## **Issue: Uneven Sidewalks**

#### Solution 1: Create a Transition – a transition can be used for sidewalks with:

- Small height differences (generally under 1-1/2 inch).
- Raised edges from tree roots or settling.
- Tripping hazards at sidewalk joints.

The edge of a raised block may be **shaved down** using a concrete grinder. After grinding, the area should be smooth in texture and level with the adjacent block, providing a seamless transition from block to block.

#### Not Ideal for:

- Slabs with major structural damage or multiple large cracks.
- Concrete that is crumbling or extremely old.



Example of the type of sidewalk this method will work on





Example of a successful repair

Solution 2: Slabjacking (also called mudjacking or concrete lifting) - a method used to raise and level sunken concrete slabs. It's a cost-effective alternative to tearing out and replacing concrete.

- Sidewalks that have sunk due to soil erosion, poor compaction, or water washout.
- Slabs that are otherwise intact and not severely cracked or broken.

Slabjacking involves injecting a material beneath a sunken concrete slab to lift it back to its original level. If you decide to use slabjacking as your form of repair, holes drilled into the concrete must be patched.

#### Not Ideal for:

- Slabs with major structural damage or multiple large cracks.
- Concrete that is crumbling or extremely old.



Example of the type of sidewalk this method will work on



Example of a successful repair

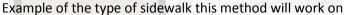
## **Issue: Sidewalk Cracks**

### Solution: Concrete patching, caulking, and Sealing

- Hairline to ½-inch wide cracks in otherwise solid concrete.
- Repair holes, chips, and cracks in concrete.
- Extend the life of the sidewalk.
- Improve appearance and safety.

For simple cracks and to help prolong the life of sidewalks, you can use self-leveling concrete sealers. Clearing vegetation and debris from cracks in your sidewalk and sealing them will also protect against water from working its way into those cracks.













Example of successful repairs

Repairs may be made using a halfand-half mixture of cement and sand, or with a commercial two-part epoxytype concrete patch material. The minimum thickness for a patch is 1 inch. Thicknesses less than 1 inch generally do not bond well. Prior to patching, the deteriorated material should be removed to expose sound concrete. The surface should be prepared with a bonding material or epoxy as prescribed by the patch manufacturer.

# Issue: Complete replacement of sidewalks

Referencing Smithton Borough Ordinance 167, Chapter 21

§105. Sidewalk Materials. All sidewalks shall be constructed, reconstructed and repaired of concrete only and any new concrete must have a minimum thickness of three and one-half inches (3 1/2"). Where existing sidewalk is of material other than concrete, it shall be legal to retain said sidewalk until such time as repairs or replacement are required. At that time, the repairs or replacement must be made with concrete. (Ord. 147, 6/7/1977, §5)

§106. Width of Sidewalks. All sidewalks constructed, reconstructed or repaired after the adoption of this Part 1 shall have a minimum width of four feet (4'). (Ord. 147, 6/7/1977, §6)





Examples of the type of sidewalks that needs replaced