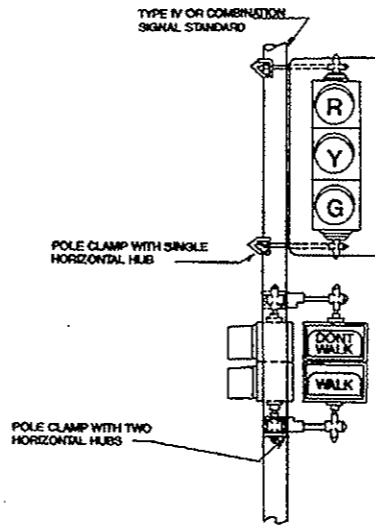


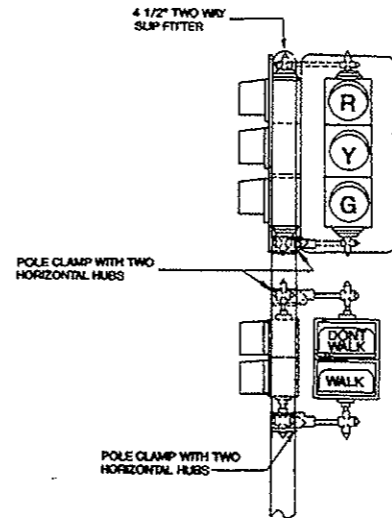
TRAFFIC SIGNAL HEAD MOUNTING



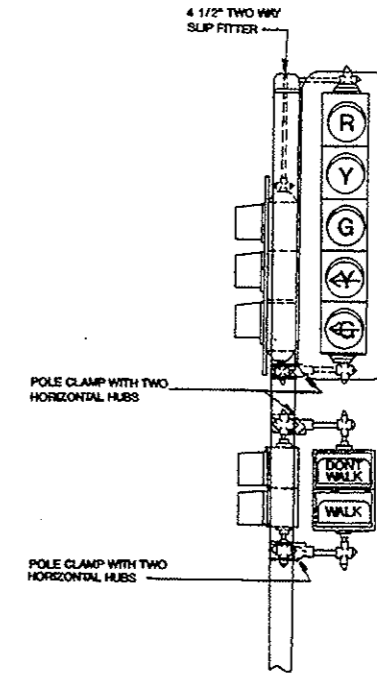
TYPE II
PEDESTAL MOUNTED
PEDESTRIAN



TYPE IV
POST MOUNTED - VEHICULAR
POST MOUNTED - PEDESTRIAN



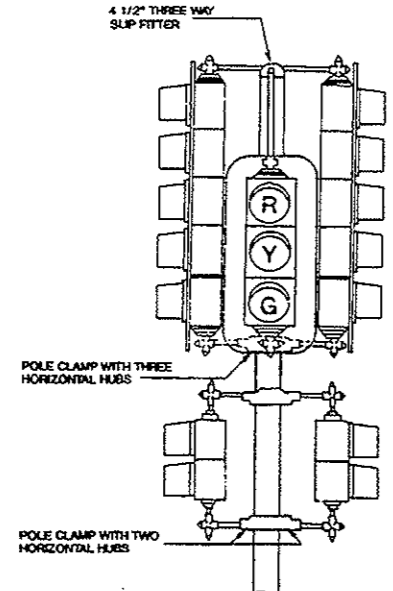
TYPE V
POST MOUNTED - VEHICULAR
POST MOUNTED - PEDESTRIAN



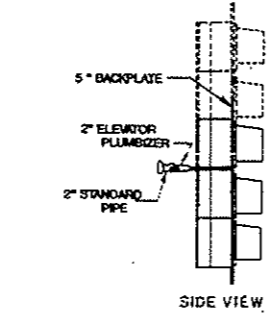
TYPE VI
POST MOUNTED - VEHICULAR
POST MOUNTED - PEDESTRIAN

NOTES:

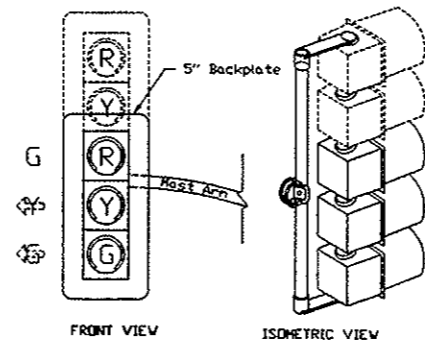
- CLEARANCE:** CLEARANCE FROM THE GROUND LINE OR SIDE-WALK TO THE BOTTOM OF POST OR PEDESTAL MOUNTED VEHICULAR SIGNAL HEADS SHALL BE 10 FT. MINIMUM. FROM PEDESTRIAN SIGNAL HEADS SHALL BE 8 FT. MINIMUM.
- SIGNAL HEADS:** SEE TRAFFIC SIGNAL LAYOUT FOR CORRECT MOUNTING POSITION, NUMBERS, SIZE AND ARRANGEMENT OF LENSES.
- POLE CLAMPS:** A POLE PLATE WITH BUTTABLE BANDING MATERIAL AS APPROVED BY THE ENGINEER IN THE FIELD MAY BE SUBSTITUTED FOR THE POLE CLAMPS. WHERE TRAFFIC SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS ARE MOUNTED ONE ABOVE THE OTHER, ONE POLE CLAMP ASSEMBLY MAY BE USED.
- PAINT:** SIGNAL HOUSING SHALL BE PAINTED YELLOW. BACK PLATES SHALL BE PAINTED DULL BLACK. POLE CLAMPS AND SIGNAL HEAD MOUNTING HARDWARE SHALL BE PAINTED THE SAME COLOR AS THE SIGNAL STANDARD SHAFT.
- MOUNTING DETAILS:** ALL SIGNAL HEADS SHOWN ARE VIEWED FROM DIRECTION OF TRAVEL.



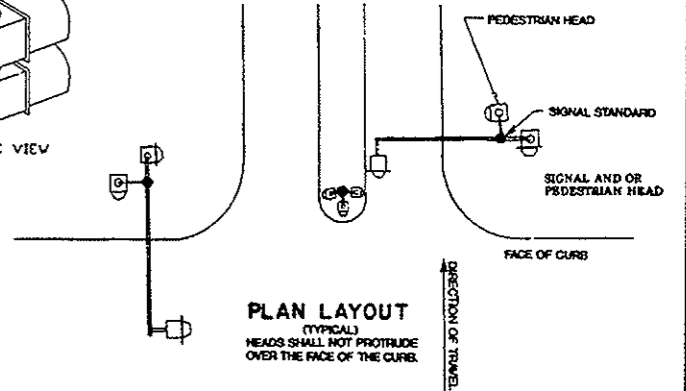
TYPE VII
POST MOUNTED - VEHICULAR
POST MOUNTED - PEDESTRIAN



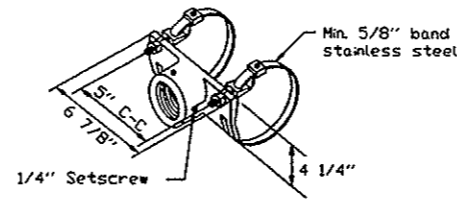
MID-SPAN MOUNTED
MAST ARM RIGID MOUNTED SIGNAL HEADS



END MOUNTED
MAST ARM RIGID MOUNTED SIGNAL HEADS



PLAN LAYOUT
(TYPICAL)
HEADS SHALL NOT PROTRUDE
OVER THE FACE OF THE CURB.



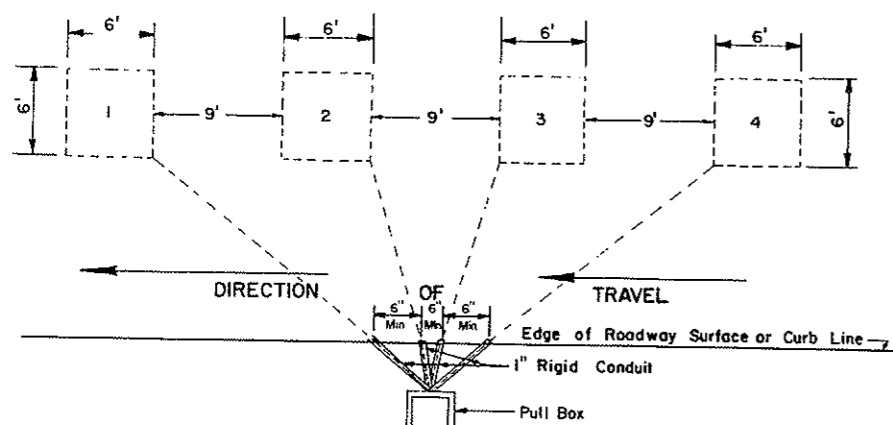
MAST ARM
SIGNAL HEAD BRACKET

10-1-85	
REVISIONS	
DATE	CHANGE
5-23-94	Type II
10-19-94	Rev. Visors & Add 5-Section Head
8-1-95	5 Section Head End mounted Detail
8-29-95	Delete Type III
11-29-95	Mast Arm Mounting Bracket

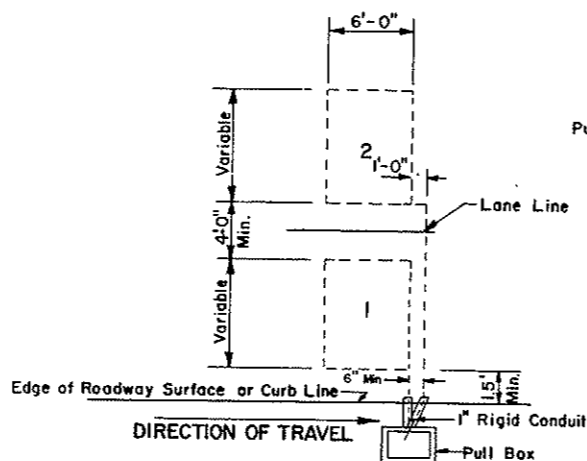
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION
APPROVED: *David H. Lee*
DESIGN ENGINEER

LOOP DETECTORS DETAILS

D-772-5

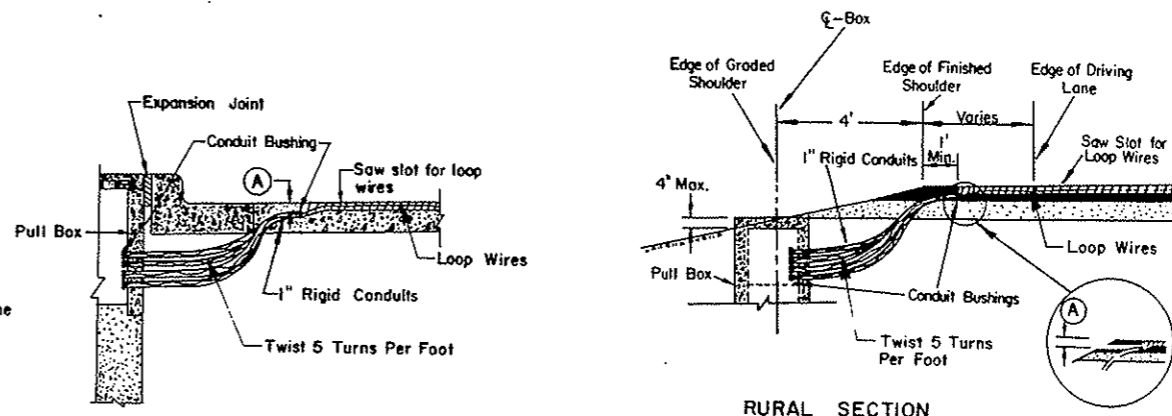


MULTIPLE LOOP DETECTOR DETAIL
(PRESENCE LOOPS)



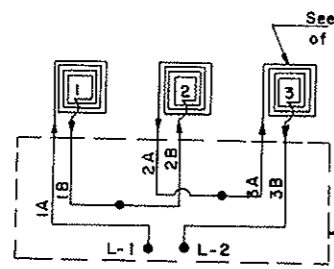
CURB SECTION

(A) 1" Concrete Surfacing Min.
2" Asphalt Surfacing Min.



RURAL SECTION

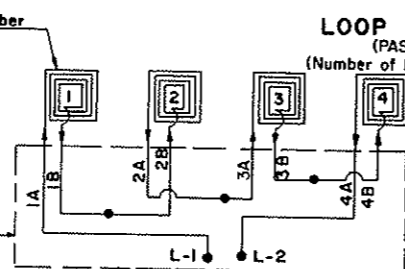
SAW SLOT TO PULL BOX DETAILS



MULTIPLE LOOP CONNECTION

All conductors shall be labeled in the pull box as shown. (1A, 1B, 2A, etc.)

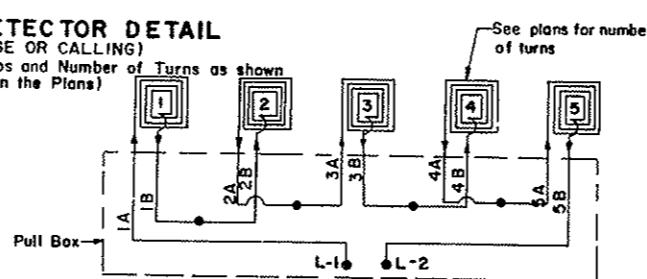
The loop connections shall be spliced in the pull box: 1A to L-1, 1B to 2B, 2A to 3A, and 3B to L-2



MULTIPLE LOOP CONNECTION

All conductors shall be labeled in the pull box as shown. (1A, 1B, 2A, etc.)

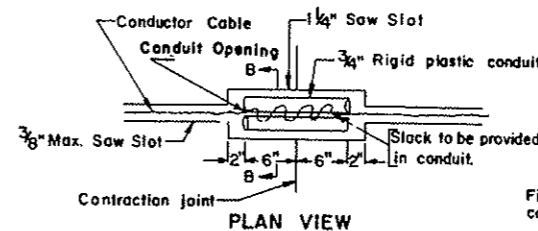
The loop connections shall be spliced in the pull box: 1A to L-1, 1B to 2B, 2A to 3A, 3B to 4B, and 4A to L-2



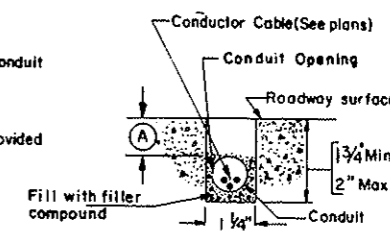
MULTIPLE LOOP CONNECTION

All conductors shall be labeled in the pull box as shown. (1A, 1B, 2A, etc.)

The loop connections shall be spliced in the pull box: 1A to L-1, 1B to 2B, 2A to 3A, 3B to 4B, 4A to 5A, and 5B to L-2



PLAN VIEW



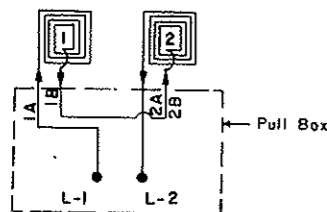
SECTION BB

CONTRACTION JOINT DETAIL

(This detail shall also be used whenever a crack in the roadway is encountered.)

NOTES:

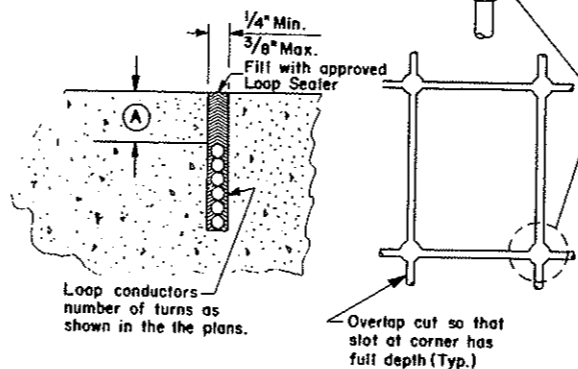
1. Each loop shall be saw cut in the roadway.
2. The number of turns, size of loop and size of conductor shall be as shown on the plans. The first loop dimension figure is the length in the direction of travel and the second dimension is the width across the traffic lane.
3. The lead routing shall be in separate slots to conduit leading to pull box to minimize interaction.



MULTIPLE LOOP CONNECTION

All conductors shall be labeled in the pull box as shown. (1A, 1B, 2A, etc.)

The loop connections shall be spliced in the pull box: 1A to L-1, 1B to 2B, and 2A to L-2.



SAW SLOT DETAILS

Drill detector loop corners 2" deep then saw pavement slots to form loops. Dimensions and location shall be as shown in plans.

10-1-86	
REVISIONS	
DATE	CHANGES
8-3-87	NOTE
11-20-89	RIGID CONDUIT AT CURB SPACING
12-8-89	MULTIPLE LOOP CONNECTION
9-3-91	SAW SLOT
10-12-94	Delete Loop Lead-in Lightning Prot

NORTH DAKOTA
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DESIGN ENGINEER