

## BY-LAW NUMBER 361-2024 ON REQUIREMENTS AND CONDITIONS FOR THE CONSTRUCTION OF PUBLIC OR PRIVATE ROADS

## **Resolution #2024-09-Rxxx**

# Adoption of BY-LAW NUMBER 361-2024 on construction requirements and conditions for public or private roads

**WHEREAS** the Municipality of the Township of Harrington is governed by the Land Use *Planning and Development Act* (L.R.Q., c. A-19.1).

**WHEREAS** the Municipality of the Township of Harrington wishes to ensure an adequate and safe road service for all citizens and users on its territory.

**WHEREAS** it is necessary to update the current by-law on road construction and establish new normative provisions governing roads.

**WHEREAS** a notice of motion of the present by-law is given at the regular meeting of the municipal council on July 15, 2024, and the draft by-law is tabled at this same meeting.

**WHEREAS** a copy of this draft by-law was given to the members of the Municipal Council in accordance with the Quebec Municipal Code (RLRQ, c. C-27.1);

**WHEREAS** a copy of the draft by-law is available for public consultation at the beginning of the meeting.

IT IS MOVED BY Councillor Daniel St-Onge

**AND** UNANIMOUSLY **CARRIED TO ADOPT with modifications** by-law number 361-2024, concerning construction requirements and conditions for public or private roads, which repeals by-laws 198-2012 and 199-2012.

THEREFORE, the Municipality of the Township of Harrington decrees as follows:

The preamble forms an integral part of this by-law

## PROVINCE OF QUEBEC MUNICIPALITY OF THE TOWNSHIP OF HARRINGTON MRC D'ARGENTEUIL

## BY-LAW NUMBER 361-2024 RESPECTING REQUIREMENTS AND CONDITIONS FOR THE CONSTRUCTION OF PUBLIC OR PRIVATE ROADS

## **1 DECLARATORY PROVISIONS**

## 1.1 PURPOSE OF THE BY-LAW

The purpose of this by-law is to make the issuance of a public or private road construction permit subject to the conclusion of an agreement between the applicant and the Municipality concerning the execution of work related to infrastructures and equipment and the assumption of responsibility for this work by integrating drainage and water flow management measures in an ecologically responsible manner.

## **1.2 AREA OF APPLICATION**

This by-law applies to the construction of public or private roads located throughout the territory of the Municipality of the Township of Harrington, including, without limiting the generality of the foregoing, road foundations, covers, drainage, signs, pedestrian walkways, fences and similar equipment.

## **1.3 REFERENCE DOCUMENTS**

When detailed technical information concerning materials, equipment and calculation methods is required to ensure compliance with the requirements of this by-law and the text refers to a reference document, such document forms an integral part of this by-law.

In the event of any discrepancy between the provisions of these regulations and the requirements of any referenced document, the provisions of these regulations shall prevail.

## **1.4 INTERPRETATION**

The use of the verb "shall" indicates an absolute obligation; the verb "may" indicates an optional meaning. Any other definition retains its regular meaning or that prescribed in the applicable regulations.

## **1.5 TERMINOLOGY**

Unless expressly specified to the contrary or unless the context indicates a different meaning, the expressions, terms and words defined in the Permits and Certificates Bylaw apply.

## **1.6 COMING INTO FORCE**

This by-law shall come into force in accordance with the law.

## 2 **DEFINITIONS**

- 1) Vehicular access: A private access road providing access to buildings, including those within integrated projects, from the public thoroughfare. A vehicular access must always be passable to allow emergency vehicle traffic.
- 2) AQTR: Association québécoise des transports (Quebec Transportation Association)
- 3) Shoulder: Part of the roadbed between the roadway and the ditch embankment, used to support the structure and surface of the roadway.
- 4) Bank: Part of the edge, more or less steep, of running or stagnant water, which can be or is submerged without the water overflowing.
- 5) **Riparian protection strip:** strip of land bordering lakes and watercourses, extending inland from the natural high-water mark.
- 6) BNQ: Bureau de normalisation du Québec.
- 7) CCDG: specifications and general specifications of the Ministry of Transport.
- 8) **Turning circle:** turning area where vehicles travel counterclockwise to allow a vehicle to return to travel in the opposite direction in the other lane.
- 9) Roadway: surface on which vehicles travel, excluding shoulders.
- **10) Path:** a land based communication route of local interest, usually in the countryside, of secondary importance to roads.
- **11)** *Private road:* thoroughfare under private jurisdiction, built within a minimum 15-metre right-of-way that has not been ceded to the Municipality, which provides access to properties dependent on it.
- **12)** *Public road:* road belonging to the municipality, the provincial authority or the federal authority.
- 13) Council: The Council of the Municipality of the Township of Harrington.
- 14) Road construction: includes, but is not limited to, drainage, excavation or foundation work required to build the infrastructure.
- **15) Watercourse:** year-round or intermittent river or stream, with the exception of drainage ditches dug artificially into the ground and used for runoff.

- **16)** Cul-de-sac: roundabout with a minimum diameter of 30 meters, dead end, dead-end street.
- 17) Start of work: the time at which clearing work begins prior to the start of infrastructure shaping work, including where applicable, blasting.
- 18) Right-of-way: Space occupied by roads and public utilities.
- **19)** Private road right-of-way: corridor used as a for private road.
- **20) Driveway:** access permanently built into the pavement or the curb of a street or ditch to allow a vehicle access to the property adjacent to the street.
- **21)** Foundation: A layer of predetermined materials, including the lower and upper foundations, of a set thickness, designed to support the loads transmitted by motor vehicle traffic and their loads.
- **22)** Ditch: A ditch is a small longitudinal depression in the ground used to drain surface water from neighboring properties, i.e. road ditches, line ditches that drain adjacent properties only, and ditches used to drain a single property only.
- **23) Engineer:** an engineer who is a member in good standing of the Order of Engineers of Quebec.
- 24) Laboratory: an accredited soil laboratory mandated by the Municipality or the developer.
- 25) Lake: Any body of water fed by one or more watercourses or springs.
- **26) Highwater line:** the high-water line is the line used to delimit the coastline and the shoreline. This high-water line is located at the natural high-water line, i.e.

At the point where there is a change from a predominance of aquatic plants to a predominance of terrestrial plants or, if there are no aquatic plants, the point where the terrestrial plants stop in the direction of the body of water.

Plants considered aquatic are all hydrophytes, including submerged plants, plants with floating leaves, emergent plants and emergent herbaceous and woody plants, characteristic of marshes and swamps open to a body of water.

Where there is a water retention structure, at the maximum operating level of the hydraulic structure for the upstream part of the water body.

Where there is a legally erected retaining wall, the line from the top of the structure.

If it is not possible to determine the high-water mark using the above criteria, it may be located as follows:

If the information is available, the 2-year flood limit, which is considered equivalent to the line established according to the botanical criteria defined above.

- **27)** Bed: The part of a lake or watercourse usually covered by water.
- **28)** Littoral: Part of a lake or watercourse that extends from the high-water mark to the center of the lake or watercourse.
- **29)** Lot: Land registered on a cadastral plan, in accordance with articles 3026 et seq. of the Civil Code, to which a distinct number is assigned.
- **30) Waterfront lot:** Site adjacent to a lake or watercourse, wetland, marsh, bog, swamp or other body of water.
- **31) MELCC:** Ministry of Environment and the Fight against Climate Change.
- 32) MTQ: Quebec Ministry of Transport and Sustainable Mobility of Quebec.
- 33) Municipality: The Municipality of the Township of Harrington.
- **34) Wetland:** A place flooded or saturated with water for sufficiently long period of time to influence the nature of the soil and the composition of the vegetation. This definition includes marshes, swamps, peat bogs and ponds. A wetland may be open or closed.
- **35) Municipalize:** Place a good or service under the control of a municipality.
- **36) Designated Officer:** Official designated by Council to administer and enforce this by-law as described in the Permits and Certificates By-law.
- **37)** Cadastral operation: A cadastral modification as provided for in the first paragraph of article 3043 of the Civil Code of Québec.
- **38)** Work: Any building, construction, use, excavation or transformation of the ground, including clearing, filling and clearing.
- **39)** Pedestrian crossing: area of land laid out for pedestrian traffic.
- **40)** Culvert: conduit installed to allow water to flow into a drainage system (including ditch, watercourse, etc.).
- **41)** Bridge: structure or construction used to cross a depression in the ground or an obstacle (including a watercourse, railroad, road, etc.).
- **42) Road surfacing:** means covering with gravel, stone screening, crushed paving, bituminous concrete or any other equivalent material approved by the Municipality.
- **43)** Applicant: any individual or legal entity requiring the Municipality to issue a subdivision permit for a development project involving at least the construction of a road.

- **44) Public Services:** Public utility networks such as aqueduct, sanitary sewer, storm sewer, electricity, gas, fiber optics, post office, telephone as well as related equipment and accessories.
- **45)** Sub-base: Granular borrow layer of predetermined grain size, placed on the infrastructure or on the supporting soil and under the lower foundation.
- **46)** Lot: Land consisting of one (1) or more contiguous lots or parts of lots.
- **47) Public thoroughfare:** Any thoroughfare for vehicles, bicycles or pedestrians, or any space reserved for this purpose by the Municipality or having been transferred to it for public use.

## **3 PRINCIPLES OF APPLICATION**

## **3.1 PRINCIPLE**

All construction work on public or private roads within the territory of the Municipality must be carried out by the applicant or his agent(s), in accordance with the terms and conditions set out in this by-law.

#### **3.1.1 ADMINISTRATIVE PROVISIONS**

a) Administration and enforcement of the by-law

The administration and enforcement of this by-law are entrusted to any person hereinafter referred to as the "designated officer", by resolution of the Municipal Council.

b) Powers of the designated official

The powers of the designated officer are set out in the Permits and Certificates Bylaw.

c) Site and building visits

The designated officer may visit and examine, between 7:00 a.m. and 7:00 p.m., any immovable or movable property, as well as the interior and exterior of constructions, buildings or works of any kind, to ascertain whether the by-law whose application has been entrusted to him is being complied with and to oblige owners, tenants or occupants to receive him and answer any questions put to them concerning the application of this by-law.

The designated officer is authorized to be accompanied by any person during the visit likely to help him assess the condition of the premises or to note a fact or situation.

#### **3.2 PERMITS**

#### **3.2.1 OBLIGATIONS**

Any person wishing to undertake an activity requiring the issuance of a permit under the present by-law must obtain such permit from the designated officer before undertaking said activity. No permit may be issued until the requirements of this by-law and any other applicable municipal by-law have been complied with.

The applicant must carry out the work in accordance with the conditions stipulated in the permit and the declarations made at the time of application.

No deforestation and/or road construction work may begin until a permit has been obtained from the Municipality's urban planning department. To this end, issuance of the permit is conditional on the developer agreeing to sign the memorandum of understanding with the Municipality.

Prior to the commencement of work, the applicant must have obtained all required permits and/or certificates of authorization from other government authorities, and must also provide the designated officer with the following documents in duplicate (2), said documents to be signed and sealed by a qualified engineer who is a member of the Order of Engineers of Québec:

- A road subdivision plan showing the limits of the road right-of-way.

- Elevations of the natural terrain as well as projected elevations of the longitudinal and transverse profile with % slopes of the road.

- 25m sections and a typical cross-section of the proposed road structure.

- Stormwater management plan (including pre- and post-development flow calculations, sizing of culverts and flow and sediment control structures) in accordance with MELCC stormwater management guides.

- Easements required for drainage of proposed structures and other related equipment or overburden.

- Culvert location, diameter, type and installation details.
- Location and length of proposed guardrails.
- Road design speed.

- Location and details of utilities to be located on or under the road right-of-way, as well as any required easements.

- A construction schedule.

Work is to be carried out in stages. Each stage will be followed by an inspection and must receive the approval of the designated municipal official, the engineer mandated by the Municipality or his authorized representative before proceeding with the following stages:

- a) Road staking
- b) Clearing and removal of vegetation cover.
- c) Profiling, backfill, drainage channeling.
- d) Granular foundation and compaction.
- e) Paving (if required).

## **3.2.2 MODIFICATIONS TO PLANS AND DOCUMENTS**

Any changes made to plans and documents after the permit has been issued must be approved by the designated officer before the modified work is carried out. In such cases, a new permit will be required.

The designated officer may approve modifications only if they comply with the provisions of this by-law and all applicable regulations.

Such approval does not extend the term of the permit.

## **3.2.3 TIME LIMIT FOR PERMIT ISSUANCE**

Unless otherwise stipulated, when the subject of an application complies with the provisions of the present by-law, the permit requested must be issued within sixty (60) calendar days of the date of receipt of the application by the designated officer.

If an application is incomplete, the date of receipt of the additional information is considered to be the date of receipt of the application.

## **3.2.4 DURATION OF PERMIT**

All permits are null and void if not acted upon within six (6) months of the date of issue.

Road construction must be completed within one (1) year of the date of issue of the permit, i.e. one (1) year for foundations, single-layer paving, slope stabilization and ditches.

For bridge construction (not forming part of a road construction permit), the construction deadline is to be established with the municipal authorities.

Once these deadlines have passed, the Municipality may initiate any appropriate legal proceedings in accordance with the provisions of the present by-law.

## **3.2.5 POSTING OF PERMITS**

## A PERMIT MUST BE PROMINENTLY DISPLAYED, FOR THE ENTIRE DURATION OF THE WORK ON THE SITE WHERE IT IS TO BE CARRIED OUT.

## **3.2.6 COST OF PERMITS**

The cost of a permit for work covered by this by-law is \$200. In addition, the fees and/or financial guarantees required under the by-law respecting agreements for municipal and

infrastructure work apply.

#### 3.2.7 FOLLOWING APPLICATION SUBMISSION

Upon receipt of a complete written application, the designated officer will study the project plan, suggest any necessary modifications to the applicant, if applicable, within sixty (60) calendar days of receipt of the documents, and issue a building permit if:

1) The subdivision permit is issued in accordance with the conditions and requirements of the subdivision by-law.

2) The project complies with the urban plan, other urban planning bylaws, the MRC's layout diagram, any MRC interim control bylaws and any other municipal bylaws in force, and has been accepted in principle, by resolution, by the Council, which has so informed the applicant.

3) The application is accompanied by all plans and documents required by this bylaw.

4) The project complies with this by-law.

5) A memorandum of understanding is signed in accordance with the by-law respecting municipal and infrastructure work agreements.

6) Permits or certificates of authorization from the Ministry of Sustainable Development, of Environment and the Parks, the Ministry of Transport or any other government department or level, if required, have been issued.

If not, he must inform the applicant in writing of his refusal within 30 calendar days, giving reasons.

## **3.2.8 ISSUANCE OF A MAIN BUILDING CONSTRUCTION PERMIT**

A construction permit for a main building may be issued on a lot adjacent to a new public or private road only if it complies with this by-law.

#### **3.2.9 NOTICE OF COMMENCEMENT OF WORK**

Before work begins, the applicant must send the Municipality written notice of his intention to begin said work. The Municipality will convene a site start-up meeting within 7 days of receiving this notice.

At this meeting, the Municipality will issue an authorization to start the work, provided that all permits and authorizations have been obtained, and that all requirements set out in the memorandum of understanding for municipal work, agreed and signed by the developer and the Municipality, have been met.

#### **3.2.10 WORK INSPECTION**

Within a fortnight of completion of the work, the engineer appointed by the Municipality (at the applicant's expense), the contractor, the applicant and a representative of the Municipality will inspect the work for provisional acceptance. This inspection will take place following written notice from the engineer at least 5 days in advance. At the end of the work, a certificate of compliance must be issued for the work carried out by an engineer who is a member in good standing of the Order of Engineers of Quebec, and who has been duly mandated at the time of signing the memorandum of understanding provided for in bylaw number 360-2024 on agreements relating to municipal and infrastructure work.

#### **3.2.11 WARRANTY PERIOD**

The time between provisional acceptance of the work and final acceptance (if all deficiencies are corrected) during which the contractor must guarantee the good condition and operation of the work performed under the contract is twelve (12) months.

#### 3.2.12 "AS-BUILT" PLANS

Three paper copies and one digital copy in PDF format of all "as-built" plans shall be delivered to the Municipality no later than 60 days after completion of the work and shall be corrected following final acceptance, if applicable. These plans must incorporate all changes made during construction. A written list of changes and the triangulated location of all appurtenances (main valves, service valves, sewer service inlets, manholes, catch basins, etc.) must be provided.

#### **3.2.13 FINAL ACCEPTANCE**

At the end of the twelve (12) month warranty period, the engineer appointed by the Municipality (at the applicant's expense) will inspect the work in the presence of the contractor, the applicant and a representative of the Municipality. The contractor will be advised to make any repairs deemed necessary and noted by the engineer and the Municipality's representative. Once all deficiencies have been corrected, the engineer will issue a certificate of compliance. The applicant may then release and pay the 10% contractual holdback to the contractor.

## **3.3 CATEGORY OF LAND REFERRED TO IN THIS BY-LAW**

All building permit applications involving at least one public or private road or part of a road are subject to this by-law and to the obligation to enter into an agreement, as hereinafter stipulated.

# 3.4 PREREQUISITE CONDITIONS FOR ISSUING A SUBDIVISION PERMIT RELATING TO THIS BY-LAW

**In addition to the conditions for issuing a subdivision permit** provided for in the Subdivision By-law in force on the territory of the Municipality, the designated officer may only issue a subdivision permit providing for a road or part of a road if:

a) The proposed road is connected to a public road or to a road providing access to a public road.

b) The application addressed to the Municipality, for the attention of the General Manager, is accompanied by all the documents required by the present by-law.

c) The applicant and the Municipality have signed an agreement concerning the execution of the work, in accordance with the conditions established by this by-law.

## **3.5 ASSUMPTION OF COSTS**

Any person requesting the issuance of a construction permit covered by this by-law is required to assume all costs related to direct or related road construction work shown on the plans and specifications and must, to this end, first enter into an agreement with the Municipality under the terms of the by-law respecting agreements for municipal and infrastructure work.

# 3.6 PROTOCOL OF AGREEMENT FOR THE CONSTRUCTION OF A PRIVATE ROAD OR ITS EXTENSION

The applicant must contract with the Municipality to meet the following conditions:

- a) Provide a plan of the proposed cadastral operation of the road, prepared by a land surveyor (one hard copy and one digital copy in PDF format).
- b) Provide road construction plans, completed and sealed by an engineer (one hard copy, one digital copy in PDF and DWG format).
- c) Provide a biologist's report inventorying the flora and fauna as well as any environmental details that may be disturbed by the construction of said road(s).
- d) To provide any expert reports requested for analysis and understanding of the application.
- e) To build the road shown on the plan for which the construction permit is requested within the time frame agreed upon by the parties.
- f) To carry out all work, inform the Municipality in writing of the completion of the work, while allowing the Municipality the right to visit the site to verify the progress of the work and its compliance with the construction standards of the present by-law.

- g) Where applicable, to build or install, at its own expense, all infrastructure related to construction, such as lighting, bridges, culverts or any other equipment or infrastructure directly related to the construction of said road, except for traffic signs.
- h) To take all necessary mitigation measures to minimize negative impacts on the environment as a preventive measure, such as controlling drainage, erosion and sedimentation.

## 4 DESIGN STANDARDS MINIMUM STANDARDS FOR PRIVATE ROAD CONSTRUCTION

The design and construction of private roads and all municipal services must comply with the following standards:

- Subdivision by-law number 193-2012 and its amendments.
- The Environmental Quality Act, directives 001, 004 and all others applicable from the Ministry of Environment and the Fight against Climate Change (MELCC).
- The urban planning by-law in effect at the time of filing of the project documents.
- The present by-law.
- Ministry of Transport of Quebec standards for road construction, volumes I, II and III, as well as the general specifications (CCDG).
- Bureau de normalisation du Québec (BNQ) standards.
- AQTR's Canadian geometric road design standards.
- Good engineering practice.
- Sketches appended to the by-law.

Any reference to regulations, standards, directives or laws must refer to the most recent version. In the event of contradiction between regulations, standards, directives and laws, the safest standard must be applied.

## 4.1 STAKING OF ROAD

Before beginning construction work, the applicant must have permanent metal markers (monuments) installed by a land surveyor on each side of the road at intervals of no more than 150 metres, as well as at the beginning and end of each curve, at tangent points and when the right-of-way line is broken.

Any survey monuments removed must be reinstalled by a land surveyor, at the applicant's expense. These requirements also apply when a road is retroceded to the Municipality by its owner(s).

#### **4.2 LAYOUT STANDARDS**

## 4.2.1 ROAD LAYOUT

#### a) Nature of soil

In addition to respecting the natural topography of the site as much as possible, the street layout must avoid peat bogs, marshy ground, unstable ground and any land unsuitable for drainage or exposed to flooding, scree, subsidence or other ground movement.

Street alignments must also avoid any area where the thickness of loose deposits or friable rock is insufficient to permit the digging of trenches required for the passage of public utility pipes.

#### b) Wooded areas

Street alignments must avoid areas where wildlife habitats and other sensitive environmental components are present, such as a white-tailed deer containment area and a heronry.

#### c) Watercourses

The minimum distance between the limits of a street right-of-way and the high-water mark of a watercourse is 75 m.

In the case of the completion of a road network providing access to a body of water or crossing a watercourse, the minimum distances prescribed in paragraph 1 do not apply. However, a minimum distance of 300 m must be maintained between 2 crossings.

When a new street is to be connected to an existing street over a distance not exceeding 300 m, the minimum distance between the limits of the street right-of-way and the high-water mark of a watercourse may be reduced to 15 m.

The provisions of the present article do not apply to a street leading to a landing, bridge or water crossing. The street must be designed so as not to encroach unnecessarily on the 75 m strip, and to run as close as possible to perpendicular to the watercourse.

The minimum distance between a new logging road and a watercourse or lake is 60 m.

The distance between a street or logging road and a watercourse is calculated horizontally from the limit of the street right-of-way and the high-water mark of the watercourse.

#### d) Topography

No street may be built on a lot with a transverse slope greater than 30%.

In areas with slopes between 15% and 30%, the layout must follow natural curves, avoiding straight lines.

## 4.2.2 RIGHT-OF-WAY

The minimum right-of-way for a local street is fifteen (15) metres and twenty (20) metres for a collector street.

## **4.2.3 INTERSECTION ANGLE**

The following standards apply to the corner of intersections:

1. The angle of intersection between two streets must be at right angles  $(90^{\circ})$ . In cases where the physical characteristics of intersections do not permit this, a maximum deviation of 20 degrees is authorized. In all cases, the alignment must be maintained over a minimum distance of 30 m, calculated from the center of the intersection.

2. The centerlines of intersections between two streets leading onto the same collector street must be at least 75 m apart.

However, on Route 327, the minimum distance between an intersection planned for the opening of a new street and an intersection existing on April 29, 2009 is 450 m.

3. The axes of intersections between two streets fronting on the same local street

## **4.2.4 SLOPE**

The following standards apply to street slopes:

- 1. The minimum longitudinal slope of any street is 0.5%.
- 2. The maximum longitudinal slope of streets is:
  - a) 5% for a collector street.
  - b) 10% for a local street.

3. The maximum longitudinal slope of a local street may be increased to 14%, over a maximum distance of 100 m, if topography so requires. The slope preceding this section may not exceed 8% over a minimum length of 50 m.

4. In all cases, the slope of a local street may not exceed 3% within the first 20 m of the radius of an intersection.

5. The slope of a collector road may exceed the standard prescribed in paragraph 2 by 3% within the first 30 m of the radius of an intersection.

## **4.2.5 MISCELLANEOUS**

Each layer of road subgrade must be graded and compacted to obtain a minimum cross slope of 3% from the center to the ditches, except on sharp curves where a different slope may be proposed in accordance with the provisions of Canadian geometric road design standards.

## 4.2.6 SPEED-DEPENDENT CURVES

All future roads must be designed to have a minimum curve radius of 50 metres if the desired posted speed is 30 km/h, and 85 metres if the posted speed is 50 km/h.

## 4.2.7 CUL-DE-SAC STREET

A cul-de-sac street must terminate with a turning island or turning circle whose rightof-way diameter must not be less than 30 metres.

## 4.2.8 PIPE-HEAD STREET

The construction of a pipe-head street must comply with the following conditions:

1. The maximum length of the entrance street is 250 m.

2. The length of the pipe-head street may not exceed 850 m, excluding the entrance street.

3. A carriageway with a minimum width of 5 m, serving both as a footpath and an escape route, must link the pipe head street to another street.

## **4.3 EARTHWORK**

## **4.3.1 SITE PREPARATION**

The site for the road must be prepared as follows:

- a) Vegetation cover, stumps and roots, rocks (200 to 300 millimetres in diameter within the first 300 millimetres below the subgrade line, rocks larger than 300 millimetres in diameter within 600 millimetres below the subgrade line) and other such materials must be removed across the entire width of the base of the road subgrade, and the excavation filled with materials similar to the surrounding natural soil and free of rocks.
- b) If the road alignment crosses a wetland or peat bog, the construction method must be defined by an engineer.
- c) Ditches must be built to a regular profile to allow water to always run off. They must be free of stones, branches and other objects that could impede water flow. Ditches must be able to drain into lower ditches or watercourses.
- d) Road shoulders likely to cause erosion must be paved.
- e) The right-of-way must be completely free of debris, garbage, piles of earth, rocks, branches and other obstacles.
- f) Any land adjoining a road must be higher than the road. All owners must ensure that surface water from their parking lot drains into the ditch. Under no circumstances may water from the lot drain onto the road.

#### 4.3.2 EXCAVATION SURPLUS

Any surplus material must be transported, placed and spread out in a suitable manner at locations agreed upon with the engineer and the owner. If the owner does not wish to retain surplus excavated material, the contractor shall dispose of it.

If excess excavated material is deposited on land not owned by the owner or the contractor, the latter must provide the Municipality and the engineer with a letter from the owner of the site to the effect that he accepts the material and releases the contractor, the owner, the engineer and the Municipality from any disputes that may arise from the fact that excavated material has been transported and deposited on his land and that he has obtained all required authorizations and permits.

#### 4.3.3 ENVIRONMENTAL PROTECTION

Throughout the duration of the work, the contractor shall take, and ensure that all persons under his jurisdiction take, all necessary measures to maintain the protection of the environment, and in particular, but without limitation, the following items:

- All existing vegetation on the project site must be preserved, such as bushes, trees, lawns and other vegetation which, in the opinion of the engineer, does not interfere with the work, or else we will be forced to carry out redevelopment work (such as tree planting, seeding, compensatory measures, etc.).

- The use of pesticides, herbicides and insecticides is prohibited.

- The contractor must, for the duration of the work, use recognized industrial control methods to avoid or curb the production of dust, noise and smoke, as well as any air pollution on the site.

- Whenever necessary, or at the request of the engineer, owner or designated official of the Municipality, the contractor must apply dust suppressant (excluding water). Failure to do so may result in such spreading being carried out at the contractor's expense.

- At all times, machine tools and tracked vehicles (except rubber tracks) are prohibited on all roads with asphalt pavement, unless wood plywood with a minimum thickness of <sup>3</sup>/<sub>4</sub> inch or rubber mats with a minimum thickness of <sup>3</sup>/<sub>4</sub> inch are laid on the ground to prevent damage to the asphalt. Any offender will be systematically subject to the fines provided for in the present by-law. Also, the cost of repairing damaged paving will be borne by the offender.

- It is forbidden to carry out construction work between 7 p.m. and 7 a.m. that generates noise from machinery or specialized equipment.

In addition, the contractor must comply in all respects with the environmental guide for work related to the Water Treatment Program of Quebec issued by the MELCC, Water Quality Branch in 1985, with subsequent revisions.

## 4.3.4 MATERIAL REMOVAL AND SITE CLEAN-UP

Upon completion of all work, the contractor shall remove all rubble to a site approved by the engineer and clean up the site within 7 days.

## **4.4 ROAD STRUCTURE**

## **4.4.1 COLLECTIVE STREET**

The minimum width of the roadway is 7 m, with 1 m shoulders. The pavement structure must meet the following minimum requirements:

- <u>Sub-base</u>: 300 mm thick MG-112 material. All materials, whether in place or not, may be considered as long as a soil laboratory accredits the material as MG-112. The engineer must, depending on the "natural" soil conditions of the site, justify that this layer is not required when applicable.
- <u>Lower foundation</u>: 250 mm thick, MG-56 diameter crushed stone. The engineer may, depending on the "natural" soil conditions of the site, justify that this layer may be less than 250 mm.

• <u>Upper foundation</u>: 200mm thick MG20 crushed stone.

The above-mentioned sub-base and lower and upper foundation layers must be compacted separately to 95% of the modified "Proctor".

The grading of the various materials must comply with standard NQ 2560-114. Grades specified in the General Specifications and Estimates (CCDG) of the Ministry of Transport of Québec.

A copy of the grading analysis and compaction tests must be submitted to the Municipality and/or the engineer. Upon presentation of calculations certified by a soils engineer, the Municipality may, if it deems appropriate, accept a different structure, provided it is shown that the bearing capacity of the proposed structure is equal to or greater than that required by the present by-law, all in accordance with the type of soil on which the road structure rests.

The Municipality reserves the right to require, under certain conditions, the paving of shoulders, gutters, windrows and curbs. The shoulder will be 1 m wide on each side of the pavement, with a 5% slope.

#### **4.4.2 LOCAL STREET**

The minimum width of the roadway is 6 m with 0.5 m shoulders. The pavement structure must meet the following minimum requirements:

- <u>Sub-base</u>: 300 mm thick MG-112 material. Any material, in place or not, may be considered as long as a soil laboratory accredits the material as MG-112. The engineer must, depending on the "natural" soil conditions of the site, justify that this layer is not required when applicable.

- Lower foundation: 200 mm thick MG-56 crushed stone.
- <u>Upper foundation</u>: 200mm thick MG-20 crushed stone.

The above-mentioned subbase, lower foundation and upper foundation layers must be compacted separately at 95% modified Proctor.

The grading of the various materials must comply with NQ 2560-114.

A copy of the grading analysis and compaction tests must be submitted to the Municipality and/or the engineer. Upon presentation of calculations certified by a soils engineer, the Municipality may, if it deems it appropriate, accept a different structure, provided it is shown that the bearing capacity of the proposed structure is equal to or greater than that required by the present by-law, all in accordance with the type of soil on which the road structure rests.

The Municipality reserves the right to require, under certain conditions, the paving of shoulders and the installation of gutters, windrows and curbs.

#### **4.4.3 BITUMINOUS SURFACING**

Bituminous paving must be supervised by a recognized soil laboratory approved by the Municipality. Parameters to be monitored include: asphalt mix conformity, paving rate, asphalt mix temperature during paving, asphalt mix joint temperature before and during paving of the 2nd span, asphalt binder spreading and all other requirements established within BNQ and/or CCDG standards.

A layer of crushed stone MG-20, MG-20b or GBR (on steep slopes only) will be laid, graded and compacted to 95% of the modified Proctor, on the shoulder to reinforce the bituminous pavement. Crushed stone must not be deposited on the bituminous pavement and spread with a grader on the shoulder in such a way as to damage the pavement or reveal grooves. Any saw cuts in the paving must be made in a straight line.

#### 4.5 ROAD DRAINAGE

#### 4.5.1 DITCHES AND EMBANKMENTS

Ditches must be dug using an appropriate bucket with blade (without teeth/when the nature of the soil permits) on each side of the road with a minimum longitudinal slope of 0.5% to allow free flow of surface water. The profile of ditches must be such that no stagnant water remains in them. Ditches must have a minimum depth of 800 mm. Ditch side slopes must not exceed 1.0V for 1.5H. Maintenance easements in favor of the municipality must be provided if the top or bottom of the slope exceeds the right-of-way. In addition, retaining walls must be provided to minimize slopes.

Where private land is lower than the level of the proposed ditch bottom, an embankment must be built to retain water within the ditch. This embankment must be stabilized and able to withstand heavy rainfall.

During and after construction, all necessary measures must be taken to ensure that surface water drains away without eroding or washing away fine particles. This implies the installation of sedimentation basins and sediment barriers at the appropriate locations, as indicated on the plans submitted.

To this end, the contractor must take the necessary measures and build the necessary facilities to prevent material and/or fine particles from polluting watercourses or constituting substances or materials harmful to the life of aquatic flora and/or fauna.

The developer is required to stabilize ditch embankments with H-3 hydroseeding (native species) on 100 mm of topsoil, within a maximum of 14 days of completion of the roadway structure. In unstable areas, biodegradable netting with mulch will be installed, as recommended by the engineer.

In addition, for any ditch with a slope greater than 8%, the bottom of the ditch must be graded with 100 to 200 mm crushed stone, 300 mm thick, and fitted with velocity sills when the slope exceeds 8%. The junction between the slope of the ditch and that of the surrounding land must be rounded. In certain steeply sloping areas, a paved gutter, at the limit of the paving, may be required at the natural outlets of surface water, to prevent erosion of shoulders and slopes. If an existing ditch must be reshaped, the lower third technique must be used.

Whenever surface or channelled drainage water from the right-of-way destined to become municipal is directed towards or onto private property, a minimum 6-metrewide drainage and maintenance easement must be granted to the Municipality when the road is retroceded.

#### 4.5.2 CULVERT

When a culvert is installed, its end must be stabilized to prevent erosion.

The proposed street right-of-way includes the extra widths required to ensure vegetation recovery on the slopes created on either side of the roadway, shoulders and drainage ditches.

All culverts must be designed for a minimum recurrence of 1 in 25 years (including private driveways). They must be HDPE (high-density polyethylene) with a smooth Class 320 interior, with a minimum width of 6 metres and a maximum width of 9 metres for residential driveways and 11 metres for commercial or industrial driveways. For commercial driveways longer than 11 metres, a manhole must be installed for maintenance purposes.

Transverse culverts crossing the roadway must be at least 12 metres long and have a minimum diameter of 450 mm, HDPE class 320. If a culvert is longer than 30 metres, an access shaft approved by the Municipality must be installed every 15 metres.

Where significant water flows are anticipated, culverts must be of sufficient diameter not to delay the flow of these flows.

Culverts must be installed in accordance with the sketch appended to the by-law.

There must be no standing water upstream or downstream of the culvert.

Culverts at private entrances are the responsibility of the owner of the property served and must be installed or replaced by the owner. Driveway slopes must not encroach into the road right-of-way. Driveway slopes may only begin at the property line.

#### **4.6 PROVISIONAL SIGNAGE**

The contractor must provide all necessary signage (barricades, descriptive signs, light signals, flagmen, beacons, fences, etc.) when carrying out work near or on the road, in accordance with the Regulation respecting road signage issued by the Ministère des Transports du Québec on November 24, 1989 and all subsequent amendments (Highway Safety Code L.R.Q., c. C-2a.289), as well as occupational health and safety standards.

Should the signage prove inadequate or non-compliant, the Municipality will proceed with the installation of all necessary signage at the expense of the contractor and the promoter, for as long as the signage remains non-compliant.

The contractor must always maintain traffic flow and access to property entrances. The contractor is responsible for notifying in writing all emergency services and other road users (firefighters, police, school bus, public transit, Canada Post, Chamber of Commerce, garbage and recycling collection, etc.) in the event of mandatory road closure. No road closure may be carried out without the prior authorization of the Municipality and its approval of the proposed signage plan.

#### **4.7 RESTRAINT SYSTEMS**

The engineer must refer to Volume 1 of the Standards of the Ministry of Transport of Quebec, entitled Road Design (Conception Routière), regarding the justification for the installation of a restraint system (guardrails). The Municipality reserves the right to require, under certain conditions, the installation of a safety element where it deems it necessary.

## **5 CESSION AND MUNICIPALIZATION OF ROADS**

## **5.1 OBLIGATION TO MUNICIPALIZE**

Neither the acceptance of the principle of construction of a road, nor the acceptance of the construction plans and specifications, nor the inspections that may be carried out by any municipal officer or his authorized representative during the execution of the work shall constitute an obligation on the part of the Municipal Council to accept the cession and municipalization of a road.

## **5.2 CRITERIA FOR THE MUNICIPALIZATION OF A ROAD**

Roads built prior to the adoption of this by-law need not comply in full with the clauses of this new by-law or any subsequent road construction by-law in order to be considered for municipalization. However, all roads built after the adoption of the present by-law will have to comply with all applicable clauses of the by-law in force at the time of construction of the said road.

## **5.3 CONDITIONS**

For roads built before the adoption of the present by-law, it will have to be demonstrated by an engineer that the structural capacity of the road meets the minimum requirements in keeping with its intended use. In addition, the slope of the road must not exceed 15% in any section, it must be built within a right-of-way at least fifteen (15) metres wide, and visibility angles must respect minimum distances to ensure the safe circulation of road users.

The Municipality will consider municipalizing a road only when maintenance work considered usual is required once the transfer has been completed.

When construction work (paving, change of profile or alignment, reconstruction of the structure, blasting, ditching, installation of culverts, etc.) is required, it may be carried out, following written agreement with the owners or residents, at the expense of the applicant(s), either by means of a lump-sum payment or a local improvement tax for the sector benefiting from the work. No road will be municipalized and maintained by the Municipality until final acceptance of the work has taken place and the engineer responsible for supervising the work has issued a certificate of compliance.

The assignor(s) must provide the Municipality with a cadastral plan of the right-ofway of the road to be assigned, as well as an "as-built" plan of the infrastructure, all prepared by a professional. In addition, permanent metal markers (milestones) must be installed by a land surveyor, at a minimum distance of 150 metres from each other, as well as at each street intersection and at each change of alignment (beginning and end of curve).

## **5.4 TRANSFER**

The acquisition of the road is entirely at the discretion of the Municipal Council, which may require the transfer of the road upon simple request, or never request such a transfer, in which case the road will remain private.

The owner of the land must transfer the road to the Municipality by notarized contract for the nominal sum of one dollar (\$1). All costs relating to this transaction will be borne by the assignor.

The following documents must be provided to the Municipality before both parties sign the notarial deed attesting to the municipalization of a road:

- Certificate of location and technical description from a land surveyor showing that all infrastructures, including ditches, embankments and any other constructions, are within the road right-of-way.
- As-built" plan in 3 hard copies and computer format.
- Certificate of compliance from consulting engineer.
- Final receipt from contractor and subcontractors.
- Cadastral plan.
- Servitudes for drainage of proposed works and other related equipment.
- Draft notarial deed.
- Final acceptance of the work by the designated official.

- A minimum warranty, following final acceptance of the work, of twelve (12) months for underground services (water, sanitary and storm sewer systems), earthworks and shoulders, and twenty-four (24) months for sidewalks and curbs. During the warranty period, the owner must maintain the work performed in good condition.
- Where paving is required as the final surface of the street, a three (3)-year warranty against any cracks appearing in the pavement from the time the final layer of paving is in place. The warranty shall be in the form of a certified cheque for ten percent (10%) of the actual cost of the bituminous surfacing. Cracks must be sealed in accordance with the designated official's instructions, using a treatment recognized and approved by the latter.

## **5.5 ACCEPTANCE**

The Council of the Municipality of the Township of Harrington may refuse any road if it deems that the owner has not complied with the standards required by this bylaw.

No road will be accepted between November 1st and May 1st of each year.

#### **6 PENAL PROVISIONS AND COMING INTO FORCE**

Any person who contravenes the provisions of this by-law commits an offence.

#### **6.1 PENAL SANCTIONS**

Cumulatively or alternatively, the Municipality may also take penal action to enforce compliance with its by-law.

Any person acting in contravention of the present planning by-law commits an offence and is liable to a fine of not less than one thousand (\$1,000) dollars, and not less than two thousand (\$2,000) dollars for a legal person, plus costs.

In the event of a repeat offence, the fine may be increased to two thousand (\$2,000) dollars for a natural person and four thousand (\$4,000) dollars for a legal entity, plus costs.

If an offence lasts more than one day, the offence committed on each day constitutes a separate offence and the penalties enacted for each offence may be imposed for each day that the offence lasts, in accordance with the present by-law.

#### **6.2 APPLICATION OF PENALTIES**

Council generally authorizes the Director General, the Director of the Public Works Department, the Foreman of the Public Works Department, the Director of the Urban Planning and Environment Department, as well as any Building and Environment Inspector, to undertake penal proceedings against any contravener of any of the provisions of the present by-law, and consequently generally authorizes these persons to issue any statements of offence useful for this purpose.

The Municipality may, for the purposes of enforcing the provisions of this by-law, exercise cumulatively or alternatively, with those provided for in this by-law, all appropriate recourses of a civil or penal nature and, without limitation, the Municipality may exercise all recourses provided for in articles 227 to 233 of the Act respecting land use planning and development (R.S.Q., chapter A-19.1).

## **6.3 COMING INTO FORCE**

This by-law will come into force in accordance with the law.

Gabrielle Parr Mairesse Steve Deschênes Directeur général et Greffier-trésorier

Notice of motion:	15 juillet 2024
Adoption of draft by-law:	15 juillet 2024
Transmission of the certified copy to the	n/a
MRC:	
Notice of Public consultation meeting (7 days	n/a
prior):	
Public consultation meeting:	n/a
Adoption of the second draft:	n/a
Transmission of the certified copy to the	n/a
MRC:	
Register notice (5 days prior):	n/a
Record-keeping register:	n/a
Adoption of by-law:	
Transmission of a Certified copy of the by-	n/a
law to the MRC:	
Entry into force of by-law (acceptance of	
certificate of conformity):	
Avis entrée en vigueur-Transmission MRC	n/a
copie certifiée conforme :	

## **ANNEXE 1**

## CROQUIS

