

Report of the Strategic Director, Regeneration to the meeting of Bradford East Area Committee on 21st July 2016

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Subject: Street Lighting Column Replacement Programme

Summary statement: This report seeks to advise the Area Committee regarding the replacement of street lighting columns determined as non compliant and the subsequent recommendations as to how the West Yorkshire Local Transport Plan Funding allocation is most effectively utilised.

Mike Cowlam
Strategic Director
Regeneration

**Portfolio:
Environment and Sustainability**

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**Overview and Scrutiny Area:
Environment and Waste Management**



1.0 SUMMARY

- 1.1 This report seeks to inform the Area Committee of the requirement to replace street lighting columns that have been identified as non-compliant. That is, they are in need of urgent replacement due their age and condition based upon the findings of inspections carried out during reactive maintenance visits.

2.0 BACKGROUND

- 2.1 An essential part of the maintenance of the street lighting assets is to carry out visual inspection of each column, which provides valuable information as to the condition of the unit, specifically the structural integrity of the column.
- 2.2 Many of the steel columns were installed over 30 years ago and although a programme of external painting has prevented the columns from corroding on the outside the inside remains unprotected, and is therefore vulnerable.
- 2.3 There are also a significant number of concrete columns that are in excess of 30 years old which are prone to cracking as a result of corrosion to the steel reinforcing bars inside the columns which also require replacement when identified as non compliant.

3.0 OTHER CONSIDERATIONS

- 3.1 When replacing life expired columns the most effective means is to replace on a scheme basis therefore not only replacing the columns but also improving the lighting to modern standards.
- 3.2 All new lighting installed as part of the column replacement programme is now energy efficient LED lighting saving around 50% of the energy used based on the energy consumption of the previous equipment, the new units can also be pre-programmed to reduce the lighting levels outside peak periods

4.0 FINANCIAL AND RESOURCE APPRAISAL

- 4.1 The funding required for the Priority 1 schemes in Appendix 1 is estimated as £70,509 which is allocated to the Bradford East Area Committee.
- 4.2 The total West Yorkshire Local Transport Plan budget allocated to the Council by the Department for Transport is £388,000. This has been split between the Area Committees to deal with the Priority 1 column replacement schemes based upon the value of the estimates.

5.0 RISK MANAGEMENT AND GOVERNANCE ISSUES

5.1 There are no risk management and governance issues

6.0 LEGAL APPRAISAL

6.1 The Council has a power under Section 97 of the Highways Act 1980 to provide and maintain street lighting columns.

7.0 OTHER IMPLICATIONS

When lighting is replaced as a whole street or scheme there may be some columns that have been previously replaced as a result of accident damage or maintenance replacements, these columns are either designed around wherever possible for retaining in situ or carefully removed for re-use for reactive maintenance.

7.1 EQUALITY AND DIVERSITY

7.1.1 There are no equal rights implications at this time

7.2 SUSTAINABILITY IMPLICATIONS

7.2.1 Galvanised steel street lighting columns are recyclable when replaced on reaching the end of their design life which is likely to be in excess of 50 years; modern lanterns are constructed so that over 90% of the materials can also be recycled.

7.2.2 LED lanterns have an anticipated life in excess of 100,000 hours, which equates to around 25 years dramatically reducing the maintenance requirements when compared to traditional light sources.

7.3 GREENHOUSE GAS EMISSIONS IMPACTS

Modern street lighting equipment is considerably more energy efficient than older apparatus, and when using variable lighting levels along with white light can significantly reduce the energy consumption and CO² emissions.

7.4 COMMUNITY SAFETY IMPLICATIONS

7.4.1 Street lighting is a highly visible front line service. Good street lighting provides a vital function during the hours of darkness, protecting people and property and enhancing the night-time environment. Effective street lighting deters criminal activity and reduces road accidents.

7.5 HUMAN RIGHTS ACT

7.5.1 There are no direct Human Rights implications arising from the recommendations below.

7.6 TRADE UNION

7.6.1 There are no Trade Union implications in this item

7.7 WARD IMPLICATIONS

7.7.1 Priority 1 Schemes in Appendix 1 are within Bolton and Undercliffe and Bowling and Barkerend Wards

8 NOT FOR PUBLICATION DOCUMENTS

8.1 There is no restriction on the publication of this report.

9.0 OPTIONS

9.1 Members are asked to consider implementing the schemes listed in Table A of Appendix 1 which are prioritised with Priority 1 (being the schemes requiring the most urgent replacement as identified by site surveys). Designs and detailed estimates have been prepared for these schemes, a copy of these design is in Appendix 2.

9.2 Members may choose to implement column replacement schemes from Table B in Appendix 1, budget estimates have been prepared for these schemes. However, it may be necessary to remove any non compliant columns for safety reasons should they not be replaced in this financial year

10.0 RECOMMENDATIONS

10.1 That the Priority 1 street lighting column replacement schemes listed in Table A of Appendix 1 of the report be implemented.

11.0 APPENDICES

11.1 Appendix 1 – Column Replacement Schemes for Area Committee consideration

11.2 Appendix 2 – Designed schemes for consideration.

12.0 BACKGROUND DOCUMENTS

None.

Appendix 1 Column Replacement Schemes for Area Committee consideration

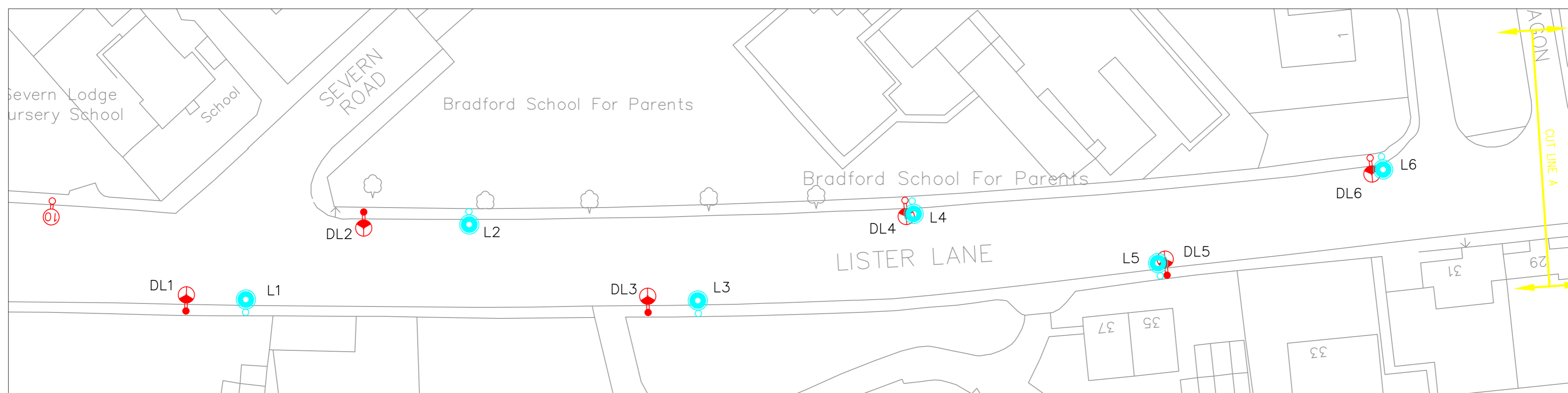
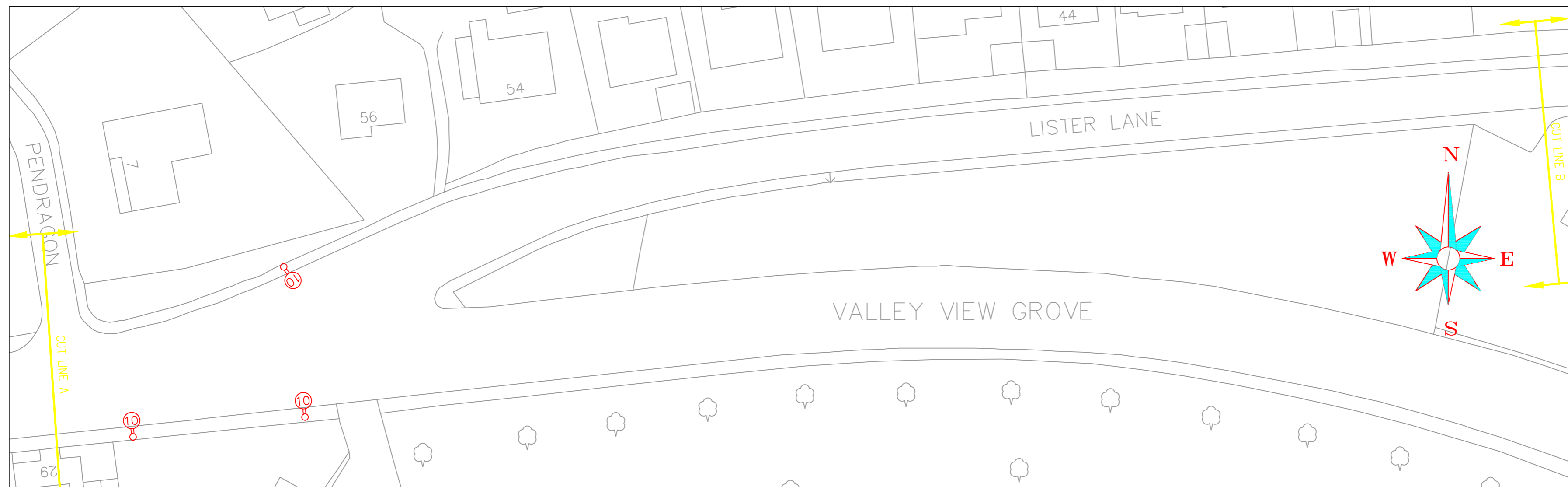
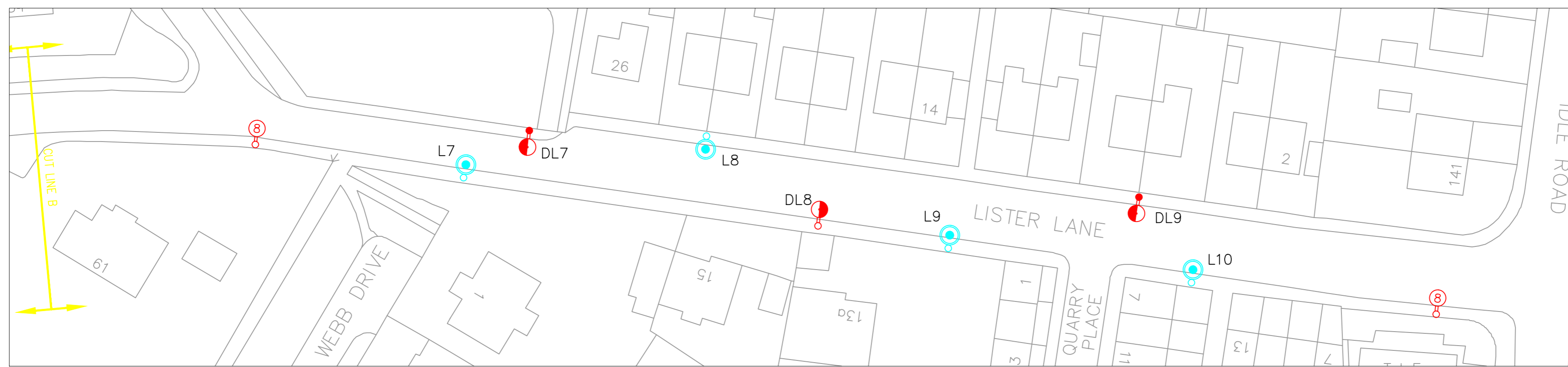
Table A - Priority 1 Schemes

Ward	Priority	Road	Estimate
Bolton and Undercliffe	1	Lister Lane	£22,477
Bolton and Undercliffe	1	Northcote Road	£11,824
Bowling and Barkerend	1	New Lane, Tyersal	£36,208
Total			£70,509

Table B - Other Schemes

Ward	Priority	Road	Estimate
Bolton and Undercliffe	2	Ashbourne Crescent	£9,653
Total			£9,653

Appendix 2 Designs for consideration (see following page)

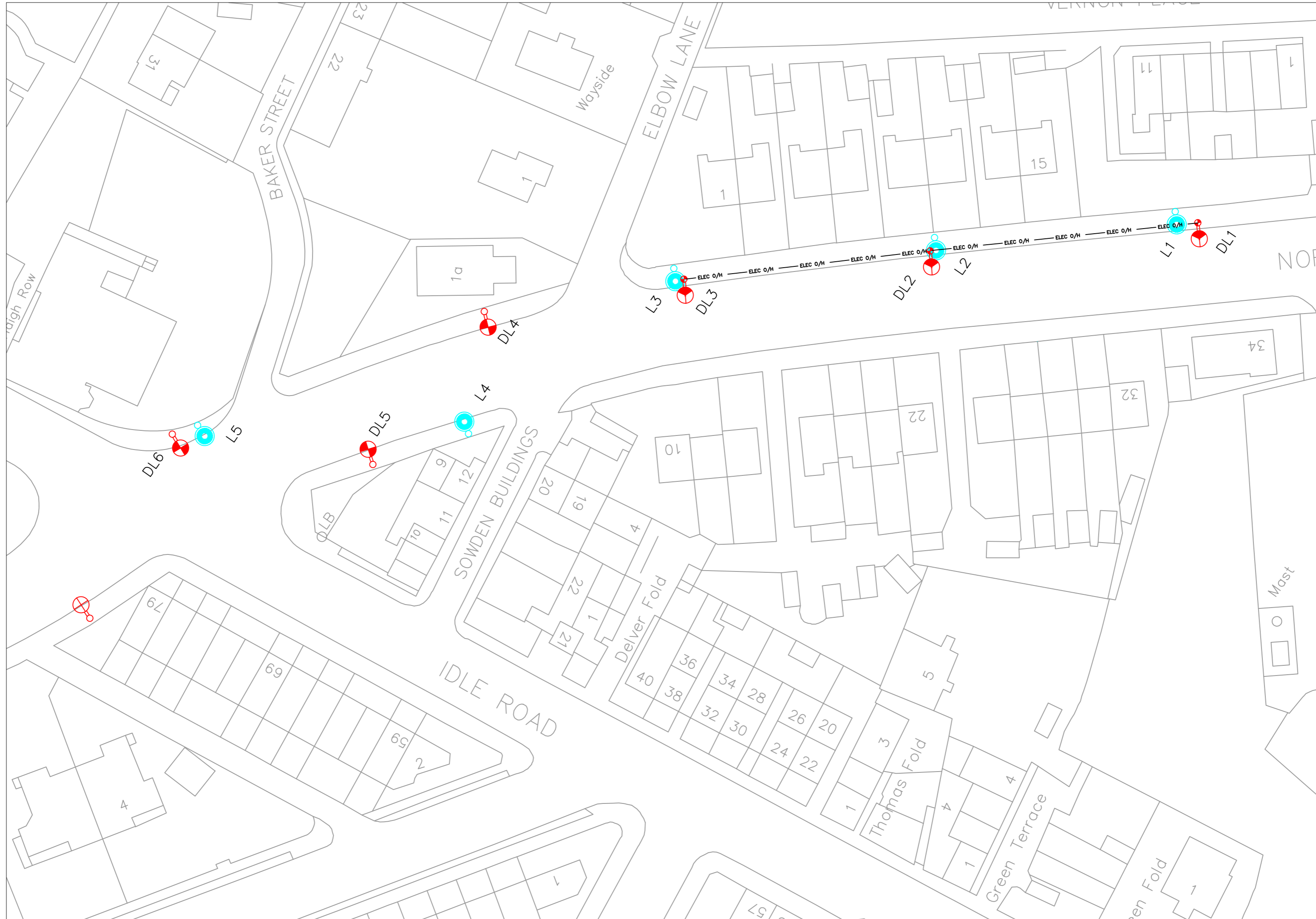


Quant.	Symbol	Type of Lighting Unit
4		Proposed 8 metre tubular steel column with spigot mounted bottom entry Urbis Ampera Midi 32LED Neutral white 5141 lantern unit 337372. Factory set-500mA driver: dimming regime 1(22:00-5:30 50%). Fitted with Nema socket SS6 20:20lux photocell. Finished in grey.
6		Proposed 10 metre tubular steel column with spigot mounted bottom entry Urbis Ampera Maxi 96LED Neutral white 5139 lantern unit 341142. Factory set-500mA driver: dimming regime 1(22:00-5:30 50%). Fitted with Nema socket SS6 20:20lux photocell. Finished in grey.
2		Existing 8m lighting column shown for reference only.
4		Existing 10m lighting column shown for reference only.
2		Existing 5 metre concrete column with 0.50m projection bracket and side entry lantern unit incorporating a 35W SOX lamp to take up and remove to tip.
1		Existing 5 metre steel column with 0.50m projection bracket and side entry lantern unit incorporating a 35W SOX lamp to take up and remove to tip.
2		Existing 8 metre steel column with 1.0m projection bracket and side entry lantern unit incorporating a 90W SOX lamp. To take up and remove to recycle.
4		Existing 8 metre concrete column with 1.0m projection bracket and side entry lantern unit incorporating a 90W SOX lamp. To take up and remove to recycle.

Notes:

1. All new columns to have Osram drivers with factory set dimming regime 1.
2. Existing services detailed on this drawing are not to be treated as accurate. The contractor is responsible for proving all services on site prior to the commencement of works.

Revision	CBM	MAR 16
Revision	Initi	Date
City of Bradford MDC		
www.bradford.gov.uk		
Department of Regeneration Strategic Director: Barra Mac Ruairi RIBA FRSA		
Design Office: Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW		
Project: LISTER LANE BOLTON AND UNDERCLIFFE		
Client: CAP 16/17		
Contractor to Contract: C P Leach BSc C.Eng MICE DMS		
Design	CBM	CBM
Scale/Date	1:500	A Preece
Scale/Date	1:500	MAR 16
Drawing Title: STREET LIGHTING PROPOSALS		
Drawing No: R/PTH/SL/100146/15151-1A		



Revision Inits Date

City of Bradford MDC
www.bradford.gov.uk

Department of Regeneration
 Strategic Director: Barra Mac Ruairi RIBA FRSA

Design Office:
 Transportation and Highways Service
 Street Lighting Unit
 Wakefield Road Depot
 Foundry Lane
 Bradford
 BD4 7NW

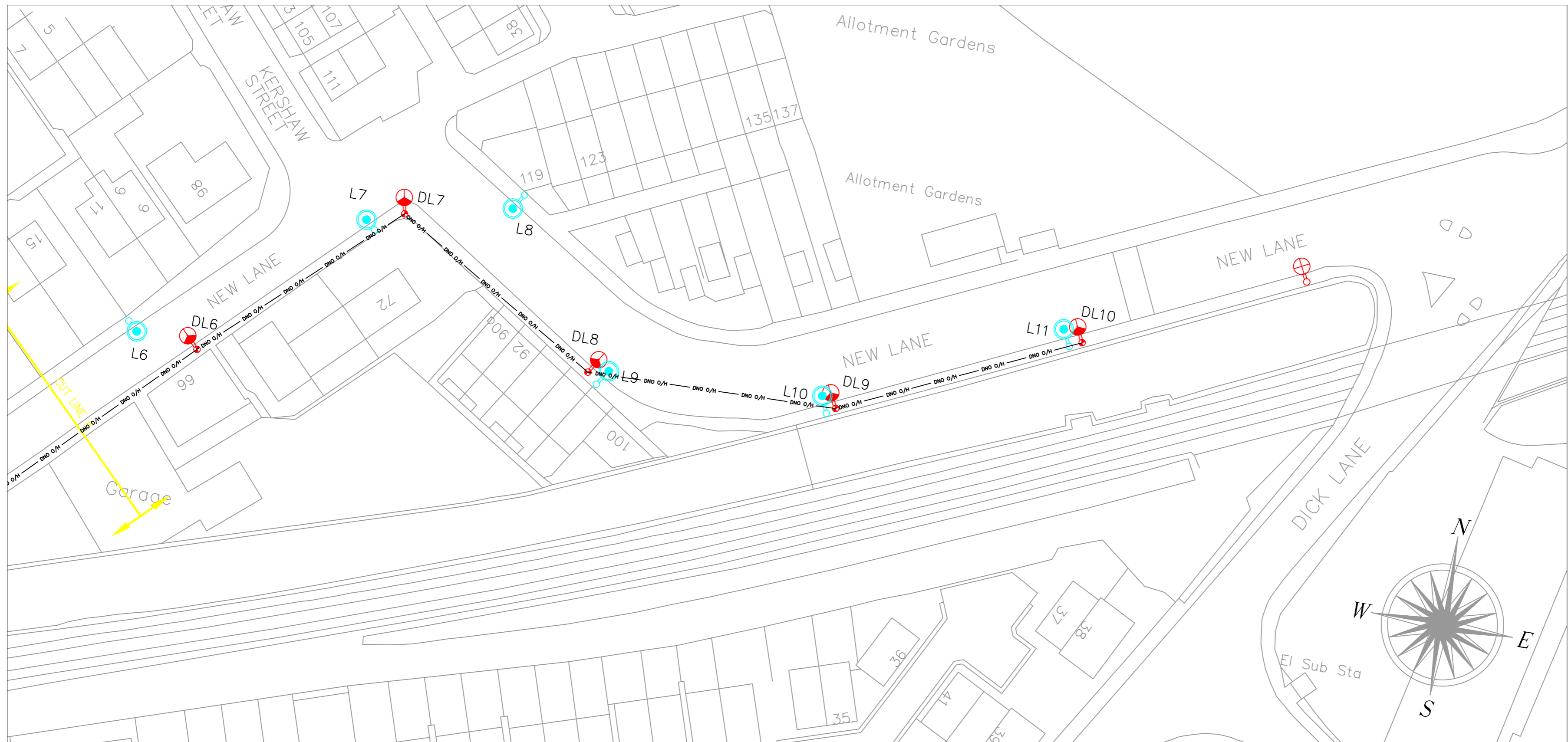
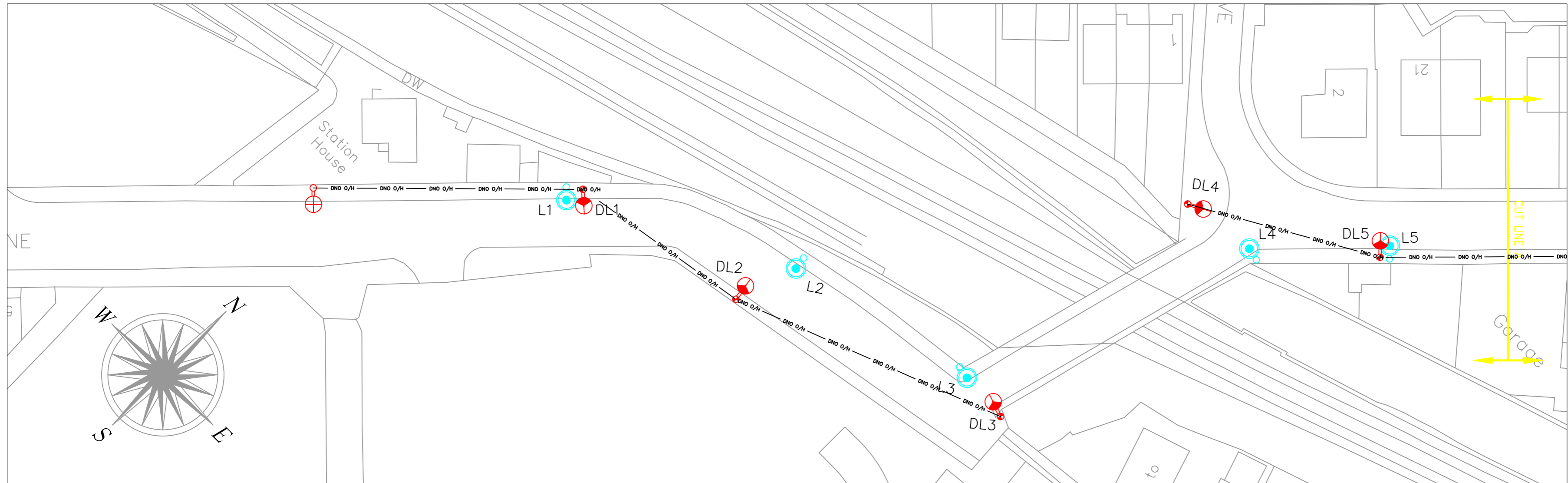
Project:
**Northcote Road
 Bradford**

Client:
 C P Leach BSc C.Eng MICE DMS

Design:	CM	Drawn:	CM	Checked:	CM	Released:	CM
Scale 1:500	1:500	Approved:	A Preece	Date:			

STREET LIGHTING PROPOSALS

Drawing No:
 R/PTH/SL/100146/15195-1A



- | Quant. | Symbol | Type of Lighting Unit |
|--------|--------|--|
| 7 | | Proposed 8 metre tubular steel column with spigot mounted bottom entry Urbis Ampera Midi 48LED Neutral white 5141 lantern unit 337372. Factory set-500mA driver; dimming regime 1(22:00-5:30 @50%). Fitted with Nema socket SS6 20:20lux photocell. Finished in grey. |
| 4 | | Proposed 8 metre tubular steel column 0.5m projection bracket having a side entry Urbis Ampera Midi 48LED Neutral white 5141 lantern unit 337372. Factory set-500mA driver@ dimming regime 1(22:00-5:30 @50%). Fitted with Nema socket SS6 20:20lux photocell. Finished in grey. |
| 1 | | Existing 10m lighting column shown for reference only. |
| 1 | | Existing 10m MASTER column. O/H lines to be disconnected at this point, column and lantern to remain in situ. |

- Notes:**
- All new columns to have Osram drivers with factory set dimming regime 1.
 - Existing services detailed on this drawing are not to be treated as accurate. The contractor is responsible for proving all services on site prior to the commencement of works.

A	Original	CBM	SEP 15
	Revision		
City of Bradford MDC			
www.bradford.gov.uk			
Department of Regeneration Strategic Director: Barra Mac Ruairi RIBA FRSA			
Design Office: Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW			
Project: NEW LANE TYERSAL			
Client: CAPITAL 14/15			
Contractor: C P Leach BSc C.Eng MICE DMS			
Design	CBM	Drawn	Checked
Scale/1:500	1:500	approved	A Preece
STREET LIGHTING PROPOSALS			
Drawing No: R/PTH/SL/100146/15155-1A			