Council Meeting Date: November 2, 2009 Agenda Item: 9(a)

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: 2009 Update on the City's Hazardous Weather Plan

DEPARTMENT: Public Works Department

PRESENTED BY: Mark Relph, Public Works Director

Jesus Sanchez, Operations Manager

Brian Breeden, Roads Maintenance Supervisor

ISSUE STATEMENT:

Every year, between the winter months of November through March of the following year, City crews and Public Works Administration prepare, plan and execute procedures to address inclement weather conditions, primarily high wind and rainstorms, as well as snow and icy conditions. These conditions produce flooding, heavy debris and slippery road conditions.

Being prepared and ready to respond is a major goal of the City Manager's Office and the Public Works Department. Maintaining our city streets functional during these hazardous storm events, allowing for safe motoring conditions and pedestrian pathways, is important.

The purpose of this document is to provide information to the council and the public on being prepared for unpredictable inclement hazardous weather conditions.

FINANCIAL IMPACT:

This report is informational only.

RECOMMENDATION

No action is required. The purpose of this document is to provide information to the council and the public on being prepared for unpredictable inclement hazardous weather conditions.

Approved By: City Manager City Attorney____

INTRODUCTION

During inclement weather conditions, such as snow and ice, high winds and rainstorms, the City is committed to provide quality service to the citizens of Shoreline. The main priority is to ensure the safety of all motorists by keeping the roads clear, so that traffic continues to move through the City as safely and efficiently as possible. In so doing, the following is the City's plan for addressing hazardous weather.

DISCUSSION

Hazardous Weather Preparation:

The City Roads crews are the initial first responders to inclement weather conditions, determining the impact the weather may have on staffing levels and equipment resources. The City subscribes to a weather service that gives us daily reports on current and upcoming weather concerns. It also has a 24-hour monitoring system that informs us of changing weather patterns that might affect road conditions. Based on these reports, we can be ready for any upcoming storm within 1 to 2 hours.

During the month of October, all snow removal and related equipment are assessed and readied by the Public Work's Roads crew. All rolling stock (trucks, backhoes, street sweeper etc.) are maintained and tuned up. The City of Shoreline has two (2) truck mounted plows and 5-yard slide-in sanders, one (1) 3-yard slide-in sander, two (2) plow-only trucks and one (1) motor grader. There is one (1) driver available for each vehicle.

All necessary traction devices are inventoried and ready for installation, in the event weather forecasts are predicting above normal inclement weather events.

All Roads staff and support groups are trained to respond appropriately and safely. The Roads crew must be familiar with all priority lifeline routes, Metro routes and key access points into and out of the City. The City Traffic Engineer is alerted for possible road closures and all other support staff from the Parks Department and the Customer Response Team (CRT) are notified for possible additional support.

The radio equipment is tested, and all radio batteries are fully charged to ensure dependable and adequate communication. The Emergency Manager Coordinator is advised on the daily preparations and is alerted to any problematic issues.

Coordination with Parks and CRT:

The Roads Supervisor will determine if additional resources are needed from the Parks Department and CRT. This will be dependent upon the magnitude of the snow event and the expected duration. The Parks Department may be asked to help clear Fire Department driveways, as well as the City's outlying facilities and the City Hall. Additionally, both the Parks Department and CRT will respond to and assist in clearing vegetation from the right-of-way. In consultation with the Roads Supervisor, CRT will continue to respond to site-specific and situational emergencies, such as road closures, downed live wires, flood situations and priority signs that have fallen.

Coordination with King County Metro:

During the first signs of snow accumulation around the City, the Police Department will notify CRT/standby, who will then contact the Roads Supervisor. The Roads Supervisor will notify King County Metro Transit Division of the snow. This will enable Metro Transit to gear up for the snowfall by chaining up their fleet of buses and begin their snow routes throughout the City.

City of Shoreline Coordination with the Police Department, Fire District and Emergency Management Coordinator:

In the event that any of the three disciplines above inform us that a major storm event may stress the City's means, and that we would benefit from coordinating our resources, any of those three disciplines can initiate a call to the on-duty Fire Battalion Chief, Police Sergeant, CRT, Public Works Road Supervisor, or the Emergency Management Coordinator to prepare contact information for event coordination. The three disciplines will endeavor to work off one central list of calls for service if the number of calls warrants coordination.

If a situation occurs that cannot be pre-planned, the disciplines will endeavor to coordinate their resources in the most efficient manner possible. This will include the use of hard-wired phones, cell phones, and/or 800 radios. All three disciplines will have access to the radio frequencies that they have in common. Most major events will include the use of all three disciplines in either an active or support capacity. At a minimum, establishing who the on-duty supervisors are, what radio frequency will be used for coordination and which phone lines may be applicable will facilitate more expedient contact and coordination.

City Response

When contacted by Fire or Police concerning a resource emergency, the City will initially send either the on-call CRT staff person or, if applicable, the on-duty Public Works supervisor to the Fire Department to coordinate calls for service. City staff will monitor the City of Shoreline channel to be able to respond to police of fire requests. The City of Shoreline 24-hour number is (206) 801-2700. If the City Operations crews are on duty and being dispatched from the Hamlin shops, their direct line is (206) 801-2442.

If the event begins depleting significant resources, a decision should be made to activate the Emergency Operations Center (EOC) to level 1, 2 or 3 (see Attachment C - EOC Activation Levels from Comprehensive Emergency Management Plan), depending on the nature of the event. If this occurs, the EOC will take over the coordination of calls for service and the acquiring of resources, once the EOC is functional. During serious events, when staffing allows, a field representative should be assigned to take photographs of significant damage or occurrences. This can be used if the EOC is activated for situational awareness and damage assessment.

Public Preparedness:

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 Arterials, bridges, overpasses, hills, school bus routes, major roadways that allow emergency vehicles to transport people to hospitals, and known problem shady areas.
- Priority 2 Secondary routes. (Second response needed, around-the-clock service, sanding, plowing)
- Priority 3 Residential roads. (When snow and ice event is winding down, up to a 72-hour delay; unless medical, police, or fire request help)

Property owners will be responsible to clear away snow from all walkways adjoining their property. City crews operating plows will not clear private driveways either in residential areas or commercial business zones. The primary purpose of the limited resources and crews is to clear the roadways as efficiently and safely as possible.

The City does not have the manpower to remove snow from any sidewalks. If, in the rare event the snow is piled up from plows and graders 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.

Emergency preparedness information is readily available to the public. A great amount of effort has been made to educate the public regarding how to prepare for upcoming winter conditions. The City posts general preparedness and event-specific information on its website. The October issue of Currents contains an article on winter weather preparation. Dressing appropriately for the weather, carrying extra clothing and blankets in vehicles, having vehicles winterized by ensuring that they have adequate traction devices, and chains ready for use for potentially challenging conditions are all important items to stress to the public. The public should also be reminded to be patient and courteous to other drivers when traveling in hazardous conditions, to drive only when necessary and plan for delays.

RPIN.ORG – Regional Public Information Network: Register to receive emails when important emergency information, such as weather events and road closures. Receive news alerts from more then 75 public agencies serving King County.

- Get an emergency kit, make a plan, be informed
- Supply list and communications plan get your family and children involved early
- Map your neighborhood
- Pets make a back-up emergency plan in case you cannot care for your pet yourself
- People with disabilities and special needs prepare for all kinds of needs
- Senior citizens extra planning may be needed
- Is your business prepared?
- Carbon monoxide poisoning Find safe ways to heat your homes. Obtain an informational pamphlet from your local Fire District.

RECOMMENDATION

No action is required. The purpose of this document is to provide information to the council and the public on being prepared for unpredictable inclement hazardous weather conditions.

ATTACHMENTS

Attachment A - Hazardous Weather Plan

Attachment B - 2009-2010 Snow and Ice Removal - Primary and Secondary Routes

with King County Snow Bus Routes Overlap

Attachment C – EOC Activation Levels from Comprehensive Emergency

Management Plan



Hazardous Weather Plan

The purpose of this document is to provide information on how the City will respond to hazardous weather. More specifically this Plan will:

- Provide information to the primary responders; the Public Works Operations crews,
- To include operations crews from Park Maintenance and Customer Response Team if the response and resources are required,
- On procedures to be followed during inclement weather conditions, primary high wind, rain storms plus snow and ice conditions.
- Additional hazards caused by flooding or debris from sever wind storms may also cause us to deploy staff and resources to return our roadways to normal safe driving conditions.
- Communicate to the public the City's response to hazardous weather and the public's responsibilities during specific events.

GENERAL

The City of Shoreline is committed to provide quality service to the citizens of Shoreline during any significant storm event. The safety of the motoring public is our primary concern. Our number one goal is to keep traffic moving through the City as efficiently and safely as possible. In the event of road closures, we will deploy road closure signs. These will be designated detour routes that will be clearly marked. Do not go around "Road Closed" signs. They are there for the protection of the motorists.

All staff should have both their Nextel and 800 MHz radios on them and operational to ensure adequate communications. The supervisor will designate which channel of your radio for you to be on and broadcast information over the radio that all on duty staff should be aware of.

The public and City staff need to be prepared for the upcoming winter conditions. Dress appropriate for the weather; consider carrying extra clothing and blankets in your vehicles. Have your vehicle winterized; make sure you have adequate traction devices for the appropriate driving conditions. Ensure chains are ready for use and you know how to install them. Please be patient and courteous to other drivers when traveling in hazardous conditions. Drive only when necessary and plan for delays.

During serious events and when staffing allows, a field representative should be assigned to take photographs of significant damage or occurrences. This can be used if the EOC is activated for situational awareness and damage assessment.

WIND STORMS

During windstorms, identify potential windfall hazards and determine if action needs to be taken to either remove them, such as tree limbs, or mark it for others to see. Have ready

access to chain saws and other equipment for tree and limb removal. Report all down electrical wires and determine if the area needs to be marked or protected by staff and/or equipment so citizens are not endangered. Anticipate power outages and have flashlights operationally ready for use. In high wind events, safety is the first consideration. If wind gusts or sustained winds are high, debris removal should only be undertaken if it is to save a life or prevent serious injury. If this is not the case, crews should return to a safe facility until the winds sustain and operations are made safe. If winds are sustained for more than 10 minutes at 40 mph or higher, suspend all operations and return to a safe facility. If you do not know what the wind speed is and you feel you are in danger, suspend your assignment, notify your supervisor, and return to a safe facility. When in doubt, request direction from a supervisor.

FLOODING

Flooding due to extend periods of wet weather or rapid snowmelt, can cause significant danger to the staff and citizens. Ensure you have the proper supplies and equipment in your vehicle to address the need. Become familiar with the land around you to identify potential flood areas. (Areas susceptible to water accumulations, runoff, and steep slopes, etc).

If you suspect imminent flood danger, advise your supervisor so that decisions can be made about road closures or building evacuations. Post a safety spotter when working around hazardous areas and establish evacuation signals. Contact all utilities to assess possible breaks and/or causes of the flooding. Assess buildings, streets and citizens downstream of the incident. Assess standing water in a roadway carefully before driving or walking through. Remember, the sheer force of just six inches of swiftly moving water can knock a person off their feet. Cars are easily swept away in just two feet of water. Close all roadways that could pose this kind of hazard.

SNOW and ICE

The City of Shoreline has two (2) truck mounted plows and 5 yard slide in sanders, one (1) 3 yard slide in sander, two (2) plow only trucks and one (1) motor grader. There will be one (1) driver available per vehicle.

The City subscribes to a weather service that gives us daily reports on current and upcoming weather concerns. It also has a 24-hour monitoring system that informs us of changing weather patterns that might affect road conditions. Based on these reports, we can be ready for any upcoming storm within 1 to 2 hours.

When notified of upcoming black ice alerts, we will schedule a two (2) person crew to start no later then 0400 hours, to apply sand and/or deicers to bridge decks, overpasses, known wet and shady areas, and other known problem areas to prevent icy conditions. These applications do not guarantee that all roads will be free of ice; Drivers still have to be cautious when driving in freezing weather.

When an advanced snow alert is given, the City street crews will install all snow and ice removal equipment during normal work hours and determine if a standby crew will be needed. If standby is needed, the first response crew will wait to be notified by the standby person. When notified, the first response crews will start on the priority routes or where the weather has the most effect on roads. The first response Supervisor will make the decision to call in additional help should the need occur. If additional help is required or the snow and ice event continues past a regular work shift, a 24-hour service will commence until no longer needed.

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- Arterials, Bridges, over passes, hills, school bus routes, major roadways to allow emergency vehicles to transport people to hospitals, and known problem shady areas.
- Priority 2- Secondary Routes. (Second response needed, around the clock service, sanding, plowing)
- Priority 3- Residential roads (When snow and ice event is winding down, up to a 72 hour delay, unless medical, police, or fire request help)

The City will notify Metro Transit Division of the first signs of snow accumulations to allow Transit to start chaining up their fleet and proceed to their snow routes throughout the city of Shoreline.

Parks maintenance crews will be responsible for snow and ice removal at the Spartan Gym facility, City Hall and the Richmond Highlands Recreational facility. Public Works crews may assist if conditions in the public right-of-way have been adequately addressed.

Property owners will be responsible to clear away snow from all walkways adjoining their property as required by City ordinance (SMC 12.05.020A). Business and property owners that plow snow or have it removed from their property shall not place the snow in the public right-of-way. This is not a permitted use and can lead to hazardous conditions for the traveling public and storm drainage systems.

Shoreline City, Fire & Police Communication and Coordination Plan

In the event that information is received by any of the three disciplines involved that an event may occur that will stress our resources and would benefit from coordinating them, any of the three disciplines can initiate a call to the on duty Fire Battalion Chief, on duty Police Sergeant, and to CRT, Public Works Road Supervisor, or the Emergency Management Coordinator to preparing contact information in the event coordination is needed. The three disciplines will endeavor to work off one central list of calls for service if the number of calls warrants coordination.

If a situation occurs that cannot be pre-planned, the disciplines will endeavor to coordinate their resources in the most efficient manner possible. This will include the use of hardwired phones, cell phones, and/or 800 radios. All three disciplines will have access to the radio frequencies that they all have in common. Most major events will include the use of

all three disciplines in either an active or support capacity. At a minimum establishing who the on duty supervisors are, what radio frequency will be used for coordination and which phone lines may be applicable will facilitate more expedient contact and coordination.

Resource Emergency declared by any discipline:

Fire Department response:

- 1) Contact on duty Shoreline police supervisor
 - Call 296-3380 request that the on-duty supervisor respond to the Fire Station at 175 and Aurora and/or contact the Battalion Chief at 206/795-3350.
 - Contact the City at 801-2700 and ask for a representative to respond to the Fire Department.
- 2) In the event the hard wired phones are not working ask Fire communications center to contact KCSO communications center via PSAP to request that the on-duty supervisor respond to the Fire Station
- 3) City of Shoreline on duty staff can be reached on their 800 radio on the City of Shoreline Channel if the phone lines are not working. (See Mutual Radio Talk Groups below).

Police Department response:

- 1) The Fire Department will contact the on-duty Police supervisor via their Communications Center when possible. If that does not work they will contact you via your Nextel.
- 2) The on-duty Police Supervisor will contact the Battalion Chief at 206/795-3350 and/or respond to the Fire Station to coordinate with Fire, Public Works/CRT and city staff. If the Fire Command Center is activated it can be reached by calling: 206/533-2267.
- 3) If possible the on-duty Police Supervisor will remain at the Fire Station to assist in the coordination of calls for service. The goal will be to reduce duplication of calls.
- 4) In the event of an emergency and radio and telephone communications are not working the on duty Police supervisor will report to the Fire Station.
- 5) If the on-duty Police supervisor cannot remain they will leave an Explorer Radio set on the agreed upon frequency and Fire will monitor.
- 6) On-duty police supervisor will have their portable on the agreed upon channel to allow for a quick exchange of information from the Fire Department/City. (See Mutual Radio Talk Groups below).

*A Battalion Chief is on-duty 24/7. At major events the Battalion Chief is typically present. This phone number is always with the Battalion Chief and is our best way to contact fire at a major incident or in an emergency situation when we need to be in contact with fire. (206) 795-3350. This number is for supervisors only and not for public dissemination. If you are requesting Fire assistance at a scene and want them staged at a specific location

you can call the on duty BC to coordinate that and pick an agreed up channel to communicate with the Fire staff assigned.

City Response

When contacted by the Fire or Police concerning a Resource Emergency, the city will initially send either the on-call CRT staff person or if applicable, the on duty Public Works supervisor to the Fire Department to coordinate calls for service. City staff will monitor City of Shoreline Channel so as to be able to respond to police of fire requests. City of Shoreline 24 hour number is 206 801-2700. If the City Operations Crews are on duty and being dispatch from Hamlin Shops, their direct line is 206 801-2442.

If the event begins depleting significant resources a decision should be made to activate the EOC to level 1, 2 or 3 depending on the nature of the event. If this occurs, the EOC will take over the coordination of calls for service and the acquiring of resources once the EOC is functional.

Mutual Radio Talk Groups City of Shoreline

Talk Group	City	Police	Fire
Shoreline City ****	A1, B1, C1	P2	B 13
Shoreline EOC	A 10, B10, C9	P3	B 14
All Gov	C 8	D6	A 14
Shoreline Public Works	A 2, B2, C2		B15
KC Emergency Management Communications	B 11	01	G1
KC Emergency Management Operations	B 12	O-2	G2
KC Emergency Management Zone 1	B 13	O-3	G3
KC Emergency Management Zone 3 (South King Co)	B 14	0-4	
KC Emergency Management Zone 5 (Seattle)	B 15	O-5	
			

^{****} This is the primary City channel, monitored and used daily.

2008-09 Snow & Ice Schedule

Priority Roads for Snow Removal

Primary/Life Line Routes

			•
Aurora Av N	N 145 th St	to	NW 205 th St
Meridian Av N	N 145 th St	to	N 205 th St
1 st Av N	N 185 th St	to	N 205 th St
5 th Av NE	NE 185 th St	to	NE 205 th St
5 th Av NE	NE 145 th St	to	NE 185 th St
NE 180 th St	5 th Av NE	to	15 th AV NE
15 th Av NE	NE 145 th St	to	NE 205 th St
NE 196 th St	15 th AV NE	to	NE 205 th St
NE 205 th St	15 th AV NE	to	30 th AV NE
25 th Av NE	23 rd AV NE	to	NE 205 th St
21 st Av NE	NE 205 th St	to	NE 205 th St (Loop)
NW Innis Arden Way	N 160 th St		to 10 th Av NW (Hill)
Carlyle Hall RD N	Dayton Av N	to	NW 175 th St
NW 175 th St	Dayton Av N	to	14 th AV NW
14 th AV NW	10 th AV NVV	to	NW 188 th St
15 th Av NW	NW 188 th St	to	NW 205 th St
20 th Av NW	NW 195 th St	to	NW 205 th St
Freemont Av N	N 165 th St	to	N 205 th St
N 200 th ST	3 rd Av NW	to	Meridian Av N
N 195 th St	8 th Av NW	to	Aurora Av N
3 rd Av NW	N 185 St	to	NW 205 th St
NW 205 th St	3 rd AV NW	to .	8 th AV NW
NW 185 th St	8 th Av NW	to	Dayton Av N
N 183 rd St	Dayton Av N	to	Freemont Av N
8 th AV NW	NW 205 th St	to	NW 175 th St
Dayton Av N	N 185 th St	to	Westminster Way
Westminster Way N	N 145 th St	to	Aurora Av N
N 160 th St	Aurora Av N	to	Greenwood Av N
N 155 th St	Westminster Way N	to	15 th Av NE
N 175 th St	Freemont Av N	to	25 th Av NE
N 185 th St	NW Richmond Beech Dr	to	10 th Av NE
NW 195 th PI	NW Richmond Beech Dr	to	NW 196 th St
NW Richmond Beech Dr	NW 205 th St	to	NW 196 th St
10 th Av NE	NE 185 th St	to	NE Perkins Way
NE Perkins Way	10 th Av NE	to	15 th Av NE
24 th Av NE	15 th Av NE	to	25 th Av NE
25 th Av NE	24 th Av NE	to	N 145 th St

Secondary Routes

NW 200 St	8 th Av NW	to	12 th Av NW
12 th Av NW	NW 195 th St	to	NW 205 th St
NW 201 st St	12 th Av NW	to	15 th Av NW
NW 199 th St	20 th Av NW	to	Richmond Bch RD
Evanston Av N	N 182 nd St	to	Dayton PI N (Loop)
Greenwood Av N	N 145 th St	to	Carlyle Hall RD
1 st St Av NW	NW 175 th St	to	NW 185 th St
6 th Av NW	NW 175 th St	to	NW 185 th St
NW Innis Arden Rd	14 th Av NW	to	NW Richmond Bch RD
Ashworth Av N	N 145 th St	to	N 175 th St
N 165 th St	Ashworth Av N	to	Dayton Av N
N 160 th St	Ashworth Av N	to	Meridian Av N
N 150 th St	Ashworth Av N	to	Meridian Av N
1 st Av NE	N 145 th St	to	N 155 th St
N 165 th St	Meridian Av N	to	End of Street
NE 150 th St	15 th Av NE	to	25 th Av NE
NE 170 th St	5 th Av NE	to	22 nd Av NE
NE 168 th St	15 th Av NE	to	22 nd Av NE
NE Perkins Way	City Boundaries	to	15 th Av NE
NE 188 th St	10 th Av NE	to	15 th Av NE
N 193 rd St	5 th Av NE	to	Meridian Av N
N 192 nd St	Meridian Av N	to	Aurora Av N
Ashworth Av N	NE 175 th St	to	N 200 th St

<u>Probable Road Closures-Notify Traffic Engineer when roads are closed and reopened</u>

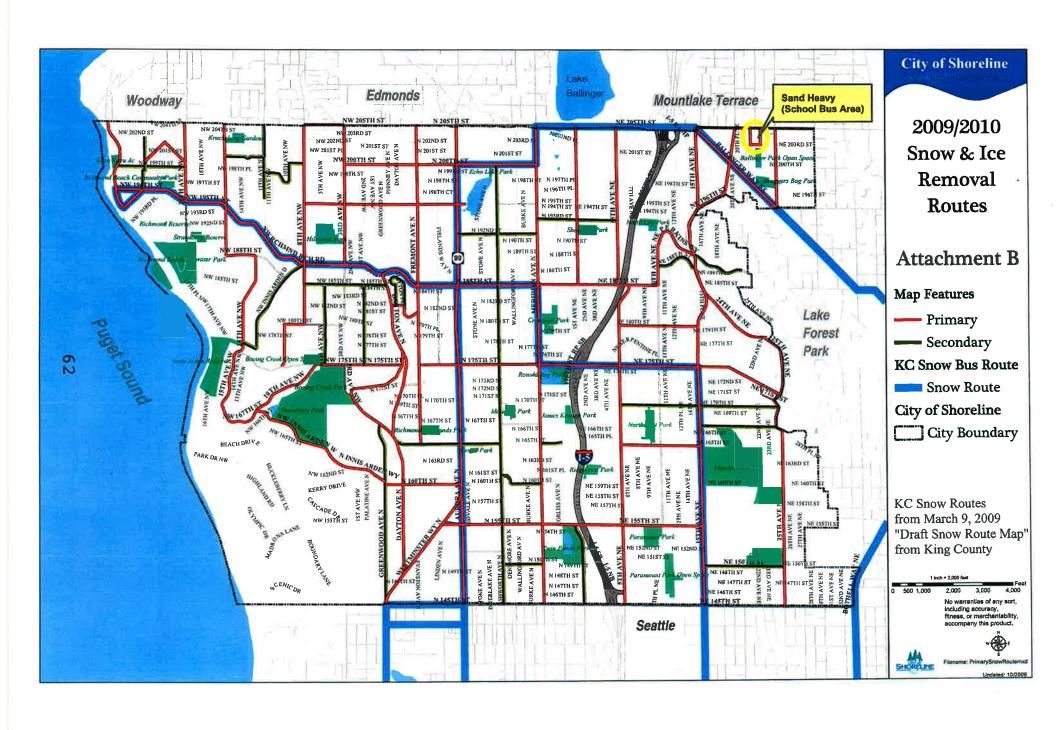
10 th Av NE (NE Corner)
11 th Av NE (SW Corner)
12 th Av NE (SW Corner)
Ashworth Ave N (SE Corner)
Wallingford Ave N (SW Corner)
N 203 rd St (NE Corner)
N 205 th St (NW Corner)
NW 203 rd St (NE Corner)
NW 205 th St (SW Corner)
22 nd Av NW (SW Corner)

Newly Installed "C" Curbs & Traffic Islands

Familiarize yourselves with these areas before the snow falls because you will not see them when it does. They can cause <u>Major damage to equipment and yourselves.</u>

The Steel Plates Location is at this time: (All Steel plates will be marked with signs)

None at this time



ATTACHMENT C

ESF #5 EMERGENCY MANAGEMENT APPENDIX C

EMERGENCY OPERATIONS CENTER ACTIVATION PROCEDURES

This checklist is to serve as a guide for notification of key personnel in the event an emergency occurs that would require activating the EOC in the City of Shoreline. The City Manager or his/her designee will authorize the activation of the EOC for the City of Shoreline. Once this authority has been given, the City Manager shall delegate to the administrative staff of the City Manager's Office (CMO) the task of making the appropriate notifications.

• At the time of activation, the City Manager's Office shall determine where the EOC will be activated and to which level, 1, 2, or 3 (see below).

It is expected that all Department Heads will respond to the EOC, or their designees if they are not available. Each Department Head/Section Chief will be responsible for notifying the staff who are assigned to support their sections to respond to the EOC. Operational Managers/Supervisors will be responsible for notifying staff that they need to respond to the event.

- If there are any specific directions to City staff about reporting to work, CMO's administrative staff shall place them on the City's Emergency Outgoing Hotline, (206) 801-2255.
- If phone lines are not available, other communication devises will be utilized to the extent possible to ensure notifications, i.e. 800 radios, push-to-talk feature of Nextel phones, or email.
- When no communication is available after a significant event, City staff can assume that the City's Green/Gold teams have been activated, and respond to the EOC according to their department plan and the green and gold procedures.

(If, due to the nature of the activation, it is deemed appropriate for the CMO's administrative staff to assign this function elsewhere in the organization, they shall ensure that the staff person assigned has the necessary information and direction to complete the appropriate notifications.)

Level I Monitoring Phase - An emerging situation is being monitored and may warrant the need for obtaining more resources in the future.

Level II Partial Activation - A situation that requires two or more departments to provide an effective response: resources may be required from other agencies.

Level III Full Activation - A situation beyond the ability of our organization to manage; additional resources are required and an emergency is proclaimed.

(See EOC Handbook for examples).

Determine which location for the EOC will be activated. A. Primary – Fire Training Center B. Alternate – Police Station

City Hall