

SNOW & ICE CONTROL PLAN



**CITY OF
GREAT FALLS,
MONTANA**

RESPECTFUL

RESPONSIVE



DEPARTMENT OF PUBLIC WORKS

RESPONSIBLE

MISSION STATEMENT

The city of Great Falls Public Works Department will meet the needs of our community by professionally managing the public infrastructure and ensuring a safe, clean and healthy environment.

PUBLIC WORKS MISSION STATEMENT

We will accomplish our Mission by...

- Investing in the continued development and well being of Public Employees.
- Conducting our business openly, honestly and ethically.
- Behaving professionally at all times.
- Valuing the relationship with our customers.
- Enhancing the sense of community with Great Falls and its neighbors.
- Communicating and cooperating to achieve the goals of the Department and the City.
- Providing our services equally to all our customers, both internally and externally.
- Using the fewest resources possible while still accomplishing our goals.
- Being stewards for responsible development.
- Striving to surpass expectations of the community.

CITY OF GREAT FALLS

SNOW AND ICE

CONTROL PLAN

**PREPARED BY
PUBLIC WORKS DEPARTMENT
CITY OF GREAT FALLS**

**DATE: JANUARY 1, 1989
(REVISED: AUGUST 1, 1991)
(REVISED: AUGUST 1, 1993)
(REVISED: SEPTEMBER 1, 2000)
(REVISED: NOVEMBER 28, 2005)
(REVISED: NOVEMBER 26, 2007)
(REVISED: DECEMBER 8, 2010)**

PURPOSE STATEMENT

To provide access to desired destinations such as employment, shopping, and community services or other facilities in a quick, convenient, safe, and comfortable manner for all population groups in the community with a minimum of harmful effects on the environment.

FORWARD

The purpose of this Snow and Ice Control Plan is two-fold: (1) to provide the general public and city officials with an insight into the complexity of snow and ice control operations; and (2) to summarize policies and procedures to be followed by City personnel.

Snow and ice control is frequently a matter of choosing between two evils. For example, plowing snow off to the side of the street may clean the center, but it often covers sidewalks, blocks driveways and parked vehicles... Plowing to a windrow down the center of the street may alleviate these problems, but may create others by impeding left turns and restricting traffic flow. The purpose of this plan is to set forth the issues and to establish policy and procedural guidelines.

This plan addresses four areas of concern: Level of Service, Priorities, Operational Procedures and Special Requests.

Level of Service is controlled by balancing resources committed to the public's willingness to pay for this service.

Setting Priorities recognizes that streets cannot all be cleared simultaneously.

Operational Procedures are aimed at implementing the plan as effectively and efficiently as possible.

Special Requests for service are an inherent part of snow and ice control efforts and must be addressed.

Snow and ice control is a matter that is taken very seriously. It is an area that involves safety, liability, economic and energy conservation issues. This Snow and Ice Control Plan recognizes the unacceptability of snow clogged, ice covered, unsafe and impassible roadways.

Finally, snow and ice control is addressed as an uncertain activity. Snowfall rate, temperature, wind velocity and storm duration affect response.

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LEVEL OF SERVICE

The service possibilities may range from: 1) a “curb-to-curb bare asphalt” or the removal of snow and ice on every street, alley, sidewalk and pedestrian crosswalk in the City to 2) a policy of “do nothing”. The first extreme is not within the realm of practicality and the second is unacceptable to the residents of Great Falls. A snow and ice control program includes varying levels of service for City streets, depending on a variety of factors such as traffic volumes, emergency access, public safety and available equipment. A list of available equipment is provided in Appendix I.

The Public Works Department’s primary objective is to provide for the safe and orderly movement of vehicular traffic throughout the City during all weather conditions including severe winter storms. Although City streets, including major arterials, may be temporarily closed during extremely severe conditions, the Department will use available resources to prevent closing or to keep the duration of closures to a minimum. The Public Works Department strives to keep all lanes of traffic moving. During extreme conditions travel may be limited to one lane of vehicular traffic.

Sidewalks and driveways are also concerns:

1. The department will not clear sidewalks nor attempt to clear private driveways during snow emergencies.
2. Pedestrian crosswalks are cleared by the plowing and sanding process based on their priority route location.

Recognizing that it is not possible for the Department to remove all the snow from all the streets concurrently, the level of service to be provided is summarized below:

The Public Works Department shall use available resources to keep public streets in the City open for vehicular travel during all but the most severe weather conditions.

When extreme weather conditions severely restrict or halt traffic movement, the Department will operate continuously, twenty-four hours per day, seven days a week, clearing streets in the order of priority provided in this plan.

These operations will continue until vehicular traffic movement has been restored to a safe and acceptable level throughout the City.

In order to assist the efforts of the Department, property owners or building occupants are prohibited from placing snow and ice on public streets and alleys. Driveways, alleys, and parking areas in any area shall be cleared so that snow and ice from such areas are not placed in the public streets.

PRIORITIES

The City of Great Falls receives an annual average snowfall of 58 inches. Snowfall is often accompanied by winds in excess of 40 mph and subzero temperatures. This plan recognizes that it is not possible to remove all of the snow simultaneously from all of the streets. Factors effecting snow and ice control operations include snowfall rate and accumulation, moisture content, temperature, wind velocity, and the duration of the storm. Priorities must be established so that arterials and collector streets are cleared first in order that vehicular traffic may continue to move safely and efficiently on the City's street network.

This plan establishes and defines the following priorities (See Appendix II for color coded maps):

Priority One: **Emergency Snow Routes (Red)**

Streets designated as emergency snow routes and signed as such, with specific road signs placed within the street right-of-way.

The purpose of this designation and signage is to alert the public that these streets are to be kept clear of parked vehicles which may interfere with snow and ice control operations.

Upon declaration of a snow emergency, declared by the City Manager or his designated representative, vehicles left unattended on the emergency snow route system shall be removed at the owner's expense. (Municipal Code 12.33, Emergency Snow Route)

Emergency Snow Routes are given Priority One designation as they provide a network system for emergency services operations.

Priority Two: Arterials (Black)

Streets interconnecting high volume streets and completing the major street network with particular attention to schools, hospitals and business areas.

Major arterial streets are given Priority Two designations as they serve as a major street network with the City.

Priority Three: Selected Collector Streets (Green)

Streets including mass transit routes and other collector streets necessary to provide access to arterials. Hillside additions including, but not limited to: Bel View Palisades, West Hill Addition, Valley View, Riverview and Prospect Heights.

Non-Priority: Most residential streets and others not mentioned above. These streets will not normally be cleared unless impassable and ordered cleared by the City manager or his designated representative.

Other: Streets maintained by the Montana Department of Highways are color-coded blue. Streets maintained by the Cascade County Road Department are color-coded yellow.

After operations on priorities one, two and three have been accomplished, special requests will be responded to once the need is verified by the Public Works Department. The response will depend on resource availability (manpower, equipment, etc.) and backlog of the requests.

III. OPERATIONAL PROCEDURES

For the purpose of snow and ice control, the City is divided into five areas: West/Southwest, Northeast/Northwest, Downtown, East and South of 10th Ave. S. The maps in Appendix II identify these areas.

The Street Maintenance Division Supervisor will respond to advance notice of an approaching storm by taking the following steps:

- 1) Ordering plows and/or sanders to be installed on trucks;
- 2) Closely monitoring weather developments;
- 3) Alerting crews that they may be called back to work at any time, due to possible weather conditions.

When snowfall or freezing rain is possible, the Street Maintenance Division Supervisor will direct crews to begin operations when, in the supervisor's opinion, one or more of the following conditions exist:

- 1) Icing of streets is occurring or likely to occur, creating a hazard to vehicular traffic.
- 2) Snowfall accumulation which exceeds two inches (2") on emergency snow routes is imminent or occurring.
- 3) Snowfall has accumulated on non-priority streets in amounts sufficient to halt or block traffic.

A. PLOWING PROCEDURES

For each of the three conditions described above, the following practices will be used:

CONDITION 1: Slick or icy spots will be sanded to reduce the hazard or danger to vehicular traffic. Particular attention will be given to areas near stop signs, traffic signals and hills, especially those on or adjacent to streets on the emergency snow route system.

CONDITION 2: When snow depth exceeds two inches, snow removal crews will commence plowing on emergency snow routes. The goal is to keep these streets open to travel so that emergency services vehicles can reach all parts of the city with minimum delay. Snow will be plowed to the curb line on emergency snow routes and residential streets.

CONDITION 3: At which time they become impassable and ordered cleared by the City Manager or his designated representative plowing of residential streets will be from curb to curb. Plowing of residential streets will not begin until after emergency snow routes, high traffic volume streets, hospitals and public school accesses, mass transit routes and business districts have been cleared of snow accumulations.

The plowing will normally be done by plowing snow toward the side of the street. Care shall be exercised by operators to minimize the blocking of driveways and burying of sidewalks. The Street Maintenance Division Supervisor, however, recognizes that blocking driveways and burying sidewalks is at times unavoidable. The burden is then with the property owner or occupant to clear them.

DE-ICING PROCEDURES

The City's salt policy calls for a minimum amount of salt to be used to achieve as safe a street surface as possible. The material is mixed with sand at a 5% salt to sand ratio to keep the sand from freezing and becoming unworkable.

Reduced corrosion granular deicers may be used on pedestrian crosswalks in the business district and on high traffic volume intersections when normal sanding may not effectively improve conditions.

A. SNOW REMOVAL

The act of plowing snow to the center of the street where it is loaded into trucks with snowblowers is limited due to the high cost and manpower demands associated with this process. It is done selectively using the following criteria:

- to provide access to parking
- to provide additional snow storage
- to facilitate traffic movements

This operation may be delayed until plowing and sanding of all Priority One routes has been completed.

IV. SPECIAL REQUESTS

Persons who have questions about snow and ice control or unsafe winter driving conditions should contact the Public Works Department, 771-1401. Calls received by the Street Maintenance Division or Public Works Department Office during or after a winter storm will be logged in order to provide a record thereof.

Since the Street Maintenance Division receives a large number of special requests during and after a winter storm, it is not possible to dispatch snow and ice control equipment immediately upon request. Examples of special requests are driveway clearing, mail delivery plowing, and drainage or parking issues. The Supervisor shall substantiate special requests by a means such as:

1. Radio messages from equipment operators
2. Information from field supervisors
3. Multiple requests from the same general area

Once a request is determined to be valid, the Supervisor shall respond. Unless directed otherwise by a higher authority, special requests shall not be given priority over the planned schedule.

The response action will depend on resource availability and the number of special requests to be dealt with.

APPENDIX I

CITY OF GREAT FALLS

SNOW AND ICE CONTROL EQUIPMENT

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SNOW AND ICE CONTROL EQUIPMENT

Three motor graders

Seven truck-mounted snowplows with sanders

Two front-end loaders

One pickup-mounted V-plow

One front-end loader mounted snow-blower/snow-blade

One skidsteer mounted snow-blower/snow-blade/side delivery broom

Five tandem axle trucks

APPENDIX II

SNOW AND ICE CONTROL MAPS

Color Code:



Red - Priority One



Black - Priority Two



Green - Priority Three



Blue - Montana Department of Highways

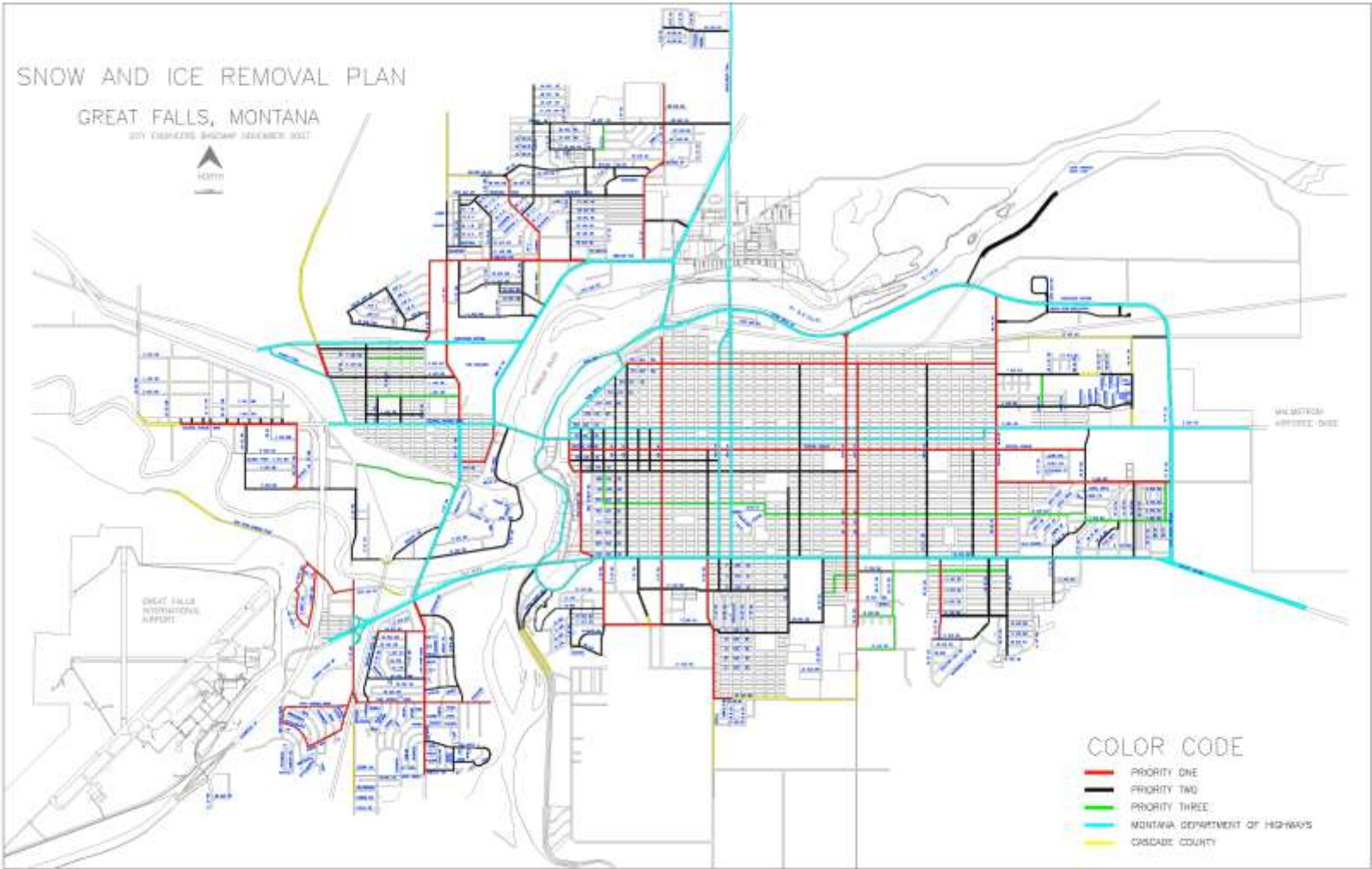


Yellow - Cascade County

SNOW AND ICE REMOVAL PLAN

GREAT FALLS, MONTANA

CITY ENGINEER'S OFFICE JANUARY 2017



COLOR CODE

- PRIORITY ONE
- PRIORITY TWO
- PRIORITY THREE
- MONTANA DEPARTMENT OF HIGHWAYS
- CASCADE COUNTY

NOTES: