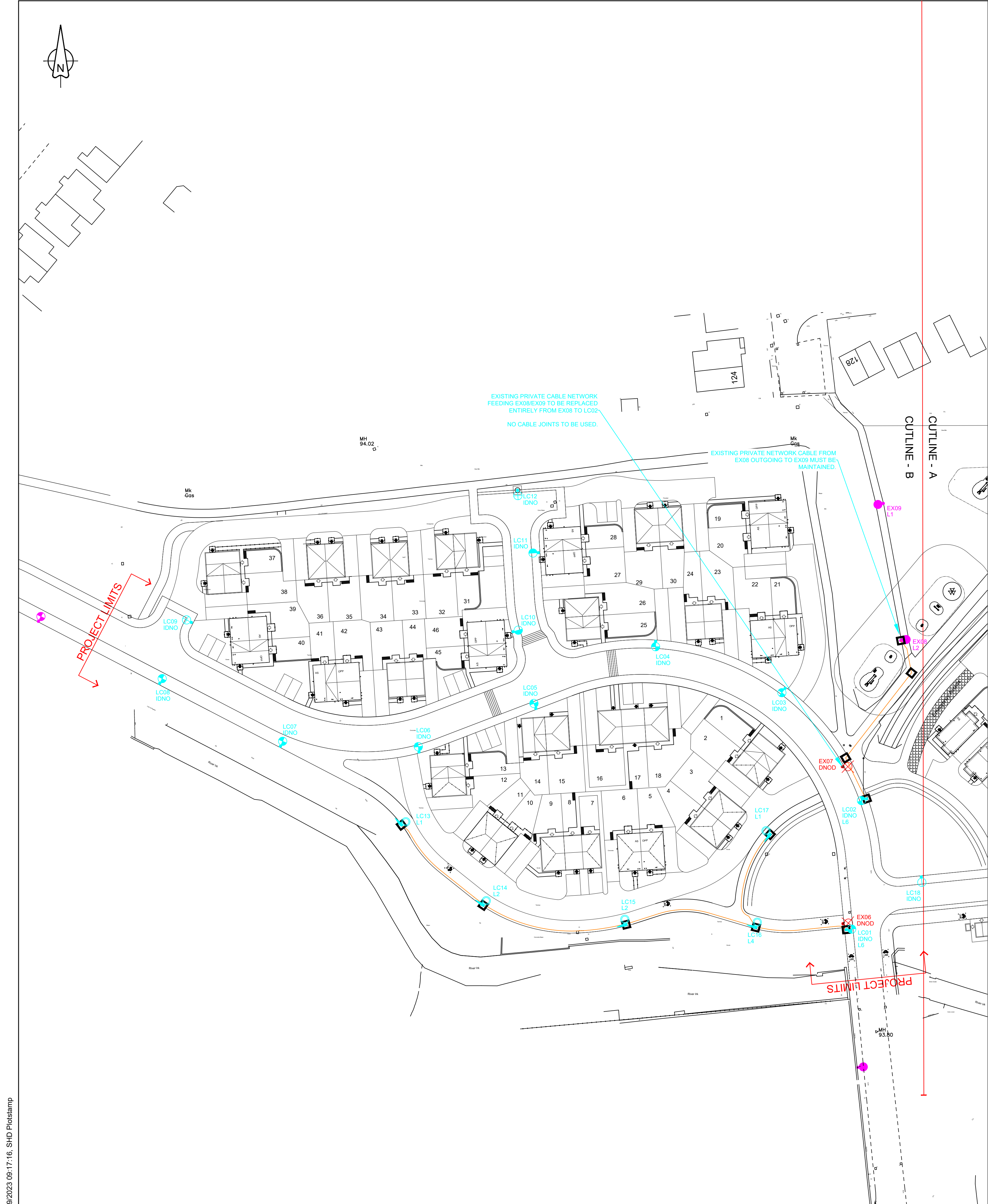




|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Qty 1</div><div>Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>CC6780 - 6M TRENT PR POST TOP</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA043.V1.F4Q1.W023</div><div>Luminaire Order Ref:</div><div>VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>3.33 klm</div><div>Charge Code:</div><div>42 0023 0000 100</div><div>Luminaire wattage:</div><div>23 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>IDNO electrical supply connection<br/>IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)</div><div>Primary Isolator:</div><div></div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div> | <div><div>Qty 20</div><div>Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>1B0601METR10GR</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA033.V1.F4Q1.W018</div><div>Luminaire Order Ref:</div><div>VMX.2.LA033.V1.F4Q1.W018.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>2.59 klm</div><div>Charge Code:</div><div>42 0018 0000 100</div><div>Luminaire wattage:</div><div>18 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>IDNO electrical supply connection<br/>IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)</div><div>Primary Isolator:</div><div></div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div> | <div><div>Qty 33</div><div>Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>1B0601METR10GR</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA043.V1.F4Q1.W023</div><div>Luminaire Order Ref:</div><div>VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>3.33 klm</div><div>Charge Code:</div><div>42 0023 0000 100</div><div>Luminaire wattage:</div><div>23 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>IDNO electrical supply connection<br/>IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)</div><div>Primary Isolator:</div><div></div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div> |
| <div><div>Qty 5</div><div>Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>1B0601METR10GR</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA023.V1.F4Q1.W013</div><div>Luminaire Order Ref:</div><div>VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>1.82 klm</div><div>Charge Code:</div><div>42 0013 0000 100</div><div>Luminaire wattage:</div><div>13 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>IDNO electrical supply connection<br/>IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)</div><div>Primary Isolator:</div><div></div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div>                                                  | <div><div>Qty 5</div><div>Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>CC6780 - 6M TRENT PR POST TOP</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA023.V1.F4Q1.W013</div><div>Luminaire Order Ref:</div><div>VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>1.82 klm</div><div>Charge Code:</div><div>42 0013 0000 100</div><div>Luminaire wattage:</div><div>13 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>Private cable network</div><div>Primary Isolator:</div><div>32A double pole switch with BS 88 Type 2 6A fuse to luminaire</div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div>         | <div><div>Qty 2</div><div>Existing lighting column to be uprooted and removed from site. Luminaire to be removed and handed back to the local authority for reuse or recycling.</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <div><div>Qty 8</div><div>Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham &amp; Rochdale Borough Council Street Lighting Specification.</div></div> <div><div>Column Reference:</div><div>1B0601METR10GR</div><div>Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.</div><div>Mounting Type:</div><div>Post top mounted</div><div>Manufacturer Ref:</div><div>VMX.2.LA053.V1.F4Q1.W038</div><div>Luminaire Order Ref:</div><div>VMX.2.LA053.V1.F4Q1.W038.PT1.T7 T.LRD.CL8.L007</div><div>Lumen Output:</div><div>5.07 klm</div><div>Charge Code:</div><div>42 0038 0000 100</div><div>Luminaire wattage:</div><div>38 w</div><div>Colour Temperature:</div><div>3000k (Warm White)</div><div>Luminaire Tilt Inclination:</div><div>0°</div><div>Luminous Intensity:</div><div>G4</div><div>Dimming Profile:</div><div>CMS controlled</div><div>Supply:</div><div>IDNO electrical supply connection<br/>IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)</div><div>Primary Isolator:</div><div></div><div>Door Orientation:</div><div>Refer to DWG 13.04 (Door Alignment)</div></div>                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

GENERAL NOTES

1.

This drawing must be read in conjunction with:  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 2 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 3 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 4 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 5 OF 5

2.

All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.

3.

SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.

4.

Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.

5.

This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.

6.

Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.

7.

All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE GS6, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations

8.

All luminaires are to have Philips Xitanium dimmable DALI enabled electronic drivers.

9.

All luminaires are to have Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets.  
**Except Lighting column LC29 which is to have a Branch Node installed.**  
**There shall be a requirement for one lantern to have the capability of mounting a Lucy Vizion Collector via twenty (20) millimetre diameter hole in the lantern canopy, using a NEMA socket replacement kit, and plugging into the Dali driver via Vizion/Dali interface control unit.**

10.

All luminaires shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade

LIGHTING CLASSIFICATION

This lighting design has been produced in accordance with current:  
BS 5489-1:2020, CEN/TR 13201-1:2014 & BS EN 13201-2:2015 outdoor lighting documents and guidelines.

Road lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux  
Minimum illuminance (Emin): >1.00 lux  
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux  
Minimum illuminance (Emin): >0.60 lux  
Emin/Eav (uniformity): >0.20 (>20%)

NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.

SCHEME:

OFF DON STREET, MIDDLETON

DRAWING:

S38 STREET LIGHTING DESIGN  
APPROVED 15/09/2023

CLIENT:

KELLEN HOMES

DRAWING NUMBER:

SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13

DRAWN:

SRH

CHECKED:

SRH

CONTRACT NUMBER:

SHD418

DATE:

29/11/2021

SCALE @ A1

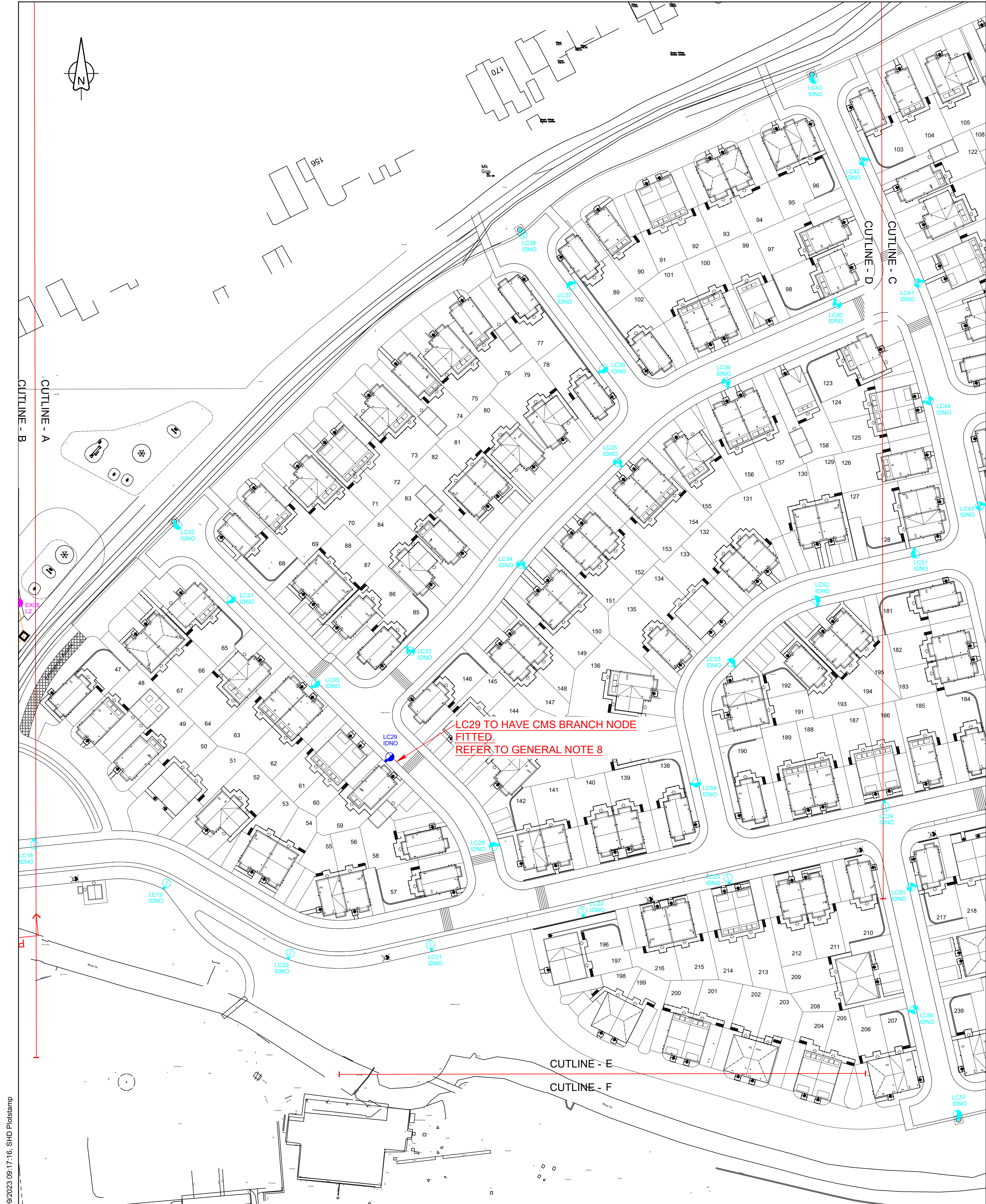
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REVISION:

R13

CONSTRUCTION ISSUE

15/09/2023 09:17:16, SHD Plotstamp



|                             |                                                                                                                                        |                                                                                                                                                                                                                                                                         |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 1                                                                                                                                      | Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | CC6780 - 6M TRENT PR POST TOP                                                                                                          | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                                                             |
| Luminaire:                  |                                                                                                                                        |                                                                                                                                                                                                                                                                         |
| Mounting Type:              | Post top mounted                                                                                                                       |                                                                                                                                                                                                                                                                         |
| Manufacturer Ref:           | VMX.2.LA043.V1.F4Q1.W023                                                                                                               |                                                                                                                                                                                                                                                                         |
| Luminaire Order Ref:        | VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007                                                                                         |                                                                                                                                                                                                                                                                         |
| Lumen Output:               | 3.33 klm                                                                                                                               |                                                                                                                                                                                                                                                                         |
| Charge Code:                | 42 0023 0000 100                                                                                                                       |                                                                                                                                                                                                                                                                         |
| Luminaire wattage:          | 23 w                                                                                                                                   |                                                                                                                                                                                                                                                                         |
| Colour Temperature:         | 3000k (Warm White)                                                                                                                     |                                                                                                                                                                                                                                                                         |
| Luminaire Tilt Inclination: | 0°                                                                                                                                     |                                                                                                                                                                                                                                                                         |
| Luminous Intensity:         | G4                                                                                                                                     |                                                                                                                                                                                                                                                                         |
| Dimming Profile:            | CMS controlled                                                                                                                         |                                                                                                                                                                                                                                                                         |
| Supply:                     | IDNO electrical supply connection IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.) |                                                                                                                                                                                                                                                                         |
| Primary Isolator:           |                                                                                                                                        |                                                                                                                                                                                                                                                                         |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                                                                                                    |                                                                                                                                                                                                                                                                         |

- GENERAL NOTES**
- This drawing must be read in conjunction with:  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 2 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 3 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 4 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 5 OF 5
  - All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.  
SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.  
Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
  - This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.
  - Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
  - All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE G56, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations
  - All luminaires are to have Philips Xitanium dimmable DALI enabled electronic drivers.
  - All luminaires are to have Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets.  
**Except Lighting column LC29 which is to have a Branch Node installed.**  
**There shall be a requirement for one lantern to have the capability of mounting a Lucy Vizion Collector via twenty (20) millimetre diameter hole in the lantern canopy, using a NEMA socket replacement kit, and plugging into the Dali driver via Vizion/Dali interface control unit.**
  - All luminaires are to have Internal wiring from IDNO isolator to the luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade
- LIGHTING CLASSIFICATION**
- This lighting design has been produced in accordance with current:  
BS 5489-1:2020, CEN/TR 13201-1:2014 & BS EN 13201-2:2015 outdoor lighting documents and guidelines.

Road lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux  
Minimum illuminance (Emin): >1.00 lux  
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux  
Minimum illuminance (Emin): >0.60 lux  
Emin/Eav (uniformity): >0.20 (>20%)

**NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.**

|                             |                                                                                                                                        |                                                                                                                                                                                                                                       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 20                                                                                                                                     | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                                                                                                                         | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                                                                                                                       |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA033.V1.F4Q1.W018                                                                                                               |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA033.V1.F4Q1.W018.PT1.T7 T.LRD.CL8.L007                                                                                         |                                                                                                                                                                                                                                       |
| Lumen Output:               | 2.59 klm                                                                                                                               |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0018 0000 100                                                                                                                       |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 18 w                                                                                                                                   |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                                                                                                                     |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                                                                                                                         |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.) |                                                                                                                                                                                                                                       |
| Primary Isolator:           |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                                                                                                    |                                                                                                                                                                                                                                       |

|                             |                                                                                                                                        |                                                                                                                                                                                                                                       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 5                                                                                                                                      | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                                                                                                                         | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                                                                                                                       |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013                                                                                                               |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007                                                                                         |                                                                                                                                                                                                                                       |
| Lumen Output:               | 1.82 klm                                                                                                                               |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0013 0000 100                                                                                                                       |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 13 w                                                                                                                                   |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                                                                                                                     |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                                                                                                                         |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.) |                                                                                                                                                                                                                                       |
| Primary Isolator:           |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                                                                                                    |                                                                                                                                                                                                                                       |

|                             |                                                               |                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 5                                                             | Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | CC6780 - 6M TRENT PR POST TOP                                 | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                                                             |
| Luminaire:                  |                                                               |                                                                                                                                                                                                                                                                         |
| Mounting Type:              | Post top mounted                                              |                                                                                                                                                                                                                                                                         |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013                                      |                                                                                                                                                                                                                                                                         |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007                |                                                                                                                                                                                                                                                                         |
| Lumen Output:               | 1.82 klm                                                      |                                                                                                                                                                                                                                                                         |
| Charge Code:                | 42 0013 0000 100                                              |                                                                                                                                                                                                                                                                         |
| Luminaire wattage:          | 13 w                                                          |                                                                                                                                                                                                                                                                         |
| Colour Temperature:         | 3000k (Warm White)                                            |                                                                                                                                                                                                                                                                         |
| Luminaire Tilt Inclination: | 0°                                                            |                                                                                                                                                                                                                                                                         |
| Luminous Intensity:         | G4                                                            |                                                                                                                                                                                                                                                                         |
| Dimming Profile:            | CMS controlled                                                |                                                                                                                                                                                                                                                                         |
| Supply:                     | Private cable network                                         |                                                                                                                                                                                                                                                                         |
| Primary Isolator:           | 32A double pole switch with BS 88 Type 2 6A fuse to luminaire |                                                                                                                                                                                                                                                                         |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                           |                                                                                                                                                                                                                                                                         |

|                             |                                                                                                                                        |                                                                                                                                                                                                                                       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 8                                                                                                                                      | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                                                                                                                         | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                                                                                                                       |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA053.V1.F4Q1.W038                                                                                                               |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA053.V1.F4Q1.W038.PT1.T7 T.LRD.CL8.L007                                                                                         |                                                                                                                                                                                                                                       |
| Lumen Output:               | 5.07 klm                                                                                                                               |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0038 0000 100                                                                                                                       |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 38 w                                                                                                                                   |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                                                                                                                     |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                                                                                                                         |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.) |                                                                                                                                                                                                                                       |
| Primary Isolator:           |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                                                                                                    |                                                                                                                                                                                                                                       |

|                             |                                                                                                                                        |                                                                                                                                                                                                                                       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 33                                                                                                                                     | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                                                                                                                         | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                                                                                                                       |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA043.V1.F4Q1.W023                                                                                                               |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007                                                                                         |                                                                                                                                                                                                                                       |
| Lumen Output:               | 3.33 klm                                                                                                                               |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0023 0000 100                                                                                                                       |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 23 w                                                                                                                                   |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                                                                                                                     |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                                                                                                                     |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                                                                                                                         |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.) |                                                                                                                                                                                                                                       |
| Primary Isolator:           |                                                                                                                                        |                                                                                                                                                                                                                                       |
| Door Orientation:           | Refer to DWG 13.04 (Door Alignment)                                                                                                    |                                                                                                                                                                                                                                       |

- Luminaire to have Lucy Vizion CMS Branch Node installed.  
**Refer to General Note 8.**
- Future development phase S38 street lighting column
- 1m² concrete hard standing around base compartment of proposed lighting column
- Indicates direction of travel of raise/lower lighting column.
- Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 1000mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway
- Proposed 450mm x 450mm composite modular chamber to provide duct access complete with lockable heavy duty cover and frame denoted 'STREET LIGHTING' on cover.

**Ducting location's shown on this drawing are indicative only and final setting out positions to be determined by the site engineer or overseeing organisation.**

**UNIT IDENTIFICATION KEY:**

LC\*\* Proposed lighting column identification number  
EX\*\* Existing lighting column identification number

**ELECTRICAL CONNECTION TYPE:**

IDNO Proposed independent DNO supply connection  
DNOD Disconnect existing DNO supply connection  
L\*\* Private cable termination type:  
Refer to SHD418-SHD-HEL-DR-EO-Electrical-R13

**ISOLUX CONTOUR KEY:**

- 0.20 Isolux contour line
- 0.60 Isolux contour line
- 1.00 Isolux contour line
- 2.00 Isolux contour line

**EXISTING EQUIPMENT:**

Existing lighting column to remain

Existing lighting column to be uprooted and removed from site.  
Luminaire to be removed and handed back to the local authority for reuse or recycling.

| R13 | CONSTRUCTION ISSUE                    | 15/09/2023 | SRH |
|-----|---------------------------------------|------------|-----|
| R12 | LA REVIEW AMENDMENTS 22/08/2023       | 26/08/2023 | SRH |
| R11 | LA REVIEW AMENDMENTS 27/07/2023       | 05/08/2023 | SRH |
| R10 | LA REVIEW AMENDMENTS 02/06/2023       | 29/06/2023 | SRH |
| R9  | LA REVIEW AMENDMENTS 04/05/2023       | 04/05/2023 | SRH |
| R8  | LA REVIEW AMENDMENTS 22/03/2023       | 13/04/2023 | SRH |
| R7  | LA REVIEW AMENDMENTS 07/02/2023       | 27/02/2023 | SRH |
| R6  | LA REVIEW AMENDMENTS 18/10/2022       | 02/12/2022 | SRH |
| R5  | DEVELOPMENT LAYOUT CHANGE 01/08/2022  | 05/08/2022 | SRH |
| R4  | DEVELOPMENT LAYOUT CHANGE 04/05/2022  | 13/05/2022 | SRH |
| R3  | ADDED COLUMNS O/S PLOTS 1 TO 13       | 26/01/2022 | SRH |
| R2  | DEVELOPMENT LAYOUT CHANGE 07/01/2022  | 07/01/2022 | SRH |
| R1  | RENUMBERED LIGHTING COLUMNS           | 07/12/2021 | SRH |
| R0  | INITIAL DESIGN FOR REVIEW AND COMMENT | 29/11/2021 | SRH |
| REV | DESCRIPTION                           | DATE       | BY  |



info@shdlighting.co.uk ☎ 07834 490 192 www.shdlighting.co.uk

|                    |                                                   |            |             |
|--------------------|---------------------------------------------------|------------|-------------|
| SCHEME:            | OFF DON STREET, MIDDLETON                         |            |             |
| DRAWING:           | S38 STREET LIGHTING DESIGN<br>APPROVED 15/09/2023 |            |             |
| CLIENT:            | KELLEN HOMES                                      |            |             |
| DRAWING NUMBER:    | SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13     | DRAWN:     | SRH         |
|                    | SHEET 2 OF 5                                      | CHECKED:   | SRH         |
| CONTRACT NUMBER:   | SHD418                                            | DATE:      | 29/11/2021  |
|                    |                                                   | APPROVED:  | P BEVERIDGE |
|                    |                                                   | SCALE @ A1 | 1:500       |
|                    |                                                   | REVISION:  | R13         |
| CONSTRUCTION ISSUE |                                                   |            |             |



LC29 TO HAVE CMS BRANCH NODE  
FITTED.  
REFER TO GENERAL NOTE 8

|                             |                                   |                                                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 1                                 | Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | CC6780 - 6M TRENT PR POST TOP     | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                                                             |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                                                         |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                                                         |
| Manufacturer Ref:           | VMX.2.LA043.V1.F4Q1.W023          |                                                                                                                                                                                                                                                                         |
| Luminaire Order Ref:        | VMX.2.LA043.V1.F4Q1.W023.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                                                          |
| Lumen Output:               | 3.33 klm                          |                                                                                                                                                                                                                                                                         |
| Charge Code:                | 42 0023 0000 100                  |                                                                                                                                                                                                                                                                         |
| Luminaire wattage:          | 23 w                              |                                                                                                                                                                                                                                                                         |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                                                         |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                                                         |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                                                         |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                                                         |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                                                    |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                                                         |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                                                     |

- GENERAL NOTES**
- This drawing must be read in conjunction with:  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 2 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 3 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 4 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 5 OF 5
  - All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.  
SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
  - Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
  - This lighting design has been prepared in accordance with the HEMS/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.
  - Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
  - All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE G56, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations
  - All luminaires are to have Philips Xitanium dimmable DALI enabled electronic drivers.
  - All luminaires are to have Lucy Zodion Vizion Central Management System – UnitNode 3 with 5 pin suitable for 7 pin NEMA sockets.  
**Except Lighting column LC29 which is to have a Branch Node installed.**  
**There shall be a requirement for one lantern to have the capability of mounting a Lucy Vizion Collector via twenty (20) millimetre diameter hole in the lantern canopy, using a NEMA socket replacement kit, and plugging into the Dali driver via Vizion/Dali interface control unit.**
  - All luminaires are to have Internal wiring from IDNO isolator to the luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade

Road lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux  
Minimum illuminance (Emin): >1.00 lux  
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux  
Minimum illuminance (Emin): >0.60 lux  
Emin/Eav (uniformity): >0.20 (>20%)

**NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.**

|                             |                                   |                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 20                                | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                    | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA033.V1.F4Q1.W018          |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA033.V1.F4Q1.W018.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 2.59 klm                          |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0018 0000 100                  |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 18 w                              |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                  |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

|                             |                                   |                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 5                                 | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                    | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013          |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 1.82 klm                          |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0013 0000 100                  |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 13 w                              |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                  |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

|                             |                                   |                                                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 5                                 | Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | CC6780 - 6M TRENT PR POST TOP     | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                                                             |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                                                         |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                                                         |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013          |                                                                                                                                                                                                                                                                         |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                                                          |
| Lumen Output:               | 1.82 klm                          |                                                                                                                                                                                                                                                                         |
| Charge Code:                | 42 0013 0000 100                  |                                                                                                                                                                                                                                                                         |
| Luminaire wattage:          | 13 w                              |                                                                                                                                                                                                                                                                         |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                                                         |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                                                         |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                                                         |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                                                         |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                                                    |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                                                         |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                                                     |

|                             |                                                               |                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 5                                                             | Proposed galvanised <b>raise and lower mid-hinged</b> tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | CC6780 - 6M TRENT PR POST TOP                                 | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                                                             |
| Luminaire:                  |                                                               |                                                                                                                                                                                                                                                                         |
| Mounting Type:              | Post top mounted                                              |                                                                                                                                                                                                                                                                         |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013                                      |                                                                                                                                                                                                                                                                         |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7                               | T.LRD.CL8.L007                                                                                                                                                                                                                                                          |
| Lumen Output:               | 1.82 klm                                                      |                                                                                                                                                                                                                                                                         |
| Charge Code:                | 42 0013 0000 100                                              |                                                                                                                                                                                                                                                                         |
| Luminaire wattage:          | 13 w                                                          |                                                                                                                                                                                                                                                                         |
| Colour Temperature:         | 3000k (Warm White)                                            |                                                                                                                                                                                                                                                                         |
| Luminaire Tilt Inclination: | 0°                                                            |                                                                                                                                                                                                                                                                         |
| Luminous Intensity:         | G4                                                            |                                                                                                                                                                                                                                                                         |
| Dimming Profile:            | CMS controlled                                                |                                                                                                                                                                                                                                                                         |
| Supply:                     | Private cable network                                         |                                                                                                                                                                                                                                                                         |
| Primary Isolator:           | 32A double pole switch with BS 88 Type 2 6A fuse to luminaire |                                                                                                                                                                                                                                                                         |
| Door Orientation:           |                                                               | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                                                     |

|                             |                                                               |                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 2                                                             | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                                                | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                                               |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                                              |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA023.V1.F4Q1.W013                                      |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA023.V1.F4Q1.W013.PT1.T7                               | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 1.82 klm                                                      |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0013 0000 100                                              |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 13 w                                                          |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                                            |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                                            |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                                            |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                                                |                                                                                                                                                                                                                                       |
| Supply:                     | Private cable network                                         |                                                                                                                                                                                                                                       |
| Primary Isolator:           | 32A double pole switch with BS 88 Type 2 6A fuse to luminaire |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                                               | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

|                             |                                   |                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 8                                 | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                    | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA053.V1.F4Q1.W038          |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA053.V1.F4Q1.W038.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 5.07 klm                          |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0038 0000 100                  |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 38 w                              |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                  |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

|                             |                                   |                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 33                                | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                    | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA043.V1.F4Q1.W023          |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA043.V1.F4Q1.W023.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 3.33 klm                          |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0023 0000 100                  |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 23 w                              |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                  |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

|                             |                                   |                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City                        | 33                                | Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification. |
| Column Reference:           | 1B0601METR10GR                    | Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.                                           |
| Luminaire:                  |                                   |                                                                                                                                                                                                                                       |
| Mounting Type:              | Post top mounted                  |                                                                                                                                                                                                                                       |
| Manufacturer Ref:           | VMX.2.LA043.V1.F4Q1.W023          |                                                                                                                                                                                                                                       |
| Luminaire Order Ref:        | VMX.2.LA043.V1.F4Q1.W023.PT1.T7   | T.LRD.CL8.L007                                                                                                                                                                                                                        |
| Lumen Output:               | 3.33 klm                          |                                                                                                                                                                                                                                       |
| Charge Code:                | 42 0023 0000 100                  |                                                                                                                                                                                                                                       |
| Luminaire wattage:          | 23 w                              |                                                                                                                                                                                                                                       |
| Colour Temperature:         | 3000k (Warm White)                |                                                                                                                                                                                                                                       |
| Luminaire Tilt Inclination: | 0°                                |                                                                                                                                                                                                                                       |
| Luminous Intensity:         | G4                                |                                                                                                                                                                                                                                       |
| Dimming Profile:            | CMS controlled                    |                                                                                                                                                                                                                                       |
| Supply:                     | IDNO electrical supply connection | IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)                                                                                                                                  |
| Primary Isolator:           |                                   |                                                                                                                                                                                                                                       |
| Door Orientation:           |                                   | Refer to DWG 13.04 (Door Alignment)                                                                                                                                                                                                   |

- Luminaire to have Lucy Vizion CMS Branch Node installed.  
**Refer to General Note 8.**
- Future development phase S38 street lighting column
- 1m² concrete hard standing around base compartment of proposed lighting column
- Indicates direction of travel of raise/lower lighting column.
- Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 1000mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway
- Proposed 450mm x 450mm composite modular chamber to provide duct access complete with lockable heavy duty cover and frame denoted 'STREET LIGHTING' on cover.

**Ducting location's shown on this drawing are indicative only and final setting out positions to be determined by the site engineer or overseeing organisation.**

**UNIT IDENTIFICATION KEY:**  
**LC\*\*** Proposed lighting column identification number  
**EX\*\*** Existing lighting column identification number

**ELECTRICAL CONNECTION TYPE:**  
**IDNO** Proposed independent DNO supply connection  
**DNOD** Disconnect existing DNO supply connection  
**L\*\*** Private cable termination type:  
Refer to SHD418-SHD-HLG-DR-EO-Electrical-R13

**ISOLUX CONTOUR KEY:**  
0.20 Isolux contour line  
0.60 Isolux contour line  
1.00 Isolux contour line  
2.00 Isolux contour line

**EXISTING EQUIPMENT:**  
Existing lighting column to remain  
Existing lighting column to be uprooted and removed from site.  
Luminaire to be removed and handed back to the local authority for reuse or recycling.

|     |                                       |            |     |
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| R9  | LA REVIEW AMENDMENTS 04/05/2023       | 04/05/2023 | SRH |
| R8  | LA REVIEW AMENDMENTS 22/03/2023       | 13/04/2023 | SRH |
| R7  | LA REVIEW AMENDMENTS 07/02/2023       | 27/02/2023 | SRH |
| R6  | LA REVIEW AMENDMENTS 18/10/2022       | 02/12/2022 | SRH |
| R5  | DEVELOPMENT LAYOUT CHANGE 01/08/2022  | 05/08/2022 | SRH |
| R4  | DEVELOPMENT LAYOUT CHANGE 04/05/2022  | 13/05/2022 | SRH |
| R3  | ADDED COLUMNS O/S PLOTS 1 TO 13       | 26/01/2022 | SRH |
| R2  | DEVELOPMENT LAYOUT CHANGE 07/01/2022  | 07/01/2022 | SRH |
| R1  | RENUMBERED LIGHTING COLUMNS           | 07/12/2021 | SRH |
| R0  | INITIAL DESIGN FOR REVIEW AND COMMENT | 29/11/2021 | SRH |
| REV | DESCRIPTION                           | DATE       | BY  |

|                                                            |                                                   |            |             |
|------------------------------------------------------------|---------------------------------------------------|------------|-------------|
|                                                            |                                                   |            |             |
| info@shdlighting.co.uk 07834 490 192 www.shdlighting.co.uk |                                                   |            |             |
| SCHEME:                                                    | OFF DON STREET, MIDDLETON                         |            |             |
| DRAWING:                                                   | S38 STREET LIGHTING DESIGN<br>APPROVED 15/09/2023 |            |             |
| CLIENT:                                                    | KELLEN HOMES                                      |            |             |
| DRAWING NUMBER:                                            | SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13     | DRAWN:     | SRH         |
|                                                            | SHEET 3 OF 5                                      | CHECKED:   | SRH         |
|                                                            |                                                   | APPROVED:  | P BEVERIDGE |
| CONTRACT NUMBER:                                           | SHD418                                            | SCALE @ A1 | 1:500       |
|                                                            | DATE: 29/11/2021                                  | REVISION:  | R13         |
| CONSTRUCTION ISSUE                                         |                                                   |            |             |



City 1

Proposed galvanised **raise and lower mid-hinged** tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: CC6780 - 6M TRENT PR POST TOP  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA043.V1.F4Q1.W023

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA043.V1.F4Q1.W023

Luminaire Order Ref: VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007

Lumen Output: 3.33 km

Charge Code: 42 0023 0000 100

Luminaire wattage: 23 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: IDNO electrical supply connection  
IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Door Orientation: Refer to DWG 13.04 (Door Alignment)

**GENERAL NOTES**

- This drawing must be read in conjunction with:  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 2 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 3 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 4 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 5 OF 5
- All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.  
SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
- Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
- This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.
- Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
- All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE G56, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations
- All luminaires are to have Philips Xitanium dimmable DALI enabled electronic drivers.
- All luminaires are to have Lucy Zodion Vizion Central Management System - UniNode 3 with 5 pin suitable for 7 pin NEMA sockets.  
**Except Lighting column LC29 which is to have a Branch Node installed.**  
**There shall be a requirement for one lantern to have the capability of mounting a Lucy Vizion Collector via twenty (20) millimetre diameter hole in the lantern canopy, using a NEMA socket replacement kit, and plugging into the Dali driver via Vizion/Dali interface control unit.**
- All luminaires are to have Internal wiring from IDNO isolator to the luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade

**LIGHTING CLASSIFICATION**  
This lighting design has been produced in accordance with current:  
BS 5489-1:2020, CEN/TR 13201-1:2014 & BS EN 13201-2:2015 outdoor lighting documents and guidelines.

Road lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux  
Minimum illuminance (Emin): >1.00 lux  
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux  
Minimum illuminance (Emin): >0.60 lux  
Emin/Eav (uniformity): >0.20 (>20%)

**NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.**

City 20

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA033.V1.F4Q1.W018

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA033.V1.F4Q1.W018

Luminaire Order Ref: VMX.2.LA033.V1.F4Q1.W018.PT1.T7 T.LRD.CL8.L007

Lumen Output: 2.59 km

Charge Code: 42 0018 0000 100

Luminaire wattage: 18 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: IDNO electrical supply connection  
IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Door Orientation: Refer to DWG 13.04 (Door Alignment)

City 5

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA023.V1.F4Q1.W013

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA023.V1.F4Q1.W013

Luminaire Order Ref: VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007

Lumen Output: 1.82 km

Charge Code: 42 0013 0000 100

Luminaire wattage: 13 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: IDNO electrical supply connection  
IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Door Orientation: Refer to DWG 13.04 (Door Alignment)

City 5

Proposed galvanised **raise and lower mid-hinged** tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: CC6780 - 6M TRENT PR POST TOP  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA023.V1.F4Q1.W013

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA023.V1.F4Q1.W013

Luminaire Order Ref: VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007

Lumen Output: 1.82 km

Charge Code: 42 0013 0000 100

Luminaire wattage: 13 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: Private cable network

Primary Isolator: 32A double pole switch with BS 88 Type 2 6A fuse to luminaire

Door Orientation: Refer to DWG 13.04 (Door Alignment)

City 8

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA053.V1.F4Q1.W038

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA053.V1.F4Q1.W038

Luminaire Order Ref: VMX.2.LA053.V1.F4Q1.W038.PT1.T7 T.LRD.CL8.L007

Lumen Output: 5.07 km

Charge Code: 42 0038 0000 100

Luminaire wattage: 38 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: IDNO electrical supply connection  
IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Door Orientation: Refer to DWG 13.04 (Door Alignment)

City 33

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR  
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.

Luminaire: VMX.2.LA043.V1.F4Q1.W023

Mounting Type: Post top mounted

Manufacturer Ref: VMX.2.LA043.V1.F4Q1.W023

Luminaire Order Ref: VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007

Lumen Output: 3.33 km

Charge Code: 42 0023 0000 100

Luminaire wattage: 23 w

Colour Temperature: 3000k (Warm White)

Luminaire Tilt Inclination: 0°

Luminous Intensity: G4

Dimming Profile: CMS controlled

Supply: IDNO electrical supply connection  
IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)

Door Orientation: Refer to DWG 13.04 (Door Alignment)

- Luminaire to have Lucy Vizion CMS Branch Node installed.  
**Refer to General Note 8.**
- Future development phase S38 street lighting column
- 1m² concrete hard standing around base compartment of proposed lighting column
- Indicates direction of travel of raise/lower lighting column.
- Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 1000mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway
- Proposed 450mm x 450mm composite modular chamber to provide duct access complete with lockable heavy duty cover and frame denoted 'STREET LIGHTING' on cover.

**Ducting location's shown on this drawing are indicative only and final setting out positions to be determined by the site engineer or overseeing organisation.**

**UNIT IDENTIFICATION KEY:**  
LC\*\* Proposed lighting column identification number  
EX\*\* Existing lighting column identification number

**ELECTRICAL CONNECTION TYPE:**  
IDNO Proposed independent DNO supply connection  
DNOD Disconnect existing DNO supply connection  
L\*\* Private cable termination type:  
Refer to SHD418-SHD-HEL-DR-EO-Electrical-R13

**ISOLUX CONTOUR KEY:**  
0.20 Isolux contour line  
0.60 Isolux contour line  
1.00 Isolux contour line  
2.00 Isolux contour line

**EXISTING EQUIPMENT:**  
Existing lighting column to remain

Existing lighting column to be uprooted and removed from site.  
Luminaire to be removed and handed back to the local authority for reuse or recycling.

|     |                                       |            |     |
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| R10 | LA REVIEW AMENDMENTS 02/06/2023       | 29/06/2023 | SRH |
| R9  | LA REVIEW AMENDMENTS 04/05/2023       | 04/05/2023 | SRH |
| R8  | LA REVIEW AMENDMENTS 22/03/2023       | 13/04/2023 | SRH |
| R7  | LA REVIEW AMENDMENTS 07/02/2023       | 27/02/2023 | SRH |
| R6  | LA REVIEW AMENDMENTS 18/10/2022       | 02/12/2022 | SRH |
| R5  | DEVELOPMENT LAYOUT CHANGE 01/08/2022  | 05/08/2022 | SRH |
| R4  | DEVELOPMENT LAYOUT CHANGE 04/05/2022  | 13/05/2022 | SRH |
| R3  | ADDED COLUMNS O/S PLOTS 1 TO 13       | 26/01/2022 | SRH |
| R2  | DEVELOPMENT LAYOUT CHANGE 07/01/2022  | 07/01/2022 | SRH |
| R1  | RENUMBERED LIGHTING COLUMNS           | 07/12/2021 | SRH |
| R0  | INITIAL DESIGN FOR REVIEW AND COMMENT | 29/11/2021 | SRH |
| REV | DESCRIPTION                           | DATE       | BY  |



info@shdlighting.co.uk ☎ 07834 490 192 www.shdlighting.co.uk

SCHEME: OFF DON STREET, MIDDLETON

DRAWING: S38 STREET LIGHTING DESIGN  
APPROVED 15/09/2023

CLIENT: KELLEN HOMES

|                                                               |                       |
|---------------------------------------------------------------|-----------------------|
| DRAWING NUMBER: SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13 | DRAWN: SRH            |
| SHEET 4 OF 5                                                  | CHECKED: SRH          |
|                                                               | APPROVED: P BEVERIDGE |
| CONTRACT NUMBER: SHD418                                       | SCALE @ A1            |
| DATE: 29/11/2021                                              | REVISION: R13         |

CONSTRUCTION ISSUE



- GENERAL NOTES**
- All works are to be carried out in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
  - Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.
  - The information on this drawing does not account for installation considerations, site conditions or provide any form of risk assessment.
  - No account is taken for the blocking effect caused by buildings, trees, etc.
  - The calculation shown by this drawing assumes that the whole area being considered is in the same plane, i.e. there are no changes in gradient or elevation.
  - It should be assumed by the contractor that not all services have been identified during the design period. It is the responsibility of the contractor to take all necessary steps to ensure that any such unidentified services are carefully located and not damaged.
  - The contractor shall identify the location of any overhead electrical or communication equipment prior to the undertaking of any onsite works. Should the presence of such equipment be identified, the contractor shall consult with the relevant statutory undertaker for further guidance.
  - All luminaires are to have Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets. **Except Lighting column LC29 which is to have a Branch Node installed. There shall be a requirement for one lantern to have the capability of mounting a Harvard (Lucy Zodion) branch node via 20mm dia hole in the lantern's canopy, using a NEMA socket replacement kit for the 20mm dia hole, and plugging into the DALI driver via a Vizion/DALI interface control unit.**
  - Final lighting column positions shall be agreed onsite with the Oldham and Rochdale street lighting representative.
  - Final lighting column identification numbers shall be agreed with the Oldham and Rochdale street lighting representative.
  - Lighting column foundations shall be designed in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale' and the manufacturer datasheet's for the columns, soil types and environmental conditions present.
  - All new lighting units shall integrate within the existing Oldham & Rochdale central management system (CMS) network and be a stand alone fully operable and prior to adoption shall be proven and witnessed to be fully working.
  - Each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
  - The contractor shall provide the Oldham and Rochdale street lighting representative with as-built drawings, test certificates and column and luminaire data sheets and details of all CMS node reference in accordance with the latest 'the specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
  - The contractor shall keep and provide accurate records to the Oldham and Rochdale street lighting representative and service provider in relation to the identification numbers associated with all central management system control equipment in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
  - Electrical installation work shall be carried out in accordance with the requirements of the latest edition of the IET wiring regulations, BS 7671
  - Proposed lighting columns shall be installed to the back edge of the proposed footway construction within adopted highway and shall not obscure property windows/doors or private access/driveways.
  - The minimum distance for a lighting column to be erected from the kerb face in a service strip shall be 1000mm
  - The developer will be required to pay any energy liability charges with their electricity supplier until the date of formal adoption of the development.
  - The developer will be responsible, unconditionally, for the condition, operation and any risk or liability of all the highways electrical equipment on all approved Section 38 agreement works until the date of formal adoption of the development.
  - The planting of trees near to lighting columns is to be avoided as future growth may inhibit lighting levels. Due to the layout of the plots and associated driveways it is inevitable that there will be conflict with proposed landscaping features. Where such instances occur the lighting will take precedence in order to satisfy the requirements of the British standard.

**LIGHTING CLASSIFICATION**  
This lighting design has been produced in accordance with current: BS 5489-1:2020, CEN/TR 13201-1:2014 & BS EN 13201-2:2015 outdoor lighting documents and guidelines.

Road lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux  
Minimum illuminance (Emin): >1.00 lux  
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux  
Minimum illuminance (Emin): >0.60 lux  
Emin/Eav (uniformity): >0.20 (>20%)

**NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.**

- NOTES**
- This drawing must be read in conjunction with:  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 1 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 2 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 3 OF 5  
SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13-SHEET 4 OF 5
  - All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately. SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
  - Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another. This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.
  - Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
  - All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE GS6, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations

- STATUTORY SERVICE NOTES**
- Current statutory service record plans should be obtained by the contractor / overseeing organisation before the commencement of any street lighting installation or removal works.
  - All services are to be located and identified prior to installing or removing any lighting columns. Installation and Removal works should be carried out in accordance with ENA TS 43-8, EAWR 1989, CDM 2015 & G39/1 and all other relevant HSE regulations.
  - All works in the vicinity of any overhead cables shall conform to the requirements of HSE guidance note GS6 "avoidance of danger from overhead lines"
  - All works in the vicinity of underground mains or cables shall conform to the requirements of HSE guidance note HGS47 "Avoiding danger from underground services" and any additional requirements specified by the relevant undertaker. The contractor will be responsible for liaison with the undertakers and for programming the agreed protection and / or diversion works for any statutory undertakers apparatus into the overall works programme

|     |                                       |            |     |
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| R11 | LA REVIEW AMENDMENTS 27/07/2023       | 05/08/2023 | SRH |
| R10 | LA REVIEW AMENDMENTS 02/06/2023       | 29/06/2023 | SRH |
| R9  | LA REVIEW AMENDMENTS 04/05/2023       | 04/05/2023 | SRH |
| R8  | LA REVIEW AMENDMENTS 22/03/2023       | 13/04/2023 | SRH |
| R7  | LA REVIEW AMENDMENTS 07/02/2023       | 27/02/2023 | SRH |
| R6  | LA REVIEW AMENDMENTS 18/10/2022       | 02/12/2022 | SRH |
| R5  | DEVELOPMENT LAYOUT CHANGE 01/08/2022  | 05/08/2022 | SRH |
| R4  | DEVELOPMENT LAYOUT CHANGE 04/05/2022  | 13/05/2022 | SRH |
| R3  | ADDED COLUMNS O/S PLOTS 1 TO 13       | 26/01/2022 | SRH |
| R2  | DEVELOPMENT LAYOUT CHANGE 07/01/2022  | 07/01/2022 | SRH |
| R1  | RENUMBERED LIGHTING COLUMNS           | 07/12/2021 | SRH |
| R0  | INITIAL DESIGN FOR REVIEW AND COMMENT | 29/11/2021 | SRH |
| REV | DESCRIPTION                           | DATE       | BY  |



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SCHEME: OFF DON STREET, MIDDLETON

DRAWING: S38 STREET LIGHTING DESIGN  
APPROVED 15/09/2023

CLIENT: KELLEN HOMES

|                  |                                               |             |             |
|------------------|-----------------------------------------------|-------------|-------------|
| DRAWING NUMBER:  | SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R13 | DRAWN:      | SRH         |
|                  | SHEET 5 OF 5                                  | CHECKED:    | SRH         |
|                  |                                               | APPROVED:   | P BEVERIDGE |
| CONTRACT NUMBER: | SHD418                                        | DATE:       | 29/11/2021  |
|                  |                                               | SCALE @ A1: | 1:1000      |
|                  |                                               | REVISION:   | R13         |

CONSTRUCTION ISSUE