

# ASHFORD RESIDENCES STAGE 2-6 AS3000 DESIGN

**UNDERGROUND SERVICES IDENTIFICATION**

WORK CREWS WHO WILL BE EXCAVATING AT THIS SITE ARE ADVISED TO CONTACT THE 'DIAL BEFORE YOU DIG' SERVICE TO DETERMINE THE EXTENT OF EXISTING UNDERGROUND SERVICES AND THE REQUIREMENTS OF THE APPROPRIATE SERVICE PROVIDERS. IT IS THE RESPONSIBILITY OF THE WORKS CREWS TO HAVE ALL EXISTING SERVICES AFFECTED BY THESE WORKS LOCATED ON SITE TO AVOID ANY DAMAGE DURING EXCAVATION WORKS. WHERE SERVICES HAVE BEEN SHOWN ON THE PLAN, THESE LOCATIONS ARE INDICATIVE ONLY AND NO WARRANTY IS IMPLIED AS TO THEIR ACCURACY.

**DIAL 1100 BEFORE YOU DIG**

DIAL BEFORE YOU DIG SERVICE  
PHONE - 1100  
WEB - www.1100.com.au  
YOUR REQUEST SHOULD BE FORWARDED 5 WORKING DAYS BEFORE PLANNED EXCAVATION DATE.

**AS - CONSTRUCTED**  
PENSAR UTILITIES ABN 51 159 247 631  
Phone: 07 3846 5922

Name: Andrew Smith.  
Sign: [Signature]  
Date: 10/06/2021

**STREETLIGHTING CERTIFICATION**

ROAD LIGHTING CERTIFIED TO COMPLY WITH AS/NZS 1158.1:2005 FOR V-CATEGORY AND AS/NZS 1158.3:1:2005 FOR P-CATEGORY. THE LIGHTING DESIGN IS BASED UPON THE FOLLOWING MAINTENANCE SCHEDULE:

- LAMP REPLACEMENT AT 36 MONTH INTERVALS INCLUDING CLEANING & INSPECTION OF LUMINAIRE.
- VEGETATION TO BE KEPT CLEAR OF LUMINAIRES.
- INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN. 95%.
- LUMINAIRES AND LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS.

PRIVATE ROAD: CATEGORY P4

L. FERRIS RPEQ No. 5938

**SCOPE OF WORKS**  
THIS WORKS PLAN INCORPORATES A SCHOOL DEVELOPMENT ZONE. THE DESCRIPTION OF THE WORK IS:

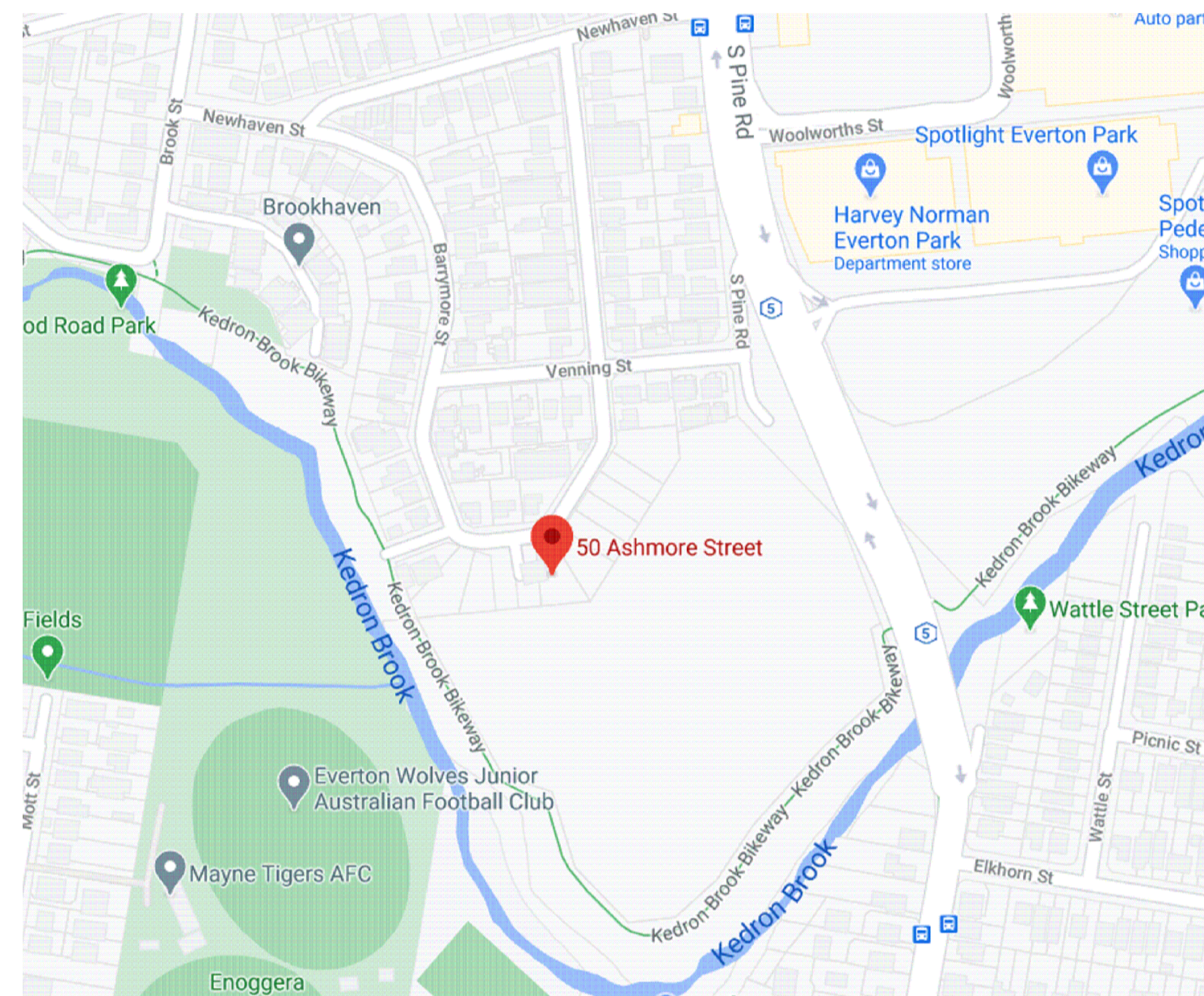
- PRIVATE LIGHTING INSTALL TO SUIT RATE 3 FUTURE CONNECTION

THE SCOPE OF WORKS ACROSS THE DEVELOPMENT ZONE INCLUDES:

- SUPPLY, TRENCH AND INSTALL ELECTRICAL CONDUITS
- SUPPLY AND INSTALL STREETLIGHTS AND ASSOCIATED UG CABLES & TERMINATIONS
- SUPPLY AND INSTALL UNDERGROUND CABLING TO TRANSLINK BUS SHELTERS
- TEST AND COMMISSION WORKS IN ACCORDANCE WITH COMMISSIONING PLANS.

**LOCATION OF UTILITIES**  
THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL UNDERGROUND SERVICES PRIOR TO COMMENCING WORK AT THE SITE, AND IS RESPONSIBLE FOR THE REPAIR OF DAMAGE TO UNDERGROUND OR OVERHEAD UTILITY ASSETS, ARISING FROM THESE WORKS. CONTACT DIAL BEFORE YOU DIG.

- GENERAL NOTES**
- NO OTHER SERVICES TO ENCR OACH INTO THE STANDARD UNDERGROUND ELECTRICITY CORRIDOR OF 0mm - 900mm FROM RP BOUNDARY.
  - ALL CABLES TO BE INSTALLED IN CONDUIT WITHIN THE STANDARD ELECTRICITY ALIGNMENT ALLOCATED BY THE LOCAL COUNCIL. WHERE CONDUITS VARY FROM THIS AND AT ROAD CROSSINGS, PROTECTIVE STRIP IS TO BE INSTALLED. WHERE PRACTICAL ELECTRICITY CABLES SHALL NOT BE CLOSER THAN 250mm TO THE REAL PROPERTY BOUNDARY.
  - A, B OR C WHERE SHOWN BESIDE LV PILLARS DENOTES SERVICE PHASING.
  - THE CONTRACTOR SHALL MEASURE ACTUAL CABLE LENGTHS REQUIRED ON SITE AFTER INSTALLATION OF CONDUITS THEN NOTIFY ENERGEX/SUPPLIER WHEN CONFIRMING CABLE ORDER.
  - ALL BENDS INSTALLED ON 100mm AND 125mm RETICULATION CONDUITS MUST BE 1830mm RADIUS UNLESS OTHERWISE SPECIFIED.
  - CONTRACTOR TO SUPPLY ALL LABELS AND SITE ID NUMBERS TO ENERGEX SPECIFICATION.
  - WHEN CROSS ROAD CONDUIT FINISHES OPPOSITE A TRUNCATION PEG, PROPERTY SIDE OF TRENCH TO BE 300mm ALIGNMENT FROM RP.
  - CIVIL CONTRACTOR TO INSTALL ALL ROAD CROSSING CONDUITS.
  - ELECTRICAL CONTRACTOR TO INSTALL FOOTPATH CONDUITS.
  - CO-ORDINATE CONDUIT INSTALLATION WITH NBN CONTRACTORS.
  - ELECTRICITY PILLARS TO HAVE 600mm EXCLUSION ZONE FROM ALL OTHER SERVICES.
  - CIVIL CONTRACTOR TO INSTALL CONSUMER LEAD IN CONDUITS FOR ELECTRICAL AND NBN/COMMS PRIOR TO CONSTRUCTION OF RETAINING WALLS INTO ROAD RESERVE IN ACCORDANCE WITH AS/NZS 3000:2018 AND OTHER AUTHORITY REQUIREMENTS.
  - ALL ELECTRICAL AND TELECOMMUNICATION INFRASTRUCTURE ADJACENT TO ZERO LOT BOUNDARIES ARE TO BE ALIGNED OR OFFSET FROM BOUNDARY LINE. IF THE PILLAR IS WITHIN 1M OF DRIVEWAY PROTECTIVE BOLLARDS ARE TO BE INSTALLED. STREETLIGHTS TO BE OFFSET 1M FROM BOUNDARY LINE CLEAR OF FUTURE DRIVEWAYS.
  - ELECTRICAL CONTRACTOR TO ENSURE ALL NETWORK IS SUPPLIED AND INSTALLED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND UTILITY REQUIREMENTS.
  - CV SERVICES HAS PREPARED THESE PRELIMINARY DESIGN DOCUMENTATION ON BEHALF OF THE MIRVAC FOR THE PURPOSES OF ISSUING OUT FOR CONSTRUCTION TENDER. CV SERVICES DOES NOT TAKE ANY RESPONSIBILITY FOR ANY FURTHER ON SITE DESIGN CHANGES OR AMENDMENTS REQUIRED. ANY ON-SITE CHANGES MUST BE DISCUSSED BETWEEN THE ELECTRICAL CONTRACTOR AND MIRVAC FOR ACTIONING.
  - AS-CONSTRUCTED DOCUMENTATION & COMPLETION PACKAGES FOR THE ELECTRICAL AND NBN INSTALLATION ARE THE RESPONSIBILITY OF THE ELECTRICAL CONSTRUCTION CONTRACTOR.



- SITE SERVICES COORDINATION:**
- ELECTRICAL CONTRACTOR IS TO CO-ORDINATE ALL SERVICE INSTALLATIONS WITH OTHER CONTRACTORS AND SERVICES ON SITE.
  - ALL RELEVANT STANDARDS FOR THE INSTALLATION OF THE AS3000 ELECTRICAL INSTALLATION AND NBN PIT & PIPE MUST BE FOLLOWED.

DESIGNS PROVIDED BY CV SERVICES ARE INDICATIVE ONLY. ALL ASPECTS OF THE DESIGN INCLUDING SITE COORDINATION IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

CONTRACTOR TO CONFIRM THAT DESIGN IS CURRENT AT TIME OF INSTALLATION BY COMPARING THE DESIGN TO CIVIL, HYDRAULIC AND ARCHITECTURAL LAYOUTS.

CONTRACTOR IS RESPONSIBLE FOR LODGING SUPPLY ENQUIRY, THROUGH APPLICATION AND EWR WITH ENERGEX.

**ELECTRICAL LEGEND**

**CONDUIT**

1E25 CONDUIT DESIGNATION SIZE  
E - ELECTRICAL  
C - COMMUNICATION  
P - NBN  
T - TELSTRA  
QUANTITY

⊠ ELECTRICAL PIT  
⊠ COMMUNICATIONS PIT

— UNDER GROUND CONDUIT AS NOMINATED

▬ MAIN SWITCHBOARD  
▬ DISTRIBUTION BOARD  
▬ SWITCHBOARD / DISTRIBUTION BOARD BY OTHERS

Ⓚ kWh AUTHORITY/REVENUE KILOWATT HOUR METER

Ⓞ CLASS 1 CHECK METERING

Ⓜ (A, MD) AMMETER WITH MAXIMUM DEMAND INDICATOR

/// 3 PHASE CIRCUIT  
/ 1 PHASE CIRCUIT

X/Y NO LETTERING : HRC FUSE AND HOLDER  
FCL : FAULT CURRENT LIMITER  
(X = CARTRIDGE RATING, Y = CARRIER RATING)

⊗ LOAD BREAK ISOLATOR

⊗ 20A MOULDED CASE CIRCUIT BREAKER (E.G., 3 POLE, 20 AMP)

⊗ 20A COMBINED MCB/RCD WITH 30mA TRIP CURRENT (UNO)

⊗ CURRENT TRANSFORMER WITH SHORTING LINKS

⊗ METERING ISOLATION LINK

--- SWITCH WIRE

— CIRCUIT LINE

Ⓜ JB JUNCTION BOX

Ⓜ FB FLOOR BOX WITH DOUBLE DATA & DOUBLE GPO

▨ ELECTRICAL LADDER TRAY

▨ COMMUNICATION TRAY OR DUCT

▨ NBN TRAY

▨ SKIRTING DUCT MODULINE HM50150

Ⓜ SP 2 CHANNEL POWDER COATED ALUMINIUM SERVICE POLE

Ⓜ XX-YY CIRCUIT REFERENCE (XX - DB REFERENCE YY - CIRCUIT REFERENCE)

**LIGHTING LEGEND**

Ⓜ LED BOLLARD FITTING, C/W RAG CAGE FOUNDATION  
FITTINGS: OPAL LIGHTING  
13W KHA SLIM LED 93 / 06083381 - 3000K 80 CRI - FINISH - BK-81/BLACK/TEXTURED

Ⓜ BOLL1 SOLAR BOLLARD FITTING  
4W LED ARKLED OPAL LIGHTING ONYX BOLLARD 3000K

Ⓜ LT01 TREE UP-LIGHTS. ADJUSTABLE SPOTLIGHT ON POST.  
FITTINGS: VERSALUX. 12W LED, ARES PAN ON POST 504024

Ⓜ LED POST TOP FITTING, COMES ON 5.5m, POWDER-COATED BLACK ROUND TAPERED POLE  
FITTINGS: FORLITE  
ITALO 27W STA 3\_5.2M

**FOR CONSTRUCTION**

REV	DATE	DETAILS	REV	DATE	DETAILS
PR1	21/08/2020	PRELIMINARY DESIGN			
PR2	10/09/2020	UPDATED PRELIMINARY DESIGNS - INC. LEAD IN AND CONSTRUCTION NOTES			
A	29/10/2020	ISSUED FOR CONSTRUCTION			

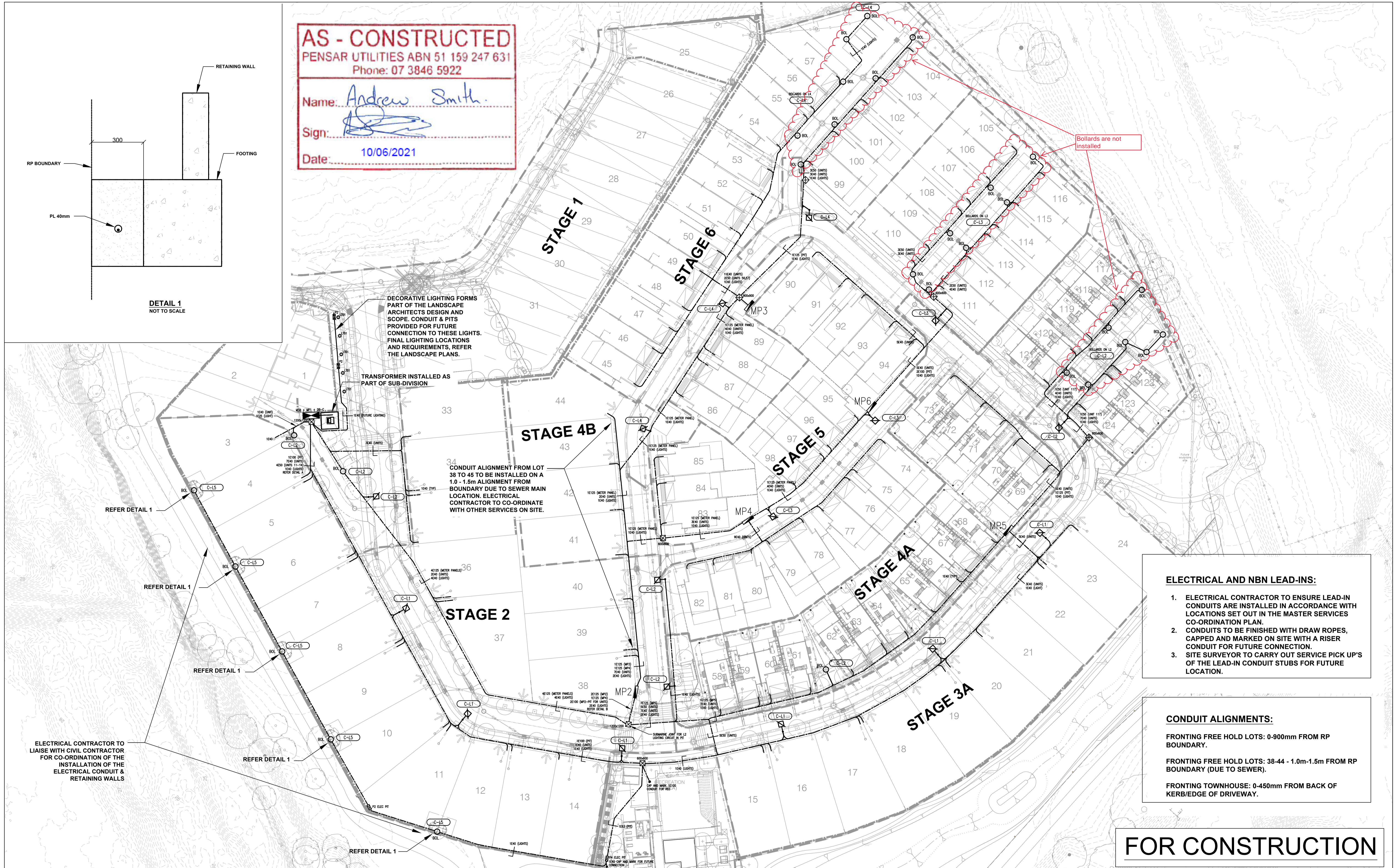
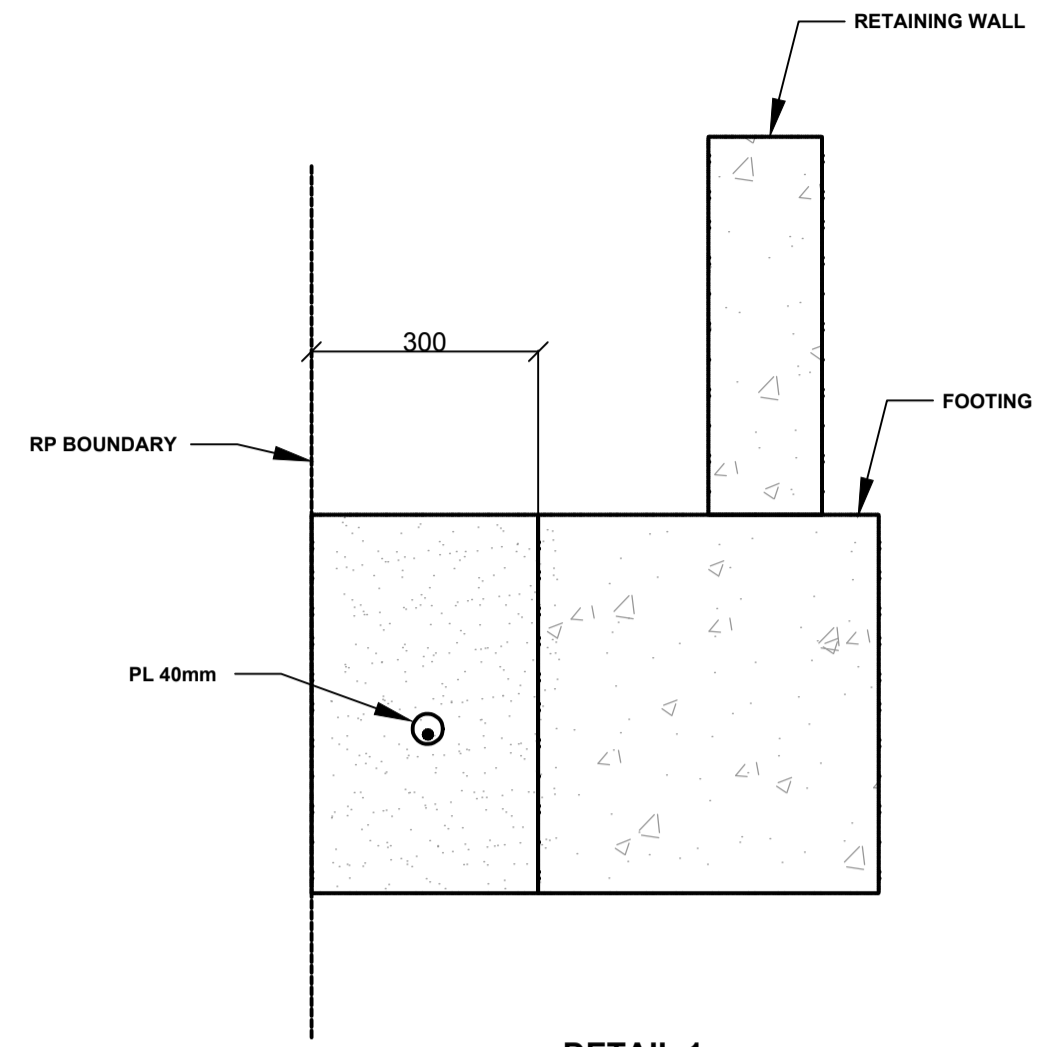


SITE CONTACT DETAILS		ALIGNMENTS		PROPERTY DESCRIPTION	
NAME	ENERGEX OH 3.0	ENERGEX UG 0.9	NUMBER OF LOTS: 124	PROPOSED LOTS: -	
COMPANY	TELSTRA DBYD	GAS DBYD	CANCELLING LOTS:		
PHONE	HP GAS DBYD	WATER DBYD	LOCAL AUTHORITY: BCC		
MOBILE	STORMWATER DBYD	SEWERAGE DBYD	APPROVAL No: -		
FAX	OTHER DBYD				
EMAIL					

APPROVED: M.Hodge PHONE: 0448 039 985	ASHFORD RESIDENCES STAGES 2-6	10244-2-8	SCALE : 1:500 @ A1
CHECKED: M.Hodge PHONE: 0448 039 985			
DESIGNER: P.CAMERON PHONE: 3662 4365			
PLANNER: T.FOSTER PHONE: 0448 903 388			
ISSUE DATE: 9/5/2019	COVER SHEET AND LEGEND	-	A
Sheet 1 of 7			

**AS - CONSTRUCTED**  
 PENSAR UTILITIES ABN 51 159 247 631  
 Phone: 07 3846 5922

Name: Andrew Smith  
 Sign:   
 Date: 10/06/2021



**ELECTRICAL AND NBN LEAD-INS:**

1. ELECTRICAL CONTRACTOR TO ENSURE LEAD-IN CONDUITS ARE INSTALLED IN ACCORDANCE WITH LOCATIONS SET OUT IN THE MASTER SERVICES CO-ORDINATION PLAN.
2. CONDUITS TO BE FINISHED WITH DRAW ROPES, CAPPED AND MARKED ON SITE WITH A RISER CONDUIT FOR FUTURE CONNECTION.
3. SITE SURVEYOR TO CARRY OUT SERVICE PICK UPS OF THE LEAD-IN CONDUIT STUBS FOR FUTURE LOCATION.

**CONDUIT ALIGNMENTS:**

FRONTING FREE HOLD LOTS: 0-900mm FROM RP BOUNDARY.

FRONTING FREE HOLD LOTS: 38-44 - 1.0m-1.5m FROM RP BOUNDARY (DUE TO SEWER).

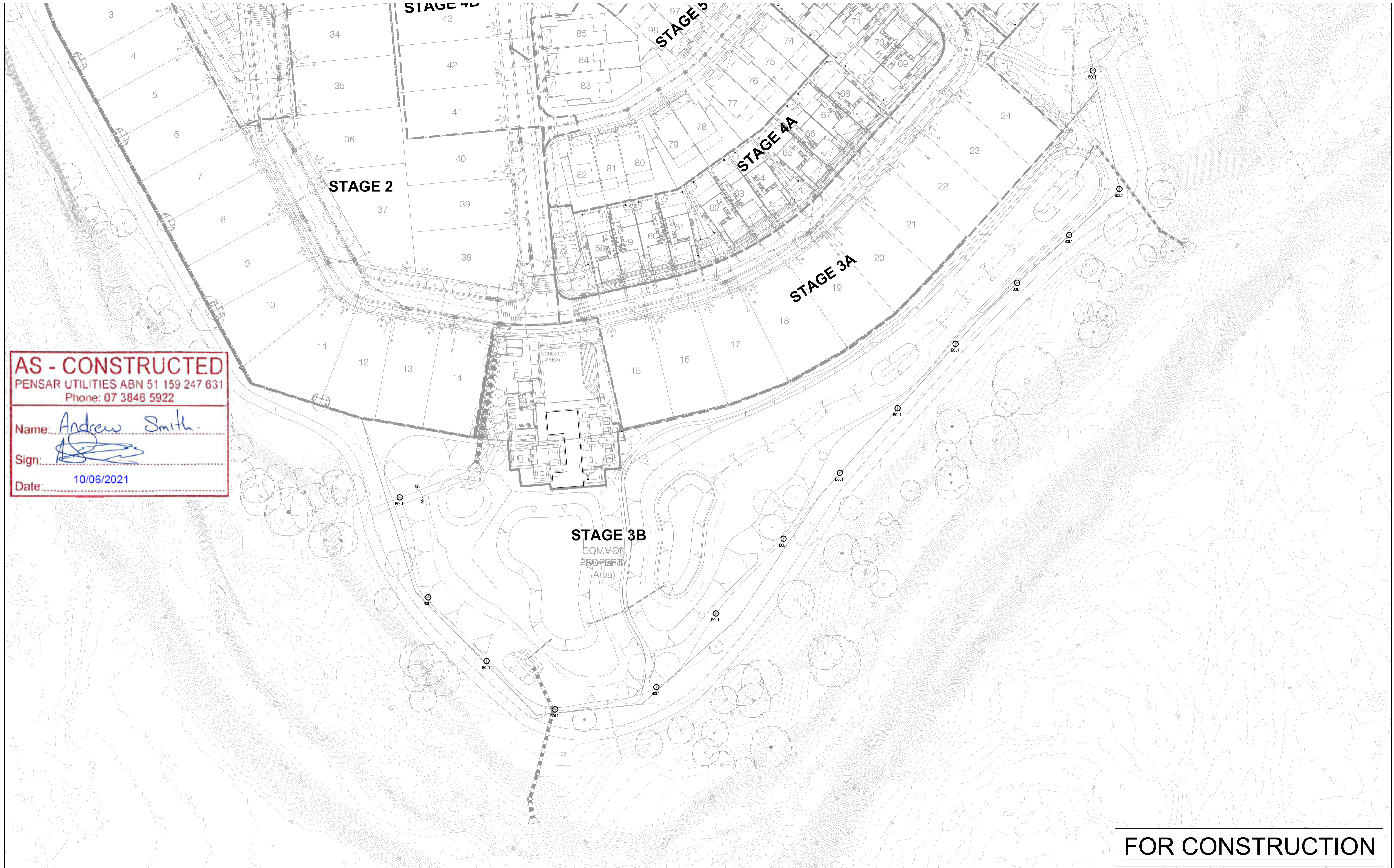
FRONTING TOWNHOUSE: 0-450mm FROM BACK OF KERB/EDGE OF DRIVEWAY.

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SITE CONTACT DETAILS		ALIGNMENTS	PROPERTY DESCRIPTION	APPROVED:	ELECTRICAL RETICULATION	SCALE: 1:500 @ A1
NAME	ENERGEX OH	ENERGEX UH	NUMBER OF LOTS: 124	M.Hodge	ASHFORD RESIDENCES STAGES 2-6	10244-2-8
COMPANY	0.9	3.0	PROPOSED LOTS: -	PHONE: 0448 039 985		
PHONE	TELSTRA	DBYD	CANCELLING LOTS:	CHECKED: M.Hodge	AS3000 RETICULATION	A
MOBILE	GAS	DBYD	APPROVAL No:	PHONE: 0448 039 985		
FAX	HP GAS	DBYD		DESIGNER: P.CAMERON		
EMAIL	WATER	DBYD		PHONE: 3662 4365		
	STORMWATER	DBYD		PLANNER: T.FOSTER		
	SEWERAGE	DBYD		PHONE: 0448 903 388		
	OTHER	DBYD		ISSUE DATE: 9/5/2019		



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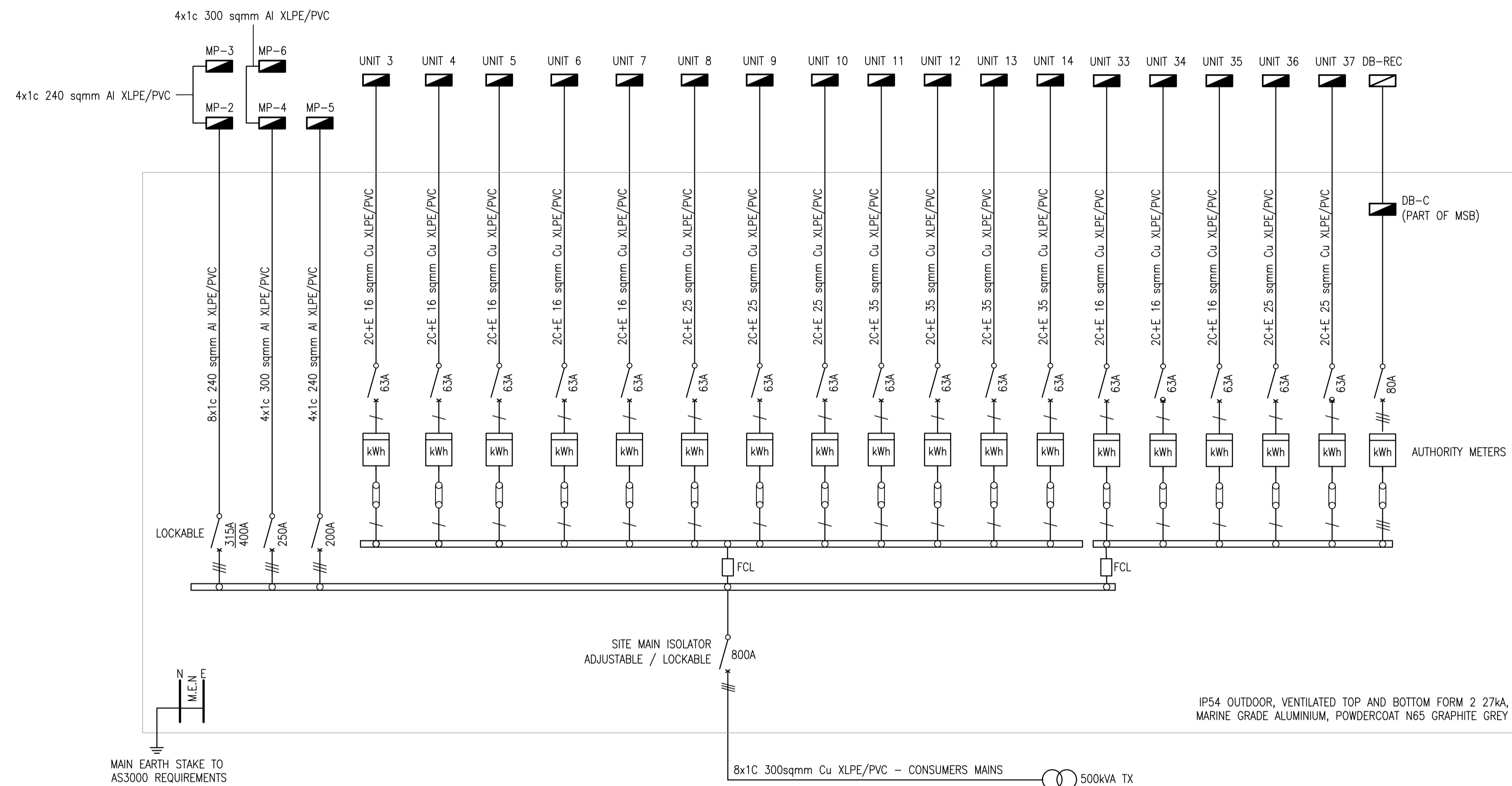
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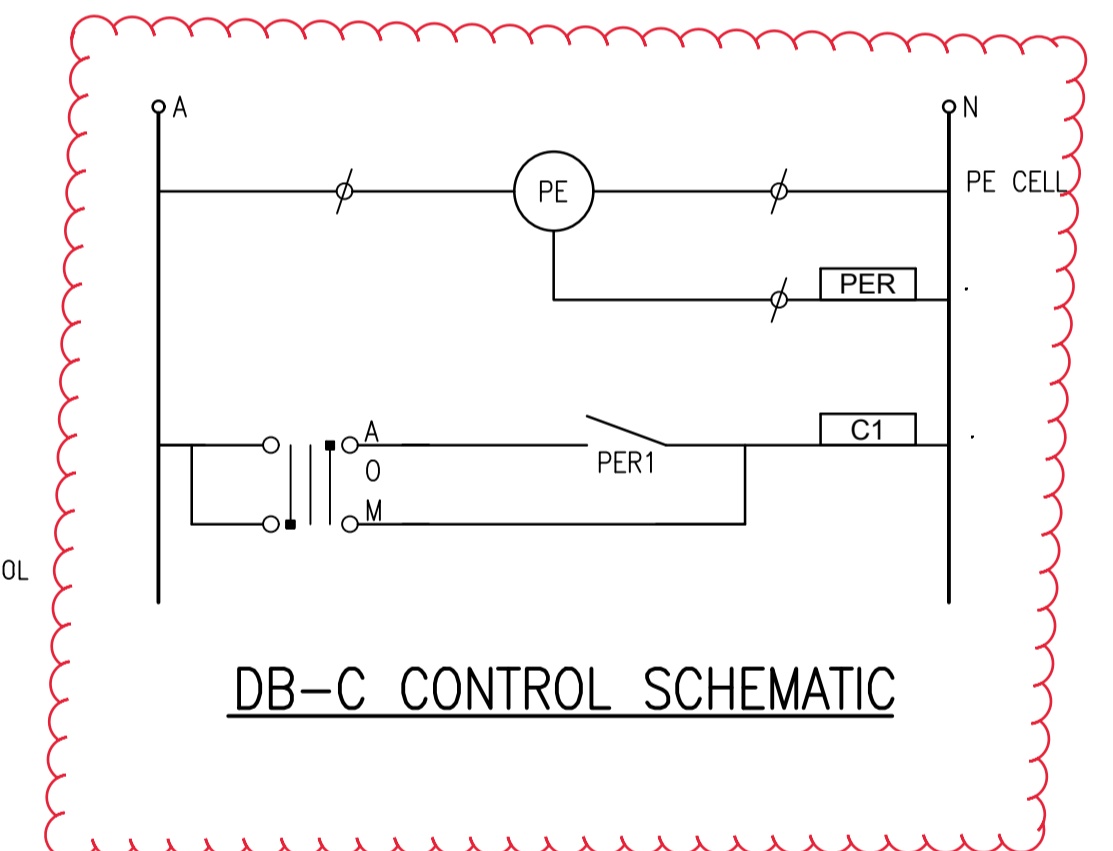
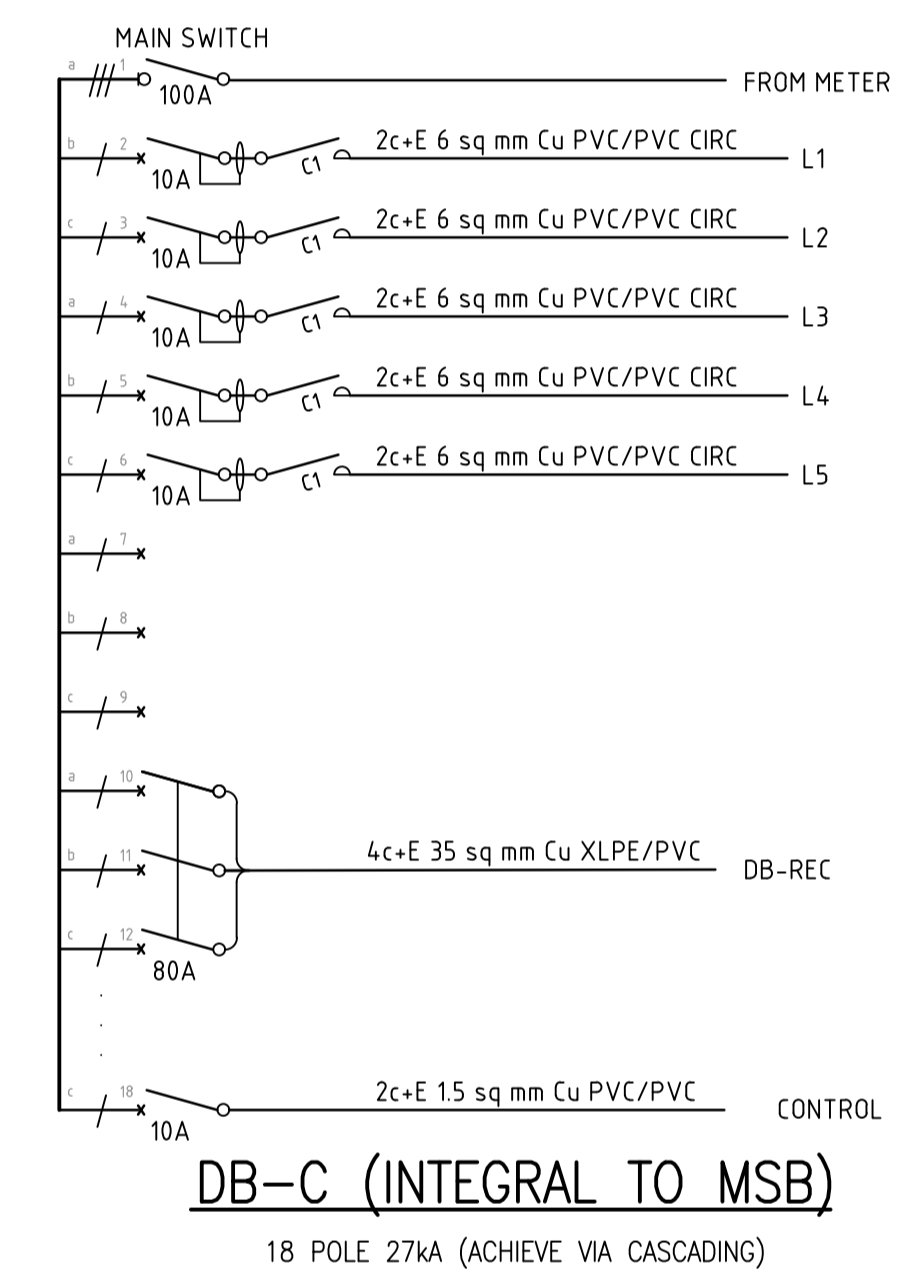
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COMPANY	TELSTRA DBYD	GAS DBYD	CANCELLING LOTS:	LOCAL AUTHORITY: BCC	PHONE: 0448 039 985	DESIGNER: P.CAMERON		SOLAR BOLLARDS - NON AS1158 COMPLIANT		-	A
PHONE	HP GAS DBYD	WATER DBYD	APPROVAL No: -	PLANNER: T.FOSTER	PHONE: 3662 4365	ISSUE DATE: 9/5/2019				Sheet 3 of 7	
MOBILE	STORMWATER DBYD	SEWERAGE DBYD			PHONE: 0448 903 388						
FAX	OTHER DBYD										
EMAIL											

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**MAIN SWITCHBOARD + MP-1 + DB-C SCHEMATIC**



PE Not installed to allow for CCTV power

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EMAIL	WATER	DBYD			
	STORMWATER	DBYD			
	SEWERAGE	DBYD			
	OTHER	DBYD			


APPROVED:	M.Hodge
PHONE:	0448 039 985
CHECKED:	M.Hodge
PHONE:	0448 039 985
DESIGNER:	P.CAMERON
PHONE:	3662 4365
PLANNER:	T.FOSTER
PHONE:	0448 903 388
ISSUE DATE:	9/5/2019

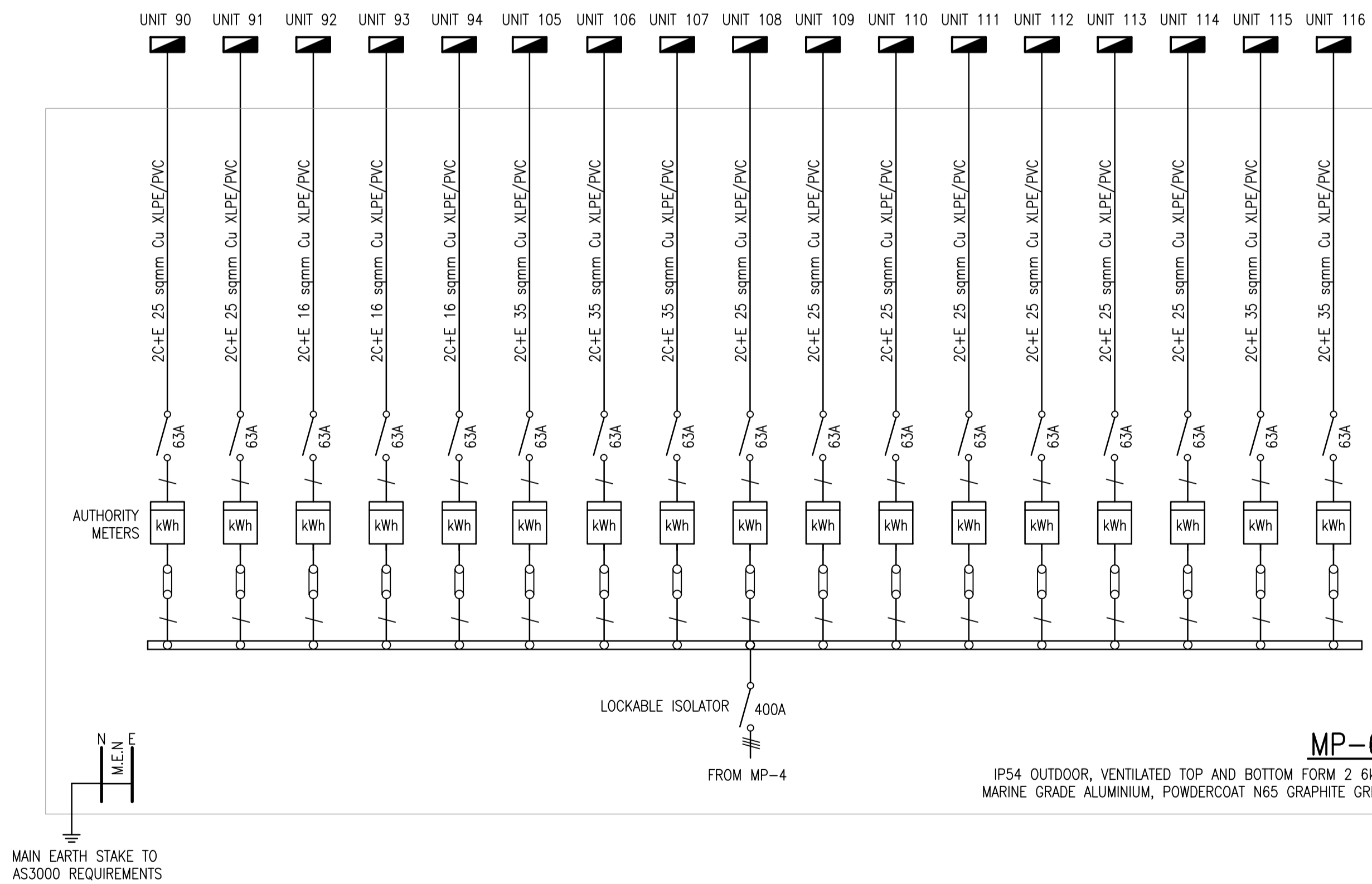
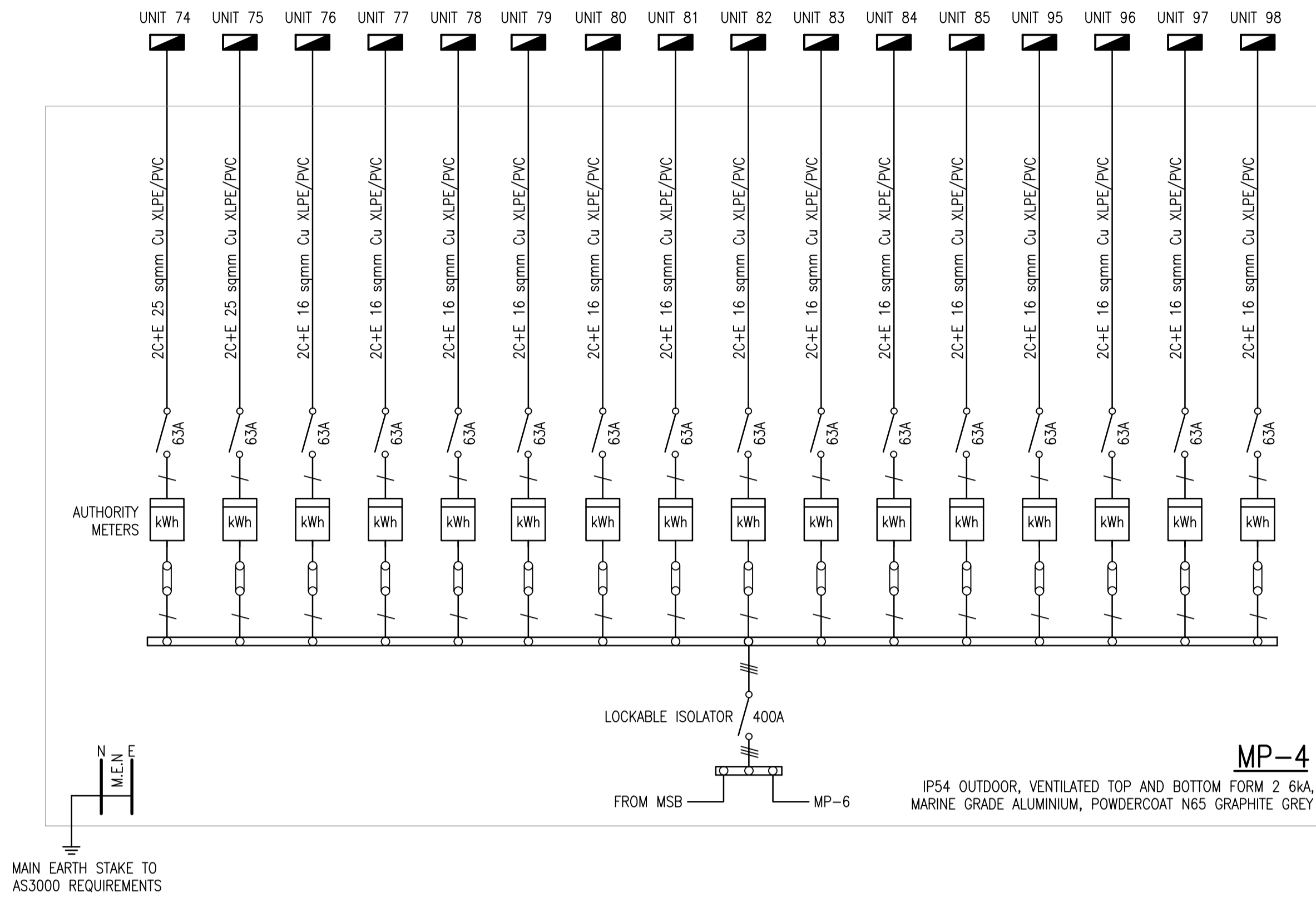
ELECTRICAL RETICULATION	
ASHFORD RESIDENCES STAGES 2-6	
SCHEMATIC SHEET 1	

SCALE: 1:500 @ A1
<b>10244-2-8</b>
- A
Sheet 4 of 7



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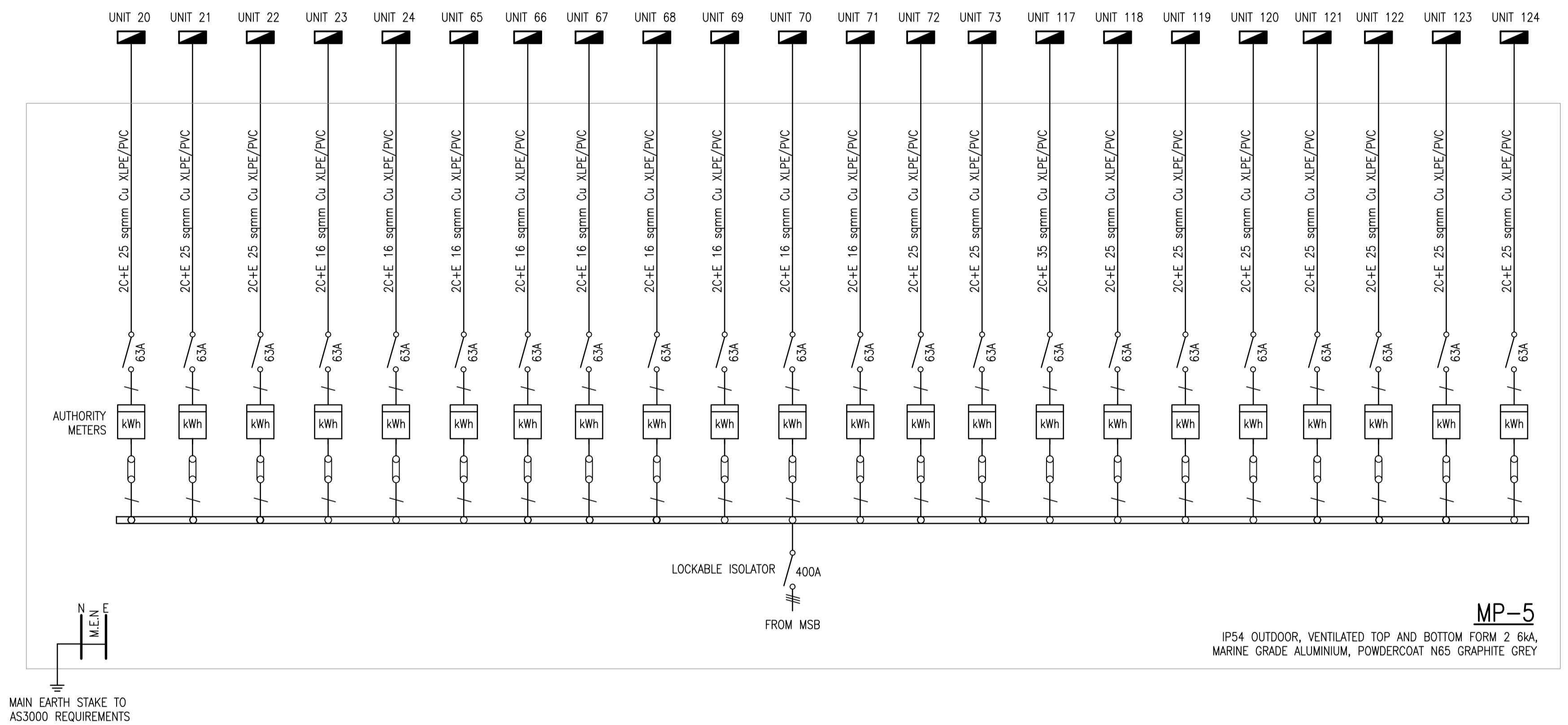


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MOBILE	GAS	DBYD	LOCAL AUTHORITY:	BCC	PHONE: 0448 039 985
FAX	HP GAS	DBYD	APPROVAL No:	-	DESIGNER: P.CAMERON
EMAIL	WATER	DBYD			PHONE: 3662 4365
	STORMWATER	DBYD			PLANNER: T.FOSTER
	SEWERAGE	DBYD			PHONE: 0448 903 388
	OTHER	DBYD			ISSUE DATE: 9/5/2019

ELECTRICAL RETICULATION	SCALE: NTS @ A1
ASHFORD RESIDENCES STAGES 2-6	10244-2-8
SCHMATIC SHEET 3	- A

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PHONE	HP GAS	DBYD	APPROVAL No:	-	
MOBILE	WATER	DBYD			
FAX	STORMWATER	DBYD			
EMAIL	SEWERAGE	DBYD			
	OTHER	DBYD			

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PHONE: 0448 039 985	
CHECKED: M.Hodge	
PHONE: 0448 039 985	
DESIGNER: P.CAMERON	
PHONE: 3662 4365	ASHFORD RESIDENCES STAGES 2-6
PLANNER: T.FOSTER	
PHONE: 0448 903 388	SCHEMATIC SHEET 4
ISSUE DATE: 9/5/2019	

SCALE: NTS @ A1
<b>10244-2-8</b>
- A
Sheet 7 of 7