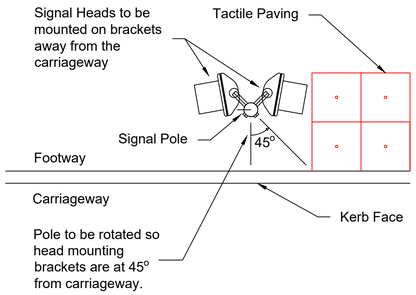
Pole Orientation Setting Out 1, 2, 4 and 5



Scale: 1:100 @ A1

Notes:

1. The traffic signal controller is to be a Telent Optima ELV large case with integral MOVA 8 and Integral Remote Monitoring (installed and commissioned by Telent). Suitable SIM card to be provided by Sandwell Metropolitan Borough Council.
2. The Telent Optima controller cabinet is to be installed on a NAL cabinet base. Please refer to the NAL installation guide.
3. All poles are to be 114mm diameter 4m Straight Low Access Spigot and installed 450mm deep within the NAL retention socket.
4. The NAL retention socket should be installed at 600mm deep. Please refer to the NAL installation guide and use the short levelling pole to ensure the socket / pole are straight.
5. The poles are to be numbered clockwise from the controller as per the drawing. The pole numbers are to be black on a yellow background and positioned facing the controller.
6. All traffic signal poles, traffic signal controller cabinet, NAL cabinet base and electrical feeder pillar are to be black in colour.
7. Traffic signal poles 1, 2, 4 and 5 are to be installed with the signal head bracket fixings at 45 degrees and the signal heads mounted away from the carriageway, as per the pole orientation diagram.
8. All traffic signal heads and equipment are to be installed with a minimum clearance of 600mm to the edge of the carriageway.
9. All pedestrian demand units are to be fitted with tactile devices on the bottom right hand side of the unit.
10. Audible devices are to be installed within pedestrian demand units on poles 1 and 4.
11. Audibles are to be timetabled between 7:00 - 22:00 - 7 days a week.
12. Nearside indicators are to have narrow field of view (NFoV) legends.
13. Nearside indicators on Poles 1 and 4 are to have high level repeaters.
14. The photocell for dimming shall be located on a signal head on Pole 2 where it will not be affected by street lighting.
15. Centre island nearside units to include Blackout Period during period 6, if push button pressed red man to illuminate.
16. All road markings shown to be laid in accordance with TSRGD 2016.
17. All ducting shall be polypropylene, orange in colour, smooth bore with 'Traffic Signals' imprinted on the duct. Draw cords shall be included in all ducts.
18. All duct chambers are to have a grade B composite lid with steel frames and will have 150mm concrete bed and surround.
19. Ducting from RS115 NAL units to adjacent chamber are to be 1x100mm unless indicated otherwise. All other runs shall be as indicated by number.
20. Black 50mm duct to be installed between electrical feeder pillar and controller for electricity supply.
21. The main contractor is to arrange the installation of the electrical feeder pillar. The new electrical supply is to be in a TOFCO feeder pillar with a double pole isolator and 2-way consumer unit. The appropriate discrimination is to be provided for the cut-out fuse.
22. Telent Design Services to attend SAT and are to be contacted at least 2 weeks prior. The MOVA Validation will be carried out by Telent Design Services.
23. This drawing is to be read in conjunction with the entire design package including the following drawings/documents:

    396986-DD-ISS01-TS01
    396986-DD-ISS01-TS02
    396986-DD-ISS01-CV01
    396986-DD-ISS01-SC01
    396896-DD-ISS01-RM01
    TOPAS 2500 Traffic Signal Controller Specification

The following information has been collected from pre-construction information and the telent CDM hazard management process.

Hazards

1. Low Voltage cables within the vicinity of works
2. Gas within the vicinity of works
3. Water within the vicinity of works
4. Telecoms within the vicinity of works

Statutory undertaker information provided by customer. All other information has been produced from site survey. Up to date service plans to be provided within 3 months of construction start date.

SIGNALS KEY:

- Large case Telent OPTIMA ELV Traffic Signal Controller.
- Electrical Feeder Pillar.
- 4m Low Access Spigot Signal Pole.
- RAG Primary Signal Head and Phase Label.
- Nearside Puffin Indicator Combined Unit (Narrow Field of View).
- Nearside Puffin Indicator Combined Unit (Narrow Field of View) with high level repeaters.
- Pedestrian Demand Unit.
- Brushless Tactile Device.
- AGD 326 On-Crossing Detector and Label.
- AGD 641 Kerbside Detector and Label.
- Photoelectric Cell.
- Signal Pole Number.
- MOVA Detection Loop and Label.

CIVILS KEY:

- NAL STAKKAbox Chamber 600mm x 600mm.
- NAL STAKKAbox Chamber 450mm x 450mm.
- NAL STAKKAbox Chamber 300mm x 450mm.
- NAL Pole Retention Socket RS115 (Duck-Foot Bend).
- NAL Carriageway Loop Box with 50mm Connecting Duct.
- New 100mm Orange Traffic Signals Duct (No. as indicated).
- New 50mm Orange Traffic Signals Duct (No. as indicated).
- 50mm Black Duct for Electrical Feed.
- New 400mm x 400mm Tactile Paving (Red in colour).

Pole Setting Out / Equipment Schedule

Pole No	Pole Type	Pole Distance from Kerb to the Centre of Pole (m)	Pole Distance from Tactile Paving to the Centre of Pole (m)	Pole Distance from Stopline to the Centre of Pole (m)	NAL Retention Socket & Planting Depth	Notes	Primary Signal Heads	Detection		Pedestrian Equipment				Other Equipment
								AGD 326 On-Crossing Detector	AGD 641 Kerbside Detector	Nearside Puffin Indicator and Pedestrian Demand Unit (NFoV)	Pedestrian Demand Unit only	Brushless Tactile Device	Audible Device	Photoelectric Cell
1	4m Straight Low Access Spigot	0.7	0.5		RS115 (600mm)	Signal head side mounted	1		1	1		1	1	
2	4m Straight Low Access Spigot	0.7	0.5		RS115 (600mm)	Signal head side mounted	1	1			1	1		1
3	4m Straight Low Access Spigot			2.5m	RS115 (600mm)	Pole to be installed in centre of the island	2			1		1		
4	4m Straight Low Access Spigot	0.7	0.5		RS115 (600mm)	Signal head side mounted	1		1	1		1	1	
5	4m Straight Low Access Spigot	0.7	0.5		RS115 (600mm)	Signal head side mounted	1	1			1	1		
6	4m Straight Low Access Spigot			2.5m	RS115 (600mm)	Pole to be installed in centre of the island	2			1		1		

Cable Schematic

AIN2	AIN1	1x 2 pair non-armoured Approx length 76m	ELV CONTROLLER	1x 20 core (1.5mm²) 1x 12 core (1.5mm²) Approx length 17m (1)
AX4	AX3	1x 2 pair non-armoured Approx length 51m		1x 20 core (1.5mm²) 1x 12 core (1.5mm²) Approx length 20m (2)
BIN6	BIN5	1x 2 pair non-armoured Approx length 108m		1x 20 core (1.5mm²) 1x 12 core (1.5mm²) Approx length 26m (3)
BX8	BX7	1x 2 pair non-armoured Approx length 83m		1x 20 core (1.5mm²) Approx length 44m (4)
				1x 20 core (1.5mm²) Approx length 42m (5)
				1x 20 core (1.5mm²) 1x 12 core (1.5mm²) Approx length 26m (6)

DETAILED DESIGN

Iss	Rev	Date	Description	By	Chkd	App
01	02	01/04/26	Changes made as per SMBC comments	KSC	PJS	PJS
01	01	30/03/26	Changes made as per SMBC comments	KSC	LWW	PJS
01	00	22/01/26	First Issue	KSC	DWK	PJS

Sandwell Metropolitan Borough Council

A4123 Wolverhampton Road / Clent Road, Sandwell, Traffic Signals Design (1 of 2)

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Originator: KSC	Checked: DWK	Approved: PJS	Date: 22/01/26
Drawing No: 396986-C1145-DD		Iss: 01	Rev: 00 | TS01