B1.00 CLASSIFICATIONS

All roadways in new developments shall be classified according to the Town’s current Official Plan. The Town’s roadway classification includes the following:

- Major Arterial
- Minor Arterial
- Collector
- Local

Roadways within urban areas are to be designed and constructed to urban cross sections. Roadways servicing industrial, commercial and institutional land uses are also to be built to urban standards. Residential land uses outside of urban areas may only be constructed with rural cross sections under limited circumstances, with specific approval from the Town.

The proposed classification of all streets planned in new development areas shall be confirmed with the Town prior to the commencement of the design.
B2.00 PLANNING CONSIDERATIONS

B2.01 Arterial Roadways

The Town will undertake the planning and design of new arterial roadways and arterial roadway widenings. The Town aims to maintain and protect the capability to achieve satisfactory capacity for the movement of people and goods, including:

- automobile movements supporting all trip purposes
- truck movements serving the downtown and employment areas
- pedestrian flows
- transit services and facilities.

B2.02 Traffic Signals

All arterial to arterial road intersections will be eventually signalized. Traffic signals located between arterial road intersections will be determined by the Town. Signalized intersections will be spaced between 300m to 500m apart and the spacing will be dependent upon the arterial road and the section of arterial road being considered for signalization. In addition to permitting vehicle turning movements, traffic signals will maximize signal progression and vehicle carrying capacity while assisting other objectives of the Official Plan to be met.

Traffic signals on arterial roads will generally occur at collector roads serving continuous connections across and between concession blocks.

B2.03 Access to Adjacent Land Uses

Lands adjacent to the arterial roads are to be served by continuous collector roads which meet at the traffic signals on arterial roads. The dedication of traffic signals to an individual land use adjacent arterial roads is generally not encouraged, except where justified in particular circumstances, and where acceptable signal spacing criteria can be met. If an individual large land use, such as retail/commercial/service-oriented uses can achieve traffic signal spacing, then the Town will require that adjacent land uses connect their parking lots in order for vehicles to access the traffic signal. Where arterial roads are flanked by residential land uses, direct driveway access will not be permitted. Any other access to the arterial road between traffic signals will only be considered if the impacts to arterial road traffic flows are minimal. This access will be only restricted entrances such as rights in and rights out and will be at the discretion of the Town.

B2.04 Local Road Connections

Consideration may be given by the Town to allow an unsignalized local/collector road connection between traffic signals. This will not be considered unless it can be demonstrated, through a traffic study, that such a connection will not degrade the carrying capacity of the arterial road. However, no local roads will be permitted to create a four-way intersection (unsignalized intersection) with an arterial road.
**RESERVES**

Access to the arterial roadways will be protected through provision of continuous 0.3m wide reserves on both sides of the right-of-way. The reserve may be lifted only at the Town's discretion.

**ROAD CROSS SECTIONS**

The Town's Official Plan specifies road allowance widths of 26m and 20m for collector and local roads respectively and 35m and 30m for major and minor arterial roads respectively. The Town has approved the use of “alternative” road allowance widths, which are less than those specified in the Official Plan. The development proponent is responsible to demonstrate the appropriate application of the “alternative” road allowance widths as outlined below. The road cross sections based on the Official Plan and the currently approved “alternative” road allowance widths are provided in Section K (BWG Standard Drawings B101 to B106 and B117 to B119).

**COLLECTOR AND LOCAL ROADS**

The collector road system will preferably consist of a two-lane roadway with allowances for parking. Four-lane collector roads are discouraged and will require specific approval by the Town. At the intersection of the internal collector roads and arterial roads, an exclusive left turn lane must be provided. Traffic volumes will dictate if two inbound and outbound lanes are required in addition to the left turn lane. The pavement and road allowance may be widened where requested by the Town to provide "bump-outs" for transit stops, on-street parking near schools, parks or open spaces. The bump-outs allow for parking or transit activity without affecting through traffic. The road allowance width must also incorporate any proposed entrance features (i.e. medians, landscaping strips, signage, etc.) and day-lighting requirements. Local roads will be designed as standard two lane local streets permitting parking on one side.

**SUPPORTING TRAFFIC STUDIES**

Prior to the time of draft plan approval, the Town may require the proponent to prepare and submit two supporting traffic studies, for the Town's approval. The first study consists of a Traffic Impact Study (TIS) which is a broad-based external transportation study that examines the property boundary conditions and interconnections with adjacent properties (including signalization issues), assessed under existing and future conditions. The study must recommend the phasing of traffic signals and arterial road widenings to match development.

The second study consists of a Functional Internal Traffic Study (FITS) which balances appropriate urban design guidelines with a detailed assessment of internal transportation and traffic geometric design including opportunities for traffic calming, off-street or driveway parking issues, signalization warrants, roadway capacity, lane configurations, boulevard requirements (i.e., snow storage and utility corridors and buy-in from utilities), transit and pedestrian requirements, vehicle decision making criteria and intersection vehicle sight lines, medians and entrance features.
A guideline for the preparation of the traffic studies can be found in Appendix C.

B2.09 Roadway Phasing and Implementation

The Town will require that the collector road network be in place early in the development process in order to preserve the capacity of the arterial roads and to provide alternative travel routes for residents and businesses in new growth areas. In some cases, the collector roads may need to be planned and constructed before the adjacent local development is ready to proceed. The Town’s general requirement is that two collector road connections to two different arterial roads will be required for each phase of development. The full extent of the collector road system in each phase is to be constructed. Roadway phasing and implementation is to be discussed with the Town early in the development process.
B3.00 DESIGN ELEMENTS

The geometric road design for new roads shall adhere to the following minimum criteria table:

Table 2: Geometric Road Design

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Collector</th>
<th>Minor Arterial</th>
<th>Major Arterial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Speed (km/hr)</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>K-Sag Min. (m)</td>
<td>8</td>
<td>12</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>K-Crest Min. (m)</td>
<td>8</td>
<td>15</td>
<td>20</td>
<td>55</td>
</tr>
<tr>
<td>Minimum Centreline Radii</td>
<td>90</td>
<td>115</td>
<td>250</td>
<td>400</td>
</tr>
<tr>
<td>Minimum Grade</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Desired Maximum Grade</td>
<td>6.0%</td>
<td>6.0%</td>
<td>5.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Minimum tangent length</td>
<td>30</td>
<td>30</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>between reverse curves</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum grades for</td>
<td>3.5%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>through roads at</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intersections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Width (m)</td>
<td>8.0/8.5</td>
<td>9.0</td>
<td>14.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Right-of-Way Width (m)</td>
<td>20.0</td>
<td>26.0</td>
<td>30.0</td>
<td>35.0</td>
</tr>
<tr>
<td>[with urban design]</td>
<td>[16.0*]</td>
<td>[23.0]</td>
<td>[26.0]</td>
<td>[30.0]</td>
</tr>
<tr>
<td>[18.0]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Angle</td>
<td>70°-90°</td>
<td>85°-90°</td>
<td>85°-90°</td>
<td>80°-90°</td>
</tr>
<tr>
<td>Minimum Tangent Length</td>
<td>30.0</td>
<td>45.0</td>
<td>50.0</td>
<td>75.0</td>
</tr>
<tr>
<td>for intersection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approaches (from CL) (m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* for single-loaded roads only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All grade changes in excess of 1.0% shall be designed with a vertical curve. The minimum tangent length prior to a grade change of up to 1.0% is 6m, and between 1.0% and 1.5% is 9m. The concrete curb gutter on cul-de-sac’s and bends is to maintain a minimum grade of 0.50%.

The typical road allowance cross-section shall be designed and constructed as per the appropriate standard drawings. Details shall be provided for any special provisions required due to unique physical conditions on site or for existing or future design conditions. Such conditions include retaining walls, slope protection, culverts, bridges or special cross fall conditions.

Laneways are to be considered for review by the Town on a case by case.

Road widening/tapering at the intersection of industrial and/or collector roads with arterial roads may be required depending on the findings and conclusions of the supporting traffic reports. The straight run and taper length for this additional
pavement strip shall be determined by the Town in conjunction with the Traffic Report. In such cases, the boulevard width shall be maintained.

**B3.01 Horizontal Curves**

The layout of horizontal bends shall be according to BWG Standard Drawing B107.

**B3.02 Vertical Curves**

All points of grade change in excess of one percent shall be designed with vertical curves as outlined in the current Transportation Association of Canada publications. The minimum visibility curves to be used are outlined in the geometric details for each roadway classification. The minimum tangent length between vertical curves shall be 9m.

**B3.03 Backfall at Intersecting Streets**

At all street intersections the normal cross-fall of the major street shall not be interrupted by the crown line of the minor street. A two or three percent back slope shall be provided on the minor street at all street intersections, except those controlled by traffic signals. This back slope shall continue to the end of the curb return radii to facilitate proper drainage of the intersection. Overland flow routing of storm drainage through the intersection must be maintained.

**B3.04 Geometric Intersection Design**

Property daylighting at all intersection quadrants shall be included in the road allowances in accordance with the following dimensions.

**Table 3: Daylight Triangle and Curb Radii**

<table>
<thead>
<tr>
<th>ROAD CLASSIFICATION</th>
<th>INTERSECTING ROAD CLASS</th>
<th>DAYLIGHTING TRIANGLE DIMENSIONS (m)</th>
<th>CURB RADII (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCAL</td>
<td>LOCAL</td>
<td>5.0</td>
<td>9.0</td>
</tr>
<tr>
<td></td>
<td>COLLECTOR</td>
<td>7.5</td>
<td>9.0</td>
</tr>
<tr>
<td>LOCAL</td>
<td>ARTERIAL</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td>COLLECTOR</td>
<td>LOCAL</td>
<td>7.5</td>
<td>9.0</td>
</tr>
<tr>
<td></td>
<td>COLLECTOR</td>
<td>10.0</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>ARTERIAL</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>ARTERIAL</td>
<td>LOCAL</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>COLLECTOR</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td></td>
<td>ARTERIAL</td>
<td>15.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Such daylighting shall be shown on the proposed plan for registration and on all engineering drawings.

**B3.05 Cul-de-Sac and Bulbs**

Permanent cul-de-sacs are generally not permitted. Where approved, they shall be no longer than 120m. A maximum length of 150m may be permitted only where
supported through a traffic study and where appropriate servicing configurations are approved by the Town.

In locations where adequate water flow requires mains connected from the two ends of the road, the pipe shall be provided through a walkway block at the end of the cul-de-sac.

The turning bulbs shall be constructed as per BWG Standard Drawing B108, minimum gutter grades of 0.5% shall be maintained along the flow line of the gutters around the bulb.

### B3.06 Location of Utilities

The location of utilities within the road allowance shall be as detailed in the BWG Standard Drawings for Road Cross Section Details. A Utility Coordination Plan shall be submitted to the Town for approval of the proposed utility locations.

All utility wiring is to be installed underground. Hydro transformers are to be housed in suitable enclosures and mounted on transformer pads installed at the final elevation of the adjacent ground. The location of transformer pads shall be as detailed on the Town Typical Road Cross Section Details. Telephone and Cable junction boxes may be mounted at the surface in approved standard enclosures.

In areas approved by the Town, “Trafalgar” poles may be utilized which incorporate the facilities for various utilities in the street light pole.

### B3.07 Community Mail Box Requirements

In general, community mail centres and/or individual super mailbox sites shall be placed in locations approved by the Town. These locations are to be indicated on the approved Utility Coordination Plan. Community mail centres shall be constructed in mini-parks, centrally and suitably located in consultation with Canada Post Corporation. The design of the community mail centre must incorporate such criteria as pedestrian safety, traffic flow and aesthetics. The Town of Bradford West Gwillimbury may require the developer to furnish the following amenities within the community mail centre:

- retaining walls
- park benches
- fencing
- litter containers
- landscaping
- pedestrian lighting
- concrete pad or interlocking stone surface
- architectural controlled kiosks
- adjacent car bays parallel to the travelled portion of the roadway.

The Developer shall be responsible for obtaining building permits when required, since some designs for these mailboxes constitute a “building” when constructed with a roof enclosure.
All details associated with the community mail centres or super mailboxes shall be identified on the Engineering Drawings and will be subject to the approval of the Town. The Developer shall be responsible for constructing community mail centres within residential subdivisions, prior to the issuance of the first building permit.

The approval of Canada Post Corporation with respect to location of community mail centres and/or site individual super mailboxes will be required prior to final approval of the Engineering Drawings
B4.00 PAVEMENT DESIGN

B4.01 Road Pavement Design

All pavement designs shall be supported by a Geotechnical Report prepared by a Professional Engineer. The report shall include results from soil testing of the existing sub-grade and recommend a pavement design required to support the anticipated traffic loading in accordance with the Transportation Association of Canada publication “A Guide to the Structural Design of Flexible and Rigid Pavements in Canada”.

The following tables provide the Town of Bradford West Gwillimbury’s minimum pavement structure requirements by road classification and driveway class. Where the minimum recommended pavement design indicated in the Geotechnical report exceeds the minimum requirements in the table below, the designer shall specify the higher strength pavement structure. Where asphaltic treatment is not warranted (e.g., gravel roads), the road structure is to be specified by a geotechnical engineer.

Table 4: Roadway Pavement Design

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>O.P.S.S. Granular ‘B’ Sub-base (mm depth)</th>
<th>O.P.S.S. Granular ‘A’ Base (mm depth)</th>
<th>HL8 Asphalt Surface (Top) Course (mm depth)</th>
<th>HL3 Asphalt Surface (Top) Course (mm depth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>375</td>
<td>150</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Collector</td>
<td>450</td>
<td>150</td>
<td>90</td>
<td>40</td>
</tr>
<tr>
<td>Arterial</td>
<td>450</td>
<td>150</td>
<td>100</td>
<td>40</td>
</tr>
</tbody>
</table>

Copies of all test results and proposed road designs shall be submitted with the Engineering Drawings. In no case will a pavement design less than the minimum Town Standard be considered acceptable.

Testing and approval of all granular materials at the designated pits, prior to placement, and subsequent in-situ verification tests shall also be performed by the Developer’s Geotechnical Consultant.

Prior to the placement of asphalt pavement, the Consulting Engineer must submit to the Town for approval, the asphalt pavement mix designs.
B5.00 CONCRETE CURB AND GUTTER

Concrete curb and gutter conforming to OPSD 600.040 or OPSD 600.070 (two stage) shall be used on all new urban subdivision roads. Curbs are to be constructed per OPS specifications in all regards, with concrete strength to be a minimum of 30MPa at 28 days with 7% +/- 1.5% air entrainment.

A key is to be integrally formed with the curb in any location where sidewalks are immediately adjacent to the curb.

All curb and gutter is to be protected from damage from heavy equipment and vehicles.

Curb radii are to be continuous to the property line at all signalized or traffic controlled commercial, industrial or institutional entrances.
SECTION B - ROADWAYS

B6.00 SIDEWALKS

The following guidelines shall be used to determine the sidewalk construction within new subdivision developments, unless determined otherwise by the Town:

1. Sidewalks shall be installed on one side of, Local and Industrial roads.
2. Sidewalks shall be installed on both sides of Collector and Arterial roads.
3. Sidewalks are not required on Cul-De-Sacs unless 25 or more units front onto the roadway and/or the road terminates at an amenity (i.e., park, school, commercial, open space block, etc.).
4. In general, sidewalks should be located on the north and west sides of the street.

The sidewalk shall conform in details and dimensions to the current BWG Standard Drawings and shall be installed at locations as shown on the typical road cross sections.

All sidewalks to be 1.5m wide and shall be a thickness of 150mm, constructed in accordance with OPSD 310.010 and OPSD 310.030 (intersections). All concrete and works shall conform to OPSS 351. The sidewalk subgrade shall be graded to the specified tolerances and compacted to 95% Standard Proctor Density. A 150mm minimum thickness of Granular ‘A’ bedding compacted to 95% Standard Proctor Density shall be provided for all sidewalks. Concrete strength is to be a minimum of 30MPa at 28 days with 7% +/- 1.5% air entrainment.

Sidewalks to be continuous through all driveways including industrial, commercial and institutional driveways.

The minimum thickness of the concrete sidewalk when crossing industrial, commercial and institutional driveways shall be 200mm.

All sidewalks shall have a minimum cross fall of 2.0% to a maximum of 4% and no steps are allowed.

At street intersections the curb and the sidewalk shall be depressed to meet the roadway elevations as shown on the standard drawings.

Directional grooves shall be incorporated where the slope is greater than 5% or at locations where grooves are warranted and at all intersections.

The Town requires that all concrete sidewalks be constructed as indicated on the approved Engineering Drawings, prior to preliminary acceptance.

B6.01 Walkways

Walkways as shown on the approved draft plan are to be constructed with concrete sidewalks on a compacted base, per the standards for sidewalks and as shown on BWG Standard Drawing B111. In special cases where the major system (i.e. overland) stormwater flows are to be conveyed through walkways, a walkway with
adjacent curbs as shown on BWG Standard Drawing B112 shall be used. The hydraulic capacity of the walkway as noted in Section C3.00 is not to be exceeded. Walkways within park areas shall be located as directed by the Town and shall be constructed in accordance with the Town’s specifications (BWG Standard Drawing I102).
**B7.00 DRIVEWAY APPROACHES**

The developer is responsible for the grading, graveling and paving of all driveways from the curb to the face of the garage, or to the dwelling (wherever is applicable). All driveways and parking areas in any land use area are to be fully paved.

**B7.01 Minimum Driveway Design**

**Table 5: Driveway Pavement Design**

<table>
<thead>
<tr>
<th>Driveway Class</th>
<th>O.P.S.S. Granular ‘B’ Sub-base (mm depth)</th>
<th>O.P.S.S. Granular ‘A’ Base (mm depth)</th>
<th>HL8 Asphalt (Base)</th>
<th>HL3 Asphalt Surface Course (mm depth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>N/A</td>
<td>150</td>
<td>N/A</td>
<td>50 (HL3)</td>
</tr>
<tr>
<td>Light Industrial, Commercial, Apartment, Residential / Condo</td>
<td>225</td>
<td>150</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>300</td>
<td>150</td>
<td>75</td>
<td>40</td>
</tr>
</tbody>
</table>

**B7.02 Driveway Grades**

The maximum permissible design grade for any driveway on private lands shall be 6.0%; 8.0% in rural areas. The minimum grade for all driveways shall be 2.0%.

**B7.03 Driveway Depressions**

The width of a single driveway shall be 3.6m, Double driveways shall be 5.5m wide the width and location of driveway depressions for commercial industrial and apartment driveways shall be detailed in accordance with OPSD 350.010, however, the maximum width shall be in accordance with applicable by-law restrictions.

Driveway depressions shall be formed in the curb according to the detail and location as per BWG Standard Drawing B109. A mechanical curb cutting machine is not permitted to saw cut driveway depressions.
SECTION B - ROADWAYS

B8.00 BOULEVARDS

All boulevard areas are to be graded to a minimum of 2% according to the details shown on the Town’s Standard Drawings to the satisfaction of the Town. The grade of the boulevard is to be constant from the back of the curb to the property line and in no case will terracing be permitted. The final grade of the sod shall match the finished grade of the top of the concrete curb and sidewalk.

All debris and construction materials shall be removed from the boulevard area upon completion of the base course asphalt and shall be maintained in a clean state until the roadway section is completed.

Topsoil that meets the requirements in section I5.02 of this document, shall be placed on all boulevard areas that are to be sodded. The minimum depth of topsoil shall be 100mm.

No. 1 Nursery Sod shall be used for all areas that are to be sodded.

B8.01 Open Ditches

Where permitted, open ditches shall be graded to the lines and grades as shown on the plan and profile drawings.

Ditch slopes shall not exceed 4:1 with a maximum depth of 1.2m below centreline grade unless otherwise approved by the Town. The minimum depth of ditches shall be 500mm below the subgrade of the road. Ditch grades shall be a minimum of 1% and a maximum of 6%, or as designed to accommodate appropriate velocities for sodded channels. Ditches with slopes less than 1% will require sub-drains to be installed under the invert of the ditch.

Ditches are to be topsoiled with clean, weed free topsoil to a minimum depth of 100 mm. The ditch invert is to be sodded to a minimum of 2.0m wide and the balance to be seeded and mulched. When the ditch grade exceeds 6.0%, approved erosion protection shall be used.

Minimum culvert size for road crossings shall be 450mm (2.0mm thick minimum) with minimum 0.6m cover. Culverts shall be installed and bedded in accordance with OPS Specifications. All culverts require some form of end protection, being rip-rap, concrete, manufactured end sections, etc.

Driveway culverts shall be corrugated steel pipes with a minimum size of 400mm in diameter and shall be of a length to suit the driveway width. The minimum cover over driveway culverts shall be 450mm. Culverts and driveways are to be installed prior to the excavation for houses and shall include an end treatment as per the Town standard.
B9.00 TRAFFIC CONTROLS

The proposed location and type of all street name signs, parking restrictions, traffic control signs, signalization and pavement markings shall be shown on the Traffic Control Plan and the ‘Plan and Profile’ drawings. All traffic control devices shall conform to the Ontario Traffic Manual.

B9.01 Street Name Signs

Location

Street name signs shall be placed at each intersection and shall identify each street at the intersection. The location of the street name signs are shown on BWG Standard Drawing B113.

Type

All street name signs shall be manufactured and installed in accordance with the BWG Standard Drawings B114, B115 or B116. All street name signs shall be mounted on 50mm round galvanized finished steel posts 3.6m in length, and imbedded 1.20m into the ground.

B9.02 Traffic Control and Advisory Signage

Location

Traffic control and advisory signs shall be located in accordance with the Ontario Traffic Manual (OTM) as published by the Ministry of Transportation of Ontario.

All roads under the jurisdiction of the Town shall be posted with a maximum speed limit as directed by the Town.

All “No Parking” and “No Stopping” zones should be clearly identified with signs in accordance with the OTM. The Town will allow the placement of No Parking and No Stopping signs on streetlight poles to reduce clutter. The placement of signs on streetlight poles is only permitted when the appropriate spacing is achieved.

For local roads parking is generally only permitted on one side of the street. No parking zones are typically established on the side of road opposite where the sidewalk is located.

In school zones, no parking is permitted on the side of the road where the school is located and no stopping is permitted on the opposite side of the street.

A sign shall be erected at each entrance to the development stating that the roads are not assumed and shall be according to BWG Standard Drawing A101.

Type

Traffic control and advisory signs shall conform to the standards of the OTM as current at the time of installation. All signs are to be manufactured with materials as outlined in the OTM.

All regulatory/warning signs shall be mounted on galvanized steel U-flange posts (2.5kg/m) and imbedded 1.20m into the ground.
Signs must be erected at the completion of the base course asphalt and maintained by the Developer until “Final Assumption” by the Town. Temporary signs may be installed initially, however permanent signs are to be installed upon completion of all boulevard grading and sodding.

**B9.03 Pavement Markings**

Pavement Markings for traffic control shall be provided and conform to the current standards of the OTM. All markings are to be completed with approved materials in accordance with OPSS 710.

Pavement markings shall be indicated on the plans for all stop bars, pedestrian crossings, center and lane lines, etc. as may be required for the subdivision streets. Such markings are to be shown on a Traffic Control plan.

Temporary pavement markings are to be laid immediately following the paving of base asphalt and shall be maintained as required, until top course asphalt.

Durable pavement markings shall be laid immediately following the paving of top asphalt and shall be maintained until final assumption as per OPSS 710.
B10.00 OTHER REQUIREMENTS

Prior to the placement of asphalt after October 15th of any calendar year, the developer shall obtain specific approval from the Town on a day to day basis.

B10.01 Road Occupancy Permit

A Road Occupancy Permit is required from the Town, whenever it is necessary to perform excavations or any construction works on an existing Town right-of-way, external to the development. All work will be done in accordance with ordinances and By-laws of the Town of Bradford West Gwillimbury. The placement and compaction of the backfill material and the restoration of the right-of-way shall be done in accordance with the standards and specifications of the Town. All road crossings shall be completed by tunneling unless explicitly approved otherwise. Any open road cut shall be backfilled with non-shrink concrete material up to the road base.

Before making detours, a traffic control plan is to be provided and permission is required from the Town. Where the road is not part of the Town road system, approval from the appropriate road authority will also be necessary. In all cases, the Fire, Police Departments, School Bus Companies and Ambulance Service must be notified by the Developer or his Contractor.