

CORPORATION OF THE UNITED TOWNSHIPS OF HEAD, CLARA & MARIA
ROAD CONSTRUCTION MINIMUM STANDARDS
SCHEDULE "A" TO BY-LAW 2008-06

1. POLICY PURPOSE

This policy establishes minimum standards for the construction of new and upgrading of existing municipal highways within the Municipality of the United Townships of Head, Clara & Maria; and sets guidelines for the use of unopened road allowances, seasonal roads and private/cottage roads. The goal of this policy is:

- a) to ensure consistency in the construction of new and upgrading of existing municipal highways;
- b) to ensure adherence to the official plan;
- c) to ensure that proponents build new municipal highways to a minimum municipal standard;
- d) to avoid passing any new development costs to ratepayers of the municipality;
- e) to ensure that proponents upgrading existing seasonal or private roads to municipal highways abide by a minimum municipal standard;
- f) to control the means by which the municipality may assume private/cottage or seasonally maintained municipal roads to provide fairness and consistency; and
- g) to control the use and development of unopened road allowances;

2. DEFINITIONS

- a) Municipal Highways – Roads and streets that have been assumed by the municipality, and are maintained year round by the municipality.
- b) Seasonal Roads – Roads and streets that have been assumed by the municipality, and are maintained only during the summer months (April to mid-November) usually for cottage/camp access.
- c) Private/cottage Roads - Roads and streets that have **not** been assumed by the municipality, which provide access by means of a registered right-of-way to private property; the use and maintenance of which is the responsibility of the abutting land owners.
- d) Proponents – Developers, residents, or ratepayer or other associations who are building a new road or street under a subdivision agreement, or land severance or are upgrading or requesting the municipality to upgrade an existing seasonal or private road to a municipal highway.

3. POLICY

It is the intent and policy of the Corporation of the United Townships of Head, Clara & Maria:

- a) to provide minimum construction standards for all municipal highways, and seasonal roads within the Municipality.
- b) to provide standard guidelines for all private/cottage roads within the Municipality.
- c) to apply consistently the minimum standard to ensure the quality of new road construction and the upgrading of existing roads to municipal highways.
- d) to ensure that all proponents are held to the same standard of quality.
- e) to maintain ownership and control of unopened road allowances except in specific circumstances as outlined in the following guidelines.
- f) to not assume responsibility for or maintenance of any private/cottage road except as outlined below. Should Council ever deem it necessary to assume such a road, it must first be brought up to municipal standards as detailed in Schedule "B".
- g) to not assume on a year round basis any seasonal road. Should Council ever deem it necessary to assume, on a year round basis, such a road, it must first be brought up to municipal standards as detailed in Schedule "B".

Municipal Road Allowance

It is the Council's preference to not allow improvements to municipal road allowances that are not maintained unless the following occurs:

- a) the Municipality declares the road allowance surplus and the municipal road allowance is stopped up and sold in accordance with the provisions of the *Municipal Act, 2001 as amended*; or
- b) the road is brought up to a municipal standard and assumed by the Municipality for maintenance purposes; or
- c) the proponents of the road allowance improvements enter into legal agreement with the Municipality that includes provisions for indemnification of liability, signage and liability insurance;
- d) that a professional engineer's report be submitted to the Municipality confirming that the remedial work proposed would not adversely affect adjacent land or cause environmental concerns; and specifically
- e) that any wetland crossings are the subject of an assessment by a qualified biologist to demonstrate that there are no adverse environmental impacts.
- f) The above also applies to any crossing of an unopened Municipal road allowance.

Municipal Road Standards

- a) The Municipality shall only assume and maintain new roads or existing private roads following a petition of Council and if the road is first brought up to the standards of the Municipality as outlined below.
- b) The Municipality must be convinced that the assumption of a new road or an upgraded road is in the best interest of the public before it commits to the assumption of the road.
- c) The Municipality may consider waterfront development on a private road where it may be demonstrated that a publicly assumed and maintained road is not necessary for the appropriate development of the Municipality as per our zoning by-law and the Official Plan.
- d) The Municipality may consider imposing seasonal and private/cottage road standards where it is deemed appropriate for development designed for seasonal or private/cottage use only.
- e) Year round road service will not be provided on seasonal roads or private/cottage roads until formally assumed by Council and until such roads are upgraded to the road standards as detailed in Schedule "B" to this policy, at the expense of the benefiting property owners.

Private/Cottage Roads

- a) Council may only assume private/cottage roads if they are upgraded to the appropriate standard as detailed in this policy, if the proponent provides, at their own cost, an accurate and current legal survey, and if Council deems it in the best interest of the public.
- b) New private/cottage roads may be considered to access new shoreline development so long as it is clearly understood that the Municipality has no responsibility for the maintenance of the road and is not responsible for the delivery of services to the same extent as would be the case for lands directly abutting a year round, publicly maintained road. For example, garbage collection would occur where the private road intersects with the Municipal road, not in front of each home as along municipal roads.
- c) In considering the establishment or extension of new private/cottage roads for severance purposes, Council will have regard for the purpose of the road, its length, the number of users, the anticipated changing status of the road, liability, minimizing any negative impact on the natural environment and any relevant construction or

operational standards including safety and entrances.

Colonization and Deviation Roads

- a) The Municipality will not recognize any former colonization road or deviation road as a publicly maintained road for the purpose of this policy notwithstanding that it retains ownership of the roadbed.
- b) The Municipality must have been maintaining a roadway year round on a regular basis for the road to be recognized as a year round publicly maintained road.
- c) Where the Municipality realigns an existing road, the former roadbed will be conveyed to the abutting land owners in accordance with the *Municipal Act*.

4. SCOPE

- a) This road construction minimum standard policy applies to all streets/roads within the Municipality of the United Townships of Head, Clara & Maria that are Municipal highways under the *Municipal Act*, 2001, S.O. 2001, c. 25 as amended, section (26) (31). The policy further applies to all new subdivision and/or private/cottage roads, all existing seasonal roads and all unopened road allowances.
- b) All subdivision agreements will include conditions that will ensure new roads meet the construction minimum standard and conditions of the Official Plan.
- c) This policy also applies to the upgrading of seasonally maintained municipal roads and private roads to municipal highways. All costs of such upgrades will be borne by the abutting land owners.

5. RATIONAL

The Municipality of the United Townships of Head, Clara & Maria is a rural municipality with many roads accessing waterfront properties. There is an increasing demand for waterfront and water view development. Many of the current roads are seasonal and/or private roads, and as development continues and land transfers occur, there will be a demand for the municipality to upgrade and/or assume these roads.

Private roads are the principal means of access for a large number of waterfront property owners. Aside from setting the width of rights-of-ways and suggesting construction standards, the Municipality has no jurisdiction over private roads. With the shift to market value assessment, the shoreline tax base pays a significantly larger portion of the Municipality's tax base. There will eventually be pressure placed on Council to assume some of these private roads.

The construction minimum standards policy will establish how the municipality will control road construction standards as well as determine who will be responsible for the costs associated with achieving these standards.

It is the intent of the Council of the United Townships of Head, Clara & Maria to protect the municipality and its residents from incurring tax increases to finance road construction and upgrades that are the responsibility of developers, and in some cases residents whose properties are abutting and/or accessed by seasonal and private roads.

6. ROAD CLASSIFICATION

- a) The class of road will be determined by the MTO standards for Highway Maintenance Priority Class Categories by using a traffic volume count and applicable speed limits. The assumed speed limit for all municipal roads is 50 km per hour unless otherwise posted as detailed in by-law number 2003-05.

- b) Based on the average annual daily traffic (AADT) count, to date, all highways/roads within the Municipality receive, on a yearly average, more than 0 and less than 199 vehicles per day and are therefore categorized as either class 5 or class 6 highways.

7. APPROVAL OF CONSTRUCTION

Before commencement of any work, the proponent shall provide proof to the Municipality that the Contractor is qualified, experienced and has the equipment and personnel to successfully complete the work. Furthermore, the proponent shall obtain all necessary permits and approvals as required. Construction or installation of services shall not take place until the proponent has obtained all necessary permits and approvals, and has complied with all requirements as outlined by the Road Superintendent or his designate.

8. PLANNING

- a) Plan and Profile Drawings
Plan and profile drawings are required for all roads, blocks, easements, and reserves. All road allowances, lots, blocks, easements and reserves are to be shown and identified in the same manner as the Registered Plan. Drawings are to be prepared so that each street or road can be filed separately. Street or road names are to be identified on the plan. All engineering drawings shall be dated and stamped by a Professional Engineer.
- b) Drainage
The proponent agrees to carry out all drainage and grading works necessary in the opinion of the Road Superintendent or any agent for the Municipality to provide for proper drainage of all lands included in the work plan. A drainage study may be required depending on the length of road in question, soil conditions and the topography of the land. Requirement for a drainage study is at the discretion of the Road Superintendent or his designate.
- c) As Constructed Plans
The proponent shall provide immediately upon completion of the work an acceptable, original, final set of "as constructed" plans of said work conforming to the Municipal standards, to the Clerk of the Municipality.

9. MINIMUM STANDARDS FOR YEAR-ROUND MUNICIPAL ROADS AND STREETS

Flat or Gently Rolling Terrain

(For specifics for Year-round Municipal Roads - Steep or Rocky Terrain, Seasonal Roads or Private/Cottage Roads, please see Schedule "B" attached.) All measurements in metric have been roughly converted to imperial for ease of reference and are not accurate conversions.

- a) Right of Way
The road right of way is to be properly surveyed and dedicated to, or owned by the Municipality of the United Townships of Head, Clara & Maria, and is to be a continuous minimum width of 20.0 metres (66 ft)..

The Municipality will advise the developer whether a vehicle turn-around is required at the end of the road. If required, it will be constructed to standards as outlined below. The minimum clearance width shall be 12 metres (40 ft).

- b) Platform Width

The overall width of the road is the sum of the surface width and twice the shoulder width. The platform width of the road is 5.5 metres (18 ft) plus 2 – 1 metre (3 ft) shoulders, or 7.5 metres (24 ft) total.

c) Surface Width

The surface width is considered the driven portion of the road which does not include the width of the shoulder. The surface width shall be 5.5 m (18 ft). The surface is to be covered by a minimum depth of 100 mm (4 in) after compaction of granular “A” crushed gravel measured at all points on the roadway.

d) Shoulder Width

Each of the two shoulders shall be a minimum width of 1 metre (3 ft). These shoulders shall be covered by a minimum depth of 100 mm (4 in) after compaction of granular “A” crushed gravel measured at all points on the shoulder.

e) Depth of Granular Base

The depth of granular base material, which is the material below the surface course of crushed gravel, shall be placed to a minimum depth of 200 mm (8 in) of pit run gravel, depending on the sub-grade material which is the original ground in its natural state. The Municipality reserves the right to increase the depth of granular base after consideration of the sub-grade material in the proposed road construction site.

f) Ditches

The depth of the ditch in a cut section is determined by measuring the difference from the crown or center of the road to the bottom of the ditch using a string level and the minimum depth is to be .5 metres (18 in) including sections of roads on the crests of vertical curves.

Minimum width between the centers of the ditches shall be 9 metres (30 ft). All ditches are to be carried to a sufficient outlet. The depth of the ditch may be required to be greater than .5 metres (18 in) to carry the drainage to a sufficient outlet. A drainage easement will be required for all drainage ditches outletted across private property regardless of whether a natural drain exists.

g) Culverts

The culverts are to be approved corrugated steel pipe, concrete or plastic and are to be a minimum diameter of 400 mm (16 in) or larger as required and directed by the Road Superintendent and as per our driveway and culvert policy. Culverts shall be covered with a minimum of 450 mm (18 in) of appropriate cover. Culverts shall extend 300 mm (1 ft) beyond the toe of the slope (minimum slope of 1.5:1).

h) Entrances

Any culvert placed on an entrance on the road right of way is to be a minimum of 300 mm (12 in) in diameter or larger as required, minimum entrance width is to be 5 metres (16.5 ft) or other as directed by the Road Superintendent.

The culvert must be of sufficient diameter to maintain free flow of water in the ditch and must be properly installed in order to avoid future maintenance problems. When the upstream culvert is larger than the minimum standard,

the entrance culvert must be at least the same diameter as the upstream culvert in order to avoid “bottlenecks”.

The length of the entrance pipe will be determined by the Road Superintendent. Each entrance must be designed, constructed and maintained in a manner that will prevent surface water from being discharged from the property onto the road.

- i) Alignment
The horizontal and vertical alignment of the road is to be such that a grader and other equipment can operate effectively. The maximum grade of the road at any point is 12%.
- j) Guardrails
Guardrails will be installed where the distance from the bottom of the ditch or drop-off immediately adjacent to the shoulder of the roadway exceeds 3 metres (10 ft).
The length of the guardrail will be determined at the discretion of the Road Superintendent or his designate.
- k) Turn-arounds
All turn arounds will have:
 - i. A 13 metre (43 ft) minimum radius (including 1 metre (3 ft) shoulder);
 - ii. “No Parking” advisory signs posted;
 - iii. Proper ditches as required (as per schedule “A” attached);
 - iv. A designated 35 metre (115 ft) right of way;
 - v. Center of turn-around filled in with appropriate road base material;
 - vi. Minimum base of granular material same as roadway base.
- l) Surface Type
All roads with a classification of 5 or 6 (less than 200 vehicles per day) will be gravel surface.

All roads with classification of 4 or better (200 or more vehicles per day) will be hard surfaced with low-cost bituminous surface.

10. AUTHORITY

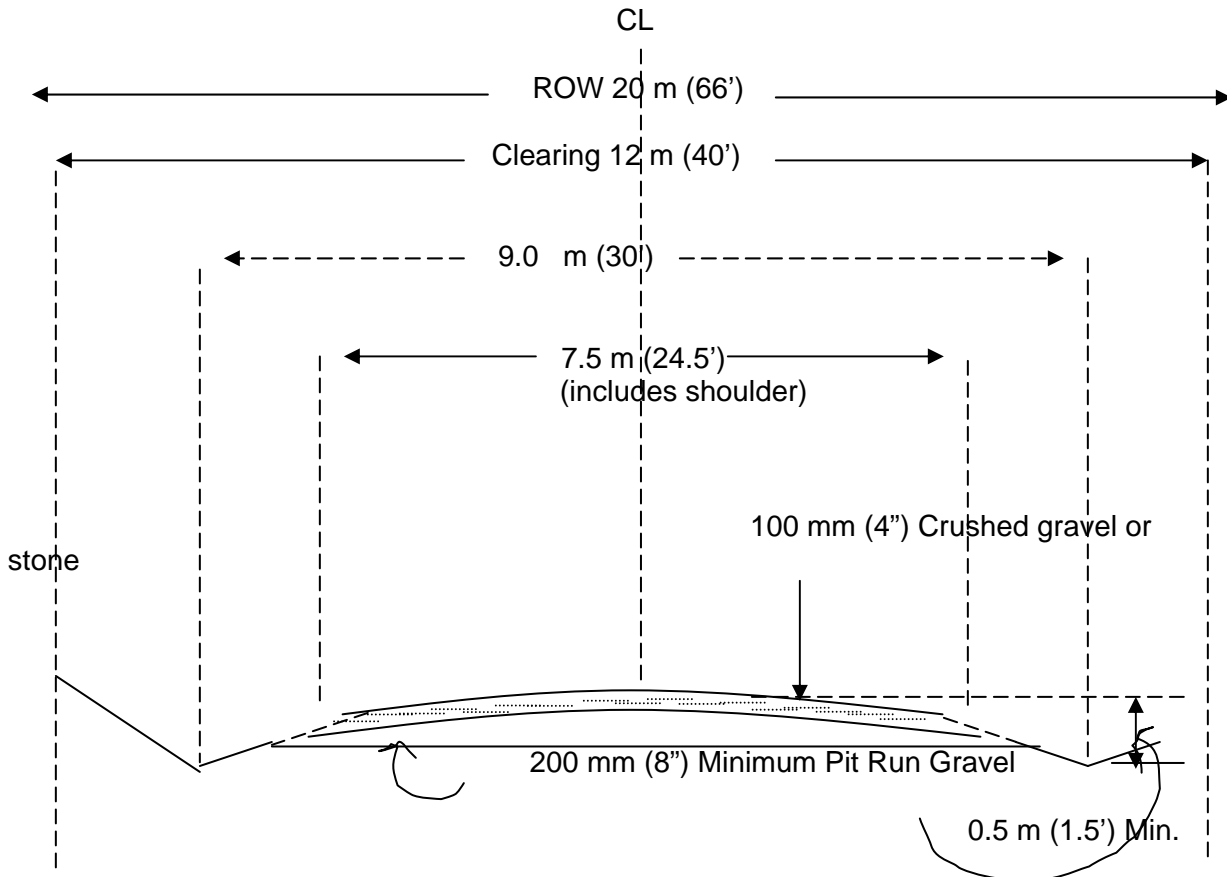
Authority to control street/road minimum standards is derived from section 26, 31, and 44 of the *Municipal Act*, 2001, S.O. 2001, c. 25 as amended.

SCHEDULE 'A'
MUNICIPALITY OF THE UNITED TOWNSHIPS OF HEAD, CLARA & MARIA
MINIMUM ROAD STANDARD

In the interest of uniformity, it is hereby advised that the minimum standard to which any road must be built before it can be absorbed into the Municipal Highway system is as shown below. These are the minimum standards required for a low volume of traffic - standards will increase as the traffic increases, for instance in subdivision roads. Proponents, prior to entering into an agreement with private interests and before construction of roads, should consult the municipality as to what standards are applicable to each particular area before the municipality will even consider assuming the road.

| | |
|---|--------------|
| Right-of-Way (ROW) of at least 20m (66') dedicated to public use (10 m (33') each side from center line of road) | 20m (66') |
| Width of Clearing | 12m (40') |
| Width of traveled portion (incl. Shoulder & rounding) | 7.5m (24.5') |
| Width between ditches | 9m (30') |
| Depth from Crown of road to ditch bottom | 0.5m (1½') |
| Total depth of granular surface (4" crushed granular/ plus 8" pit run) | 300mm (12") |
| Culverts, either corrugated iron, plastic or concrete, minimum..... | 400mm (16") |

- All ditches must be carried to a sufficient outlet
- Alignment-must be such that maintenance equipment can work effectively.
- Turnarounds – must be set out as above



SCHEDULE "B"
MUNICIPALITY OF THE UNITED TOWNSHIPS OF HEAD, CLARA & MARIA
MINIMUM ROAD STANDARDS CHART

| Road Construction Standards | Year-Round Maintained Roads, Flat or Gently Rolling Terrain | Year-Round Maintained Roads, Steep and/or Rocky Terrain | Seasonally Maintained (Summer) Roads | Private (Cottage) Roads Suggested Guidelines |
|---|--|--|---|---|
| Right-of-way | 20 m (66') | 20 m (66') | 20 m (66') | 20 m (66') required |
| Minimum Clearing width | 12 m (40') | 9 m (27') | 12 m (40') | 10 m (33') |
| Surface width | 5.5 m (18') | 4.5 m (13.5') | 5 m (16.5') | 5 m (16.5') |
| Surface Material Granular "A" compacted depth | 100 mm (4") | 100 mm (4") | 100 mm (4") | 100 mm (4") |
| Surface treatment | Granular "A" crushed gravel | Granular "A" crushed gravel | Granular "A" crushed gravel | Granular "A" crushed gravel |
| Shoulder width | 1.0 m (3') each side | 1.0 m (3') each side | 0.5 m (1.5') each side | 0.5 m (1.5') each side |
| Ditches | 0.5 m (1.5') | 0.5 m (1.5') | 0.5 m (1.5') | 0.5 m (1.5') |
| Culverts | 400 mm (16") | 400 mm (16") | 400 mm (16") | 400 mm (16") |
| Base Material or Cover over bedrock Granular "B" compacted depth | 200 mm (8") (depending on sub-grade material) | 200 mm (8") (depending on sub-grade material) | 200 mm (8") (depending on sub-grade material) | 200 mm (8") (depending on sub-grade material) |
| Maximum grade | 12% | 12 % | 14% | 12% |
| Dead ends | 12 m (40') | 12 m (40') | 10 m (33') | 10 m (33') |
| Turnarounds | 13m (43') | 13m (43') | 13m (43') | 13m (43') |

Note: The standards listed above for Private/Cottage roads are suggested guidelines except for the requirement for a deeded right-of-way of 20 m or 66', which is required to provide for adequate maintenance width in the event that the private road is ever assumed by the municipality.