Standard Drawing Report

Date: October 25, 2017

Technical Owner: Civil – Brett I. Kesterson, P.E.

Standard Drawing No. P-548 Calculation Book No. n/a

Drawing Title: Sidewalk Ramp with Planter Strip Placement Options

Background Information, Including Reference Material:

This is a new drawing (2015). It was drawn to be a typical depiction of a standard sidewalk corridor (0.5' curb + 4' planting strip + 6' sidewalk with 0.5’-1.5’ buffer behind walk depending on the zoning) and modelled after a similar ODOT standard drawing.

A 15-foot corner radius is typical for new construction in the City of Portland although many existing corners are smaller radii. 15-foot is also the tipping point at which it becomes quite challenging to construct dual ramps and keep the ramps within the legal crossing which is the extension of the right-of-way lines.

Assumption Made:

The drawing has evolved with the Access Board direction published as ADA Accessibility Guidelines (ADAAG). The slopes and configurations of the ramp meet the design guidance of the Access Board.

Design Narrative:

The drawing defines 3 basic types of sidewalk ramps adjacent to a planter strip (landscaped furnishing zone). The preferred ramp is the 15-foot or larger radius with dual ramps. If the curb radius is smaller than 15 feet and there is enough right-of-way, the smaller radius with dual ramps is preferred. The last option of a single ramp is used on a curb radius smaller than 15 feet with limited right-of-way preventing dual ramps.

All slopes are given in a maximum slope when the ramp is constructed with a lesser slope to be used for design to provide a tolerance for construction.
A flat travel surface is considered to be any surface that has a maximum slope of 2% in any direction with a 1.5% slope used in design to provide a construction tolerance. A ramp surface can have a maximum slope of 8.33% with a 7.2% slope used in design to provide a construction tolerance. The landing area (turning space) in the ramp is to be a minimum of 4 feet by 4 feet. However, if the landing area (turning space) is next to a curb at the back of the ramp to retain material, then the dimension parallel to the ramp is to be 5 feet.