

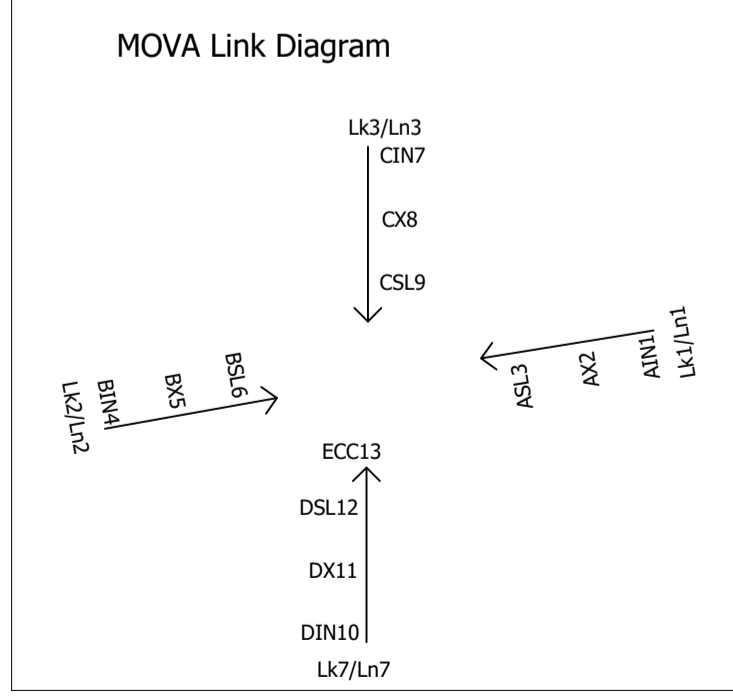
| Pole Setting Out | | | | | Equipment Schedule | | | | | | | | | | | | |
|------------------|-----------------------|-----------------------------|---------------------------------------|----------------------|---|------------------------------------|----------------------------------|---|------------------------|-------------------------------------|--|-----------|--|--|-----------------|--|--|
| Pole No | Pole Type | Pole Distance from Kerb (m) | Pole Distance from Tactile Paving (m) | NAL Retention Socket | Notes | Primary Signal Heads | | | Secondary Signal Heads | | | Detection | | | Other Equipment | | |
| | | | | | | AGD 306 Microwave Vehicle Detector | AGD 318 Dual Zone Radar Detector | FLIR TrafiOne 195 Thermal Stopline Detector | Photoelectric Cell | 3.0m TRP Vertical Extension Bracket | | | | | | | |
| 1 | 4m Straight Slotless | 1.4 | N/A | RS115 (600) | Pole position to be retained. | | | | | | | | | | | | |
| 2 | 4m Straight Slotless | 0.7 | N/A | RS115 (600) | Pole position to be retained. (1.0m from stopline). | | | | 1 | | | | | | | | |
| 3 | 4m Straight Slotless | 2.1 | N/A | RS115 (600) | Pole position to be retained. | | | | | | | | | | | | |
| 4 | 4m Straight Slotless | 1.0 | N/A | RS115 (600) | Pole position to be retained. (7.0m from stopline). | 1 | | | | | | | | | | | |
| 5 | 4m Straight Slotless | 1.2 | N/A | RS115 (600) | Pole position to be retained. (7.0m from stopline). | 1 | | | | | | | | | | | |
| 6 | 4m Straight Slotless | 0.7 | N/A | RS115 (600) | Pole position to be retained. (2.0m from stopline). | | | | 1 | | | | | | | | |
| 7 | 4m Swan Neck Slotless | 1.0 | N/A | RS115 (600) | Pole position to be retained. | | | | | | | | | | | | |
| 8 | 4m Straight Slotless | 1.3 | N/A | RS115 (600) | Pole position to be retained. (1.0m from stopline). | 1 | | | | | | | | | | | |
| 9 | 4m Straight Slotless | 1.3 | N/A | RS115 (600) | Pole position to be retained. (1.0m from stopline). | 1 | | | | | | | | | | | |

- The following information has been collected from pre-construction information and the telent CDM hazard management process.
- Hazards**
- Underground HV Cables within vicinity of excavation works.
 - Underground LV Cables within vicinity of excavation works.
 - Water mains within vicinity of excavation works.
 - Low Pressure Gas mains within vicinity of excavations.
 - Telecoms Chambers and Cables within vicinity of excavation works.
 - Street lighting within vicinity of excavation works.
- Statutory Undertakers information was provided by customer. All other information was obtained from site survey.

- SIGNALS KEY:**
- New Large case Telent OPTIMA ELV Traffic Signal Controller on a NAL Controller Cabinet Base.
 - Electrical Feeder Pillar.
 - 4m Straight Slotless Signal Pole.
 - RAG Primary Signal Head and Phase Label.
 - RAG+RTIGA Secondary Signal Head, 4-in-line.
 - NRT No Right Turn Regulatory Box Sign 4-in-line.
 - NLT No Left Turn Regulatory Box Sign 4-in-line.
 - AGD 306 Microwave Vehicle Detector and Label.
 - FLIR TrafiOne 195 Thermal Stopline Detector and Label.
 - AGD 318 Dual Zone Radar Detector and Label.
 - Photoelectric Cell.
 - Signal Pole Number.
 - Virtual MOVA Detection Zone and Label.
 - Virtual Stopline Detection Zone.
- CIVILS KEY:**
- NAL STAKKAbox Controller Chamber 600mm x 600mm.
 - NAL STAKKAbox Large Chamber 600mm x 450mm.
 - NAL STAKKAbox Medium Chamber 450mm x 450mm.
 - NAL Pole Retention Socket RS115.
 - New 100mm Orange Traffic Signals Duct (No. as indicated).
 - 50mm Black Duct for Electrical Feed.

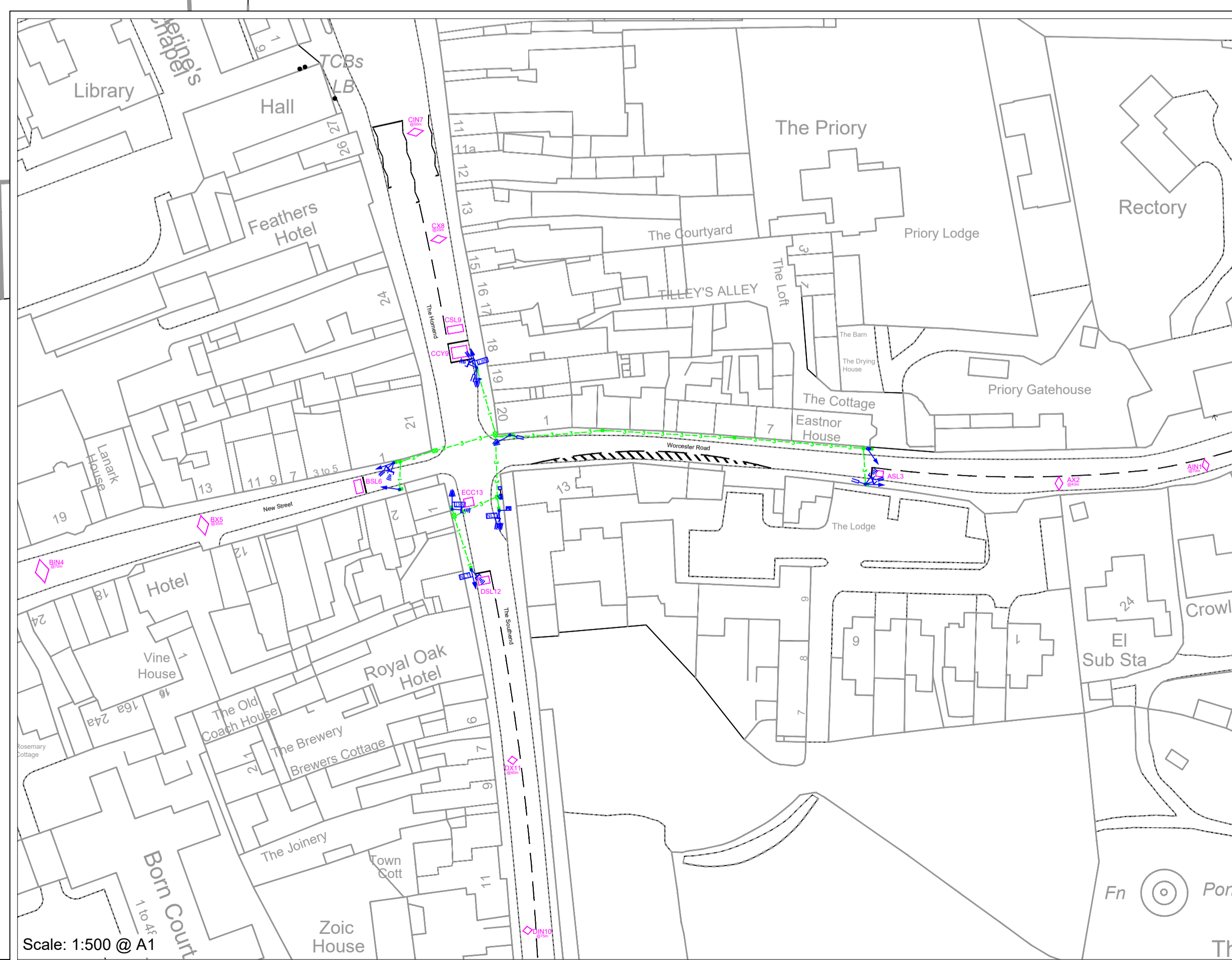
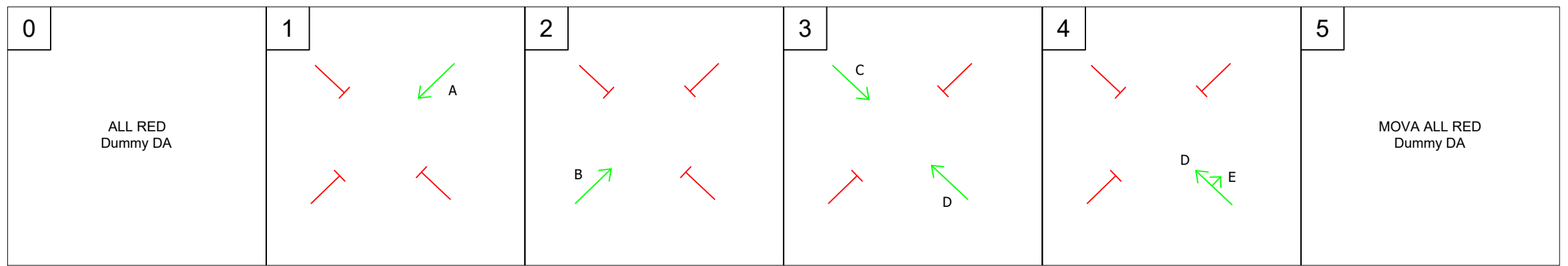
- Notes:**
- Controller to be a New Large Case Telent OPTIMA ELV installed on a NAL Controller Cabinet base with integral iMOVA and Telent Remote Monitoring via a 4G router. Suitable SIM card to be provided by HCC.
 - All Poles are to be 114mm diameter 4m Straight Slotless and installed 450mm deep.
 - Controller, NAL Controller Cabinet Base, Feeder Pillar and all Poles are to be Black in colour. Controller to be coated with anti-graffiti finish.
 - Pole numbers are to face the controller and be Black on a Yellow background.
 - The signal heads should be LED and both the signals and controller shall be ELV (Extra Low Voltage).
 - The photocell for dimming shall be located on a signal head on Pole 1 where it will not be affected by street lighting.
 - All road markings are to be retained.
 - All new ducting shall be polypropylene, Orange in colour, smooth bore with 'Traffic Signals' imprinted on the duct. Draw cords shall be included in all ducts.
 - All duct chambers are to have a grade B composite lid with steel frames and will have 150mm concrete bed and surround.
 - Ducting from RS115 NAL units to adjacent chamber are to be 1x100mm unless indicated otherwise. All other runs shall be as indicated by number.
 - Black 50mm duct to be installed between electrical feeder pillar and controller for electricity supply. Supply to be organised by HCC.
 - Detection Zones are set up at SAT by commissioning engineer.
 - Drawing to be read in conjunction with the works specification.

Scale: 1:200 @ A1



Cable Schematic

| | |
|--|---|
| 1 x 16 core (1.5mm ²) | 1 |
| Approx length 13m | |
| 1 x 8 core (1.5mm ²) | 2 |
| Approx length 35m | |
| 1 x 8 core (1.5mm ²) | 3 |
| Approx length 21m | |
| 1 x 8 core (1.5mm ²) | 4 |
| Approx length 46m | |
| 1 x 16 core (1.5mm ²) 1 x 8 core (1.5mm ²) | 5 |
| Approx length 50m | |
| 1 x 20 core (1.5mm ²) | 6 |
| Approx length 38m | |
| 1 x 16 core (1.5mm ²) | 7 |
| Approx length 26m | |
| 1 x 8 core (1.5mm ²) | 8 |
| Approx length 102m | |
| 1 x 16 core (1.5mm ²) | 9 |
| Approx length 108m | |



DETAILED DESIGN

| | | | | | |
|--|--------------------------------------|-------------------|---------------------------|---------|------|
| 01/03/2021 | 20/01/2023 | 1st Drawing Issue | JTO | RDB | PJS |
| By | Date | Description | By | Checked | Appr |
| Title: 8008 Top Cross, Ledbury Junction Design Traffic Signals Design | | | | | |
| Project No: S01241 | Scale: As Shown | Date: 03/01/2023 | | | |
| Drawn: JTO | CAD File Name: 351596-TS-Isd01-Rev00 | | | | |
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| Originator: JTO | Checked: RDB | Approved: PJS | Approval Date: 20/01/2023 | | |
| DRAWING No: 351596-TS | ISS: 01 | REV: 00 | | | |