

EXTERNAL LIGHTING (REF B) INSTALLED ON ANCILLARY BUILDING TO BE MOUNTED AT HIGH LEVEL, CLOSE TO ROOF FACADE AND CONTROLLED SIMILARLY FROM TRAINING BUILDING MAIN SWITCH ROOM. FITTINGS TO BE INSTALLED 300mm FROM EDGE OF BUILDING SO AS TO NOT AFFECT UPPER SHOOTING PLATFORM.

DENOTES LOCATION OF MAIN SWITCH ROOM WHERE HAND OFF AUTO SWITCH AND TIME CLOCK ARE TO BE LOCATED

LIGHTING WILL SWITCH ON AUTOMATICALLY AT DUSK AND SWITCH OFF AUTOMATICALLY VIA TIMECLOCK AT 11PM.

LANTERN SUBJECT TO CHANGE BASE ON SUPPLY CHANGE CHANGES, IF THE LANTERN CHANGES THE UPWARD LIGHT POLLUTION AND LIGHT OVERSPILL SHALL REMAIN AS PER THE PLANNING SUBMISSION.

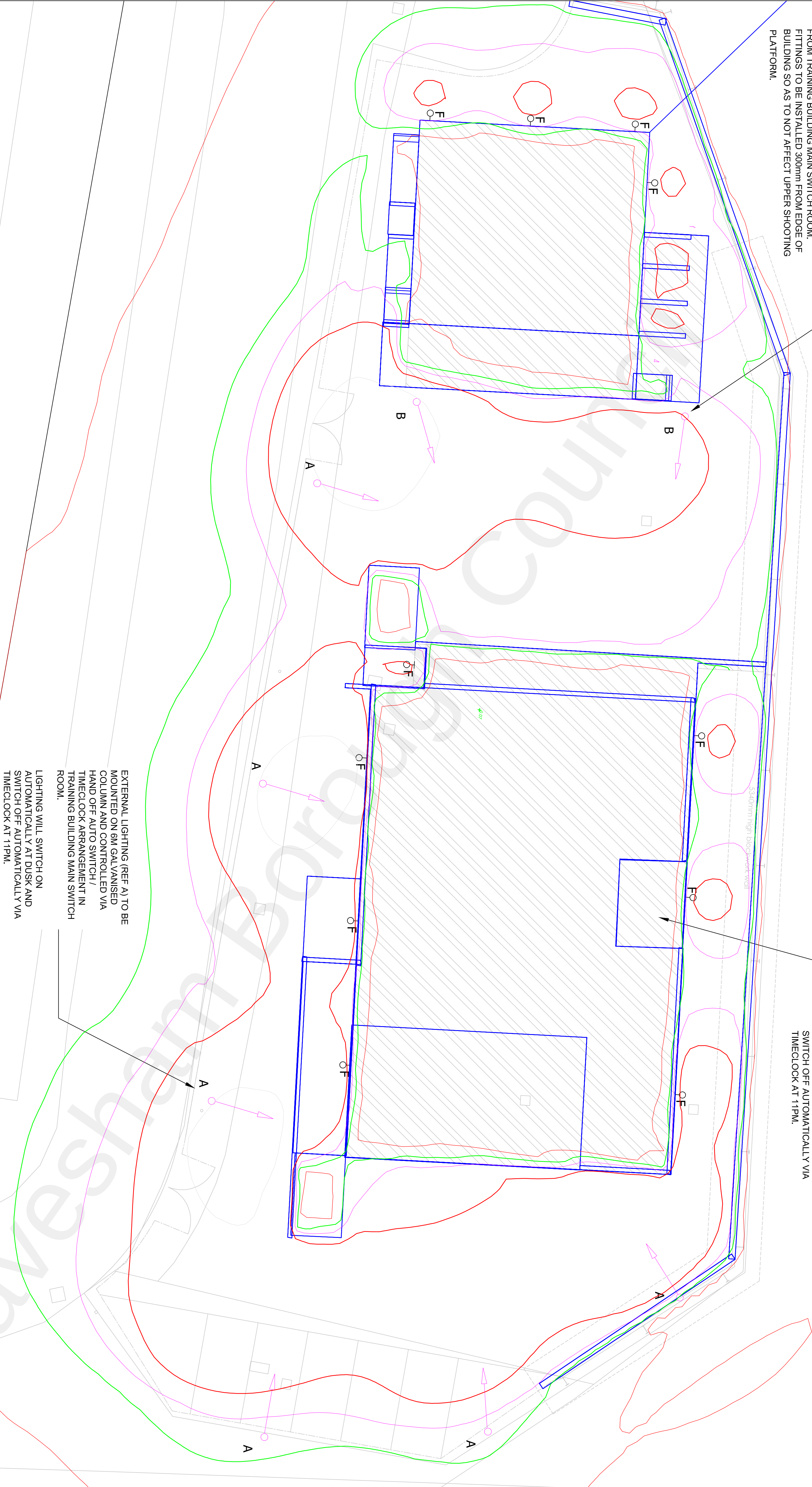
NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ASSOCIATED DRAWINGS.
- ALL CABLES EXTERNAL TO THE ELECTRICAL ENCLOSURE TO BE STEEL WIRE ARMoured IN 50mm ID DUCT, BURIED TO A DEPTH OF APPROXIMATELY 450mm.
- ALL ROUTES TO BE CLEARLY IDENTIFIED USING ELECTRICAL WARNING TAPE.
- ALL ISOLATORS, CONNECTORS ETC., TO BE RATED AT A MINIMUM OF IP65.
- THE LIGHTING SHALL BE SWITCHED VIA A HAND OFF TUBED PHOTOCELL ARRANGEMENT WITH INTEGRATED DIGITAL TIMECLOCK.
- ELECTRICAL INSTALLATION TO STREET LIGHTING SHALL COMPLY WITH BS 7671 REQUIREMENTS OF ELECTRICAL INSTALLATIONS (SEE WIRING REGULATIONS).
- ELECTRICAL CONTRACTOR TO BE IN ATTENDANCE ONLY FOR CONSTRUCTION, OFF-LOADING AND ERECTION OF LIGHTING COLUMNS.
- LIGHTING COLUMNS TO BE COMPLETE IN ALL RESPECTS AND INCORPORATE LANTERN, COVER, CONTROL GEAR, LAMPS AND ALL NECESSARY BRACKETS AND FIXINGS.
- THE PROTECTIVE DEVICE WITHIN THE FEEDER PILLAR SHALL BE DETERMINED BY THE DISCRIMINATION OF THE UPSTREAM DEVICES, FACTOR TO ALLOW FOR DRAIN IN PITS IF THE LENGTH OF RUN IS OVER 35 METERS IF REQUIRED.
- ALL BACK BOARDS IN COLUMNS AND FEEDER PILLARS ARE THE BE FSC TIMBER.
- NICE/IEC TEST & COMPLETION CERTIFICATES SHALL BE SUBMITTED AT HAND OVER.
- "AS INSTALLED" DRAWINGS AND O&M MANUALS SHALL BE SUBMITTED AT HAND OVER.
- ALL COLUMNS SHALL BE FULLY BRITISH STANDARD COMPLIANT.
- THE EXTENT OF THE WORKS REQUIRED TO COMPLETE THE INSTALLATION IS NOT LIMITED TO THAT SHOWN ON THIS DRAWING.
- ALL ITEMS OF EQUIPMENT DEEMED NECESSARY TO PROVIDE A SAFE AND FULLY OPERATIONAL SYSTEM SHALL BE INCLUDED.

REF A - COLUMN MOUNTED LED FLOODLIGHT COMPLETE WITH ASYMMETRIC DISTRIBUTION, LUMEN OUTPUT: 4920 lm & COLOUR TEMPERATURE: 4000K AS THORN OLSTS OR SIMILAR.

REF B - COLUMN MOUNTED LED FLOODLIGHT COMPLETE WITH ASYMMETRIC DISTRIBUTION, LUMEN OUTPUT: 4300 lm & COLOUR TEMPERATURE: 4000K AS THORN LEDTT OR SIMILAR.

REF F - WALL MOUNTED LED BULKHEAD LUMINAIRE, LUMEN OUTPUT: 1050 lm & COLOUR TEMPERATURE: 4000K AS THORN ETE F1A OR SIMILAR.



EXTERNAL LIGHTING (REF A) TO BE MOUNTED ON 8M GALVANISED COLUMN AND CONTROLLED VIA HAND OFF AUTO SWITCH / TIMECLOCK ARRANGEMENT IN TRAINING BUILDING MAIN SWITCH ROOM.

LIGHTING WILL SWITCH ON AUTOMATICALLY AT DUSK AND SWITCH OFF AUTOMATICALLY VIA TIMECLOCK AT 11PM.

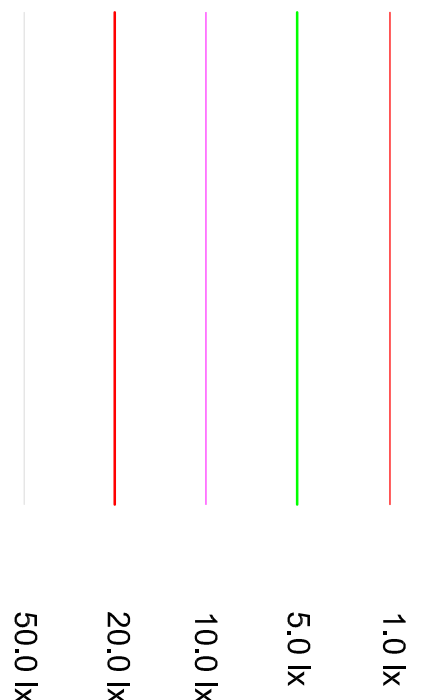
NOTES

- LIGHTING LEVELS TO COMPLY WITH GUIDANCE AS PROVIDED IN BS EN 12464-2 AND CIBSE SL L56.
- ALL LIGHTING TO BE IN ACCORDANCE WITH ITP GUIDANCE NOTES FOR THE REDUCTION OF OBTRUSIVE LIGHT (GMO1:2011)
- LIGHTING ISO-LUX LINES SHOWN ONLY TO DEMONSTRATE LIGHT SPILL/CONTROL.
- AUTOMATIC ADJUSTABLE PHOTOCELL AND TIMECLOCK CONTROLS TO BE PROVIDED TO SWITCH EXTERNAL LIGHTING ON AT DUSK AND OFF AT A PREDETERMINED TIME (11PM CUREFW AS PER ITP GUIDELINES)
- LUMINAIRE POSITIONS AND QUANTITIES ARE APPROXIMATE AND SUBJECT TO REFINEMENT FOLLOWING CONTRACTOR'S DETAILED DESIGN/CALCULATION, IN ORDER TO ACHIEVE THE STATED DESIGN CRITERIA.
- ALL LAMP SOURCES SHALL BE LED TYPE, TYPICALLY WITH COLOUR TEMPERATURE IN THE RANGE 3000K - 4000K

EXTERNAL LIGHTING DESIGN CRITERIA (GROUND LEVEL)

AREA	TARGET AVERAGE ILLUMINANCE (LUX)	CALCULATED AVERAGE ILLUMINANCE (LUX)
PEDESTRIAN AREAS	10	20
EAST SIDE (CAR PARK) AREA	20	30
SOUTH SIDE (ENTRANCE) AREA	20	37
CENTRAL AREA	20	31

ISOLINE LEGEND (CALCULATED AT GROUND LEVEL)



- COLUMN TYPE
- 8M STEEPED COLUMN
 - HEAVY DUTY MILD STEEL COLUMN,
 - FACTORY HOT DIPPED GALVANISED LIGHTING COLUMN,
 - SUPPLIED WITHIN THE DOOR COMPARTMENT IS AN NB BRASS EARTH SET AND A NON-HYDROSCOPIC BACKBOARD ONTO WHICH THE FUSE CUT OUT OR CONTROL GEAR CAN BE FITTED,
 - RECESSED DOOR WITH STAINLESS STEEL CHAIN,
 - FACTORY COATED ROOF-MOUNTED BASE SECTION,
 - TAMPER RESISTANT LOCKING MECHANISM,
 - FACTORY PAINTED

