

# **APPENDIX D**

## **RUMBLE STRIP SPECIFICATION AND DETAIL**

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SPECIFICATIONS FOR SHOULDER AND CENTRELINE RUMBLE STRIP

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SPECIFICATIONS FOR SHOULDER AND CENTRELINE RUMBLE STRIP

895. 1 SCOPE

These specifications govern all operations necessary for and pertaining to the construction of longitudinal shoulder and centreline Rumble Strips.

895. 5 EQUIPMENT

5.1 Inspection

Equipment required for this work shall be in satisfactory working condition and so maintained for the duration of the work.

Equipment shall be on site and available for inspection, testing and approval before the work commences.

5.2 Milling Machine

The milling machine used shall either be equipped with an integral sweeping device mounted directly behind the cutter otherwise a separate sweeping operation shall be conducted as construction of the rumble strip progresses.

895. 7 CONSTRUCTION METHODS

7.1 Configurations

The Contractor shall construct milled-in rumble strips in accordance with the various configurations shown in the following drawings:

Drawing Title	Drawing Number
Shoulder Rumble Strip Details	TO-006a
Centreline Rumble Strip Details	TO-006b
Rumble Strip Details for Partial Concrete/Bituminous Shoulder	TO-006c
Shoulder and Centreline Rumble Strip Details	TO-006d
200mm Shoulder and Centreline Rumble Strip Details	TO-006e

The Rumble Strip configuration and location will be identified in the contract Special Provisions. The Contractor shall provide all equipment and labour necessary for the construction of the rumble strips.

## 895. 7 CONSTRUCTION METHODS

## 7.2 Prohibited Locations

Rumble strips shall be interrupted at the curve radius of all intersecting accesses or roadways at the beginning of the curve radius. No rumble strip shall be installed across intersections, tapers or accesses nor any other locations specified by the Engineer.

At intersections with deceleration/acceleration lanes, shoulder rumble strips shall be applied along the entire shoulder of the taper and auxiliary lane, and shall terminate at the beginning of the curve radius of the intersecting road unless otherwise staked by the Engineer.

Rumble strips shall not be installed on bridge decks and overpass structures.

Rumble strips shall not be installed within 5 metres of sealed traffic counting and traffic signal loop detector lead wires.

## 7.3 Rejection

Rumble strips constructed outside of the tolerances as shown on the drawings in these specifications or rumble strips installed in any of the above prohibited locations will be rejected and the Contractor shall be responsible for repairing such work.

## 7.4 Clean Up

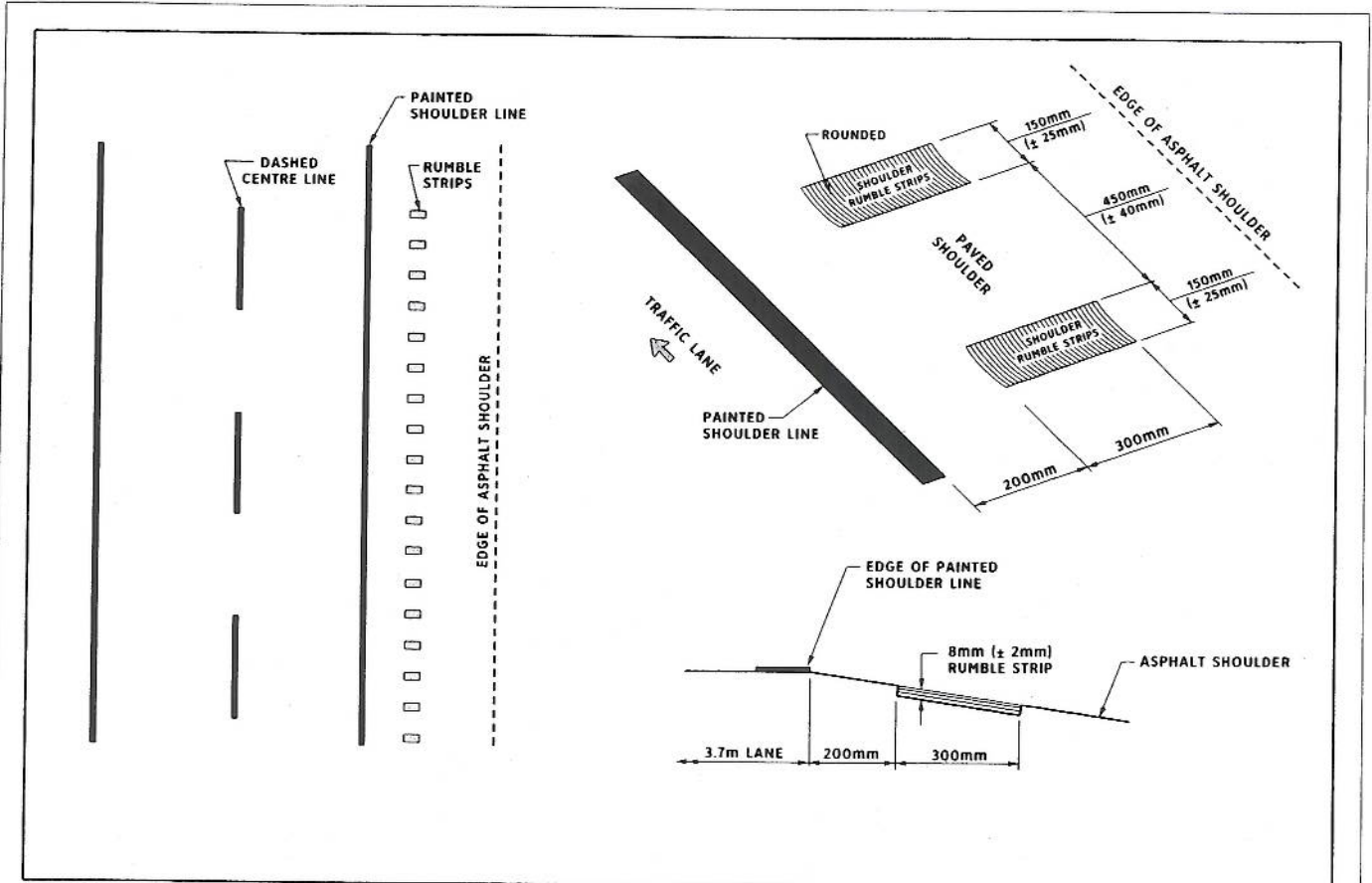
The Contractor shall sweep the roadway of all debris created from the milling operation.

## 895. 8 METHOD OF MEASUREMENT

Measurement of the "Rumble Strip" will be determined in lineal meters as measured by the Engineer. For measurement purposes, each rumble strip will be measured individually on each side of the roadway and/or centerline.

## 895. 9 BASIS OF PAYMENT

The unit price for "Rumble Strip" will be payment in full for all equipment and labour construct the rumble strips, for sweeping the milled debris from the road and for all other operations necessary or incidental to the work.



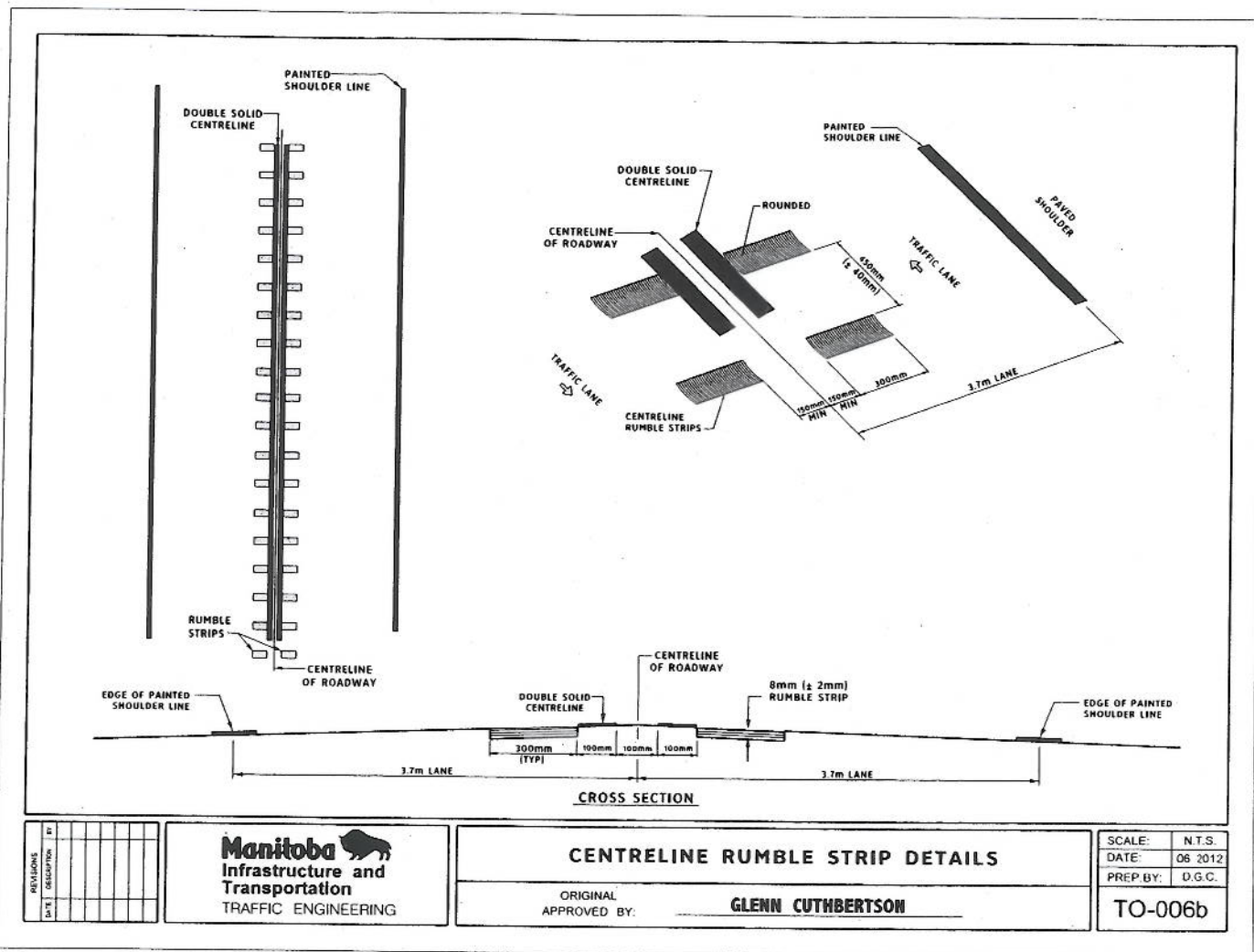
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**SHOULDER RUMBLE STRIP DETAILS**

ORIGINAL APPROVED BY: GLENN CUTHBERTSON

SCALE:	N.T.S.
DATE:	06 2012
PREP BY:	D.G.C.
TO-006a	



REV.	DESCRIPTION	DATE

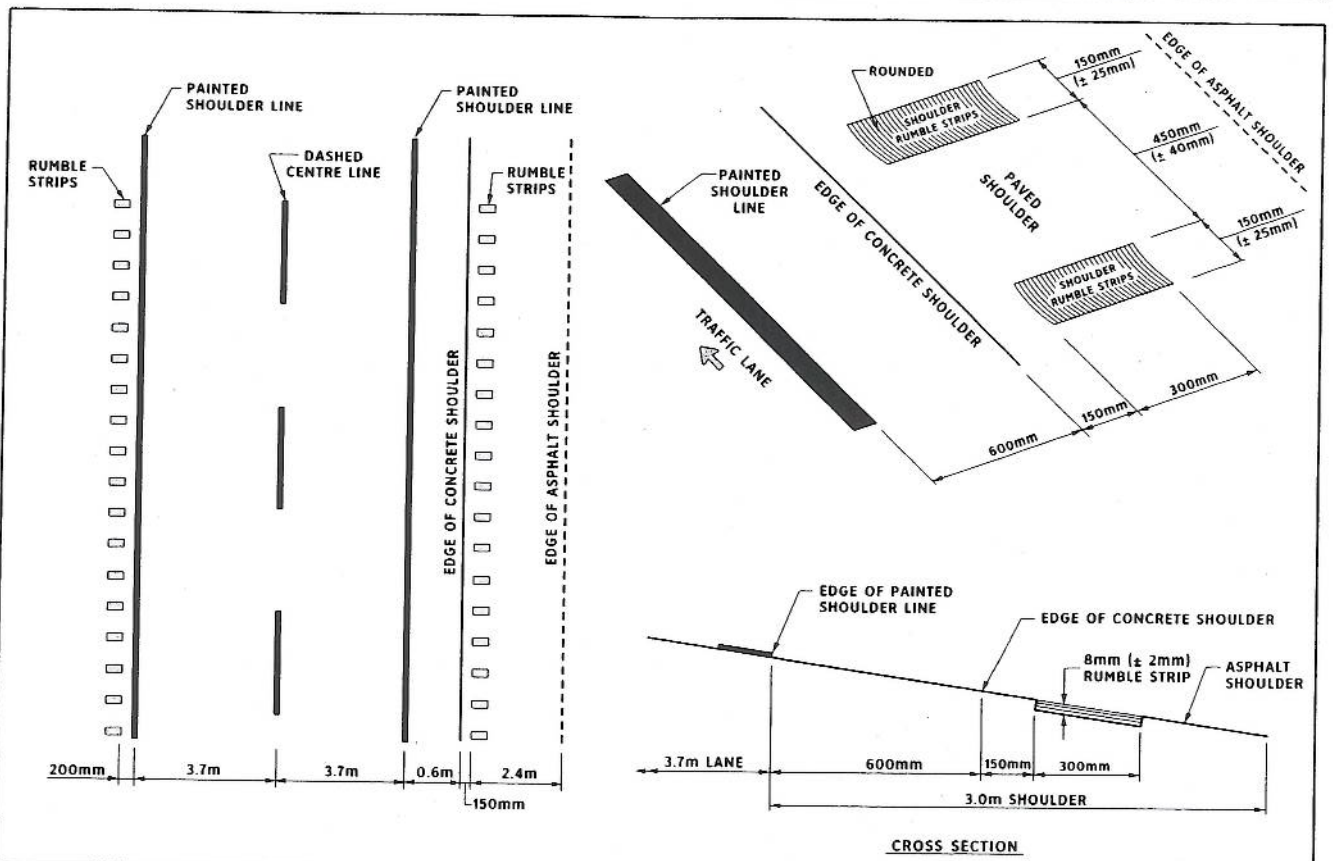
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TRAFFIC ENGINEERING

**CENTRELINE RUMBLE STRIP DETAILS**

ORIGINAL  
APPROVED BY: GLENN CUTHBERTSON

SCALE: N.T.S.  
DATE: 06 2012  
PREP BY: D.G.C.

TO-006b



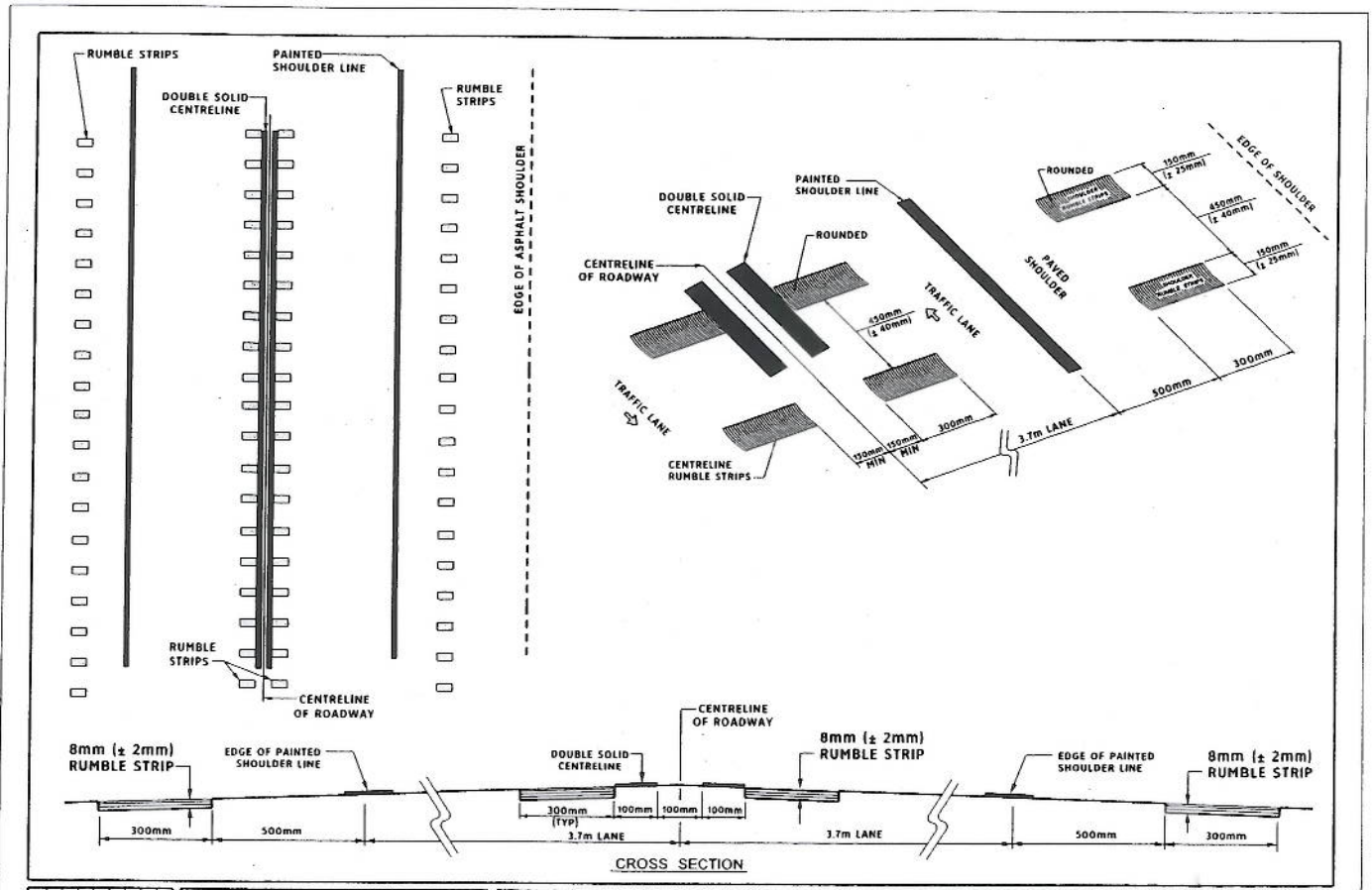
REVISIONS	NO.	DESCRIPTION	DATE

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TRAFFIC ENGINEERING

**RUMBLE STRIP DETAILS FOR  
PARTIAL CONCRETE / BITUMINOUS SHOULDER**

ORIGINAL  
APPROVED BY: **GLENN CUTHBERTSON**

SCALE: N.T.S.  
DATE: 06 2012  
PREP. BY: D.G.C.  
**TO-006c**



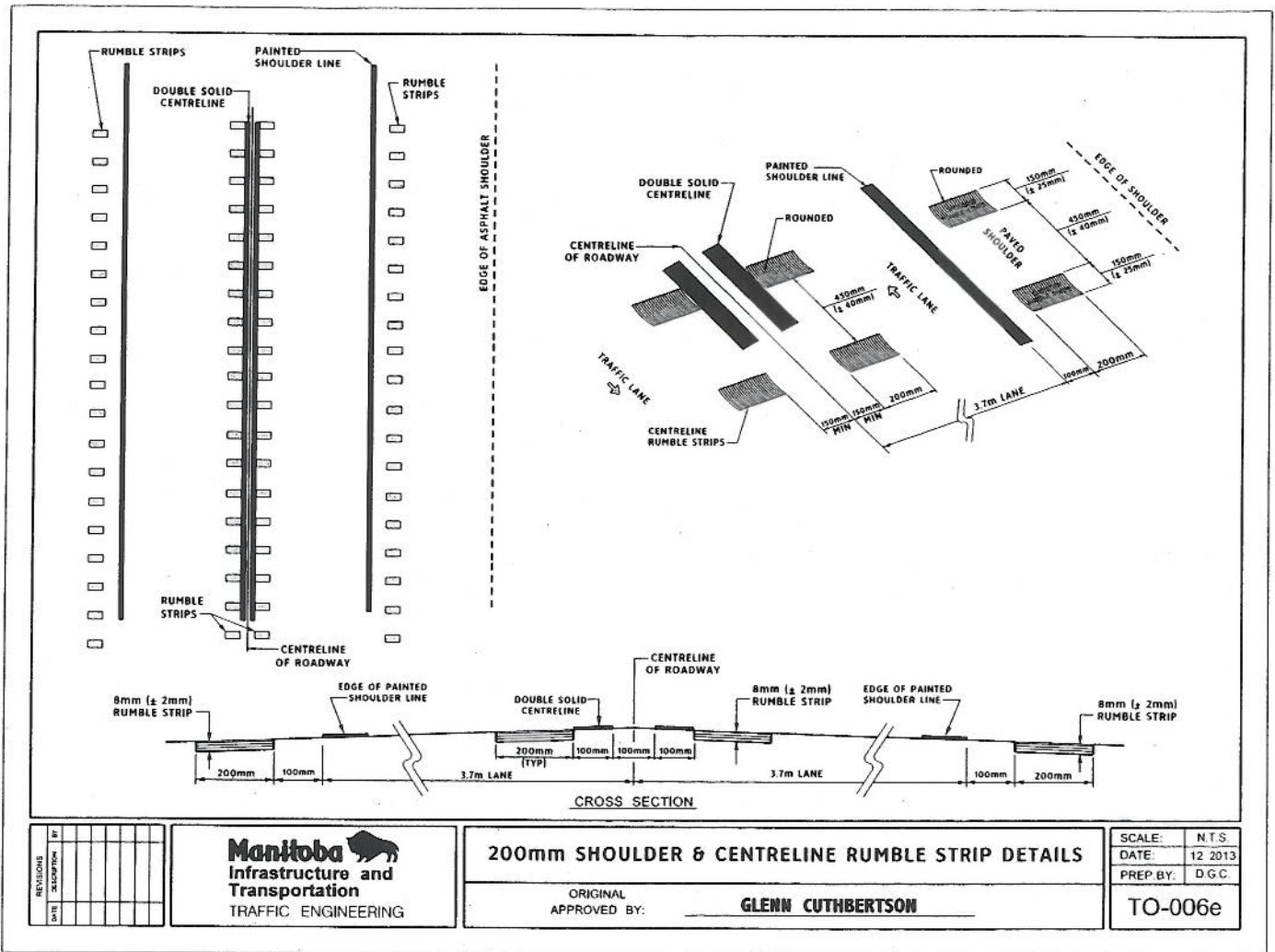
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**Manitoba**  
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**SHOULDER & CENTRELINE RUMBLE STRIP DETAILS**

ORIGINAL  
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SCALE:	N.T.S.
DATE:	06.2012
PREP. BY:	D.G.C.
TO-006d	



REVISIONS	BY	DATE	DESCRIPTION

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**200mm SHOULDER & CENTRELINE RUMBLE STRIP DETAILS**

ORIGINAL APPROVED BY: **GLENN CUTHBERTSON**

SCALE:	N.T.S.
DATE:	12 2013
PREP BY:	D.G.C.
TO-006e	