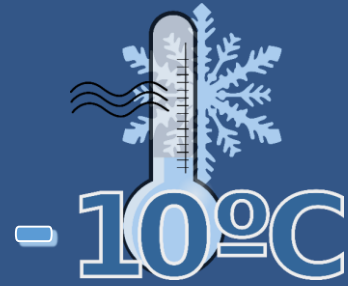
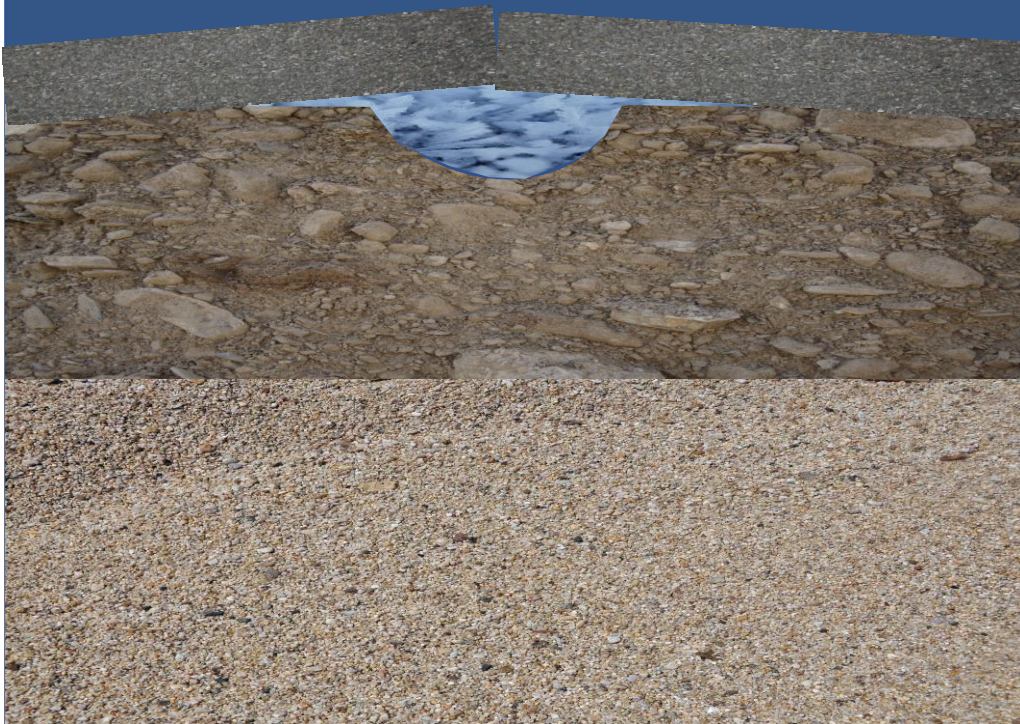


HOW IS A POTHOLE FORMED IN ASPHALT?

1. Water from rain and melting ice enter the road base through cracks in the surface. The water enters and starts washing away fine particles that hold the gravel base tightly together.

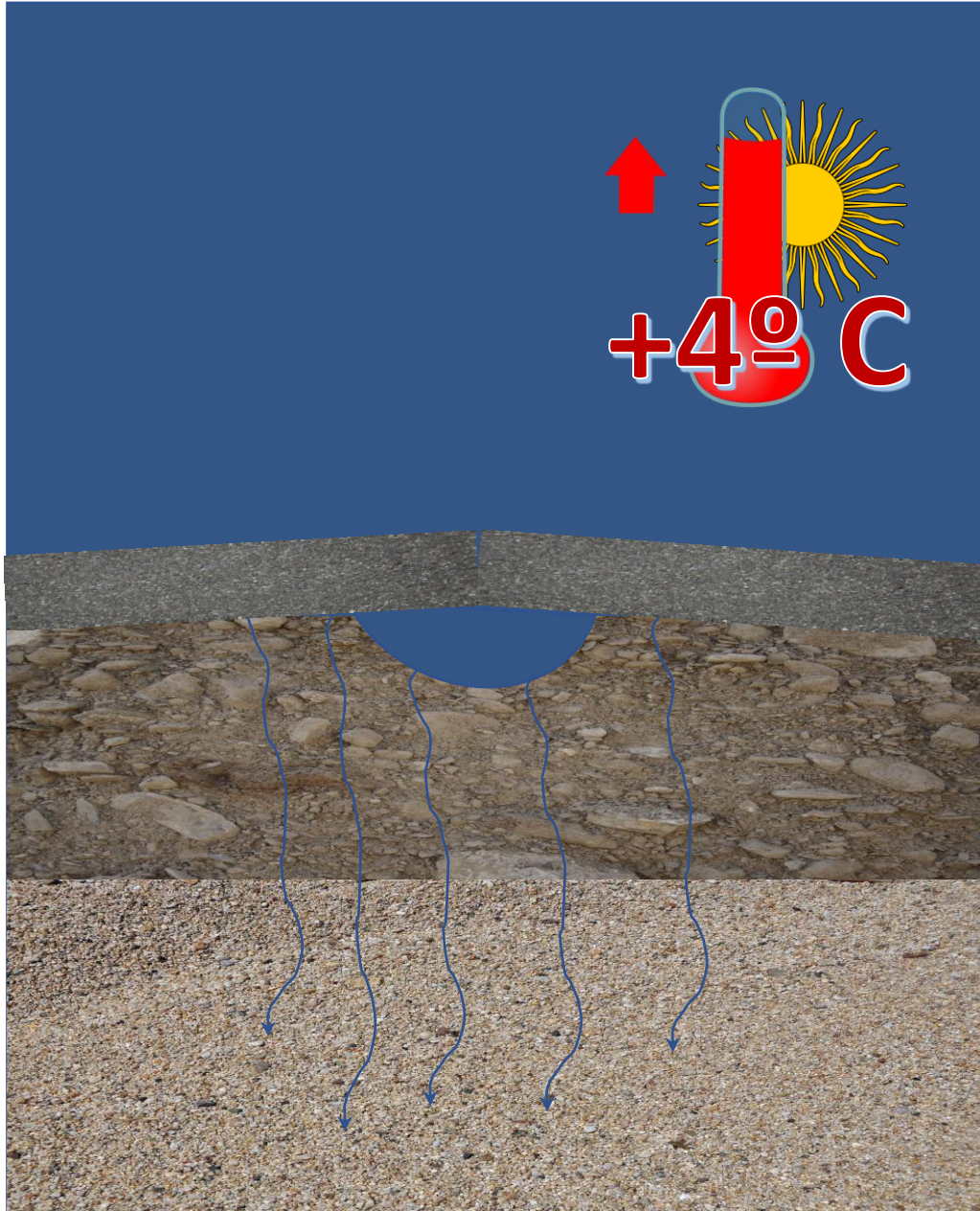


-10°C



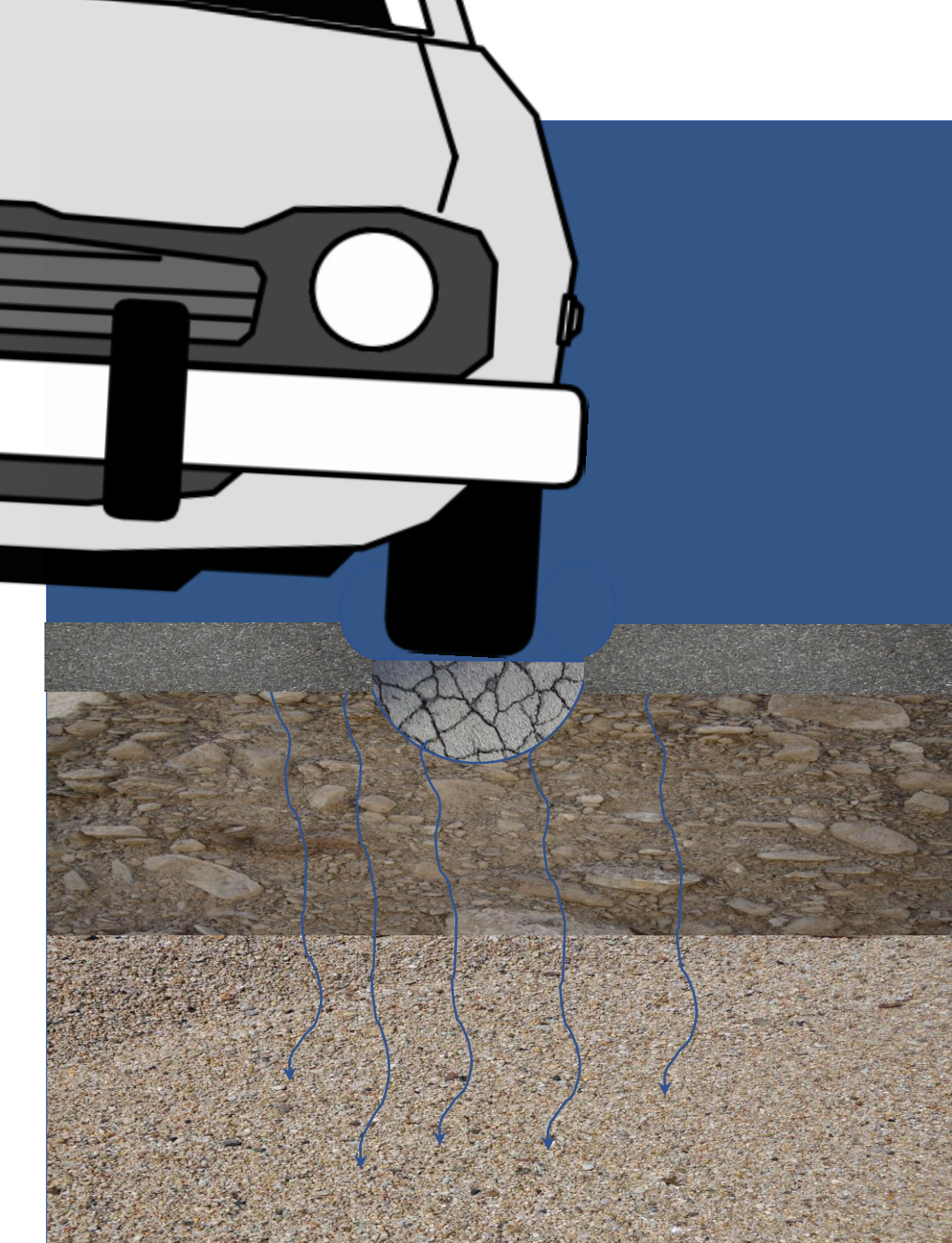
HOW IS A POTHOLE FORMED IN ASPHALT?

2. Pockets of water form under the road surface. These water pockets will freeze during cold winter weather and are able to support some traffic. The freezing water expands and will make the asphalt heave and crack even further.



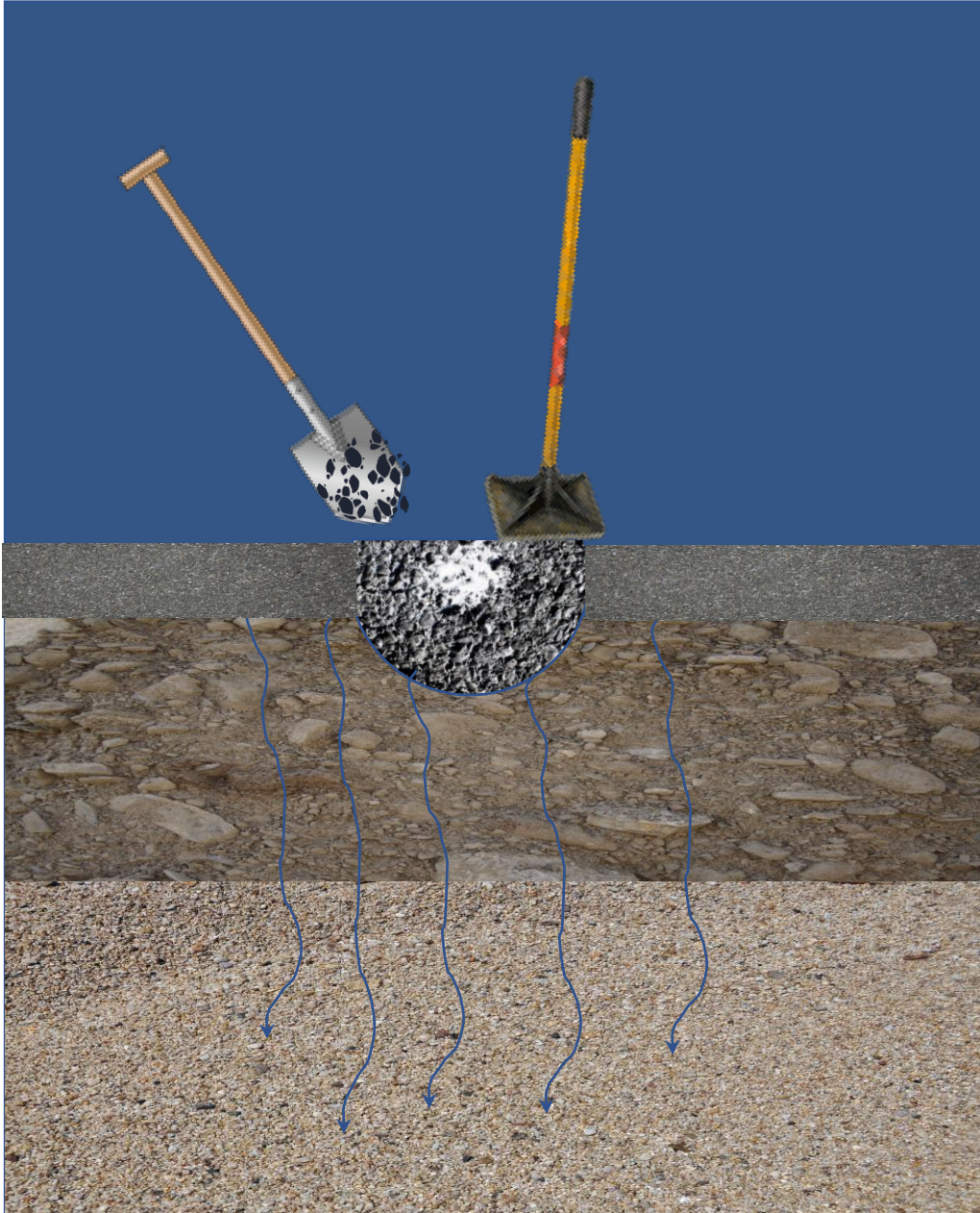
HOW IS A POTHOLE FORMED IN ASPHALT?

3. When the weather warms up, the ice pockets melt and the water drains through the road base. This not only leaves voids under the roads surfaces but it can also soften the road base.



HOW IS A POTHOLE FORMED IN ASPHALT?

4. The soft, cracked asphalt no longer supports the weight of traffic and breaks up leaving a hole on the surface.



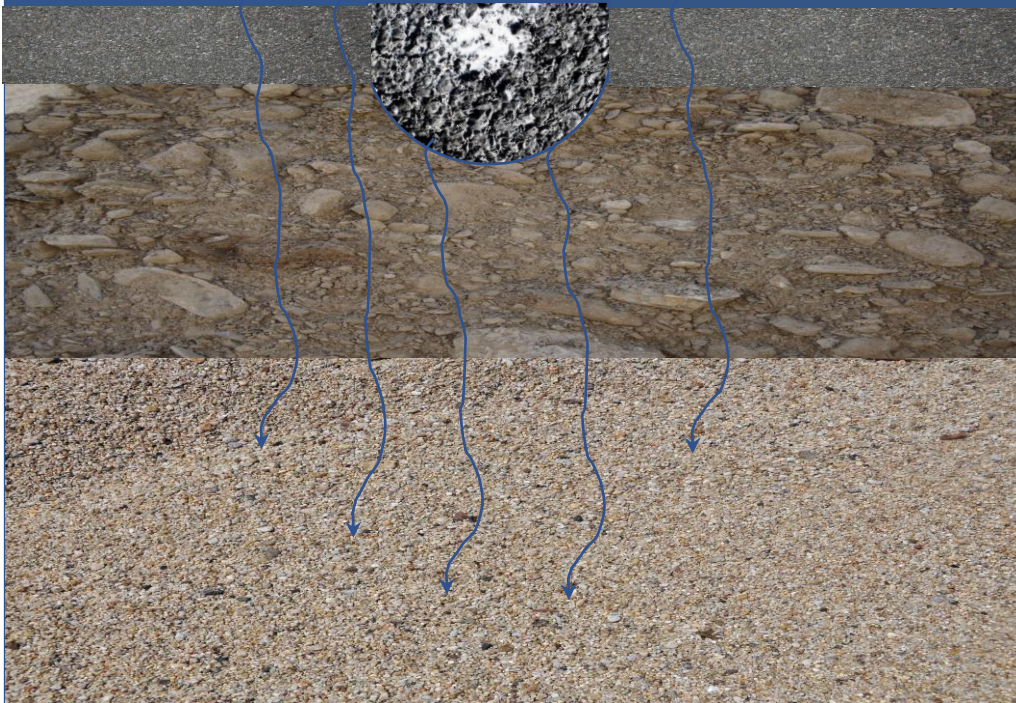
HOW IS A POTHOLE REPAIRED IN ASPHALT? **(TEMPORARY REPAIR – HIGH VOLUME)**

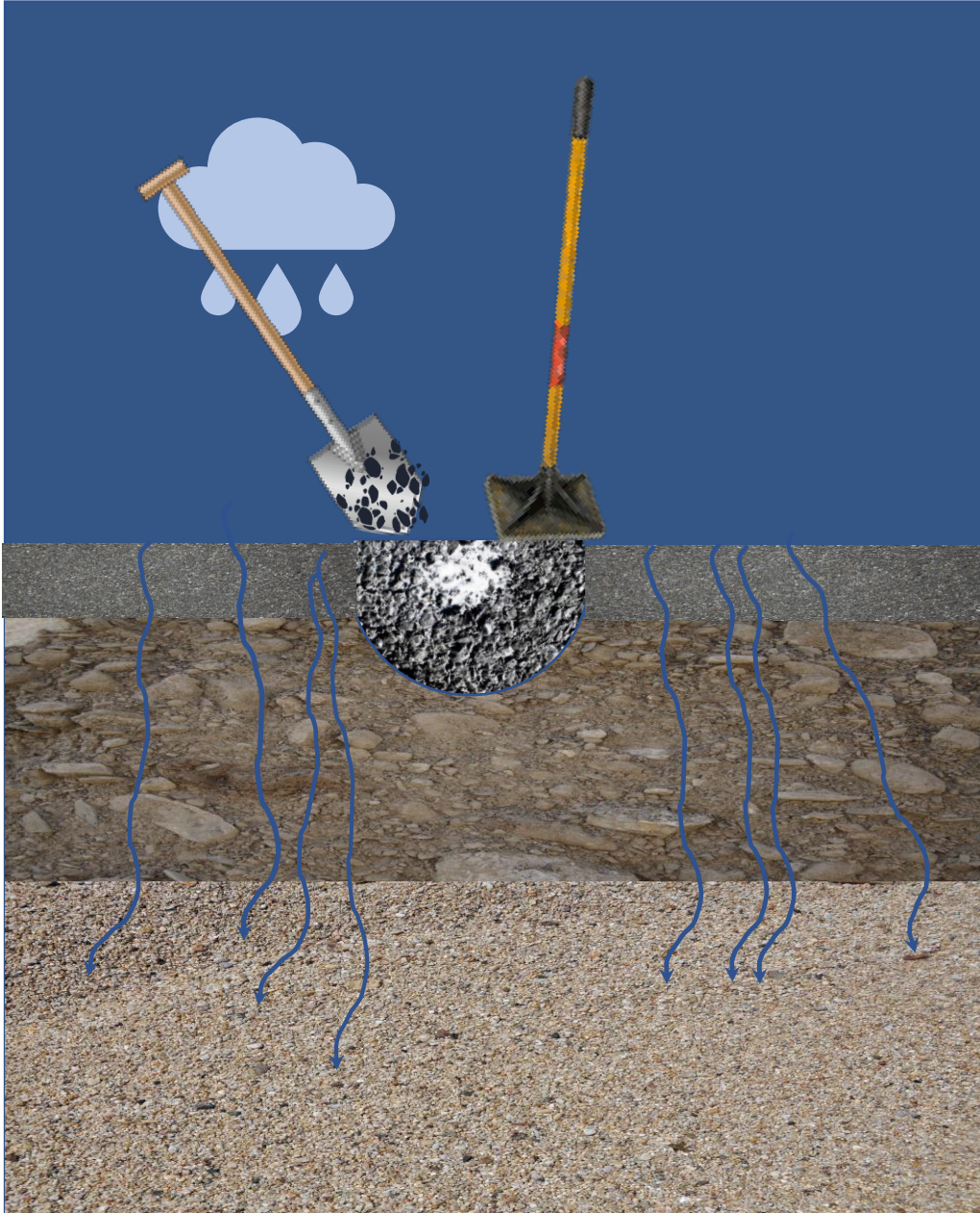
1. In the spring, the number of potholes formed is extremely high. In Oro-Medonte we fill approximately 16,700 potholes each spring. Given the large number of potholes that appear at once and product availability, **Cold Mix** material is used. The cold mix is shoveled into the hole and hand tamped where possible. Where there are large volumes of potholes, a truck is used to press the product into the holes. The purpose is to fill the holes to allow traffic to drive on the surface, and to divert the majority of the water away from the road base.



HOW IS A POTHOLE REPAIRED IN ASPHALT? **(TEMPORARY REPAIR – HIGH VOLUME)**

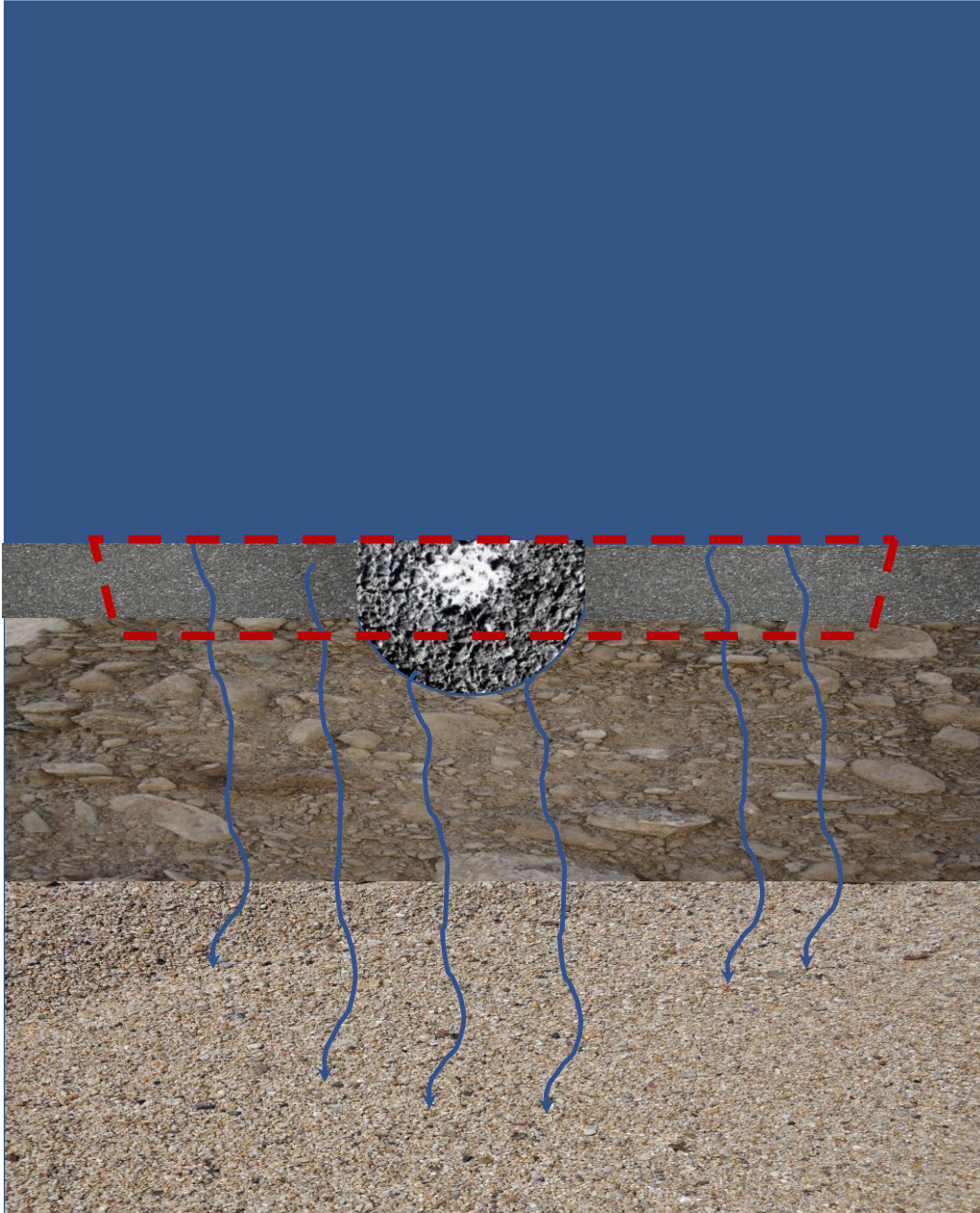
2. Although the hole is filled, the base and subbase have become soft causing the road to lose shape. Ponding of water can cause more water to infiltrate causing more potholes and in some cases, the same potholes to re-appear.





HOW IS A POTHOLE REPAIRED IN ASPHALT? (SEMI PERMANENT REPAIR – LOW VOLUME)

1. In some locations, the road condition is such that a permanent repair may not be feasible. The Township of Oro-Medonte uses a Semi-Permanent **Cold Mix** material that will plug the hole. Once this is complete, the pothole remains in a state of repair for a duration of time and in some cases, permanently. However, since other cracks and deficiencies in the pavement cannot be repaired, other potholes may appear and the same pothole may continue to grow.



HOW IS A POTHOLE REPAIRED IN ASPHALT? (PERMANENT REPAIR)

1. A permanent repair is done when weather permits and there is sufficient good uncracked asphalt to tie into. The area is saw cut and removed. Some base deficiencies can be fixed at this point by replacing some gravel. However, this may cause other issues in the future. This permanent repair approach is not possible where there is poor surface quality.

HOW IS A POTHOLE REPAIRED IN ASPHALT?
(PERMANENT REPAIR)

2. New **Hot Mix** is laid and the road is sealed from water infiltration to the road base.

