Highway and Structure Maintenance Definitions

In these Maintenance Specifications, unless the context otherwise requires, the following terms will have the following meanings ascribed to them:


Abutment  a wall supporting the end of a Bridge or Span and retaining the approach Fill.

Acrow  a proprietary name for a modular steel Panel Bridge similar to a Bailey Bridge.

Alligatored  an area of pavement identified by a checkerboard of cracks giving an alligator hide appearance that may or may not be accompanied by surface distortion.

Anchor Bolt  a Foundation bolt (including hardware), drift spike, or any other device used for holding any mechanism or structure down. It may or may not be threaded.

Armour  metal covering used at joints or around Piles, including rigidly affixed anchorages, to protect the underlying material.

Backfill  earth or other material used to replace material removed during construction, such as in culvert trenches, and behind Bridge Abutments and Retaining Walls. Also refers to material placed in Binwalls and between an old structure and a new lining.

Backslope  the slope at the opposite side of a Highway ditch from the Shoulder, and extending up to the natural ground level.

Bailey  a modular Bridge made of interchangeable latticed steel Panels coupled with pins. Used primarily as an emergency or temporary Bridge.

Ballast Wall  the section of an Abutment, above the Bridge Seats, that retains the adjacent Fill.
<table>
<thead>
<tr>
<th><strong>Bearing</strong></th>
<th>Superstructure support elements between the Bridge Seats and the Bridge Superstructure. Composed of steel, rubber, etc. separated into two general categories as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) fixed allows only rotational movements.</td>
<td></td>
</tr>
<tr>
<td>(b) expansion allows longitudinal as well as rotational movements.</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Refer to drawings for specific Bridges.</td>
<td></td>
</tr>
<tr>
<td><strong>Bent</strong></td>
<td>a line of columns built as a structural unit, transverse to the Bridge and supporting the load of the Superstructure.</td>
</tr>
<tr>
<td><strong>Black Ice</strong></td>
<td>a very dangerous, slippery condition on a pavement surface created by transparent ice on the dark asphalt, which is found at times in such locations as in shaded areas and is not normally noticeable in advance of driving onto Highway sections with such a condition.</td>
</tr>
<tr>
<td><strong>Bleeding</strong></td>
<td>an area where the asphalt mix is too rich, leading to the asphalt oozing to the surface in puddles and leaving a slick and slippery area.</td>
</tr>
<tr>
<td><strong>Box Beam</strong></td>
<td>concrete box Stringers which are precast for quick assembly at a Bridge site. When placed side by side these form the Deck as well and are often temporarily used as-is for a traffic Wearing Surface.</td>
</tr>
<tr>
<td><strong>Braces</strong></td>
<td>a diagonal, or sometimes horizontal, structural member used to stiffen a structure.</td>
</tr>
<tr>
<td><strong>Bridge</strong></td>
<td>a structure providing a means of transit for pedestrians and/or vehicles above the land and/or water surface of a valley, arroyo, gorge, river, stream, lake, canal, tidal inlet, gut or strait, above a Highway, railway or other obstruction, whether natural or artificial. The essential parts of a Bridge are: (1) the Substructure consisting of its Abutments and Pier or Piers supporting the Superstructure, (2) the Superstructure slab, girder, Truss, arch or other span or spans supporting the Highway loads and transferring them the Substructure, and (3) the Highway and its incidental parts functioning to receive and transmit traffic loads.</td>
</tr>
<tr>
<td><strong>Bridge Joints</strong></td>
<td>includes expansion joints, sealed joints, Finger Joints, Sliding Plate Joints and all other Deck joints.</td>
</tr>
</tbody>
</table>
Bridge Structural Engineer

a Civil Engineer registered with the Association of Professional Engineers of B.C., specializing in Bridge structural design, construction and maintenance and employed or retained by the Province for professional advice regarding structural matters.

Brow Log

a log placed above the Deck surface used as a Wheelguard. May act as an additional load-carrying Stringer if tied to the structure via Needle Beams.

CGSB

Canadian Government Specifications Board. CGSB specifications may be obtained from Canadian Government Specification Board, Ottawa, Ontario, K2A 0S5.

Camber

slight arch built into the longitudinal profile of a beam to accommodate deflections due to Dead Loads and Live Loads.

Cap

a horizontal member on an Abutment or Pier to distribute the loads of the Bridge. The Stringers or Bearings rest on the Cap.

Cementitious

having the properties of cement; essentially composed of cement.

Chord

the upper and lower longitudinal members of a Truss.

Class

see Classification.

Classification

designates the kinds and levels of Maintenance Services to be provided according to the amount and type of service the Highway is expected to provide, and for each individual Highway or portion of Highway is the Class which the Province’s records designate, and as may be amended from time to time by the Province.

The Minister may, at the sole discretion of the Minister, from time to time, change the Class of a Highway dependent upon other factors than indicated in this definition.

Classifications of Highways in the Service Area are included in RIMS.

The Summer Classification is generally based on, but not limited to, the following:
SUMMER CLASSIFICATION

A.D.T. (average daily traffic)

<table>
<thead>
<tr>
<th>Class</th>
<th>Vehicles per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>over 10,000</td>
</tr>
<tr>
<td>2</td>
<td>5,000 - 10,000</td>
</tr>
<tr>
<td>3</td>
<td>1,000 - 5,000</td>
</tr>
<tr>
<td>4</td>
<td>500 - 1,000</td>
</tr>
<tr>
<td>5</td>
<td>100 - 500</td>
</tr>
<tr>
<td>6 *</td>
<td>10 - 100</td>
</tr>
<tr>
<td>7 *</td>
<td>0 - 10</td>
</tr>
<tr>
<td>8</td>
<td>a Highway, typically without a constructed road but for which maintenance responsibilities exist for such things as danger tree removal and drainage, and which may also have other improvements to maintain such as pedestrian and bicycle paths. *Roads Classed 6 or 7 with heavy industrial use will be increased one Class in RIMS.</td>
</tr>
</tbody>
</table>

Winter Classification is generally based on but not limited to the following:

WINTER CLASSIFICATION

<table>
<thead>
<tr>
<th>Class</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>high volume traffic (over 5,000 winter average daily traffic count) or commuter routes and certain expressways and Freeways through mountain passes, as determined by the Province. They are heavy commuter traffic routes extended to include the bulk of vehicles commuting daily to a center and cut-off where traffic drops below 2,500 winter average daily traffic count. Very high volume ski hill and commuter routes.</td>
</tr>
<tr>
<td>B</td>
<td>all trunk and main routes (or portion thereof as designated by the Province) not included in Class A, with a cut-off traffic volume of 1,000 winter average daily traffic count. Lower volume ski hill and commuter routes.</td>
</tr>
<tr>
<td>C</td>
<td>all school bus routes and industrial (truck) traffic routes (more than 25% trucks) not included in Class A and B.</td>
</tr>
<tr>
<td>D</td>
<td>all other regularly maintained winter routes.</td>
</tr>
<tr>
<td>E</td>
<td>all other irregularly maintained winter routes.</td>
</tr>
<tr>
<td>F</td>
<td>roads not maintained in the winter, or not open, or not maintained by the Minister.</td>
</tr>
</tbody>
</table>
Commencement Date: the first day of the Term, as described in the Maintenance Agreement.

Compacted: when an unloaded pick-up truck driven over the surface leaves an indentation of no more than 5mm.

Contract Year: has the same meaning as defined in Article I of the Maintenance Agreement.

Counter Brace: a Truss diagonal member inclined in the opposite direction to the Main Braces. Smaller than the Main Braces.

Crook: this is a deviation edgewise from a straight line drawn from end to end of a piece of lumber, whereas “twist” is a deviation flatwise including a curl, and “bow” is a deviation flatwise only.

Crown: this is the vertical rise in elevation from the outside edge to the centerline on straight sections of Highway, used to ensure run-off drainage.

Danger Tree: any tree deemed to be hazardous using a recognized assessment methodology such as that recognized by the Wildlife Tree Committee of British Columbia or the International Society of Arboriculture.

Debris: litter, rubbish, vegetation, fallen rocks, dead animals, spilled materials, brush, branches or other tree components or other items, which are not part of the Highway by intention.

Debris Dam: congested Debris obstructing the free movement of water in a stream.

Debris Flow: brush, trash, floating logjams, cable connected log fin booms, etc. all moving in a stream at high water. Sometimes collecting on Bridge Piers, dolphins, or Trash Racks.

Debris Torrent Structure: any structure which by design and/or function acts to control the flow of, or contain, Debris or Debris Flows, including but not limited to Debris impound basins, avalanche berms, avalanche deflector mounds, basins associated with snowsheds.

Deck: the portion of a Bridge that supports the Highway, from the top of the major structural members to the Wearing Surface, and designed to distribute loads evenly across the Bridge.

Decking: timber planking used as a Wearing Surface on the Deck of a timber Bridge.
**De-Icing Chemical**
material used to remove or assist the removal of ice and compacted snow from the pavement surface by chemical means.

**Density**
as defined in the Pavement Surface Condition Rating Manual.

**Dirt and Gravel Highway**
unpaved Highway, including the following components:
the top surface of the Highway and the area between the outside edge of the top surface and the bottom of the ditch, known as the side slopes. Furthermore, the Dirt and Gravel Highway edge is the breakpoint between the extreme outside edge of the top surface and the side slopes.

**Distortions**
as defined in the Pavement Surface Condition Rating Manual.

**Dragnet Vehicle**
a device to bring errant vehicles to a safe controlled stop by arresting the energy of the moving mass by way of a series of self contained units each containing spools of specially selected steel alloy tapes, or energy absorbers, and a series of special fabric nets or cables.

**Drain**
an aperture through a wall, curb, or Deck to provide egress for water that would otherwise accumulate on the Bridge.

**Drifting**
accumulation of snow caused by wind action close to the surface of the ground.

**Ekki Wood**
(lophira procera) a tropical hardwood species used for timber Decking on Bridges.

**Emergency Site**
a geographically limited location where the damage is limited by the bounds of undisturbed road structure, including but not limited to:

i) if a road parallels a stream that has eroded the road in several different locations, they will be considered different emergency “sites”;

ii) if a road parallels a stream that has flooded at a location and the water has returned to the stream at another location(s), causing a washout(s) then this will be considered “one site”;

iii) a stream paralleling a road and producing separated “floods and water returns” will be considered “different sites”;
iv) a slide originating at one location and impacting on the road at one or more locations will be “one site”; and

v) slides originating at different locations will be considered “different sites”.

A subsequent event causing damage to a previous site, that had been fully reconditioned to its original state, will generate a “new site”. An event or events that cause further damage to an existing site, not fully remedied and still within the response time of the pertinent specifications will be considered as an extension of the original site.

End Post

the last diagonal member at the end of a Truss, or the vertical member at the end of a Bailey or Acrow Bridge.

Fines

very small particles of material (under 200 micrometres in size), typically the size of fine silt or clay particles. Fines act as a binder or glue when intermixed with sand and gravel.

Finger Joint

an expansion Joint in which the opening is spanned by meshing steel fingers or teeth.

Flashing

sheet metal used as waterproofing or Armour for timber or log members.

Floor Beam

transverse members which support the Stringers and transmit the load to the main Girders or load carrying members. Steel Pier Caps on reinforced concrete Pier columns are a special type of Floor Beam.

Flume

an open channel or conduit of metal, concrete, or wood used to direct water away from a drain.

Flyover

a structure carrying one-way traffic over a Highway.

Footing

the portion of the Substructure resting on the ground.

Foundation

(i) the supporting soil material upon which the structural portion of the Bridge is placed.

(ii) portions of the Bridge (usually below ground) which distribute the pressure to the soil or artificial supports. Similar to Footing.
Fracture Critical — any member for which failure is likely to result in the collapse of the structure.

Freeway — multi-lane Highway with fully controlled access.

Galvanized — steel or iron item which has a coating of zinc applied for rust protection.

Geotechnical Engineer — a Geological Engineer registered with the Association of Professional Engineers of B.C., and employed or retained by the Province for professional advice regarding geotechnical matters.

Gradation — the distribution of size of material particles from coarse to very fine, determined by quantities retained on screens of decreasing mesh size or spacing.

Grading — the machine blading of dirt or gravel Highway surfaces to remove Raveling and Rutting and establish proper cross-section.

Grout — a fluid mixture of cement, sand, and water that can be poured or pumped easily.

Guardrail — barrier fastened to the edge of a Bridge Deck to prevent vehicles from running over the side of the Bridge.

Gusset — a plate serving to connect the elements of a member or the members of a structure and to hold them in the correct alignment and/or position at a joint.

Hard Surfaced Highways — all Highways which do not have a dirt or gravel surface.

Heart-Side — the face of a timber that was closest to the centre of the tree. Growth rings are concave on the Heart-Side.

Heartwood — timber members that contain the center annual rings of the original tree, or the soft central core.

Highway — has the meaning ascribed to it in the Maintenance Agreement.

Highway User — any person or persons, regardless of form of transportation, that use any lands or facilities within the jurisdiction of the Ministry of Transportation.
Hot-in-place Patch a Permanent Patch using existing asphalt and re-cycling and re-applying it at the same location.

Laminated transverse members of a laminated Bridge Deck having the same function as Cross-Ties. Usually preservative treated two-inch nominal sized lumber tightly placed perpendicular to the traffic direction and vertically on edge over the Stringers, then nailed to the Stringers and each other. May also be parallel to the traffic (longitudinally laminated).

Lateral Rod a horizontal, transverse tension rod.

Launching Nose this is a length of Bailey or Acrow Bridge structure which is used to help launch the Bridge. The Launching Nose is raised from the normal horizontal position by pinning, allowing it to make contact with a Roller at the other end of a Span to continue the launching process. Once the structure is fully in position the Launching Nose is removed.

Livestock as defined in the Livestock Act.

Longitudinal Cracking includes Longitudinal Wheel Path Cracking and Longitudinal Joint Cracking as defined in the Pavement Surface Condition Rating Manual.

Lower Mainland the area to the south of a straight line from Horseshoe Bay east to Hope and then proceeding due south to the Canada-USA border and then proceeding west along the Canada-USA border to the Strait of Georgia.

Main Brace a primary diagonal member in a Truss.

Maintenance Services the same meaning as described in Article I of the Maintenance Agreement.


Median the portion of a divided Highway separating the traveled ways for traffic in opposing directions.

Multiplate a steel culvert, three metres or more in diameter, fully or partially factory assembled or field assembled by bolting together a number of
corrugated steel plates. When less than three metres in diameter it will be considered to be a culvert.

**Needle Beam** a transverse log, timber, or steel beam placed under the Stringers and fastened to them to make them act as a unit. Used to join the Stringers and trussing system.

**Number 1** lumber grading in accordance with the National Lumber Grades Authorities Standard Grading Rules for Canadian Lumber.

**Number 2** lumber grading in accordance with the National Lumber Grades Authorities Standard Grading Rules for Canadian Lumber.

**Off-take** the extension of ditches away from the line of the Highway and toward the Right-of-way boundary or low ground for the purpose of de-watering a Highway Road Base or eliminating excessive Roadside water flow and erosion.

**One Hundred Year Flood** a term describing the stream or river’s maximum expected peak flow within a period of 100 years, computed from hydrological data, watershed information and historical annual peak flow data.

**Overhead** a Bridge carrying a Highway over a railway, or a railway and another facility.

**Overlay Patch** a Permanent Patch that consists of a layer of new asphalt over an existing asphaltic pavement, or a new layer of asphalt or concrete on a Bridge deck.

**Overpass** a grade separated structure where the Highway passes over an intersecting Highway or railway.

**Panel** the main load carrying member in a Bailey or Acrow Bridge structure. Panels are pinned together end to end and connected side by side where necessary to form continuous Girder Trusses from bank to bank. A traffic surface Deck is mounted between the bottom Chords of the Panels.

**Parapet** a wall-like member of reinforced concrete integrally connected to the sidewalk portion of a Bridge to serve as a protective barrier for vehicular or pedestrian traffic.

**Pedestrian Overpass** a Bridge carrying pedestrians over a Highway.
Permanent patch a patch that lasts as long as the adjacent surface.

Pickets a vertical element used to mark Highway features.

Pier an intermediate vertical support (Substructure) used to join and support the two Spans.

Pile a structural column driven deep into the ground (at least two metres) to provide support for structures built on soft ground. Piles are used for Abutments and Piers and for protective dolphins and retaining walls.

Piling a structure or group of Piles.

Pin a cylindrical bar used as a means of connecting, holding in position, and transmitting the stresses of the members forming a Truss or framed joint.

Ponding large puddles of water trapped on the Highway surface.

Portal the clear unobstructed space of a through Bridge forming the entrance to the Bridge. The entire Portal member of the top Chord bracing which fixes the uppermost limit of the vertical clearance.

Pot-hole on a paved or Sealed Highway, an area where a piece of pavement has broken free and been removed, leaving a hole, usually the depth of the asphalt pavement layer and on a gravel Highway, a hole in which water puddles.

Pull-outs these are widened areas alongside Shoulders of the Highway, where vehicles may pull off the traveled surface. Usually a site where a litter receptacle is located and may include an historical marker, picnic tables or other features.

Quantified Maintenance Services one of the maintenance Services, as defined in Article I of the Maintenance Agreement and in the introduction to these Maintenance Specifications.

Railway Authority a company which, under the Railway Act, has control of and is responsible for the rail portion of a Railway Crossing.

Railway Crossing Highway surface common to both the Railway Authority and the Province bounded by a length equal to the length from end of tie to end of tie and a width equal to the Highway width from Shoulder point to Shoulder point plus one-half metre each side.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway Crossing</td>
<td>the Highway prism including ditches on the Railway Authority’s property from the Railway Crossing outward to the edge of the Railway Authority’s Right-of-way.</td>
</tr>
<tr>
<td>Rakers</td>
<td>these members, in Bailey and Acrow Bridges structures, are the stabilizers that connect between Transoms and the top hole in a Panel vertical section.</td>
</tr>
<tr>
<td>Ravelling</td>
<td>on a paved Highway, an area where the asphalt mix is too lean, leading to the aggregate popping out of the mix or breaking away under wear and on a gravel Highway, where the coarse aggregate is loose and there are not enough Fines to allow compaction to a tight surface.</td>
</tr>
<tr>
<td>Re-decking</td>
<td>the replacement of a Bridge Wearing Surface. On timber structures this includes: planking, Wheelguards and shims, rail posts, post braces and railing, and may include cross ties. Minor Re-decking involves no replacement of cross-ties; Major Re-decking involves the replacement of cross-ties.</td>
</tr>
<tr>
<td>Refurbish</td>
<td>for the purposes of the Maintenance Specification for Sign System Maintenance only, it means the removal of the Sign from the field to a Sign shop, stripped of the old Sign face by a chemical or grinding process, and an addition of a new face to the Sign blank. Sign overlaying done at the Sign shop is also considered as being Refurbished.</td>
</tr>
<tr>
<td>Reinforcing Steel</td>
<td>steel bars embedded in concrete structures during forming and manufacture. These bars add tension strength to concrete and resist contraction or expansion due to temperature change.</td>
</tr>
<tr>
<td>Replacement Patch</td>
<td>a Permanent Patch consisting of new asphalt in place of the existing asphaltic pavement or concrete on a Bridge.</td>
</tr>
<tr>
<td>Re-shaping</td>
<td>the machine blading of Dirt and Gravel Highways from ditch line to ditch line, to re-establish the proper shape of the Highway including Shoulder edges and Crown. This process also brings aggregate and Fines back onto the surface from Shoulders and ditches and involves a deeper cut than Grading.</td>
</tr>
</tbody>
</table>
Rest Area

A Rest Area is a developed roadside area for the use of the traveling public, containing washrooms, litter receptacles and other facilities as follows:

a) Class "A" a major full service facility, containing a large, permanent building with sinks, usually with 9 or more flush or composting toilets, power, and illumination of pedestrian and/or parking facilities. These sites may also contain a tourist information facility operated by others.

b) Class "B" a moderate sized facility containing a permanent building, usually with 4 or more flush or composting toilets.

c) Class "C" a small facility containing one or more one-person structures with pit or chemical toilet facilities.

Retaining Structure

A vertical structure designed to resist the horizontal earth pressures of a fill or other material and/or a structure designed to prevent material from spilling onto the highway.

Right-of-way

The legally defined property on which the highway is situated.

Rip-rap

Protective cover of large stone, rock or concrete of various sizes placed compactly or irregularly to prevent and protect stream banks, sides of fills around abutments or piers, the travelled lanes and other highway features from scour, debris and erosion.

Road Base

The portion of highway subsurface on which the traveling surface or wearing surface is placed.

Roadside

That part of the public highway between the edge of shoulder and the highway right-of-way boundary, including the sidewalk. It does not include the shoulder.

Routine

One of the maintenance services, as defined in Article 1 of the maintenance agreement and in the introduction to these maintenance specifications.

Rural

All areas outside urban boundaries.

Rutting

deformation of the surface of the road in the vehicle wheelpath due to repetitive passes of vehicle tires.

S4S

A timber surfacing designation meaning surfaced four sides.
Sapwood

outer layers of growth of a tree between the bark and the Heartwood which contains the sap.

Schedule 1

as defined by section 19.07 of the Motor Vehicle Act Regulations, designating those Highways which cannot be used by the following:

a) vehicles drawn by animals;

b) livestock, as defined in the Livestock Act;

c) farm implements and farm machinery, whether self-propelled or towed;

d) pedestrians, unless attending a disabled vehicle;

e) vehicles incapable of maintaining a minimum speed of 60 km/h on level Highway, except construction or maintenance equipment while working on or traveling to or from a worksite located on a Highway named in Schedule 1.

Schedule 2

as defined by section 19.08 of the Motor Vehicle Act Regulations, designating those Highways where fencing will be erected if livestock are at large on the adjacent land.

Scour

the local lowering of the streambed by the erosive action of water.

(i) general Scour occurs in a waterway opening as a result of obstruction of the flow.

(ii) local Scour occurs at a Pier or Abutment as a result of local obstruction of the flow.

(iii) natural Scour is the Scour of a streambed resulting from natural phenomena, such as channel meandering.

Sealed

a gravel Highway surface on which emulsified oil and aggregate has been alternatively spread, including compaction for particle set, building up an asphaltic pavement layer.

or/
a paved Highway surface on which asphaltic products have been used to seal cracks, extend life expectancy of the paved Highway and create a skid resistant surface.
Services as defined in Article I of the Maintenance Agreement and the introduction to these Maintenance Specifications including: Routine Maintenance Services, Quantified Maintenance Services, Emergency Services and Additional Maintenance Services

Severity as defined in the Pavement Surface Condition Rating Manual.

Shadow Vehicle a vehicle used as a mobile advance warning device, as described in the "Traffic Control Manual for Work on Roadways".

Shim to support, level, or adjust the fit by using thin, often tapered pieces of material.

Shoulder the area between the edge of the outside traffic lane and the ditch, including the following components: Shoulder top, Shoulder edge, and Shoulder side slope. Furthermore, the Shoulder edge is the breakpoint between the Shoulder top and the Shoulder side slope.

Shoving a longitudinal displacement of a localized area of a pavement surface, generally caused by braking or accelerating vehicles and usually located on hills and at intersections.

Sight Distance driver visibility of the Highway, Signs and intersections at minimum distance to safely drive the Highway at these locations.

a) for the purposes of removing all movable obstructions (i.e. brush, tall grass, vehicles, etc.) from the Highway Right-of-way, the following minimum Sight Distances will be met:

   (i) for vehicles traveling on any traveled portion of a Highway:

<table>
<thead>
<tr>
<th>Summer Highway Classification</th>
<th>Minimum Highway Sight Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3</td>
<td>330 m</td>
</tr>
<tr>
<td>4 &amp; 5</td>
<td>200 m</td>
</tr>
<tr>
<td>6 &amp; 7</td>
<td>75 m</td>
</tr>
</tbody>
</table>
(ii) for vehicles stopped at an intersection a distance of 2 metres behind the applicable legal stopping location for the highway at that point and intersection, visibility in both directions to the traveled portion of the Highway will be:

<table>
<thead>
<tr>
<th>Summer Highway Classification</th>
<th>Minimum Highway Sight Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3</td>
<td>300 m</td>
</tr>
<tr>
<td>4 &amp; 5</td>
<td>200 m</td>
</tr>
<tr>
<td>6 &amp; 7</td>
<td>100 m</td>
</tr>
</tbody>
</table>

(iii) for vehicles on the traveled portion of the Highway the minimum Sight Distance to Highway signs will be:

<table>
<thead>
<tr>
<th>Summer Highway Classification</th>
<th>Minimum Highway Sight Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>500 m</td>
</tr>
<tr>
<td>2 &amp; 3</td>
<td>300 m</td>
</tr>
<tr>
<td>4 &amp; 5</td>
<td>150 m</td>
</tr>
<tr>
<td>6 &amp; 7</td>
<td>75 m</td>
</tr>
</tbody>
</table>

b) Sight Distance for traffic control requirements will be defined as the length of unobstructed Highway visible to the driver and the following values (as a function of the posted speed limit) will be the minimum distances acceptable to the Province. Sight Distance less than set out below will require additional control as defined in the Sign Manuals:

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>Sight Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 kilometres per hour</td>
<td>80 metres</td>
</tr>
<tr>
<td>60 kilometres per hour</td>
<td>110 metres</td>
</tr>
<tr>
<td>70 kilometres per hour</td>
<td>130 metres</td>
</tr>
<tr>
<td>80 kilometres per hour</td>
<td>170 metres</td>
</tr>
<tr>
<td>90 kilometres per hour</td>
<td>200 metres</td>
</tr>
<tr>
<td>100 kilometres per hour</td>
<td>250 metres</td>
</tr>
<tr>
<td>110 kilometres per hour</td>
<td>300 metres</td>
</tr>
</tbody>
</table>
Sign
a lettered board, message or other display which includes all regulatory, warning, guide or informational, advisory, construction and maintenance, route markers and all special or other messages/displays under the Provincial jurisdiction as defined by the Province but excluding electronically controlled messages/displays; a sign includes the Sign Face Overlay.

Sign Bridge
an overhead sign support structure, typically of truss construction, with the horizontal member either supported at both ends or cantilevered over the Traveled Lanes. Type L, M, or H galvanized post davits are not considered to be Sign Bridges.

Sign Face Overlay
the layer of the Sign which contains the message, and which is applied to the aluminum, wood or steel sign.

Sign System
includes all regulatory, warning, guide or informational, advisory, construction and maintenance, route marker Signs, Sign Bridges, avalanche gates, delineators, hazard markers, Signs, Sign Face Overlay, posts, hardware (i.e. nuts, bolts, washers, rivets, etc.) and all special Signs, under other Provincial jurisdictions, as defined by the Province but excluding electronically controlled signage.

Sill
horizontal structural member set directly on the ground surface, or embedded only to a firm surface level. Usually a temporary base for a temporary support (see False Bent) or bracing.

Sliding Plate Joint
an expansion Joint in which the opening is covered by a steel plate attached to only one side of the joint.

Slippery
any road condition which causes an increase in normal dry surface stopping distances as a result of buildup of frost, ice, slush or snow.

Slope Of Grain
the deviation of the line of fibres in a timber member from a straight line parallel to the sides of the piece.

Slump
a measure of the workability and flowability of concrete. Slump varies with water, air, and admixture content and the temperature of the concrete.

Snow Avalanche Technician
a snow avalanche technician designated by the Province as such.
Snow Berm  a windrow of snow constructed for the purpose of accumulating Drifting snow.

Sod  a mat of grass roots and fibres containing earth and granular aggregate.

Spall  circular or oval depression in concrete resulting from separation of a portion of the surface, at a fracture. Usually part of the rim is perpendicular to the surface.

Specialty Fences  all fences other than those installed on Schedule 1 or Schedule 2 Highways for which the Province is responsible, e.g., fences in Rest Areas, at bridge ends, etc.

Split  a through longitudinal separation of the wood cells at the end of a piece of lumber.

Spray Patch  a Permanent Patch that consists of a layer of asphalt, covered with aggregate over existing asphalitic pavement.

SSPC  Steel Structures Painting Council. A society concerned with the use of coatings to protect industrial steel structures.

Stringer  longitudinal beams supporting the Bridge Deck, and in large Bridges or Trusses, framed into or upon the Floor Beams.

Substructure  Abutments, Piers, their Foundations and protective works which form the Bridge Substructure supporting the Superstructure above.

Summer Highway Classification  see Classification.

Superelevation  this is the vertical rise in elevation from the outside edge of a Highway surface, to the inside edge on a curving section of Highway.

Superstructure  the entire structure of a Bridge resting on the Piers and Abutments, consisting of Stringers, Decking, Trusses, sidewalks, Wearing Surface and railing.
Sway Brace  (i)  a piece bolted or otherwise secured in an inclined position upon
the side of a Pile or frame Bent between the Cap and Sills to
add rigidity to the assemblage.

(ii)  a component of Bailey or Acrow Bridges, used to square
each bay of the Bridge and prevent sway movements of the Bridge.

Temporary Patch  a temporary correction of pavement deficiencies to address safety
issues.

Transom Clamps  these are vise-type clamps with a swinging bolt at one end, used on
Bailey and Acrow Bridge structures to hold the Transom securely to
the bottom Chord of Panels.

Transoms  the Deck supporting cross member in a Bailey or Acrow Bridge
structure, spanning between the bottom Chords of the Panels in these
Bridges.

Transverse Cracking  as defined in the Pavement Surface Condition Rating Manual.

Trash Rack  a pervious barrier constructed to catch Debris and prevent blockage of
a Bridge or the inlet of a culvert or Multiplate.

Travelled Lane  the surface of a Highway:

(i)  between the painted shoulder line on one side and the painted
Shoulder line on the other side, or

(ii)  in the absence of Shoulder lines - from asphalt edge to asphalt
edge, or

(iii)  in the absence of hard surfacing refer to the definition of Dirt
and Gravel Highway.

The travellable portions of Rest Areas, pullout areas, parking areas,
Weigh Scale Areas, and any other vehicle-accessible portions within
the Right-of-way are included.

Treated  a gravel Highway surface on which emulsified asphalt and aggregate
has been alternatively spread, including compaction for particle set,
building up an asphaltic pavement layer.
Truss  a jointed Bridge structure having an open built web construction so arranged that the frame is divided into a series of triangular figures with its component straight members primarily stressed axially only.

Truss Rod  a vertical Tension Rod.

Underpass  a Bridge carrying a Highway beneath another feature including a Highway of less traffic volume.

Urban  within a Municipality as the term is defined in the Local Government Act, or within a distance of 3 kilometres of a municipal boundary, or extending out to the limit of residential or commercial development, whichever comes first.

Wane  bark or lack of wood from any cause, except eased edges, on the edge or corner of a piece of lumber.

Wash-boarding  transverse ridges, ripples or small bumps on a gravel/dirt Highway surface (right angles to travel), usually on hills or steeper sections, leading to very rough, vibrating or chattering ride.

Water/Cement Ratio  the mass ratio of the water to the cement contained in a unit volume of concrete. Usually between 0.40 and 0.45 for normal concrete.

Wearing Surface  the surface portion of a Bridge Deck directly in contact with the wheels of vehicles.

Weigh-in-motion Sites  a facility that uses sensors in the pavement for weighing vehicles while they are in motion.

Weigh Scale Area  a facility within Highway Right-of-way which may be used by the Province for the purpose of commercial vehicle weighing, including but not limited to the traveling and parking areas, buildings and scale, signing and signals.

Wheelguard  a steel or timber piece placed longitudinally along the side of the Highway to guide the movements of vehicle wheels and safeguard the Bridge Trusses, railings and other constrictions existing outside the Highway from collision with the vehicles and their loads.

Wildlife  as defined in the Wildlife Act.
<table>
<thead>
<tr>
<th>Winter Abrasive</th>
<th>the sand or fine gravel applied to Highway surfaces during winter snow and ice conditions to provide traction for vehicles. May or may not contain De-Icing Chemicals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Highway Classification</td>
<td>see Classification.</td>
</tr>
</tbody>
</table>