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Standard Drawing Report

Date: March 6, 2025

Technical Owner: Traffic - Andrew Sullivan, P.E.

Standard Drawing No. P-558 **Calculation Book No.** n/a

Drawing Title: Bicycle Facility Separators

X

REGISTERED PROFESSIONAL ENGINEER
83769PE
Digitally Signed
OREGON
DEC. 17, 2014
ANDREW PATRICK SULLIVAN

Expires 6/30/2026

Original Report Date: March 6, 2025

Background Information, Including Reference Material:

PBOT initially used traffic separators specified on ODOT Std. Dwg. RD706 for bicycle lane buffer hardening in 2018. Since that time, PBOT created its own detail (COP Std. Dwg. P-557) to narrow the horizontal profile of the ODOT detail to fit in constrained locations. P-557 has been in use since April 2021.

This detail modifies the vertical profile and device spacing relative to P-557. Otherwise, the horizontal profile and dowel placement are identical to P-557.

Assumption Made:

No major assumptions are made with the traffic separators.

Design Narrative:

This detail is intended for the exclusive use of hardening bicycle buffers and can be deployed adjacent to parking lanes or general traffic lanes. The P-558 detail modifies the P-557 design to include a vertical face on the traffic side. It is expect that the vertical face will provide improved detectability for drivers when conducting parking maneuvers when deployed adjacent to parking lanes and may appear as a more formidable barrier when deployed adjacent to general traffic lanes.

The P-558 detail also modifies the P-557 design to widen the device spacing from a one-foot gap to a four-foot gap. This widened gap provides easier mid-block bicycle access, functions better for drainage/debris

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collection, and results in less material, therefore, less construction and maintenance cost over long distances.

The 4” vertical exposure continues to be mountable for emergency response vehicles as necessary.

The dowel configuration of P-558 matches that of P-557. PBOT Bridges & Structures ran a dowel capacity analysis and determined the existing dowel configuration could handle the additional load without modification.