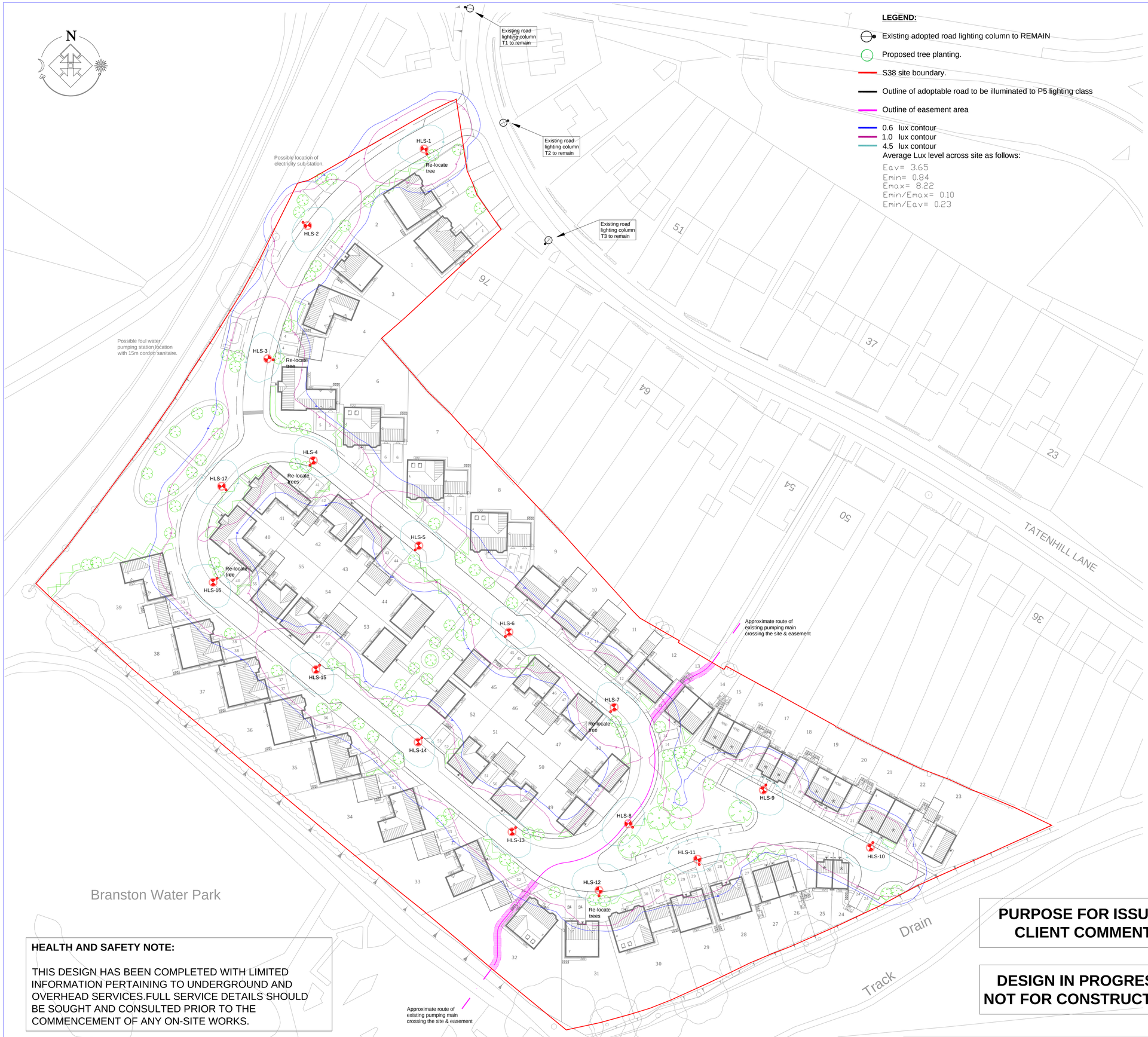

LEGEND:

- Existing adopted road lighting column to REMAIN
- Proposed tree planting.
- S38 site boundary.
- Outline of adoptable road to be illuminated to P5 lighting class
- Outline of easement area
- 0.6 lux contour
- 1.0 lux contour
- 4.5 lux contour

Average Lux level across site as follows:

Eav= 3.65
Emin= 0.84
Emax= 8.22
Emin/Emax= 0.10
Emin/Eav= 0.23

S38 WORKS LIGHTING EQUIPMENT SCHEDULE:

Lantern:	Holophane manufactured Vmax post-top mounted LED lantern, neutral white (4000k). Philips Xitanium LED driver
Code:	VMX.L044.V1.F4Q1 17w 2.03klm
Switching/ Control:	35/18lux photocell with lantern manufacturer installed NEMA
Column Height:	6m post top mounted at 0 degree upward tilt
Column	Tubular steel hot dip galvanised. Glass flake root protection/ finish to Staffordshire specification.

DIMMING REGEME:

Philips Xitanium driver and integrated dynadimmer gear pre-programmed for stand-alone operation. Dimming to be confirmed by Client. Where dimming is to be applied, refer to lantern reference on drawing for sequence:

Ref; **Dim A**:	75% of max light output between 20:00 and 00:00 and 50% of max light output between 00:00 and 06:00. Rest of time 100% output
Ref; **Dim B**:	50% of max light output between 20:00 and 06:00. Rest of time 100% output
Ref; **Dim C**:	75% of max light output between 00:00 and 06:00. Rest of time 100% output

SUPPLIES:

Road lighting columns to be fed from DNO LV supply networks.
Isolation: Double pole fused isolator with lock off facility to SCC specification c/w 6A BS 88 fuse. Isolator to be mounted above DNO cut out.

GENERAL LIGHTING SCHEME NOTES:

1. Any alterations to the positions of columns and associated equipment shown on this drawing must be referred to the designer to ensure compliance with lighting level requirements before installation.
2. Setting out should be conducted by a competent person. Before construction, Staffordshire Council should be notified for agreement / inspection if required. It is advised that Staffordshire Council and HEMSA approved contractors are to be commisioned to install lighting equipment.
3. Consideration must be given to column door orientation. Where a column position is to back of footpath or verge, door to face road. Further orientation guidance is contained within SLP501 which must be referred to.
   Ensure correct orientation of lanterns to road as detailed within drawing.
4. New column numbering as detailed is for reference only; Client to asign identification numbering in line with Adopting Authority specification where required.
5. In order to avoid future maintenance issues, the planting of trees and shrubbery in the vicinity of street lighting equipment is to be avoided.
6. Columns are to be planted to the rear of footways. Where in soft ground, columns to be located to a minimum of 1.5m back of kerb within grass / service strip. Mid hinge columns to be located to back of hard surface not within surrounding verge.

The design and installation of lighting and electrical equipment must fully comply with the current edition of E-on Street Lighting documents - “Street Lighting Design Policy” ref SLP500, “Specification for lighting and lit traffic signs on new developments” ref SLP501 and “Highway Works Detail drawings” ref SLP502. These documents are available and must be obtained and read by the appointed contractor.

S38 ROAD LIGHTING DESIGN METHODOLOGY:

1 S38 road lighting scheme conforms to S5489-1:2013 lighting class P5 (Eav= 3 to 4.5 lux with Emin=0.6). No SP ratio applied.
2 Existing road lighting along Tattenhill Lane is assumed to be satisfactory with no proposals to upgrade. The new proposed lighting scheme extends illumination to the junction, no contribtory illumination from existing scheme is included in new scheme calculations.
3 Potential bat activity to the West, South and East site boundary is noted. Target illumination level is low (class P5) with use of zero upward light ratio lanterns (low pollution) post top mounted at 0 deg upward tilt. Column spacings are optimised for scheme efficiency, with good lantern optic which minimises light trespass out of target road area. 0.6 lux contour as shown in blue provides indication of the minimum lux level within lighting class over the site.
4 New tree planting schedule is included on drawing for reference. Where trees are close to columns which may impact lighting scheme efficiency, designer has included a comment for tree re-location. Client to liaise with landscaping architect to ensure trees are not planted in close proximity to columns upon final agreed column locations.
5 Proposed scheme equipment is in line with current SCC specification. Where lighting scheme is to be adopted, full technical approval from SCC Lighting Engineer must be confirmed prior to installation.

HEALTH AND SAFETY NOTE:

THIS DESIGN HAS BEEN COMPLETED WITH LIMITED INFORMATION PERTAINING TO UNDERGROUND AND OVERHEAD SERVICES.FULL SERVICE DETAILS SHOULD BE SOUGHT AND CONSULTED PRIOR TO THE COMMENCEMENT OF ANY ON-SITE WORKS.

PURPOSE FOR ISSUE: CLIENT COMMENT

DESIGN IN PROGRESS NOT FOR CONSTRUCTION

21/02/17 Draft 1 Issued to Client for comment.

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Project: Lioncourt Homes Ltd Road Lighting

Location: Tatenhill Lane Branston

Drawn by:	Ken Duckers	**Date:**	18/02/17
Checked by:	Ian Buckley	**Date:**	
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Scale @ A1: 1:500	**Drawing No.:** HLS-625	**Sheet:** 1 of 1	**Revision:** Draft 1