



# Traffic Signal Design Manual

ORIGINATOR Director, Bureau of Traffic Operations		6-1-7
CHAPTER 6	Signal Infrastructure Design	
SECTION 1	Permanent Signals	
SUBJECT 7	Signing and Pavement Marking	

## SIGNS

All traffic signs *should* be installed as required in the WisMUTCD.

Supplemental signs recommended for traffic signal operation need not be shown on the signal plan sheet (except for specific signing for right turns -- see TSDM 5-1-2). These signs include:

CROSS ON GREEN LIGHT ONLY	R10-1
Pedestrian push button supplemental signs	R10-3 series
SIGNAL AHEAD	W3-3
NO TURN ON RED	R10-11a
LEFT ON GREEN ARROW ONLY	R10-5
LEFT TURN SIGNAL	R10-21
OPPOSING TRAFFIC MAY HAVE LONGER GREEN	W25-2 series

Foldable stop signs *may* be installed on signal poles for use when state-owned signals are not operating. When used, folding stop signs **shall** be placed on the near right of approaches with an emergency red flash. Approaches with emergency yellow flash **shall not** get stop signs

State of Wisconsin law allows U turns at signalized intersections. See TEOpS 2-2-19.1 for additional guidance for placement and use of NO U TURN signs at signalized intersections.

The purpose of left-turn arrows on signal heads is to eliminate the need for the use of left-turn signs (LEFT ON GREEN ARROW ONLY, LEFT TURN SIGNAL, etc.). The use of these signs *should* be determined on a case-by-case basis. For guidance on the use and placement of LEFT TURN YIELD ON FLASHING YELLOW ARROW signs, refer to TEOpS 2-2-53.

Other traffic control signs (e.g. one-way, no parking, etc.) *should* be installed as needed. These signs *should* meet the requirements of the WisMUTCD.

### PAVEMENT MARKINGS

Prior to designing the traffic signals on the plan sheet, the pavement markings *should* be located to act as a guide in the location of signal heads, pedestrian heads, and detector loops. If the pavement markings are proposed they *should* be noted as such in the plans. All pavement markings **shall** be in conformance with *Standard Specifications*, *TEOpS*, and *WisMUTCD*. Any questions regarding pavement markings *should* be directed to the Regional Pavement Marking Supervisor.

As stated in TSDM 5-1-2, the signal plan sheet *should* show all cross walks and stop lines due to their influence on signal and detector placement. The location of handicap ramps *should* also be shown if the crosswalk marking does not adequately show where they are located. The lane lines need to be shown because of their effect on detector and signal head placement and to convey to the review staff the lane designations. "Arrows" and "only" markings do not need to be placed in all left-turn lanes. Such markings are typically placed at locations where major roads cross, or certain geometric conditions exist. The Regional Pavement Marking Supervisor will determine the use of these markings.