

SECTION 800

800. STRUCTURES

810. General

- A. The term “structures” as used in this section applies to bridges, retaining walls, reinforced concrete box culverts, and pipes greater than 72 inch in diameter constructed in the public right-of-way or within public easements.
- B. Structures shall be designed and constructed in accordance with the *Oregon Standard Specifications for Construction, Manual of Field Test Procedures, Bridge Design and Drafting Manual, Roadside Design Guide, AASHTO LRFD Bridge Design Specifications, and The Oregon Structural Specialty Code (OSSC)* (as adopted by the City’s Building Department).

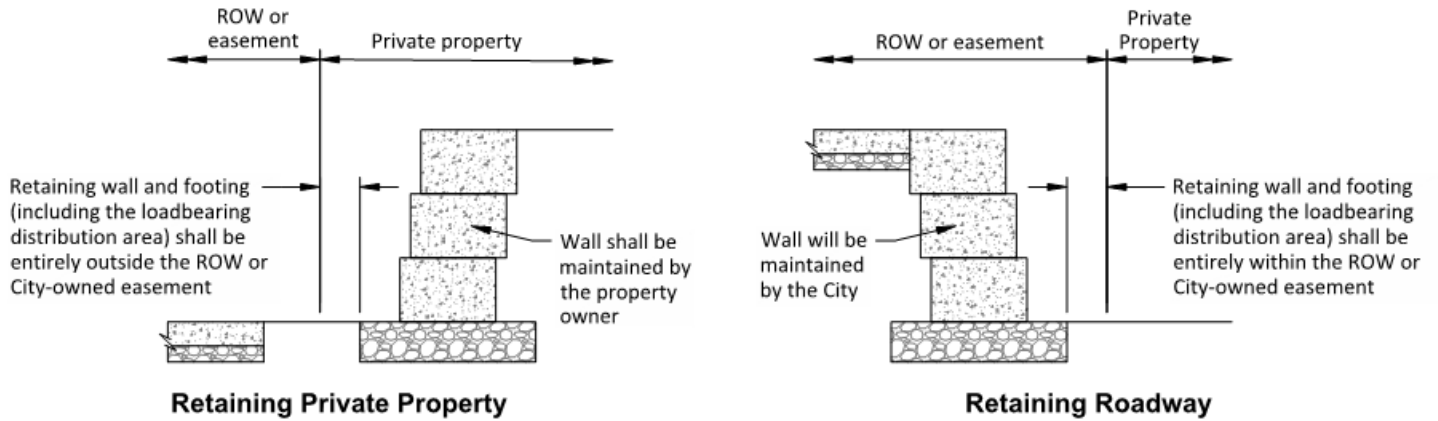
820. Design Criteria

- A. The project drawings and specifications shall state the ODOT requirements and design criteria for structures that apply to the project.
- B. Concrete for structures shall be a minimum of Class 5000, 3/4 inch concrete.
- C. Concrete for structures shall provide mix designs with GWP thresholds according to 170.6.1

830. Retaining Walls

- A. The term “retaining wall” as used in this section includes the wall face, structural backfill, geogrids and other tie back systems, wall drainage systems, drainage backfill, and all other wall components required by the wall system manufacturer or Engineer to ensure the stability of the wall.
- B. Retaining walls exceeding 4 feet in height (measured from the base of the foundation to the top of the wall) shall be designed by a registered Professional Engineer licensed to practice structural engineering in the State of Oregon. Walls less than 4 feet in height but supporting a surcharge load must also be designed by a registered Professional Engineer.
- C. Retaining walls shall be designed to avoid conflicts with the maintenance of utilities.
- D. Retaining walls shall be designed for maintenance traffic loads when applicable.
- E. If a retaining wall is located outside a public right-of-way, a building permit may be required by the City depending upon the height and loading of the wall. Visit the City of Hillsboro Building Department website for building permit requirements.
- F. Walls constructed to retain a roadway or other public infrastructure shall be located entirely within the ROW or City-owned easement. Walls constructed to retain private property shall be located entirely on the private property and shall be maintained by the property owner. See Figure 830.1 for wall location and ownership.

Figure 830.1 – Wall Location and Ownership



- G. Retaining walls located near street intersections shall conform to the sight distance requirements specified in Subsection 230.5.1.
- H. All walls taller than 24 inches require a handrail or fence.
- I. Retaining walls less than 24 inches in height located at the back of a proposed sidewalk shall include a 3½ inch tall “kicker” as shown in Figure 830.2.

Figure 830.2 – Short Wall at Back of Sidewalk

