# **Pothole Repair**



### Submit a pothole

The City of Mount Carmel Street Department is responsible for maintaining City streets. Filling potholes is one of the activities found in the Pavement Management Plan. Because potholes can

pop up anytime anywhere, especially in wet and wintry weather, the response to potholes is considered stop-gap work to keep the streets serviceable.

### What causes potholes in Mount Carmel?

Because of the multiple rain, snow and ice events, damage to City streets occurs. Damage occurs during and after the freeze-thaw cycle. freeze thaw cycles – above freezing during the day; below freezing at night.

#### What is the freeze thaw cycle?

During a freeze-thaw cycle, water from rain, melting ice or snow gets down into cracks and crevices in the surface pavement. When the pavement freezes, the pavement expands, weakening the surface. When it thaws, the pounding of tires breaks up the weakened pavement.

Depending on the time of the year: There are two processes and materials the City uses for pothole repairs.

Winter months, "cold-mix" asphalt is used because asphalt plants are closed and the supply of "hot-mix" asphalt is not available. Cold-mix is distributed out of the back of a pickup and tamped in by hand, creating a temporary patch. Patches made with cold-mix material is expected to be temporary. The patches are a stop-gap measure during freezing temperatures to keep our streets serviceable.

During months when the temperatures stay mostly above freezing, hot mix asphalt is used by City crews to make permanent patches. It is kept hot until the repair is made.

## How are potholes filled?

When a repair crew (typically two or three workers driving a pothole repair truck and one acting as "traffic control"), the first step is to remove the debris in and around the pothole. Then the mix is placed in the hole. In colder weather, the material is tamped in by hand.

Will there ever be an end to potholes?

No, as long as there is moisture, water, freezing temperatures, and continuously aging street pavement, there will always be failing pavement somewhere in the streets.

But we can gain on making repairs - either one at a time or hundreds at a time.

Like mentioned above, filling potholes is a temporary measure to keep roads serviceable. It is one of the four road treatment strategies Mount Carmel Street Department provides through its Pavement Management Program. It is part of the Full Depth Repairs and Stop Gap Measures strategy. The other three are:

Preventive Maintenance Major Rehabilitation Reconstruction