LUX LEVEL ISOLINE PLOT

INTRODUCTION

THE LIGHTING CALCULATION HAS BEEN BASED ON THE FOLLOWING ARCHITECTURAL DRAWINGS ISSUED BY GENTOO HOMES:

GEN/60A/200

LIGHTING DESIGN NOTES

1. THE LIGHTING DESIGN DEVELOPED AND DETAILED ON THIS DRAWING UTILISES STANDARD WALL MOUNTED, DOWN ONLY LUMINARIES. IF THE SELECTED PRODUCTS ARE CHANGED THE LIGHT SPILL CALCULATION WILL REQUIRE CHECKING.

2. THE EXTERNAL LIGHTING DESIGN HAS BEEN ASSESSED AGAINST ENVIRONMENTAL ZONE E2 WHICH IS DESCRIBED AS VILLAGE OR RELATIVELY DARK OUTER SUBURBAN LOCATIONS. THIS INFORMATION IS INDICATED IN TABLE 1 DESIGN GUIDANCE IN THE ILP GUIDANCE NOTES FOR THE REDUCTION OF OBTRUSSIVE LIGHT GN01:2011

3. THE LIGHTING INSTALLATION SHALL BE CAREFULLY CONSIDERED TO ENSURE PROVISION OF APPROPRIATE PHYSICAL AND SPECTRAL PROPERTIES AS FOLLOWS:

   NEUTRAL COLOUR TEMPERATURE <2700K

   NO LIGHT OUTPUT WAVE LENGTHS TO PEAK HIGHER THAN 550 nM

   MINIMIZE THE SPREAD OF LIGHT ABOVE THE HORIZONTAL.

   USE NARROW SPECTRUM LIGHT SOURCES.

   SELECTED FITTINGS HAVE THE OUTPUT GLASS PLANES PARALLEL TO THE GROUND TO AVOID SKY GLOW.

4. TYPE EX2 ARE CONTROLLED VIA AN INTERGRATED PIR SENSOR THERFORE THEY WILL BE SWITCHED OFF IF THE AREA IS UNOCCUPIED. THIS WILL HELP TO PROVIDE NIGHT-TIME 'DARK PERIODS.' TO THE REAR OF THE PROPERTIES AND REDUCE THE EFFECT ON THE CONSERVATION STATUS OF BATS WITHIN THE LOCAL AREA.

5. LUMINAIRE TYPE EX1 & EX2 ARE WALL MOUNTED AT 1800MM #AFFL

LIGHTING STANDARDS

THE EXTERNAL LIGHTING DESIGN HAS BEEN DESIGNED IN LINE WITH THE FOLLOWING DESIGN STANDARDS:

- ILP THE INSTITUTION OF LIGHTING ENGINEERS GUIDANCE NOTES FOR THE REDUCTION OF OBTRUSIVE LIGHT GN01:2011
- BS EN 12464-2 LIGHTING OF WORKPLACES - OUTDOOR WORKPLACES PART 2

CONCLUSIONS

1. THE ILP CRITERIA FOR A ZONE E2 ENVIRONMENT IS MET FOR ALL LIGHTING CONDITIONS.

Works

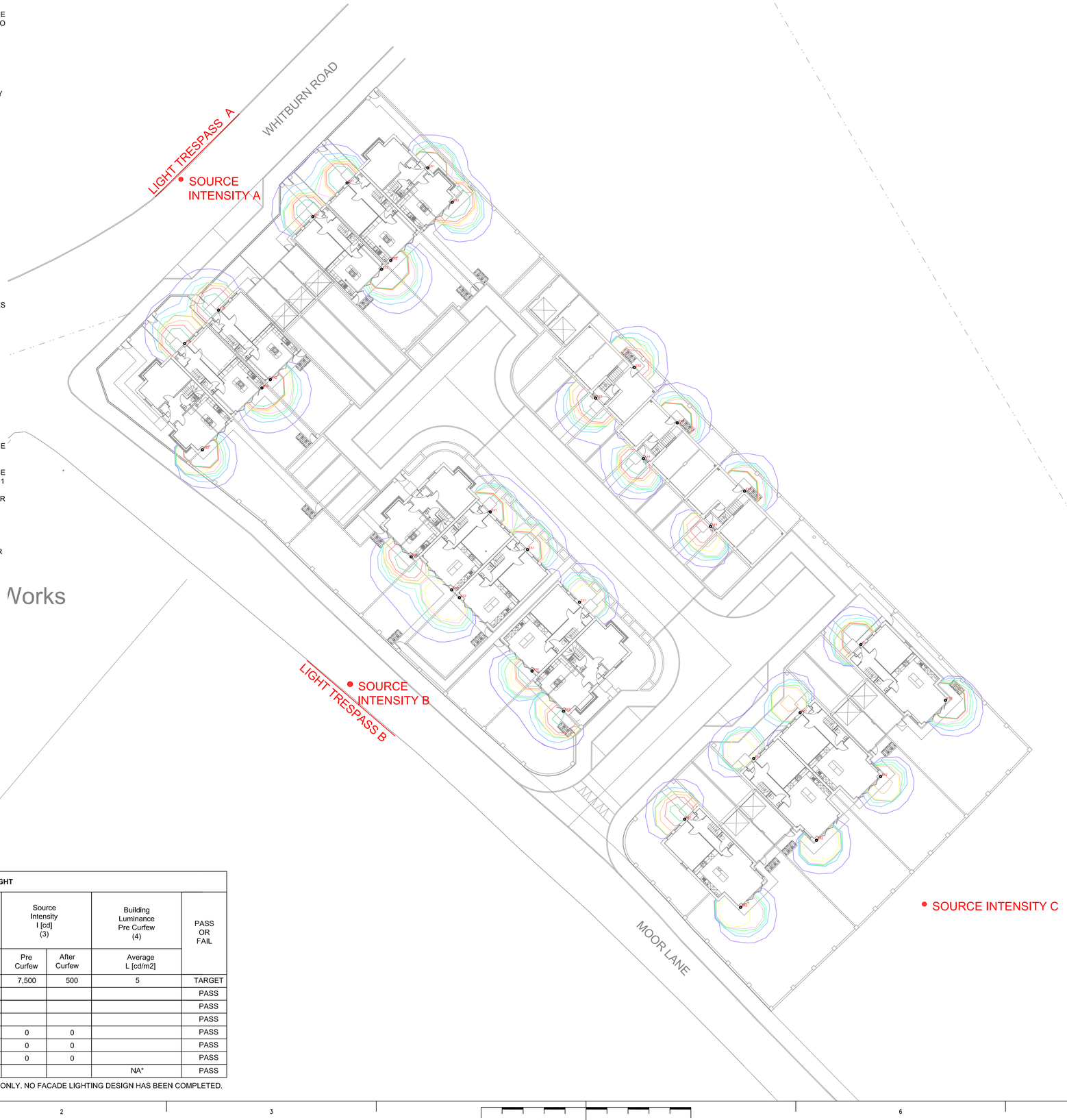
LEGEND

EX1 TYPE EX1 - SAXBY LIGHTING ATLANTIS 1LT WITH 7W (max 800lm) 2700K LED RETROFIT LAMP

EX2 TYPE EX2 - SAXBY LIGHTING PALING PIR 1LT WITH 7W (max 800lm) 2700K LED RETROFIT LAMP

ISOLINES

- 0.1 lx
- 0.2 lx
- 0.3 lx
- 0.4 lx
- 0.5 lx
- 1.0 lx
- 5.0 lx
- 10.0 lx
- 20.0 lx



ILP GUIDANCE NOTES ON THE REDUCTION OF OBTRUSSIVE LIGHT

	Sky Glow ULR [Max %] (1)	Light Trespass into Windows Ev [Lux] (2)		Source Intensity I [cd] (3)		Building Luminance Pre Curfew (4)	PASS OR FAIL
		Pre Curfew	After Curfew	Pre Curfew	After Curfew	Average L [cd/m2]	
ENVIRONMENTAL ZONE 2	2.5%	5	1	7,500	500	5	TARGET
SKY GLOW	0%						PASS
LIGHT TRESPASS A		0.05	0.05				PASS
LIGHT TRESPASS B		0.11	0.11				PASS
SOURCE INTENSITY A				0	0		PASS
SOURCE INTENSITY B				0	0		PASS
SOURCE INTENSITY C				0	0		PASS
BUILDING LUMINANCE						NA*	PASS

* THE LIGHTING DESIGN FOR THIS SCHEME IS FUNCTIONAL ONLY. NO FACADE LIGHTING DESIGN HAS BEEN COMPLETED.

1015049 | A1

Based on.

Architects Drg No.	Rev
Structural Drg No.	Rev
Survey Drg No.	Rev
Other Drg No.	Rev
Other Drg No.	Rev

DO NOT SCALE FROM THIS DRAWING

Notes

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ANY RELEVANT STRUCTURAL, ARCHITECTURAL AND CONSULTANTS DRAWINGS.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SERVICES SPECIFICATIONS.
3. DO NOT SCALE FROM THIS DRAWING.
4. ALL DIMENSIONS STATED IN mm.

Issue	Date	Description	By	Chkd	Verfd
-	03/04/18	FOR PLANNING	MT	AB	LF

Project
EAST BOLDON

Client
GENTOO HOMES

Architect
GENTOO HOMES

Title
EXTERNAL LIGHT POLLUTION STUDY

Drawing No. BSXX(63)4001

Drawing Status INFORMATION

Job No. 1015049

Scale 1:250

CUNDALL

4th Floor, Partnership House
Regent Farm Road,
Gosforth,
Newcastle NE3 3AF
Telephone: +44 (0)191 213 1515

Website: www.cundall.com

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Apr 03, 2018 - 4:01pm plotted by m.tweedale

True scale at 1:1