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TO:	CHAIR AND MEMBERS PLANNING AND ENVIRONMENT COMMITTEE
FROM:	GEORGE KOTSIFAS, P. Eng. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL
SUBJECT:	PROPOSED AMENDMENTS TO THE SITE PLAN BY-LAW PUBLIC PARTICIPATION MEETING AUGUST 26, 2014

RECOMMENDATION

On the recommendation of the Manager of Development Services & Planning Liaison, the proposed by-law attached as Appendix "A" **BE INTRODUCED** at the Municipal Council meeting on September 2, 2014 to amend Site Plan Control Area By-law C.P-1455-541.

BACKGROUND

Over the past several years, staff in Development Services have continued to study sections of the Site Plan Manual (Schedule 1 of the Site Plan Control Area By-law) with a goal to provide improvements to sections of the Manual. As part of this review, staff have reviewed areas pertaining to External Works; Road Widening; Access To & From the Site Parking Facilities and Internal Driveways; Facilities & Enclosures for the Storage of Waste Material; and Landscaping.

The proposed revisions reflect changes in policy as a result of OPA 438, previous changes to the Development Charges By-law, the Access Management Guidelines; the Transportation Master Plan, as well as replace and/or delete outdated details. The policy changes that have been addressed by the proposed amendments are highlighted below.

a) External Facilities and Works Provided in Conjunction with the Site

As a result of the change to the Development change By-law in 2009, the extent of works potentially claimable by developers has changed. In addition to this, there was a shift in the works previously done by developers to works now done by the City. The evaluation of these claims has been relocated from Development Services to the Director, Development Finance. There is an evaluation during this approval process and a further confirmation after the work is completed.

b) Road Widening

The City's Official Plan sets out the parameters for the sizes of road allowances based upon their type i.e. arterial, primary collector, etc. In turn, the Zoning By-law Z-1 sets out more specifically the extent of the ultimate road allowances based upon the Official Plan. Section 41 of the Planning Act gives the City the means to take the road widening during the site plan approval process.

In the past, the policy provided for these widenings to be a "deferred" widening. That meant the lands were not transferred to the City upon entering the development agreement but a clause was placed in the agreement where the owner agreed to dedicate these lands upon notice being given by the City. In a small number of cases, the land was dedicated to the City upfront where works requiring the land were contemplated in the near future.

OPA 438 makes provision for the City to receive the entire ultimate road dedication prior to issuance of site plan approval and the development agreement. Section 4, Road Widening is being amended to implement the Official Plan Amendment. Table 4.1, Typical Road Right-of-Way Allowances is being deleted as section 4.21 of By-law Z-1 provides for the extent of the road allowance required by the City.

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On June 26, 2012, City Council adopted the Transportation Master Plan. This Plan set out increased road widenings to accommodate future transportation needs for the City.

On April 30, 2013, City Council passed an amendment to the Zoning By-law to revise Section 4.21 (Road Allowance requirements) to implement the Transportation Master Plan. The road widenings are to be free and clear of encumbrances and all buildings, parking, etc., will be set back from these widenings. At the time, City Council amended its policies for road widenings whereby when development occurs road widenings are taken. Section 4, Road Widening of Schedule 1 is being modified to implement the new policies.

c) Access To and From Site

Several years ago a consultant was retained to develop Access Management Guidelines. Aspects of these guidelines are reflected in this section. In addition to this, the figures in this section are being deleted and references are being added to direct consultants and owners to current details and standards on line. By doing this, current standards will be used. Provision has also been made for Traffic Impact Studies and Traffic Management Plans, widths of drives, the radius required for drives and manage works on major roads to ensure traffic flows and traffic safety.

d) Parking Facilities and Internal Driveways

The proposal provides clarification of parking location with respect to the zoning by-law and urban design principles; adds a new section for schools to clarify aspects of parking and bus loading; and updates for common internal drives by deleting outdated details and update others of details required.

e) Landscaping the Site and Improvements to an adjoining highway

Several years ago the Planning Act was revised to allow Cities to request changes/improvements to the boulevard of the proposed development.

This section makes provision to request sustainable design on any adjoining highway under municipal jurisdiction including, without limitation, trees, shrubs, hedges, plants or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking.

Not every site will require these types of improvements, but this will provide the opportunity for increased landscaping on the boulevard at the very least. In most cases, the City would take over these works. In some cases, the owners will be responsible to maintain these works, etc. The modified licensing agreement could accommodate items to be maintained by the owner of the development.

f) Facilities and Enclosures for the Storage of Waste Material

This section has been revised to provide for alternative collection systems (deep collection unit); requirement for material separation for municipal pickup; revisions to the enclosure sizes where the City collects the waste material; and a number of upgrades to reflect the City's latest solid waste program.

g) Replace/delete Figures

A number of figures are outdated and need to be deleted. The City has posted standard engineering details on the web. The deletion eliminates the conflicts. Most of the original figures were hand drawn and are being converted to an electronic format to be incorporated into the Site Plan Manual.

Attached is an excerpt from Schedule 1 showing the additions and deletions (Appendix B). The additions are in bold and the deletions have lines through the words being deleted. These additions and deletions will ensure the Site Plan Control Area By-law is up-to-date and implements the latest amendments to the Official Plan. In particular, Section 4 of the Site Plan

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Control Area By-law, Road Widening is being amended to implement Official Plan Amendment 438, which added numerous clauses to Official Plan Policy 18.2.5.

Initial notice was placed in the Londoner in April 2014 and a subsequent notice was placed in the Londoner on July 10, 2014. As a result of this notice, staff provided the local engineering association and the local planning group with copies of the proposed amendments as well as presenting to the planners in June 2014. While there were some questions raised, there were no written submissions presented to Development Services.

A notice of public meeting was placed in the Londoner on August 7, 2014.

CONCLUSION

Over the past several years, staff have been reviewing various sections of the Site Plan Control Area By-law. This current review examined External works, Road Widenings, Access to Site, Parking, Landscaping on the boulevard and Storage of Waste Materials to provide updates to reflect changes in the Development Charges By-law, new Official Plan policies, and updates for various City divisions, as well as delete and/or update figures in Schedule 1: The Site Plan Manual.

PREPARED BY:	Reviewed By:
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RECOMMENDED BY:	REVIEWED BY:
TERRY GRAWAY, MCIP, RPP MANAGER, DEVELOPMENT SERVICES & PLANNING LIAISON	GEORGE KOTSIFAS, P.Eng MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL

cc: John Braam, Managing Director - Environmental & Engineering Services & City Engineer

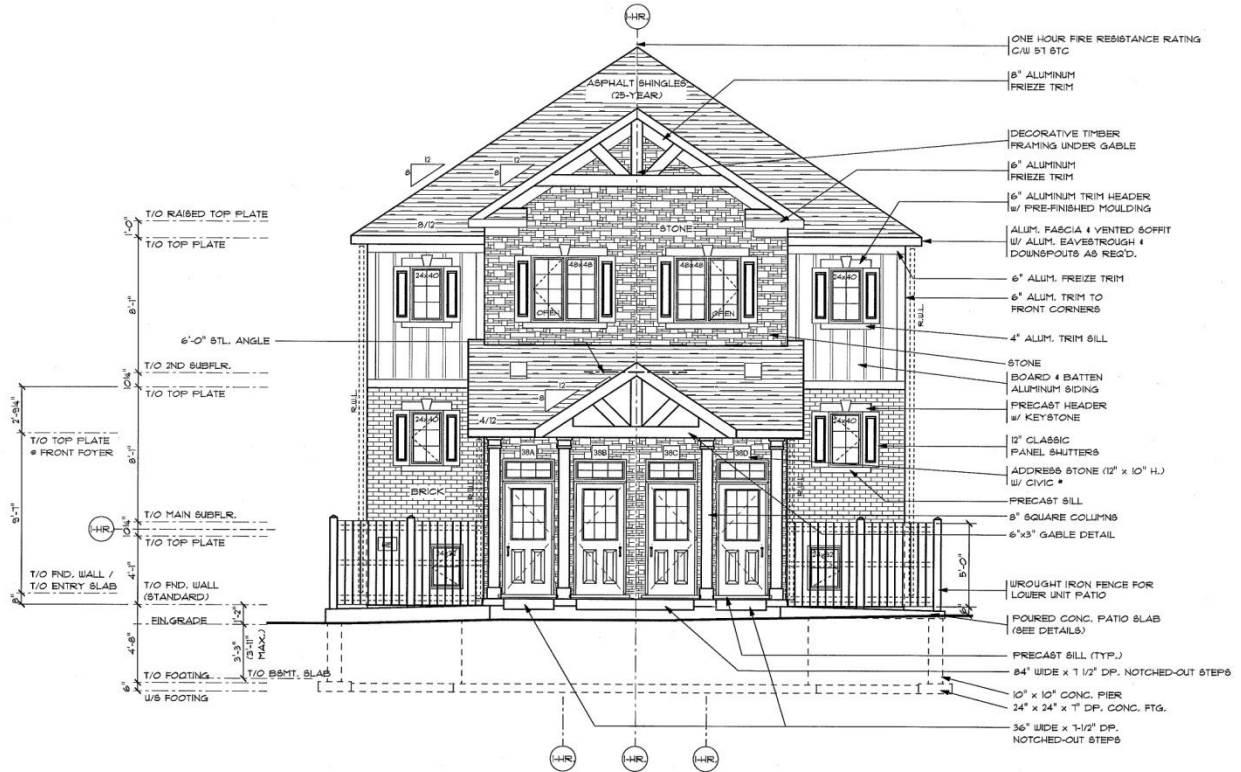
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Appendix "B"

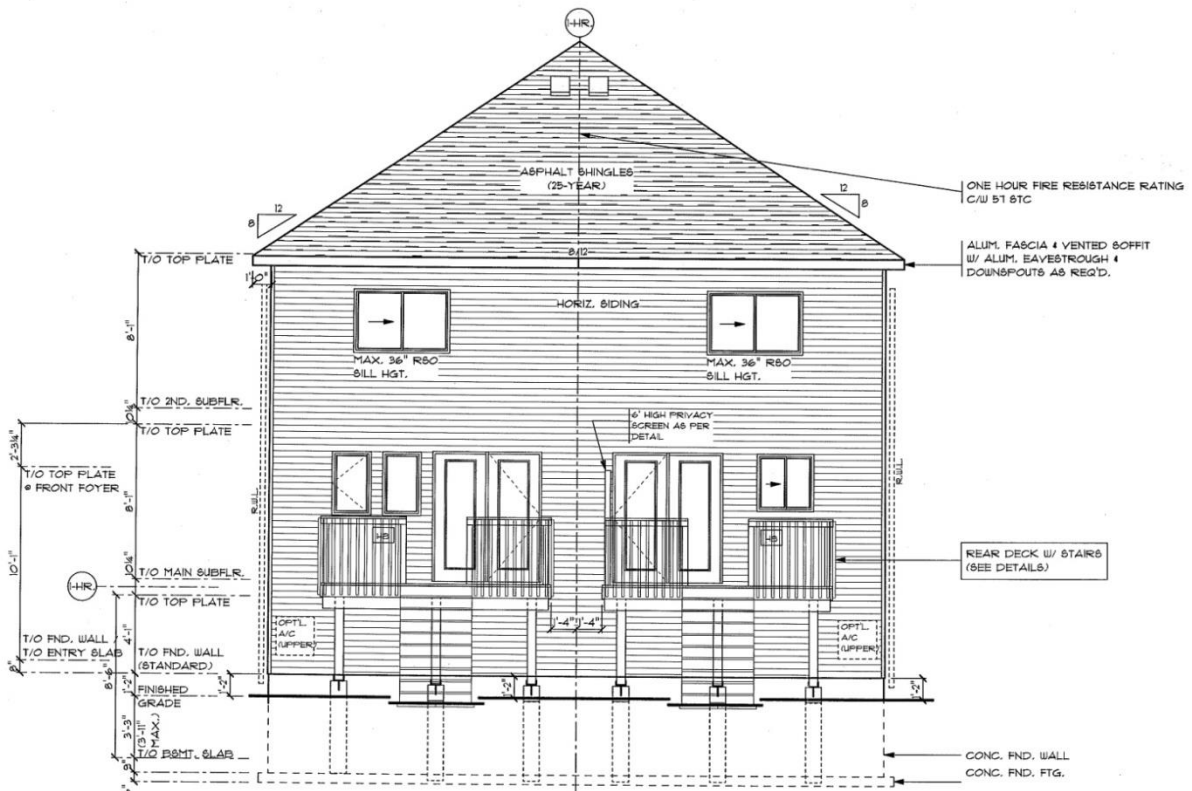
PROPOSED ADDITIONS AND DELETIONS TO SCHEDULE 1

FIGURE 1.1 (REPLACEMENT)

SAMPLE BUILDING ELEVATIONS



Front Elevation



Back Elevation

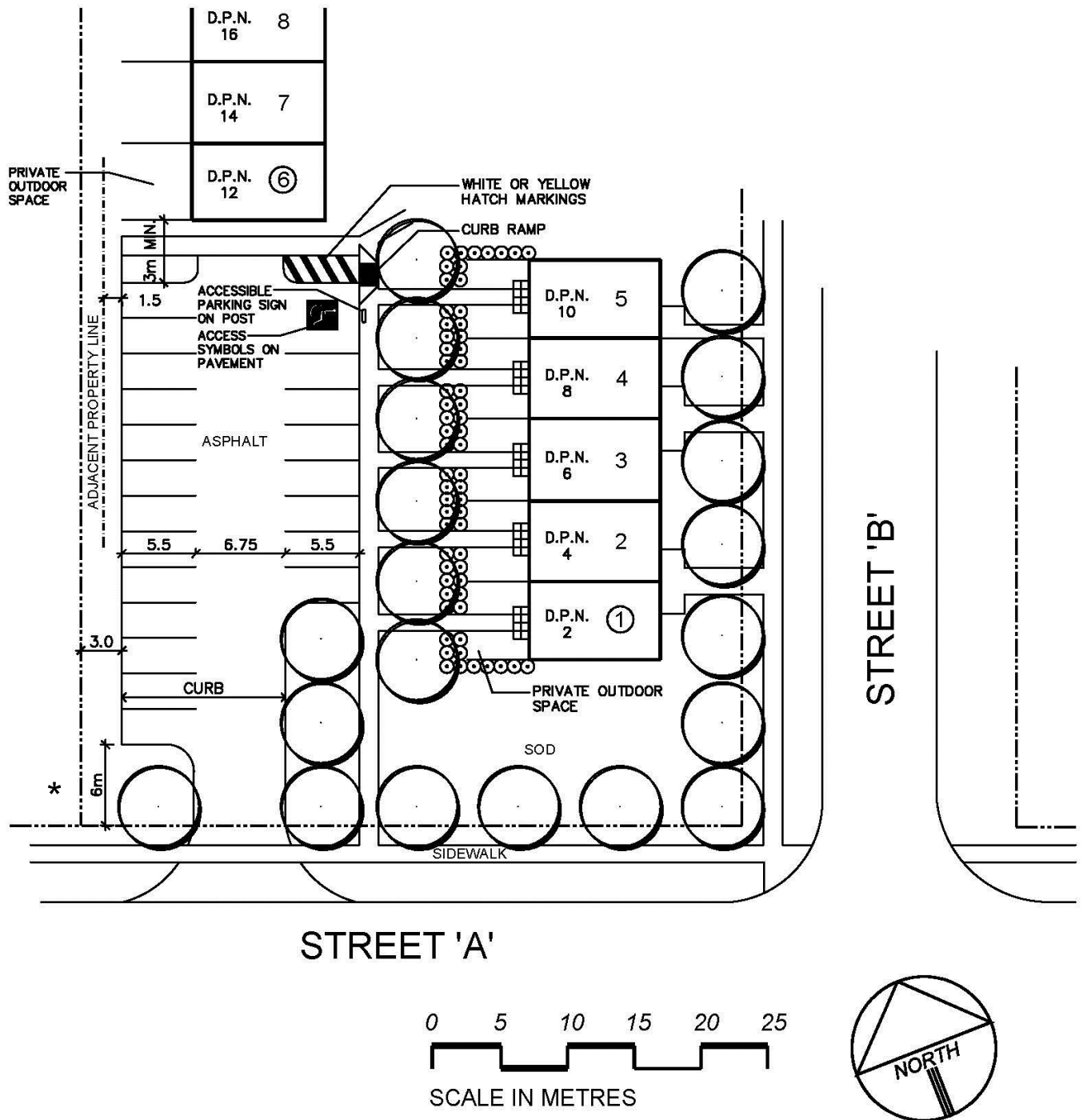
Note: Provide elevations for all sides (See 1.8 – Building Elevations and Cross-Section

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Requirements)

FIGURE 2.1 (REPLACEMENT)

PARKING SEPARATION



* Note: The clear throat distance varies depending upon the number of parking spaces.

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3. EXTERNAL FACILITIES AND WORKS PROVIDED IN CONJUNCTION WITH THE SITE

3.1. Objective

To ensure that no person undertakes development unless the municipal services normally required by The City of London are available to service the land, buildings or structure. (See Council policies on the City Services, Capital Works Budget, Industrial Oversize Reserve Fund, Urban Growth Capital Works Reserve Fund and the Municipal Services Section in the applicable Zoning By-law). (See also Official Plan Policies 2.6.4, 17.1, 17.2.5, 17.2.6.)

3.2. Design of Works to Be Assumed

Where facilities and works external to the site are provided in conjunction with the development of the site, the plans are to be prepared by a consulting engineer and must be submitted to the ~~General Manager of Environmental Services and City Engineer~~ **Managing Director, Development & Compliance Services & Chief Building Official** for approval prior to construction of said works and facilities. Detailed cost estimates are also required of the total cost, including the City's share of such costs. The facilities and work shall be constructed and accepted by the City prior to the occupancy of any building on the site taking place, unless otherwise approved by the ~~General Manager of Environmental Services and City Engineer~~ **City Engineer**.

3.3. "As-Constructed" Drawings

"As-constructed" drawings of any facilities and works to be assumed by the City will be required prior to the full release of security. This requirement applies to works on any easement which the City must maintain. Drawings shall be completed to the specifications of the ~~General Manager of Environmental Services and City Engineer as detailed in Memorandum to Consultants No. 34 as amended~~ **City Engineer**.

3.4. Certificate of Works to be Assumed

Facilities and works to be assumed by the City within a public highway, walkway or easement shall be inspected and certified by the owner's consulting engineer. The form of certification is to be substantially the same as the one listed as development agreement standard clause ~~No. 3~~ **No. 4**.

3.5. Works Eligible for a Claim

Some external facilities and works may be eligible for either an Urban Growth Capital Works Claim, **and/or the City Services Fund**, and/or a Capital Works Budget Claim and/or ~~and~~ Industrial Oversizing Claim. Eligibility for these claims must be approved by the City prior to construction and ~~in accordance with City policy, see development agreement standard clauses 4, 5 and 6~~ **subsequent to entering into a development agreement**.

3.6. Security

Security is required to ensure the completion of external works. Security may be reduced as stages of construction are completed.

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4. ROAD WIDENING

4.1. Site Plan

(a) ~~The site plan shall show the land to be dedicated prior to the issuance of the building permit or at the time of the future road improvement project as applicable. The future dedication shall be free of buildings and shall be used for parking and landscaping only~~ **development agreement. The land shall be free and clear of any encumbrances.**

(b) ~~If the road dedication required by Council policy at the time of development is not the ultimate road dedication required, the~~ **The site plan shall show the ultimate road widening, in addition to the presently required road dedication, and all buildings, parking access, etc. will be set back beyond the ultimate road widening in accordance with the zoning by-law.**

(c) **The City of London’s Official Plan establishes a basis for the widths of road allowances. Based on this, the City’s zoning by-law Z-1 sets out the actual ultimate road allowance widths. The zoning by-law also establishes that setbacks for parking, buildings, etc. are to be from the ultimate road allowance. In addition to this, the intersections of some streets will require sight triangles and in some cases increased widenings to accommodate Bus Rapid Transit Systems (BRT) in the future, in accordance with the zoning by-law.**

~~Table 4.1 shows the typical road right-of-way allowances noted in the Official Plan for the municipality and shall be used to determine road widening dedications and building setbacks, in accordance with Council Policy 25 (62). It should be noted that as part of the road dedications, widening in addition to those shown in the table may be required for daylight triangles and overpasses at specific locations.~~

(d) **In some cases, road widenings are required for existing sites where substantial additions or changes are being proposed. Where no road works are proposed in front of the subject property, the dedication is required, however, the property owner may be given permission to continue to use the lands subject to items such as: entry into a modified boulevard parking agreement with the City, provision of insurance to indemnify and save the City harmless.**

(See Official Plan Policies 18.2.4, 18.2.5, and Council Policy 25(62).)

Note: Table 4.1 is to be deleted.

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5. ACCESS TO AND FROM SITE

5.1. Objective

- (a) To provide for the orderly and safe movement of traffic in and out of private properties with minimum interference to vehicular, ~~and~~ pedestrian, **and bicycle** traffic using the public road system, as intended by the Official Plan (see Official Plan Policy 18.2.6).
- (b) To ensure that works on the road allowance are up to the standards prescribed by the City as provided for in the Streets By-law, **and with the City of London Access Management Guidelines.**

5.2. Access Driveway - Definition

Any area constructed within the public road allowance, connecting a paved public street with private property, for the purpose of providing access and egress for motor vehicles to private property.

5.3. Number of Accesses

- (a) The number of access driveways should be minimized on all streets. Each development will be analyzed in terms of the site characteristics, including street frontage, land area, traffic generation and parking capacity to determine the desirable number and locations of access driveways. Driveways to arterial streets should be avoided if a site can have an access to a collector street.
- (b) The design of driveway entrances located along transit routes will take into consideration the functional aspects of the transit operation, and ensure that driveways are co-ordinated with transit facilities. **Relocation of transit stops are subject to the approval of the London Transit Commission and the City. Any such works if approved will be at the sole expense of the developer.**
- (c) **In some cases, property owners will be required to construct a joint access in accordance with the Access Management Guidelines.**

5.4. Joint Accesses

Where required, joint accesses with abutting property owners shall be installed and the site plan shall show the location and construction, all in accordance with the standards referred to herein. If the joint access is to be provided for in the future, the site plan shall show the proposed location and the development agreement shall make provision for this as well.

5.5. Location

- (a) Access driveways should be located opposite other existing, proposed access driveways, or public streets to avoid offset conditions and associated difficulties with the provision of required left turn storage lanes on the street. In all cases, major access driveways to arterial streets, when permitted, shall be located to allow for effective traffic progression on the arterial route.
- (b) At the property line with an adjacent property or lane, a curb length of not less than 1 m (3 feet) shall be blended between the near edge of the driveway and the property line projected at right angles to the curb line.

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- (c) ~~At an intersection, a curb length of not less than the following shall be left undisturbed between the near edge of the driveway and the street line of an intersecting street, projected at right angles to the curb line.~~

~~Commercial — 4.5 m (15 feet)
Residential — 12 m (40 feet)~~

~~(d) Where more than one private entrance serves the same lands from the same street, the entrances shall be separated by a distance of 15.2m (50 feet) unless otherwise approved by the General Manager of Environmental Services and City Engineer to the satisfaction of the City Engineer.~~

- (d) ~~(e) Where an entrance/exit is divided by an island, a~~ A minimum island width of 1.8 m (6 feet) ~~measured both at the street line and a point 1.2 m (4 feet) outside of the curb line~~ **curb line**, may be permitted between adjacent one-way drives serving as a combined entrance/exit facility. Such driveways must be clearly signed as entrance and exit. **The detailed design shall accommodate turning radii for large vehicles.**

All entrance/exits shall provide a minimum clear throat from the ultimate road allowance onto private property as set out in the Access Management Guidelines.

- (e) **Spacing of drives serving the same site or adjacent sites should be consistent with the access management guidelines. In some cases, a Traffic Impact Study may be required to confirm access locations and designs in accordance with the Access Management Guidelines.**

5.6. **Angular Placement**

The centre line, for a distance of at least 6 m (20 feet), of a two-way driveway shall meet the curb line as close as practical to a 90 degree angle and the centre line of a one-way driveway may meet the curb line at an angle less than a right angle, but not less than 60 degrees.

5.7. **Width**

~~For single, two-family and rowhousing specifications, see the attached standards in Figure 5.1. Specifications for other types of development will be evaluated on an individual basis.~~

The scale, size and intensity of a project may affect the size and extent of a driveway serving a complex. (See Access Management Guidelines)

The minimum width of a drive serving a residential complex is 6.7m and may be increased to accommodate turning movements.

The radius of each side of the drive shall be at least 9 meters.

For Industrial, Commercial and Institutional Uses, the driveways shall be at least 9 meters in width but not exceed 12m in width, and the radius on driveway shall be increased to provide for the size of vehicles potentially accessing these sites.

5.8. **Design**

- (a) All access driveways should be constructed with raised curbs and surfaced with asphalt or other hard surface approved by the ~~General Manager of Environmental Services and City Engineer.~~
- (b) Vertical grades of access driveways should be 2% (1:50) for a minimum

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distance of 6 m (20 feet) onto the site from the street line.

- (c) Sidewalks, curbs and gutters should be continuous and level across access driveways ~~(see Figure 5.2 for sidewalks)~~ **(see City of London Engineering standards).**

5.9. **Abandoned Driveways**

These driveways shall be removed and replaced with sidewalks, boulevards, curbs and gutters, all to the specifications of the City Engineer. This work shall be shown on the site plan.

5.10. **Property Line Grading**

- (a) The property line (including the adjacent boulevards) abutting road allowances of arterial and primary collectors shall be graded to blend with the future road grades proposed for the street. City standard, entitled "Subdivision Grading along Arterial and Primary Collectors Roads," shall be used to establish these grades. Where these future grades have not been established yet by the ~~General Manager of Environmental Services and City Engineer's Department~~, the owner shall at no expense to the City retain a consulting engineer to obtain the necessary information to establish the future grades and have such approved by the ~~General Manager of Environmental Services and City Engineer~~.
- (b) On all other streets not mentioned in (a) above, the owner shall grade the property line and adjacent boulevards so that they blend with the existing street grade to the specifications of the ~~General Manager of Environmental Services and City Engineer~~.
- (c) The site plan shall show the grades of the property line and boulevards as described in (a) and (b) above.

5.11. **Utilities Within Road Allowance**

The owner shall, in addition to obtaining a ~~works permit~~ **permit of approved works** from the ~~General Manager of Environmental Services and City Engineer~~ for work within the road allowance ensure that all the utilities are contacted. ~~Attached is Figure 5.3 showing the typical locations of all utilities within the road allowance. These~~ **Underground utility** locations must, however, be verified in the field by the respective utilities. Non-standard locations for new utilities or services must be approved by the Utilities Co-ordinating Committee.

In some cases, a Traffic Management Plan will be required to be submitted to demonstrate items such as: how the flow of traffic will be maintained; safety issues; etc. for any work on the City Road Allowance.

5.12. **Boulevards**

All new, disturbed or reinstated boulevards shall be sodded except boulevards less than 1.0 m (3.0 ft.) in width, between the sidewalk and curb or edge of pavement, which shall be paved with interlocking paving stones, asphalt, or concrete, unless the ~~General Manager of Environmental Services and City Engineer~~ approves sodding. Boulevards 1 metre (3.0 ft.) or wider may be paved with the approval and to the specifications of the ~~General Manager of Environmental Services and City Engineer~~.

Note: Figures 5.1, 5.2 and 5.3 are to be deleted.

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6. PARKING FACILITIES AND INTERNAL DRIVEWAYS

6.1. Objective

- (a) To provide for adequate parking and loading facilities, orderly circulation within the parking area and an attractive community appearance (see Official Plan Policies 6.11, 7.2.15, 8.5, 9.1.7.7, 12.6.1, 14.2.2.10 and Council Policy 25(56)).
- (b) To encourage site planning and architectural design that is compatible with effective transit services.

6.2. Off-Street Parking Facilities

(a) Number of Spaces

- (i) Refer to the applicable zoning by-law for the total number of required parking spaces.
 - (ii) Visitor Parking: Multi-unit residential development including ~~cluster single family and cluster two family~~ **detached dwellings** developments with a total of three or more units shall provide a common area(s) for visitor designated and signed parking spaces. One (1) visitor parking space shall be provided for every ten (10) dwelling units. The number of visitor parking spaces may be included within the total number of parking spaces required by the applicable zoning by-law. ~~The location of visitor parking spaces shall maximize identification from the main entry to the site and minimize the misuse of assigned spaces or designated areas by either residents or visitors.~~ **Where feasible, visitor parking shall be centrally located to serve all units. These may be distributed in small clusters to better serve the complex.** Driveways or parking spaces that are, or may be perceived for the exclusive use in association with a dwelling unit will not be considered as a visitor parking space.
 - (iii) Barrier free parking is to be provided for buildings in accordance with the Ontario Building Code and in accordance with the zoning by-law, where identified.
- (b) Location - Parking areas should be no closer than 3 metres (10 feet) to street line ~~or~~ **and** 1.5 metres (5 feet) to a property line. ~~except where a joint or continuous parking area is proposed.~~
- (c) Commercial parking areas may be located ~~in the front, side or rear yards depending on~~ **in the interior and/or rear yards, and are discouraged from being in the front or exterior yards depending upon:**
- (i) predominant parking location on sites in the vicinity, location of adjacent commercial parking areas;
 - (ii) existence of adjacent non-commercial land use; and
 - (iii) convenience to proposed uses.
- (iv) prohibitions in the zoning by-law.**
- (v) in cases where parking is permitted in the front yard or exterior yard, adequate screening is required.**
- (d) Where feasible parking should not be permitted in a yard adjacent to a residential zone. Where such parking is permitted, adequate screening will be required (see Section 9 on landscaping).

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- (e) Schools – car parking and bus loading areas are to be located on private property.**
- (f)** ~~(e)~~ Residential parking areas should be located:
- (i) in view of dwellings and activity areas, preferably 45 m (150 feet) maximum ~~walking~~ **walking** distance;
 - (ii) adjacent to pedestrian systems;
 - (iii) convenient to the building entrances; and
 - (iv) no closer that 3 m (10 ft.) to a window of a habitable room.
- (g)** ~~(f)~~ Where the applicable zoning by-law regulations do not specify the size of parking spaces and aisles, the relevant standard minimum parking dimensions set out in Figure 6.1 and Table 6.1, shall be used and the spaces shall be clearly marked.
- (h)** ~~(g)~~ Parking rows should be delineated by poured concrete curbs or planters at each end to prevent uncontrolled internal traffic movements and generally to confine traffic to designated parking aisles or driveways.
- (i)** ~~(h)~~ Parking areas shall be designed so as to not require vehicles to reverse from the property onto a public street.
- (j)** ~~(i)~~ Access to and from parking aisles should be minimized along main feeder driveways.
- (k)** ~~(j)~~ No more than 15 parking spaces should be permitted in a row without an interrupting minimum 3 m (10 ft.) width planting area.
- (l)** ~~(k)~~ For developments abutting transit routes, parking areas are encouraged in locations to the side or rear of the building. The extent to which parking areas are feasible in locations to the side and rear of commercial buildings will be subject to both the visibility of customer parking as a marketing factor and public safety concerns respecting surveillance from abutting streets and buildings.
- (m)** ~~(l)~~ Barrier free parking spaces shall be located in close proximity to the building's barrier free entrance.

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TABLE 6.1

OFF-STREET PARKING AREA																								
Location	<ul style="list-style-type: none"> - preferably not adjacent to a residential zone - minimum 3 m to street line - minimum 1.5 m to property line 																							
Layout	<ul style="list-style-type: none"> - See Figure 6.1 - maximum in uninterrupted row - 15 																							
Internal Driveways	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;">Intersections</td> <td colspan="2" style="text-align: center;">- 90 °</td> </tr> <tr> <td style="text-align: center;">Width Minimum</td> <td style="text-align: center;"><u>Parking Two Sides</u></td> <td style="text-align: center;"><u>Parking One Side</u></td> </tr> <tr> <td></td> <td style="text-align: center;">90 °</td> <td style="text-align: center;">6.5 m</td> </tr> <tr> <td></td> <td style="text-align: center;">60 °</td> <td style="text-align: center;">4.5 m</td> </tr> <tr> <td></td> <td style="text-align: center;">45 °</td> <td style="text-align: center;">3.4 m</td> </tr> <tr> <td style="text-align: center;">Width Maximum</td> <td style="text-align: center;">30 °</td> <td style="text-align: center;">3.1 m</td> </tr> <tr> <td></td> <td style="text-align: center;">Parallel</td> <td style="text-align: center;">3.8 m</td> </tr> </table> <ul style="list-style-type: none"> - adjacent to a building no wider than the minimum width 			Intersections	- 90 °		Width Minimum	<u>Parking Two Sides</u>	<u>Parking One Side</u>		90 °	6.5 m		60 °	4.5 m		45 °	3.4 m	Width Maximum	30 °	3.1 m		Parallel	3.8 m
Intersections				- 90 °																				
Width Minimum				<u>Parking Two Sides</u>	<u>Parking One Side</u>																			
				90 °	6.5 m																			
				60 °	4.5 m																			
				45 °	3.4 m																			
Width Maximum				30 °	3.1 m																			
	Parallel	3.8 m																						
Pedestrian Circulation	- normally no separate facility required																							
Paving	- asphalt or other hard surface **																							
Parking Module	- if overhang space of 0.6 m is provided, the module of parking and manoeuvring space may be reduced accordingly.																							

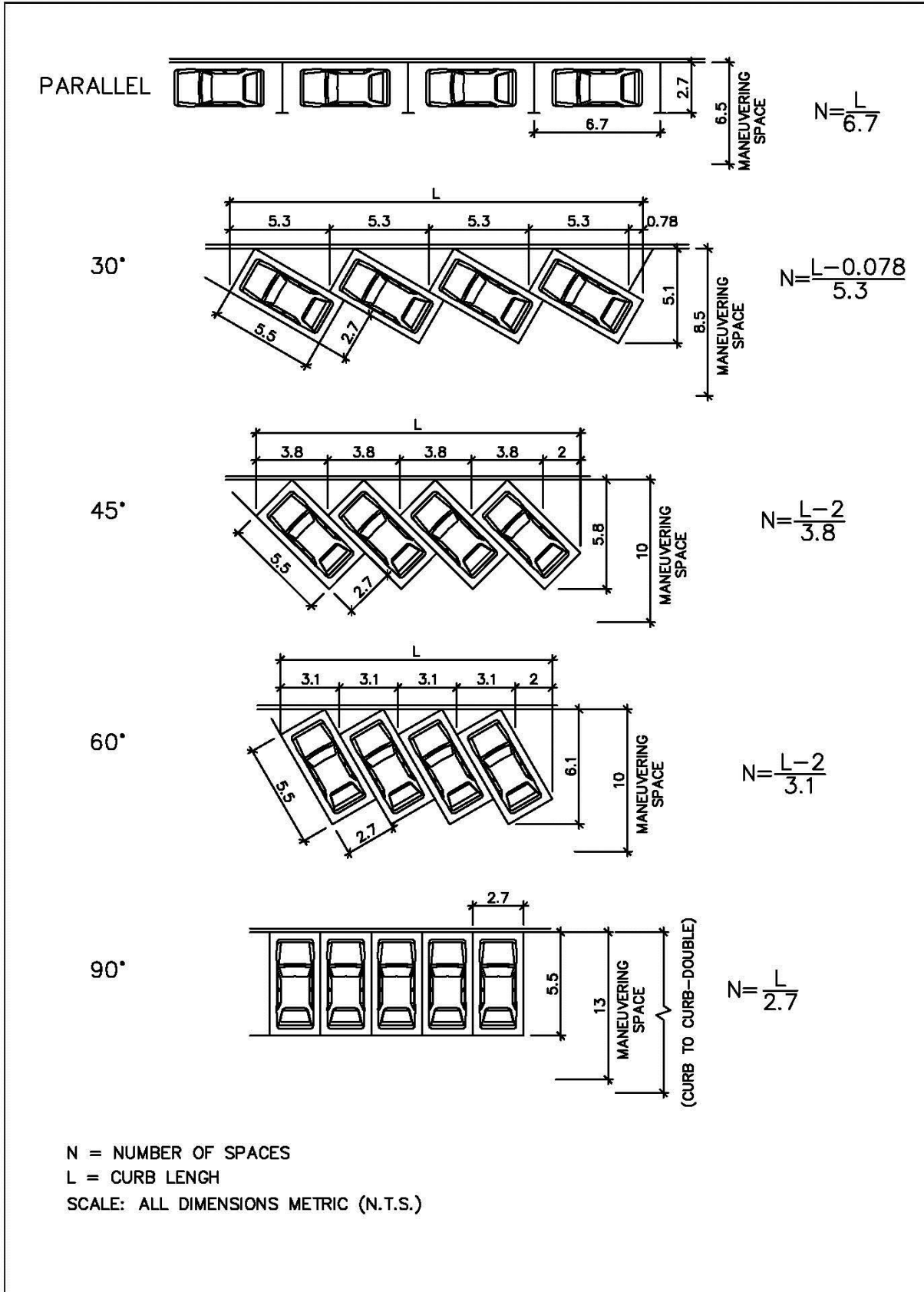
* Including units served by a connecting local road.

** Including pervious paving where feasible.

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FIGURE 6.1 (REPLACEMENT)

PARKING STANDARDS – RESIDENTIAL & COMMERCIAL USES



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6.3. **Internal Driveways**

- (a) Main internal driveways which are heavily travelled should be delineated by raised curbs or equivalent barriers ~~to avoid interference to moving traffic created by parking manoeuvring~~ **and be designed not to have parking spaces on either side where possible.**
- (b) Intersections of driveways and parking aisles should be at a 90 degree angle.
- (c) The horizontal alignment of all driveways should be geometrically sound, but lengthy straight sections should be minimized to discourage speeding.
- (d) The design of driveway and parking aisle intersections should ensure adequate visibility of intersecting traffic movements.
- (e) In large commercial developments, main internal driveways should not be located abutting building entrances in order to minimize pedestrian and vehicle conflicts.
- (f) Driveways adjacent to a building should be a maximum width of 6.7 m (22 ft.) for two-way traffic and 3.35 m (11 ft.) for one-way traffic to deter parking in the driveway.

6.4. **Paving**

All surfaces used for parking or vehicular circulation shall be paved with asphalt or other equivalent hard surface approved by the ~~General Manager of Environmental Services and City Engineer~~ **Manager, Development Services & Planning Liaison**. Consideration may be given to alternative surface materials such as turfstone, cobblestone, etc., that allow precipitation to percolate into the soil, for any parking spaces provided over the minimum number required. All materials used should be capable of being indelibly marked to designate the parking spaces provided.

Note: See the Lighting, Grading, Landscaping, and Fencing Sections for these aspects of parking lot design.

6.5. **Parking Structures**

Consideration should be given to the use of parking structure in higher intensity developments. These can consist of underground parking, sunken open air parking lots with usable roof decks or sundecks over individual parking spaces. Parking structures should be architecturally treated and landscaped (~~see Figure 6.2~~). **Parking spaces and driveway isles are to be consistent with surface parking driveway standards. The entrance drive to a parking structure should be designed in accordance with Figure 6.2.**

6.6. **Off-Street Loading Facilities**

(a) Definitions

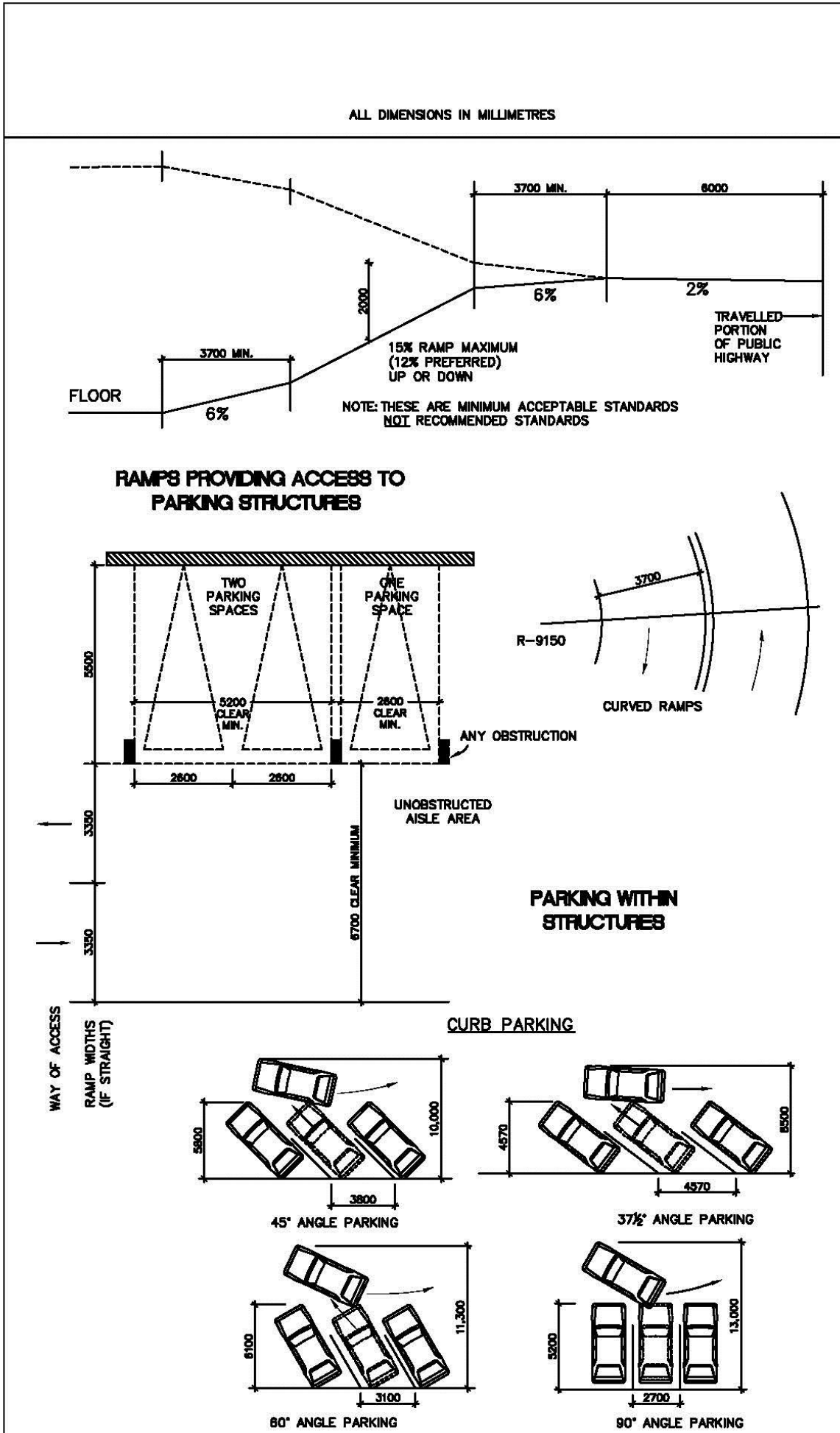
- (i) Loading Facility means a loading space or bay along with any manoeuvring area required as part of the loading facility and which is located on the site, either within a building or adjacent to a building.
- (ii) Loading Space means a paved area exclusively for loading and unloading trucks either within a building or adjacent to a building and does not include any manoeuvring space.

(b) Number of Spaces

Refer to the applicable zoning by-law.

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FIGURE 6.2 (REPLACEMENT)
PARKING STRUCTURES



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(c) Minimum Size

Where under the applicable zoning by-law there are regulations concerning loading facilities but no dimensions are given, then the following shall apply:

	Width	Height	Length
Industrial	3.6 m (12 ft.)	4.5m (15 ft.)	20 m (65 ft.)
Other	3.6 m (12 ft)	4.25 m (14 ft.)	9 m (30 ft.)

(d) Access

~~All loading facilities should have associated with them sufficient space on the property or private easements or exclusive rights-of-way to permit the trucks and vehicles making deliveries or picking up goods to make all manoeuvres "off-street" and none of these vehicles will be permitted to reverse onto or from an arterial street onto the property except that in the Central Business District off-street manoeuvring space is not required where only one loading space is required.~~

All loading spaces or loading areas should have associated space on the property to provide truck maneuvering. Such areas should be shown on the plan and none of these vehicles will be permitted to reverse onto or from the street abutting the property, unless otherwise permitted in the zoning by-law.

Roads providing access to building fronts and fire routes are to be designed to support emergency vehicles, e.g. fire trucks.

(e) Location

Access to loading facilities may be by separate access or by an internal driveway serving a parking area. **Loading spaces are to be located in accordance with the zoning by-law.**

(f) Paving

All loading spaces, manoeuvring areas and driveways should be hard surfaced with suitable materials to the satisfaction of the ~~General Manager of Environmental Services~~ and City Engineer, i.e., concrete, asphalt, lockstone, etc.

(g) Joint Loading Facilities

In shopping centres or other similar integrated development, the use of joint loading facilities to serve all or several individual businesses will be encouraged.

Note: See Figure 6.3 for typical parking layout on a site plan.

6.7. Fire Department Access

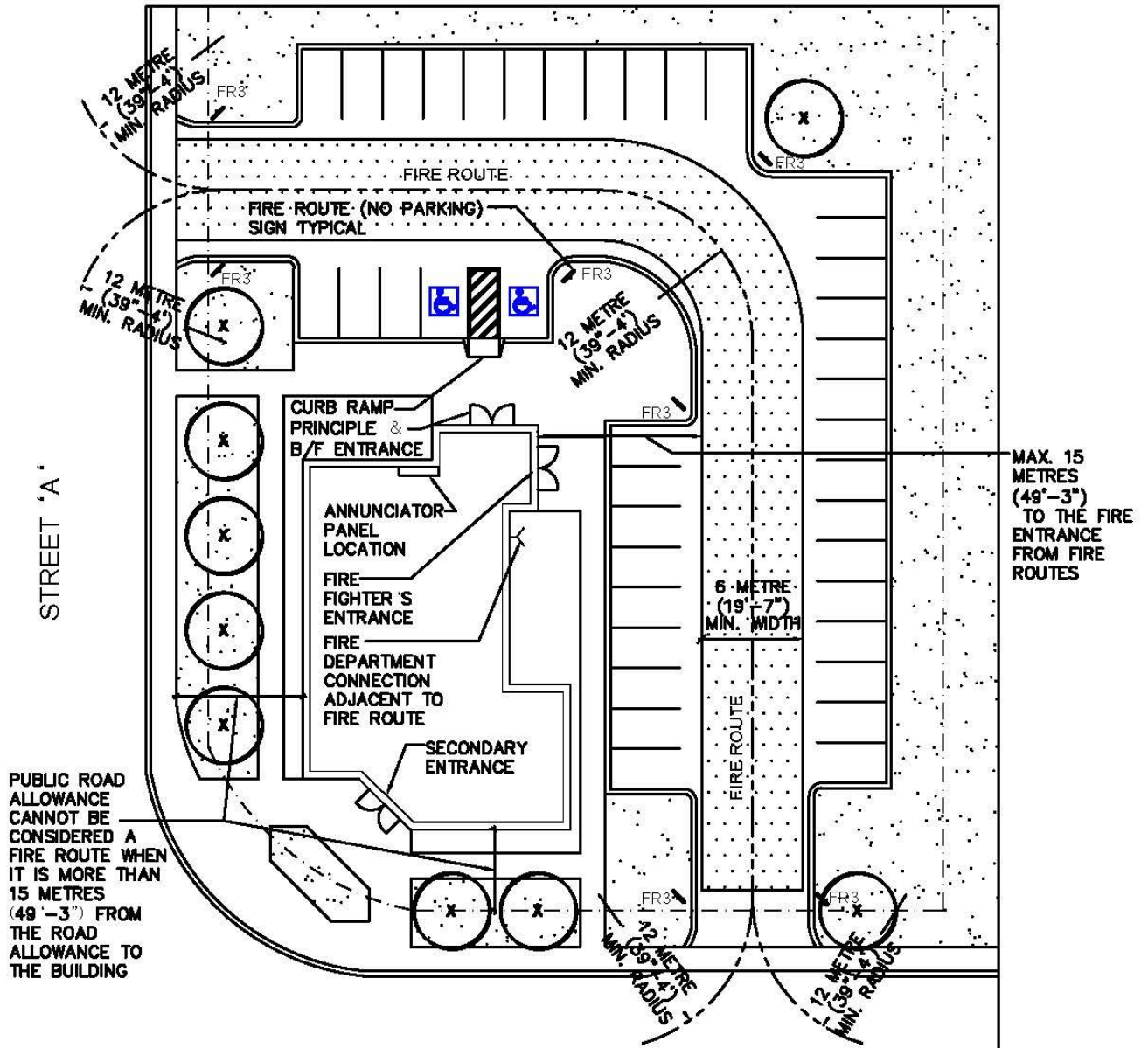
(a) Access routes for fire fighting including the location, width, turning radius, vertical alignment and location of fire route signs shall be shown on the site plan (a sample site plan is shown in ~~figure 6.1~~ **Figure 6.3 Private Property Fire Routes**).

(b) When required in association with a development, fire routes shall be constructed, installed and maintained by the owner in accordance with Table ~~6.2~~ **6.3 Design Standards for Fire Routes**. The construction, installation and maintenance of fire routes shall include fire route signs in accordance with Table ~~6.3~~ **6.4 Design and Installation Standards for Fire Route Signs**.

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FIGURE 6.1 FIGURE 6.3 (RENUMBERED)

PRIVATE PROPERTY FIRE ROUTES



FIRE ROUTES (O.B.C. SUBSECTION 3.2.5)

- LOCATED NOT LESS THAN 3 METRES (9'-10") AND NOT MORE THAN 15 METRES (49'-3") FROM THE BUILDING
- FIRE HYDRANT TO BE MAX 45 METRES (147'-6"), UNOBSTRUCTED TO FIRE DEPARTMENT CONNECTION AND 90 METRES (295'-3") TO PRINCIPLE ENTRANCE WHEN NO FIRE CONNECTIONS ARE REQUIRED
- OVERHEAD CLEARANCE MIN 5 METRES
- CHANGE IN GRADIENT MAX 1 IN 12.5 OVER A MIN. DISTANCE OF 15 METRES
- MUST BE DESIGNED TO SUPPORT FIRE EQUIPMENT UNDER ALL CONDITIONS
- HAVE TURN AROUND FACILITY FOR DEAD END PORTIONS EXCEEDING 90 METRES (295'-3")
- HAVE ACCESS OPENINGS EVERY 15 METRES (49'-3") ON WALLS REQUIRED TO FACE A STREET UNLESS BUILDING IS SPRINKLERED

NUMBER OF STREETS (O.B.C. ARTICLE 3.2.2.10)

- FOR TWO STREETS ACCESS TO 50% OF BUILDING PERIMETER FROM FIRE ROUTE
- FOR THREE STREETS ACCESS TO 75% OF BUILDING PERIMETER FROM FIRE ROUTE
- LOCATED WITHIN 15 METRES (49'-3") OF THE BUILDING

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TABLE 6.2-6.3
DESIGN STANDARDS FOR FIRE ROUTES

Width:	6.0 metres
Overhead Clearance:	5.0 metres
Minimum Centreline Turning Radius:	12.0 metres
Maximum Gradient:	1 vertical in 12.5 horizontal over a minimum distance of 15 metres
Maximum Dead End Distance without An Approved Turnaround Facility:	90 metres
Design Loading:	To support the expected loads of fire fighting equipment
Surface Material:	Concrete, asphalt or other material designed to permit accessibility under all climate conditions

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TABLE 6.3 6.4**DESIGN AND INSTALLATION STANDARDS FOR FIRE ROUTE SIGNS**

- | | | |
|----|------------------------------|--|
| 1. | Sign Plate: | Lettering, colour, size and material in accordance with Figure 6.2 6.4 |
| 2. | Sign Post: | Type and material in accordance with Figure 6.3 and 6.4 |
| 3. | Sign Mounting Alternatives: | <ul style="list-style-type: none"> a) standard sign post (figure 6.4) b) light standard or other equivalent utility pole located not more than 1 metre from the limit of the fire route, but in no case shall a sign be attached to a wall or fence |
| 4. | Mounting Height: | 3 metres measured from the top limit of the sign to the grade of the fire route surface adjacent to the fire route sign |
| 5. | Spacing between Signs: | not more than 30 metres (100 ft.) between signs located on the same side of the fire route and spaced such that at least two signs are clearly visible and lettering is legible from all locations within the fire route |
| 6. | Location of Signs: | <ul style="list-style-type: none"> a) fire routes greater than 6.1 metres in width at least on one side of the fire route to form a continuous route, usually on the right side of the drive upon entering from the street b) fire routes 6.1 metres or less in width on both sides of the fire route |
| 7. | Setback from the Fire Route: | <ul style="list-style-type: none"> a) where a curb or equivalent edge treatment is not provided to define the edge of the fire route, there shall be a minimum 0.3 metres (1 ft.) and maximum 1.5 metre (5 ft.) to any part of the sign b) where a curb or equivalent edge treatment is provided to define the edge of the fire route, there shall be a minimum 0.3 metres (1 ft.) and a maximum 1.5 metre (5 ft.) to any part of the sign |
| 8. | Sign Orientation: | at an angle of not less than 30 degrees and not more than 45 degrees to a line parallel to the flow of traffic |
| 9. | Visibility: | the property owner is responsible to ensure that physical obstructions are not placed or constructed in locations that interfere with the visibility and/or legibility of any fire route sign and to ensure sufficient maintenance of vegetation such that unobstructed views to all fire route signs are maintained at all times and under all circumstances. |

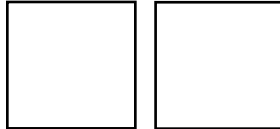
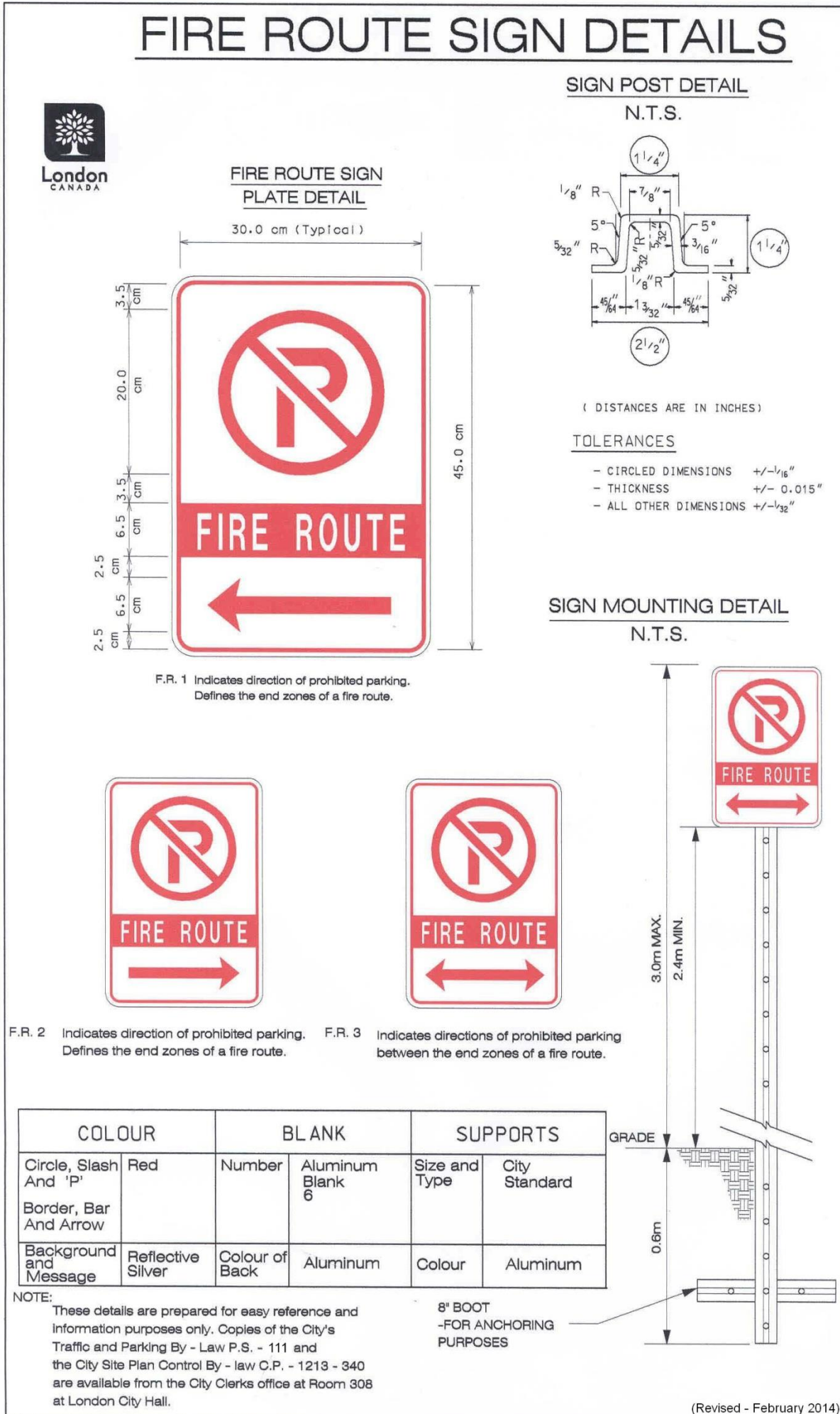


FIGURE 6.4 (RENUMBERED/REPLACEMENT)

FIRE ROUTE SIGN DETAILS



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6.8. **Transit Routes on Private Property**

(a) Trip-generating/activity nodes such as the downtown area, regional and community shopping areas, recreational, entertainment and cultural facilities, major employment facilities and high density residential uses shall be designed to facilitate pedestrian and transit use. Where potential transit ridership warrants and to minimize the walking distance between facilities and transit stops, transit routes may be extended from the municipal road system onto a private development site. Proponents of development that may benefit by the design of a transit route on private property are encouraged to undertake early consultation with the London Transit Commission and City staff.

(b) Site plan applications shall be reviewed for potential transit routes on private property, where the scale of a development exceeds the following general criteria:

- Residential (medium and high density) - 700 units
- Institutions - 5,000m²GFA
- Commercial/Office - 7,000²GFA
- Industrial (employees) - 500 people
- Recreation - 5,000 m²GFA

NOTE: The purpose of these general criteria are to allow the evaluation of large scale development projects for possible transit routes on private property. Smaller development proposals however, may also be considered for transit routes on private properties where warranted.

(c) The review of transit routes on private property shall take into consideration the cumulative effects of the abutting existing and future developments when considering the potential transit ridership.

(d) Routing for transit vehicles through private development shall be direct and efficient. Road alignments should follow a linear pattern with no parking or loading activities along the designated transit route. The route shall be designed to give priority to transit vehicles over private automobiles.

(e) Transit stop locations, bus loading pads and transit passenger amenities should be designed to provide for the comfort, **including shade trees where feasible**, convenience and safety of the transit passenger and be barrier free accessible.

(f) The design of a transit route on private property shall be in accordance with the following design standards:

- i) 15 metre minimum inside turning radius
- ii) 3.7 metre minimum lane width along straight sections of the route plus an additional 0.5 metre width along 15 metre radius curves
- iii) 5% maximum grade
- iv) the transit route shall be designed to a standard sufficient to carry the weight of bus traffic.

(g) Night lighting shall be provided in a continuous manner along all transit routes on private property and shall provide lighting levels to the satisfaction of the London Transit Commission during the non-daylight hours of the operation of bus service.

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- (h) Transit passenger amenity areas that are incorporated within the buildings of a development shall include night light levels to the satisfaction of the London Transit Commission and shall be lit and accessible during the hours of operation of the bus service.

6.8.1. **Building Entrance Facilities for Paratransit Vehicles**

- (a) Building entrance facilities suitable to accommodate paratransit vehicle access shall be required for all commercial, institutional, and recreation development projects and for all residential development where the number of residential units exceeds 24 units per building.
- (b) The location of building entrance facilities is encouraged immediately adjacent to the principal entrance of the building and shall not exceed a maximum distance of 15 metres between the building entrance and the closest accessible location of paratransit vehicles. An overhead structure for weather protection is encouraged between the vehicle location and the building entrance.
- (c) The building entrance facility shall include a separate hard surfaced loading pad for use by paratransit and other service vehicles with minimum dimensions of 3.5 metres wide by 12.0 metres. The loading pad shall be located adjacent to and accessible from the internal driveway system and shall not conflict with other parking or manoeuvring facilities.
- (d) The alignment of internal driveways for use by paratransit vehicles shall be designed to permit the safe and efficient movement of vehicles in a manner that allows paratransit vehicles to travel from the municipal roadway through the building entrance facility and return to the municipal roadway without any reversing movements. Building entrance facilities and internal driveway that provide access to the entrance facility shall be designed with a minimum outside turning radius of 9.0 metres.
- (e) In order to provide full paratransit vehicle access, plans shall provide continuous driveways on private property for all buildings (no reversals).**

6.9 **Joint Use of Common Internal Drive**

- ~~(a) Where required, the site plan shall make provisions for the joint use of common driveways with abutting lands. The development agreement may also provide for this, including construction and use of the common driveways.~~

The site plans should show all works necessary to build the common internal drive to the property line including any temporary barriers to be removed when the common internal drive is constructed in the adjoining property. The common internal driveway provides traffic flow from one site to the next.

- (b) Where transit facilities are required on private property, the site plan will show the integration of the transit facilities with the proposed development and abutting lands **where they are integrated.**

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7. WALKWAYS AND ALL OTHER MEANS OF PEDESTRIAN ACCESS

7.1. Objective

To ensure the provision of safe and convenient pedestrian circulation including facilities for persons with disabilities, senior citizens, and children (see Official Plan Policies 11.1.1 and 18.2.14).

7.2. Pedestrian Facilities on Private Property

- (a) Senior Citizens and Persons with Disabilities – Pedestrian facilities shall be designed to enable senior citizens and persons with disabilities to travel unassisted from the fronting public sidewalk to at least one main building entrance and one main parking area by incorporating sidewalk ramps of a proper gradient and surfacing material instead of steps or staircases, and handrails. These pedestrian facilities shall not only include the connection from the street and parking area but also provide interconnection from building to building. Reference should be made to the appropriate section of the Ontario Building Code (see Appendix 5 of OBC).
- (b) Location - Sidewalks and pedestrian walkways shall be located to join building(s) access points to other use areas of the site such as parking areas, and recreational uses, and abutting public street sidewalks. Pedestrian walkways should be located in accordance with user needs and the desire lines produced from inter-relationship of locating elements of the site plan. Where no public sidewalk exists, the installation of same across the frontage of the site will be normally a requirement of development in accordance with the standards of the ~~General Manager of Environmental Services and City Engineering Department~~ **City Engineer**. Table 7.1 describes the design characteristics of pedestrian walkways.

7.3 Transit Related Walkways

- (a) Pedestrian access to buildings located on properties that abut a transit route shall include sidewalks that provide barrier free, direct and convenient access from the adjacent transit stop facilities to the building entrance in order to reduce the walking distance to and from transit stops.

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TABLE 7.1

WALKWAY DESIGN CHARACTERISTICS	
Element	Characteristic
(a) Minimum Width of Walkway	1.0 m (3 ft.) 1.5 m (5 ft.) minimum *
(b) Maximum Slope: Grade Crossfall	1:10 (except as required for barrier free access) 1:50
(c) Surfacing Material: (i) Main Walkways - walkways that connect building or unit entries to parking, loading and drop-off areas and to municipal streets (ii) Secondary Walkways -walkways that connect the main walkways to amenity areas such as on-site recreation facilities and park pathways (iii) Barrier free paths of travel are to be a different texture from the other sidewalk surfaces in accordance with the Ontario Building Code (OBC)	Poured-in-place concrete, interlocking paving stone Poured-in-lace concrete, interlocking paving stone, asphalt or other hard surfacing Brushed concrete, painted lines on asphalt or as otherwise permitted under the Ontario Building Code (OBC)
(d) (i) Stairs: ** Maximum per flight Minimum per flight Width (ii) Ramps	14 risers 2 risers Same as accompanying walkway Slopes in accordance with the OBC
(e) Handrails	For more than 3 steps and for ramps as required under the OBC
(f) Lighting	Special lighting to ensure safety
(g) Minimum Setback from Parking Areas ¹	1 m (3 ft.)

¹Setback is required to accommodate vehicular overhang and the deposition of snow.

* **Increase walkways abutting parking spaces by at least 0.6 m (2 ft.).**

****Stairs are not permitted in the road allowance.**

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9. LANDSCAPING AND BUFFERING OF THE SITE

9.1. Objective

To increase shade on sites by using non-ornamental trees improve the aesthetics and function of the site, by providing for screening, the control of access to adjoining residential properties, shading, ornamentation, the reduction of storm water runoff and increasing the percentage of leaf cover in the City where sites are developed or redeveloped (see Official Plan Policies 11.1.1, 17.1.4, 17.6.2, 17.6.3, 17.6.4 and 17.6.5).

9.5. Parking Lot Landscaping

(a) ~~(b)~~ Interior:

- (iii) Each planter should be bounded by concrete curbing appropriately designed to prevent vehicles from damaging the landscape material (Figure 9.2). (Minimum 3.0 m width and at least 0.9 m depth of planting ~~soil~~ **soil**)

(b) ~~(d)~~ Construction:

~~Islands~~ **Islands** in parking lots require a minimum of 0.9 m **depth** of quality organic soil.

9.6 Maintenance

- a) Subsequent to planting, the owner shall take steps to ensure plant materials are established to promote a healthy condition of all plant materials, by using good horticultural practices such as watering, ~~fertilizing~~ **fertilizing**, pruning as required;
- b) Subsequent to the acceptance of the plantings, owners are required to maintain all plantings in a healthy condition and to replace any dead materials.

9.7 Landscape Improvements on the Road Allowance

The municipality may require the improvements on the boulevard in front, beside or behind the property being developed. Such improvements may include without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities.

These items are required in addition to any other landscape elements on private property in order to create a stronger landscaped streetscape.

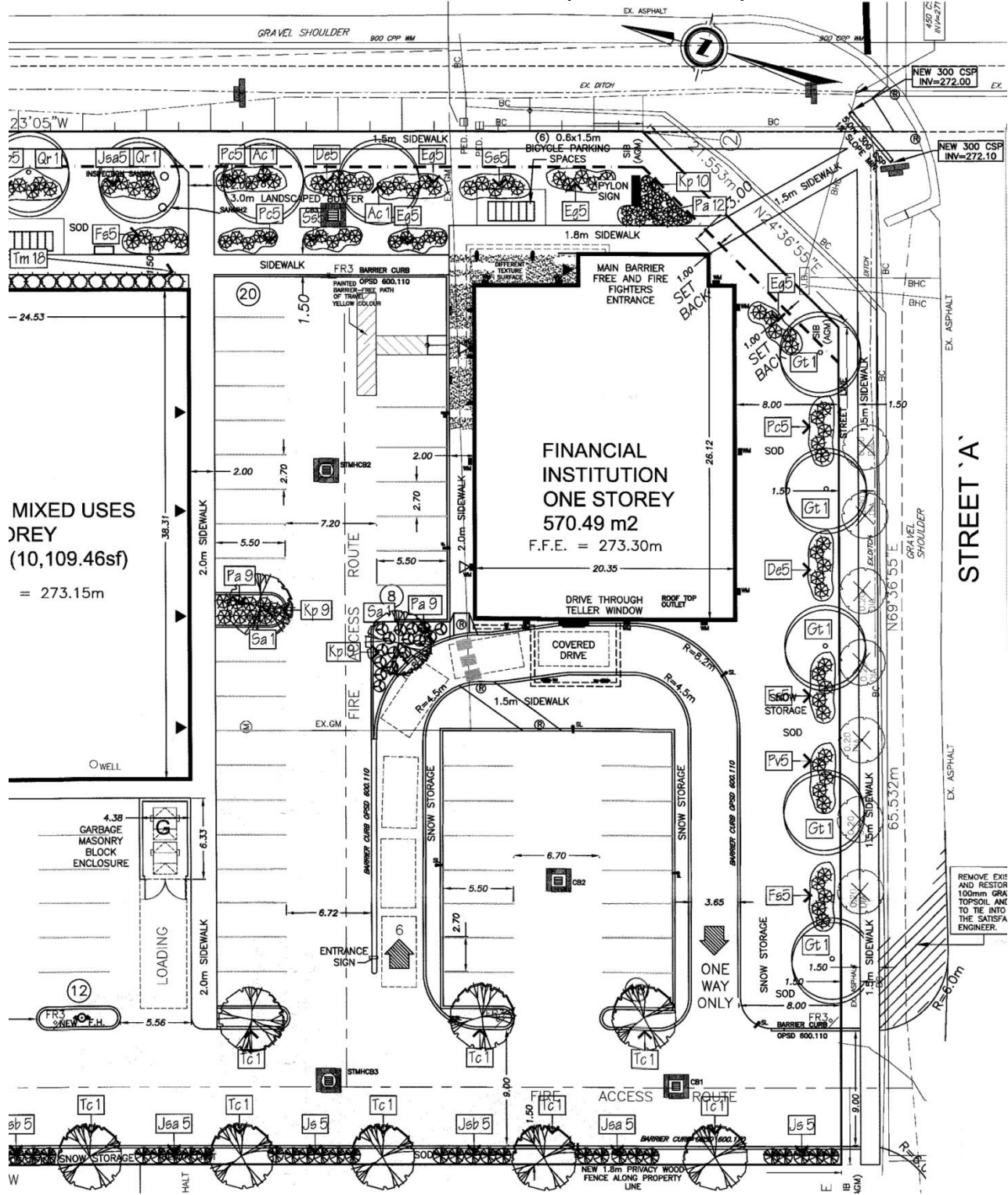
In some cases, the owner will be required to maintain these improvements, and will be required to carry insurance to indemnify and save the City harmless from any actions arising from these works. These items would be included in a licensing agreement in addition to the development agreement. In most cases, these works (boulevard trees) will be maintained by the City.

Landscaping at the intersection of two City Road allowances shall not block sight lines.

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FIGURE 9.1 (REPLACEMENT)

SAMPLE LANDSCAPE PLAN (PARTIAL PLAN)



SAMPLE PLANT LIST

PLANT MATERIAL

KEY	COMMON NAME	BOTANICAL NAME	QTY	SIZE	COND
Am	MULTISTEM SERVICEBERRY	Amelanchier canadensis (multi-stem)	3	150cm	POT
Ar	RED MAPLE	Acer rubrum 'Sunset'	3	65mmcal	WB
Co	HACKBERRY TREE	Celtis occidentalis	1	65mmcal	WB
Gb	MAIDEN HAIR TREE	Ginkgo biloba	1	60mmcal	WB
Gt	SHADEMASTER LOCUST	Gleditsia triacanthos 'Shademaster'	3	50mmcal	WB
Jh	PRINCE OF WALES JUNIPER	Juniperus horizontalis 'Prince of Wales'	11	60cm	POT
Kf	KARL FOERSTER REED GRASS	Calamagrostis acutiflora 'Karl Foerster'	25	2yr/1gal	POT
Pe	LITTLE BUNNY FOUNTAIN GRASS	Pennisetum alopecuroides 'Little Bunny'	15	2yr/1gal	POT
Pm	DWARF MUGO PINE	Pinus mugo 'Pumilo'	14	50cm	POT
Sb	ANTHONY WATERER SPIREA	Spiraea bumalda 'Anthony Waterer'	26	60cm	POT

Note: Provide information as outlined in Section 9

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10. FACILITIES AND ENCLOSURES FOR THE STORAGE OF WASTE MATERIAL GARBAGE AND RECYCLING

10.1. Objective

To ensure that adequate facilities are provided for:

- (a) the storage of garbage **and recycling** between collections thereby avoiding health, safety and litter problems; and
- (b) the efficient and safe collection of garbage **and recycling** by collection vehicles.

(See Official Plan Policy 11.1.1, and the Waste **Management** By-law **WM-12**)

10.2. Methods of Storage and Collection

(see Collection Practices Table 40.2 **10.1**)

(a) Residential Rowhousing:

- (i) Storage: An individual area within or immediately associated with each unit is required for garbage storage between collection days. ~~Common exterior storage facilities are not a recommended or preferred method of storage and will only be permitted in situations where the developer demonstrates that individual storage facilities are not feasible.~~ **Outside storage of garbage or recyclables is not a recommended or preferred method of storage.**

Outside storage of garbage will only be permitted in situations where the developer demonstrates that individual storage facilities are not feasible. Outside storage of garbage will require an enclosure meeting the requirements of Table 10.2

Outside storage of recyclables is preferred if collection of recyclables is not practical from individual units from the boulevard of the abutting public street or private drive. Outside storage of recyclables will require an exterior storage enclosure meeting the requirements of Table 10.2. Outside storage of recyclables without an enclosure (i.e., exterior storage area) will only be permitted where the developer demonstrates that a recycling enclosure is not feasible.

- (ii) Collection: If collection is by the City, it shall be at the boulevard of the abutting public street or private drive that is approved as a city collection vehicle access driveway. The collection vehicle access driveway shall **be** shown on the approved site services plan designed in accordance with Section 10.4 and Table 40.4 **10.3**. Units fronting to private driveways that are not accessible by City vehicles shall bring their garbage to ~~common pick-up points~~ **communal collection points and their recyclables to exterior storage enclosures located at the boulevard of an abutting public street or private drive that is approved as a City collection vehicle access driveway.** ~~In accessible driveways should be limited in length such that the maximum number of units serviced by each common pick-up point or storage enclosure complies with Table 10.3.~~

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(b) Apartments:(i) Buildings With Less Than 30 12 or Less Units:**Garbage**

The garbage is centrally stored in specifically designed garbage rooms within the building, ~~or however for buildings with less than 12 units properly designed exterior enclosures meeting the requirements of Table 10.2. will be accepted.~~ ~~Garbage cans or polyethylene bags~~ **Plastic garbage bags or metal or plastic cans (minimum 30L, maximum 125L)** each not exceeding ~~27.2 kg (60 lbs.)~~ **20kg (44lbs.)** may be used **for garbage.**

Recycling

The recycling can be stored within each unit, in a specifically designed storage room within the building, exterior storage area or exterior storage enclosure meeting the requirements of Table 10.2. If 360 litres carts are used, a minimum of two is required.

(ii) Buildings Having Between 30 Units and 150 Units With More Than 12 Units:**Garbage**

The garbage shall be centrally stored in specifically designed ~~garbage rooms within the building. The garbage~~ ~~Garbage storage facilities shall consist of either 4 cubic yard 3.1, 4.6 or 6.1 cubic metre steel bulk bin containers located in the building and wheeled out to a collection point located within easy with access of by garbage collection vehicles, meeting the requirements of Table 10.3, or the installation of a garbage compaction unit which is compatible with collection vehicles, meeting the requirements of Table 10.3. a 3 cubic yard steel container. Both the 3 and 4 cubic yard containers are available from the General Manager of Environmental Services and City Engineer's Department.~~ **Exterior storage enclosures are permitted to store empty and full bulk bin containers.**

Recycling

Recycling shall be stored in a specifically designed room within the building of sufficient size to accommodate one 360 litre cart for every seven residential units and allow for resident access and movement of the carts. For collection, carts shall be wheeled to a point within access, meeting the requirements of Table 10.3. Recycling carts must be compatible with City collection vehicles. Exterior storage enclosures are permitted to store empty and full recycling containers.

~~(iii) Buildings Having Over 150 Units: Garbage storage facilities shall include a garbage compaction unit as described in (ii) above.~~(c) Commercial, Institutional, Industrial:

- (i) Commercial: For shopping centres, steel **bulk bin** containers are used. For individual stores and offices, depending on the volume of garbage or type of storage facilities cans, polyethylene bags or ~~steel bulk bin~~ **bulk bin** containers may be used. For any integrated commercial uses exceeding 5000 sq. metres (50,000 sq. feet) of gross floor area, a central garbage storage should be provided. **Consideration will be given to the use of a deep collection**

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unit on site. The extent of screening for this is dependent upon its location and style.

- (ii) Institutional: Depending on the volume of garbage and type of storage facility, cans, polyethylene bags, and **steel bulk bin** containers may be used. ~~If pick-up is by City forces the size of the steel containers must be 4 cubic yards.~~ **Consideration will be given to the use of a deep collection unit on site. The extent of screening for this is dependent upon its location and style.**
- (iii) Industrial: Depending on the volume of garbage or type of storage facility, cans, polyethylene bags or steel containers may be used. ~~If pick-up is by City forces the size of the steel containers must be 4 cubic yards.~~ **Consideration will be given to the use of a deep collection unit on site. The extent of screening for this is dependent upon its location and style.**
- (iv) **City collection at Commercial, Institutional and Industrial properties is limited to 12 bags of garbage per collection and 5 Blue Boxes of recycling and 2 bundles of cardboard. These properties must be on an established residential collection route and no trade waste is permitted.**

(d) **Facilities for the Collection & Storage of Recyclable Materials**

- (i) **Recycling in commercial, industrial or institutional buildings/ complexes is required. The plans for the complex shall locate the collection areas on the site plan. Any such locations shall be screened. Materials are to be separated as required for municipal pickup and/or in accordance with provincial standards.**

(e)(e) **Facilities for Storage and Collection of Source Separated Organics**

- (i) **May be provided for private waste collection.**

10.3. **Location of Storage**

- (a) ~~Generally all garbage should be stored inside the building(s) and moved to the point of collection on collection day. If garbage is stored outside, a properly designed enclosure is required, which shall be shown on the site plan for approval.~~

Commercial, industrial, institutional and apartment developments may be exempt from the requirement for exterior enclosures if steel bulk bin containers are used and strategically located in combination with the building configuration to utilize areas such as recessed service areas or extended building walls so that the storage containers are not within public or neighbourhood view.

- (b) If the development includes medical or dental offices or a drug store, the garbage storage facilities shall be located in a building or structure capable of being locked.

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- (c) Table 10.2 describes the design features of both garbage and recycling collection points and storage enclosures if permitted.
- (d) **All garbage and recycling containers must be located a minimum of 3 metres (10 feet) away from all buildings.**

10.4. **Accessibility by Collection Vehicles**

- (a) Where volumes of garbage **and recycling** warrant, collection vehicles will go on site providing there is ingress and egress with circulation designed to avoid reversal of the vehicle.
- (b) Whether the garbage is collected privately or by the City, the collection vehicles are sufficiently similar to require the same spatial dimensions for convenient and safe access. Refer to Table ~~10.4~~ **10.3** for the acceptable design parameters.
- (c) The vehicular accesses and internal driveways of the development shall be designed to carry the weight of the City's garbage collection vehicles. Construction standards are available from the ~~City Engineer's Department~~ **Solid Waste Management Division**.

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TABLE 10.1

GARBAGE COLLECTION PRACTICES						
Use		Collection Responsibility	Storage Location	Containers May Be Leased From City¹	Number of Collections Per Week	
Residential						
(a)	rowhousing:					
	(i)	rowhousing units that front directly to a public street or private drive accessible to City collection vehicles	City or Private	within dwelling unit	No	Once
	(ii)	rowhousing units that front to a private drive not accessible to City collection vehicles	City or Private	within dwelling unit or approved common exterior storage enclosure	No	Once
(b)	apartments (under 12 units)					
(c)	apartments (12 or more units)					
			City	interior or approved exterior enclosure interior	No	Once
			City		No	Twice
Institutional			City or Private	interior or approved exterior enclosure	Yes	Twice
Commercial						
(a)	shopping centres (malls, plazas)					
(b)	other premises					
			Private	interior or approved exterior enclosure	No	Not applicable
			City or ³ Private	interior or approved exterior enclosure	No	Once
Industrial			City or ³ Private	interior or approved exterior enclosure	No	Once

¹For certain use, as identified, steel containers are leased through the Sanitation Division of the General Manager of Environmental Services and City Engineer's Department. The two sizes of containers that are available are the 3 cubic yard (measuring 4.5' x 6.5') and the 4 cubic yard (measuring 4.5' x 6.5'). If the City will not lease containers, they may be obtained from a private garbage collection operation.

²Common exterior storage enclosures are permitted only when the applicant demonstrates that individual storage facilities are not feasible. If approved, common exterior storage enclosures are required in accordance with the design characteristics of Table 10.4. Steel or other garbage containers are not permitted for common exterior storage except within a storage enclosure.

³The City will collect garbage from industrial uses, and commercial uses provided the garbage is not "trade waste" which is that produced directly from manufacturing or retailing (i.e. produce and cartons from supermarkets).

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TABLE 10.1 GARBAGE AND RECYCLING COLLECTION AND STORAGE PRACTICES

<i>Use</i>	<i>Collection Responsibility</i>	<i>Storage Location¹</i>	<i>Collection Location²</i>	<i>Containers Sold/Leased From City¹</i>	<i>Collection Frequency</i>	
Residential						
(a)	rowhousing units with sufficient individual storage and front directly to a public street or private drive accessible to City collection vehicles	City or Private	within dwelling unit	boulevard of the abutting public street or private drive	No	Once every 6 business days
(b)	rowhousing units with sufficient individual storage and do not front directly to a public street or private drive accessible to City collection vehicles	City or Private	within dwelling unit	<u>Garbage</u> communal collection point <u>Recycling</u> approved exterior storage enclosure or storage area	Rollout carts for recycling sold	Once every 6 business days
(c)	rowhousing units with insufficient individual storage	City or Private	<u>Garbage</u> approved exterior storage enclosure <u>Recycling</u> approved exterior storage enclosure or storage area	<u>Garbage</u> approved exterior storage enclosure <u>Recycling</u> approved exterior storage enclosure or storage area	Bulk bins for garbage leased Rollout carts for recycling sold	Once per week
(d)	apartments with 12 units or less	City or Private	<u>Garbage</u> interior storage room or approved exterior enclosure <u>Recycling</u> interior storage room or approved exterior enclosure or storage area	private drive accessible to City collection vehicles	Bulk bins for garbage leased Rollout carts for recycling sold	Once per week
(e)	apartments with more than 12 units	City or Private	interior storage room; approved exterior storage enclosure may be used to store containers after they become full	private drive accessible to City collection vehicles	Bulk bins for garbage leased Rollout carts for recycling sold	Once/Twice per week
Institutional		City or Private	interior or approved exterior enclosure	public street or private drive accessible to City collection vehicles	Bulk bins for garbage leased	Once/Twice per week
Commercial						
(a)	shopping centres (malls, plazas)	Private	interior or approved exterior enclosure interior	Not applicable	Not applicable	Not applicable
(b)	other premises (not-for-profit, social clubs)	City or ³ Private	interior or approved exterior enclosure	public street or private drive accessible to City collection	Not applicable	Once per week/every six business days
Industrial		Private	interior or approved exterior enclosure	Not applicable	Not applicable	Not applicable

Agenda Item #

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- Notes 1) Communal collection points, exterior storage areas and exterior storage enclosure must meet the requirements of Table 10.2**
2) Private drives must meet the requirements of 10.3.

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TABLE 10.2

DESIGN FEATURES OF GARBAGE PICK-UP POINTS AND ENCLOSURES		
Design Features		Design Guidelines
1-	Common pick-up point ¹	
(a)	Location	immediately adjacent to an approved collection vehicle access route
(b)	Material	poured in place concrete or other structurally adequate and impervious material
(c)	Maximum number of units serviced by each collection point.	12
(d)	Fencing, landscaping or other enclosure	0.6 metre (2 feet) maximum
2-	Common Exterior Storage Enclosure ¹	
(a)	Location	immediately adjacent to an approved collection vehicle access route and oriented to facilitate pick-up
(b)	Slab Material	poured in place concrete
(c)	Maximum number of units serviced by each facility	20
(d)	Enclosure Wall Height	2 metres (6 feet) minimum
(e)	Enclosure Wall Material	concrete, brick, masonry or other material of similar durability and capable of being maintained by washing. Wood enclosures are not permitted.
(f)	Size	2.4 metres (8 feet) x 3.0 metres (10 feet) maximum
(g)	Gates ²	1.2 metres (4 feet) minimum opening

¹A water supply line and hose bib connection adjacent to common pick-up points and common exterior storage enclosures is recommended for ease of maintenance.

²Gates are not required when there is a storage container such as a steel bin within the enclosure and the orientation of the opening does not impact upon the street, abutting properties or the development.

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TABLE 10.2 - DESIGN FEATURES OF RESIDENTIAL GARBAGE AND RECYCLING COLLECTION POINTS AND ENCLOSURES

Design Features		Design Guidelines
1. Communal collection point¹ – Garbage		
(a)	Location	immediately adjacent to an approved collection vehicle access route
(b)	Material	poured in place concrete or other structurally adequate and impervious material
(c)	Maximum number of units serviced by each collection point.	12
(d)	Fencing, landscaping or other enclosure	1.0 metre (3 feet) maximum
2. Common Exterior Storage Area – Recycling		
(a)	Location	immediately adjacent to an approved collection vehicle access route and oriented to facilitate pick-up minimum of 3 metres (10 feet from existing buildings)
(b)	Slab Material	poured-in-place concrete, asphalt or other structurally adequate and impervious material
(c)	Maximum number of units serviced by each collection point	roll-out recycling cart – 35
(d)	Signage	signage to identify area and recycling rules
3. Common Exterior Storage Enclosure¹ – Recycling and garbage		
(a)	Location	immediately adjacent to an approved collection vehicle access route and oriented to facilitate pick-up
(b)	Slab Material	poured-in-place concrete
(c)	Maximum number of units serviced by each facility	storage enclosure for bagged garbage – 20 storage enclosure for bulk bin container – no limit storage enclosure for roll-out recycling cart – no limit
(d)	Enclosure Wall Height	2 metres (6 feet) minimum
(e)	Enclosure Wall Material	concrete, brick, masonry or other material of similar durability and capable of being maintained by washing wood enclosures are not permitted
(f)	Enclosure roof	storage enclosure for bagged garbage – not permitted storage enclosure for bulk bin container – not permitted storage enclosure for roll-out recycling cart – required
(g)	Minimum Gate Opening ²	bagged garbage - 1.2 metres (4 feet) single bulk bin compound – 3.6 metres (12 feet) double bulk bin compound – 7.2 metres (24 feet) roll-out recycling cart - 1.2 metres (4 feet)

¹A water supply line and hose bib connection adjacent to common pick-up points and common exterior storage enclosures is recommended for ease of maintenance.

²Gates are not required for exterior storage enclosures for bulk bins when the opening to the storage enclosure is not visually from public property (including public streets) or impact abutting properties or the development. The gates for bulk bin compounds must be open for collection on the morning of the scheduled collection.

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TABLE 10.3

DESIGN FEATURES OF COLLECTION VEHICLE ACCESS DRIVEWAYS		
Design Features		Design Guidelines
(a)	Width	3.7 metres (12 feet) minimum
(b)	Surface Material	asphalt or other approved hard surface
(c)	Turning Radius	12.2 metre (40 feet) minimum three point or hammerhead type turning facilities that require reversing are not generally acceptable.

TABLE 10.3 - DESIGN FEATURES OF COLLECTION VEHICLE ACCESS DRIVEWAYS

Design Features		Design Guidelines
(a)	Width	3.7 metres (12 feet) minimum
(b)	Surface Material	asphalt or other approved hard surface
(c)	Turning Radius	23 metre (76 feet) minimum for bagged garbage collection and blue box recycling 26 metre (85 feet) for bulk bin garbage collection three point or hammerhead type turning facilities that require reversing are not generally acceptable.
(d)	Location of housing units on private drives for individual collection	Housing units must have designated parking in front of each unit with no common parking lot.

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Appendix "A"

Bill No.
2014

By-law No. C.P. – _____

A by-law to amend By-law C.P.-1455-541

WHEREAS Section 41 of the Planning Act, R.S.O. 1990, c.P.13 provides in part that, where in an official plan an area is shown or described as a proposed site plan control area, the council of the local municipality in which the proposed area is situated may, by by-law, either a committee of the council or to an appointed officer of the municipality any of the council's power or authority under that section;

AND WHEREAS Clause 5(2) (b) of the Building Code Act authorizes the council of a municipality to pass by-laws requiring applications for building construction permits to be accompanied by such plans, specifications, documents and other information as is prescribed;

AND WHEREAS in the Official Plan for the City of London Planning Area the whole of the City of London is shown or described as a proposed site plan control area and the Council of The Corporation of the City of London considers it appropriate to designate the whole of the City of London as a site plan control area, to delegate its powers or authority under Section 41 of the Planning Act, R.S.O. 1990, c.P.13, to certain appointed officials of the Corporation, and to require applications for building construction permits to be accompanied by plans and drawings referred to in Subsection 41(4) and by one or more agreements with the Corporation that deal with or ensure the provision and maintenance of any of the facilities, works or matters to be provided in conjunction with all buildings and structures to be erected and any of the facilities, works or matters mentioned in Subsection 41(7) of that Act.

AND WHEREAS Municipal Council of The Corporation of the City of London passed By-law C.P.-1455-541 being a by-law to designate a Site Plan Control Area and to delegate Council's power under Section 41 of the Planning Act, R.S.O. 1990 c.P.13;

AND WHEREAS it is deemed expedient to amend the said By-law;

Now THEREFORE the Municipal Council of The Corporation of the City of London hereby enact as follows:

1. Bylaw No. C.P.-1455-541 is hereby amended by deleting Figure 1.1 of Schedule 1 and by replacing it with a new Figure 1.1 as attached as Schedule "A".
2. By-law No. C.P.-1455-541 is hereby amended by deleting Figure 2.1 of Schedule 1 and replacing it with a new Figure 2.1 as attached as Schedule "B".
3. By-law No. C.P.-1455-541 is hereby amended by deleting clauses 3.2, 3.3, 3.4 and 3.5 of Schedule 1 and replacing them with the following new clauses 3.2, 3.3, 3.4 and 3.5 as follows:

"3.2. Design of Works to Be Assumed

Where facilities and works external to the site are provided in conjunction with the development of the site, the plans are to be prepared by a consulting engineer and must be submitted to the Managing Director, Development & Compliance Services & Chief Building Official for approval prior to construction of said works and facilities. Detailed cost estimates are also required of the total cost, including the City's share of such costs. The facilities and work shall be constructed and accepted by the City prior to the occupancy of any building on the site taking place, unless otherwise approved by the City Engineer.

3.3. "As-Constructed" Drawings

"As-constructed" drawings of any facilities and works to be assumed by the City will be required prior to the full release of security. This requirement applies to works on any

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easement which the City must maintain. Drawings shall be completed to the specifications of the City Engineer.

3.4. Certificate of Works to be Assumed

Facilities and works to be assumed by the City within a public highway, walkway or easement shall be inspected and certified by the owner's consulting engineer. The form of certification is to be substantially the same as the one listed as development agreement standard clause No. 4.

3.5. Works Eligible for a Claim

Some external facilities and works may be eligible for either an Urban Growth Capital Works Claim, and/or the City Services Fund, and/or a Capital Works Budget Claim and/or Industrial Oversizing Claim. Eligibility for these claims must be approved by the City prior to construction and subsequent to entering into a development agreement.”

4. By-law No. C.P.-1455-541 is hereby amended by adding clause 3.6 of Schedule 1 as follows:

“3.6. Security

Security is required to ensure the completion of external works. Security may be reduced as stages of construction are completed.”

5. By-law No. C.P.-1455-541 is hereby amended by deleting clause 4.1 of Schedule 1 and replacing it with a new clause 4.1 Site Plan as follows:

“4.1. Site Plan

- (a) The site plan shall show the land to be dedicated prior issuance of the development agreement. The land shall be free and clear of any encumbrances.
- (b) The site plan shall show the ultimate road widening, and all buildings, parking access, etc. will be set back beyond the ultimate road widening in accordance with the zoning by-law.
- (c) The City of London’s Official Plan establishes a basis for the widths of road allowances. Based on this, the City’s zoning by-law Z-1 sets out the actual ultimate road allowance widths. The zoning by-law also establishes that setbacks for parking, buildings, etc. are to be from the ultimate road allowance. In addition to this, the intersections of some streets will require sight triangles and in some cases increased widenings to accommodate Bus Rapid Transit Systems (BRT) in the future, in accordance with the zoning by-law.
- (d) In some cases, road widenings are required for existing sites where substantial additions or changes are being proposed. Where no road works are proposed in front of the subject property, the dedication is required, however, the property owner may be given permission to continue to use the lands subject to items such as: entry into a modified boulevard parking agreement with the City, provision of insurance to indemnify and save the City harmless.

(See Official Plan Policies 18.2.4, 18.2.5, and Council Policy 25(62).)

6. By-law No. C.P.-1455-541 is hereby amended by deleting Table 4.1 of Schedule 1.
7. By-law No. C.P.-1455-541 is hereby amended by amending 5.1(a) deleting the word “and” before the word “pedestrian” and by adding a coma after the word “vehicular”, both in the second line and further by adding the phrase “, and bicycle” after the word

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pedestrian in the second line.

8. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.1(b) of Schedule 1 by adding the following phrase after the last word in the sentence and before the period as follows:

“, and with the City of London Access Management Guidelines”

9. By-law No. C.P.-1455-541 is hereby amended by deleting the title for 5.3 of Schedule 1 and by replacing the title as follows:

“Number of Accesses.”

10. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.3(b) of Schedule 1 by adding the following sentences after the first sentence as follows:

“Relocation of transit stops are subject to the approval of the London Transit Commission and the City. Any such works if approved will be at the sole expense of the developer.”

11. By-law No. C.P.-1455-541 is hereby amended by adding clause to Section 5.3 of Schedule 1 by adding clause 5.3(c) as follows:

“(c) In some cases, property owners will be required to construct a joint access in accordance with the Access Management Guidelines.”

12. By-law No. C.P.-1455-541 is hereby amended by deleting clause 5.5(c), 5.5(d) and 5.5(e) of Schedule 1 and by replacing them with a new 5.5(c), 5.5(d) and 5.5(e) as follows:

“(c) Where more than one private entrance serves the same lands from the same street, the entrances shall be separated to the satisfaction of the City Engineer.

(d) Where an entrance/exit is divided by an island, a minimum island width of 1.8 m (6 feet) and a point 1.2 m (4 feet) outside of the curb line, may be permitted between adjacent one-way drives serving as a combined entrance/exit facility. Such driveways must be clearly signed as entrance and exit. The detailed design shall accommodate turning radii for large vehicles.

All entrance/exits shall provide a minimum clear throat from the ultimate road allowance onto private property as set out in the Access Management Guidelines.

(e) Spacing of drives serving the same site or adjacent sites should be consistent with the access management guidelines. In some cases, a Traffic Impact Study may be required to confirm access locations and designs in accordance with Access Management Guidelines.”

13. By-law No. C.P.-1455-541 is hereby amended by deleting clause 5.7 of Schedule 1 and by replacing it with a new clause 5.7 as follows:

“5.7. **Width**

The scale, size and intensity of a project may affect the size and extent of a driveway serving a complex. (See Access Management Guidelines)

The minimum width of a drive serving a residential complex is 6.7m and may be increased to accommodate turning movements.

The radius of each side of the drive shall be at least 9 meters.

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For Industrial, Commercial and Institutional Uses, the driveways shall be at least 9 meters in width but not exceed 12m in width, and the radius on driveway shall be increased to provide for the size of vehicles potentially accessing these sites.”

14. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.8(a) in Schedule 1 deleting the words: “General Manager of Environmental Services and” in the second and third line.

15. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.8(c) by deleting the words “(see Figure 5.2 for sidewalks)” at the end of the sentence and by replacing them at the end of the sentence and before the period with the following phrase:

“(see City of London Engineering standards)”

16. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.10(a) of Schedule 1 by deleting the words “General Manager of Environmental Services and” in the 6th and 7th line as well as in the 9th and 10th line as well as deleting the word “s Department” in the 7th line.

17. By-law No. C.P.-1455-541 is hereby amended by deleting both paragraphs in clause 5.11 of Schedule 1 and by replacing them with two new paragraphs as follows:

“The owner shall, in addition to obtaining a permit of approved works from the City for work within the road allowance ensure that all the utilities are contacted. Underground utility locations must, however, be verified in the field by the respective utilities. Non-standard locations for new utilities or services must be approved by the Utilities Co-ordinating Committee.

In some cases, a Traffic Management Plan will be required to be submitted to demonstrate items such as: how the flow of traffic will be maintained; safety issues; etc. for any work on the City Road Allowance.”

18. By-law No. C.P.-1455-541 is hereby amended by amending clause 5.12 of Schedule 1 by deleting the words “General Manager of Environmental Services and” in the 4th line as well as the 6th and 7th line.

19. By-law No. C.P.-1455-541 is hereby amended by deleting Figures 5.1, 5.2 and 5.3 of Schedule 1.

20. By-law No. C.P.-1455-541 is hereby amended by deleting clause 6.2(a), 6.2(b) and 6.2(c) in Schedule 1 and by adding new clauses 6.2(a), 6.2(b), and 6.2(c) as follows:

(a) Number of Spaces

(i) Refer to the applicable zoning by-law for the total number of required parking spaces.

(ii) Visitor Parking: Multi-unit residential development including cluster detached dwellings developments with a total of three or more units shall provide a common area(s) for visitor designated and signed parking spaces. One (1) visitor parking space shall be provided for every ten (10) dwelling units. The number of visitor parking spaces may be included within the total number of parking spaces required by the applicable zoning by-law. Where feasible, visitor parking shall be centrally located to serve all units. These may be distributed in small clusters to better serve the complex. Driveways or parking spaces that are, or may be perceived for the exclusive use in association with a dwelling unit will not be

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considered as a visitor parking space.

- (iii) Barrier free parking is to be provided for buildings in accordance with the Ontario Building Code and in accordance with the zoning by-law, where identified.
- (b) Location - Parking areas should be no closer than 3 metres (10 feet) to street line and 1.5 metres (5 feet) to a property line.
- (c) Commercial parking areas may be located in the interior and/or rear yards, and are discouraged from being in the front or exterior yards depending upon:
 - (i) predominant parking location on sites in the vicinity, location of adjacent commercial parking areas;
 - (ii) existence of adjacent non-commercial land use; and
 - (iii) convenience to proposed uses.
 - (iv) prohibitions in the zoning by-law.
 - (v) in cases where parking is permitted in the front yard or exterior yard, adequate screening is required.

21. By-law No. C.P.-1455-541 is hereby amended by amending clause 6.3(a) by deleting the words “to avoid interference to moving traffic created by parking manoeuvring” and by adding the words “and be designed not to have parking spaces on either side where possible”.

22. By-law No. C.P.-1455-541 is hereby amended by adding a new clause 6.2(e) of Schedule 1 as follows: “(e) Schools – car parking and bus loading areas are to be located on private property.” and re-lettering the existing clauses (e) to (l) inclusive to (f) to (m).

23. By-law No. C.P.-1455-541 is hereby amended by amending clause 6.2(e)(i) of Schedule 1 by deleting the word “waling” and replacing it with the word “walking”.

24. By-law No. C.P.-1455-541 is hereby amended by deleting Figure 6.1 of Schedule 1 and replacing it with a new Figure 6.1 as attached as Schedule “C”.

25. By-law No. C.P.-1455-541 is hereby being amended by amending Table 6.1 of Schedule 1 by adding “**” after the word “surface” in the 5th line and by adding the phrase as follows: “Including pervious paving where feasible.” below the table.

26. By-law No. C.P.-1455-541 is hereby being amended by amending section 6.4 of Schedule 1 to delete the words “General Manager of Environmental Services and City Engineer” in the 2nd and 3rd line and replacing them with the words “Manager, Development Services & Planning Liaison”.

27. By-law No. C.P.-1455-541 is hereby amended by amending clause 6.5 of Schedule 1 by deleting the phrase “(see Figure 6.2)” and by adding new sentences as follows:

“Parking spaces and driveway isles are to be consistent with surface parking driveway

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standards. The entrance drive to a parking structure should be designed in accordance with Figure 6.2.”

28. By-law No. C.P.-1455-541 is hereby amended by deleting Figure 6.2 of Schedule 1 and by replacing it with a new Figure 6.2 as attached as Schedule “D”.

29. By-law No. C.P.-1455-541 is hereby amended by deleting Figure 6.1 and replacing it as Figure 6.3 as attached as Schedule “E”.

30. By-law No. C.P.-1455-541 is hereby being amended by deleting clauses 6.6(d), (e), (f) and (g) of Schedule 1 and replacing them with new 6.6(d), (e), (f) and (g) as follows:

“(d) Access

All loading spaces or loading areas should have associated space on the property to provide truck maneuvering. Such areas should be shown on the plan and none of these vehicles will be permitted to reverse onto or from the street abutting the property, unless otherwise permitted in the zoning by-law.

Roads providing access to building fronts and fire routes are to be designed to support emergency vehicles, e.g. fire trucks.

(e) Location

Access to loading facilities may be by separate access or by an internal driveway serving a parking area. Loading spaces are to be located in accordance with the zoning by-law.

(f) Paving

All loading spaces, manoeuvring areas and driveways should be hard surfaced with suitable materials to the satisfaction of the City Engineer, i.e., concrete, asphalt, lockstone, etc.

(g) Joint Loading Facilities

In shopping centres or other similar integrated development, the use of joint loading facilities to serve all or several individual businesses will be encouraged.”

31. By-law No. C.P.-1455-541 is hereby being amended by amending clause 6.7(a) of Schedule 1 by deleting the words “figure 6.1” at the end of the sentence and by replacing it with the following phrase before the bracket: “Figure 6.3 Private Property Fire Routes”.

32. By-law No. C.P.-1455-541 is hereby being amended by amending clause 6.7(b) by deleting this clause and replacing it with at new clause 6.7(b) as follows:

“(b) When required in association with a development, fire routes shall be constructed, installed and maintained by the owner in accordance with Table 6.3 Design Standards for Fire Routes. The construction, installation and maintenance of fire routes shall include fire route signs in accordance with Table 6.4 Design and Installation Standards for Fire Route Signs.”

33. By-law No. C.P.-1455-541 is hereby being amended by amending Table 6.2 and 6.3 of Schedule 1 by renumbering them Table 6.3 and 6.4 respectively.

34. By-law No. C.P.-1455-541 is hereby being amended by amending Figure 6.2, 6.3 and 6.4 of Schedule 1 by deleting these figures and replacing them with Figure 6.4 as attached as Schedule “F”.

35. By-law No. C.P.-1455-541 is hereby being amended by amending Section 6.8(e) by

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adding the following phrase after the word “comfort” and before the coma as follows: “including shade trees where feasible”.

36. By-law No. C.P.-1455-541 is hereby being amended by amending the clause 6.8.1 of Schedule 1 by adding a new clause 6.8.1(e) as follows:

“(e) In order to provide full paratransit vehicle access, plans shall provide continuous driveways on private property for all buildings (no reversals).”

37. By-law No. C.P.-1455-541 is hereby being amended by amending the clause 6.9(a) and (b) of Schedule 1 by deleting these clauses and replacing them with new clauses as follows:

“(a)The site plans should show all works necessary to build the common internal drive to the property line including any temporary barriers to be removed when the common internal drive is constructed in the adjoining property. The common internal driveway provides traffic flow from one site to the next.

(b) Where transit facilities are required on private property, the site plan will show the integration of the transit facilities with the proposed development and abutting lands where they are integrated.”

38. By-law No. C.P.-1455-541 is hereby being amended by amending Table 7.1 by deleting “1.0 m (3 ft.)” in line (a) under Characteristic and replacing it with “1.5 m (5.0 ft.)” and by adding an asterisk after the word minimum.

39. By-law No. C.P.-1455-541 is hereby amended by adding a phrase below Table 7.1 as follows: “Increase walkways abutting parking spaces by at least 0.6 m (2 ft.)

40. By-law No. C.P.-1455-541 is hereby being amended by amending the clauses 7.2(b) of Schedule 1 by deleting the words “General Manager of Environmental Services and City Engineering Department” and replace them with the words “City Engineer”.

41. By-law No. C.P.-1455-541 is hereby being amended by amending Table 7.1 of Schedule 1 by adding a double asterisk after the word “stairs” in line (d) and adding the following sentence below the table: “**Stairs are not permitted in the road allowance.”

42. By-law No. C.P.-1455-541 is hereby being amended by amending the clause 9.5 (b) and (d) and 9.6 a) of Schedule 1 by deleting the words “soild”, “Inlands” and “fertizing” respectively and replacing them with the words “soil”, “Islands” and “fertilizing” respectively and re-lettering 9.5 (b) and (d) to 9.5 (a) and (b) respectively.

43. By-law No. C.P.-1455-541 is hereby being amended by amending the clause 9.5 (b) by adding the word “depth” after “of 0.9m”.

44. By-law No. C.P.-1455-541 is hereby being amended by amending Section 9 of Schedule 1 by adding clause 9.7 as follows:

“9.7 Landscape Improvements on the Road Allowance

The municipality may require the improvements on the boulevard in front, beside or behind the property being developed. Such improvements may include without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities.

These items are required in addition to any other landscape elements on private property in order to create a stronger landscaped streetscape.

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In some cases, the owner will be required to maintain these improvements, and will be required to carry insurance to indemnify and save the City harmless from any actions arising from these works. These items would be included in a licensing agreement in addition to the development agreement. In most cases, these works (boulevard trees) will be maintained by the City.

Landscaping at the intersection of two City Road allowances shall not block sight lines.”

45. By-law No. C.P.-1455-541 is hereby being amended by deleting Figure 9.1 of Schedule 1 and by replacing it with a new Figure 9.1 as attached as Schedule “G”.

46. By-law No. C.P.-1455-541 is hereby being amended by deleting Section 10 of Schedule 1 and by replacing it with a new Section 10 as attached as Schedule “H”.

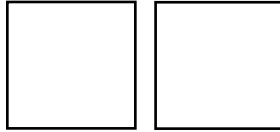
47. This by-law comes into force on October 1, 2014

Passed in Open Council on September 2, 2014

J. Baechler
Mayor

Catherine Saunders
City Clerk

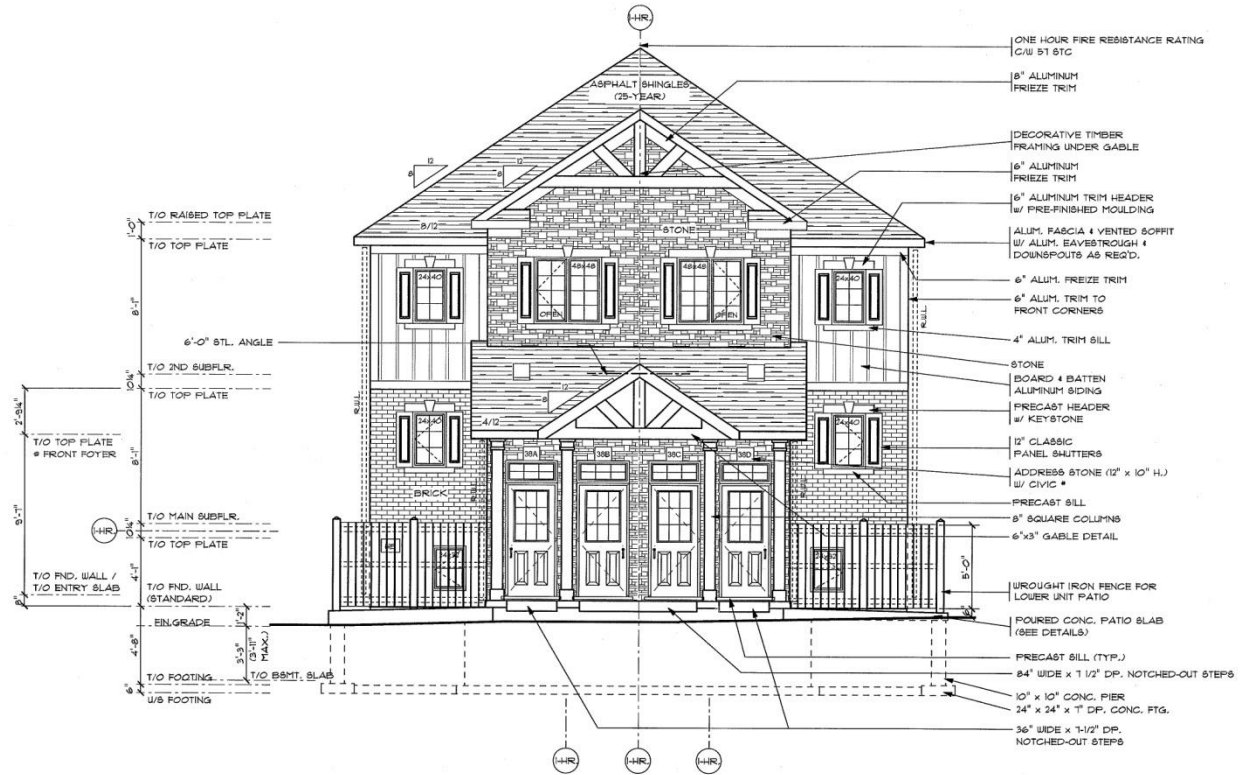
First Reading – September 2, 2014
Second Reading – September 2, 2014
Third Reading – September 2, 2014



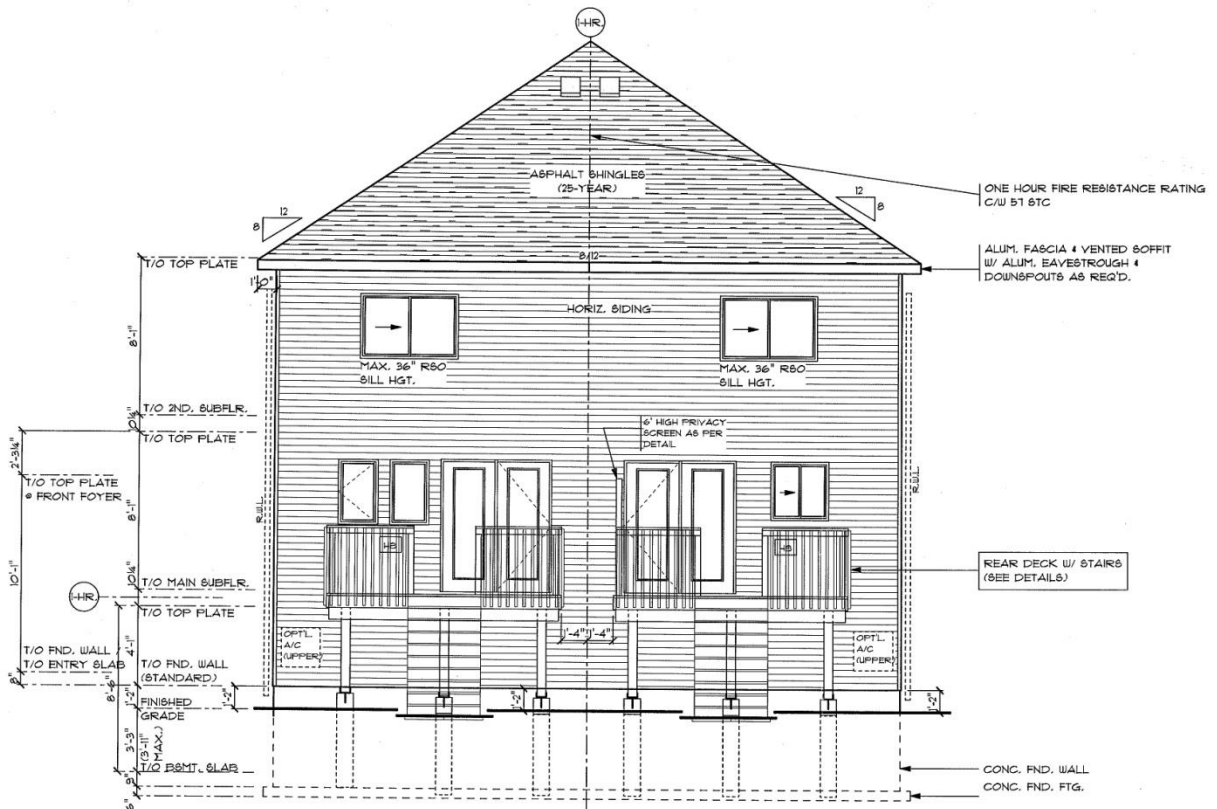
Schedule "A"

FIGURE 1.1

SAMPLE BUILDING ELEVATIONS



Front Elevation



Back Elevation

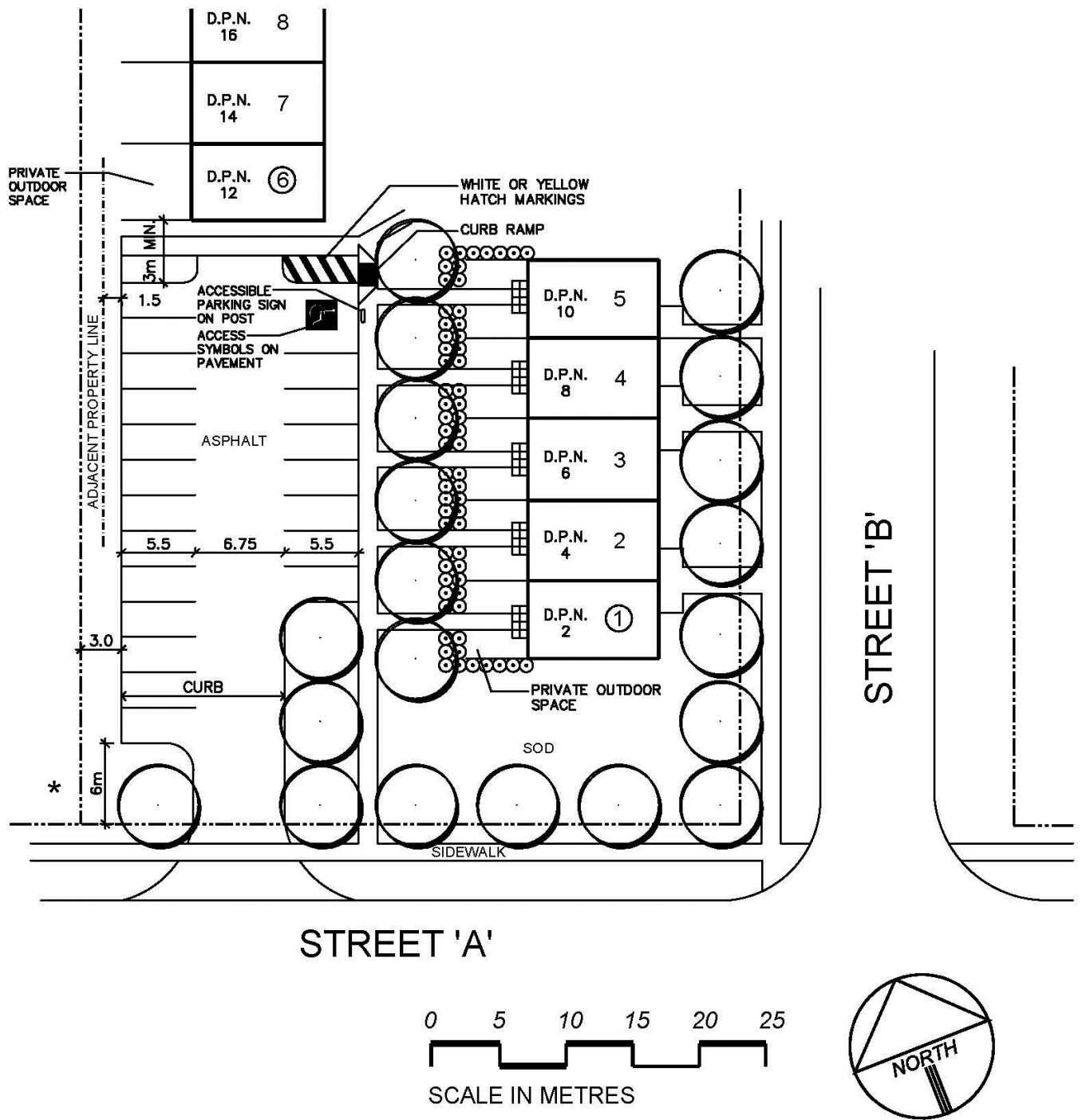
Note: Provide elevations for all sides (See 1.8 – Building Elevations and Cross-Section Requirements)

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Schedule "B"

FIGURE 2.1

PARKING SEPARATION



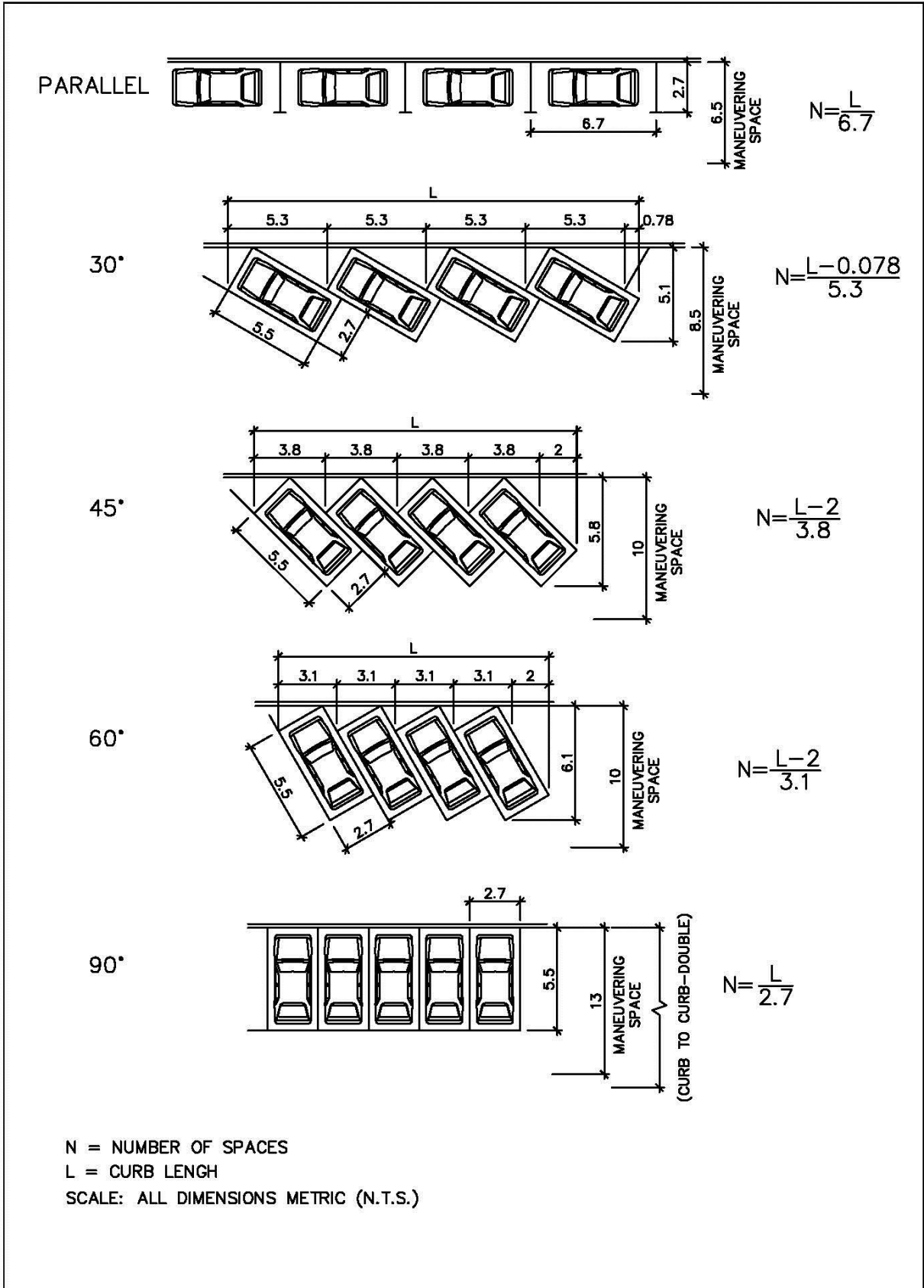
* Note: The clear throat distance varies depending upon the number of parking spaces.

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Schedule "C"

FIGURE 6.1

PARKING STANDARDS – RESIDENTIAL & COMMERCIAL USES

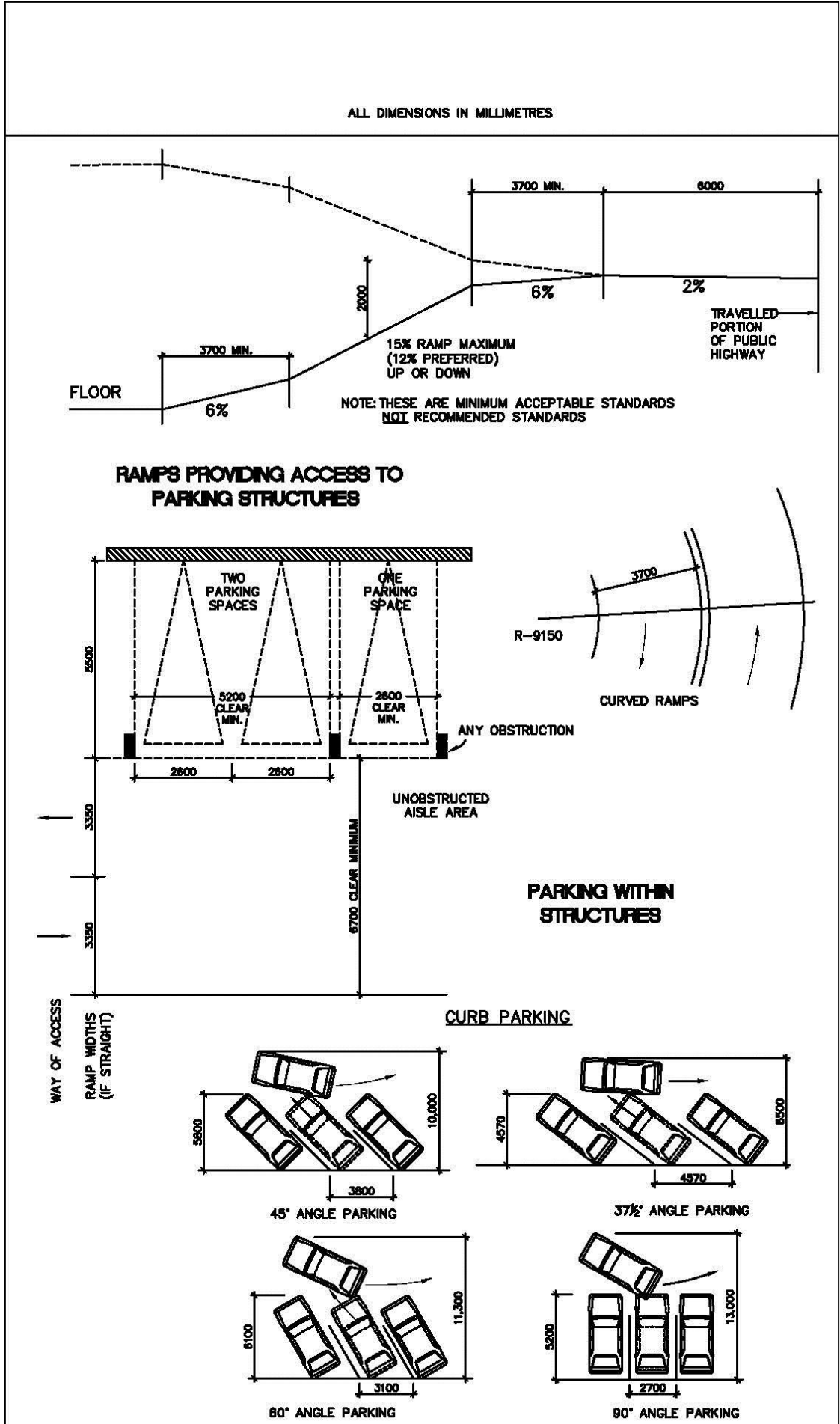


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Schedule "D"

FIGURE 6.2

PARKING STRUCTURES

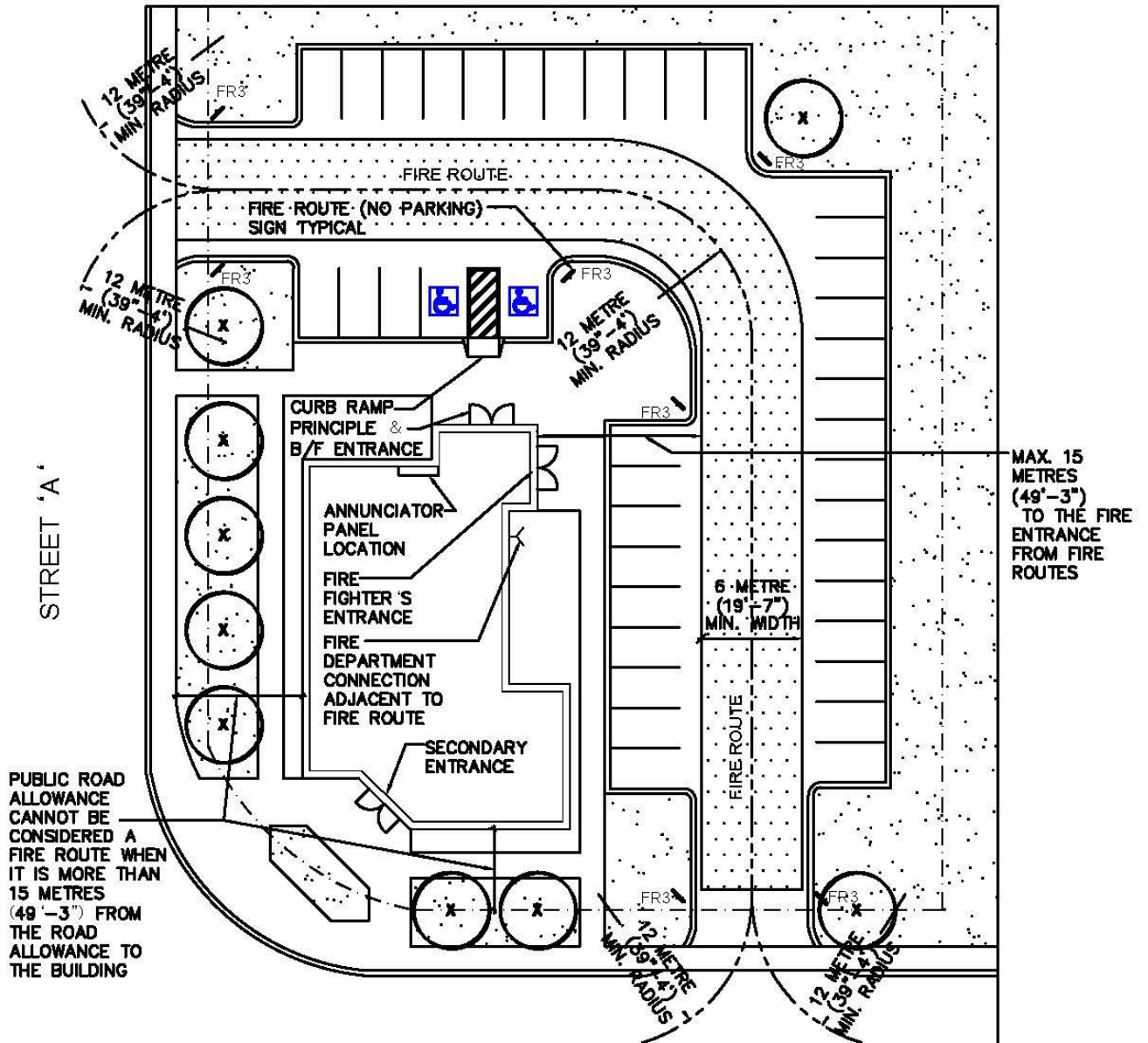


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Schedule "E"

FIGURE 6.3

PRIVATE PROPERTY FIRE ROUTES



FIRE ROUTES (O.B.C. SUBSECTION 3.2.5)

- LOCATED NOT LESS THAN 3 METRES (9'-10") AND NOT MORE THAN 15 METRES (49'-3") FROM THE BUILDING
- FIRE HYDRANT TO BE MAX 45 METRES (147'-6"), UNOBSTRUCTED TO FIRE DEPARTMENT CONNECTION AND 90 METRES (295'-3") TO PRINCIPLE ENTRANCE WHEN NO FIRE CONNECTIONS ARE REQUIRED
- OVERHEAD CLEARANCE MIN 5 METRES
- CHANGE IN GRADIENT MAX 1 IN 12.5 OVER A MIN. DISTANCE OF 15 METRES
- MUST BE DESIGNED TO SUPPORT FIRE EQUIPMENT UNDER ALL CONDITIONS
- HAVE TURN AROUND FACILITY FOR DEAD END PORTIONS EXCEEDING 90 METRES (295'-3")
- HAVE ACCESS OPENINGS EVERY 15 METRES (49'-3") ON WALLS REQUIRED TO FACE A STREET UNLESS BUILDING IS SPRINKLERED

NUMBER OF STREETS (O.B.C. ARTICLE 3.2.2.10)

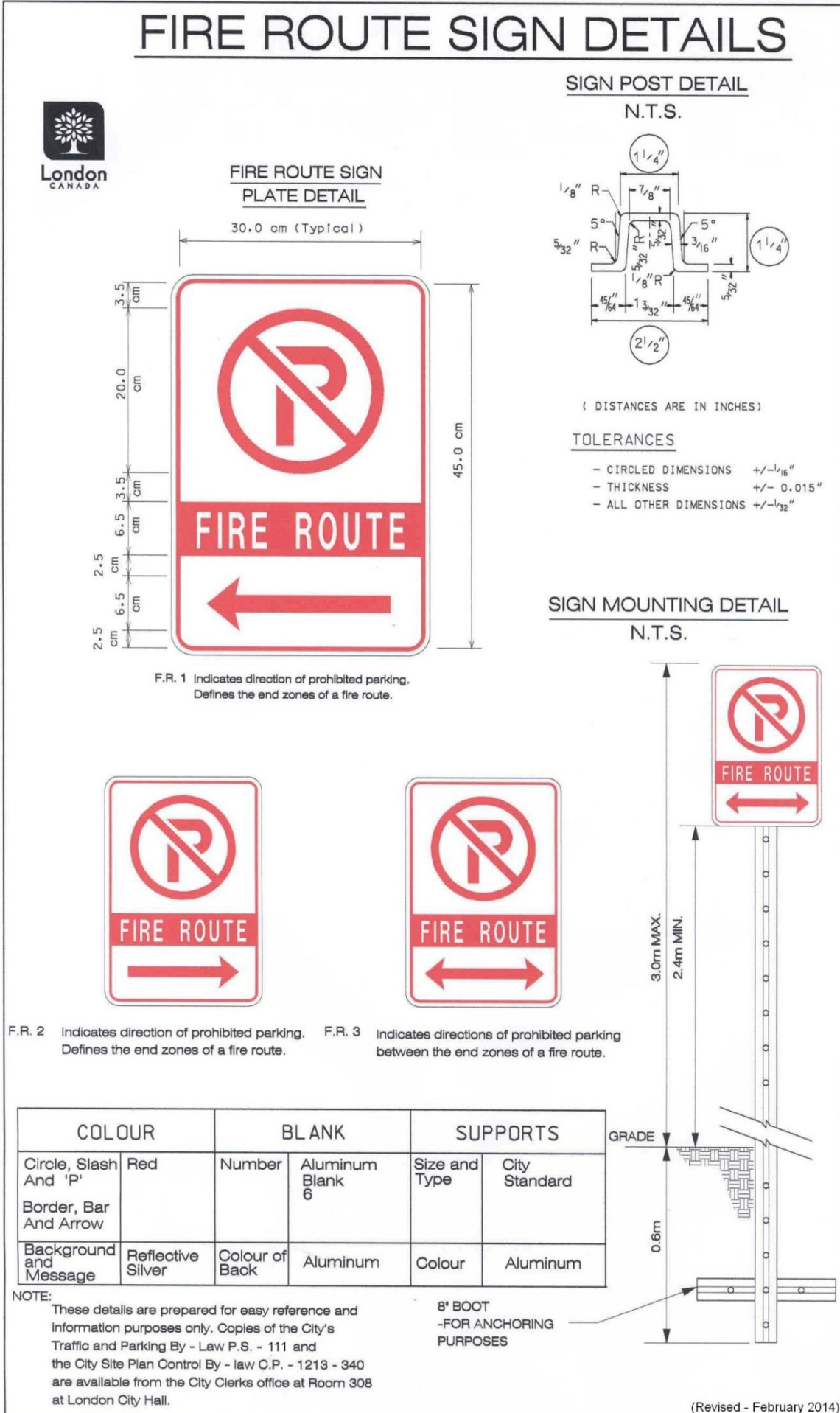
- FOR TWO STREETS ACCESS TO 50% OF BUILDING PERIMETER FROM FIRE ROUTE
- FOR TREE STREETS ACCESS TO 75% OF BUILDING PERIMETER FROM FIRE ROUTE
- LOCATED WITHIN 15 METRES (49'-3") OF THE BUILDING

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Schedule "F"

FIGURE 6.4

FIRE ROUTE SIGN DETAILS



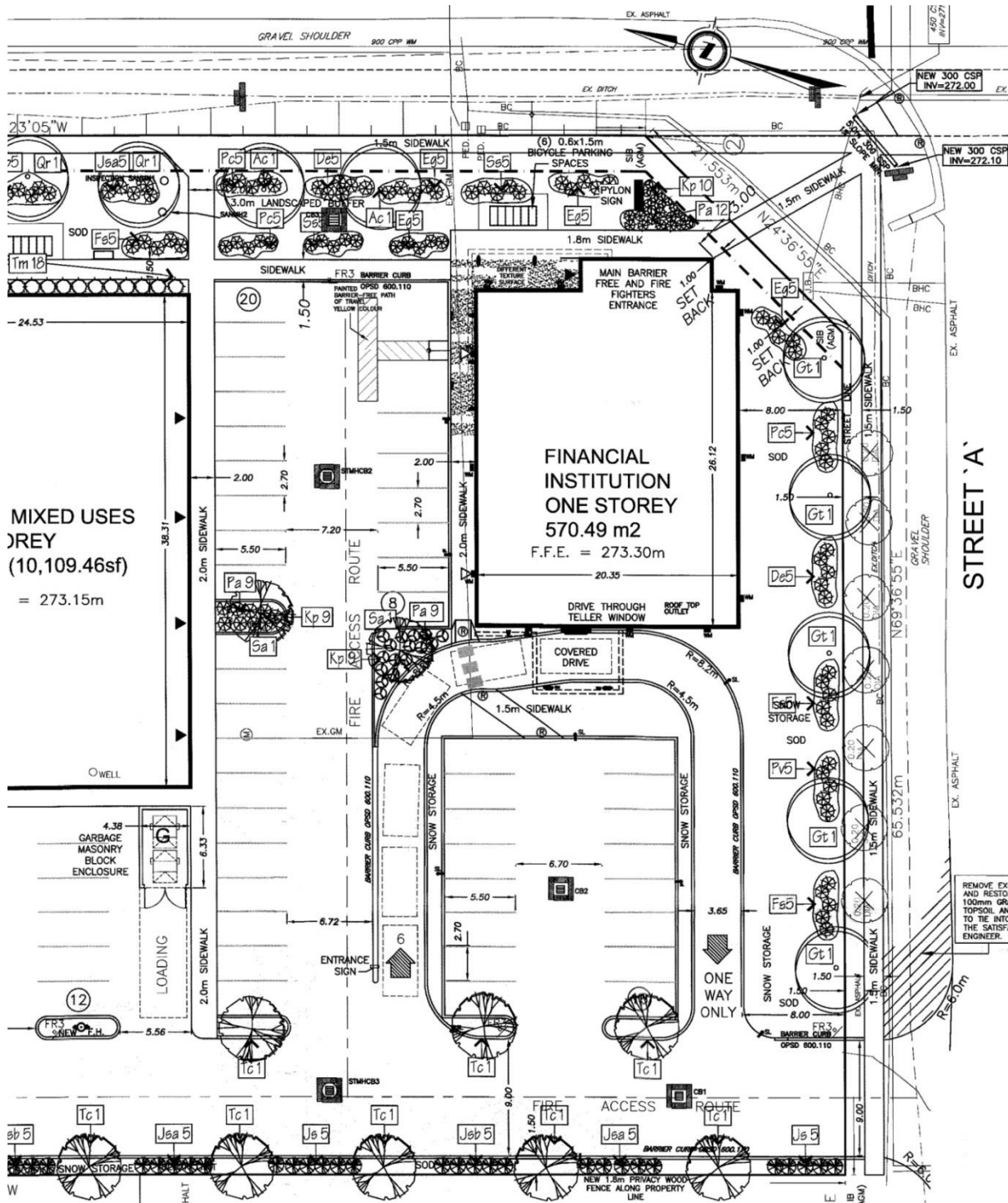
(Revised - February 2014)

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Schedule "G"

FIGURE 9.1

SAMPLE LANDSCAPE PLAN (PARTIAL PLAN)



SAMPLE PLANT LIST

PLANT MATERIAL

KEY	COMMON NAME	BOTANICAL NAME	QTY	SIZE	COND
Am	MULTI STEM SERVICEBERRY	<i>Amelanchier canadensis</i> (multi-stem)	3	150cm	POT
Ar	RED MAPLE	<i>Acer rubrum</i> 'Sunset'	3	65mmcal	WB
Co	HACKBERRY TREE	<i>Celtis occidentalis</i>	1	65mmcal	WB
Gb	MAIDEN HAIR TREE	<i>Ginkgo biloba</i>	1	60mmcal	WB
Gt	SHADEMASTER LOCUST	<i>Gleditsia triacanthos</i> 'Shademaster'	3	50mmcal	WB
Jh	PRINCE OF WALES JUNIPER	<i>Juniperus horizontalis</i> 'Prince of Wales'	11	60cm	POT
Kf	KARL FOERSTER REED GRASS	<i>Calamagrostis acutiflora</i> 'Karl Foerster'	25	2yr/1gal	POT
Pe	LITTLE BUNNY FOUNTAIN GRASS	<i>Pennisetum alopecuroides</i> 'Little Bunny'	15	2yr/1gal	POT
Pm	DWARF MUGO PINE	<i>Pinus mugo</i> 'Pumilo'	14	50cm	POT
Sb	ANTHONY WATERER SPIREA	<i>Spiraea bumalda</i> 'Anthony Waterer'	26	60cm	POT

Note: Provide information as outlined in Section 9

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Schedule “H”

10. FACILITIES AND ENCLOSURES FOR THE STORAGE OF GARBAGE AND RECYCLING

10.1. Objective

To ensure that adequate facilities are provided for:

- (a) the storage of garbage and recycling between collections thereby avoiding health, safety and litter problems; and
- (b) the efficient and safe collection of garbage and recycling by collection vehicles.

(See Official Plan Policy 11.1.1, and the Waste Management By-law WM-12)

10.2. Methods of Storage and Collection

(see Collection Practices Table 10.1)

(a) Residential Rowhousing:

Storage: An individual area within or immediately associated with each unit is required for garbage storage between collection days. Outside storage of garbage or recyclables is not a recommended or preferred method of storage.

Outside storage of garbage will only be permitted in situations where the developer demonstrates that individual storage facilities are not feasible. Outside storage of garbage will require an enclosure meeting the requirements of Table 10.2

Outside storage of recyclables is preferred if collection of recyclables is not practical from individual units from the boulevard of the abutting public street or private drive. Outside storage of recyclables will require an exterior storage enclosure meeting the requirements of Table 10.2. Outside storage of recyclables without an enclosure (i.e., exterior storage area) will only be permitted where the developer demonstrates that a recycling enclosure is not feasible.

Collection: If collection is by the City, it shall be at the boulevard of the abutting public street or private drive that is approved as a city collection vehicle access driveway. The collection vehicle access driveway shall be shown on the approved site services plan designed in accordance with Section 10.4 and Table 10.3. Units fronting to private driveways that are not accessible by City vehicles shall bring their garbage to communal collection points and their recyclables to exterior storage enclosures located at the boulevard of an abutting public street or private drive that is approved as a City collection vehicle access driveway.

b) Apartments:

(i) Buildings With 12 or Less Units:

Garbage

The garbage is centrally stored in specifically designed garbage rooms within the building, or exterior enclosures meeting the requirements of Table 10.2. Plastic garbage bags or metal or plastic cans (minimum 30L, maximum 125L) each not exceeding 20kg (44lbs.) may be used for garbage.

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Recycling

The recycling can be stored within each unit, in a specifically designed storage room within the building, exterior storage area or exterior storage enclosure meeting the requirements of Table 10.2. If 360 litres carts are used, a minimum of two is required.

(ii) Buildings With More Than 12 Units:

Garbage

The garbage shall be centrally stored in specifically designed garbage rooms within the building. The garbage storage facilities shall consist of either 3.1, 4.6 or 6.1 cubic metre bulk bin containers located in the building and wheeled out to a collection point with access by garbage collection vehicles, meeting the requirements of Table 10.3, or the installation of a garbage compaction unit which is compatible with collection vehicles, meeting the requirements of Table 10.3. Exterior storage enclosures are permitted to store empty and full bulk bin containers.

Recycling

Recycling shall be stored in a specifically designed room within the building of sufficient size to accommodate one 360 litre cart for every seven residential units and allow for resident access and movement of the carts. For collection, carts shall be wheeled to a point within access, meeting the requirements of Table 10.3. Recycling carts must be compatible with City collection vehicles. Exterior storage enclosures are permitted to store empty and full recycling containers.

(c) Commercial, Institutional, Industrial:

- (i) Commercial: For shopping centres, bulk bin containers are used. For individual stores and offices, depending on the volume of garbage or type of storage facilities cans, polyethylene bags or bulk bin containers may be used. For any integrated commercial uses exceeding 5000 sq. metres (50,000 sq. feet) of gross floor area, a central garbage storage should be provided. Consideration will be given to the use of a deep collection unit on site. The extent of screening for this is dependent upon its location and style.
- (ii) Institutional: Depending on the volume of garbage and type of storage facility, cans, polyethylene bags, and bulk bin containers may be used. Consideration will be given to the use of a deep collection unit on site. The extent of screening for this is dependent upon its location and style.
- (iii) Industrial: Depending on the volume of garbage or type of storage facility, cans, polyethylene bags or steel containers may be used. Consideration will be given to the use of a deep collection unit on site. The extent of screening for this is dependent upon its location and style.
- (v) City collection at Commercial, Institutional and Industrial properties is limited to 12 bags of garbage per collection and 5 Blue Boxes of recycling and 2 bundles of cardboard. These properties must be on an established residential collection route

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and no trade waste is permitted.

(d) **Facilities for the Collection & Storage of Recyclable Materials**

- (i) Recycling in commercial, industrial or institutional buildings/ complexes is required. The plans for the complex shall locate the collection areas on the site plan. Any such locations shall be screened. Materials are to be separated as required for municipal pickup and/or in accordance with provincial standards.

(e) **Facilities for Storage and Collection of Source Separated Organics**

- (i) May be provided for private waste collection.

10.3. **Location of Storage**

- (a) Commercial, industrial, institutional and apartment developments may be exempt from the requirement for exterior enclosures if steel bulk bin containers are used and strategically located in combination with the building configuration to utilize areas such as recessed service areas or extended building walls so that the storage containers are not within public or neighbourhood view.
- (b) If the development includes medical or dental offices or a drug store, the garbage storage facilities shall be located in a building or structure capable of being locked.
- (c) Table 10.2 describes the design features of both garbage and recycling collection points and storage enclosures if permitted.
- (d) All garbage and recycling containers must be located a minimum of 3 metres (10 feet) away from all buildings.

10.4. **Accessibility by Collection Vehicles**

- (a) Where volumes of garbage and recycling warrant, collection vehicles will go on site providing there is ingress and egress with circulation designed to avoid reversal of the vehicle.
- (b) Whether the garbage is collected privately or by the City, the collection vehicles are sufficiently similar to require the same spatial dimensions for convenient and safe access. Refer to Table 10.3 for the acceptable design parameters.
- (c) The vehicular accesses and internal driveways of the development shall be designed to carry the weight of the City's garbage collection vehicles. Construction standards are available from the Solid Waste Management Division.

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TABLE 10.1 GARBAGE AND RECYCLING COLLECTION AND STORAGE PRACTICES

Use	Collection Responsibility	Storage Location ¹	Collection Location ²	Containers Sold/Leased From City ¹	Collection Frequency	
Residential						
(a)	rowhousing units with sufficient individual storage and front directly to a public street or private drive accessible to City collection vehicles	City or Private	within dwelling unit	boulevard of the abutting public street or private drive	No	Once every 6 business days
(b)	rowhousing units with sufficient individual storage and do not front directly to a public street or private drive accessible to City collection vehicles	City or Private	within dwelling unit	<u>Garbage</u> communal collection point <u>Recycling</u> approved exterior storage enclosure or storage area	Rollout carts for recycling sold	Once every 6 business days
(c)	rowhousing units with insufficient individual storage	City or Private	<u>Garbage</u> approved exterior storage enclosure <u>Recycling</u> approved exterior storage enclosure or storage area	<u>Garbage</u> approved exterior storage enclosure <u>Recycling</u> approved exterior storage enclosure or storage area	Bulk bins for garbage leased Rollout carts for recycling sold	Once per week
(d)	apartments with 12 units or less	City or Private	<u>Garbage</u> interior storage room or approved exterior enclosure <u>Recycling</u> interior storage room or approved exterior enclosure or storage area	private drive accessible to City collection vehicles	Bulk bins for garbage leased Rollout carts for recycling sold	Once per week
(e)	apartments with more than 12 units	City or Private	interior storage room; approved exterior storage enclosure may be used to store containers after they become full	private drive accessible to City collection vehicles	Bulk bins for garbage leased Rollout carts for recycling sold	Once/ Twice per week
Institutional		City or Private	interior or approved exterior enclosure	public street or private drive accessible to City collection vehicles	Bulk bins for garbage leased	Once/ Twice per week
Commercial						
(a)	shopping centres (malls, plazas)	Private	interior or approved exterior enclosure interior	Not applicable	Not applicable	Not applicable
(b)	other premises (not-for-profit, social clubs)	City or ³ Private	interior or approved exterior enclosure	public street or private drive accessible to City collection	Not applicable	Once per week/ every six business days
Industrial		Private	interior or approved exterior enclosure	Not applicable	Not applicable	Not applicable

Notes 1) Communal collection points, exterior storage areas and exterior storage enclosure must meet the requirements of Table 10.2

2) Private drives must meet the requirements of 10.3.

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TABLE 10.2 - DESIGN FEATURES OF RESIDENTIAL GARBAGE AND RECYCLING COLLECTION POINTS AND ENCLOSURES

Design Features		Design Guidelines
1. Communal collection point¹ – Garbage		
(a)	Location	immediately adjacent to an approved collection vehicle access route
(b)	Material	poured in place concrete or other structurally adequate and impervious material
(c)	Maximum number of units serviced by each collection point.	12
(d)	Fencing, landscaping or other enclosure	1.0 metre (3 feet) maximum
2. Common Exterior Storage Area – Recycling		
(a)	Location	immediately adjacent to an approved collection vehicle access route and oriented to facilitate pick-up minimum of 3 metres (10 feet from existing buildings)
(b)	Slab Material	poured-in-place concrete, asphalt or other structurally adequate and impervious material
(c)	Maximum number of units serviced by each collection point	roll-out recycling cart – 35
(d)	Signage	signage to identify area and recycling rules
3. Common Exterior Storage Enclosure¹ – Recycling and garbage		
(a)	Location	immediately adjacent to an approved collection vehicle access route and oriented to facilitate pick-up
(b)	Slab Material	poured-in-place concrete
(c)	Maximum number of units serviced by each facility	storage enclosure for bagged garbage – 20 storage enclosure for bulk bin container – no limit storage enclosure for roll-out recycling cart – no limit
(d)	Enclosure Wall Height	2 metres (6 feet) minimum
(e)	Enclosure Wall Material	concrete, brick, masonry or other material of similar durability and capable of being maintained by washing wood enclosures are not permitted
(f)	Enclosure roof	storage enclosure for bagged garbage – not permitted storage enclosure for bulk bin container – not permitted storage enclosure for roll-out recycling cart – required
(g)	Minimum Gate Opening ²	bagged garbage - 1.2 metres (4 feet) single bulk bin compound – 3.6 metres (12 feet) double bulk bin compound – 7.2 metres (24 feet) roll-out recycling cart - 1.2 metres (4 feet)

¹A water supply line and hose bib connection adjacent to common pick-up points and common exterior storage enclosures is recommended for ease of maintenance.

²Gates are not required for exterior storage enclosures for bulk bins when the opening to the storage enclosure is not visually from public property (including public streets) or impact abutting properties or the development. The gates for bulk bin compounds must be open for collection on the morning of the scheduled collection.

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TABLE 10.3 - DESIGN FEATURES OF COLLECTION VEHICLE ACCESS DRIVEWAYS

Design Features		Design Guidelines
(a)	Width	3.7 metres (12 feet) minimum
(b)	Surface Material	asphalt or other approved hard surface
(c)	Turning Radius	23 metre (76 feet) minimum for bagged garbage collection and blue box recycling 26 metre (85 feet) for bulk bin garbage collection three point or hammerhead type turning facilities that require reversing are not generally acceptable.
(d)	Location of housing units on private drives for individual collection	Housing units must have designated parking in front of each unit with no common parking lot.