

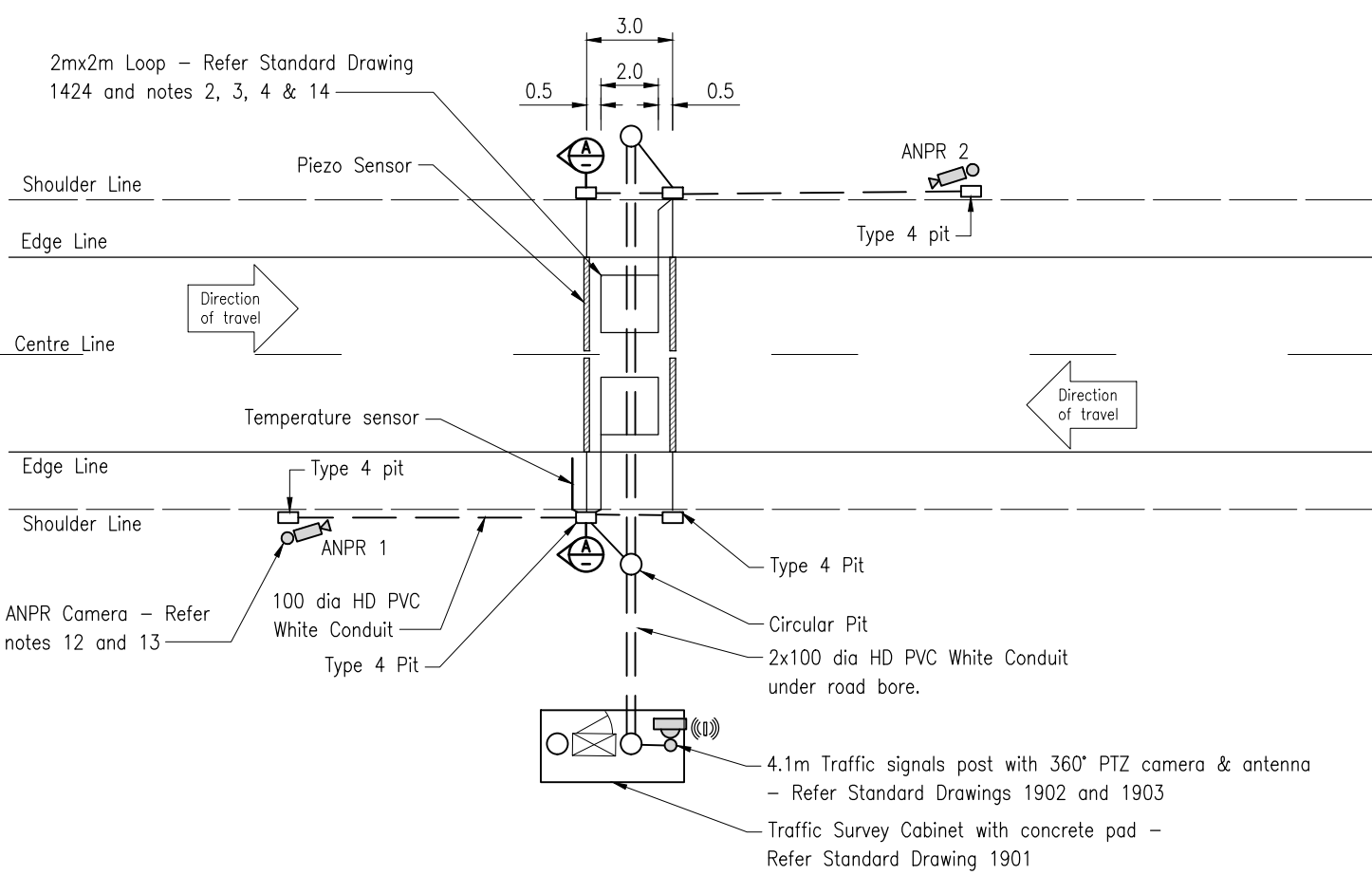
NOTES:

1. The piezo sensor is to be assembled and tested prior to delivery at site.
2. Slots for loops and piezo sensors 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.
3. Slots shall be cut in the pavement surface using a dry cut method and vacuumed clean prior to installation of vehicle sensors.
4. The loops and brass linguini piezo sensor shall be sealed in the slots using PU200 resin.
5. The quartz sensors shall be sealed in the slots using grouting compound TYPE1000 A1.
6. Prior to curing, it is preferred that the resin and grouting compound should be stored in an environment around 20° Celsius. During storage, the resin must not be allowed to reach freezing point or exceed 30° Celsius.
7. Refer manufacturer's instructions for the piezo sensor installation parameters.
8. Loop detector and feeder cables are to be jointed in pits. Each joint to be separately insulated and sealed to prevent ingress of water.
9. The piezo sensor cable is to be jointed at the length supplied by the manufacturer. Multiple joints are not permitted.
10. Where possible, there shall be a minimum 500mm gap between slots cut for sensors and tails.
11. Lane numbering for WIM system configuration to follow gazettal, then against-gazettal direction.
12. ANPR cameras shall be installed from the trailing piezo sensor at a distance, height and offset specified by the ANPR camera manufacturer and safety guidelines for roadside objects.
13. The contractor shall consult with the Principal's representative for orientation, alignment and focusing of the ANPR camera.
14. Loops shall exhibit the following characteristics:
Inductance - 100uH to 250uH
Resistance - ≤ 2.5Ω
Q-factor - ~ 20 @ 40kHz.
15. All dimensions in metres unless otherwise stated.

ASSOCIATED DEPARTMENTAL DOCUMENTS:
Standard Drawings
Specifications

- REFERENCED DOCUMENTS:
Departmental Standard Drawings:
1149 Traffic Signals/Road Lighting/ITS - Installation of Underground Electrical and Communications Conduit
1314 Traffic Signals/Road Lighting - Cable Joining Pit Drainage Details
1424 Traffic Signals - Detector Loops Installation Details
1440 Traffic Signals/Road Lighting - Cable Joining Pit Rectangular Concrete Surround
1901 ITS - Traffic Survey Cabinet Base Installation Details
1902 ITS - Traffic Survey Surveillance Post Typical Details
1903 ITS - Traffic Survey Surveillance Post Wiring Details

Departmental Specifications:
MRTS203 Provision of Weigh-in-Motion System
MRTS207 Traffic Survey Foundation Equipment
MRTS250 Provision of Automatic Number Plate Recognition System



LEGEND

SYMBOL	TYPE
	ANPR Camera with pole
	PTZ Dome Camera with pole
	Wireless Antenna
	Traffic Survey Cabinet

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

WEIGH IN MOTION TYPICAL SITE DETAILS

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ITS			
WIM PIEZO SENSOR INSTALLATION DETAILS		A3 Not to Scale	Standard Drawing No 1906 Date 3/2023
A	B	C	D