

**CITY OF LIVONIA  
AS-BUILT DRAWING REQUIREMENTS  
(UPDATED 9/30/19)**

**The final plans shall be prepared as follows:**

1. The Design Engineer will be responsible for submitting a final measured plan to the City of Livonia Engineering Department. The following information shall be incorporated onto a signed and sealed print:
  - a. The as-built rim elevations of all storm sewer, sanitary sewer, and water main structures.
  - b. As-built inverts and lengths of all the utilities (including sump and sanitary leads) updated on both the plan and profile views.
  - c. The Designer should also set a benchmark on all hydrants. The benchmark is to be located on the arrow, next to the operating nut.
  - d. The as-builts top-of-curb elevations adjacent to all utility structures.
  - e. As-built information of swales on the grading plan.
  - f. The as-built information should be acquired after final inspections have determined that structures do not require adjustments.
  - g. Topographic as-builts of all berms shall be shown on the final measure plans, with contour lines.
  - h. The original topographic survey of the undeveloped site must be included in the final measures.
  - i. The original storm water design calculations and drawings must be included in the final measures.
  - j. All underground utilities and pavements shall be labeled as "Public" or "Private". In general, main line sanitary sewers and water mains must be "Public".
  
2. The Design Engineer will be responsible for submitting an as-built detention pond certificate. The following information shall be incorporated onto a signed and sealed blueprint and acquired prior to the stabilization of the side slopes:
  - a. As-built contours should be indicated at 1-foot vertical increments and each contour shall be designated with its elevation.
  - b. As-builts permanent water and high water contours shall be depicted on the plans.
  - c. All proposed contours should be eliminated except for bottom of pond, 100-year storage, and top of bank contours. As-built and proposed contours shall have different line styles.
  - d. As-built volumes shall be indicated in 1-foot increment.

**CITY OF LIVONIA  
AS-BUILT DRAWING REQUIREMENTS  
(UPDATED 9/30/19)**

- e. Proposed volumes shall be indicated along with detention calculations per the approved plans.
- f. Include as-built detention storage volumes.
- g. Random spot elevations shall be provided along the banks of the detention/retention pond.
- h. Provide the as-built invert elevations of the weep holes located in the riser pipe that determine the bank full volume elevation.
- i. Verification that the slope shall not be steeper than 1 on 6.
- j. Identify areas of stone around the risers and locations where riprap has been placed.
- k. Provide elevations of the top of the retaining walls and the elevation at the face of the wall. Per the plans there shall not be more than 18-inches of face showing.
- l. Reveal the size and locations of the pond conduits.
- m. The following certification must appear at an appropriate location on the as-built drawings, certified by a registered Professional Licensed Surveyor in the State of Michigan that is in good standing:

I hereby certify that the final dimensions of the retention/detention basin are sufficient to ensure storage of \_\_\_\_\* cubic feet of water below elevation \_\_\_\_\* feet as required on the approved plans. I also certify that the side slopes of the retention/detention basin do not exceed a slope of one (1) foot vertical over six (6) feet horizontal and/or that the necessary basin fencing has been installed per the City of Livonia Site Plan Design Standards, Section VI, Part K, No. 3 unless waived by the Engineering Division when the design is an integral part of the landscaping and the location and depth does not present a potential hazard.

Name \_\_\_\_\_  
State of Michigan RLA License Number \_\_\_\_\_

(\*figures to be established during the review phase)

- 3. Three copies of the draft final measures must be submitted to the City of Livonia Engineering Department.
- 4. Upon the City of Livonia's review and approval, a complete mylar copy, one paper copy and a CD (containing both PDF and AutoCAD files) of the final measured plans must be forwarded to City of Livonia Engineering Department.