

**T O W N S H I P
of
WHITEWATER REGION**

**POLICY NAME:
ROAD MAINTENANCE**

**DEPARTMENT:
Public Works**

**DATE ESTABLISHED:
Implemented:
DATE REVISED:**

Statement of Policy:

“The objectives of the Township of Whitewater Region Public Works Department’s **winter** maintenance activities shall be established to provide winter driving conditions consistent with the needs of a low traffic volume rural road system in a Canadian winter.”

“The objectives of the Township of Whitewater Region Public Works Department’s **summer** activities shall be to build and maintain the Township roads to meet the present and future needs of an ever growing traffic volume .”

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MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

OBJECTIVES

Based on the Statement of Policy, the Township of Whitewater Region establishes the following objectives to govern the winter maintenance operation to be performed by its Public Works Department. It is the stated objective of the Township of Whitewater Region:

- (1) That a uniform degree of effort is to be established for all roads under the jurisdiction of the Township of Whitewater Region. (Note: This uniform effort will not necessarily result in the same level of service due to topography, surface type and traffic conditions.)
- (2) That winter maintenance standards are to be attained with one crew. A crew is the number of people required to man one set of equipment once.
- (3) That plow/spreader routes are to be designed so that the maximum time to complete a route under normal conditions will be no more than 7.5 hours.
- (4) That call-out times shall be established so that equipment is turned around, and at the first major point in its return trip within 4hr of starting time. There will be no plowing Salt/sanding authorized that commences after 21:00 or before 05:00. There will be no pot spreading call-out after 21:00 or before 05:00.

In the case of a freezing rain storm or snow storm where a general call-out will reduce the cost and effort the Township will have to expend later, and on the sole decision of Township management, a general call-out is permitted at anytime.

- (5) That overtime is not to be authorized for baring pavement, winging back (widening), or step winging.
- (6) That deicing will continue in a responsible manner and in accordance with the Ministry of Environment's Guidelines as published in 1975. The rate of spreading shall be 130 kg. of salt per kilometer per application.

Sanding will continue on gravel roads and on paved roads when the temperature dictates at a rate of 500 kg. of sand per kilometer per application. The sand shall be treated with only sufficient salt to keep the stockpile from freezing (5% by weight).

- (7) The maximum speed for plowing will be 45km/h.
- (8) An activity when started must be continued until the entire system, where that activity is required, has received treatment.

(9) That a phone list of Township employees responsible for call-outs be made available to Police & Emergency Services, and updated yearly.

(10) Roads for which special consideration is requested will be dealt with on an individual basis by the Public Works Committee. Should a road qualify for special treatment, the road section and the special treatment authorized will be identified and appropriate written instructions issued by Council.

(11) Roads not maintained in the winter will be identified by council, and Proper warning signs installed .

(12) That the Municipality of the Township of Whitewater Region Council, adopt the Ontario Regulation 239/02

Minimum Maintenance Standards For Municipal Highways.

(A copy of this regulation can be obtained at www.e-laws.gov.on.ca)

We are not in a contest with any other road authority to see who can have the cleanest roads the fastest. Township of Whitewater Region policy, is for safe roads within a reasonable time **no less and no more!**

HEALTH AND SAFETY

We will comply with the Ontario Occupational Health and Safety Act and Regulations.

We will comply with the Municipal Health and Safety Regulations.

UTILITIES

Public Utilities are located on municipal road allowances by authority of Public Works. (Highway Act). Once the utility is in place the municipality has a financial obligation for any subsequent relocation initiated by the municipality.

A uniform policy is adopted regarding the initial installation and or relocation of utility plants on road allowances. Both overhead and underground as follows:

To facilitate maintenance and or reconstruction all overhead utilities generally should be located within one metre of right of way limit.

Underground utilities to be buried at a depth of not less than .6 metres.

GAS PLANTS

COMMUNICATION PLANTS

The initial placing/relocate will be applied for in writing and accompanied by a detail drawing to be approved by Public Works. The drawing will consist of all pertinent details.

Control over utility placements should reduce costs and interruption for all parties.

ENTRANCES

We propose that all new entrances be applied for by landowner ,and obtained from the building inspector and approved by Public Works Supervisor, using committee approved guidelines. All entrance pipe diameter, (if required) must be as assessed by PWS. Pipe length rural 9 metres minimum, urban 6 metres minimum. Pipes shall be OPS CSP only. Joints sealed with filter cloth. The entrance shall be in place before an occupancy permit is issued. The installation of the entrance shall be the soul responsibility of the land owner.

This practice should eliminate unacceptable entrances to our roads system .

SEVERANCE ON FORCED ROADS - POLICY

A condition for granting severances on forced roads shall be that a distance of 10 metres from the centre line of the existing forced road represent the front lot line. The surveying and deeding to the Township of the portion of land between the centre of the road and the front lot line is the responsibility of the person requiring the severance. These conditions would apply only to the lot being severed.

Whereas it is necessary to acquire a 20 metre road allowance for proper widening, construction and road maintenance; it is the intention of Council to enter into an agreement with the person requiring the severance to deed to the township a portion of land 10 metres from the centre line of the existing forced road adjacent to that portion of land that is retained. It is understood that the costs of surveying and deeding these lands shall be at no cost to the Township.

In the event that the applicant owns property across the forced road from the lot being severed, the agreement shall include provisions for the transfer to the Township of a portion of land 10 metres from the centre line lying adjacent to said land. The conditions outlined in paragraph two (2) shall apply.

Policy For Accepting new roads into the Township system

ROAD STANDARDS

1. No road shall be accepted into the road system of the Township of Whitewater Region unless approved by Committee and Council.
2. Sub-grade will be graded to 3% min. and 6% max. and shall start at centre line of road and end at the edge of sub-grade rounding.
3. The centre line of the ditch will be 75 mm below the centre line finish grade of the road, and no less than 1.5 metres from the sub-grade edge of road (sub-grade rounding).
4. The Granular “B” will be a minimum of 150 mm, the depth of “B” will be greater if the original or native ground is unstable. This will be designated by a Public Works representative. The surface shall be graded to 3% from centre line to shoulder rounding.
5. The Granular “M” shall be 150 mm and shall be properly packed.
6. Hard top surface. Minimum of double surface treatment (rural) Minimum 6.5 m. wide
7. Hard top surface 50 mil HL4 compacted (Urban) minimum 6.25 m. wide
8. Road deck to be 7 meters minimum from shoulder rounding to shoulder rounding.
9. Trees and brush shall be cleared minimum of 8 m from centre line.
10. All required signs must be in place.
11. **Conditions for acceptance :** upon completion of the road construction.
 - (a) A written request asking council to take the road into the TWP road system , when or if council agrees then ,
 - (b) A one year 100% warranty period will begin ,
 - (c) Council can direct Public Works to do winter maintenance (plowing/salt/sand)
 - (d) One year after first acceptance ; Upon request and when satisfied all

conditions are met the council can give written notice of final acceptance .

INSPECTION

There is an obligation on the roadway authority to know the condition of its roadways. All roadways should undergo inspection on a routine basis by an inspector, reporting to a supervisor of the road authority, and keeping appropriate records of the conditions found.

Where notice of an alleged condition is given to the supervisor, such condition shall be deemed to exist from time of notice. The supervisor may direct an inspection to be done, in which case the report from that inspection will prevail. The condition may be deemed to be an acceptable condition, by the supervisor having regard for the ONTARIO REGULATION 236/02. During winter operations the plow operators will be deemed to be the inspector for her/his plow route.

SURFACE TYPE

The surface type is an indicator to the user of the stability and predictability of the traveled surface of the road.

For roadways under reconstruction the minimum condition is loose top.

DUST

Where dust caused by traffic on a loose top road surface impacts on reasonable vehicle safety, relative to the ambient condition of the road, that condition should not occur for more than 2 months.

This policy does not consider where the condition occurs over a distance of less than 100m.

This standard does not apply to shoulders.

Dust suppression will be applied in accordance with the strict guide lines of the Ontario Ministry of Environment.

Dust abatement to address other criteria such as field crops, and air quality are not addressed in this policy.

FLOODING

A flood condition exists where water, flowing or standing, covers more than half a lane width. Where floods exceed the depth of, (100mm.) a response is required. Flood conditions on roadways should have warning posted. Where the roadway is not closed, it should be monitored at reasonable intervals during the flood.

The time for responding should be no more than 12 hours. Flood mitigation, while in a flood condition, is at the discretion of the road authority. Flooding within a two week period is considered a single occurrence.

Where the maximum frequency is exceeded the zone should be posted to advise of the potential hazard.

LANE WIDTH

Lane widths are measured to the edge of the road surface. For loose top roads this is usually the start of the rounding for the ditch slope. Hardtop lane widths are measured to the edge of asphalt, the lane edge of a gutter, or the face of a curb, but does not include partially paved shoulders.

Where the road surface narrows below the minimum width for a short distance (eg. bridge, viaduct) such condition should be posted to indicated the condition (eg. “Reduced Road Width” or a commonly recognized symbol.)

All roads are considered to have a minimum of 2 lanes. All non-curbed hardtop roads are considered to have a minimum of .5m shoulders. Where that shoulder is less than .5m add the shortfall to the lane width requirement. Parking requirements are not considered roadways. Less than the minimum lane widths should be posted with notice.

- A. Hard Top Pave (Asphalt) Lane width 3m min. .5 shoulder min.
- B. Hard Top Surface Treatment Lane width 3.5m min. to rounding min.
- C. Loose Top Lane width 3.5m min to rounding. min.

As set out in the* Geometric Design Standards For Rural Ontario Roads.

TRAVEL SPEED

Speed levels have regard for reasonable average travel speeds on a road as impacted by road roughness and geometry alone. Speed reductions due to weather, snow, ice, traffic, foreign material and road-side environment are not considered, but safe operation of a vehicle during these conditions is the responsibility of the driver.

Certain circumstances may justify the legal maximum speed to be regulated in a zone at less than the desirable speed. In such specific cases the desirable speed is the posted speed.

CLEARANCES

Vertical and horizontal clearances recognize setback of obstacles that may cause damage when struck, or may impair visibility related to safety. (eg. rock, earth, guy cables, utility posts, abutments, structures, hydrants, trees, brush). Such obstacles may be localized or general in nature. Non-woody vegetation may encroach the clearance zone to maximum conditions. Curb faces less than 30 cm high, safety devices, regulatory signs and entrances are not considered to be encroachments.

For each substandard condition should be posted or guided with an appropriate warning or device (eg. hazard marker, warning sign, guide rail, attenuation device). Maximum grass encroachment is .5m. Maximum lag time for removing the substandard condition is:
Temporary - 2 years; Structures - on reconstruction; Utilities - on replacement. Desirable vertical clearance for all municipal roads is 6 m.

DEBRIS

This standard has regard for un-naturally occurring, visible from the road, within the roadway, significant objects in the roadside (eg. tires, garbage bags, significant litter).

When these objects represent a safety concern to vehicles or pedestrians they represent a substandard condition and should be responded to in a reasonable time. Accumulation of such objects may also cause blockage of drains leading to road flooding.

Litter pick-up and landscaping of the roadside for other objectives (eg. aesthetics, maintenance equipment) are not addressed in this standard.

ROAD DEBRIS

Where debris occurs on the road surface, but does not prevent the flow of traffic (eg. carrion, litter, tree fall, product spills) yet impacts on reasonable safety or vehicle damage the condition should be removed within a timely manner after becoming aware.

This does not address the need to respond in an appropriate and timely manner to emergency situations which impact on road surface conditions. (eg. accident scenes, spills.)

SHOULDERS

The cross fall is usually not more than 8%. Where a curb or gutter separates the road from the shoulder, the cross fall may be reversed to a maximum of 3%.

The minimum and desirable shoulder width is a condition which is determined by this policy. Shoulders may be reduced to narrower than the minimum for short distances to account for localized encroachments or for attenuation devices. Shoulders may be of grass, gravel or hardtop surfaces.

- A. The shoulder width should be no less than .5m
- B. The vertical height of grass should be no greater than .400 mm.
- C. The construction of shoulders will be with Granular material only (A. B. & C.), and, where a ditch is present, it is not to be faced with top soil, mud or any type of material that could hinder proper drainage of the roadway.

TRAFFIC PATTERNS

The Township of Whitewater Region has a combined roads system of approximately 714.4 lane kilometers of roads.

An observation of the traffic pattern of our Township roads indicates that over 95% of our traffic occurs between 06:00 and 23:00, less than 5% occurs between 23:00 and 06:00.

(Slightly over half of our roads have traffic up to midnight, and less than a quarter of our traffic occurs before 06:00).

Basically, if snow and or ice makes a particular section of road especially dangerous, and if the cost of fixing it is reasonable, the Municipality will be under a duty to do so.

We are expected to keep our roads in a reasonable condition. No More No Less.

EMERGENCY CALL OUT

Request made for service during “Emergencies”.

The Township of Whitewater Region response time for any emergency situation not during normal working hours would be in the neighborhood of two hours:

ALL CALL OUT RESPONSES WILL BE IN ACCORDANCE WITH THE UNION COLLECTIVE AGREEMENT, AND A RECORD KEPT .

- phoning time - 15 minutes;
- leaving house time - 15 minutes;
- driving to patrol garage time - 30 minutes;
- getting truck checked, running and out of garage - 10 minutes;
- plow/spread to site of emergency - up to two hours.

Thus, only in a case of a general emergency affecting the entire Township will full crews be called out between 21:00 and 05:00.

Hal Johnson

Public Works Supervisor

APPROVED DATE: June 2nd, 2004

MOTION NUMBER: 2004-157

