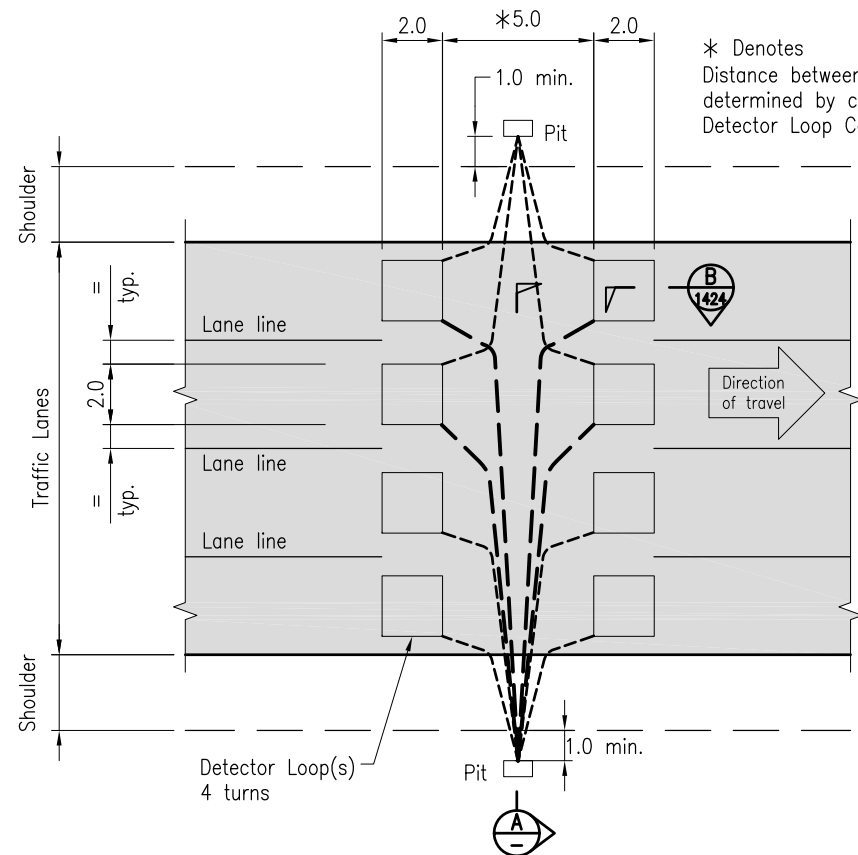


SECTION A
LOOPS INSTALLED IN PAVEMENT



TYPICAL VEHICLE DETECTOR LOOP PLACEMENT IN ASPHALT PAVEMENT (4 TRAFFIC LANES)

ASSOCIATED DEPARTMENTAL DOCUMENTS:

- Standard Drawings Specifications
- Manual of Uniform Traffic Control Devices (MUTCD) - Part 14 Traffic Signals
- Traffic Road Use Manual (TRUM) - Volume 4 part 5 Configuration and Placement of Vehicle Detection Sensors

REFERENCED DOCUMENTS:

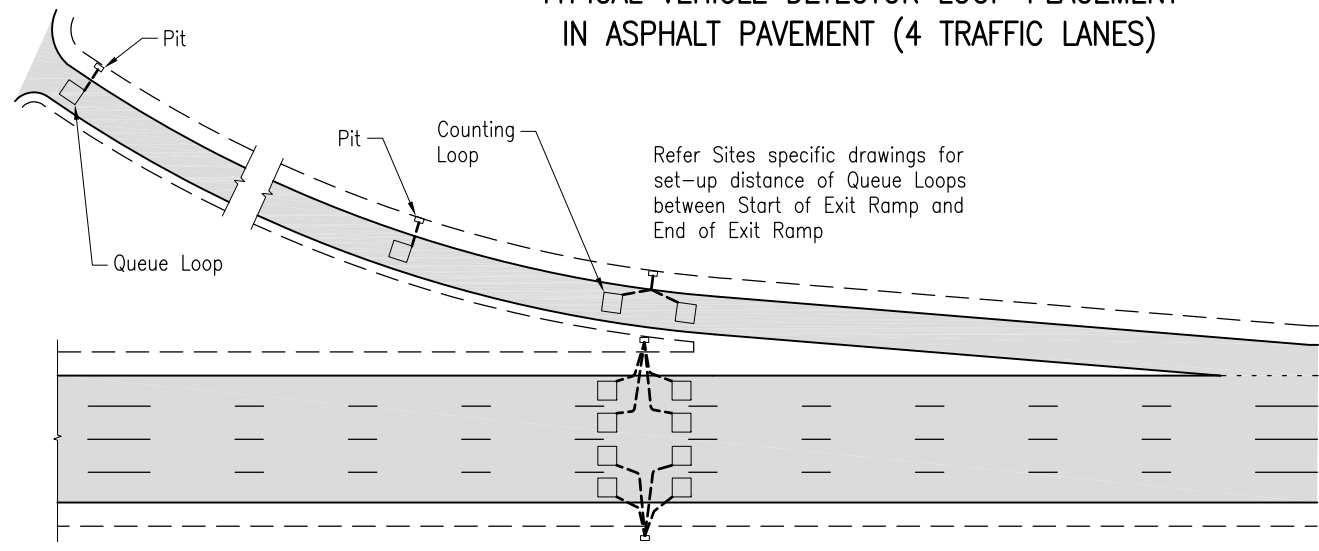
- Departmental Standard Drawings:
 - 1424 Traffic Signals - Detector Loops Installation Details
 - 1440 Traffic Signals/Road Lighting - Cable Jointing Pit Rectangular Concrete Surround
 - 1425 Traffic Signals - Detector Loops Placement Details

Departmental Standard Specifications:

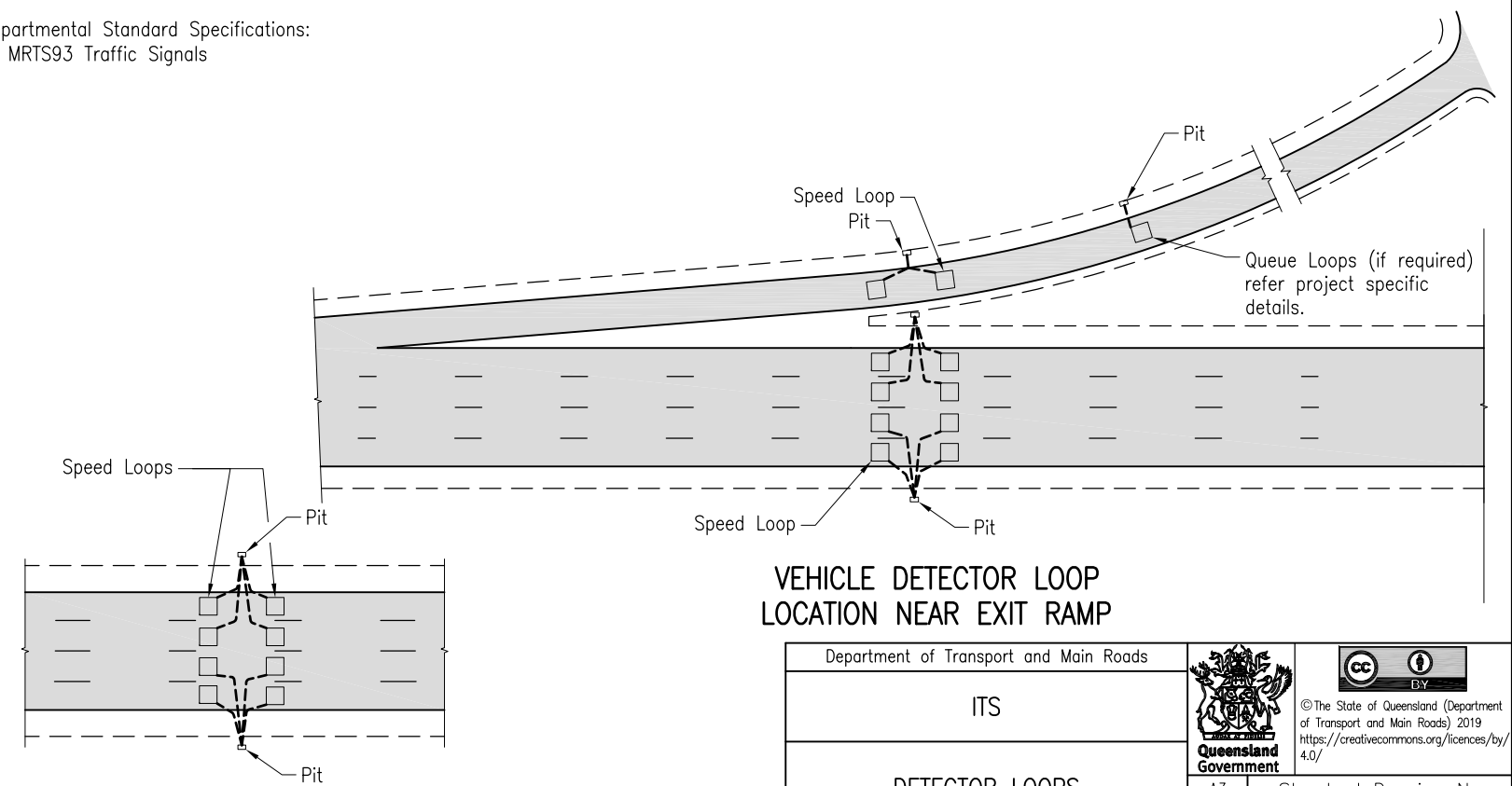
- MRTS93 Traffic Signals

NOTES:

- Loops are to be preformed, square, measuring 2 x 2 supplied with 5 turns of No. 16 gauge.
- Preformed loops to be assembled, joined and tested prior to delivery at site. Cores to be continuous - jointing of cores is unacceptable.
- The individual loop cores to be insulated individually and encapsulated within a flexible sleeve constructed from polypropylene, polyethylene, XPPE or other suitable material approved by ITS and Electrical Technology Section.
- Lead in and loop to be one continuous cable with no joins. Leading to be insulated individually, twisted together at approximately 4 turns per 100mm and encapsulated within a flexible sleeve.
- Detector loops are to be installed and sealed into slots cut into the top of a concrete subbase before overlay of asphalt.
- Slots for the preformed loops to be cut using conventional loop cutting or milling type equipment. Under no circumstances percussion type equipment is to be used to form the slots.
- Slots shall be cut in the pavement surface using
 - for asphalt surface, a water-cooled diamond-tipped blade, and
 - or a spray sealed surface, a carborundum blade used dry.
- The loop shall be sealed in the slots using slot sealant approved by Engineering and Technology Branch.
- All loop feeders to be returned to the cable pit in the footpath (or the median of minimum width of 2). Length of lead-ins to be kept to a minimum to extend 600mm to 1000mm past the top of the pit. Loops in the two lanes closest to the median in a four or more lane approach may be returned to a cable pit in the median.
- Loop detector cables and feeder cables to be jointed in pits. Each joint to be separately insulated and sealed to prevent ingress of water.
- Loops in asphalt pavement to be installed to MRTS93 in dense grade with open grade cover.
- For all new pavements, only pre-formed loops shall be used. Preformed loops shall be installed prior to laying the wearing surface.
- For section B, refer standard drawing 1424.
- Dimensions are in metres unless shown otherwise



VEHICLE DETECTOR LOOP LOCATION NEAR ENTRY RAMP



VEHICLE DETECTOR LOOP LOCATION THROUGH CARRIAGEWAY

VEHICLE DETECTOR LOOP LOCATION NEAR EXIT RAMP

Department of Transport and Main Roads			
ITS			
DETECTOR LOOPS MOTORWAY MANAGEMENT PLACEMENT DETAILS		A3	Standard Drawing No
		Not to Scale	1702
			Date 3/19
A	B	C	

INSTALLATION OF CONDUITS AND PITS IS THE RESPONSIBILITY OF THE LICENSED ELECTRICAL CONTRACTOR