



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

DESIGN DIVISION
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INSTRUCTIONAL BULLETIN NO. 22-14

Regarding Updates to Chapter 7 of the Roadway Design Guidelines

Effective with the December 9, 2022 letting (September 28th turn in), Chapter 7 of the Roadway Design Guidelines has been updated to fix an error for the item number for Brooming and Degrassing as well as remove a note instructing designers to multiply the amount of water needed in urban areas by 6. Section 104.08 of the 2021 TDOT Specifications for Road and Bridge Construction states payment for dust control is incidental to applicable Contract items; therefore, modification of the water quantity in urban areas is no longer needed.

The revised section is shown below:

7-203.05 COMPUTATIONS FOR ITEM NO. 203-06 WATER

Water will be measured by the thousand gallons (M.G.).

Embankment:

$$\frac{\text{Earth embankment (C.Y.)} \times 2.525 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Base material and granular backfill:

$$\frac{\text{Compacted volume (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Foundation preparation (Item No. 204-10.01 through 204-10.25):

$$\frac{\text{Width of subgrade (Ft)} \times 0.5 \text{ Ft} \times \text{Length of project (ft)} \times 4 \text{ Gal/C.Y.}}{27 \text{ C.F./C.Y.} \times 1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Subgrade treatment (hydrated lime) (Item No. 302-01.01):

$$\frac{\text{Subgrade treatment volume (C.Y.)} \times 40.400 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Soil-cement base (Item No. 304-01.02):

$$\frac{\text{Volume of base (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Aggregate-cement base (Item Nos. 309-01.01 and 309-01.02):

$$\frac{\text{Volume of base (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Lime fly-ash base (Item Nos. 312-01, 312-02, and 312-03):

$$\frac{\text{Volume of base (C.Y.)} \times 30.77 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

7-208.00 SHOULDERS AND DITCHES

Item Number	Description	Unit of Measurement	Comment
208-01	Shoulders and Ditches	L.M.	
208-01.05	Brooming and Degrassing Shoulders	L.M.	See RDG Chapter 9-135.02, Notes 5 and 6

Chapter 7:

https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design_guidelines/DG-C7.pdf


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KJL:LHC:WKA
 September 12, 2022