

DIXON, CA 95620-3697 PHONE (707) 678-7000 Building Info <u>Building@cityofdixonca.gov</u>

### **Retaining Wall Requirements**

<u>Important:</u> The Building Division and the Planning Division have separate requirements for the approval of retaining walls. These requirements apply to the Building Division only. All applicants must first inquire about the proposed project with the Planning Division at 707-678-7000 or via email at <u>Planningdepartment@cityofdixon.us</u>

This handout is to clarify when a building permit is required for the construction of a retaining wall. This handout ONLY applies to Building Division requirements; not Planning Division requirements. Grading that is exempt from the Building Division may still require Planning Division review.

#### **DEFINITIONS:**

**Retaining Wall:** A wall designed to resist earth and/or fluid pressure, including any surcharge in accordance with acceptable engineering practices.

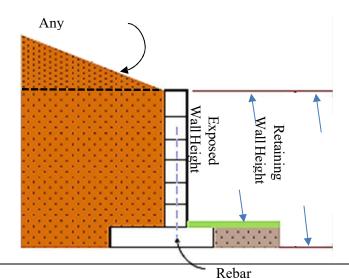
**Surcharge:** The vertical load imposed on retained soil that may impose a lateral force in addition to lateral earth pressure of retained soil. The Surcharge from soil above the top of the wall adds additional pressure. Nearby roads, buildings, or structures such as pools can add a surcharge. Example: Sloping retained soil; structure footings supported by the retained soil; or adjacent vehicle loads supported by retained soil.

**Retaining Wall Height:** The vertical distance measured from the bottom of the footing to the finish grade at the top of the wall (i.e. upper grade), per 2022 California Building Code Sec. 105.2 item

4. That is, combined total of the height of the wall and the depth of the footing below grade.

**Exposed Wall Height:** The vertical distance measured from the finish grade at the bottom of the wall (i.e. lower soil grade) to the foundation grade at the top of the wall (i.e. upper soil grade). The height does not include the wall depth of footing below grade.

### When is a permit required?



- The total wall height is greater than 4 feet measured from the bottom of the footing to the top of the retaining wall.
- Any retaining wall in excess of 30 inches (2.5 feet) in height as measured from the bottom of the footing to the top of the wall that is constructed on or within 10 feet of a slope that has a grade of 5:1 (20%) or steeper.

(2) COMPLETE PLAN SETS ARE EQUIRED. (Paper and Digital) Plans must be to scale drawn in blue or black ink, on clear unlined paper; minimum size is 11" x 17", maximum size 24" X 36". The Scope of Work must be fully stated and detailed on the plans. For building plans to be useful, they must be legible and drawn to scale.

## SITE PLAN/COVER SHEET: Site Plan:

- If a permit is required, the applicant shall provide a fully dimensioned site plan, drawn to scale, showing the lot size, street, alley, easements, parking, walls, projections, and building locations.
- Location and types (above ground or underground) of electrical and gas utilities
- Identify all existing structures and proposed retaining wall, including set-backs and distance to property line
- All project elements shall be delineated including the distances to property lines and adjacent structures.
- The general site topography with slope, drainage patterns, and current discharge location(s) shall be shown on the site plan.
- The plan must clearly show the location and dimensions of the proposed new wall(s) and provide Top of Wall (TW), Finish Grade (FG) and Top of Footing (TF) notations for each wall, at any change in construction grade, and at intervals of 2 feet where changes in height of the retaining condition(s) will exist.

#### **Drainage:**

- Provisions shall be made to relieve hydrostatic pressure via sub-drains behind the wall with installation of a 4- inch perforated drain line and a 12-inch gravel pocket.
- Weep holes or solid outlet piles are required to remove water from the wall area.
- Water is not permitted to drain onto adjoining properties or walkways.
- A separate Encroachment Permit will be required for work in the public right-of-way with the Dixon Engineering Department or 707-678-7030 or <a href="mailto:Engineering@cityofdixonca.gov">Engineering@cityofdixonca.gov</a>)

**NOTE:** A survey by a licensed land surveyer is required if the retaining wall is planned to encroach a property line and the retaining wall requires a permit.

# A permit is **NOT** required for retaining walls which:

- Do not exceed 4 feet in height as measured from the bottom of the footing to the top of the wall. (When retaining wall is not within 10 feet of a slope over 20%)
- Do not exceed 30-inches in height as measured from the bottom of the footing to the top of the wall.
  (When retaining wall is within 10 feet of a slope over 20%)

