



CITY OF MADISON HEIGHTS BUILDING DIVISION
300 W. 13 MILE ROAD
MADISON HEIGHTS, MI 48071
(248) 583-0831



REQUIREMENTS FOR SIDEWALKS, DRIVEWAYS AND OTHER FLATWORK CONCRETE

Permits are required for all flatwork concrete. The purpose of the permit is to check the grade of the concrete to insure that no drainage regulations are being violated and to check construction and restoration in the public right-of-way. A bond is required for work in the right-of-way.

The Permit Process

- a. The contractor or qualified homeowner fills out a concrete permit application.
- b. Submit two (2) copies of your plot plan indicating where you plan to install or replace your concrete (see sample). A mortgage survey works well for this. Do not use the original copy of your survey!
- c. Once you receive your permit you may start work.
- d. When all the forms are in place and the sub-base is compacted, call for an open form inspection.
- e. Once the form inspection is approved you may pour the concrete.
- f. For permits for work in the public right-of-way a restoration inspection is also required when complete.

Inspection Line Phone Number (248) 583-0831. Call 24 hours in advance.

General Requirements for All Concrete

- a. Concrete must be five (5) or six (6) sack, air-entrained concrete, have a moisture content of not more than seven and one-half (7 ½) gallons of water per sack of cement and not more than six (6) parts of aggregate for each one part of cement, by separate, dry volumetric measuring.
- b. No concrete shall be poured in freezing temperatures or when a freezing temperature is predicted, without the use of anti-freezing chemicals, or protection from freezing by other approved methods. No concrete shall be poured upon frozen subgrade.
- c. Open rail inspection is required and a final inspection is also required for right-of-way work.
- d. Jacking, ramping, patching or grinding are not permitted in the public right-of-way. These repairs are considered temporary and do not address the underlying problems.
- e. Concrete in the right-of-way must be batch mixed (no ready-mix may be used) and u-cart concrete may not be used unless it contains air entraining admixtures. For concrete in the right-of-way, the load ticket from the supplier indicating the mix and additives must be available at the final inspection.

Driveways and Flatwork (private side of the sidewalk)

- a. Driveways shall be paved not less than nine (9) feet wide from the street to all garages. Where no garage exists, the driveway shall provide two nine (9) by twenty (20) foot parking spaces as required by the zoning ordinance. Driveways shall be not less than four (4) inches thick. It shall be reinforced over all excavated areas, and shall have a non-extruding bituminous expansion at the sidewalk and the garage floor. If any concrete is abutting a building a full depth expansion joint shall be required to separate the concrete from the building or foundation. Full depth joints shall be installed every fifty (50) feet and a control joint shall be installed for every ten (10) foot by ten (10) foot square. If a driveway is widened, the approach must also be widened to the same width with eighteen (18) to thirty-six (36) inch flares at the street. Parking in front of a residence, except in front of an attached garage, is prohibited and pavement other than service walks will not be approved in that area. A minimum of four inches of clearance is required between door and basement window sills and the adjacent ground. Where a window well is required to provide the required clearance it shall provide a minimum of four inches between the sill and the bottom of the well and the finish grade and the top of the well, and be provided with an approved drain connected to the perimeter drain system.
- b. Water run off must be contained on the property by grading or swales to prevent water, road salts or other substances from flowing onto adjoining property. Where paving is proposed in the side yard to less than twelve (12) inches from the property line, the drive must be designed to contain run off within the property by:
 - 1) Forward pitch on a slab that is level across the driveway.
 - 2) Reverse pitch of a minimum of one and one half (1 ½) inches on the lot line side on slabs pitched toward the lot line.
 - 3) A one and one-half (1 ½) inch curb on the lot line side.

Approaches

- a. All approaches shall be poured the same width as the driveway, shall flare out eighteen (18) to twenty-four (24) inches on each side at the curb or street line, be no less than six (6) inches thick, no less than six (6) inches thick through the sidewalk and have a non-extruding bituminous expansion at the street and both sides of the sidewalk. The curb cut must extend the full width of the apron. Pavers may not be used to widen an approach.
- b. All concrete approaches shall have a broom finish. **Stamped, patterned and colored concrete are prohibited in the public right-of-way.**

Public Sidewalks

- a. Minimum concrete thickness is four (4) inches. Concrete in the sidewalk that crosses any driveway must be six (6) inches thick (eight (8) inches for commercial driveways).
- b. Sidewalks must be broom finished across the sidewalk and curing compound should be applied per manufacturer's instructions. **Stamped, patterned and colored concrete are prohibited in the public right-of-way.**
- c. All tree roots must be removed beside the concrete sufficient to allow form placement, and not less than 6" below the concrete, and the concrete must have a 4" sand or compacted aggregate base.
- d. Sidewalk squares must be 5' wide and should be 5' +/- long. All joints must be tooled, not saw cut.
- e. Full depth bituminous joints are required every fifty (50) linear feet, wherever the thickness of the concrete changes, along any joint with an apron or driveway and where the sidewalk abuts any other concrete.
- f. All public sidewalks shall be constructed of concrete poured from lot line to lot line. However, on a corner lot or parcel, the sidewalk shall be poured from curb or street line to the side and rear lot line, no less than five (5) feet wide and four (4) inches thick and shall have conforming barrier free ramps. Sidewalks shall be reinforced over water and sewer.

Service Walks

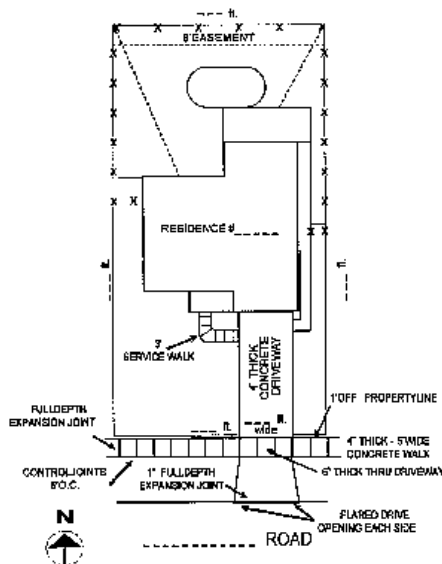
Front service walks constructed of poured concrete shall be no less than three (3) feet wide and four (4) inches thick and shall be reinforced over all excavated areas.

Brick Pavers, Stamped Concrete, and Asphalt

Brick pavers, colored or decorative stamped concrete and asphalt may be used for driveways, approaches, and service walks **on private property** if installed in accordance with the provisions of this policy and the brick or other manufacturer's recommended installation standards. Pavers and asphalt do not require permits but must comply with the driveway size and drainage provisions. **Brick pavers and stamped, patterned and colored concrete are prohibited in the public right-of-way.**

Important Notes

If you hire a contractor to do the job you should have the contractor obtain the permit. The City will verify that the contractor is licensed and registered. Before the contractor starts work you should ask to see a copy of the permit and the job card should be posted on the structure and be visible from the street.



Sample Plot Plan