ELECTRICAL SCHEMATIC KEY

SUPPLY ORIGIN	TERMINATION TYPE
FUSE TYPE	FUSE SIZE
CABLE SIZE AND TYPE	

EQUIPMENT DETAILS

- UNIT REFERENCE IDENTIFICATION NUMBER
- FUSE SIZE
- TERMINATION TYPE
- EARTH ELECTRODE (WHEN APPLICABLE)

ELECTRICAL SCHEMATIC DETAIL

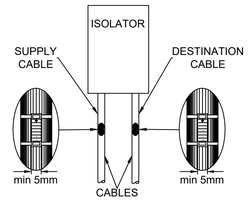
FP01	T3	FP01	T3
BS 88 Type 2	16A	BS 88 Type 2	16A
6MM² 3 CORE CU XLPE/PVC/SWA/PVC		6MM² 3 CORE CU XLPE/PVC/SWA/PVC	

PR01 6A T2 → PR03 6A T1

PR02 6A T1

The details provided on this drawing are subject to comments by all relevant approving authorities and/or any overseeing organisation. It is to be understood that these drawings and the information shown shall not be used for construction.
This drawing should not be used any tendering, procurement of materials or construction until technical approval is received. Should any tendering, procurement, installation or removal works take place prior to obtaining written full technical approval, then it is entirely at risk and SHD Lighting Consultancy Ltd accept no responsibility for these actions.

SOURCE/DESTINATION LABELLING DETAIL

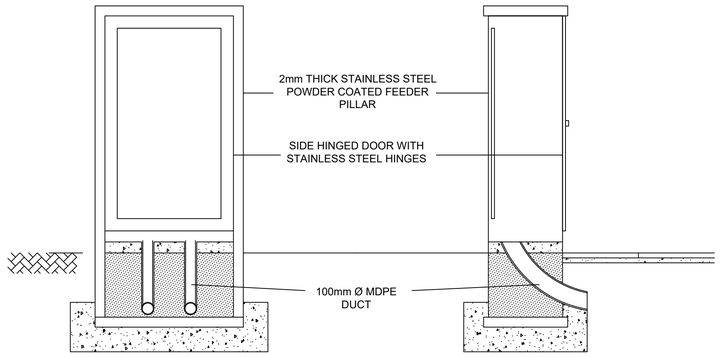


LABELLING NOTES:

1. ALL CABLES SHALL BE MARKED TO INDICATE THE SUPPLY SOURCE/DESTINATION. FINAL DETAILS TO BE SPECIFIED BY THE OVERSEEING ORGANISATION.
2. ALL CABLE MARKERS SHALL BE BLACK ON WHITE BACKGROUND AND SHALL BE MANUFACTURED FROM FLEXIBLE PVC AND HELD IN POSITION WITH BLACK PLASTIC TIE WRAP OR SIMILAR APPROVED THE OVERSEEING ORGANISATION.

TYPICAL STREET LIGHTING FEEDER PILLAR

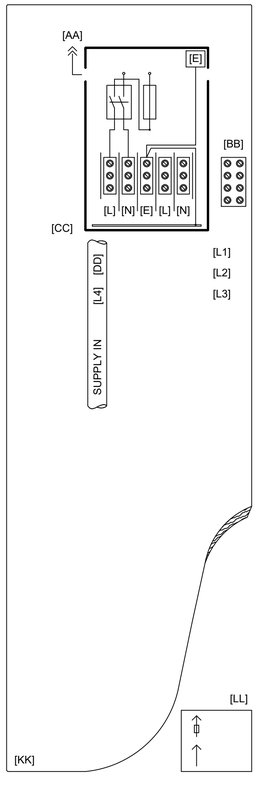
REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION DETAIL AND SPECIFICATION



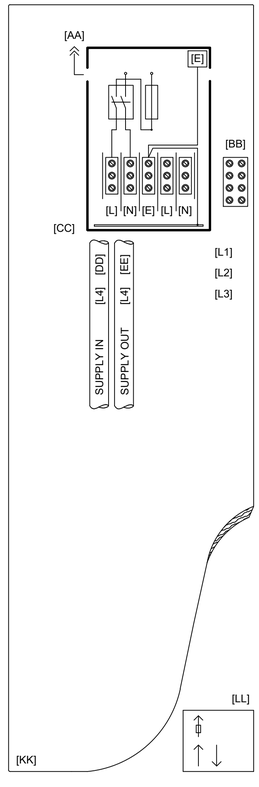
TERMINATION KEY

ITEM	DESCRIPTION
[AA]	CABLE TO LIGHTING UNIT.
[BB]	BRASS EARTH BLOCK WITH INDIVIDUAL PVC 6491X GREEN/YELLOW EARTH
	CABLES BONDED TO THE FOLLOWING COMPONENTS:
	> CUT-OUT GLAND PLATE
	> BASE COMPARTMENT DOOR;
	> BASE COMPARTMENT MAIN EARTH STUD;
	> DISTRIBUTION NETWORK OPERATOR CUT-OUT.
	(ALL EARTH CABLES SHALL BE SIZED IN ACCORDANCE WITH BS7671:2008)
[CC]	CUT-OUT INCORPORATING THE FOLLOWING COMPONENTS:
	> DOUBLE POLE ISOLATION SWITCH;
	> OUTGOING WAYS FUSED USING BS88 FUSE LINKS.
	> EXTENSION BOX WITH TERMINAL BLOCK;
	> 3mm BRASS GLAND PLATE WITH 3No. INCOMING/OUTGOING WAYS.
	> BRASS CABLE GLANDS COMPLYING WITH BS6121, TYPE CW.
	NATURAL RUBBER CABLE GROMMETS.
[DD]	INCOMING PRIVATE SUPPLY CABLE.
[EE]	OUTGOING PRIVATE SUPPLY CABLE.
[FF]	OUTGOING PRIVATE SUPPLY CABLE FUSED.
[GG]	6mm² PVC/PVC 6181Y SINGLES.
[HH]	(INDEPENDENT) DISTRIBUTION NETWORK OPERATOR CUT-OUT.
[JJ]	(INDEPENDENT) DISTRIBUTION NETWORK OPERATOR SUPPLY CABLE.
[KK]	BASE COMPARTMENT BACKBOARD.
[LL]	SCHEMATIC REPRESENTATION OF TERMINATION ARRANGEMENT.
[NN]	25mm² PVC/PVC 6181Y SINGLES.
[OO]	MINI PILLAR BACKBOARD.
[PP]	4 WAY SP&N DISTRIBUTION BOARD INCORPORATING THE FOLLOWING COMPONENTS:
	> METAL CLAD CASE.
	> DOUBLE POLE ISOLATION SWITCH.
	> BS88 FUSE LINKS.
	> BRASS CABLE GLAND COMPLYING WITH BS6121 TYPE CW REQUIRED FOR EACH OUTGOING WAY.
	> NATURAL RUBBER GROMMET FOR INCOMING CABLES [GG & NN].
[QQ]	SURGE PROTECTION DEVICE (TYPE 2)
[L1]	EARTH BLOCK LABEL "SAFETY ELECTRICAL CONNECTION - DO NOT REMOVE"
[L2]	PME WARNING LABEL "WARNING PME SERVICE POINT"
[L3]	PME WARNING LABEL "PRIVATE CABLE NETWORK LOOPED VIA PME SERVICE POINT"
[L4]	SOURCE/DESTINATION IDENTIFICATION MARKER
Notes	
1	REF. [DD], [EE] & [FF] - CABLE SHALL BE CLEATED TO THE BASE COMPARTMENT BACKBOARD APPROX. 200mm BELOW CUT-OUT.
2	REF. [DD], [EE] & [FF] - CABLE TYPE AS DEFINED ON EACH TERMINATION DRAWING.
3	REF. [AA] - A DRIP LOOP SHALL BE FORMED IN THE CABLE USING A BLACK TIE WRAP.
4	LABELS [L2],[L3] SHALL BE INSTALLED WHERE APPLICABLE TO THE ELECTRICAL INSTALLATION.
5	LABEL [L1] SHALL BE INSTALLED ADJACENT TO THE EARTH BLOCK [BB]

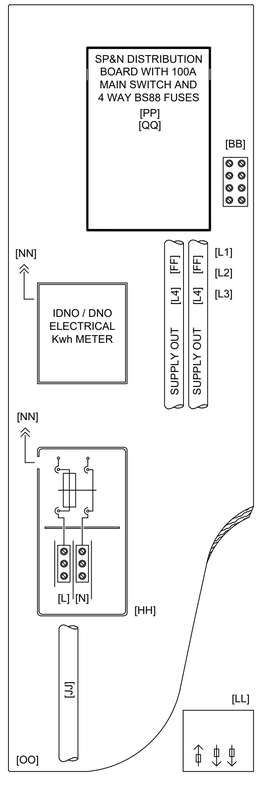
TERMINATION TYPE: 1



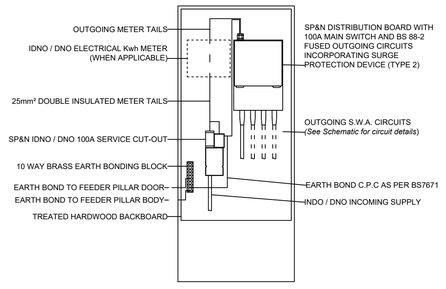
TERMINATION TYPE: 2



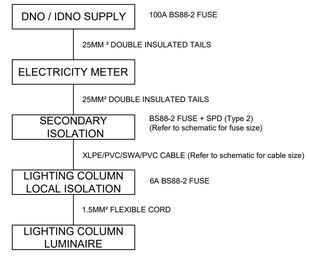
TERMINATION TYPE: 3



FEEDER PILLAR DETAIL



METERED FEEDER PILLAR - SCHEMATIC



GENERAL NOTES

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5. No substitutions of luminaires, drivers, optics, or control equipment shall be made without approval from SHD Lighting Consultancy Ltd. Unapproved substitutions may invalidate compliance with lighting standards and design intent.

NOTES

1. The information on this drawing does not account for installation considerations, site conditions or provide any risk assessment.
2. This lighting design is based solely on information provided at the time of production.
3. Any changes to site layout, levels, landscaping, building positions or surface finishes may invalidate the results and shall require reassessment.
4. The calculation shown by this drawing assumes that the whole area being considered is in the same plane.
5. No account has been taken for the blocking effect caused by buildings, trees, or other obstructions.
6. All calculations are indicative and assume correct installation, aiming and commissioning of luminaires by a competent contractor.
7. No allowance has been made for future changes in land use, vegetation growth or additional structures that may alter light spill or obtrusive light performance.
8. All photometric data used is assumed accurate as supplied by the manufacturer. The designer accepts no liability for changes to product performance after the date of design.
9. All drawings and calculations are valid only for the revision shown. Any change of site plans or product data will require recalculation.
10. The site engineer shall ensure that all setting out information is mutually compatible with all drawings and documents provided by any other designer with any inaccuracies to be reported to the overseeing organisation immediately.
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20. This design supports planning submissions but does not guarantee approval. Any planning driven changes may require redesign.
21. The client is responsible for ensuring that the installed lighting system remains compliant with all planning conditions throughout its operational life.

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3. Prior to starting work, the contractor shall identify all overhead electrical and communication apparatus within or adjacent to the works. Where present, the relevant undertaker shall be consulted, and written safety guidance obtained.
4. Works near overhead lines shall comply with HSE Guidance GS6 – “Avoidance of Danger from Overhead Power Lines”, including appropriate exclusion zones, barriers, and supervision.
5. All installation and removal works shall comply with: Electricity at Work Regulations 1989, Construction (Design and Management) Regulations 2015 (CDM 2015), ENA TS 43-8 (Underground Cable Laying), ENA ER G39/1 (Public Lighting Safety Code of Practice)and all other applicable HSE and electrical safety regulations.
6. Works near underground mains or cables shall follow HSE Guidance HSG47 – “Avoiding Danger from Underground Services”, including verified service plans, CAT & Genny use, trial holes, and safe excavation methods.
7. The contractor shall liaise with all statutory undertakers to plan and programme any required protection, isolation, or diversion works, ensuring necessary permits and approvals are in place.
8. Any service diversions or protection works shall be undertaken by, or under the supervision of, the relevant statutory undertaker in accordance with the New Roads and Street Works Act 1991 (NRSWA).
9. The contractor shall maintain accurate as-built records of all discovered or relocated services and issue updated information to the overseeing organisation at project completion.

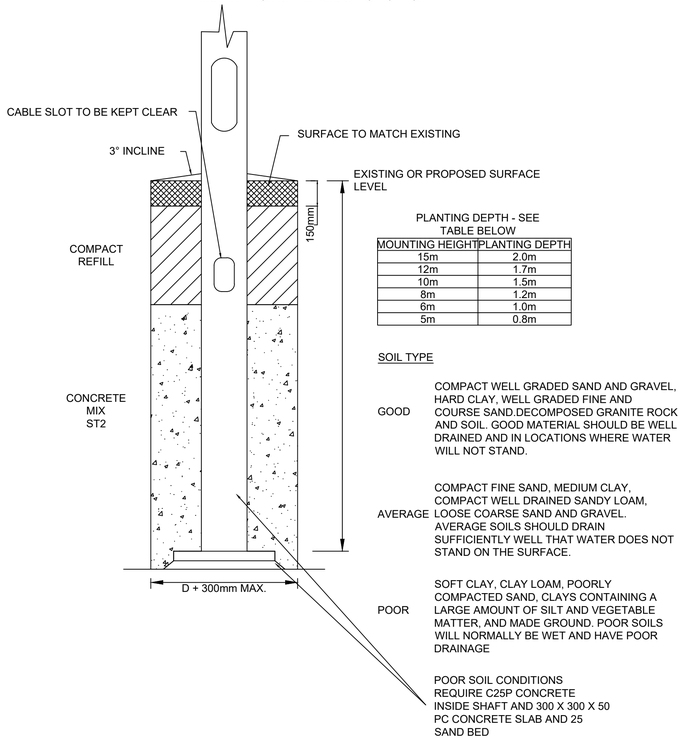
REV	DESCRIPTION	DATE	BY
R0	INITIAL DESIGN FOR REVIEW AND COMMENT	15/05/2026	SRH

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

PROJECT:	ACCRINGTON ROAD
DRAWING:	PRIVATE LIGHTING DESIGN ELECTRICAL
CLIENT:	OAKMERE HOMES
DRAWING NUMBER:	SHD2741-SHD-HEL-ACCR-DR-EO-Electrical-R0 — SHEET 1 OF 2
DRAWN:	SRH
CHECKED:	SRH
APPROVED:	
CONTRACT NUMBER:	SHD2741
DATE:	15/05/2026
SCALE @ A1	N.T.S
REVISION:	R0

NOT TO BE USED FOR CONSTRUCTION

TYPICAL COLUMN PLANTING FOUNDATION DETAIL



PLANTING DEPTH - SEE TABLE BELOW

MOUNTING HEIGHT	PLANTING DEPTH
15m	2.0m
12m	1.7m
10m	1.5m
8m	1.2m
6m	1.0m
5m	0.8m

SOIL TYPE

GOOD — COMPACT WELL GRADED SAND AND GRAVEL, HARD CLAY, WELL GRADED FINE AND COURSE SAND.DECOMPOSED GRANITE ROCK AND SOIL. GOOD MATERIAL SHOULD BE WELL DRAINED AND IN LOCATIONS WHERE WATER WILL NOT STAND.

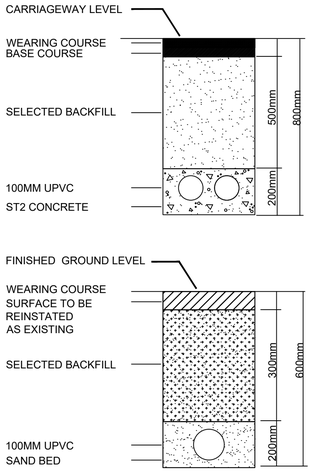
AVERAGE — COMPACT FINE SAND, MEDIUM CLAY, COMPACT WELL DRAINED SANDY LOAM, LOOSE COARSE SAND AND GRAVEL. AVERAGE SOILS SHOULD DRAIN SUFFICIENTLY WELL THAT WATER DOES NOT STAND ON THE SURFACE.

POOR — SOFT CLAY, CLAY LOAM, POORLY COMPACTED SAND, CLAYS CONTAINING A LARGE AMOUNT OF SILT AND VEGETABLE MATTER, AND MADE GROUND. POOR SOILS WILL NORMALLY BE WET AND HAVE POOR DRAINAGE

POOR SOIL CONDITIONS
REQUIRE C25P CONCRETE
INSIDE SHAFT AND 300 X 300 X 50
PC CONCRETE SLAB AND 25
SAND BED

CARRIAGEWAY AND FOOTWAY DUCTING DETAILS

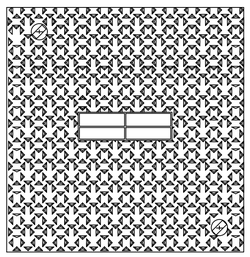
REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION DETAIL AND SPECIFICATION



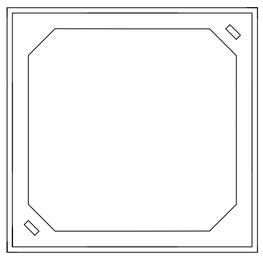
PROPOSED CHAMBER AND DUCT DETAIL

REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION DETAIL AND SPECIFICATION

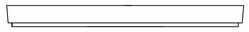
MULTI-DIRECTIONAL ANTI-SLIP COMPOSITIVE COVER



TOP SIDE.

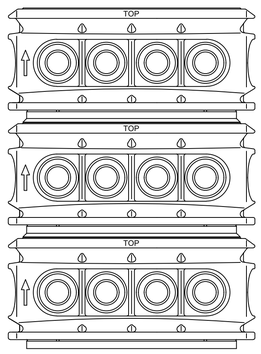


UNDERSIDE.

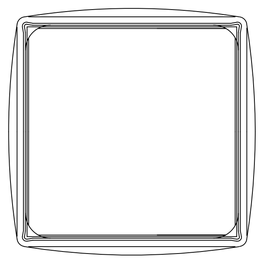


SIDE VIEW.

3 STACK ACCESS CHAMBER



SIDE/END ELEVATION.



PLAN ELEVATION.

SPECIFICATION CLAUSE

COMPOSITE MANHOLE COVER SHALL BE BLACK, (SIZE), BADGED (BADGING) MADE FROM STRUCTURAL MOULDING COMPOSITE MATERIAL WITH AVERAGE SKID RESISTANT VALUES (SRV) OF DRY 84, WET 50.
THE COVER SHALL HAVE A SURFACE PROFILE TO REDUCE FOOT AND VEHICLE CONTACT WITH SLIP LUBRICANTS. COVER/FRAME UNIT SHALL BE LOCKED AS STANDARD AND MEET THE REQUIREMENTS OF EN 124 B125.
THE COVER SHALL WEIGH LESS THAN 25KG.

NOTE:

BLANK QUARTER OF THE BADGE SHALL READ: STREET LIGHTING

SPECIFICATION CLAUSE

THE CHAMBER SHALL BE OF SOLID CONSTRUCTION OF (TRIPLE) CONSTRUCTION TO MEET THE HIGHWAY REGULATION OF (750MM) COVER.
THE CHAMBER SHALL HAVE PRE- TREPANED KNOCKOUT AREAS TO ACCEPT (50MM/100MM) INTERNAL DIAMETER STANDARD 5MM THICK WALL DUCTING.
THE CHAMBER SHALL BE MANUFACTURED BY ROTATIONAL MOULDING AND WHEN INSTALLED IN A WELL-COMPACTED SURROUND SHALL WITHSTAND 50 KN SHEER LOADING AND SIDE WALL LOADING OF 50 KN.

SPECIFICATION FOR COMPOSITE COVERS & FRAMES

1. COMPOSITE COVERS MUST BE MANUFACTURED FROM SHEET MOULDING COMPOUND (SMC)
2. COMPOSITE COVERS MUST BE LOAD TESTED TO EN124 WITH A B125 (12.5 TONNE) OR C250 (25 TONNE) LOADING.
3. COMPOSITE COVERS MUST HAVE A MINIMUM SKID RESISTANCE VALUE (SRV) OF 80
4. COMPOSITE COVERS MUST BE SUPPLIED WITH LOCKABLE STEEL FRAMES WHICH ARE HOT DIPPED GALVANISED TO BS EN ISO 1461:2022.
5. GALVANISED STEEL FRAMES MUST HAVE THE ABILITY TO BE ADJUSTED IN HEIGHT AND ANGLE WITHIN THE CHAMBER.
6. FRAMES MUST HAVE A MINIMUM UP STAND OF 80MM TO ENABLE PAVEMENT MATERIALS TO BE INSTALLED DIRECTLY AGAINST THE FRAME. FRAMES MUST NOT HAVE AN EXTERNAL FLANGE.
7. FRAMES MUST HAVE A FIXING MECHANISM WHICH ENABLES THEM TO BE MECHANICALLY SECURED TO THE ACCESS CHAMBER.
8. ACCESS CHAMBERS SHALL BE A TWIN-WALL DESIGN AND ASSEMBLED FROM STACKABLE 150MM DEEP SECTIONS.
9. ACCESS CHAMBERS MUST BE TESTED TO WITHSTAND A MINIMUM VERTICAL LOAD OF 40 TONNES WITHOUT THE USE OF CONCRETE SURROUND FOR SUPPORT.
10. ACCESS CHAMBERS MUST BE MANUFACTURED FROM THERMOPLASTIC MATERIAL WHICH IS BOTH RECYCLED AND RECYCLABLE AT THE END OF ITS PRODUCT LIFE.
11. EXTERNAL WALLS SHALL HAVE AN EXTERNAL RIB OF WIDTH NO GREATER THAN 15MM, POSITIONED AT THE BOTTOM OF EACH SECTION, TO ALLOW FULL SECTION DEPTH COMPACTION.
12. EXTERNAL WALLS SHALL BE FREE FROM MOULDING VOIDS THAT WILL NEGATIVELY IMPACT THE EFFECTIVENESS OF COMPACTION WHICH SHOULD BE IN ACCORDANCE WITH THE NEW ROADS AND STREET WORKS ACT (1991).
13. ACCESS CHAMBERS MUST NOT BE JOINTED IN THE CORNER OR REQUIRE MECHANICAL FIXING TO ACHIEVE STRENGTH.
14. ACCESS CHAMBER SECTIONS MUST HAVE THE ABILITY TO BE ADJUSTED IN HEIGHT DURING INSTALLATION.
15. ACCESS CHAMBER SECTIONS MUST BE CAPABLE OF BEING CUT LATERALLY TO ALLOW FOR TRANSITIONAL GRADIENT INSTALLATIONS.
16. ACCESS SECTIONS SHOULD HAVE PRE-DRILLED DUCT ENTRIES AND BE SUPPLIED WITH REMOVABLE CAPS.
17. ACCESS CHAMBERS MUST HAVE THE ABILITY TO ALLOW INTERNAL CABLE MANAGEMENT FURNITURE TO BE RETROFITTED WITHOUT THE NEED FOR ANY EXCAVATION.

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

PROJECT:	ACCRINGTON ROAD
DRAWING:	PRIVATE LIGHTING DESIGN ELECTRICAL
CLIENT:	OAKMERE HOMES
DRAWING NUMBER:	SHD2741-SHD-HEL-ACCR-DR-EO-Electrical-R0 / SHEET 2 OF 2
DRAWN:	SRH
CHECKED:	SRH
APPROVED:	
CONTRACT NUMBER:	SHD2741
DATE:	15/05/2026
SCALE @ A1	N.T.S
REVISION:	R0

NOT TO BE USED FOR CONSTRUCTION