed during Phase 1 snow removal activities. When the storm ends and Phase 1 snow removal activities are complete, a high priority will be assigned to school bus routes located on arterials and collectors during Phase 2 snow removal activities when school is in session.

If an authorized School District \#21 representative notifies the Public Works Department that school will be open by 9:00 p.m. on the following day, an attempt will be made to have the school bus routes on Phase 1 snow plow routes open by 6:00 a.m. the next morning. Alternatively, an authorized School District \#21 representative will try to let the Department know about school closures as soon as possible.

## Questions or concerns

Anyone with questions or concerns regarding any winter storm situation which may arise can contact the Department of Public Works at the following numbers:

| 7:00 a.m. to 4:00 p.m. | Department of Public Works | (541) 296-5401 |
| :--- | :--- | :--- |
| After-hours Call-Out | Public Works On-Call | (541) $980-7703$ |

## Appendix A: Winter Sanding/Deicing and Snow Removal Deployment

## Sanding Work Schedule

When sanding or deicing is necessary, the work will usually be conducted in phase listed order.

Special conditions may require sanding or deicing outside of these normal priorities, such as freezing rain, funerals or special community events. Normally police patrols will identify areas of need and notify the Transportation Division if hazardous conditions exist.

## Snow Plow Work Schedule

When plowing is necessary, the work will usually be conducted in phase listed order. Workers from other Divisions will help on an as needed basis. Snow plowing will normally be conducted according to the following schedule:

## Light storm conditions

Normal 8-hour work shifts for plowing:

| Day Shift: | Swing Shift: | Graveyard Shift: |
| :---: | :---: | :---: |
| Transportation Manager | Transportation Manager | Equipment Operator |
| Equipment Operator | Equipment Operator | Equipment Operator |
|  <br> Department Mechanic | Equipment Operator | Equipment Operator |

## Heavy storm conditions

Extraordinary 12-hour work shifts for plowing:

| Day Shift: | Night Shift: |
| :---: | :---: |
| Equipment Operator | Equipment Operator |
| Equipment Operator | Equipment Operator |
| Equipment Operator | Equipment Operator |
| Department Mechanic | Equipment Operator |

During snow and ice emergencies, City crews will
be on duty 24 hours per day.

## Appendix B: Inventory of Sanding/Deicing and Snow Removal

## Equipment

When deicing, sanding and/or plowing is necessary, equipment will be deployed on an as needed basis. The following equipment has been staged to respond to winter weather events:

| City-Owned Winter Weather Response Equipment |  |  |
| :--- | :--- | :---: |
| Units | Equipment Type |  |
| 1 (one) | CAT grader with snow wing |  |
| 1 (one) | Bobcat loader with snow blade |  |
| 1 (one | CAT snow push |  |
| 1 (one) | Tracked Skid Steer |  |
| 1 (one) | Manual snow blower (for sidewalks) |  |
| 1 (one) | 4 wheeler ATV with plow (for sidewalks) |  |
| 1 (one) | 5-yd trucks with reversible plow and sander |  |
| 1 (one) | Deicing unit |  |
| 2 (two) | Front end loaders |  |
| 3 (three) | One ton pickups with sanders and plows |  |
| 2 (two) | Backhoes |  |
| Leased Equipment (if needed) |  |  |
| 1 (one) | Grader |  |

## Appendix C: Snow Removal on Designated Sidewalks

When the storm ends and Phase 1 is complete, City crews will be utilized to clear only designated sidewalks within the City limits that fall under the responsibility of the City. Snow and ice removal on driveways, wheelchair ramps and sidewalks is the responsibility of the owner or person in charge of adjacent property, in accordance with The Dalles Municipal Code 5.04.080 Snow and Ice Removal.

| Designated Street or Intersection | Specific Location |
| :---: | :---: |
| Brewery Grade: East 2 ${ }^{\text {nd }}$ St. to East $9^{\text {th }}$ St. | South sidewalk and steps |
| $4^{\text {th }}$ Street Grade | North Side along rock wall, also steps up hill |
| Washington St. | 701 Washington St. to Case St. |
| West ${ }^{\text {nd }}$ St. at Mill Creek Headwall | From the swimming pool parking lot exit to the Chamber of Commerce entrance |
| West $6^{\text {th }}$ St. Bridge | Across bridge - both sides |
| West $9^{\text {th }}$ St. Bridge | Across bridge - both sides |
| West $10^{\text {th }}$ St. Bridge | Across bridge - both sides |
| West $10^{\text {th }}$ \& Cherry Heights Rd. | Senior Center, all three sides |
| Fort Dalles Museum | West 15 ${ }^{\text {th }}$, Garrison and $16^{\text {th }}$ Streets |
| Lincoln Way | Along natural rock wall between 1800 Lincoln Way and the driveway to 222 West $16^{\text {th }}$ St. |
| West Scenic Dr. | From 1919 W Scenic Dr. to Lincoln Way |
| Wright St. | From 2416 Wright St. 60 feet towards West $23{ }^{\text {rd }}$ St. |
| East Scenic Dr. | South side from 927 East Scenic Dr. eastbound to East $16^{\text {th }} \mathrm{Pl}$. |
| East Scenic Dr. (along the Pioneer Cemetery) | From the entrance to CGCC to 316 East Scenic Dr. and between 526 East Scenic Dr. and the driveway of 420 East Scenic Dr. |
| East $16^{\text {th }} \mathrm{Pl}$. | South side of East $18{ }^{\text {th }}$ St. to East Scenic Dr. |
| Jordan St.: West 12 ${ }^{\text {th }}$ St. to West $13^{\text {th }}$ St. | West side, in front of City well |
| Jordan St. Pedestrian Steps | Both north and south entrances to the Jordan St. pedestrian bridge |
| Dry Hollow Rd. | East side from East 14 ${ }^{\text {th }}$ St. to Montana St. |
| Lincoln Island (Lincoln St. and West 3 ${ }^{\text {rd }}$ St.) | Relief sidewalk in the island |
| City Public Works 1215 West 1 ${ }^{\text {st }}$ St. | 3 Sidewalks and parking lot |
| Columbia View Dr. | South side from 506 Columbia Dr. to Veterans Dr. |
| Washington St. Steps (to East Scenic Dr.) | Pedestrian stairs south of East $14^{\text {th }}$ Street |

## Appendix D: The Dalles Municipal Code 5.04.080 Snow and Ice Removal

A. No owner or person in charge of property, improved or unimproved, abutting upon any public sidewalk within the City, shall permit:

1. Snow to remain on the sidewalk for a period longer than the first two hours of daylight after the snow has fallen.
2. Ice to remain on the sidewalk for more than two hours of daylight after the ice has formed, unless the ice is covered with sand, ashes or other suitable material to assure safe travel.
B. Any person injured due to the failure of an owner or person in charge of property to clear snow or ice from the sidewalk as required by this section shall have a right of action against such owner or person in charge of property for damages. Such right of action is in lieu of any action against the City. In the event any action is filed against the City, the City shall have a right to indemnity from the owner or person in charge of property for failure to comply with this section. The indemnity shall include not only damages awarded to the person injured but also all fees, costs and expenses in defending the action and the costs and fees for bringing an indemnity action. (Ord. 93-1162)

