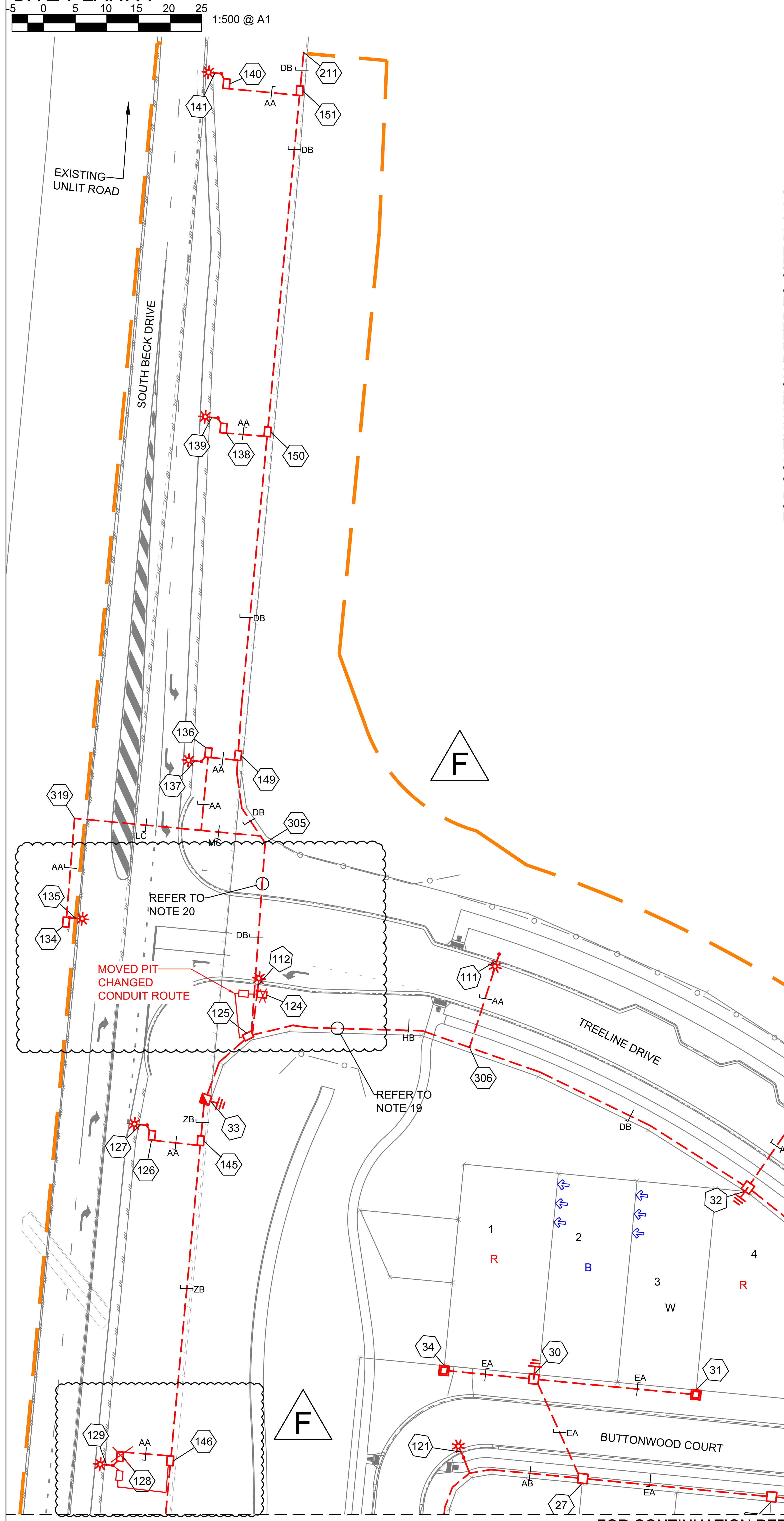
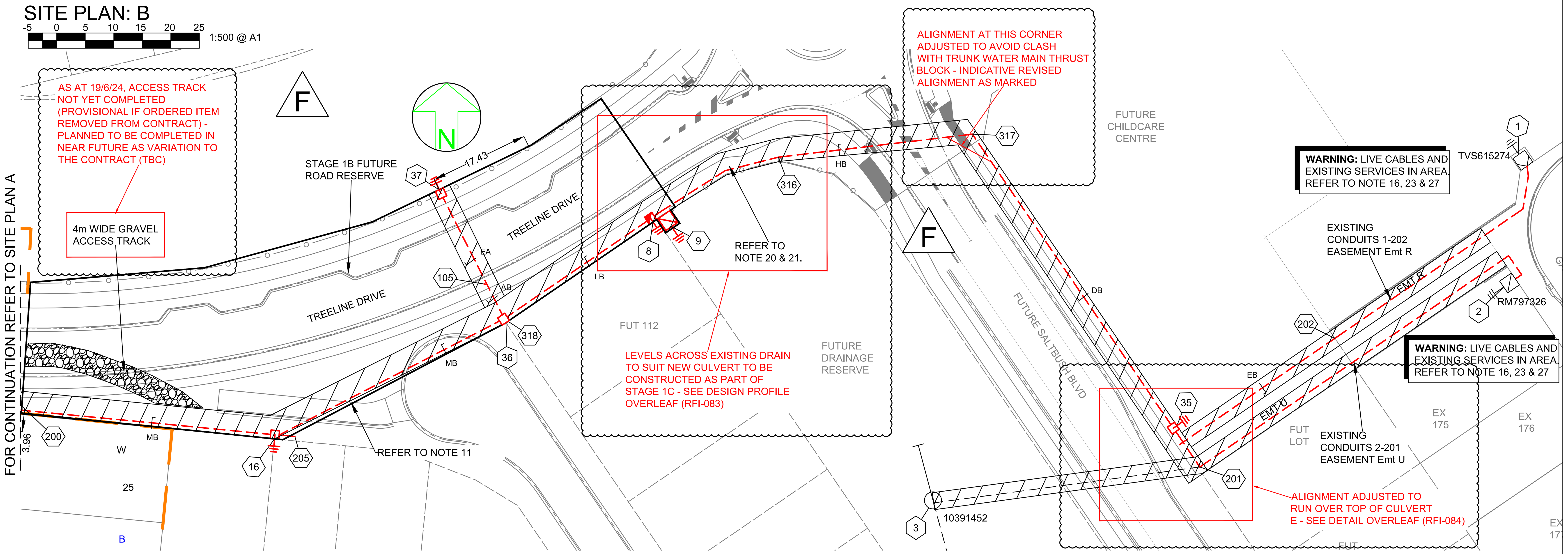
SITE PLAN: A



FOR CONTINUATION REFER TO SITE PLAN C

SITE PLAN: B



ERGON WORKS SCHEDULE

Rev Date 14-06-22

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
1	TVS615274			INSTALL - ERGON	LV CABLE TERMINATION	LV CT PM11/240	5087		ERGON ENERGY TO INSTALL LV CABLE TERMINATION FOR CABLE STN 1-35
2	RM797326			INSTALL - ERGON	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLE STN 2 TO 9

SPA LIGHTING DESIGN COMPLIANCE CERTIFICATE

spa consulting engineers (QLD)

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

NAME: MICHAEL DAYOT | TITLE: SENIOR ELECTRICAL ENGINEER
RPEQ: 29435

LIGHTING CATEGORIES: CATEGORY PR5 TO INTERNAL ROADS, V5 TO BLUEWATTLE BLVD, AND V4 TO SOUTH BECK Dr
LOCAL COUNCIL: TOWNSVILLE CITY COUNCIL
LUMINAIRE UPCAST: 0 DEGREES UPCAST ANGLE
MAINTENANCE FACTOR: 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.

1. LAMPS SHALL BE REPLACED AT 36- MONTH INTERVALS.
2. ALL THAT TIME, LUMINARIES SHALL BE CLEANED, INSPECTED AND MAINTAINED.
3. VEGETATION SHALL BE KEPT CLEAR OF STREET LIGHTS.
4. INSPECTION PATROLS AND SPOT LAMP REPLACEMENT SHALL MAINTAIN SERVICE AVAILABILITY AT NO LESS THAN 95%.
5. 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.

LOCALITY PLAN
(N.T.S)

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC
SIGNATURE: PAUL LANGTREE
DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD
SIGNATURE: RICHARD SMITH
DATE: 19/6/24

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

CLIENT:
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Ph 07 4750 7007 Fax

CIVIL ENGINEER
Empower Engineers and Project Managers (Townsville)
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TOWNSVILLE, QLD. 4810
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spa
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consulting engineers
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A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND

ZERO LOT BOUNDARY	CABLE EXISTING	SUBSTATION	COMMERCIAL/ INDUSTRIAL PILLAR
HV DUCT	CABLE PLANNED	HV ISOLATING DEVICE	DISTRIBUTION CABINET
LV DUCT	CABLE RECOVER	LV ISOLATING DEVICE	STREETLIGHT
LIGHTING DUCT	EQUIPMENT EXISTING	NORMAL PILLAR	EARTH
35mm sq ANNEALED BARE COPPER EARTH	EQUIPMENT RECOVER	CROSS ROAD PILLAR	POLE
	EQUIPMENT PLANNED	LINKING PILLAR	CABLE JOINT

Drawing Title
BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION SITE PLAN A & B AND ERGON WORKS SCHEDULE

Project Description
BLUEWATTLE PRECINCT 1, RASMUSSEN

Date	JULY 2023
Scale	1:500@A1
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	1 OF 7

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E01	F

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

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Email Address - admin@spaconsulting.com.au
A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND

- ZERO LOT BOUNDARY
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- HV ISOLATING DEVICE
- LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title

BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION SITE PLAN C

Project Description

BLUEWATTLE PRECINCT 1, RASMUSSEN

Date	JULY 2023
Scale	1:500@A1
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	2 OF 7

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E02	F

WORKPLAN NOTES

1. FOR STANDARD UNDERGROUND DUCT SECTIONS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5168.
2. POLYMERIC COVER TO BE INSTALLED OVER CONDUITS OUTSIDE NORMAL ERGON ALIGNMENT AS PER ERGON DRAWING. 5022-1 AND 5124-1 & 2. WHERE INSTALLED ALONG SOUTH BECK DRIVE UNLESS
3. 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 5163 AND DRAWING 5228 FOR TRENCHES WITH NBNCo CONDUITS.
4. 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.
5. ALL CONDUITS SHALL BE CONTINUOUS UNLESS DETAILED OTHERWISE.
6. FOR STANDARD UDC CONSTRUCTION PRACTICES REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5022, 5085 AND 5124.
7. INSTALLATION OF PADMOUNT SUBSTATION REQUIRED IN ROAD RESERVE ADJACENT LOT 16, STATION 10. PADMOUNT SITE IS TO BE 3.0m x 2.8m, REFER TO UNDERGROUND CONSTRUCTION MANUAL DWG 5000. REFER TO DETAIL A
8. INSTALLATION OF RING MAIN UNIT (RMU) REQUIRED IN FUTURE ROAD RESERVE ADJACENT TO FUTURE LOTS 113, STATION 9. RMU SITE 3.0m x 2.8m, REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5255. REFER TO DETAIL B
9. DEVELOPER SHALL INSTALL PLINTH AND CONCRETE SURROUND. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5004 & 5005 AND RMU DWG 5217.
10. INSTALL PADMOUNTED SUBSTATION AND RING MAIN UNIT (RMU) EARTHING - COMMON EARTH ARRANGEMENT. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5013 AND RMU DWG. 5221.
11. DEVELOPER TO PROVIDE 4m TRAFFICABLE, ALL WEATHER ACCESSIBLE EASEMENT OVER CABLE FROM STN 200 TO 202 CONDUITS TO BE INSTALLED TO FINAL FUTURE LEVELS TO AVOID ALL FUTURE SERVICES AND ROADS. FINAL FINISHED LEVELS TO BE CONFIRMED TO ALLOW CONDUITS TO BE INSTALLED AT CORRECT DEPTHS. FUTURE PROPERTY BOUNDARIES TO BE PEGGED WITH 50mm x 50mm WHITE BEVELED EDGED FINAL SURVEY PEGS. EASEMENT TO INCORPORATE PILLARS STN 8, 16 & 35 AND RMU STN 9. REFER TO DETAIL D.
12. 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.
13. MAJOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 2250mm FOR MAJOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-5-9-1 TO 9 FOR SBM FOOTINGS & 1-5-6-1 & 2 FOR BPM FOOTINGS.
14. 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.
15. CONFIRM ALL CONDUIT AND CABLE LENGTHS PRIOR TO INSTALLATION.
16. 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.
17. 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 JOINTING 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.
18. ELECTRONIC CABLE MARKERS (ECM'S) ARE TO BE SUPPLIED BY THE ELECTRICAL CONTRACTOR AND ARE REQUIRED AT ENDS OF ALL SPARE CONDUITS AND AT ALL CABLE JOINTS. ECM'S SHALL BE PLACED 150mm ABOVE THE LINE OF CONDUIT FOR CABLE JOINTS AND 150mm ABOVE THE LINE OF CONDUIT FOR SPARE CONDUITS. ECM'S ARE RECOVERABLE AND SHALL BE REMOVED AND RETURNED TO THE ELECTRICAL CONTRACTOR WHEN ALL SPARE CONDUIT ENDS ARE REMOVED FROM A LOCATION.
19. 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.
20. 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.
21. FUTURE CULVERT TO BE INSTALLED IN STAGE 1C. CONTRACTOR TO INSTALL CONDUITS FROM STN 9 TO 201 TO FINAL LEVELS BELOW FUTURE CULVERT TO AVOID ANY FUTURE REWORKS.
22. ADDITIONAL CONDUIT BENDS SHALL BE INSTALLED TO ACHIEVE INCREASED BURIAL DEPTH AT ROAD CROSSINGS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5022.
23. ALL CONTRACTORS MUST CARRY OUT A DIAL BEFORE YOU DIG ENQUIRY BEFORE COMMENCING ANY EXCAVATION.
24. INSTALL PILLAR OFFSET IN ACCORDANCE WITH ERGON DRAWING 5196-2 & DETAIL C.
25. CONTRACTOR TO SUPPLY AND INSTALL ENGRAVED LABEL LOCATED ON LIGHTING TERMINAL STATING "LIGHT FED FROM PILLAR ASSET NUMBER________"
26. WHERE REQUIRED CONTRACTOR TO INSTALL LV JOINT AT STN 401. CONTRACTOR TO MONITOR PULLING TENSIONS TO DETERMINE IF JOINT REQUIRED. ADDITIONAL LUBRICATION PITS MAYBE REQUIRED ON SITE FOR THESE PULLS. ELECTRICAL CONTRACTOR TO CONFIRM WITH CIVIL CONTRACTOR AT PRESTART MEETING WHERE AND IF SAND PITS ARE REQUIRED.
27. **WARNING:** LIVE CABLES AND EXISTING SERVICES IN AREA. CONTRACTOR TO USE POT HOLING, HYDRO-VAC EXCAVATION AND CABLE LOCATION IN CONSTRUCTION.
28. CONTRACTOR SHALL NOT INSTALL PITS AT THE BOTTOM OF DRAINS, VEHICLE PATHS, ROADWAYS, DRIVEWAYS, DRAIN INVERTS, BIKEWAYS, RAMPS, PEDESTRIAN ALIGNMENTS, WHEELCHAIR ACCESS OR PATHWAYS.
29. 'ZA TRENCH SECTION' DENOTES 1 x LV CONDUIT AND 2 x SL CONDUITS.
'ZB TRENCH SECTION' DENOTES 5 x HV CONDUITS, 1 x LV CONDUIT AND 1 x SL CONDUIT.
'ZC TRENCH SECTION' DENOTES 2 x HV CONDUITS, 1 x LV CONDUIT AND 2 x SL CONDUIT.

LV PULLING TENSION CALCULATED AND RECORDED

STATION FROM	STATION TO	CALCULATED	RECORDED
12	32	2,261.84 N	280 kg
32	33	1,618.06 N	220 kg
1	35		310 kg
35	8		400 kg

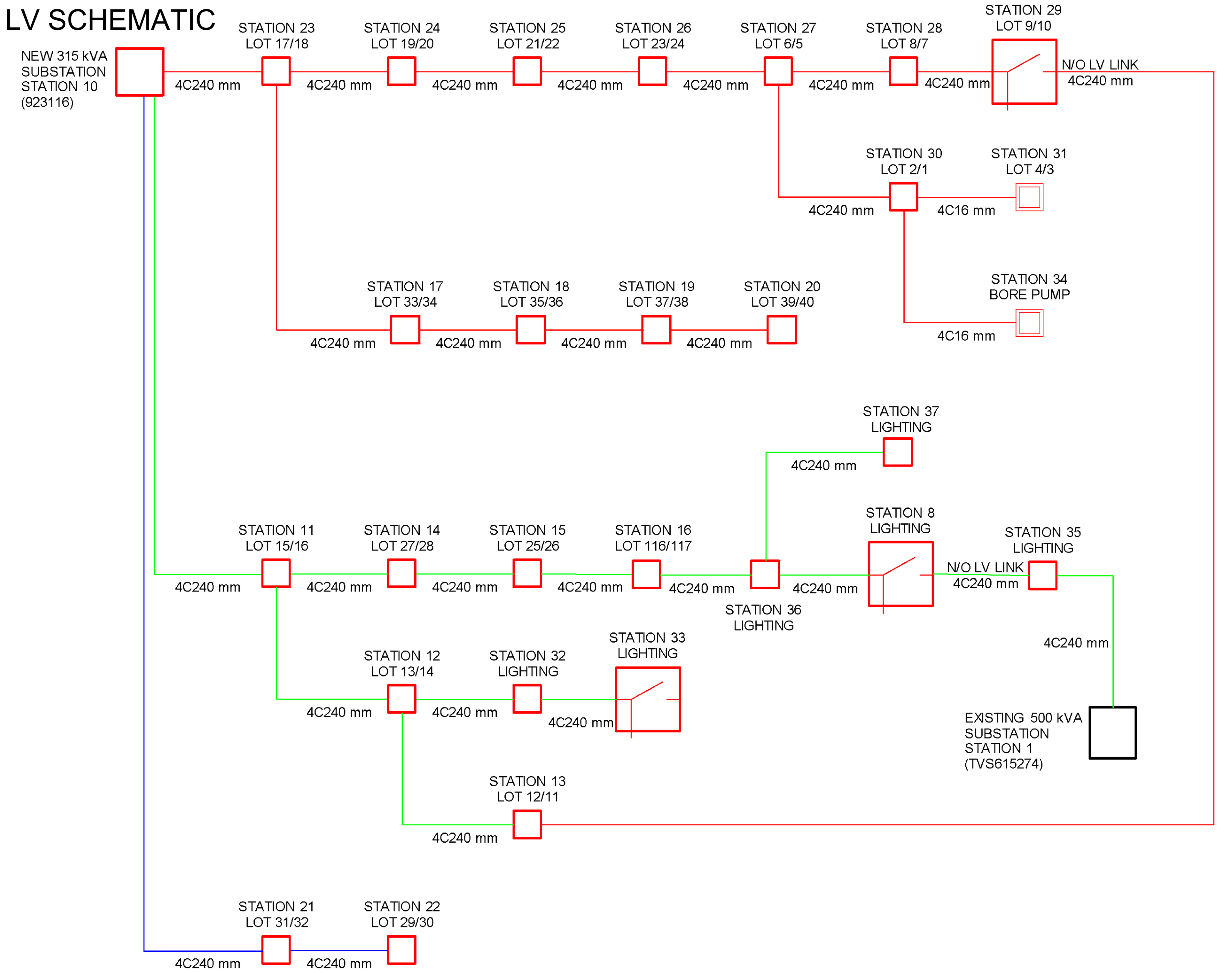
F

HV PULLING TENSION CALCULATED AND RECORDED

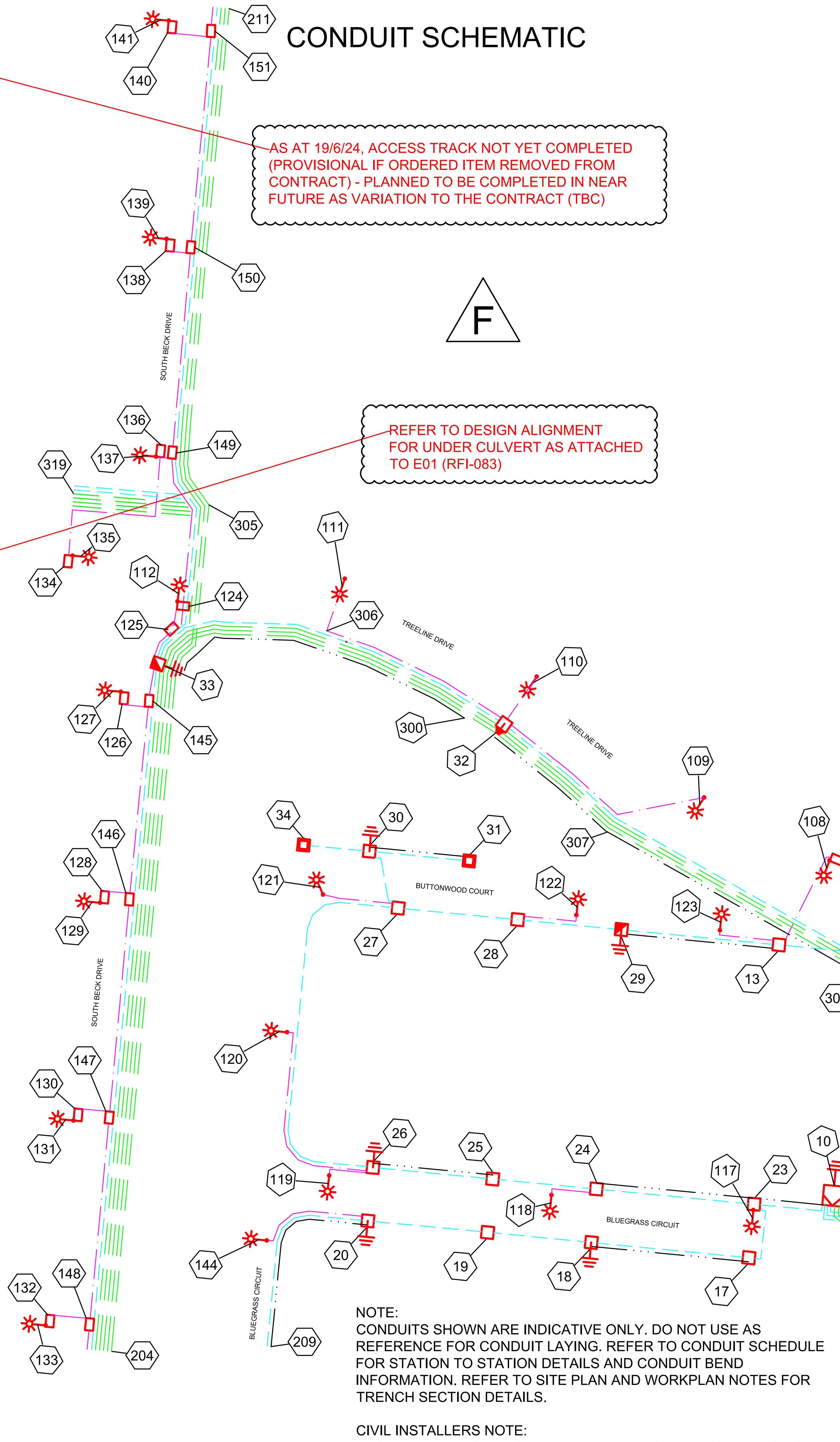
STATION FROM	STATION TO	CALCULATED	RECORDED
1	9	3,494.27 N	650kg
9	10	13,006.44 N	820kg

F

LV SCHEMATIC



CONDUIT SCHEMATIC



AS AT 19/6/24, ACCESS TRACK NOT YET COMPLETED (PROVISIONAL IF ORDERED ITEM REMOVED FROM CONTRACT) - PLANNED TO BE COMPLETED IN NEAR FUTURE AS VARIATION TO THE CONTRACT (TBC)

REFER TO DESIGN ALIGNMENT FOR UNDER CULVERT AS ATTACHED TO E01 (RFI-083)

F

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 40mm LEAD IN CONDUITS. BENDS TO BE INSTALLED AS PER ERGON STANDARD DRAWINGS.

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

AS CONSTRUCTED

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

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A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND
- ZERO LOT BOUNDARY
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- HV ISOLATING DEVICE
- LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title
BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION SCHEMATICS

Project Description
BLUEWATTLE PRECINCT 1, RASMUSSEN

Date	JULY 2023
Scale	N.T.S
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	3 of 7

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E03	F

Rev Date 31/10/2023

CONSTRUCTION SCHEDULE 1/2

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
1	TVS615274			EXISTING	EARTH				
1	TVS615274			INSTALL - ERGON	LV CABLE TERMINATION	LV CT PM11/240	5087		ERGON ENERGY TO INSTALL LV CABLE TERMINATION FOR CABLE STN 1-35
1	TVS615274			EXISTING	SUBSTATION INC HV SWITCHGEAR				10487120
2	RM797326			EXISTING	EARTH				
2	RM797326			INSTALL - ERGON	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLE STN 2 TO 9
2	RM797326			EXISTING	RMU				
3	10391452			EXISTING	POLE				
8	12508448			INSTALL	EARTH	E MEN/PIL	5085		
8	12508448			INSTALL	PILLAR	LV PL2/6/240I/N	5042		INSTALL PILLAR OFFSET TOWARD LOT 112. REFER TO NOTE 24 & 11. ALL FUSES TO BE 32AMP
9	923115			INSTALL	EARTH	E RMU11/COM	5221		
9	923115			INSTALL	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		INSTALL HV CABLE TERMINATION FOR CABLE STN 9 TO 10
9	923115			INSTALL	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		INSTALL HV CABLE TERMINATION FOR CABLE STN 9 TO 2
9	923115			INSTALL	RMU	11 RMU/O/ASL2 4S	5308		REFER TO NOTE 11 & DETAIL B.
9	12508449			INSTALL	RMU FOUNDATION	11 RMUF / ASL	5255, 5217 & 5232		
10	923116			INSTALL	EARTH	E PM11/COM	5013		
10	923116			INSTALL	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		INSTALL HV CABLE TERMINATION FOR CABLE STN 10 TO 9
10	923116			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 10-11
10	923116			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 10-23.
10	923116			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 10-21
10	12508450			INSTALL	SUBSTATION FOUNDATION	PMF 11 US	5005		
10	923116			INSTALL	SUBSTATION INC HV SWITCHGEAR	PM 11/315/ASL2 2S1F	5388		
11	12508451			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		
12	12508452			INSTALL	EARTH	E MEN/PIL	5085		
12	12508452			INSTALL	PILLAR	LV PN3/6/240I/N	5027		
13	12508453			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		ADDITIONAL 32AMP SL FUSE REQUIRED
14	12508454			INSTALL	EARTH	E MEN/PIL	5085		
14	12508454			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		
15	12508455			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		ADDITIONAL 32 AMP SL FUSE REQUIRED.
16	12508456			INSTALL	EARTH	E MEN/PIL	5085		
16	12508456			INSTALL	PILLAR	LV PN2/6/240I/N	5026		PILLAR TO BE UPGRADED TO 3-WAY IN FUTURE. REFER TO NOTE 11
17	12508457			INSTALL	PILLAR	LV PN2/6/240I/N	5026		
18	12508458			INSTALL	EARTH	E MEN/PIL	5085		
18	12508458			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 36. REFER TO NOTE 25.
19	12508459			INSTALL	PILLAR	LV PN2/6/240I/N	5026		
20	12508460			INSTALL	EARTH	E MEN/PIL	5085		
20	12508460			INSTALL	PILLAR	LV PN1/6S/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE
21	12508461			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		PILLAR TO BE UPGRADED TO 3-WAY IN FUTURE. ADDITIONAL 32AMP SL FUSE REQUIRED.
22	12508462			INSTALL	EARTH	E MEN/PIL	5085		
22	12508462			INSTALL	PILLAR	LV PN1/6/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE
23	12508463			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		
24	12508464			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 20. REFER TO NOTE 25.
25	12508465			INSTALL	PILLAR	LV PN2/6/240I/N	5026		
26	12508466			INSTALL	EARTH	E MEN/PIL	5085		
26	12508466			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		ADDITIONAL 32AMP SL FUSE REQUIRED
27	12508467			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		
28	12508468			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		
29	12508469			INSTALL	EARTH	E MEN/PIL	5085		
29	12508469			INSTALL	PILLAR	LV PL2/6/240I/N	5042		INSTALL PILLAR OFFSET TOWARD LOT 9. REFER TO NOTE 25.
30	12508470			INSTALL	EARTH	E MEN/PIL	5085		
30	12508470			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 1. REFER TO NOTE 25.
31	12508471			INSTALL	PILLAR	LV PX/6/16CUI/N	5041		
32	12508472			INSTALL	EARTH	E MEN/PIL	5085		
32	12508472			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		ALL FUSES TO BE 32AMP
33	12508473			INSTALL	EARTH	E MEN/PIL	5085		
33	12508473			INSTALL	PILLAR	LV PL2/6S/240I/N	5042		INSTALL PILLAR ON PROPERTY TRUNCATION. PILLAR TO BE UPGRADED TO 3-WAY IN FUTURE. ALL FUSES TO BE 32AMP

Rev Date 31/10/2023

CONSTRUCTION SCHEDULE 2/2

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
34	12508474			INSTALL	PILLAR	LV PX/6/16CUI/N	5041		
35	12508475			INSTALL	EARTH	E MEN/PIL	5085		
35	12508475			INSTALL	PILLAR	LV PCIA2/3/240I/N	5102		PILLAR TO BE INSTALLED OFFSET INTO FUTURE LOT. REFER TO NOTE 11
36	12509001			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		REFER TO NOTE 11
37	12509002			INSTALL	EARTH	E MEN/PIL	5085		
37	12509002			INSTALL	PILLAR	LV PN1/6S/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE. REFER TO NOTE 11.
106	12508525	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25.
107	12508476	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25.
108	12508477	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25.
109	12508478	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25.
110	12508479	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25.
111	12508480	1.05M FROM BOK		INSTALL	POLE	SL BPM/120/1 30/UG CI1	1-5-6-1 & 2		REFER TO NOTE 25
112	12508481	1.05M FROM BOK		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
113	12508482	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		OFFSET LIGHT 1M FROM PROPERTY BOUNDARY TRUNCATION TO AVOID SW PIT. REFER TO NOTE 25.
114	12508483	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
115	12508484	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
116	12508485	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET 0.5M TOWARD LOT 49. REFER TO NOTE 25.
117	12508486	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		
118	12508487	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
119	12508488	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET 3.82M TO AVOID SW PIT. REFER TO NOTE 25.
120	12508489	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
121	12508490	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
122	12508491	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET 0.5M TOWARD LOT 8 TO AVOID DW ACCESS. REFER TO NOTE 25.
123	12508492	1.3M FROM EDGE OF BITUMEN		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE ON EASEMENT BOUNDARY. REFER TO NOTE 25.
124				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
125				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
126				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
127	12508493	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
128				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
129	12508494	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
130				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
131	12508495	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
132				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
133	12508496	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
134				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
135	12508497	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
136				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28.
137	12508498	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
138				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28
139	12508499	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
140				INSTALL	SBM PIT	SUG SL/SBM/PIT	1-4-8-1		REFER TO NOTE 28
141	12508500	1.3M FROM EOB		INSTALL	POLE	SL SBM/120/1 30/UG CI1	1-5-9-1 TO 9		REFER TO NOTE 25
142				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
143	12508501	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
144	12508545	0.8M FROM BOK		INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 25.
145				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
146				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
147				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
148				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
149				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
150				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.
151				INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 28.

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW
C	19/12/23	ADDED STN 35 & 36	SW
B	29/9/23	UPDATE HV CABLE SIZE	SW
A	7/8/23	FOR CONSTRUCTION	SW

CLIENT:
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A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND

- ZERO LOT BOUNDARY
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- HV ISOLATING DEVICE
- LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title
BLUEWATTLE PRECINCT 1- STAGE 1A
UDC UG ELECTRICAL RETICULATION
CONSTRUCTION SCHEDULE

Project Description
BLUEWATTLE PRECINCT 1,
RASMUSSEN

Date	JULY 2023
Scale	N.T.S
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	3 OF 6

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E04	F

Rev Date 20-4-23	CROSSING CONDUIT DUCTING SCHEDULE						
STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
10	315	INSTALL - CIVIL	C150L	29	4.8	15/1830x5	CAP CONDUIT AT STN 10
10	315	INSTALL - CIVIL	C100L	29	4.8	15/1830x5	
10	315	INSTALL - CIVIL	C150L	29	4.8	15/1830x5	CAP CONDUIT AT STN 10
11	14	INSTALL - CIVIL	C100L	16	2.7	45/1200x2 45/1830x4 15/1830x2	ADDITIONAL BENDS ADDED TO AVOID NBN PITS.
13	142	INSTALL - CIVIL	C50H	24	6.0	90/300x1 90/600x1	
16	36	INSTALL - CIVIL	C100L	45	7.5	45/1200x2 45/1830x1 15/1830x5	REFER TO NOTE 11.
21	22	INSTALL - CIVIL	C100L	15	2.5	45/1200x2 45/1830x4 15/1830x2	ADDITIONAL BENDS ADDED TO AVOID NBN PITS.
23	17	INSTALL - CIVIL	C100L	16	2.7	45/1200x2 45/1830x4	ADDITIONAL BENDS ADDED TO AVOID NBN PITS.
27	30	INSTALL - CIVIL	C100L	16	2.7	45/1200x2 45/1830x2 15/1830x2	ADDITIONAL BENDS ADDED TO AVOID NBN PITS
32	110	INSTALL - CIVIL	C50H	14	3.5	90/300x2	
36	37	INSTALL - CIVIL	C100L	24	4.0	45/1200x2 15/1830x4	REFER TO NOTE 11.
125	305	INSTALL - CIVIL	C50H	34	8.5	90/300x1 90/600x2	REFER TO NOTE 20.
136	134	INSTALL - CIVIL	C50H	48	12.0	90/600x2	
305	125	INSTALL - CIVIL	C150L	32	5.3	15/1830x5	REFER TO NOTE 20
305	125	INSTALL - CIVIL	C100L	32	5.3	15/1830x5	CAP CONDUIT AT STN 125. REFER TO NOTE 20.
305	125	INSTALL - CIVIL	C150L	32	5.3	15/1830x5	REFER TO NOTE 20
305	125	INSTALL - CIVIL	C150L	32	5.3	15/1830x5	CAP CONDUIT AT STN 125
306	111	INSTALL - CIVIL	C50H	16	4.0	90/300x1	
307	109	INSTALL - CIVIL	C50H	23	5.8	90/300x1	
308	307	INSTALL - CIVIL	C100L	68	11.3	45/1830x1 15/1830x3	
308	307	INSTALL - CIVIL	C150L	68	11.3	15/1830x3	
308	307	INSTALL - CIVIL	C150L	68	11.3	15/1830x3	
308	307	INSTALL - CIVIL	C150L	68	11.3	15/1830x3	
310	309	INSTALL - CIVIL	C150L	22	3.7	15/1830x4	
310	309	INSTALL - CIVIL	C150L	22	3.7	15/1830x4	
310	309	INSTALL - CIVIL	C150L	22	3.7	15/1830x4	
311	312	INSTALL - CIVIL	C150L	20	3.3	45/1830x2 15/1830x2	
311	312	INSTALL - CIVIL	C150L	20	3.3	45/1830x2 15/1830x2	
314	313	INSTALL - CIVIL	C100L	28	4.7	15/1830x4	
316	317	INSTALL - CIVIL	C150L	37	6.2	15/1830x4 45/1830x1	REFER TO NOTE 11.
316	317	INSTALL - CIVIL	C150L	37	6.2	15/1830x4 45/1830x1	REFER TO NOTE 11.
316	317	INSTALL - CIVIL	C100L	37	6.2	15/1830x4 45/1830x1	REFER TO NOTE 11.
316	317	INSTALL - CIVIL	C150L	37	6.2	15/1830x4 45/1830x1	REFER TO NOTE 11.
318	16	INSTALL - CIVIL	C150L	46	7.7	45/1830x1 15/1830x2	REFER TO NOTE 11.
318	16	INSTALL - CIVIL	C150L	46	7.7	45/1830x1 15/1830x2	REFER TO NOTE 11.
318	16	INSTALL - CIVIL	C150L	46	7.7	45/1830x1 15/1830x2	REFER TO NOTE 11.
318	16	INSTALL - CIVIL	C150L	46	7.7	45/1830x1 15/1830x2	REFER TO NOTE 11.
319	305	INSTALL - CIVIL	C100L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.
319	305	INSTALL - CIVIL	C150L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.
319	305	INSTALL - CIVIL	C150L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.
319	305	INSTALL - CIVIL	C150L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.
319	305	INSTALL - CIVIL	C100L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.
319	305	INSTALL - CIVIL	C150L	30	5.0	15/1830x4	CONDUIT TO AVOID WATER FITTINGS AND MAINTAIN 1.2M CLEARANCE FROM THE WATERMAIN. CAP CONDUIT AT STN 305 & 319.

Rev Date 15/09/23	UNDERGROUND CABLE SCHEDULE 1/2						
STN FROM	STN TO	ACTION	VOLTAGE	CONSTRUCTION CODE	ROUTE LENGTH	CABLE LENGTH	REMARKS
1	35	INSTALL	415V	LVI-240C4/1611	84	96	COIL CABLE AT STN 1 FOR FINAL TERMINATION BY ERGON ENERGY.
2	9	INSTALL	11kV	11I-400T/1726	207	217	COIL CABLE AT STN 2 FOR FINAL TERMINATION BY ERGON ENERGY.
9	10	INSTALL	11kV	11I-400T/1726	226	241	
10	11	INSTALL	415V	LVI-240C4/1611	49	61	
10	21	INSTALL	415V	LVI-240C4/1611	50	62	
10	23	INSTALL	415V	LVI-240C4/1611	20	32	
11	12	INSTALL	415V	LVI-240C4/1611	27	31	
11	14	INSTALL	415V	LVI-240C4/1611	16	20	
11	114	INSTALL	240V	LVI-4CU2NS/1671	13	18	
12	13	INSTALL	415V	LVI-240C4/1611	67	71	
12	32	INSTALL	415V	LVI-240C4/1611	145	149	
13	123	INSTALL	240V	LVI-4CU2NS/1671	18	23	
13	142	INSTALL	240V	LVI-16CU2NS/1672	24	28	
14	15	INSTALL	415V	LVI-240C4/1611	27	31	
14	115	INSTALL	240V	LVI-16CU2NS/1672	50	55	

Rev Date 15/09/23	UNDERGROUND CABLE SCHEDULE 2/2						
STN FROM	STN TO	ACTION	VOLTAGE	CONSTRUCTION CODE	ROUTE LENGTH	CABLE LENGTH	REMARKS
15	16	INSTALL	415V	LVI-240C4/1611	67	71	
15	106	INSTALL	240V	LVI-16CU2NS/1672	23	28	
15	113	INSTALL	240V	LVI-4CU2NS/1671	15	20	
16	36	INSTALL	415V	LVI-240C4/1611	45	49	
17	18	INSTALL	415V	LVI-240C4/1611	39	43	
18	19	INSTALL	415V	LVI-240C4/1611	26	30	
19	20	INSTALL	415V	LVI-240C4/1611	30	34	
20	144	INSTALL	240V	LVI-4CU2NS/1671	26	31	
21	22	INSTALL	415V	LVI-240C4/1611	15	19	
21	116	INSTALL	240V	LVI-4CU2NS/1671	14	19	
21	143	INSTALL	240V	LVI-4CU2NS/1671	23	28	
23	17	INSTALL	415V	LVI-240C4/1611	16	20	
23	24	INSTALL	415V	LVI-240C4/1611	39	43	
23	117	INSTALL	240V	LVI-4CU2NS/1671	5	10	
24	25	INSTALL	415V	LVI-240C4/1611	26	30	
24	118	INSTALL	240V	LVI-4CU2NS/1671	14	19	
25	26	INSTALL	415V	LVI-240C4/1611	30	34	
26	27	INSTALL	415V	LVI-240C4/1611	102	106	
26	119	INSTALL	240V	LVI-4CU2NS/1671	12	17	
26	120	INSTALL	240V	LVI-4CU2NS/1671	51	56	
27	28	INSTALL	415V	LVI-240C4/1611	30	34	
27	30	INSTALL	415V	LVI-240C4/1611	16	20	
27	121	INSTALL	240V	LVI-4CU2NS/1671	20	25	
28	29	INSTALL	415V	LVI-240C4/1611	26	30	
28	122	INSTALL	240V	LVI-4CU2NS/1671	16	21	
29	13	INSTALL	415V	LVI-240C4/1611	39	43	LV LINK
30	31	INSTALL	415V	LVI-16CUC4/1601	24	28	
30	34	INSTALL	415V	LVI-16CUC4/1601	16	20	
32	33	INSTALL	415V	LVI-240C4/1611	98	102	
32	109	INSTALL	240V	LVI-16CU2NS/1672	60	65	
32	110	INSTALL	240V	LVI-16CU2NS/1672	14	19	
32	111	INSTALL	240V	LVI-16CU2NS/1672	61	66	
33	125	INSTALL	240V	LVI-16CU2NS/1672	12	16	
33	145	INSTALL	240V	LVI-16CU2NS/1672	6	10	
35	8	INSTALL	415V	LVI-240C4/1611	124	128	LV LINK
36	8	INSTALL	415V	LVI-240C4/1611	30	34	
36	37	INSTALL	415V	LVI-240C4/1611	24	28	
124	112	INSTALL	240V	LVI-4CU2NS/1671	5	10	
124	112	INSTALL	240V	LV-6CUC1/1673	5	10	
125	124	INSTALL	240V	LVI-16CU2NS/1672	5	9	
125	149	INSTALL	240V	LVI-16CU2NS/1672	48	52	
126	127	INSTALL	240V	LVI-4CU2NS/1671	5	10	
126	127	INSTALL	240V	LV-6CUC1/1673	5	10	
128	129	INSTALL	240V	LVI-4CU2NS/1671	5	10	
128	129	INSTALL	240V	LV-6CUC1/1673	5	10	
130	131	INSTALL	240V	LVI-4CU2NS/1671	5	10	
130	131	INSTALL	240V	LV-6CUC1/1673	5	10	
132	133	INSTALL	240V	LVI-4CU2NS/1671	5	10	
132	133	INSTALL	240V	LV-6CUC1/1673	5	10	
134	135	INSTALL	240V	LVI-4CU2NS/1671	5	10	
134	135	INSTALL	240V	LV-6CUC1/1673	5	10	
136	134	INSTALL	240V	LVI-16CU2NS/1672	48	52	
136	137	INSTALL	240V	LVI-4CU2NS/1671	5	10	
136	137	INSTALL	240V	LV-6CUC1/1673	5	10	
138	139	INSTALL	240V	LVI-4CU2NS/1671	5	10	
138	139	INSTALL	240V	LV-6CUC1/1673	5	10	
140	141	INSTALL	240V	LVI-4CU2NS/1671	5	10	
140	141	INSTALL	240V	LV-6CUC1/1673	5	10	
142	107	INSTALL	240V	LVI-16CU2NS/1672	33	38	
142	108	INSTALL	240V	LVI-16CU2NS/1672	5	10	
145	126	INSTALL	240V	LVI-16CU2NS/1672	8	12	
145	146	INSTALL	240V	LVI-16CU2NS/1672	51	55	
146	128	INSTALL	240V	LVI-16CU2NS/1672	8	12	
146	147	INSTALL	240V	LVI-16CU2NS/1672	55	59	
147	130	INSTALL	240V	LVI-16CU2NS/1672	10	14	
147	148	INSTALL	240V	LVI-16CU2NS/1672	52	56	
148	132	INSTALL	240V	LVI-16CU2NS/1672	12	16	
149	136	INSTALL	240V	LVI-16CU2NS/1672	6	10	
149	150	INSTALL	240V	LVI-16CU2NS/1672	51	55	
150	138	INSTALL	240V	LVI-16CU2NS/1672	7	11	
150	151	INSTALL	240V	LVI-16CU2NS/1672	54	58	
151	140	INSTALL	240V	LVI-16CU2NS/1672	12	16	

Rev Date 02/05/23	PUBLIC LIGHTING SCHEDULE									
STN NO	SITE LABEL	ACTION	CONSTRUCTION CODE	RATE	OWNER	MOUNTING HEIGHT (m)	POLE EASTING	POLE NORTHING	BEARING	REMARKS
106	12508525	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604837.740	7859053.059	6	
107	12508476	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604812.143	7859066.599	189	
108	12508477	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604780.845	7859077.171	201	
109	12508478	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604749.559	7859092.871	213	
110	12508479	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604707.777	7859122.997	215	
111	12508480	INSTALL	SLED PH 0702A	RATE 2	TCC	12	604659.889	7859147.434	199	
112	12508481	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604621.676	7859141.616	7	
113	12508482	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604830.833	7859046.567	276	
114	12508483	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604815.753	7858993.772	96	
115	12508484	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604859.739	7858980.181	186	
116	12508485	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604810.723	7858942.138	96	
117	12508486	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604761.891	7858989.627	186	
118	12508487	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604711.528	7858994.491	186	
119	12508488	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604656.109	7858999.844	186	
120	12508489	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604646.249	7859034.261	276	
121	12508490	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604654.280	7859067.836	336	
122	12508491	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604717.625	7859062.822	6	
123	12508492	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604753.402	7859058.779	6	
127	12508493	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604604.227	7859120.400	275	
129	12508494	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604598.823	7859066.612	275	
131	12508495	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604592.201	7859012.333	275	
133	12508496	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604585.219	7858961.202	275	
135	12508497	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604591.963	7859153.211	95	
137	12508498	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604612.800	7859177.891	275	
139	12508499	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604615.430	7859232.180	275	
141	12508500	INSTALL	SLED PH 1212A	RATE 2	TCC	12	604615.957	7859286.635	275	
143	12508501	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604804.649	7858975.652	6	
144	12508545	INSTALL	SLED SY 0137 N	RATE 2	TCC	7.5	604641.173	7858982.124	276	

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/3/24	UPDATED CONDUITS 125-305	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

CLIENT:
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PO BOX 6008,
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A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND
- ZERO LOT BOUNDARY
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- HV ISOLATING DEVICE
- LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title
BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION LIGHTING, CABLE AND CONDUIT SCHEDULE 1/2

Project Description
BLUEWATTLE PRECINCT 1, RASMUSSEN

Date	JULY 2023
Scale	N.T.S
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	5 OF 7
ERGON Project Number	1768792
SPA Drawing Number	3661-E05
Revision	F

VERGE CONDUIT DUCTING SCHEDULE 1/2

Rev Date 20-4-23

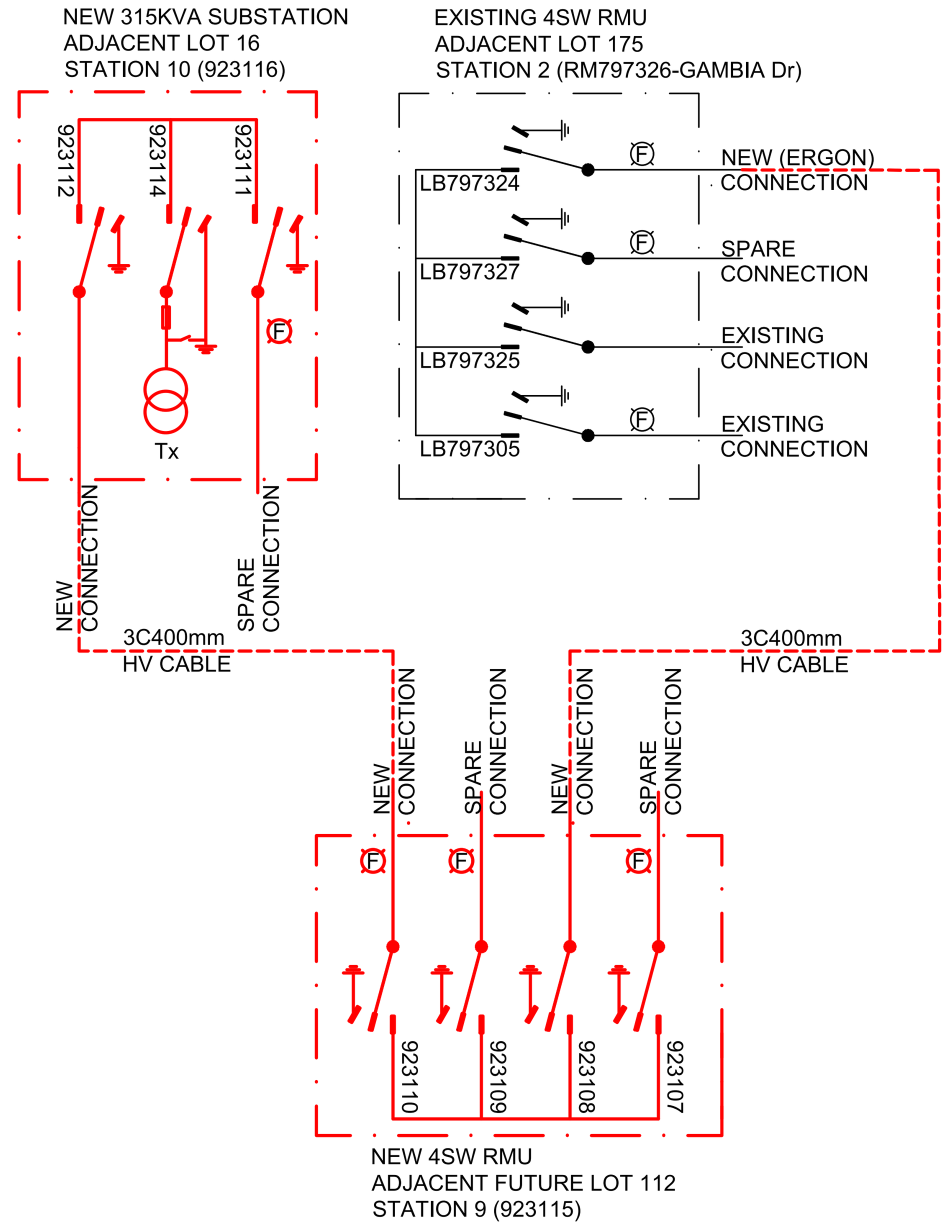
STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
8	316	INSTALL - CIVIL	C50H	24	6.0	90/300x1	
8	316	INSTALL - CIVIL	C100L	26	4.3	15/1830x5	REFER TO NOTE 20 & 21 & 11
9	316	INSTALL - CIVIL	C150L	26	4.3	15/1830x5	REFER TO NOTE 20 & 21 & 11
9	316	INSTALL - CIVIL	C150L	26	4.3	15/1830x5	REFER TO NOTE 20 & 21 & 11. CAP CONDUIT AT STN 9
9	316	INSTALL - CIVIL	C150L	26	4.3	15/1830x5	REFER TO NOTE 20 & 21 & 11. CAP CONDUIT AT STN 9
9	318	INSTALL - CIVIL	C150L	34	5.7		REFER TO NOTE 11.
9	318	INSTALL - CIVIL	C150L	34	5.7	15/1830x1	REFER TO NOTE 11.
9	318	INSTALL - CIVIL	C150L	34	5.7		CAP CONDUIT AT STN 9. REFER TO NOTE 11.
9	318	INSTALL - CIVIL	C150L	34	5.7		CAP CONDUIT AT STN 9. REFER TO NOTE 11.
10	11	INSTALL - CIVIL	C100L	49	8.2	45/1200x1 30/1830x2 15/1830x2	
10	23	INSTALL - CIVIL	C100L	20	3.3	45/1200x1	
10	314	INSTALL - CIVIL	C100L	24	4.0		CAP CONDUIT AT STN 10
11	12	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	29	0.1		COIL 2M OF CABLE AT STN 12 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 11
11	12	INSTALL - CIVIL	C100L	27	4.5	45/1200x2	
11	114	INSTALL - CIVIL	C50H	13	3.3	90/300x2 90/600x1	
12	13	INSTALL - CIVIL	C100L	67	11.2	45/1200x2 45/1830x2	
12	308	INSTALL - CIVIL	C100L	47	7.8	45/1200x1 45/1830x2	
13	123	INSTALL - CIVIL	C50H	18	4.5	90/300x2 90/600x1	
14	15	INSTALL - CIVIL	C100L	27	4.5	45/1200x2	
14	115	INSTALL - CIVIL	C50H	50	12.5	90/300x2 90/600x3	CONDUIT TO AVOID WATER FITTINGS.
15	14	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	29	0.1		COIL 2M OF CABLE AT STN 14 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 15
15	16	INSTALL - CIVIL	C100L	67	11.2	45/1200x2 45/1830x2	REFER TO NOTE 11.
15	106	INSTALL - CIVIL	C50H	23	5.8	90/300x2 90/600x1	
15	113	INSTALL - CIVIL	C50H	15	3.8	90/300x2 90/600x1	
16	205	INSTALL - CIVIL	C100L	2	0.3	45/1200x1	CAP CONDUIT AT STN 205. REFER TO NOTE 11.
16	310	INSTALL - CIVIL	C150L	47	7.8		REFER TO NOTE 11.
16	310	INSTALL - CIVIL	C150L	47	7.8		REFER TO NOTE 11.
16	310	INSTALL - CIVIL	C150L	47	7.8		REFER TO NOTE 11.
16	311	INSTALL - CIVIL	C150L	55	9.2	45/1830x3	
17	18	INSTALL - CIVIL	C100L	39	6.5	45/1200x2	
17	18	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	41	0.2		COIL 2M OF CABLE AT STN 18 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 17
18	19	INSTALL - CIVIL	C100L	26	4.3	45/1200x2	
19	20	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
20	144	INSTALL - CIVIL	C50H	26	6.5	90/300x2 90/600x1	
20	209	INSTALL - CIVIL	C100L	52	8.7	45/1200x2 30/1830x2 15/1830x2	CAP CONDUIT AT STN 209
21	116	INSTALL - CIVIL	C50H	14	3.5	90/300x2 90/600x1	CONDUIT TO AVOID WATER FITTINGS
21	143	INSTALL - CIVIL	C50H	23	5.8	90/300x2 90/600x1	
21	208	INSTALL - CIVIL	C100L	13	2.2	45/1200x1	CAP CONDUIT AT STN 208
22	207	INSTALL - CIVIL	C100L	48	8.0	45/1200x1 30/1830x2 15/1830x2	CAP CONDUIT AT STN 207
23	24	INSTALL - CIVIL	C100L	39	6.5	45/1200x2	
23	117	INSTALL - CIVIL	C50H	5	1.3	90/300x2	
24	10	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	58	0.2		COIL 2M OF CABLE AT STN 10 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 24
24	25	INSTALL - CIVIL	C100L	26	4.3	45/1200x2	
24	118	INSTALL - CIVIL	C50H	14	3.5	90/300x2 90/600x1	
25	26	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
25	26	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	32	0.1		COIL 2M OF CABLE AT STN 26 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 25
26	27	INSTALL - CIVIL	C100L	102	17.0	45/1200x2 30/1830x4 15/1830x4	
26	119	INSTALL - CIVIL	C50H	12	3.0	90/300x2 90/600x1	
26	120	INSTALL - CIVIL	C50H	51	12.8	90/300x2 90/600x3	
27	28	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
27	121	INSTALL - CIVIL	C50H	20	5.0	90/300x2 90/600x1	
28	29	INSTALL - CIVIL	C100L	26	4.3	45/1200x2	
28	122	INSTALL - CIVIL	C50H	16	4.0	90/300x2 90/600x1	
29	13	INSTALL - CIVIL	C100L	39	6.5	45/1200x2	
29	13	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	41	0.2		COIL 2M OF CABLE AT STN 29 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 13
30	31	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	27	0.1		COIL 2M OF CABLE AT STN 30 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 31
30	31	INSTALL - CIVIL	C100L	24	4.0	90/450x2	
30	34	INSTALL - CIVIL	C100L	16	2.7	90/450x2	
32	33	INSTALL - CIVIL	C100L	98	16.3	45/1200x2 30/1830x2 15/1830x5	
32	306	INSTALL - CIVIL	C50H	49	12.3	90/300x1 90/600x1	
32	307	INSTALL - CIVIL	C50H	36	9.0	90/300x1 90/600x1	
33	125	INSTALL - CIVIL	C50H	12	3.0	90/300x1	
33	145	INSTALL - CIVIL	C50H	6	1.5	90/300x1	
33	204	INSTALL - CIVIL	C100L	170	28.3	45/1200x1	CAP CONDUIT AT STN 204
35	201	INSTALL - CIVIL	C100L	10	1.7	45/1200x1	CAP CONDUIT AT STN 201. REFER TO NOTE 11.
35	317	INSTALL - CIVIL	C50H	64	16.0	90/300x1	CAP CONDUIT AT STN 317. REFER TO NOTE 11.
36	8	INSTALL - CIVIL	C100L	30	5.0	45/1200x2	
36	105	INSTALL - CIVIL	C50H	8	2.0	90/300x1	CAP CONDUIT AT STN 105. REFER TO NOTE 11.

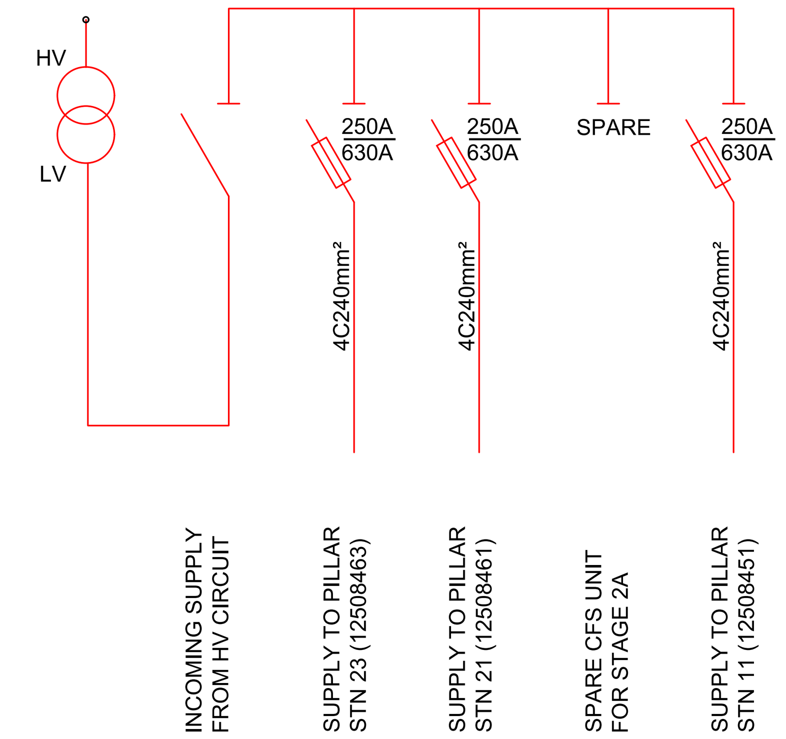
VERGE CONDUIT DUCTING SCHEDULE 2/2

Rev Date 20-4-23

STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
124	112	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
125	33	INSTALL - CIVIL	C100L	12	2.0	45/1200x1 15/1830x2 45/1830x1	
125	124	INSTALL - CIVIL	C50H	5	1.3		
125	204	INSTALL - CIVIL	C150L	183	30.5	45/1830x1 15/1830x3	CAP CONDUIT AT STN 204.
125	204	INSTALL - CIVIL	C150L	183	30.5	45/1830x1 15/1830x3	CAP CONDUIT AT STN 204.
126	127	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
128	129	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
130	131	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
132	133	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
134	135	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
136	137	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
138	139	INSTALL - CIVIL	C50H	5	1.3	90/300x2	
140	141	INSTALL - CIVIL	C50H	5	1.3	90/300x2	
142	107	INSTALL - CIVIL	C50H	33	8.3	90/300x1	INSTALL CONDUIT AT 1.05M FROM BOK.
142	108	INSTALL - CIVIL	C50H	5	1.3	90/300x1	
145	126	INSTALL - CIVIL	C50H	8	2.0	90/600x2	
145	146	INSTALL - CIVIL	C50H	51	12.8		
146	128	INSTALL - CIVIL	C50H	8	2.0	90/600x2	
146	147	INSTALL - CIVIL	C50H	55	13.8		
147	130	INSTALL - CIVIL	C50H	10	2.5	90/600x2	
147	148	INSTALL - CIVIL	C50H	52	13.0		
148	132	INSTALL - CIVIL	C50H	12	3.0	90/600x2	
148	204	INSTALL - CIVIL	C50H	7	1.8		CAP CONDUIT AT STN 204.
149	136	INSTALL - CIVIL	C50H	6	1.5	90/600x2	
149	150	INSTALL - CIVIL	C50H	51	12.8		
150	138	INSTALL - CIVIL	C50H	7	1.8	90/600x2	
150	151	INSTALL - CIVIL	C50H	54	13.5		
151	140	INSTALL - CIVIL	C50H	12	3.0	90/600x2	
151	211	INSTALL - CIVIL	C50H	7	1.8		CAP CONDUIT AT STN 211.
202	35	INSTALL - CIVIL	C100L	32	5.3	45/1200x1 45/1830x2	LOCATE EXISTING CAPPED CONDUIT AT STN 202 AND CONNECT TO NEW WITH A REDUCER. CAP CONDUIT AT STN 35. REFER TO NOTE 11.
202	35	INSTALL - CIVIL	C100L	32	5.3	45/1200x1 45/1830x2	LOCATE EXISTING CAPPED CONDUIT AT STN 202 AND CONNECT TO NEW WITH A REDUCER. REFER TO NOTE 11.
207	22	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	48	0.2		COIL 2M OF CABLE AT STN 22 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 207
209	20	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	53	0.2		COIL 2M OF CABLE AT STN 20 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 209
211	305	INSTALL - CIVIL	C150L	125	20.8	15/1830x3 45/1830x1	CAP CONDUIT AT STN 211.
211	305	INSTALL - CIVIL	C150L	125	20.8	15/1830x3 45/1830x1	CAP CONDUIT AT STN 211.
211	305	INSTALL - CIVIL	C100L	125	20.8	15/1830x3 45/1830x1	CAP CONDUIT AT STN 211.
211	305	INSTALL - CIVIL	C150L	125	20.8	15/1830x3 45/1830x1	CAP CONDUIT AT STN 211.
300	33	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	84	0.3		COIL 2M OF CABLE AT STN 33 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 300
302	8	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	72	0.3		COIL 2M OF CABLE AT STN 8 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 302
305	149	INSTALL - CIVIL	C50H	14	3.5	90/600x1	
307	32	INSTALL - CIVIL	C100L	36	6.0	45/1200x1	
307	204	INSTALL - CIVIL	C150L	302	50.3	15/1830x11	CAP CONDUIT AT STN 204.
307	204	INSTALL - CIVIL	C150L	302	50.3	15/1830x11	CAP CONDUIT AT STN 204.
307	204	INSTALL - CIVIL	C150L	302	50.3	15/1830x11	CAP CONDUIT AT STN 204.
308	32	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	108	0.4		COIL 2M OF CABLE AT STN 32 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 308.
309	308	INSTALL - CIVIL	C150L	29	4.8	45/1830x1	
309	308	INSTALL - CIVIL	C150L	11	1.8	45/1830x1	
309	308	INSTALL - CIVIL	C150L	29	4.8	45/1830x1	
310	16	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	46	0.2		COIL 2M OF CABLE AT STN 16 FOR CONNECTION BY BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 310
310	311	INSTALL - CIVIL	C150L	8	1.3	45/1830x1	CAP CONDUIT AT STN 310
312	10	INSTALL - CIVIL	C150L	73	12.2	15/1830X4	
312	10	INSTALL - CIVIL	C150L	73	12.2	15/1830X4	CAP CONDUIT STN 10
313	206	INSTALL - CIVIL	C100L	26	4.3		CAP CONDUIT AT STN 206.
315	21	INSTALL - CIVIL	C100L	20	3.3	45/1200x1 15/1830x4	
315	208	INSTALL - CIVIL	C150L	32	5.3	15/1830x4	CAP CONDUIT AT STN 208.
315	208	INSTALL - CIVIL	C150L	32	5.3	15/1830x4	CAP CONDUIT AT STN 208.
317	35	INSTALL - CIVIL	C100L	65	10.8	45/1200x1	REFER TO NOTE 11.
317	201	INSTALL - CIVIL	C150L	73	12.2	45/1830x2	REFER TO NOTE 11. LOCATE EXISTING CAPPED CONDUIT AT STN 201 AND CONNECT TO NEW.
317	201	INSTALL - CIVIL	C150L	73	12.2	45/1830x2	REFER TO NOTE 11. LOCATE EXISTING CAPPED CONDUIT AT STN 201 AND CONNECT TO NEW.
317	201	INSTALL - CIVIL	C150L	73	12.2	45/1830x2	REFER TO NOTE 11. LOCATE EXISTING CAPPED CONDUIT AT STN 201 AND CONNECT TO NEW.

HV SCHEMATIC





LV LABELLING DETAIL FOR 315KVA SUBSTATION STN 10 (923116) N.T.S

- LV FUSE SWITCHES ARE SUITABLE FOR TERMINATION OF 2 x 300mm CABLES PER PHASE.
- ALTERNATOR CONNECTION POINT PROVIDED ON LV BUS BARS.

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

CLIENT:
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A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 91 010 844 416

LEGEND

ZERO LOT BOUNDARY	CABLE EXISTING
HV DUCT	CABLE PLANNED
LV DUCT	CABLE RECOVER
LIGHTING DUCT	EQUIPMENT EXISTING
35mm sq ANNEALED BARE COPPER EARTH	EQUIPMENT RECOVER
	EQUIPMENT PLANNED
SUBSTATION	COMMERCIAL/ INDUSTRIAL PILLAR
HV ISOLATING DEVICE	DISTRIBUTION CABINET
LV ISOLATING DEVICE	STREETLIGHT
NORMAL PILLAR	EARTH
CROSS ROAD PILLAR	POLE
LINKING PILLAR	CABLE JOINT

Drawing Title

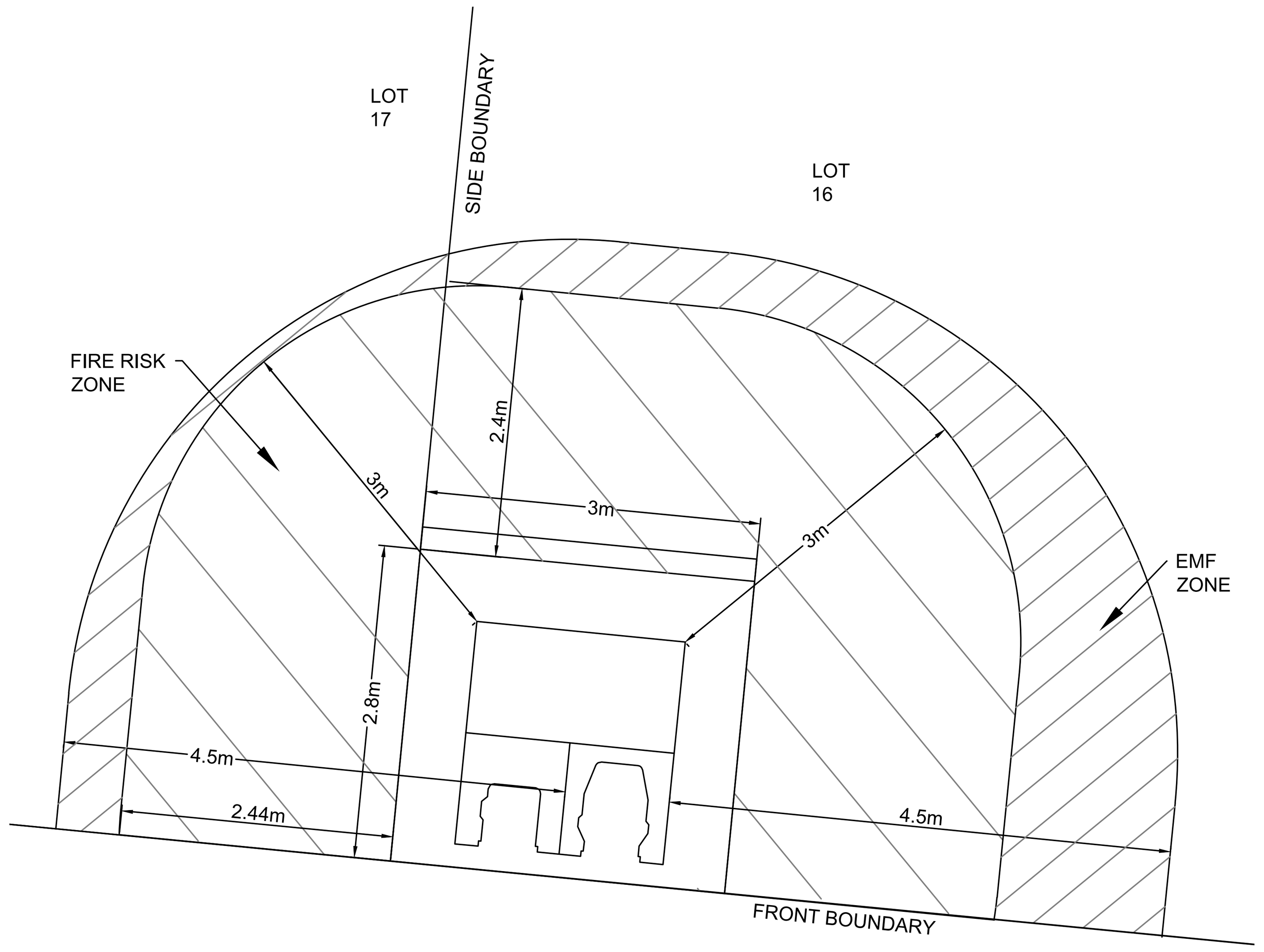
BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION CONDUIT SCHEDULE 2/2 AND HV & LABELING SCHEMATICS

Project Description

BLUEWATTLE PRECINCT 1, RASMUSSEN

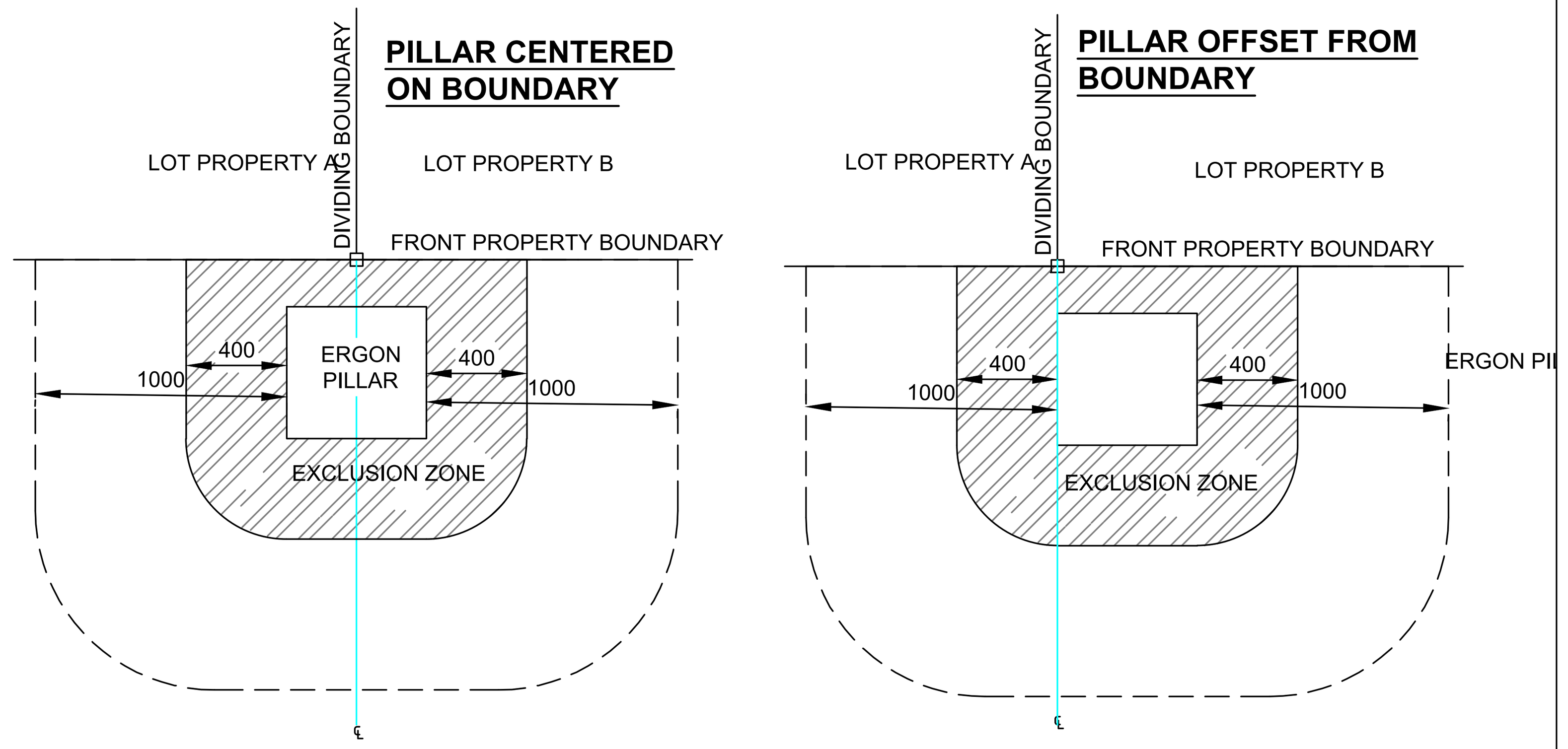
Date	JULY 2023
Scale	N.T.S
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	6 OF 7

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E06	F



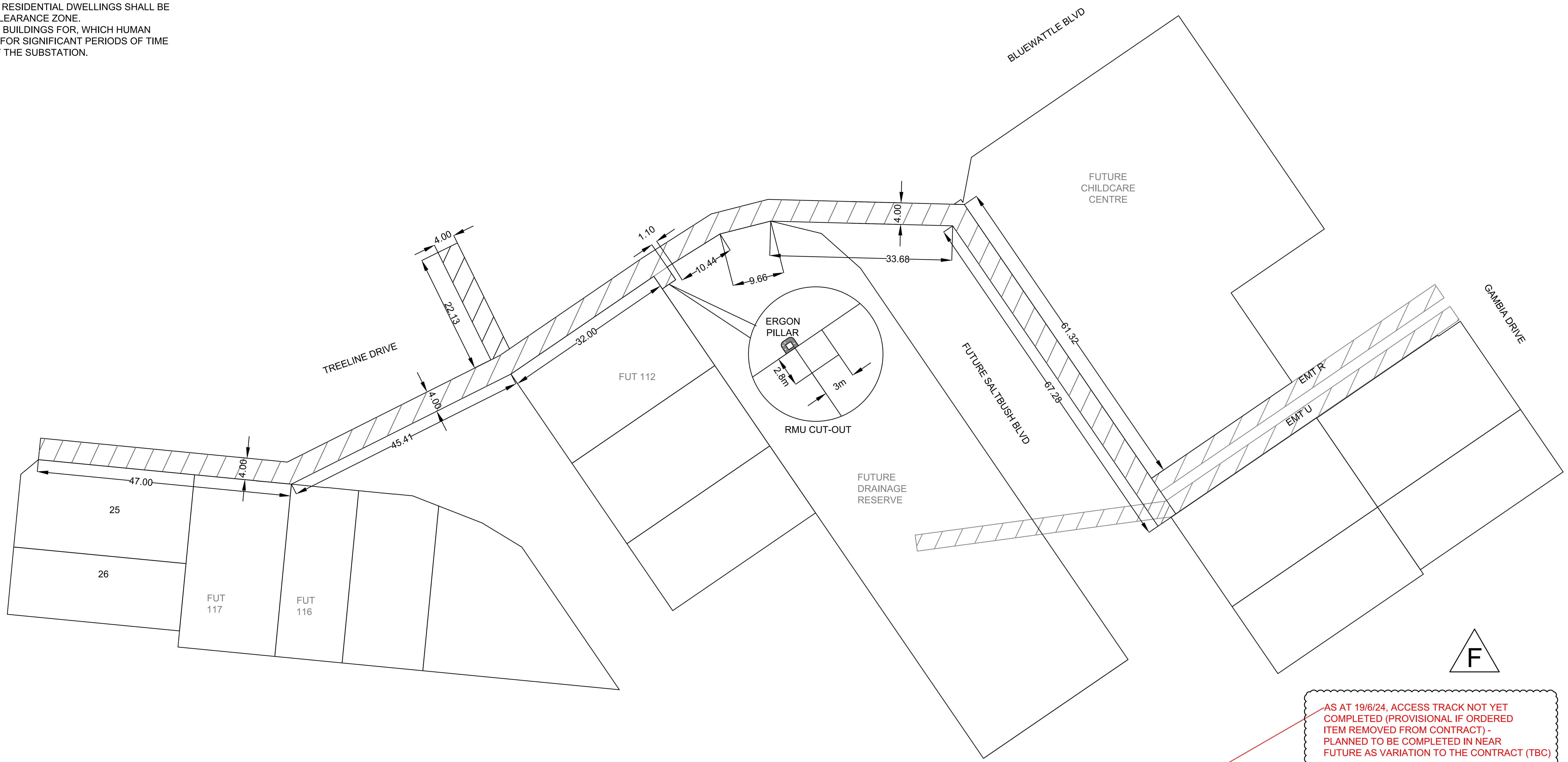
DETAIL A: SUBSTATION DETAIL FOR AUDIBLE NOISE, EMF REQUIREMENT AND FIRE AND EXPLOSION RISK ZONE

1. FOR FIRE EXCLUSION ZONES -NO RESIDENTIAL DWELLINGS SHALL BE CONSTRUCTED WITHIN THE 3m CLEARANCE ZONE.
2. FOR EMF EXCLUSION ZONES - NO BUILDINGS FOR, WHICH HUMAN OCCUPATION CAN BE EXPECTED FOR SIGNIFICANT PERIODS OF TIME CAN BE LOCATED WITHIN 4.5m OF THE SUBSTATION.



DETAIL C: PILLAR LOCATION CLEARANCE FROM LOT ACCESS

- PILLAR TO BE INSTALLED AS SHOWN WHERE REQUIRED TO AVOID DRIVEWAY ACCESS TO LOTS.
- 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.



AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: HAZELEC

SIGNATURE: PAUL LANGTREE

DATE: 21/8/24

CIVIL CONTRACTOR

NAME: BMD URBAN PTYLTD

SIGNATURE: RICHARD SMITH

DATE: 19/6/24

F

AS AT 19/6/24, ACCESS TRACK NOT YET COMPLETED (PROVISIONAL IF ORDERED ITEM REMOVED FROM CONTRACT) - PLANNED TO BE COMPLETED IN NEAR FUTURE AS VARIATION TO THE CONTRACT (TBC)

DETAIL D: EASEMENT DETAIL

1. DEVELOPER TO PROVIDE A 4m WIDE TRAFFICABLE, ALL WEATHER EASEMENT OVER ALL CONDUITS INSTALLED OUT OF STAGE.
2. GRAVEL ACCESS TO BE PROVIDED FROM THE END OF THE ROAD AT THE INTERSECTION ALONG THE ENTIRE EASEMENT TO ALLOW ACCESS TO HEAVY VEHICLES.

Code	Date	Description	Revised	Code	Date	Description	Revised
F	21/8/24	AS CONSTRUCTED	SW				
E	12/03/24	UPDATED CONDUIT 148-204/151-211	SW				
D	6/3/24	ADDED CONDUITS 305-319 AND UPDATED SUPPLY TO STN 136-134	SW				
C	19/12/23	ADDED STN 35 & 36	SW				
B	29/9/23	UPDATE HV CABLE SIZE	SW				
A	7/8/23	FOR CONSTRUCTION	SW				

CLIENT:
URBEX 118 PTY LTD

PO BOX 6008,
TOWNSVILLE, QLD. 4810
Ph 07 4750 7007 Fax

CIVIL ENGINEER
Empower Engineers and Project Managers (Townsville)

PO BOX 6008,
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spa
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consulting engineers

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Email Address - admin@spaconsulting.com.au
A business unit of SPA Consulting Engineers (QLD) Pty Ltd a.b.n. 31 010 844 416

LEGEND

ZERO LOT BOUNDARY	CABLE EXISTING	SUBSTATION
HV DUCT	CABLE PLANNED	HV ISOLATING DEVICE
LV DUCT	CABLE RECOVER	LV ISOLATING DEVICE
LIGHTING DUCT	EQUIPMENT EXISTING	NORMAL PILLAR
35mm sq ANNEALED BARE COPPER EARTH	EQUIPMENT RECOVER	CROSS ROAD PILLAR
	EQUIPMENT PLANNED	LINKING PILLAR

COMMERCIAL/ INDUSTRIAL PILLAR
DISTRIBUTION CABINET
STREETLIGHT
EARTH
POLE
CABLE JOINT

Drawing Title
BLUEWATTLE PRECINCT 1- STAGE 1A UDC UG ELECTRICAL RETICULATION DETAILS & EASEMENT LAYOUT

Project Description
BLUEWATTLE PRECINCT 1, RASMUSSEN

Date	JULY 2023
Scale	N.T.S
Drawn	SW
RPEQ Design Certification Michael Dayot 29435	
Sheet	7 OF 7

ERGON Project Number	SPA Drawing Number	Revision
1768792	3661-E07	F