

# City of Marysville

## Street and Storm Sewer Notes to be on all Future Plans

Revised 18-Nov-08

1. Contractor/Developer shall develop a Storm Water Pollution Prevention Plan to protect Ohio's resources from harmful effects of sediment.
2. All manholes shall be City of Marysville standard precast concrete manholes as shown on the standard construction drawings. Casting to be **NEENAH #R-1762** or equal, with "Marysville Storm Sewer" cast into the lid.
3. Manhole castings are to be set, or subsequently adjusted to **2"** above the surface grade established by the engineer when manhole is outside of paved areas. All adjustments shall be performed using precast rings.
4. Catch Basins and Curb Inlets shall be precast concrete or concrete brick laid in a full bed of mortar as shown on the construction drawings.
5. Catch Basin castings shall be **NEENAH R-3067** with Type 5 Vane Grates or **EAST JORDAN IRON WORKS #7030** with Type **M4 Vane Grate**.
6. All curb inlet and catch basin castings shall be permanently cast with a **Trout emblem** and "**Dump No Waste**", "**Drains to Waterways**" messages to clearly identify sewer.
7. Storm sewer located within proposed or existing pavement shall conform to **ODOT 706.02**, and shall be Class B conduit. Storm sewer outside the pavement area shall be Class C conduit, and conform to **ODOT 707.32**.
8. All sanitary and storm sewers constructed with flexible conduit shall have bedding of **ODOT 603 Type 3 (#57 stone)** extending from a point not less than 4 inches below the bottom of the pipe to a point not less than 12 inches above the crown of the pipe.
9. Any field tile disturbed during construction shall be replaced, as directed by the City Engineer, with **SDR-35 perforated pipe**. SDR-35 will be used to span the trench, or to intercept and convey to the storm sewer. Trench to be backfilled with compacted granular material.
10. All pipe outside of the right-of way shall have a minimum of 2 feet of cover. If embankment is required to achieve 2 feet of cover, it shall be placed before installation of the storm sewer.
11. Drainage structures shall have openings for curb underdrain outlets. Underdrains to be constructed in accordance with details on site plan.
12. The flow in all sewers, drains, and watercourses encountered shall be maintained by the contractor at his own expense. Whenever such watercourses are disturbed or destroyed during the prosecution of the work, they shall be restored by the contractor, at his own expense, to a condition satisfactory to the engineer.
13. All storm sewers 12 inch through 36 inch are to be camera/video taped by the developer prior to acceptance by the City Engineer. Work to be done in the presence of a City of Marysville representative. A copy of the DVD, with a summary report is to be given to the Assistant City Engineer.

# City of Marysville

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**Backfill operations shall conform to Standard Construction Drawing 63  
and meet the specifications listed below in Notes 1, 2, and 3.**

1. Storm trenches outside of the influence of streets shall require 95% of maximum dry laboratory weight at plus or minus 2% of optimum moisture. Material shall be per **ODOT 203.07 and Supplemental Specification 1015**.
2. Storm, sanitary, and utility trenches within 3 feet of the edge of pavement and within the cone of influence shall require 98% of the maximum dry laboratory weight at plus or minus 2% optimum moisture. Backfill material shall be **ODOT 304** aggregate or **ODOT 613, Low Strength Mortar (LSM)**. Where said results indicate the trench backfill does not meet the compaction requirements of **ODOT 203.07** of the construction and materials specification, all backfill shall be removed and retested until compaction meets the requirements of 203.07. Cone of influence to begin 3 feet from the edge of pavement and extend one foot in distance for every one foot of depth.
3. Storm, sanitary, and utility trenches under road pavement shall require 98% of the maximum dry laboratory weight at plus or minus 1.5% optimum moisture. Backfill material shall be **ODOT 304** aggregate or **ODOT 613, Low Strength Mortar (LSM)**. Backfill to begin 3 feet from edge of pavement and extend one foot in distance for every one foot of depth. Where said results indicate the trench backfill does not meet the compaction requirements of **ODOT 203.07** of the construction and materials specification, all backfill shall be removed and retested until compaction meets the requirements of **203.07**.
4. Prior to the construction of streets, soil tests shall be taken at all sanitary sewer, designated storm sewer trenches, and water line trenches which cross the proposed pavement or which lie such that the proposed pavements are located within any part of the influence line of said trench. Where said results indicate the trench backfill does not meet the compaction requirements of **ODOT 203.12** of the construction and materials specification, all backfill shall be removed and retested until compaction meets the requirements of 203.12.

### **Streets, Curb and Gutter**

1. Proof Rolling of both the sub-base and the compacted 304 will be conducted by the contractor with the City Engineer or his representative present to witness the proof rolling.
2. The surface course shall be placed within 5 days of the placement of the previous course. After 5 days or at any time that contamination of the intermediate course occurs, the surface will be cleaned and a tack coat applied before the surface course is placed.
3. An expansion joint is to be located at all radii and returns and every 400 foot reach of curb. Curb is to be imprint stamped above the location of the services with the appropriate letter.
  - "S" for Sanitary
  - "W" for Water
  - "X" for other Utilities
4. Face of gutter pan shall be tacked before surface course is placed.
5. Surface Course of pavement shall be treated with Reclamite asphalt rejuvenating agent, or equal.
6. Temporary barricades, if required, shall be placed where indicated on the plans. They shall consist of five wooden posts measuring 9' x 4"x4", painted white, with one reflector placed 12" from the top of each. Posts are to be placed 6'-0" center to center and extended 60" above top of curb.
7. Provide pavement marking as required by the City of Marysville. Pavement markings shall conform to **ODOT 644**. Markings to be installed as soon as possible after street paving.



## **City of Marysville**

### **Street and Storm Sewer Notes to be on all Future Plans**

#### **Streets, Curb and Gutter (Cont.)**

8. Curb Inlets shall not be installed on the radius at intersections. They must be installed before the point of curve on the curb.
9. All traffic control signs must be high intensity Diamond grade sheeting.
10. All regulatory signs must be mounted using 8 foot, 3 lb. galvanized U-Channel base post and 8 foot, 2 lb. U-Channel galvanized top post.  
Posts shall yield when hit, and shall be driven into the ground to a depth of 42".  
Vertical and lateral clearances shall comply with SCD TC-42.20.
11. Parking regulation signs are to be mounted on a single galvanized U-channel post.  
Posts shall yield when hit, and shall be driven into the ground to a depth of 42".  
Vertical and lateral clearances shall comply with SCD TC-42.20.
12. All street name signs must be high intensity grade with white background with green letters.  
Letters and borders shall be consistent with colors currently used city wide.
13. All street signs are to be mounted on a 10 foot galvanized round post measuring 2 5/8 inches in diameter (O.D.). Sign shall be 8 feet above finished grade, and shall be set in concrete.
14. Street signs shall have 8 inch lettering at multi lane streets where the speed limit exceeds 25 MPH.  
Street signs shall have 6 inch lettering at locations where the speed limit exceeds 25 MPH.  
Street sign lettering may be 4 inches where the speed limit does **not** exceed 25 MPH.
15. Font for street sign lettering shall conform to FHWA Series B.
16. Signs are to be labeled with "City of Marysville" in the borders using 1/4 inch letter height.
17. Reflective sheeting for signs shall be 3M Scotchlite 2870/3870 or equal, and shall conform to ASTM D4596 Type III or IV.
18. All signage and installations must be accordance with the Ohio Manual of Uniform Traffic Control Devices.
19. Traffic and Pedestrian signal lamp units shall be 12 inch General Electric GT1 LED, or approved equal, conforming to ODOT Supplemental Specification 872.
20. Traffic signal housing shall be one piece molded ultraviolet and heat stabilized polycarbonate units meeting or exceeding ITE specifications, and conforming to City of Marysville Supplemental Specification 872-H.