

LOCALITY PLAN (N.T.S)

**SPA LIGHTING DESIGN COMPLIANCE CERTIFICATE**

THIS LIGHTING DESIGN COMPLIES GENERALLY WITH THE NOMINATED CATEGORIES OF AS1158 FOR RATE 1 AND RATE 2 LUMINAIRES.

NAME: Michael Dayot TITLE: ENGINEER  
RPEQ: 29435

LIGHTING CATEGORIES: CATEGORY: V5 FOR EAST POINT DRIVE  
LOCAL COUNCIL: PR5 FOR SEAHAVEN COURT  
LUMINAIRE UPCAST: MACKAY REGIONAL COUNCIL  
MAINTENANCE FACTOR: 0 DEGREES UPCAST ANGLE  
0.75

THE DESIGN ASSUMES MAINTENANCE FACTORS OF 0.75 FOR MINOR ROAD LIGHTING AND 0.75 FOR MAJOR ROAD LIGHTING. THESE MAINTENANCE FACTORS ARE BASED ON THE FOLLOWING MAINTENANCE SCHEDULE, WHICH MIGHT NOT NECESSARILY BE ADOPTED BY ERGON.

- LAMPS SHALL BE REPLACED AT 36- MONTH INTERVALS.
- ALL THAT TIME, LUMINAIRES SHALL BE CLEANED, INSPECTED AND MAINTAINED.
- VEGETATION SHALL BE KEPT CLEAR OF STREET LIGHTS.
- INSPECTION PATROLS AND SPOT LAMP REPLACEMENT SHALL MAINTAIN SERVICE AVAILABILITY AT NO LESS THAN 95%.
- LUMINAIRES AND LAMPS SHALL BE REPLACED WITH EXACT EQUIVALENTS.

ALL LIGHTING CALCULATIONS ARE AVAILABLE UPON REQUEST.  
FOR LIGHTING ARRANGEMENT, SPACINGS, MOUNTING HEIGHTS, OUTREACH DETAILS AND SIGNIFICANT ROAD FEATURES, REFER TO DRAWING.

**WARNING - LIVE CABLES AND EXISTING SERVICES IN AREA. REFER TO NOTE 21**

**AS CONSTRUCTED**

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
1	SG852550			INSTALL - ERGON	LV CABLE TERMINATION	LV CT PM11/240	5087		LV CABLE TERMINATION FOR STN 1 TO 4
2	11295318			INSTALL - ERGON	PILLAR UPGRADE	LV PNU2-3/240	5074		ERGON ENERGY TO UPGRADE PILLAR TO THREE WAY IN THIS STAGE. COIL CABLE AT STN 2 FOR FINAL TERMINATION BY ERGON ENERGY..

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER

CHANGES: YES/NO

**ELECTRICAL CONTRACTOR**  
NAME: Woodburn Electrical  
SIGNATURE: Paul Langtree  
DATE: 24/09/25

**CIVIL CONTRACTOR**  
NAME: BMD Urban  
SIGNATURE: Anthony Burke  
DATE: 01/09/25

Code	Date	Description	Revised
C	30/09/25	AS CONSTRUCTED	MSEW
B	04/03/25	REMOVED LV CABLE JOINT STN 401	EB
A	21/01/25	FOR CONSTRUCTION	EB

CLIENT: URBEX PTY LTD (BRISBANE)  
PO BOX 197, WYNNUM, QLD. 4178. Ph (07) 3906 7444 Fax  
CIVIL ENGINEER: EMPOWER ENGINEERS (TOWNSVILLE)  
PO BOX 6008, TOWNSVILLE, QLD. 4810 Ph (07) 4750 7069 Fax

**spa consulting engineers**  
Simon Perkins & Associates  
Tel: (07) 4032 3311 or (07) 4728 3026  
PO Box 664 North Cairns QLD 4870  
Email Address - admin@spaconslting.com.au  
A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.s.o. 91 510 944 416

**TRENCH SECTIONS-LEGEND**

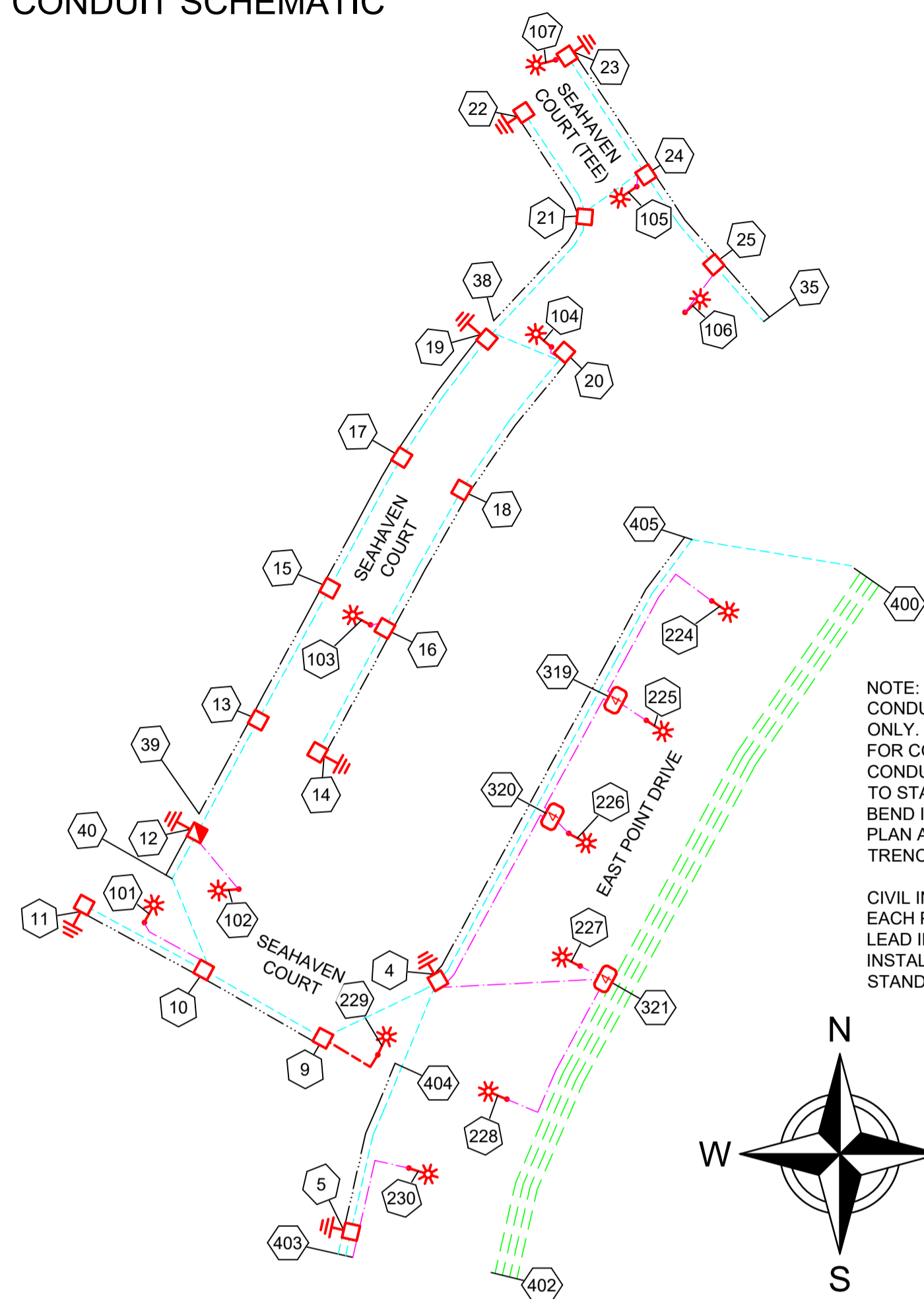
**LEGEND**

Drawing Title: EAST POINT STAGE 1D & 1R-2 UDC UG ELECTRICAL RETICULATION SITE PLAN & ERGON WORK SCHEDULE

Date: DECEMBER 2024  
Scale: 1:500@A1  
Drawn: MD  
RPEQ Design Certification: Michael Dayot 29435  
Sheet: 1 OF 4

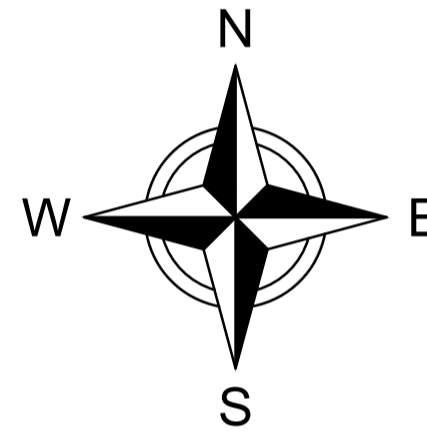
Project Description: EAST POINT SUBDIVISION MACKAY, QLD 4740  
ERGON Project Number: 1960039 SPA Drawing Number: 4003-E01 Revision: C

CONDUIT SCHEMATIC



NOTE:  
CONDUITS SHOWN ARE INDICATIVE ONLY. DO NOT USE AS REFERENCE FOR CONDUIT LAYING. REFER TO CONDUIT SCHEDULE FOR STATION TO STATION DETAILS AND CONDUIT BEND INFORMATION. REFER TO SITE PLAN AND WORKPLAN NOTES FOR TRENCH SECTION DETAILS.

CIVIL INSTALLERS NOTE:  
EACH PILLAR REQUIRES 2 x 50mm LEAD IN CONDUITS. BENDS TO BE INSTALLED AS PER ERGON STANDARD DRAWINGS.



Rev Date	VERGE CONDUIT DUCTING SCHEDULE							
20-4-23	STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTH S / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
	4	320	INSTALL - CIVIL	C50H	45	11.3	90/300x1 90/600x1	
	4	405	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	102	0.4		COIL 2M OF CABLE AT STN 4 FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE IN BOTTOM OF TRENCH AT STN 406.
	5	230	INSTALL - CIVIL	C50H	23	5.8	90/300x1	
	5	403	INSTALL - CIVIL	C100L	2	0.3	45/1200x1	CAP CONDUIT AT STN 403
	5	403	INSTALL - CIVIL	C50H	2	0.5	90/300x1	CAP CONDUIT AT STN 403
	5	403	INSTALL - CIVIL	C100L	2	0.3	45/1200x1	CAP CONDUIT AT STN 403
	5	404	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	35	0.1		COIL 2M OF CABLE AT STN 5 FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE IN BOTTOM OF TRENCH AT STN 404.
	9	10	INSTALL - CIVIL	C100L	27	4.5	45/1200x2	
	9	229	INSTALL - CIVIL	C50H	14	3.5	90/300x2 90/600x1	
	10	11	INSTALL - CIVIL	C100L	27	4.5	45/1200x2 15/1830x4	REFER TO NOTE 15
	10	101	INSTALL - CIVIL	C50H	15	3.8	90/300x2 90/600x1	
	11	9	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	55	0.2		COIL 2M OF CABLE AT STN 11 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 9.
	12	40	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	11	0.0		COIL 2M OF CABLE AT STN 12 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 40.
	13	12	INSTALL - CIVIL	C100L	25	4.2	45/1200x2	
	14	20	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	93	0.4		COIL 2M OF CABLE AT STN 14 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 20.
	15	13	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
	16	14	INSTALL - CIVIL	C100L	28	4.7	45/1200x2	
	16	103	INSTALL - CIVIL	C50H	5	1.3	90/300x2 90/600x1	BENDS ADDED TO AVOID NBN PIT
	17	15	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
	18	16	INSTALL - CIVIL	C100L	32	5.3	45/1200x2	
	19	17	INSTALL - CIVIL	C100L	29	4.8	45/1200x2 15/1830x1	
	19	39	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	112	0.4		COIL 2M OF CABLE AT STN 19 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 39.
	20	18	INSTALL - CIVIL	C100L	34	5.7	45/1200x2 15/1830x1	
	20	104	INSTALL - CIVIL	C50H	5	1.3	90/300x2 90/600x1	BENDS ADDED TO AVOID NBN PIT. REFER TO NOTE 15
	21	19	INSTALL - CIVIL	C100L	32	5.3	45/1200x2 15/1830x2	
	21	22	INSTALL - CIVIL	C100L	24	4.0	45/1200x2 15/1830x1	
	22	38	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	52	0.2		COIL 2M OF CABLE AT STN 22 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 38.
	23	35	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	66	0.3		COIL 2M OF CABLE AT STN 23 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 35.
	23	107	INSTALL - CIVIL	C50H	4	1.0	90/300x2	
	24	23	INSTALL - CIVIL	C100L	29	4.8	45/1200x2	REFER TO NOTE 15
	24	105	INSTALL - CIVIL	C50H	5	1.3	90/300x2 90/600x1	BENDS ADDED TO AVOID NBN PIT
	25	24	INSTALL - CIVIL	C100L	22	3.7	45/1200x2 15/1830x1	
	25	35	INSTALL - CIVIL	C100L	15	2.5	45/1200x1	LOCATE EXISTING CAPPED CONDUIT AT STN 35 AND CONNECT TO NEW.
	40	12	INSTALL - CIVIL	C100L	14	2.3	45/1200x1	CONNECT TO CROSSING CONDUIT AT STN 40
	319	224	INSTALL - CIVIL	C50H	38	9.5	90/300x1	
	319	225	INSTALL - CIVIL	C50H	6	1.5	90/300x1	
	320	226	INSTALL - CIVIL	C50H	3	0.8	90/300x1	
	320	319	INSTALL - CIVIL	C50H	26	6.5		
	321	227	INSTALL - CIVIL	C50H	6	1.5	90/300x1	
	321	228	INSTALL - CIVIL	C50H	37	9.3	90/300x1	
	400	402	INSTALL - CIVIL	C150L	159	26.5	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 400 AND CONNECT TO NEW. CAP CONDUIT AT STN 402.
	400	402	INSTALL - CIVIL	C150L	159	26.5	15/1830x2	LOCATE EXISTING CAPPED CONDUIT AT STN 400 AND CONNECT TO NEW. CAP CONDUIT AT STN 402.
	400	402	INSTALL - CIVIL	C150L	159	26.5	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 400 AND CONNECT TO NEW. CAP CONDUIT AT STN 402.
	400	402	INSTALL - CIVIL	C150L	159	26.5	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 400 AND CONNECT TO NEW. CAP CONDUIT AT STN 402.
	404	5	INSTALL - CIVIL	C100L	28	4.7	45/1200x1 15/1830x1	CONNECT TO CROSSING CONDUIT AT STN 404.
	405	4	INSTALL - CIVIL	C100L	102	17.0	45/1200x1 15/1830x2	CONNECT TO CROSSING CONDUIT AT STN 406.

Rev Date	CROSSING CONDUIT DUCTING SCHEDULE							
20-4-23	STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUMS	BENDS (Degrees/ Radius(mm) x No.)	Remarks
	4	9	INSTALL - CIVIL	C100L	26	4.3	45/1200x2 15/1830x5	
	4	321	INSTALL - CIVIL	C50H	34	8.5	90/300x1 90/600x1	
	4	404	INSTALL - CIVIL	C100L	25	4.2	15/1830x4	CONNECT TO VERGE CONDUIT AT STN 404 & 4
	10	40	INSTALL - CIVIL	C100L	17	2.8	45/1200x1 15/1830x4	CONNECT TO VERGE CONDUIT AT STN 40. REFER TO NOTE 15
	12	102	INSTALL - CIVIL	C50H	15	3.8	90/300x2 90/600x1	BENDS ADDED TO AVOID NBN PIT. REFER TO NOTE 15
	19	20	INSTALL - CIVIL	C100L	15	2.5	45/1200x2 45/1830x2 15/1830x4	BENDS ADDED TO AVOID NBN PIT. REFER TO NOTE 15 & 16
	24	21	INSTALL - CIVIL	C100L	16	2.7	45/1200x2 15/1830x4	BENDS ADDED TO AVOID NBN PIT. REFER TO NOTE 15 & 16
	25	106	INSTALL - CIVIL	C50H	12	3.0	90/300x2 90/600x1	BENDS ADDED TO AVOID NBN PIT. REFER TO NOTE 15
	400	405	INSTALL - CIVIL	C100L	33	5.5	15/1830x4	LOCATE EXISTING CAPPED CONDUIT AT STN 400 AND CONNECT TO NEW. CONNECT TO VERGE CONDUIT AT STN 405. REFER TO NOTE 15.

WORKPLAN NOTES

- FOR STANDARD UNDERGROUND DUCT SECTIONS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5168.
- POLYMERIC COVER TO BE INSTALLED OVER CONDUITS OUTSIDE NORMAL ERGON ALIGNMENT AS PER ERGON DRAWING. 5022-1 AND 5124-1 & 2.
- STANDARD TRENCH ALIGNMENT IS 0.3 TO 0.9 METRES OFF PROPERTY ALIGNMENT SUBJECT TO LOCATION OF OTHER SERVICES. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5164 AND DRAWING 5228 FOR TRENCHES WITH NBNcO CONDUITS.
- STREETLIGHT POLE FOOTINGS SHALL BE LOCATED PERPENDICULAR TO THE KERB, AT THE PROLONGATION OF THE SIDE PROPERTY BOUNDARY, UNLESS DETAILED OTHERWISE. WHERE DIMENSIONS ARE SHOWN THEY TAKE PRECEDENCE OVER GRID COORDINATES.
- ALL CONDUITS SHALL BE CONTINUOUS UNLESS DETAILS OTHERWISE.
- FOR STANDARD UDC CONSTRUCTION PRACTICES REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5022, 5085 AND 5124.
- MINOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 1200mm FOR MINOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-6-4-1 & 2.
- MAJOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 2250mm FOR MAJOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-5-6-1 & 2 FOR BPM FOOTINGS.
- THE LIGHTING DESIGN INCLUDES AN ALLOWANCE FOR CONSTRUCTION TOLERANCE OF LIGHT POLES SUCH THAT ANY STREETLIGHT CAN BE POSITIONED UP TO A MAXIMUM OF 350mm LONGITUDINALLY FROM THE POSITION SHOWN AND UP TO 100mm MAXIMUM FURTHER AWAY FROM KERB EDGE, INCLUDING POLES WITH GRID COORDINATES, AND STILL MAINTAIN COMPLIANCE.
- CONFIRM ALL CONDUIT AND CABLE LENGTHS PRIOR TO INSTALLATION.
- WHERE SHOWN, 35mm sq ANNEALED BARE Cu EARTH SHALL BE INSTALLED AT BOTTOM OF TRENCH, IN NATURAL SOIL, BELOW BEDDING SAND, LOCATED A MINIMUM OF 50mm HORIZONTALLY TOWARDS PROPERTY BOUNDARY FROM CONDUITS (HV OR LV) INSTALLED ON PROPERTY BOUNDARY SIDE OF TRENCH. COIL 2m OF CABLE AT SPECIFIED STATIONS IN THE CONDUIT DUCTING SCHEDULE AND ALL REQUIRED JOINTS FOR CONNECTION BY ELECTRICAL CONTRACTOR. THE USE OF THE EARTH ROD CONNECTOR (U-BOLT, IIN. 0719437) IS NOT ACCEPTABLE FOR CONDUCTOR / CABLE TO CONDUCTOR / CABLE CONNECTIONS. IN ADDITION PARALLEL GROOVE CLAMPS ARE NOT ACCEPTABLE FOR JOINING OR CONNECTING EARTHS BELOW GROUND LEVEL. ACCEPTABLE METHODS SHALL BE EITHER A CRIMP LINK OR A 'C' TYPE COMPRESSION CONNECTOR. CRIMP LINKS AND 'C' TYPE COMPRESSION CONNECTORS ARE AVAILABLE FROM ERGON ENERGY STORES IIN. 0157746 AND IIN. 2406222 RESPECTIVELY.
- IN ACCORDANCE WITH ELECTRICAL SAFETY ACT, A SAFETY OBSERVER MUST BE PRESENT AT ALL TIMES WHEN WORKING IN THE VICINITY OF ENERGISED CABLES. CONTACT ERGON ENERGY ON 131046.
- ELECTRONIC CABLE MARKERS (ECM'S) ARE TO BE SUPPLIED AND INSTALLED AT ENDS OF ALL SPARE CONDUITS INCLUDING (SPARE ROAD CROSSINGS, CONDUIT STUBS, FOR FUTURE STAGES, SPARE CONDUITS FOR FUTURE HV, ETC) AND AT ALL CABLE JOINTS. REFER TO ERGON STANDARD SPECIFICATIONS RSC07, RSC08, & RSM02.
- WHERE NOTED ON THE DESIGN, CONCRETE COVER SHALL BE INSTALLED ABOVE CONDUIT, WHERE CONDUIT BURIAL DEPTH IS LESS THAN THAT SPECIFIED IN UNDERGROUND CONSTRUCTION MANUAL DRAWING 5163. FOR FOOTPATHS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5016. FOR ROAD CROSSINGS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5017.
- EXTRA CONDUIT BENDS SHALL BE INSTALLED TO ACHIEVE INCREASED BURIAL DEPTH AT ROAD CROSSINGS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5022.
- ALL CONTRACTORS MUST CARRY OUT A DIAL BEFORE YOU DIG ENQUIRY BEFORE COMMENCING ANY EXCAVATION.
- WHERE NOTED ON THE DESIGN, ELECTRICAL CONDUITS SHALL BE INSTALLED UNDERNEATH STORMWATER PIPES WHERE CLASHES OCCUR. SEPARATION FROM BOTTOM OF STORMWATER PIPE TO TOP OF ERGON CONDUIT SHALL BE NO LESS THAN 300mm.
- INSTALL PILLAR OFFSET IN ACCORDANCE WITH ERGON DRAWING 5196-2 & DETAIL A.
- CONTRACTOR TO ENSURE MACKAY REGIONAL COUNCIL POLICY 063 AND 15.05 ARE ADHERED TO WITH RESPECT TO CLEARANCES BETWEEN ELECTRICAL OR COMMUNICATIONS INFRASTRUCTURE AND COUNCIL SERVICES.
- CONTRACTOR TO SUPPLY AND INSTALL ENGRAVED LABEL LOCATED ON LIGHTING TERMINAL STATING "LIGHT FED FROM PILLAR ASSET NUMBER \_\_\_\_\_"
- WARNING:** LIVE CABLES AND EXISTING SERVICES IN AREA. CONTRACTOR TO USE POT HOLING, HYDRO-VAC EXCAVATION AND CABLE LOCATION WHEN INSTALLING NEW INFRASTRUCTURE.
- CONTRACTOR TO SUPPLY AND INSTALL LUMINAIRES (SLED GL 0250 A2.2 & SLEDPH0509A2.2). LUMINAIRES TO BE DIRECTLY PURCHASED FROM LIGHTING DISTRIBUTORS AND NOT FROM ERGON STORE. SLEDPH0406A3
- PITS SHALL BE MOUNTED LEVEL WITH THE FINISH GROUND LEVEL, ENSURING THAT THE PITS ARE NOT PLACED IN THE BOTTOM OF DRAINS, VEHICULAR PATHS, ROADWAYS, DRIVEWAYS, DRAIN INVERTS, BIKEWAYS, RAMPS, PEDESTRIAN ALIGNMENTS, WHEELCHAIR ACCESS OR PATHWAYS. REFER TO ERGON LIGHTING CONSTRUCTION MANUAL 1-3-10-1 FOR DETAILS.



AS CONSTRUCTED

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: Woodburn Electrical  
SIGNATURE: Paul Langtree  
DATE: 24/09/25

CIVIL CONTRACTOR

NAME: BMD Urban  
SIGNATURE: Anthony Burke  
DATE: 01/09/25

Code	Date	Description	Revised
C	30/09/25	AS CONSTRUCTED	MSEW
B	04/03/25	REMOVED NOTE FOR LV CABLE JOINT ADDED	EB
A	21/01/25	FOR CONSTRUCTION	EB

CLIENT:  
URBEX PTY LTD (BRISBANE)  
PO BOX 197  
WYNNUM, QLD. 4178.  
Ph. (07) 3906 7444 Fax  
CIVIL ENGINEER  
EMPOWER ENGINEERS (TOWNSVILLE)  
PO BOX 6008,  
TOWNSVILLE, QLD. 4810  
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TRENCH SECTIONS-LEGEND

- ⊗ SPARE HV CONDUIT - EXISTING
- ⊗ SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- /AB ↓ CONDUITS - EXISTING
- /AB ↑ CONDUITS - PLANNED

LEGEND

- ◆◆◆ ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED

- ⊠ SUBSTATION
- ⊠ RING MAIN UNIT
- ⊠ CROSS ROAD PILLAR
- ⊠ LINKING PILLAR
- ⊠ LIGHTING PIT
- ⊠ CABLE JOINT
- N1, N2, N3, CIA1 & CIA2 PILLARS
- DISTRIBUTION CABINET
- ⊠ STREETLIGHT
- ⊠ EARTH
- HV/ LV POLE
- LV POLE
- ⊠ POLE MOUNTED TRANSFORMER

Drawing Title	Date	Scale	Drawn	Sheet	Project Description	ERGON Project Number	SPA Drawing Number	Revision
EAST POINT STAGE 1D & 1R-2 UDC UG ELECTRICAL RETICULATION CONDUIT SCHEMATIC & SCHEDULE AND NOTES	DECEMBER 2024	NTS	EB	2 OF 4	EAST POINT SUBDIVISION MACKAY, QLD 4740	1960039	4003-E02	C

LV SCHEMATIC

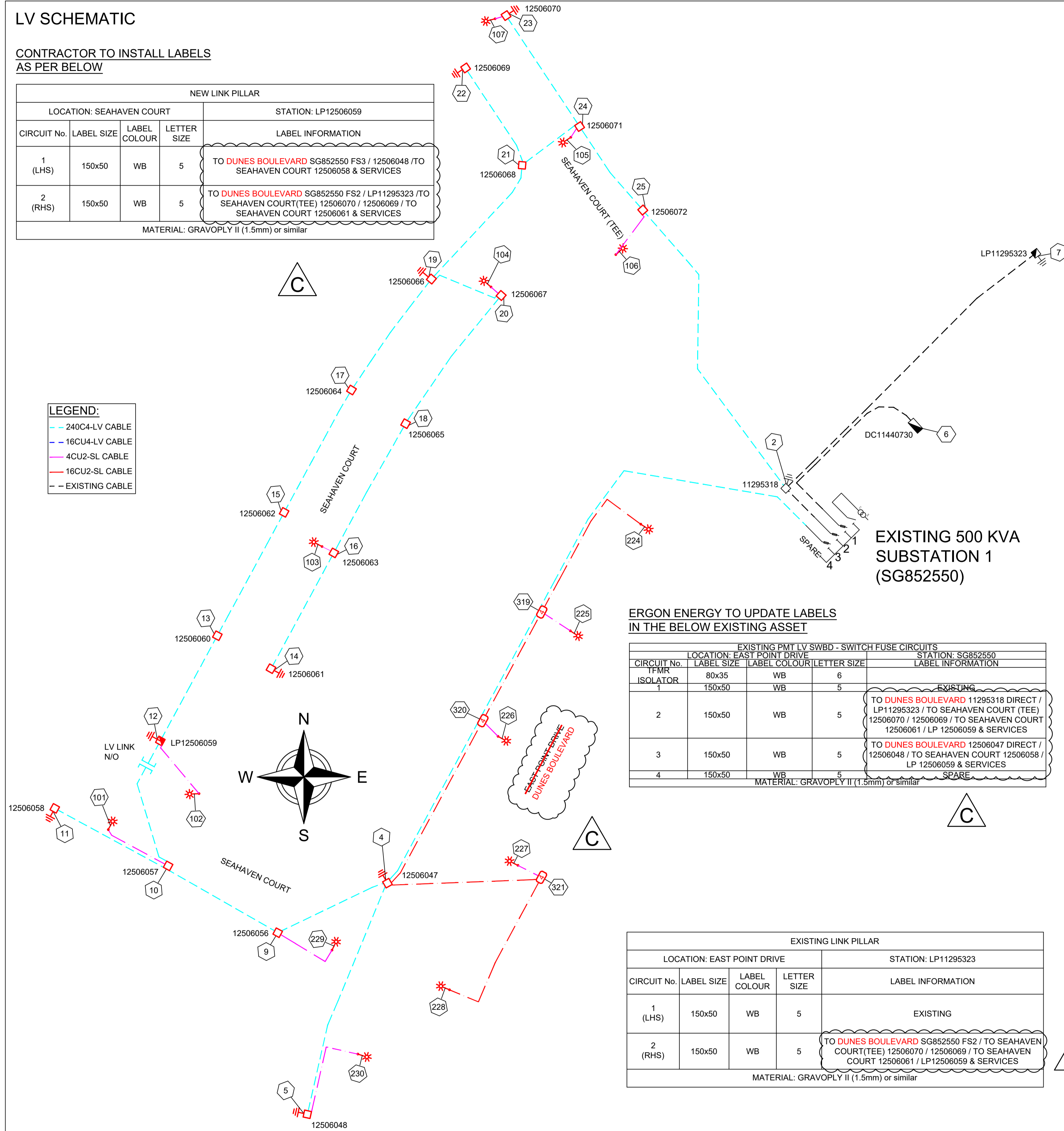
CONTRACTOR TO INSTALL LABELS AS PER BELOW

NEW LINK PILLAR				
LOCATION: SEAHAVEN COURT			STATION: LP12506059	
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
1 (LHS)	150x50	WB	5	TO DUNES BOULEVARD SG852550 FS3 / 12506048 / TO SEAHAVEN COURT 12506058 & SERVICES
2 (RHS)	150x50	WB	5	TO DUNES BOULEVARD SG852550 FS2 / LP11295323 / TO SEAHAVEN COURT(TEE) 12506070 / 12506069 / TO SEAHAVEN COURT 12506061 & SERVICES

MATERIAL: GRAVOPLY II (1.5mm) or similar

LEGEND:

- 240C4-LV CABLE
- 16CU4-LV CABLE
- 4CU2-SL CABLE
- 16CU2-SL CABLE
- EXISTING CABLE



ERGON ENERGY TO UPDATE LABELS IN THE BELOW EXISTING ASSET

EXISTING PMT LV SWBD - SWITCH FUSE CIRCUITS				
LOCATION: EAST POINT DRIVE			STATION: SG852550	
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
1	80x35	WB	6	EXISTING
2	150x50	WB	5	TO DUNES BOULEVARD 11295318 DIRECT / LP11295323 / TO SEAHAVEN COURT (TEE) 12506070 / 12506069 / TO SEAHAVEN COURT 12506061 / LP 12506059 & SERVICES
3	150x50	WB	5	TO DUNES BOULEVARD 12506047 DIRECT / 12506048 / TO SEAHAVEN COURT 12506058 / LP 12506059 & SERVICES
4	150x50	WB	5	SPARE

MATERIAL: GRAVOPLY II (1.5mm) or similar

EXISTING LINK PILLAR				
LOCATION: EAST POINT DRIVE			STATION: LP11295323	
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
1 (LHS)	150x50	WB	5	EXISTING
2 (RHS)	150x50	WB	5	TO DUNES BOULEVARD SG852550 FS2 / TO SEAHAVEN COURT(TEE) 12506070 / 12506069 / TO SEAHAVEN COURT 12506061 / LP12506059 & SERVICES

MATERIAL: GRAVOPLY II (1.5mm) or similar

UNDERGROUND CABLE SCHEDULE							
STN FROM	STN TO	ACTION	VOLTAGE	CONSTRUCTION CODE	ROUTE LENGTH	CABLE LENGTH	REMARKS
1	4	INSTALL	415V	LV-240C4/673	139	151	COIL CABLE AT STN 1 FOR FINAL TERMINATION BY ERGON ENERGY. REFER TO NOTE 21.
2	25	INSTALL	415V	LV-240C4/673	70	74	COIL CABLE AT STN 2 FOR FINAL TERMINATION BY ERGON ENERGY.
4	5	INSTALL	415V	LV-240C4/673	54	58	
4	9	INSTALL	415V	LV-240C4/673	26	30	
4	320	INSTALL	240V	LVI-16CU2NS/1672	45	49	
4	321	INSTALL	240V	LVI-16CU2NS/1672	34	38	
5	230	INSTALL	240V	LVI-4CU2NS/1671	23	28	
9	10	INSTALL	415V	LV-240C4/673	27	31	
9	229	INSTALL	240V	LVI-4CU2NS/1671	14	19	
10	11	INSTALL	415V	LV-240C4/673	27	31	
10	12	INSTALL	415V	LV-240C4/673	31	35	LV LINK
10	101	INSTALL	240V	LVI-4CU2NS/1671	15	20	
12	102	INSTALL	240V	LVI-4CU2NS/1671	15	20	
13	12	INSTALL	415V	LV-240C4/673	25	29	
15	13	INSTALL	415V	LV-240C4/673	30	34	
16	14	INSTALL	415V	LV-240C4/673	28	32	
16	103	INSTALL	240V	LVI-4CU2NS/1671	5	10	
17	15	INSTALL	415V	LV-240C4/673	30	34	
18	16	INSTALL	415V	LV-240C4/673	32	36	
19	17	INSTALL	415V	LV-240C4/673	29	33	
19	20	INSTALL	415V	LV-240C4/673	15	19	
20	18	INSTALL	415V	LV-240C4/673	34	38	
20	104	INSTALL	240V	LVI-4CU2NS/1671	5	10	
21	19	INSTALL	415V	LV-240C4/673	32	36	
21	22	INSTALL	415V	LV-240C4/673	24	28	
23	107	INSTALL	240V	LVI-4CU2NS/1671	4	9	
24	21	INSTALL	415V	LV-240C4/673	16	20	
24	23	INSTALL	415V	LV-240C4/673	29	33	
24	105	INSTALL	240V	LVI-4CU2NS/1671	5	10	
25	24	INSTALL	415V	LV-240C4/673	22	26	
25	106	INSTALL	240V	LVI-4CU2NS/1671	12	17	
319	224	INSTALL	240V	LVI-16CU2NS/1672	38	43	
319	225	INSTALL	240V	LVI-4CU2NS/1671	6	11	
320	226	INSTALL	240V	LVI-4CU2NS/1671	3	8	
320	319	INSTALL	240V	LVI-16CU2NS/1672	26	30	
321	227	INSTALL	240V	LVI-4CU2NS/1671	6	11	
321	228	INSTALL	240V	LVI-16CU2NS/1672	37	42	

PUBLIC LIGHTING SCHEDULE							
STN NO	SITE LABEL	ACTION	CONSTRUCTION CODE	RATE	TARIFF OWNER	MOUNTING HEIGHT (m)	REMARKS
101	12506073	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
102	12506074	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
103	12506075	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
104	12506076	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
105	12506077	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
106	12506078	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
107	12506079	INSTALL	SLED GL 0250 A2.2	RATE 2	MRC	7.5	REFER TO BELOW NOTES.
217	11295329	EXISTING					
224	12506049	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
225	12506050	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
226	12506051	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
227	12506052	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
228	12506053	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
229	12715212	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES
230	12715213	INSTALL	<del>SLEDPH0509A2.2</del>	RATE 2	MRC	9	REFER BELOW NOTES

CHANGED TO SLEDPH0406A3

\*SLEDPH0509A2.2 IS PHILIPS 50W ROADFLAIR 2.2K AEROSCREEN LUMINAIRE COMPLETE WITH A 5 DEGREE ADAPTOR. REFER TO NOTE 22.

ROADFLAIR STREETLIGHT LED/W 38W DMV PSD P7 2.2K

AS CONSTRUCTED

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER

CHANGES: YES/NO	
<b>ELECTRICAL CONTRACTOR</b>	
NAME: Woodburn Electrical	
SIGNATURE: Paul Langtree	
DATE: 24/09/25	
<b>CIVIL CONTRACTOR</b>	
NAME: BMD Urban	
SIGNATURE: Anthony Burke	
DATE: 01/09/25	

CLIENT: URBEX PTY LTD (BRISBANE)	
PO BOX 197, WYNNUM, QLD 4178. Ph: (07) 3906 7444 Fax:	
CIVIL ENGINEER EMPOWER ENGINEERS (TOWNSVILLE)	MSEW
PO BOX 6008, TOWNSVILLE, QLD 4810 Ph: (07) 4750 7069 Fax:	EB

**spa** consulting engineers  
Simon Perkins & Associates  
Tel: (07) 4032 3311 or (07) 4728 3026  
PO Box 664 North Cairns QLD 4870  
Email Address - admin@spaconsulting.com.au  
A business unit of SPA Consulting Engineers (SOL) Pty Ltd a.s.o. 91 510 944 416

TRENCH SECTIONS-LEGEND

- SPARE HV CONDUIT - EXISTING
- SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- CONDUITS - EXISTING
- CONDUITS - PLANNED

LEGEND

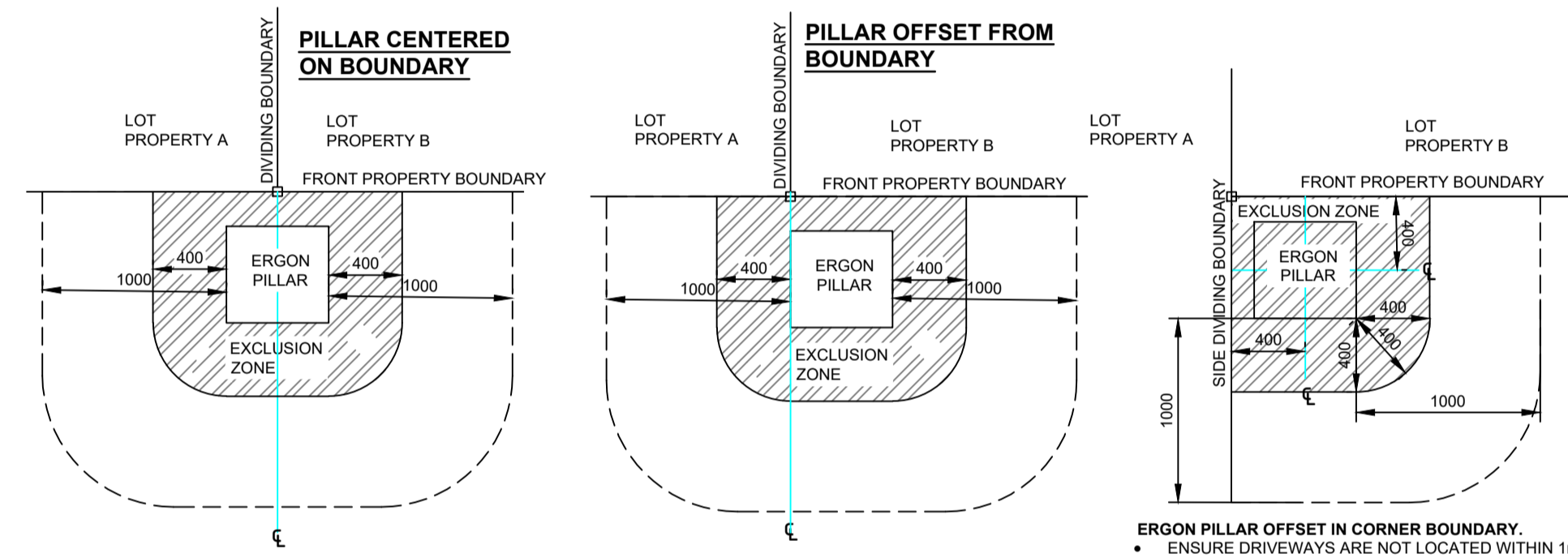
- ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED

- SUBSTATION
- RING MAIN UNIT
- CROSS ROAD PILLAR
- LINKING PILLAR
- LIGHTING PIT
- CABLE JOINT
- N1, N2, N3, CIA1 & CIA2 PILLARS
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- HV/LV POLE
- POLE MOUNTED TRANSFORMER

Drawing Title	Date	DECEMBER 2024
EAST POINT STAGE 1 D & 1R-2 UDC UG ELECTRICAL RETICULATION LV SCHEMATIC & LABELS, CABLE AND LIGHTING SCHEDULES	Scale	NTS
	Drawn	EB
	RPEQ Design Certification Michael Dayot 29435	
	Sheet	3 OF 4
Project Description	ERGON Project Number	SPA Drawing Number
EAST POINT SUBDIVISION MACKAY, QLD 4740	1960039	4003-E03
	Revision	C

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
1	SG852550			EXISTING	EARTH				
1	SG852550			INSTALL - ERGON	LV CABLE TERMINATION	LV CT PM11/240	5087		LV CABLE TERMINATION FOR STN 1 TO 4
1	SG852550			EXISTING	SUBSTATION INC HV SWITCHGEAR				
2	11295318			EXISTING	EARTH				
2	11295318			EXISTING	PILLAR				
2	11295318			INSTALL - ERGON	PILLAR UPGRADE	LV PNU2-3/240	5074		ERGON ENERGY TO UPGRADE PILLAR TO THREE WAY IN THIS STAGE. COIL CABLE AT STN 2 FOR FINAL TERMINATION BY ERGON ENERGY..
4	12506047			INSTALL	EARTH	E MEN/PIL	5085		
4	12506047			INSTALL	PILLAR	LV PN3/6S/240	5027		ADDITIONAL 32AMP FUSE REQUIRED.
5	12506048			INSTALL	EARTH	E MEN/PIL	5085		
5	12506048			INSTALL	PILLAR	LV PN1/6S/240	5025		INSTALL PILLAR OFFSET TOWARDS LOT BOUNDARY AS SHOWN. REFER TO NOTE 18. TO BE UPGRADED TO THREE WAY IN FUTURE.
6	DC11440730			EXISTING	DISTRIBUTION CABINET				
7	LP11295323			EXISTING	EARTH				
7	LP11295323			EXISTING	PILLAR				
9	12506056			INSTALL	PILLAR	LV PN2/6S/240	5026		
10	12506057			INSTALL	PILLAR	LV PN3/6S/240	5027		
11	12506058			INSTALL	EARTH	E MEN/PIL	5085		
11	12506058			INSTALL	PILLAR	LV PN1/6/240	5025		
12	LP12506059			INSTALL	EARTH	E MEN/PIL	5085		
12	LP12506059			INSTALL	PILLAR	LV PL2/6S/240	5042		INSTALL PILLAR OFFSET TOWARDS LOT 92. REFER TO NOTE 18
13	12506060			INSTALL	PILLAR	LV PN2/6/240	5026		
14	12506061			INSTALL	EARTH	E MEN/PIL	5085		
14	12506061			INSTALL	PILLAR	LV PN1/6/240	5025		INSTALL PILLAR OFFSET TOWARDS LOT 85. REFER TO NOTE 18
15	12506062			INSTALL	PILLAR	LV PN2/6/240	5026		
16	12506063			INSTALL	PILLAR	LV PN2/6S/240	5026		
17	12506064			INSTALL	PILLAR	LV PN2/6/240	5026		
18	12506065			INSTALL	PILLAR	LV PN2/6/240	5026		INSTALL PILLAR OFFSET TOWARDS LOT 81. REFER TO NOTE 18
19	12506066			INSTALL	EARTH	E MEN/PIL	5085		
19	12506066			INSTALL	PILLAR	LV PN3/6/240	5027		INSTALL PILLAR OFFSET TOWARDS LOT 100. REFER TO NOTE 18
20	12506067			INSTALL	PILLAR	LV PN2/6S/240	5026		
21	12506068			INSTALL	PILLAR	LV PN3/6/240	5027		INSTALL PILLAR OFFSET TOWARDS LOT 102. REFER TO NOTE 18
22	12506069			INSTALL	EARTH	E MEN/PIL	5085		
22	12506069			INSTALL	PILLAR	LV PN1/6/240	5025		INSTALL PILLAR OFFSET TOWARDS LOT 103. REFER TO NOTE 18
23	12506070			INSTALL	EARTH	E MEN/PIL	5085		
23	12506070			INSTALL	PILLAR	LV PN1/6S/240	5025		INSTALL PILLAR OFFSET TOWARDS LOT 73. REFER TO NOTE 18
24	12506071			INSTALL	PILLAR	LV PN3/6S/240	5027		INSTALL PILLAR OFFSET TOWARDS LOT 74. REFER TO NOTE 18
25	12506072			INSTALL	PILLAR	LV PN2/6S/240	5026		
101	12506073	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20
102	12506074	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE FROM PROPERTY BOUNDARY TRUNCATION AS SHOWN. REFER TO NOTE 20
103	12506075	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		
104	12506076	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		
105	12506077	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		
106	12506078	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET 2.5M FROM PROPERTY BOUNDARY TRUNCATION AS SHOWN. REFER TO NOTE 20
107	12506079	0.9M FROM IOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		LOCATE LIGHT FOUNDATION NO CLOSER THAN 1.3M FROM EDGE OF BITUMEN.

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
217	11295329			EXISTING	POLE				
224	12506049	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET 5.79M FROM PROPERTY BOUNDARY. LOCATE STREETLIGHT FOUNDATION NO CLOSER THAN 1.3M FROM EDGE OF BITUMEN. REFER TO NOTE 20.
225	12506050	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET 4.84M FROM PROPERTY BOUNDARY. LOCATE STREETLIGHT FOUNDATION 1.3M FROM EDGE OF BITUMEN. REFER TO NOTE 20
226	12506051	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET 2.81M FROM PROPERTY BOUNDARY. LOCATE STREETLIGHT FOUNDATION 0.9M FROM FACE OF KERB. REFER TO NOTE 20
227	12506052	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET 20.68M FROM PROPERTY TRUNCATION. LOCATE STREETLIGHT FOUNDATION 0.9M FROM FACE OF KERB. REFER TO NOTE 20.
228	12506053	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET LIGHT 9.26M FROM PROPERTY TRUNCATION. REFER TO NOTE 20.
229	12715212	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 20.
230	12715213	0.9M FROM IOK		INSTALL	POLE	SL BPM/90/1 30/UG CI1	1-5-6-1 & 2		OFFSET 4.75M FROM PROPERTY BOUNDARY PEG. REFER TO NOTE 20.
309	11295341			EXISTING	TYPE 4 LOOP PIT				
319	12715214			INSTALL	TYPE 4 LOOP PIT	SUG SLL PIT	1-4-9-1		REFER TO NOTE 23.
320	12715215			INSTALL	TYPE 4 LOOP PIT	SUG SLL PIT	1-4-9-1		REFER TO NOTE 23.
321	12715216			INSTALL	TYPE 4 LOOP PIT	SUG SLL PIT	1-4-9-1		REFER TO NOTE 23.



- WHERE REQUIRED PILLAR TO BE INSTALLED OFFSET FROM PROPERTY BOUNDARY TOWARD ADJACENT LOT, UNLESS DRIVEWAY ACCESSES FOR BOTH LOTS ARE LOCATED ON THE COMMON BOUNDARY.
- EDGE OF PILLAR CANNOT BE LOCATED MORE THAN 100mm FROM PROPERTY BOUNDARY PEG.
- DRIVEWAY ACCESS TO LOTS CANNOT BE LOCATED WITHIN 1m OF THE EDGE OF PILLAR, AS SHOWN.

- ERGON PILLAR OFFSET IN CORNER BOUNDARY.**
- ENSURE DRIVEWAYS ARE NOT LOCATED WITHIN 1m OF THE EDGE OF THE PILLAR.
  - THIS MAY BE USED FOR ZERO LOT BOUNDARIES, EASEMENTS OR CORNER LOTS.
  - REFER TO ERGON DRAWING 5196-3.
  - CENTER OF PILLAR TO BE 400mm OFFSET FROM BOUNDARIES.

DETAIL A: PILLAR LOCATION CLEARANCE FROM LOT ACCESS

AS CONSTRUCTED

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER

CHANGES: YES/NO  YES

**ELECTRICAL CONTRACTOR**  
 NAME: Woodburn Electrical  
 SIGNATURE: Paul Langtree  
 DATE: 24/09/25

**CIVIL CONTRACTOR**  
 NAME: BMD Urban  
 SIGNATURE: Anthony Burke  
 DATE: 01/09/25

C	30/09/25	AS CONSTRUCTED	MSEW
B	04/03/25	REMOVED CABLE JOINT STN 401	EB
A	21/01/25	FOR CONSTRUCTION	EB

CLIENT: URBEX PTY LTD (BRISBANE)  
 pO BOX 197 WYNNUM, QLD 4178.  
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 Simon Perkins & Associates  
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 PO Box 664 North Cairns QLD 4870  
 Email Address - admin@spaconconsulting.com.au  
 A business unit of SPA Consulting Engineers (SLE) Pty Ltd a.s.o. 91 510 944 416

**TRENCH SECTIONS-LEGEND**

⊗	SPARE HV CONDUIT - EXISTING
⊗	SPARE HV CONDUIT - PLANNED
●	CABLE - PLANNED
●	CABLE - EXISTING
○AB	CONDUITS - EXISTING
○AB	CONDUITS - PLANNED

**LEGEND**

---	CABLE EXISTING
---	CABLE PLANNED
---	CABLE RECOVER
---	EQUIPMENT EXISTING
---	EQUIPMENT RECOVER
---	EQUIPMENT PLANNED
---	CABLE JOINT
---	35mm sq ANNEALED BARE COPPER EARTH

⊠	SUBSTATION
⊠	RING MAIN UNIT
⊠	CROSS ROAD PILLAR
⊠	LINKING PILLAR
⊠	LIGHTING PIT
⊠	CABLE JOINT
⊠	N1, N2, N3, CIA1 & CIA2 PILLARS
⊠	DISTRIBUTION CABINET
⊠	STREETLIGHT
⊠	EARTH
⊠	HV/LV POLE
⊠	POLE MOUNTED TRANSFORMER
○	HV POLE
●	LV POLE

Drawing Title	Date	DECEMBER 2024
EAST POINT STAGE 1D & 1R-2 UDC UG ELECTRICAL RETICULATION CONSTRUCTION SCHEDULES AND DETAILS	Scale	NTS
	Drawn	EB
	RPEQ Design Certification	Michael Dayot 29435
	Sheet	4 OF 4
Project Description	ERGON Project Number	SPA Drawing Number
EAST POINT SUBDIVISION MACKAY, QLD 4740	1960039	4003-E04
	Revision	C