

Feedback received and Staff Response for *Livable by Design Manual (Part C): Site Design and Development Standards*

Feedback received from the following external parties:

- Region of Halton
- NAK Design Strategies
- Trafalgar Engineering Limited
- Molok North America Ltd.

Notes to assist in interpretation:

- Language added to the standard is identified with ***italics, bold and underline*** text
- Language removed from the standard is identified in ~~**bold and strike through**~~ text

xii	Original Text	No original text.
	<i>Halton Region Comment</i>	<i>In accordance with the ROP (152) regard for Healthy Community Guidelines is required. The Healthy Community Guidelines are not listed on page xii of the Standards as being one of the documents that provides relevant direction. It should be referenced as part of the Manuals review.</i>
	Response	Agreed.
	Revision	Added reference and link to <i>Healthy Communities Guidelines</i>
2.0.*	Original Text	The purpose of incorporating soft landscaping elements into site design and development is to provide enhancements to the site and interface with the public realm, screening and buffering site elements from view from the public realm and between different uses, and provide various environmental benefits.
	<i>Halton Region Comment</i>	<p><i>Halton Region's Health Department staff have the following comments:</i></p> <ul style="list-style-type: none"> • <i>On page 1 of the Standards, "...and provide various environmental benefits" please add the word health, so that it reads, "environmental <i>and health</i> benefits." For reference, below are some areas of the Regional Official Plan that might support the inclusion of health:</i> <ul style="list-style-type: none"> ○ <i>Section 147(5) Recognize and protect trees as a renewable natural resource essential to the <i>health</i> and welfare of Halton residents, wildlife and rural environment,</i> ○ <i>150(2) To develop and maintain healthy communities by fostering physical, social and economic conditions that will enhance the state of wellbeing and the quality of life for the residents of Halton.</i> • <i>The applicable bylaw(s) should be referenced to specify where information about the amount of bike parking (page 33 of the Standards) or seating (page 47 of the Standards) is found (i.e., see by-law #).</i>
	Response	Agreed.
	Revision	The purpose of incorporating soft landscaping elements into site design and development is to provide enhancements to the site and interface with the public realm, screening and buffering site elements from view from the public realm and between different uses, and provide various environmental <i>and health</i> benefits.
2.2.2	Original Text	A minimum of 30% of the trees planted on a site should be native tree species. Refer to <i>Conservation Halton Invasive Species and Biodiversity</i> guidelines for a list of permitted native species. Locally rare native species may be accepted on

		a case by case basis. Cultivars of native trees will not be credited towards the minimum 30% requirement.
	<i>Halton Region Comment</i>	<i>Section 2.2.2 indicates a minimum of 30% of the trees planted on a site should be native tree species. This number appears low. To help protect and enhance the natural heritage system and its functions the Region encourages the Town to consider a higher standard. We note that approvals by other agencies will require only native species be used in certain areas (e.g. CH regulated area, Regional NHS).</i>
	Response	Increasing native species percentage may result in a reduced ability to achieve adequate species diversity. Refer to section 2.2.1 for species variation guidelines.
	Revision	No revision to standard.
2.2.2	Original Text	A minimum of 30% of the trees planted on a site should be native tree species. Refer to <i>Conservation Halton Invasive Species and Biodiversity</i> guidelines for a list of permitted native species. Locally rare native species may be accepted on a case by case basis. Cultivars of native trees will not be credited towards the minimum 30% requirement.
	<i>Halton Region Comment</i>	<i>In many bullets of Section 2.2 Conservation Halton Invasive Species and Biodiversity [their italics] guidelines are referenced. Halton Region staff are not aware of these guidelines and think that it should be Conservation Halton's Landscaping and Tree Preservation Guidelines. Halton Region staff suggest including a link to the guidelines. This is the link to their guidelines page: http://www.conservationhalton.ca/policies-and-guidelines</i>
	Response	Agreed.
	Revision	A minimum of 30% of the trees planted on a site should be native tree species. Refer to <u>Conservation Halton Landscaping and Tree Preservation</u> <u>Conservation Halton Invasive Species and Biodiversity</u> guidelines for a list of permitted native species. Locally rare native species may be accepted on a case by case basis. Cultivars of native trees will not be credited towards the minimum 30% requirement.
2.2.3	Original Text	Invasive species shall not be planted. Refer to <i>Conservation Halton Invasive Species and Biodiversity</i> guidelines for a list of prohibited invasive species.
	<i>Halton Region Comment</i>	<i>In many bullets of Section 2.2 Conservation Halton Invasive Species and Biodiversity [their italics] guidelines are referenced. Halton Region staff are not aware of these guidelines and think that it should be Conservation Halton's Landscaping and Tree Preservation Guidelines. Halton Region staff suggest including a link to the guidelines. This is the link to their guidelines page: http://www.conservationhalton.ca/policies-and-guidelines</i>
	Response	Agreed.
	Revision	Invasive species shall not be planted. Refer to <u>Conservation Halton Landscaping and Tree Preservation</u> <u>Conservation Halton Invasive Species and Biodiversity</u> guidelines for a list of prohibited invasive species.
2.2.10	Original Text	No original standard.
	<i>Halton Region Comment</i>	<i>Halton Region staff also note that the plant material size and spacing parameters outlined in Section 2.2 differ from typical restoration/rehabilitation type plantings associated with many approvals. It is suggested to state that</i>

	Response	<i>other standards may be appropriate in those scenarios. This comment also applies to Sections 2.2.16 and 2.2.17 regarding shrub planting beds.</i>
	Revision	New standard added to Size and Spacing section: <u>For naturalization plantings a variety of sizes and successional species should be included to accelerate establishment. Refer to Conservation Halton Landscaping and Tree Preservation guidelines when planning these types of environments for further design direction.</u>
2.2.19	Original Text	For the purpose of ensuring installation performance, all tree planting should have a two-year warranty period from substantial completion of the development. A longer warranty period to a maximum of 4 years may be required, at the discretion of Town of Oakville staff.
	NAK Comment	<i>A potential 3-4 year warranty period can be onerous and the discretion of when or why it may be applied is not clearly defined.</i>
	Response	A longer warranty period may be required in instances with challenging growing environments and the long term survivability of the tree must be considered. In those limited instances, a longer warranty period may be required by staff as a condition of approval.
	Revision	For the purpose of ensuring installation performance, all tree planting should have a two-year warranty period from substantial completion of the development. A longer warranty period, to a maximum of 4 years, may be required at the discretion of Town of Oakville staff <u>in limited instances where challenging growing environments bring the long term survivability of the tree into question.</u>
2.3.3	Original Text	Existing healthy trees with a diameter at breast height (DBH) less than 150 mm that cannot be accommodated in their current location due to development constraints are recommended as good candidates for transplantation on-site or to other lands within the town.
	NAK Comment	<i>Good tree transplant candidates will depend on species type, existing and future growing conditions, time of year, etc.</i>
	Response	Agreed.
	Revision	Existing healthy trees with a diameter at breast height (DBH) less than 150 mm that cannot be accommodated in their current location due to development constraints are recommended as good candidates for transplantation on-site or to other lands within the town.
2.3.6	Original Text	Within the Tree Protection Zone (TPZ), no site alteration or disturbance to the existing grade through deposit of fill, trenching, excavating, scraping, or paving should be permitted. Storage or stockpiling of materials within the TPZ is prohibited.
	NAK Comment	<i>There will be situations in which alteration or disturbance within the tree protection zone is unavoidable. The assumption is that “should” will allow some flexibility depending on site conditions and approved land use.</i>
	Response	The direction is ‘should’ which means “the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent” and provides some flexibility due to site context and constraints. The TPZ will be reviewed by Urban Forestry staff in Development Engineering Department.

	Revision	No revision to standard.
2.4.8	Original Text	The maximum slope in soft landscape areas should not exceed 33% (3:1). In areas where power mower access is required, slopes should not exceed 25% (4:1).
	<i>Trafalgar Engineering Ltd. Comment</i>	<i>The 3:1 criteria has always been used as the standard for slopes that requiring mowing. Not sure why the 4:1 slope has been introduced.</i>
	Response	33% is the maximum slope for power mowers. 25% is preferred for enhanced operator safety.
	Revision	The maximum slope in soft landscape areas should not exceed 33% (3:1). In areas where power mower access is required, slopes should not exceed 25% (4:1) <u>a 25% (4:1) maximum slope is recommended for enhanced operator safety.</u>
2.5.1 to 2.5.3	Original Text	<ol style="list-style-type: none"> 1. For new tree plantings, 30.0 m³ of good quality topsoil, with a minimum depth of 750 mm to a maximum depth of 900 mm, should be provided. Trees in common planting areas may share soil volume to a maximum of 15.0 m³ each. 2. In tree planting areas with less than 30.0 m³ of good quality topsoil, break-out zones should be provided to allow the roots to access additional soil. Break-out zones should be incorporated that are a minimum of 3.0 m wide by 625 mm deep and constructed with engineered soil or soil cell(s). 3. Enhanced rooting environment techniques, such as engineered soils or soil cell(s), are recommended to attain the required soil volume in compact urban conditions or within hard surface paving areas. Due to the large amount of aggregate contained in engineered soil, only 20% of its total volume will be credited towards the minimum soil volume requirement as per standard 2.5.1.
	<i>NAK Comment</i>	<i>Although we have adopted these standards in practice for all tree planting in Oakville, it does result in a significant cost per tree that is approximately twice the cost of other municipalities. The large depth of topsoil has also resulted in boulevard depressions over a period of time. When determining minimum soil depths, it should also be considered that the vast majority of a typical tree root mass will grow within the top 450-600mm of the soil to better gain access to moisture.</i>
	Response	Adopting these standards contributes to the Town's goal of achieving 40% canopy cover town wide.
	Revision	No revision to standard.
2.5.3	Original Text	Enhanced rooting environment techniques, such as engineered soils or soil cell(s), are recommended to attain the required soil volume in compact urban conditions or within hard surface paving areas. Due to the large amount of aggregate contained in engineered soil, only 20% of its total volume will be credited towards the minimum soil volume requirement as per standard 2.5.1.
	<i>NAK Comment</i>	<i>How is the 20% credit for engineered soils derived? Depending on the source, there is creditable evidence to suggest that engineered soils are an effective growing medium.</i>

	Response	<p>20% was taken from: <i>Urban, James. 2008. Up By Roots. International Society of Arboriculture. Champaign, Illinois. pg.304.</i> This reference is considered a credible source.</p> <p>Tree growth is directly proportional to the amount of soil the tree has access to. As a result, trees grown in structural soil will not grow as large as trees grown in a similar volume of good quality soil without aggregate. To mitigate this effect, larger volumes of structural soil are therefore necessary to achieve the soil volume requirement.</p>
	Revision	No revision to standard.
2.6.1	Original Livable by Design Standard	<p>A landscape area required for buffering/screening/separation should have a minimum dimension of 3.0 m in any direction and a minimum area of 33.4 m², to accommodate planting and potential fencing, grading and drainage features. These areas should contain, at a minimum, large stature tree and shrub plantings, which in quantity, height and spacing are proportional to the abutting use being buffered or screened.</p>
	NAK Comment	<i>The landscape buffering / screening area size should be appropriate to the context, rather than a defined number.</i>
	Response	<p>3.0 m is considered a minimum width for which to accommodate planting and potential fencing, grading, and drainage features in a location where buffering/screening/separation is identified as being necessary. The minimum 3.0 m width of landscaping is a requirement as per Zoning By-law 2014-014. The direction is 'should' which means "the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent" which provides some flexibility due to site context and constraints.</p>
	Revision	No revision to standard.
2.6.2 to 2.6.5	Original Text	<p><u>Required landscaping along and abutting property lines</u></p> <ol style="list-style-type: none"> 2. Any required 3.0 m continuous landscape width along or abutting any road should contain, at a minimum, one (1) deciduous tree for every 12.0 m of frontage. For layout and design purposes, trees may be grouped in clusters, but spaced no greater than 15.0 m apart. Trees should be setback from the property line to avoid overlap with existing or proposed street trees. 3. Any required 3.0 m continuous landscape width, other than those abutting a road, should contain, at a minimum: <ol style="list-style-type: none"> a. one (1) deciduous or coniferous tree planting for every 12.0 m of abutting land; and b. a hedge, fence, or combination thereof, to form a continuous screening element with a minimum height of 1.5 m 4. Any required 7.5 m continuous landscape width should contain, at a minimum: <ol style="list-style-type: none"> a. one (1) deciduous or coniferous tree planting for every 4.5 m of abutting land, with a minimum of 80% of the trees within the buffer strip as coniferous species; and b. a hedge, fence, berm or combination thereof, to form a continuous screening element with a minimum height of 1.8 m <p><u>Required landscaping surrounding surface parking areas</u></p> <ol style="list-style-type: none"> 5. Any required 3.0 m continuous landscape width along or abutting any road should contain, at a minimum:

		<p>a. one (1) deciduous tree for every 12.0 m of frontage. For layout and design purposes, trees may be grouped in clusters, but spaced no greater than 15.0 m apart. Trees should be setback from the property line to avoid overlap with existing or proposed street trees; and</p> <p>b. a hedge, berm, wall, low decorative fence, or combination thereof, to form a continuous screening element with a height of 750 mm to 1000 mm above the parking area grade. Walls and fences should be set back 1.2 m from the property line to accommodate shrub plantings on the street side of the wall or fence</p>
	NAK Comment	<i>It is difficult to assign minimum planting standards without considering the context (adjacent land use types, built form orientation) and intent. Perhaps “recommended” is more appropriate.</i>
	Response	“Recommend” would infer that staff would accept buffer strips with or without planting, which is not the expectation. The direction is ‘should’ which means “the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent” and provides some flexibility due to site context and constraints.
	Revision	No revision to standard.
2.6.8	Original Text	Any required 7.5 m continuous landscape width, should contain, at a minimum: <p>a. one (1) deciduous or coniferous tree planting for every 4.5 m of abutting land, with a minimum of 80% of the trees within the buffer strip as coniferous species; and</p> <p>b. a hedge, fence, berm or combination thereof, to form a continuous screening element with a minimum height of 1.8 m</p>
	NAK Comment	<i>Landscape requirements abutting railway corridors will also be determined by acoustic requirements, grade changes, slopes, etc.</i>
	Response	This is a minimum standard. Enhancements required for acoustic requirements can be incorporated. The direction is ‘should’ which means “the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent” and provides some flexibility due to site context and constraints.
	Revision	No revision to standard.
2.7	Original Text	The standards provided in this section are not applicable to play spaces and amenity areas within Town of Oakville parks and open spaces.
	NAK Comment	<i>Indicates that standards in this section are not applicable to play spaces and amenity areas within parks and open spaces. If not parks and open spaces, then what?</i>
	Response	This standard applies to private play areas and amenity spaces, such as those proposed for condominium developments, private daycares, schools, etc. Greater clarity has been incorporated in the revision.
	Revision	The standards provided in this section <u>are applicable to play spaces and amenity areas associated with condominium developments, private daycares, public and private schools, etc.</u> <u>The standards</u> are not applicable to play spaces and amenity areas within Town of Oakville <u>owned</u> parks and open spaces.
2.7.6	Original Text	Enclosure materials are recommended to provide a degree of privacy, noise reduction and safety, yet providing some transparency to view activities beyond.

	NAK Comment	<i>Privacy enclosures for play spaces and amenity areas requires further clarification. Issues related to safety and AODA aspects need to be considered.</i>
	Response	Agree that “privacy” may be misconstrued.
	Revision	Enclosure materials are recommended to provide a degree of screening privacy , noise reduction and safety, yet providing some transparency to view activities beyond.
2.7.8	Original Text	Enclosures consisting of metal fencing with vertical pickets, spaced no greater than 100 mm apart, are recommended. Chain link fencing is not recommended.
	NAK Comment	<i>Metal fencing enclosures should only be a requirement if setbacks of play facilities from the road are limited and a fence will help prevent children from entering the road during the course of play.</i>
	Response	The standard is not requiring fencing around all play facilities. This standard should be considered where enclosures are proposed.
	Revision	No revision to standard.
2.7.10	Original Text	Coniferous tree planting is encouraged and should be positioned outside of fenced play areas, as low branches and needles may not be appropriate near small children.
	NAK Comment	<i>Coniferous planting should not interfere with views onto the playground for monitoring reasons.</i>
	Response	Agree that a re-wording of standard is necessary.
	Revision	<u>Providing a balance of</u> coniferous <u>and deciduous</u> trees planting is encouraged and should be positioned outside of fenced play areas, as low branches and needles may not be appropriate near small children. <u>However, coniferous trees should not interfere with views onto playgrounds for monitoring reasons and should be positioned outside of fenced play areas, as low branches and needles may not be appropriate near small children.</u>
2.7.11	Original Text	Learning landscapes, such as bioswales, butterfly gardens and urban agriculture that engage the user and diversify the setting, are encouraged.
	Halton Region Comment	<i>From an access to local healthy food perspective:</i> <ul style="list-style-type: none"> On page 17 of the Standards, “learning landscapes such as.....urban agriculture is encouraged”. Halton Region staff suggests it be <u>recommended</u>.
	Response	Staff agree with the Regions recommendation. With regards to NAK’s comment, staff emphasize the standard is applicable to on-site development and maintenance is the responsibility of the property owner and/or site user. Integrating learning landscapes into on-site amenity areas remains recommended.
	Revision	Learning landscapes, such as bioswales, butterfly gardens and urban agriculture that engage the user and diversify the setting, are <u>recommended encouraged</u> .
2.8.*	Original Text	Landscape areas with tree plantings are not recommended to contain light standards due to potential conflicts between plant material and above/below-ground infrastructure.

	NAK Comment	<i>Light standards within landscape areas may be considered if adequate offsets are provided.</i>
	Response	Agee that standard requires re-wording. Intent of standard previously covered in standard 2.2.14. Standard 2.8.6 can be removed.
	Revision	Standard deleted due to repetition.
2.8.8	Original Text	Within surface parking areas, each of the following tree planting conditions should be provided: <ul style="list-style-type: none"> a. a minimum of one (1) 60 mm caliper deciduous tree planted for every five (5) parking spaces; b. for parking lots with more than 75 parking stalls, locate all required trees in or within 5.0 m of the vehicle use area c. all parking spaces are positioned no farther than 30.0 m from a tree
	NAK Comment	<i>Depending on the size and configuration of the parking lot, a minimum 1 tree per 5 parking spaces may only be achievable when including planting along the perimeter of the lot.</i>
	Response	The direction is 'should' which means "the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent" and provides some flexibility due to site context and constraints.
	Revision	No revision to standard.
3.1.8	Original Text	Walkway surface treatments should incorporate changes in materials, colour, and/or texture to differentiate pedestrian crossings, passenger loading areas, dedicated parking areas and bicycle storage areas from vehicular parking and circulation areas. Within barrier-free paths of travel, incorporating tactile warning strips at the intersection of walkways and vehicular areas is recommended.
	NAK Comment	<i>Does concrete / asphalt represent an adequate change in materials, colour and/or texture to achieve the intent of distinguishing pedestrian routes from vehicle routes?</i>
	Response	In staff's opinion, these materials can provide the distinction needed, especially with well-designed and predictable routes.
	Revision	No revision to standard.
3.1.12 to 3.1.25	Original Text	<p>Ramps</p> <p>12. Ramps should be designed and installed with:</p> <ul style="list-style-type: none"> a. a minimum clear width of 900 mm, however a clear width of 1.1 m is preferred b. a maximum running slope of no greater than 6.6% (15:1) c. a surface treatment that is firm, stable and slip resistant d. no openings, such as grates or expansion joints, that are greater than 20 mm wide and all elongated openings oriented perpendicular to the direction of travel <p>13. Ramps should be designed and installed with landings located at the top and bottom of the ramp, at abrupt changes in direction of the ramp, and on long ramps at horizontal intervals not greater than 9 m apart. Ramp landings should incorporate a cross slope no steeper than 2% (50:1).</p>

14. For in-line ramps, the ramp landings should be a minimum length of 1.67 m and at least the same width of the ramp. For non in-line ramps, the ramp landings should be a minimum clear width of 1.67 m by 1.67 m.
15. Both sides of a ramp should be equipped with handrails that are continuously graspable along the entire length. Handrails are required to:
 - a. be installed at a height no less than 865 mm and no greater than 965 mm high, measured vertically from the surface of the ramp. However, handrails which do not meet these requirements are permitted provided they are installed in addition to a required handrail
 - b. extend horizontally no less than 300 mm beyond the top and bottom of the ramp and terminate in a manner that will not obstruct travel
 - c. incorporate a clearance of no less than 50 mm between the handrail and any wall or surface to which it is attached
 - d. incorporate a circular cross-section with an outside diameter of no less than 30 mm and no greater than 40 mm, or a non-circular shape with a graspable portion with a perimeter no less than 100 mm and no greater than 155 mm and whose largest cross-sectional dimension is no greater than 57 mm
16. Ramps greater than 2.2 m in width should incorporate one or more intermediate handrails that run continuous between landings and are positioned so that the space between handrails is no greater than 1.65 m.
17. Where the adjacent surface is greater than 600 mm below the ramp surface, the ramp should incorporate a wall or guard that is no less than 1.07 m high measured vertically to the top of the guard from the ramp surface. To prevent climbing, the wall or guard should be designed so that no member, attachment or opening is positioned between 140 mm and 900 mm above the ramp surface that is protected by the guard.
18. Edge protection should be incorporated where no solid enclosure or solid guard is provided along a ramp. Edge protection should be positioned on either side of the ramp at a height of 50 mm above the finished paving surface.

Curb ramps

19. Where an exterior path of travel incorporates a cut through, or is built up to a curb, the curb ramp should be in alignment with the direction of travel and designed and installed with:
 - a. a minimum clear width of 1.2 m, exclusive of flared sides
 - b. an adjacent exterior path, with a minimum width of 1.2m, to provide a turning space
 - c. a maximum running slope of 12.5% (8:1), where the change in elevation is less than 75 mm, or a maximum of 10% (10:1) where the change in elevation is greater than 75 mm and less than 200 mm
 - d. a maximum cross slope no greater than 2% (50:1)
 - e. a maximum slope for the flared sides no greater than 10% (10:1)
20. Where a curb ramp is provided at a pedestrian crossing through a vehicular area, the ramp should have tactile surface indicators that:
 - a. have raised tactile profile(s) and high tonal contrast alongside abutting surface(s)
 - b. are located at the bottom edge of the curb ramp and set back between 150 mm and 200 mm from the curb edge

		<p>c. extend the full width of the curb ramp and a minimum length of 610 mm</p> <p>Stairs</p> <p>21. Where an exterior path of travel incorporates stairs, the stairs should be designed and installed with a uniform depth and height of risers and runs in any one flight, and incorporate:</p> <ol style="list-style-type: none"> a rise of 125 mm to 180 mm between successive treads a run of 280 mm and 355 mm between successive steps a maximum nosing projection on a tread no greater than 38 mm and no abrupt undersides <p>22. A flight for stairs should not exceed 8 to 10 risers without incorporating a mid-run landing. It is recommended that a minimum of 3 risers be incorporated to adequately signal the change in grade.</p> <p>23. Stairs should incorporate a slip-resistant tread surface finish and closed risers.</p> <p>24. Stairs should incorporate high tonal contrasts alongside abutting surface(s) and extend the full width of the tread along the leading edge of each step. At the top of all flights of stairs, raised tactile profiles should be incorporated and extend the full tread width to a minimum length of 610 mm and commencing one tread depth from the edge of the stair.</p> <p>25. Where the difference in elevation between ground level and the top of the stair is greater than 600 mm, a guard should be incorporated which is no less than 920 mm high, measured vertically from the top of the guard from a line drawn through the outside edges of the stair nosing to the tread. A guard of 1.07 m high should be incorporated around the landings. A guard is not required along the side of the stair that abuts a wall.</p>
	NAK Comment	<i>These conditions seem largely to reflect OBC requirements and, therefore, may not be necessary to include in these set of standards.</i>
	Response	These standards mirror the AODA requirements. Since accessibility is an objective of Livable Oakville for all development, they have been included in this standards document.
	Revision	No revision to standards.
3.1.24	Original Text	Stairs should incorporate high tonal contrasts alongside abutting surface(s) and extend the full width of the tread along the leading edge of each step. At the top of all flights of stairs, raised tactile profiles should be incorporated and extend the full tread width to a minimum length of 610 mm and commencing one tread depth from the edge of the stair.
	NAK Comment	<i>A high tonal contrast, in addition to any raised tactile strips, is not always practical and raises issues related to ongoing repairs in the life cycle where tone matching may be difficult.</i>
	Response	In staff's opinion, a higher priority is placed on safety and usability of stairs for users with vision or mobility issues than how well the colour of replaced contrast strips match.
	Revision	No revision to standard.
3.2.*	Original Text	Comment refers to entire Vehicular Access and Circulation section

	NAK Comment	<i>It is assumed that these provisions do not apply to residential land uses.</i>
	Response	This section applies to all land uses subject to site plan control, including medium and high density residential.
	Revision	No revision to standard.
3.2.3	Original Text	Street access driveway entrances should be located opposite existing or proposed municipal roadways, private laneways and other street access driveways to avoid offset intersection conditions.
	NAK Comment	<i>There are many instances where aligning access points may not be feasible, although the intent is noted.</i>
	Response	The direction is 'should' which means "the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent" and provides some flexibility due to site context and constraints.
	Revision	No revision to standard.
3.2.5	Original Text	The municipal sidewalk and/or multi-use trail shall be continuously level approaching and crossing all street access driveway entrances (refer to OPSD 350.010). Where minimal or no boulevard width is available, the installation of a partially depressed or fully depressed walk may be acceptable (refer to OPSD 310.050).
	Trafalgar Engineering Ltd. Comment	<i>The Town does not currently use OPSD 350.010 as the standard for driveway, nor does the photo reflect this standard. The standard and the photo do show the continuous sidewalk through the driveway. However, OPSD shows a continuous tapered curb that the Town does not currently use. It is my opinion that the curb shown in OPSD 350.010 is superior to the standard currently used by the Town (Fig 3.2.5) as it eliminates the tripping hazard in the boulevard and can be used were the boulevard has hardscape. A good example of this is the new medical building on Old Bronte Road.</i>
	Response	Engineering and Construction confirmed the tapered curb should be installed with barrier curb height where adjacent to sodded boulevard.
	Revision	The municipal sidewalk and/or multi-use trail shall be continuously level approaching and crossing all street access driveway entrances (refer to OPSD 350.010, <u>noting that the tapered curb shown in the driveway apron may be required to be installed at full barrier curb height, to the satisfaction of Engineering and Construction</u>). Where minimal or no boulevard width is available, the installation of a partially depressed or fully depressed walk may be acceptable (refer to OPSD 310.050).
3.2.7	Original Text	Access driveways for large and/or heavy vehicles servicing site facilities should be: <ul style="list-style-type: none"> a. located at the rear or side of the property and not accessible directly from major thoroughfares b. shared amongst on-site tenants and with abutting sites, wherever possible and appropriate
	NAK Comment	<i>The location of access driveways that are not accessible from major thoroughfares is not always practical, particularly for some commercial and industrial sites, although the intent is noted. In some cases, accessing these driveways from major roads may be less disruptive than on smaller roads where</i>

	Response	<i>adjacent land uses may not be compatible with frequent large vehicle movement.</i>
	Revision	No revision to standard.
3.2.10	Original Text	A clear driveway throat, as measured from the property line to the point the driveway turns or parking stalls are provided, should be provided for uninterrupted inbound and outbound vehicular movements. The length of a street access driveway throat should be no less than 6.0 m, however, a greater length may be required depending on the site context, land-use and other factors, which will be determined by Transportation Engineering staff.
	Halton Region Comment	<i>The Livable by Design Manual “<u>Driveway throat length</u>” states that a minimum of 6m in length should be maintained, and that a greater length may be required depending on the site context, land use, etc.,. Based on Halton Region’s past experience with driveway throat designs, a driveway throat design of <u>20-30m</u> from the property line adjacent to Regional roads has worked best in previous design applications.</i>
	Response	The town has a variety of roads including arterials, collectors, and local roads. Depending on use, a variety of throat lengths would be appropriate for each type of road. Given these variables listing specific lengths is not practical.
	Revision	No revision to standard.
3.2.12	Original Text	Vehicular routes should be designed such that vehicles move in a forward only direction. Vehicular routes should not incorporate dead-end aisles that may result in vehicles reversing down drive aisles or onto the right-of-way.
	Halton Region Comment	<i>Halton Region strongly supports Subsection 12 stating vehicle routes (ie waste management vehicles) should be designed such that vehicles move in a forward direction only. Vehicular routes should not incorporate dead end aisles that may result in vehicles reversing down drive isles or on the right or ways.</i>
	NAK Comment	<i>Discouraging dead-end aisles may result in the requirement for additional driveway entrances that will intersect pedestrian routes and disconnect streetscape treatments.</i>
	Response	Staff recognizes Halton Regions strong support for this standard. With regards to NAK comment, in staff’s experience in development application review, elimination of dead-end aisles has not resulted in additional site access points.
	Revision	No revision to standard.
3.2.14	Original Text	Vehicular circulation routes should be appropriately dimensioned according to the site context and land use to ensure adequate on-site and off-site maneuvering room is available wherever trucks are required to make turning movements to, from and within the site and to avoid over built or excessively wide drive aisles and turning radii. Where wider drive aisles and turning radii are required to accommodate fire lanes and service areas, the location of these routes should be combined with the major drive aisles.

3.2.16	Halton Region Comment	Please reference the turning radii required for some trucks, including waste management vehicles, as 13m (Halton Region's Development Design Guidelines for Source Separate of Solid Waste may be referenced.)
	Response	Agreed.
	New Standard	Original standard retained and new standard created: <u>Fire lanes shall be designed to accommodate a 12 m turning radii. Halton Region waste management vehicles require a 13 m turning radii. Refer to Halton Region's Development Design Guidelines for Source Separate of Solid Waste for more information.</u>
3.2.15	Original Text	No original standard.
	Halton Region Comment	Drive-thru's should be mentioned under Section 3.2 Vehicular Access & Circulation. Based on Halton's past experience regarding drive-thru design, a 14m spacing from the property line to the end of the queue is recommended.
	Response	Agreed.
	New Standard	New standard: <u>For a drive-through facility a 14.0 m spacing from the property line to the end of the stacking lane is recommended.</u>
3.2.20	Original Text	The International Symbol of Accessibility should be displayed on barrier-free passenger-loading zones, barrier-free ramps along barrier-free exterior paths, and barrier-free building entrances. Building entrances that are not accessible should display directional signage to identify the barrier-free path of travel leading to the nearest barrier-free building entrance.
	NAK Comment	Although understandable for designated parking stalls, it seems the requirement for displaying the accessibility symbol for ramps, paths and entrances may be excessive. Perhaps, it should be assumed that all are accessible unless indicated otherwise.
	Response	The standard is a OBC requirement (OBC 3.8.3.1)
	Revision	No revision to standard.
3.2.22	Original Text	Weather protection features are recommended over the passenger loading area, path of travel and main building entrance, either as an extension of the built form or as a free standing structure. A weather protection feature should incorporate the appropriate height clearances to accommodate a variety of vehicle types and sizes.
	NAK Comment	Although weather protection features are desirable, they're not always practical or feasible and will be influenced by the built form type and architectural design.
	Response	The addition of weather protection features is to be taken into consideration and incorporated where feasible.
	Revision	No revision to standard.
3.2.24	Original Text	Landscape areas abutting vehicular hard surfaces should be delineated with a continuous 150 mm high curb to prevent soil and other landscape material from spreading over adjacent surfaces and to prevent damage from vehicles and snow clearing operations. Intermittent breaks in the curbing may be warranted to permit sheet flow drainage as part of an alternative engineered stormwater management system, such as a bioswale.

	<i>Traflagar Engineering Ltd. Comment</i>	<i>Using raised planting areas particularly around building should be used with caution and should not be recommended as the standard. They block drainage and prevent drainage from running into the landscape areas. Under winter time conditions snow melt stays on the sidewalks causing icing problems. When used adjacent to buildings it often requires the finished floor to be raised above the planting bed to meet OBC requirements requiring additional steps. When used in combination with single family homes there is as high risk of trapped moisture against the building resulting in long term maintenance problems. I believe Fig 3.2.23 is a picture from the Shores development. In this case the planting bed were over an underground garage and each planting bed had a drain connected to the storm sewer. Area drains were placed in a number of the walkways to assist with drainage. The building construction was concrete and less prone to moisture problems. Raise planting bed should not be prompted as the norm.</i>
	Response	The intent of the standard 3.2.22 is to have barrier curbing installed around the limits of vehicular hard surface areas like parking lots and loading areas, to prevent damage to abutting landscape areas. Installation of barrier curbing around parking lots is common place. This standard does not refer to the installation of raised planting beds adjacent to buildings as described. Figure 3.2.23 depicts a good example of a design employing the use of a variety of materials recommended in standard 3.2.23.
	Revision	Landscape areas abutting vehicular hard surfaces should be delineated with a continuous 150 mm high barrier curb to prevent soil and other landscape material from spreading over adjacent surfaces and to prevent damage from vehicles and snow clearing operations. Intermittent breaks in the curbing may be warranted to permit sheet flow drainage as part of an alternative engineered stormwater management system, such as a bioswale.
3.2.25	Original Text	A variety of surface treatments and edge materials is recommended to be incorporated to differentiate between vehicle and pedestrian routes and to create visually appealing hard surface areas.
	<i>NAK Comment</i>	<i>Is asphalt and concrete considered a distinctive enough material as a basic treatment to differentiate between vehicle (asphalt) and pedestrian (concrete) routes?</i>
	Response	In staff's opinion, these materials can provide the distinction needed, especially with well-designed and predictable routes.
	Revision	No revision to standard.
3.2.26	Original Text	Heavy duty paving treatments should be incorporated to accommodate the intended use(s) and site function, such as fire, garbage and loading vehicles.
	<i>Halton Region Comment</i>	<i>Please add heavy duty paving must be able to support a fully loaded waste collection vehicle that could weight upwards of 30 tonnes. Please also reference that for any site that waste collection vehicle driving over a supported structure such as an underground parking garage, a stamped engineer's letter certified by an Ontario Professional Engineer, indicating the supported structure can support a fully loaded waste management vehicle is required, to the satisfaction of the Region.</i>
	Response	Agreed.

	Revision	Heavy duty paving treatments should be incorporated to accommodate the intended use(s) and site function <u>of fully loaded vehicles</u> , such as fire, garbage and loading vehicles. <u>On sites where vehicles drive over a supported structure an Ontario Professional Engineer shall certify the supported structure can accommodate the intended fully loaded vehicles.</u>
3.3.1	Original Text	To avoid potential conflicts between moving vehicles, parking stalls should not be located along or accessed from major drive aisles and the required throat of a street access driveways.
	NAK Comment	<i>Although the intent of locating parking stalls away from major drive aisles is understood, it is not always feasible given limited lot configuration options.</i>
	Response	The direction is 'should' which means "the standard is expected to be achieved unless proven otherwise on good design grounds or an alternative solution meets the intent" and provides some flexibility due to site context and constraints.
	Revision	No revision to standard.
3.3.15.c	Original Text	Bicycle racks should be installed: <ul style="list-style-type: none"> a. on a hard, permanent surface with a maximum slope of 5% (20:1). Installation on soil or grass is not permitted. b. in well illuminated areas and, where possible, areas providing weather protection c. within 10 m of a main building entrance and/or in a highly visible area on site
	NAK Comment	<i>Bike racks within 10m of a main building entrance may not always be desirable, depending on the built form design and building use. Nevertheless, a clear and direct walkway link from bike parking to main building entrance should be provided.</i>
	Response	Agreed.
	Revision	Bicycle racks should be installed: <ul style="list-style-type: none"> a. on a hard, permanent surface with a maximum slope of 5% (20:1). Installation on soil or grass is not permitted. b. in well illuminated areas and, where possible, areas providing weather protection c. within 10.0 m of a main building entrance and/or in a highly visible area on site <u>with a clear and direct walkway link to the main building entrance</u>
3.4.3	Original Text	Flankage yard fences and free-standing walls, which abut a right-of-way, pedestrian walkways, parks, and other public spaces, are recommended to incorporate different materials and planting to provide visual interest
	NAK Comment	<i>It is important to note that incorporating different materials and planting needs to be compatible with the ability to maintain it appropriately, otherwise it can have a negative impact in the public realm.</i>
	Response	Agreed.
	Revision	No revision to standard.
3.4.4	Original Text	The posts and structural members of a single-sided fence shall not be positioned facing the public right of way or an abutting property.

	NAK Comment	<i>Fence posts are typically visible regardless of which side the fence faces, although it is understood that other structural components should not face the public realm.</i>
	Response	Wording is as per town Fence By-law 2002-034, as amended.
	Revision	No revision to standard.
3.4.6	Original Text	Retaining walls that exceed 1.0 m in height shall have design drawings signed and stamped by a qualified professional engineer.
	NAK Comment	<i>The stipulation that a structural engineer shall approve retaining wall heights that exceed 1.0m should not be a general requirement, but, rather, should depend on the type of loads intended on the high side of the wall (for instance, a planting bed compared to a vehicular route). Further clarification should be provided.</i>
	Response	Requirement is in accordance with Development Engineering Procedures & Guidelines Manual.
	Revision	No revision to standard.
3.4.8	Original Text	Retaining walls attached to or located in close proximity to a building shall incorporate fall protection that includes a guard for any portion of the wall over 600 mm in height from the nearby grade.
	NAK Comment	<i>A guard should only be required where there's a reasonable expectation that the public will gain access to the high side of the wall.</i>
	Response	Landscape retaining walls require guards where the public can gain access; however, in other locations associated with the building a guard is required where the difference in level is more than 600 mm. (OBC 3.3.1.17)
	Revision	Retaining walls <u>associated with access/egress around</u> attached to or located in close proximity to a building shall incorporate fall protection that includes a guard for any portion of the wall over 600 mm in height from the nearby grade.
3.4.9	Original Text	Retaining walls located in landscape areas where the public has access shall incorporate fall protection that includes a guard for any portion of the wall exceeding 1.0 m in height from nearby grade.
	NAK Comment	<i>Should stipulate a wall that exceeds 600mm, rather than 1.0m, as per OBC requirements.</i>
	Response	Staff refer to OBC 1.3.1.1 and 4.4.3.1. Landscape retaining wall can be 1.0 m in height before they require a guard.
	Revision	No revision to standard.
3.4.11	Original Text	Retaining walls located within landscape areas adjacent to rights-of-way, parks, ravines and other public realm areas should be avoided. Where a retaining wall cannot be avoided, the wall(s) should: <ul style="list-style-type: none"> a. be setback from the property line a minimum of 300 mm to accommodate plantings for screening b. be constructed no higher than 600 mm from nearby grade c. be spaced at least 1.4 m from another wall to create a terrace(s) and incorporates extensive soft landscaping between the walls of the terraces d. incorporate aesthetic and durable materials

Trafalgar Engineering Ltd. Comment	<p>Owner and developer try to avoid retaining walls in all cases because of the cost. The recommendation of this section are impractical. Retaining wall are normally constructed to save site area and or redirect drainage.</p> <ul style="list-style-type: none"> • In areas along parks/ravines the Town normally fences the public land and offsetting the retaining wall by 0.60m from the fence results in a dead zone where it is difficult to maintain any landscaping. The walls should be constructed as close to the fence as possible to limit width of the dead zone. • Limiting retaining wall to 0.6m high is very inefficient. The wall in Fig. 3.4.7 is higher than 0.6m. 				
Response	<p>Cost and stormwater management are important considerations, however, in staff's opinion, a development must also positively integrate itself into the community. High retaining walls facing the street block views into a site, reduce pedestrian penetrability, hinder wayfinding, and can be visually unattractive. Construction of low terraces provide a gradual transition to the site while facilitating a strong connection to the street. The 300 mm retaining wall setback is necessary to prevent encroachment onto adjacent property.</p> <p>Figure 3.4.7 is higher than 600mm, but it is not adjacent to the right-of-way.</p>				
Revision	<p>Since the transition to the right-of-way and other public realm areas is the main concern, the standard has been adjusted accordingly.</p> <p>Retaining walls located within landscape areas adjacent to rights-of-way, parks, ravines and other public realm areas should be avoided. Where a retaining wall cannot be avoided, the wall(s) should:</p> <ol style="list-style-type: none"> be setback from the property line a minimum of 300 mm to <u>prevent encroachments and</u> accommodate plantings for screening be constructed <u>in terraces with minimized wall height recommended</u> no higher than 600 mm <u>from nearby grade</u> be spaced at least 1.4 m from another wall to <u>create a terrace(s) and</u> incorporate extensive soft landscaping between the walls of the terraces incorporate aesthetic and durable materials 				
4.0.*	<table> <tr> <td data-bbox="250 1264 464 1297">Original Text</td><td data-bbox="477 1264 1521 1297">No original standard.</td></tr> <tr> <td data-bbox="250 1323 464 1381">Halton Region Comment</td><td data-bbox="477 1323 1521 1843"> <p><i>It would be helpful if the following requirements be added or cross referenced in Section 4.0 of the subject document.</i></p> <p><i>Section 1.9.2.5 of Halton Region's Development Design Guidelines for Source Separation of Solid Waste,) states that internal storage areas shall be constructed to prevent and deter pests and shall have adequate and well maintained mechanical ventilation and must have a sprinkler and fire prevention system in accordance with all Ontario Code and Building Code requirements. Buildings with waste compactors, must keep them secured at all times with no general access. Internal waste access doors must be at ground level with direct access to the waste collection point through double doors which are a minimum of 2.2 m in width to allow for movement of waste receptacles. These double doors should open directly to the external waste collection point, however where possible, roll up doors are preferable to double doors from an operational standpoint.</i></p> </td></tr> </table>	Original Text	No original standard.	Halton Region Comment	<p><i>It would be helpful if the following requirements be added or cross referenced in Section 4.0 of the subject document.</i></p> <p><i>Section 1.9.2.5 of Halton Region's Development Design Guidelines for Source Separation of Solid Waste,) states that internal storage areas shall be constructed to prevent and deter pests and shall have adequate and well maintained mechanical ventilation and must have a sprinkler and fire prevention system in accordance with all Ontario Code and Building Code requirements. Buildings with waste compactors, must keep them secured at all times with no general access. Internal waste access doors must be at ground level with direct access to the waste collection point through double doors which are a minimum of 2.2 m in width to allow for movement of waste receptacles. These double doors should open directly to the external waste collection point, however where possible, roll up doors are preferable to double doors from an operational standpoint.</i></p>
Original Text	No original standard.				
Halton Region Comment	<p><i>It would be helpful if the following requirements be added or cross referenced in Section 4.0 of the subject document.</i></p> <p><i>Section 1.9.2.5 of Halton Region's Development Design Guidelines for Source Separation of Solid Waste,) states that internal storage areas shall be constructed to prevent and deter pests and shall have adequate and well maintained mechanical ventilation and must have a sprinkler and fire prevention system in accordance with all Ontario Code and Building Code requirements. Buildings with waste compactors, must keep them secured at all times with no general access. Internal waste access doors must be at ground level with direct access to the waste collection point through double doors which are a minimum of 2.2 m in width to allow for movement of waste receptacles. These double doors should open directly to the external waste collection point, however where possible, roll up doors are preferable to double doors from an operational standpoint.</i></p>				

		<p><i>External storage shall be designed to accommodate all waste, according to collection type. Please note: there shall be no large loose piles of garbage permitted, at any time.</i></p> <p><i>The dedicated waste collection location must be adequately marked and signed that there shall be no parking or blocking of waste collection containers. In addition, this area must be kept clear of ice and snow.</i></p> <p><i>An overhead clearance of 9.0m for all waste management vehicle routes is required.</i></p> <p><i>The enclosure/facility must be adequately sized to accommodate the waste from all units within the development for all streams of waste collection. In order to be serviced for Regional waste collection, each development must adhere to Halton Region's "Development Design Guidelines for Source Separation of Solid Waste".</i></p>
	Response	Agreed.
	Revision	The guidelines document will be referenced in the margin note banner of this section.
4.1.3	Original Text	Where feasible and functional, the distance that vehicles are required to backup when servicing facilities should be minimized to reduce the potential disturbance from auditory backup alarms.
	Halton Region Comment	<i>Subsection 3 Please add that as per Halton Region Guidelines "Development Design Guidelines for Source Separation of Solid Waste" all collection should be in a forward motion to minimize turning back up distance. Halton Region requires a minimum head on approach of 18 m for waste management vehicles.</i>
	Response	Agreed.
	Revision	Where feasible and functional, the distance that vehicles are required to backup <u>at when</u> servicing facilities should be minimized to reduce the potential disturbance from auditory backup alarms. <u>All collection should be in a forward motion, refer to Halton Region guidelines for more information.</u>
4.1.4	Original Text	Facilities, where required and proposed, should be: <ul style="list-style-type: none"> a. integrated into the overall site design to maximize service functionality and to minimize impacts on site users b. positioned in areas on the site with low visibility from the public realm c. designed to accommodate all associated vehicular servicing and maneuvering within the site d. adequately separated and buffered from adjacent sensitive uses
	Halton Region Comment	<i>Section 4.1 also speaks to locating and configuring waste facilities and should mention that the collection points for waste are to be accessible to all residents/occupants and do not hinder residents from participating in the recyclable materials and organic waste programs and comply with Ontario's Accessibility for Ontarians with Disabilities Act.</i>
	Response	Agreed.
	Revision	Facilities, where required and proposed, should be: <ul style="list-style-type: none"> a. integrated into the overall site design to maximize service functionality and to minimize impacts on site users b. positioned in areas on the site with low visibility from the public realm

		<p>c. designed to accommodate all associated vehicular servicing and maneuvering within the site</p> <p>d. adequately separated and buffered from adjacent sensitive uses</p> <p>e. <i>have collection points for waste that are accessible to all residents/occupants and do not hinder residents from participating in the recyclable materials and organic waste programs and comply with Ontario's Accessibility for Ontarians with Disabilities Act</i></p>
4.2.*	Original Text	The following standards must be applied in conjunction with the appropriate sections of the Region of Halton's <i>Development Design Guidelines for Source Separation of Solid Waste</i> : ...
	Halton Region Comment	<i>In the first sentence "the following standards <u>must</u> be applied... the word "must" is to be emphasised.</i>
	Molok Comment	<i>In the first paragraph you require that proposed developments follow the standards of the Region of Halton's Development Design Guidelines for Source Separation of Solid Waste sections 1.9, 2.3 and 3.0. In review of these sections they provide direction for front end collection. As I am sure you are aware Molok® containers are Semi-Underground Crane Lifted Containers. The present Zoning By-law allows for our Semi-Underground Crane Lifted Containers. Thus even thou our containers are shown in Part A of the manual on pages 16 and 69 the direction given in this first paragraph would suggest and provide direction to designers that only front load containers are allowed.</i>
	Response	<p>With regards to the Region's comment, the proposed change does not reflect the document format.</p> <p>With regards to Molok's comment, the text will be revised to be more permissive where Regional waste pick-up is not required.</p>
	Revision	<u>The following standards apply to all properties in the Town. Where waste is to be collected by Halton Region, or could be collected by Halton Region in the future,</u> the following standards must <u>also</u> be applied in conjunction with the appropriate sections of Halton Region's Development Design Guidelines for Source Separation of Solid Waste: section 1.9 contains storage and internal handling requirements, section 2.3 contains waste collection standards for multi-residential apartment buildings, and section 3.0 contains standards for waste collection from industrial, commercial and institutional developments.
4.2.2	Original Text	Figure.
	Molok Comment	<i>The Region's Guidelines 1.9.2.1.2 states: "that Collection Point locations for Waste are accessible to all residents/occupants and do not hinder residents/occupants from participating in Recyclable Material and Organic Waste programs and comply with Ontario's Accessibility for Ontarian's with Disabilities Act;". Section 1.9.2.5 also states: "The Waste storage area shall be constructed to prevent pests." With these two requirements in mind, I would suggest that you may want to select a different picture for Fig. 4.2.2, found on page 38. This current pictures shows a front end container with its lid wide open allowing easy access for pests. The picture also shows staining of the concrete pad which may be caused by a leaky container which again results in attracting pests. An additional attraction to pests are the carts that by being unprotected which are a huge attraction to pest especially raccoons We usually call this presentation of carts the Racoon Buffet. Also with regards to this picture it shows a wooden gated enclosure with what looks to be a front</i>

		<p><i>load container behind the gates that appears to be in the range of 5 to 6 feet high. I would suggest to you that these gates and a container of that height would make it virtually impossible for a person with a disability (person in a wheelchair) to gain access to the container and be able to place waste within the container. This picture may also be considered to be not in compliance with The Ontario Planning Act, Section 41, (4), 1. and 2. (f) and (7), (a), 4.1, which all pertain to design facilities to have regard for persons with disabilities.</i></p>
	Response	<p>The image depicts a typical waste enclosure that meets the intent of the Region's guideline. Standard 4.1.4 of this standards document was modified and now states "Facilities (references service facilities including refuse storage, compaction and collection areas), where required and proposed, should: (e) have collection points for waste that are accessible to all residents/occupants and do not hinder residents from participating in the recyclable materials and organic waste programs and comply with Ontario's Accessibility for Ontarians with Disabilities Act." In addition the caption for the photo draws attention to and references the wall of the enclosure.</p>
	Revision	<p>No revision to figure.</p>
4.2.4	Original Text	<p>Access doors to the enclosure should be oriented away from direct view from the public realm. The doors/gates should have industrial quality hinges and closures to withstand frequent use and climate fluctuations.</p>
	Halton Region Comment	<p><i>Please note where possible, as mentioned previously, roll-up doors are preferred as access doors for waste collection access purposes over gates when a waste closure is planned for the site from an operation standpoint.</i></p>
	Response	<p>Agreed.</p>
	Revision	<p>Access doors to the enclosure should be oriented away from direct view from the public realm. The doors/gates should have industrial quality hinges and closures to withstand frequent use and climate fluctuations. <u>Where storage areas are located within a building, installation of roll-up doors are recommended.</u></p>
4.3.1.c	Original Text	<p>Facilities should be fully screened to reduce visual and auditory intrusion on the public realm and surrounding users. Screening for these facilities should be designed with:</p> <ul style="list-style-type: none"> a. the overall height of the screening exceeding the height of the vehicles, containers, and materials confined and operating within the area b. durable and quality materials that are selected based on the type of facilities being screened and the acoustic control properties required c. dense, year-round landscaping incorporated between the screening treatment and the public right-of-way to provide additional screening and noise buffering for the facilities
	NAK Comment	<p><i>Should stipulate that dense planting should be incorporated where space permits – see the lower captioned image.</i></p>
	Response	<p>Modifications have been made to the images selected.</p>
	Revision	<p>No revision to standard.</p>
4.5.3	Original Text	<p>Lighting levels measured at all property boundary lines should not exceed 0.0 lux to prevent light trespass directly onto an abutting property.</p>
	NAK Comment	<p><i>Intended minimum lighting level is indicated as 0.0 lux.</i></p>

	Response	The standard has been reworded to clarify intent. Nuisance By-law 2007-143, as amended, provides the basis for this standard.
	Revision	<u>Light shall not be broadcast directly onto an abutting property. Lighting levels measured at all property boundary lines should not exceed 0.0 lux to prevent light trespass directly onto an abutting property.</u>
4.5.5	Original Text	Over-illuminating the site and up-illuminating buildings and structures is not recommended.
	NAK Comment	<i>Up-lighting of certain buildings may be a positive, particularly for prominent buildings with notable architectural character. Perhaps this should be clarified further.</i>
	Response	The Town seeks to reduce light pollution and up-lighting does not support this objective. Highlighting notable architectural characteristics can be accommodated through subtle and sympathetic accent lighting incorporated into the feature and/or from the top down.
	Revision	No revision to standard.
5.1.4	Original Text	Street tree plantings shall incorporate a minimum of 30.0 m ³ of good quality topsoil. In planting beds with less than 30.0 m ³ of quality topsoil, break-out zones shall be incorporated to allow the roots to access additional soil. Break-out zones shall be a minimum of 3.0 m in width by 625 mm deep, and constructed with engineered soil or silva cells.
	NAK Comment	<i>To date, we have been specifying clear gravel for root break-out zones in Oakville, rather than engineered soil or silva cells.</i>
	Response	As per the details contained in Appendix B of the North Oakville Strategic Management Plan, break out zones should be constructed with 19mm – 39mm unwashed crushed non-recycled aggregate. The standard has been modified to include this option.
	Revision	Street tree plantings shall incorporate a minimum of 30.0 m ³ of good quality topsoil. In planting beds with less than 30.0 m ³ of quality topsoil, break-out zones shall be incorporated to allow the roots to access additional soil. Break-out zones shall be a minimum of 3.0 m in width by 625 mm deep, and constructed with engineered soil <u>(including 19mm – 39mm unwashed crushed non-recycled aggregate)</u> or soil cells.
5.2.6	Original Text	Unit paving, where deemed appropriate, shall be installed on a concrete base, except when installed over a paving stabilizing system such as soil cells.
	NAK Comment	<i>Unit paving installed on a concrete base will no longer be permeable and contribute to groundwater recharge.</i>
	Response	Within the public right-of-way, it is critical to maintain a level surface to prevent the creation of trip hazards. A permeable unit stone installation can be achieved on soil cells.
	Revision	Unit paving <u>within public right-of-way</u> , where deemed appropriate, shall be installed on a concrete base, except when installed over a paving stabilizing system such as soil cells.
5.3.	Original Text	No original standard
	Halton Region Comment	<i>Section 5.3 Street Furniture - This section should reference that all <u>Regional daylight triangles</u> must remain free and clear of encumbrances. Additionally, for</i>

Response	<p><i>implementation of proposed street furniture along Regional roads, co-ordination and approval with Halton Region Planning and Transportation is required.</i></p> <p>The standards in section 5.3 related to streetscape and street furnishings are intended as a starting point for discussion and are intentionally general in direction. Regional coordination and clearance is stated as a requirement in the introduction of section 5.0.</p>
Revision	No revision to standard.
