

1. SUBJECT: CHANNELIZED TRAFFIC ISLANDS (PORKCHOP ISLANDS)**2. DEFINITION**

A rounded triangular shaped traffic island designed at intersections or access driveways to facilitate right turn movement of vehicles into and out of a specific destination, while discouraging left turn movements into the access to the greatest extent possible.

3. DRAWINGS

AS-547 – Channelized Traffic Islands (Porkchop Islands)

AS-208 – Curb and Gutter for Asphalt Pavement

AS-216 – Curb Cut Requirement for Various Pavements

AS-403 – Commercial Concrete Sidewalk

AS-404 – Commercial Sidewalk – Wheelchair Ramp

AS-516 – Median End Treatment

4. BEST PRACTICE

All channelized traffic islands used to restrict access to a development shall conform to the following requirements:

- Island design shall follow the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads.
- Islands shall have a minimum area of 30m² to discourage left turns into the access and ensure provision of a large pedestrian refuge area.
- Access radii and lane widths must satisfy TAC guidelines (Figure 3.2.9.1. attached)
- Lane widths at the property line shall conform to the Zoning By-law. Committee of Adjustment approval is required for non-compliance with the By-Law.
- Design must satisfy turning templates for typical design vehicles affiliated with the development to confirm lane widths and island geometry.
- All corners of the island shall incorporate a concrete bull nosed end treatment (see AS-516 for typical end treatment).
- The curb and gutter of the road will cross the access as a drop curb design, as shown on AS-547, to protect drainage. This requirement may be waived should an alternative means of drainage be demonstrated, at the sole discretion of the City Engineer.
- Where the municipal road has a rural cross-section, alternate improvements may be substituted in place of curb and gutter to ensure adequate drainage, to the satisfaction of the City Engineer.
- Where the municipal road has a rural cross-section, the edge of the island adjacent to the municipal roadway shall be set inward towards the development by a minimum of 0.5m beyond the existing curb line or pavement edge (as shown on AS-547).
- Barrier curbs must be used for the perimeter of the island, as mountable curbs are ineffective in preventing left turn access. Appropriate signage must be erected on the island, to the satisfaction of the City Engineer. The developer shall install 75mm (3”) PVC sleeves for stanchions, in the concrete, at the approximate locations shown on AS-547. The exact location to be determined in the field. Additional signage may be required, especially in case 2 to warn maintenance vehicles of the island. All costs shall be borne by the developer.

- Municipal sidewalks shall carry through the island in line with the existing infrastructure. Wheelchair ramps are required, for all sidewalk entrances, with stamped treatment in order to aid of those with a visual impairment.
- The island surface treatment shall be coloured, stamped concrete, with the exception of the curb, sidewalk and wheelchair ramp locations. Colour to be approved by the City Engineer and City Planner.
- All resulting repairs to surrounding municipal roads, curbs and sidewalks shall be to current City Standards.

5. RELATED BEST PRACTICES

BP2.1.1 – Commercial Driveway Approaches to Roads and Deceleration Lanes – Guidelines for the Use of Curbs

BP2.3.1 – Driveway Approaches

6. RELATED CITY STANDARDS

S-4 – Selected Granular Base Courses

S-5 – Concrete Curbs and Combined Curbs and Gutters

S-6 – Concrete Sidewalk and Driveway Approaches

S-9 - Concrete

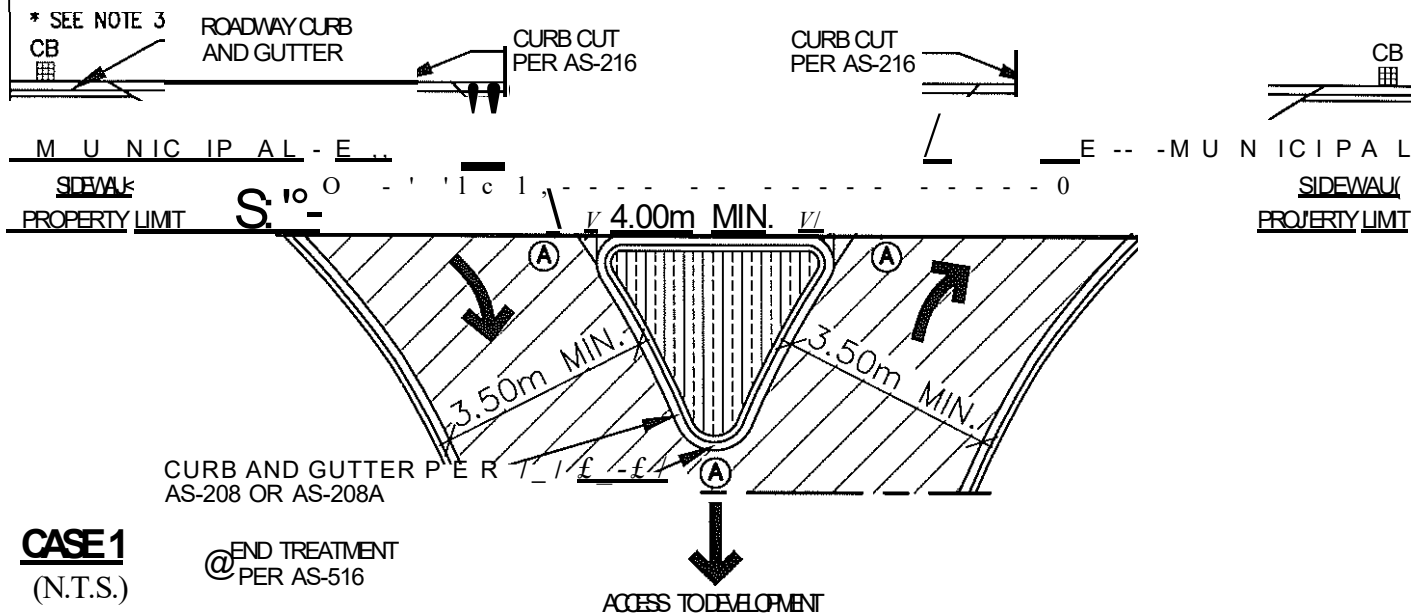
Mario Sonego
City Engineer or Designate

November 15, 2012
Date

Attachment – AS-547, TAC Figure 3.2.9.1

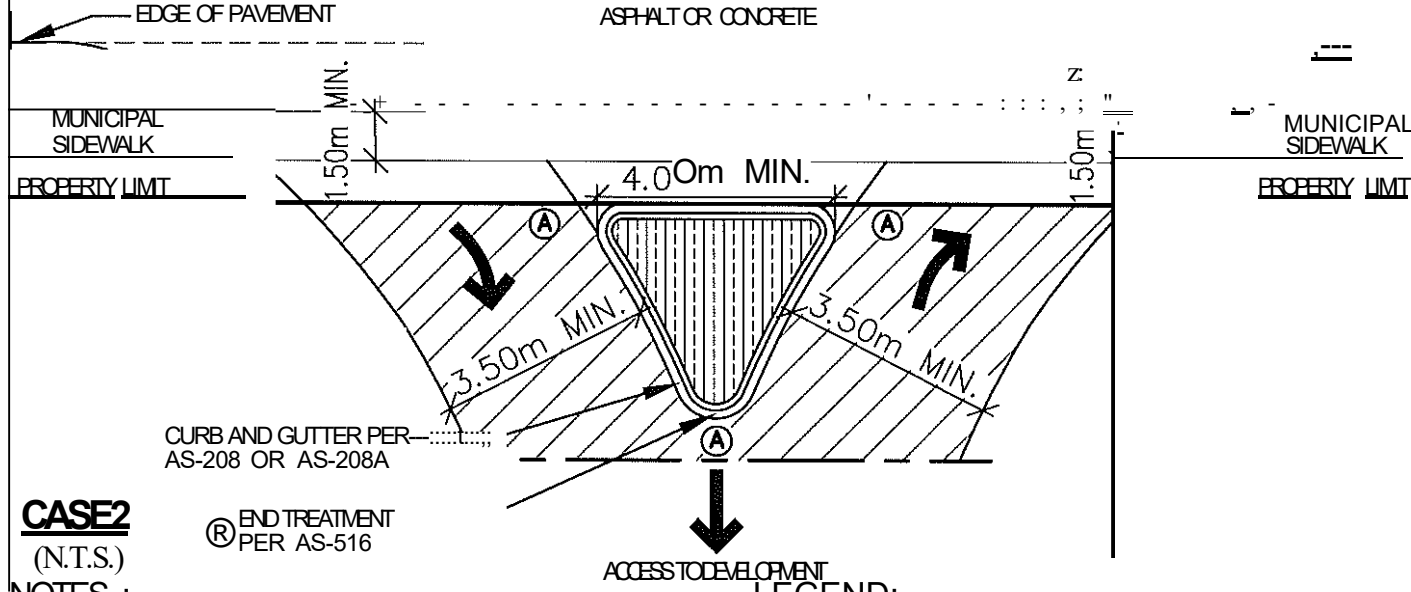
URBAN MUNICIPAL ROAD

ASPHALT OR CONCRETE



RURAL MUNICIPAL ROAD

ASPHALT OR CONCRETE



CASE 1
(N.T.S.)

Ⓐ END TREATMENT
PER AS-516

ACCESS TO DEVELOPMENT

CASE 2
(N.T.S.)

Ⓑ END TREATMENT
PER AS-516

ACCESS TO DEVELOPMENT

NOTES:

- 1.) ISLAND AND LANE GEOMETRY TO CONFORM TO TAC GUIDELINES.
- 2.) STAMPED, COLOURED CONCRETE IN ISLAND; CURB AND PATTERN TO BE APPROVED BY "THE CITY ENGINEER, AND CITY PLANNER.
- 3.) CATCHBASINS TO BE LOCATED OUTSIDE OF "THE ACCESS. REGRADING OF "THE ROADWAY MAY BE NECESSARY.
- 4.) APPLICANT TO PROVIDE DRAINAGE ACROSS "THE ACCESS INCLUDING ANY REQUIRED "CATCHBASINS AND GRADING PLANS.
- 5.) ALL CURBING, SIDEWALKS AND PAVEMENTS TO BE TO CITY STANDARDS.
- 6.) APPROPRIATE SIGNAGE REQUIRED TO BE APPROVED BY "THE CITY ENGINEER. ADDITIONAL SIGNAGE MAY BE REQUIRED FOR CASE 2 TO WARN MAINTENANCE VEHICLES OF "THE ISLAND.
- 7.) LANE WIDTH AT "THE PROPERTY TO BE IN COMPLIANCE WITH ZONING BY LAW.

LEGEND:

CONCRETE **D** ASPHALT **12d** STAMPED COLOURED CONCRETE

CITY OF WINDSOR
ENGINEERING DEPARTMENT
CHANNELIZED TRAFFIC ISLAND
(PORK CHOP ISLAND)

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