

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.

STREETLIGHTING CERTIFICATION

ROAD LIGHTING CERTIFIED TO COMPLY WITH AS/NZS 1158.1:2005 FOR V-CATEGORY AND AS/NZS 1158.3:2005 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:

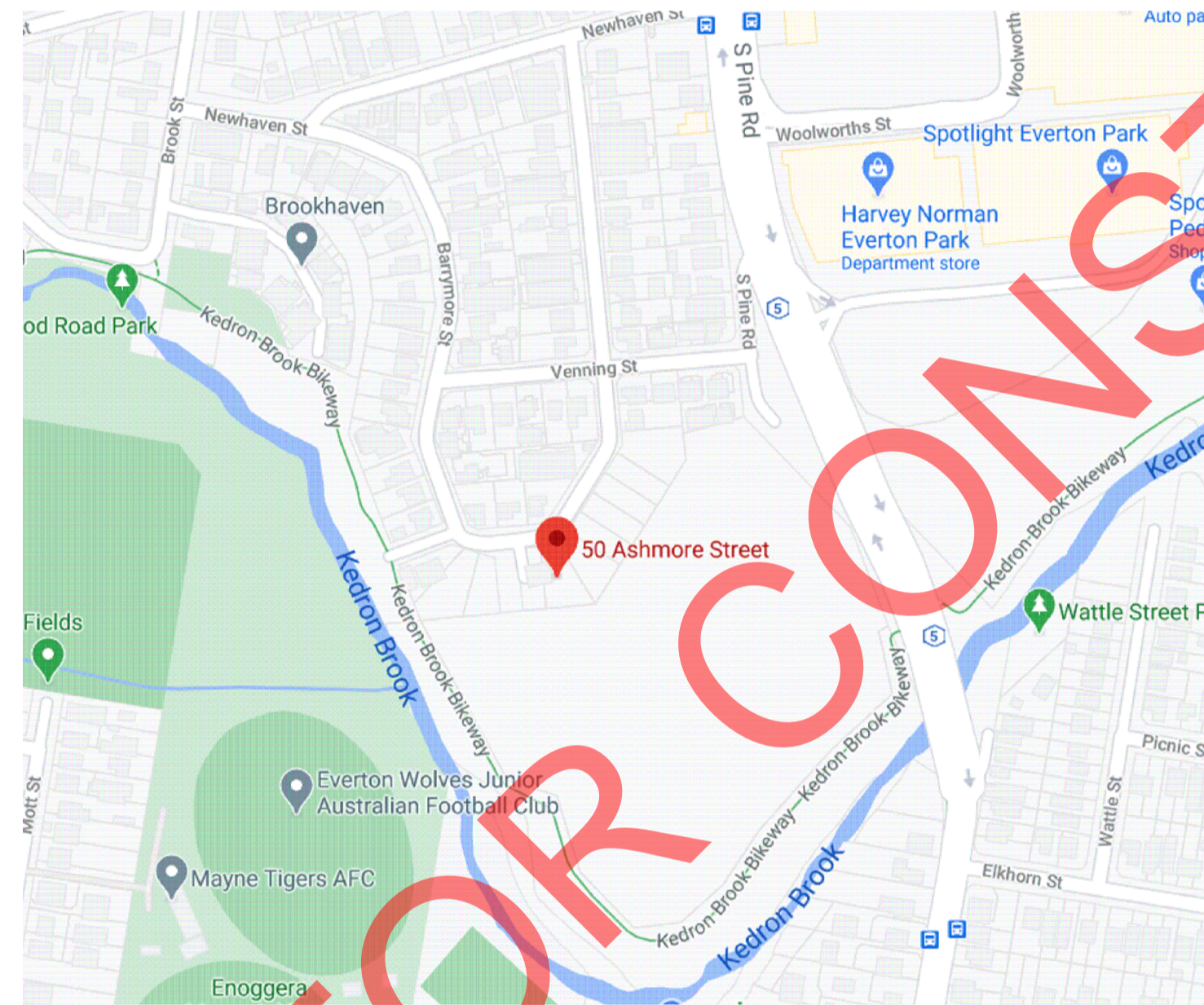
- SUPPLY, TRENCH AND INSTALL ELECTRICAL CONDUITS
- SUPPLY AND INSTALL STREETLIGHTS AND ASSOCIATED UG CABLES & TERMINATIONS
- SUPPLY AND INSTALL UNDERGROUND CABLING TO TRANSLINK BUS SHELTERS
- TEST AND COMMISSION WORKS IN ACCORDANCE WITH COMMISSIONING PLANS.

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 ENCRONCH 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.



LOCALITY PLAN
N.T.S.

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

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PR2	10/09/2020	UPDATED PRELIMINARY DESIGNS - INC. LEAD IN AND CONSTRUCTION NOTES			
A	29/10/2020	ISSUED FOR CONSTRUCTION			
B	28/07/2021	UPDATED FOR 3PH TO HOUSE LOTS			

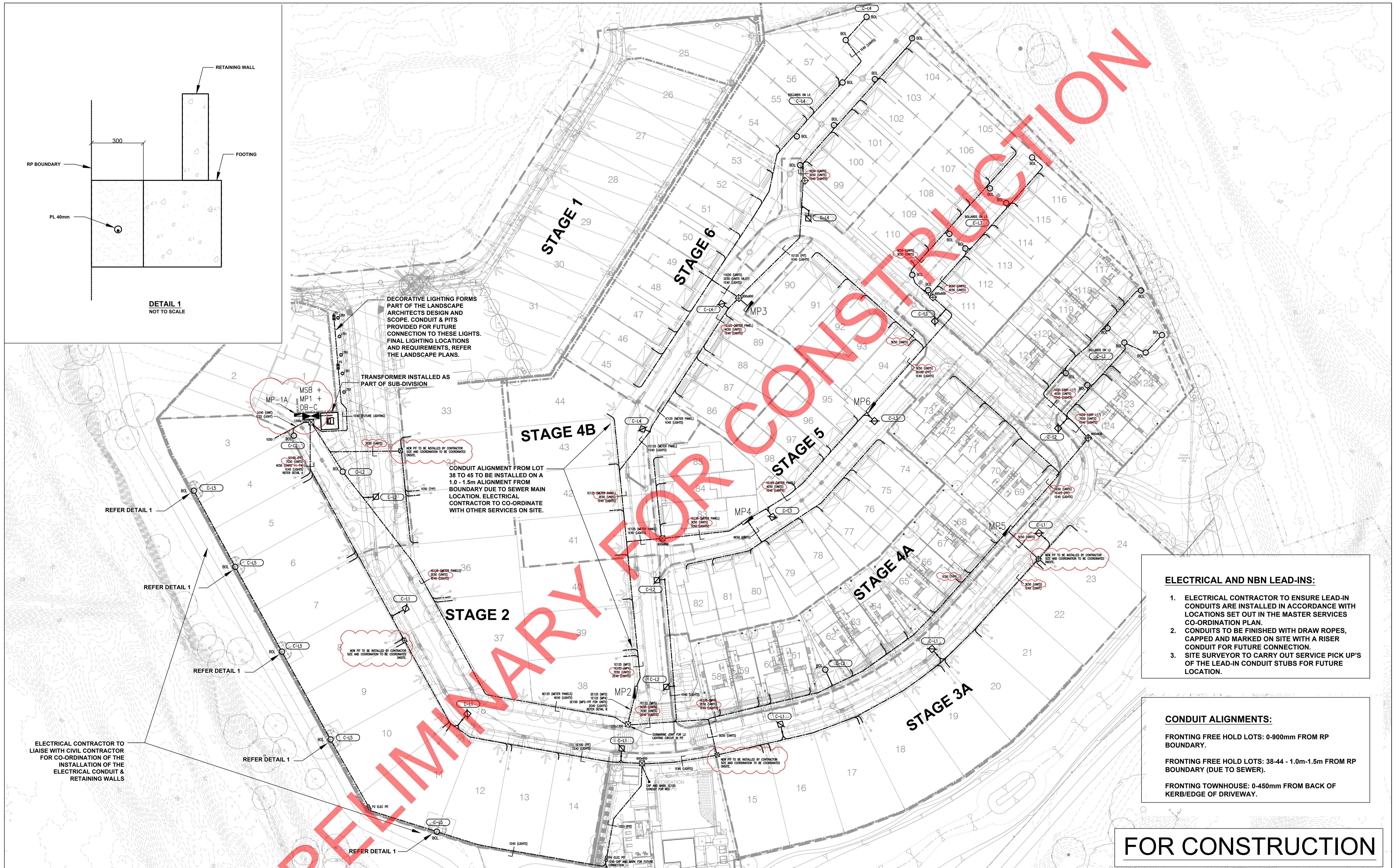


SITE CONTACT DETAILS		ALIGNMENTS		PROPERTY DESCRIPTION		APPROVED: M.Hodge		SCALE : 1:500 @ A1	
NAME	ENERGEX OH 3.0	ENERGEX UG 0.9	NUMBER OF LOTS: 124	PROPOSED LOTS: -	PHONE: 0448 039 985				
COMPANY	TELSTRA DBYD	GAS DBYD	CANCELLING LOTS:	PHONE: 0448 039 985					
PHONE	HP GAS DBYD	WATER DBYD	LOCAL AUTHORITY: BCC	DESIGNER: P.CAMERON					
MOBILE	WATER DBYD	SEWERAGE DBYD	APPROVAL No: -	PHONE: 3662 4365					
FAX	STORMWATER DBYD	OTHER DBYD		PLANNER: T.FOSTER					
EMAIL	SEWERAGE DBYD			PHONE: 0448 903 388					
	OTHER DBYD			ISSUE DATE: 9/5/2019					

ASHFORD RESIDENCES STAGES 2-6 10244-2-8

COVER SHEET AND LEGEND

- B



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).

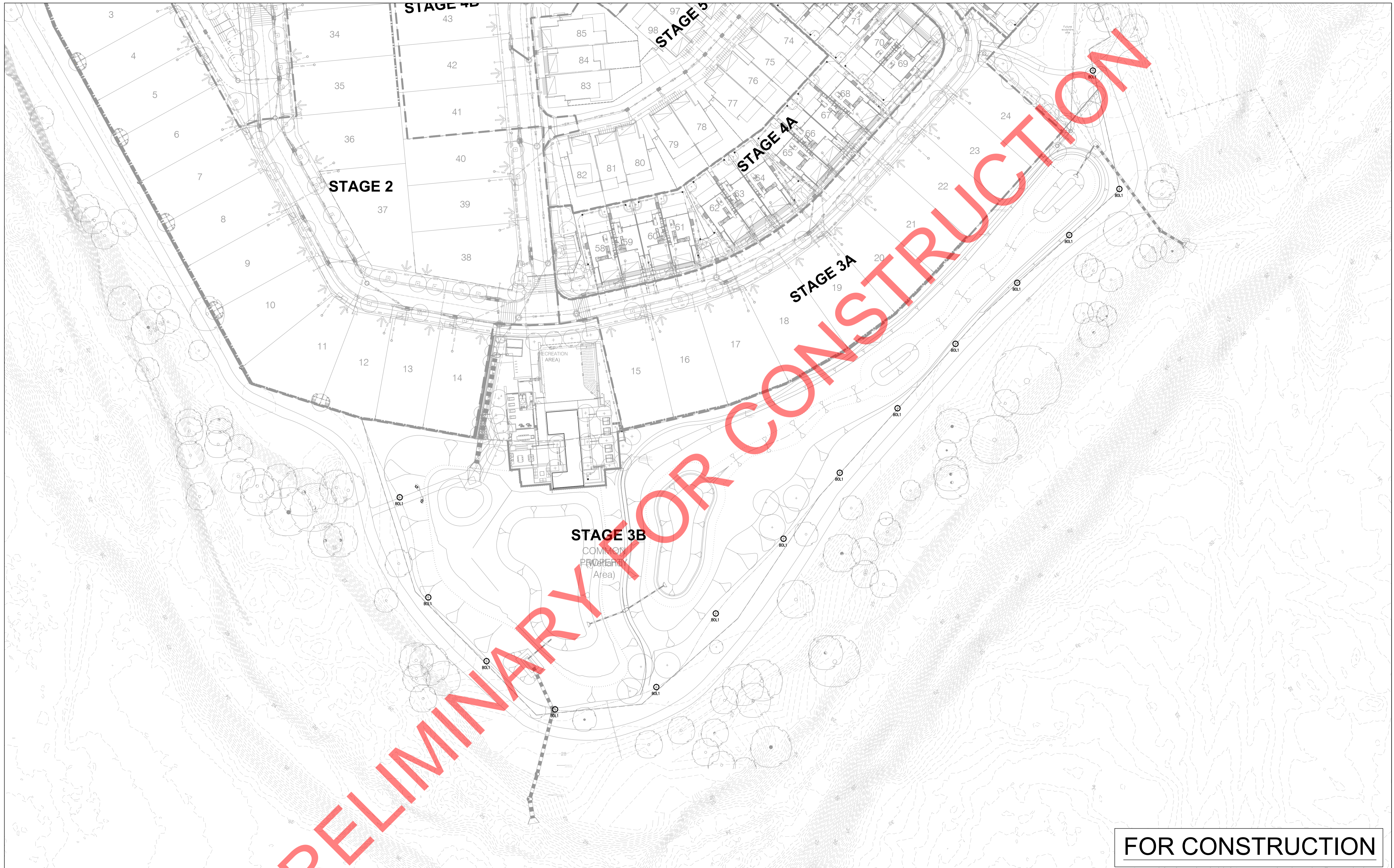
FRONTING TOWNHOUSE: 0-450mm FROM BACK OF KERB/EDGE OF DRIVEWAY.

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COMPANY	ENERGEX UH	0.9	PROPOSED LOTS: -	PHONE: 0448 039 985		
PHONE	TELSTRA	DBYD	CANCELLING LOTS:	CHECKED: M.Hodge	ASHFORD RESIDENCES STAGES 2-6	10244-2-8
MOBILE	GAS	DBYD	APPROVAL No: -	PHONE: 0448 039 985		
FAX	HP GAS	DBYD	LOCAL AUTHORITY: BCC	DESIGNER: P.CAMERON		
EMAIL	WATER	DBYD		PHONE: 3662 4365	AS3000 RETICULATION	B
	STORMWATER	DBYD		PLANNER: T.FOSTER		
	SEWERAGE	DBYD		PHONE: 0448 903 388		
	OTHER	DBYD		ISSUE DATE: 9/5/2019		



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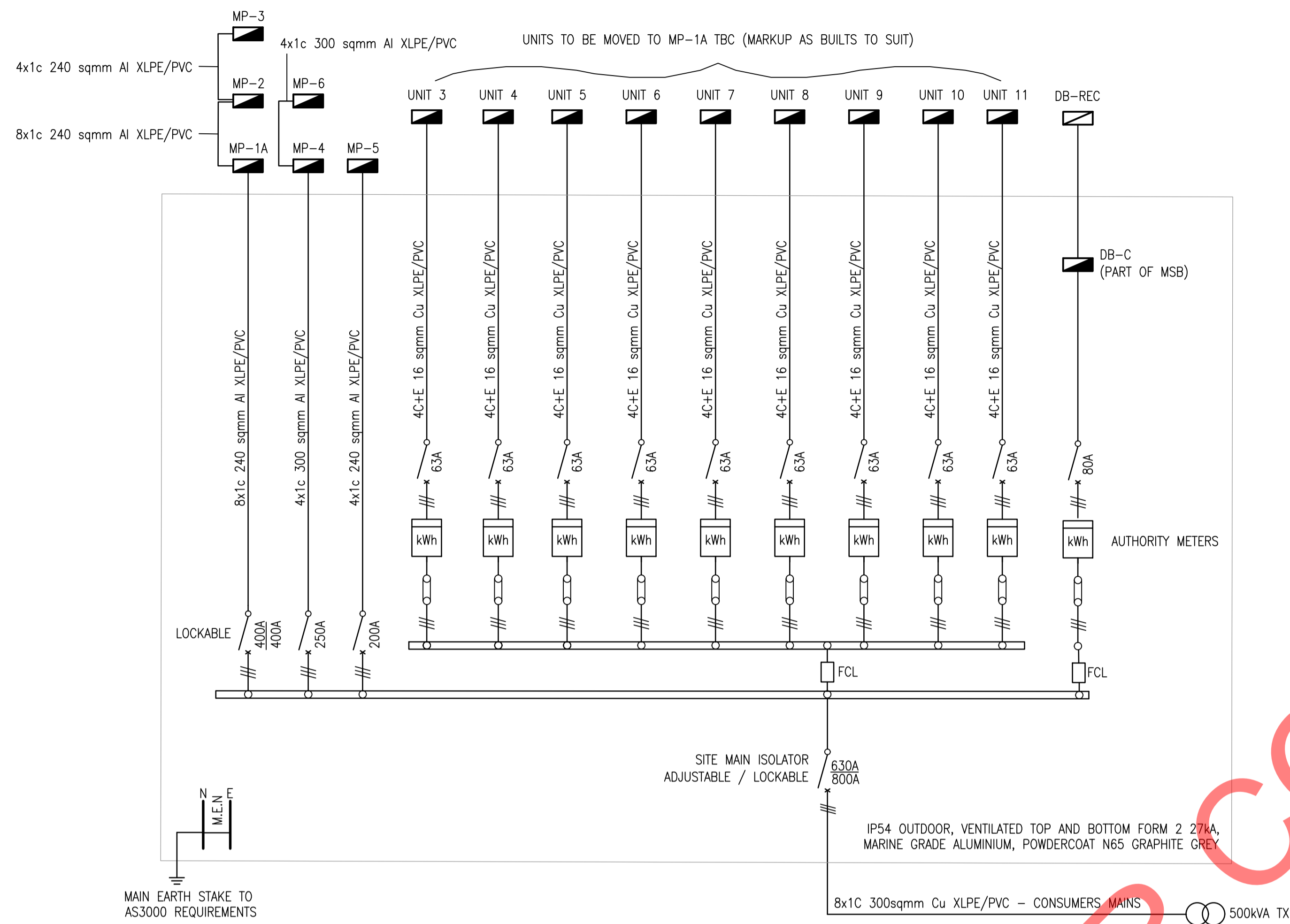


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FAX	HP GAS DBYD	APPROVAL No: -
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	SEWERAGE DBYD	
	OTHER DBYD	

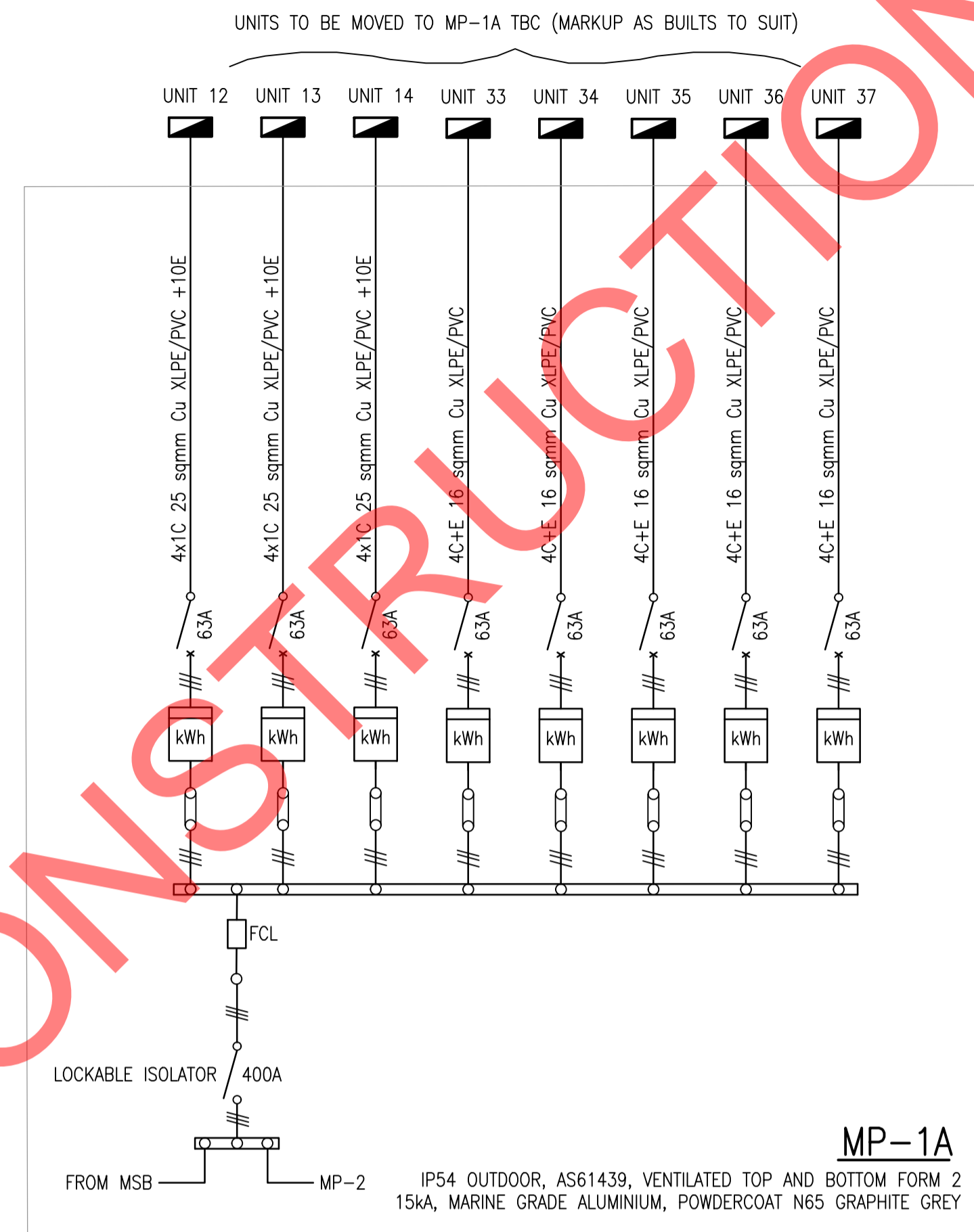
APPROVED:	M.Hodge
PHONE:	0448 039 985
CHECKED:	M.Hodge
PHONE:	0448 039 985
DESIGNER:	P.CAMERON
PHONE:	3662 4365
PLANNER:	T.FOSTER
PHONE:	0448 903 388
ISSUE DATE:	9/5/2019

ELECTRICAL RETICULATION
ASHFORD RESIDENCES STAGES 2-6
SOLAR BOLLARDS - NON AS1158 COMPLIANT

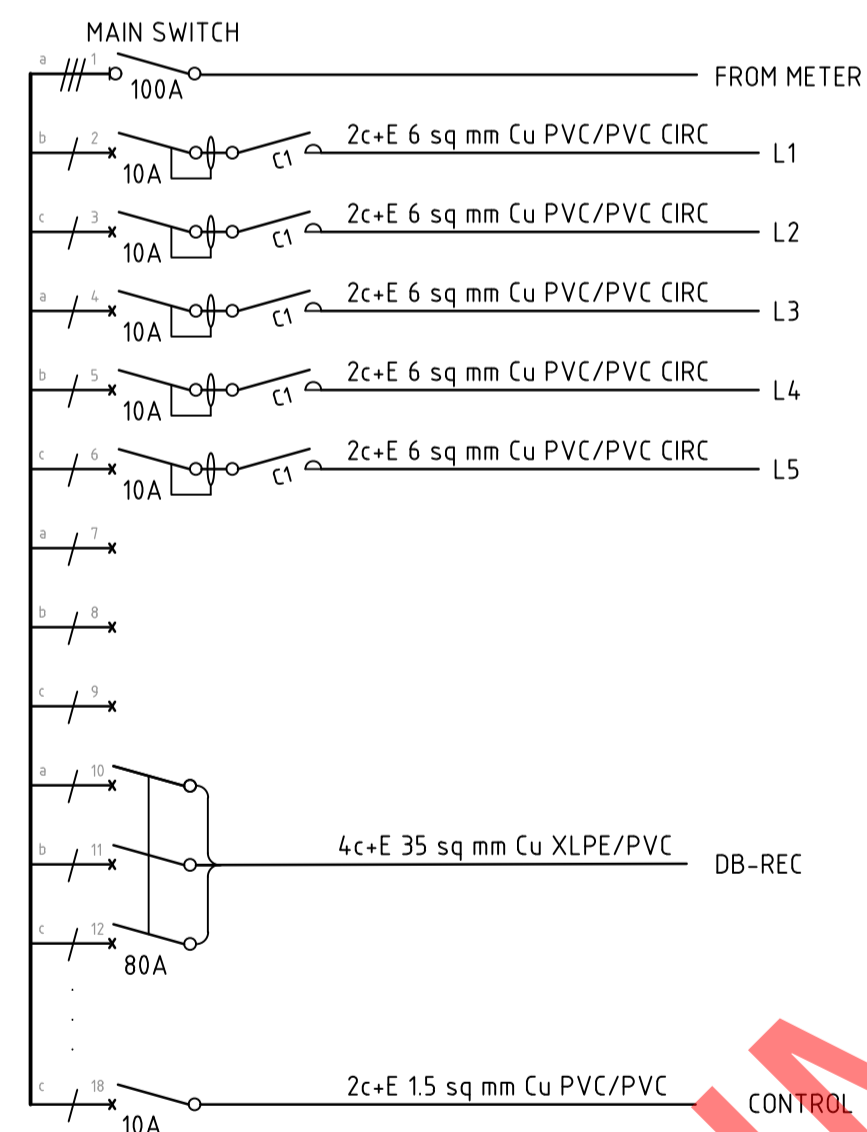
SCALE: 1:500 @ A1
10244-2-8
-
B
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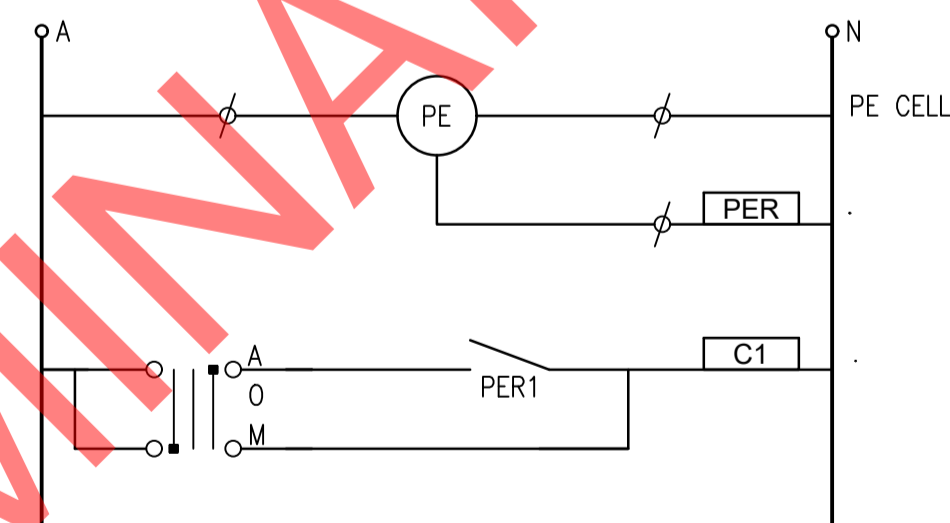
MAIN SWITCHBOARD + MP-1 + DB-C SCHEMATIC



MP-1A SCHEMATIC



DB-C (INTEGRAL TO MSB)



DB-C CONTROL SCHEMATIC

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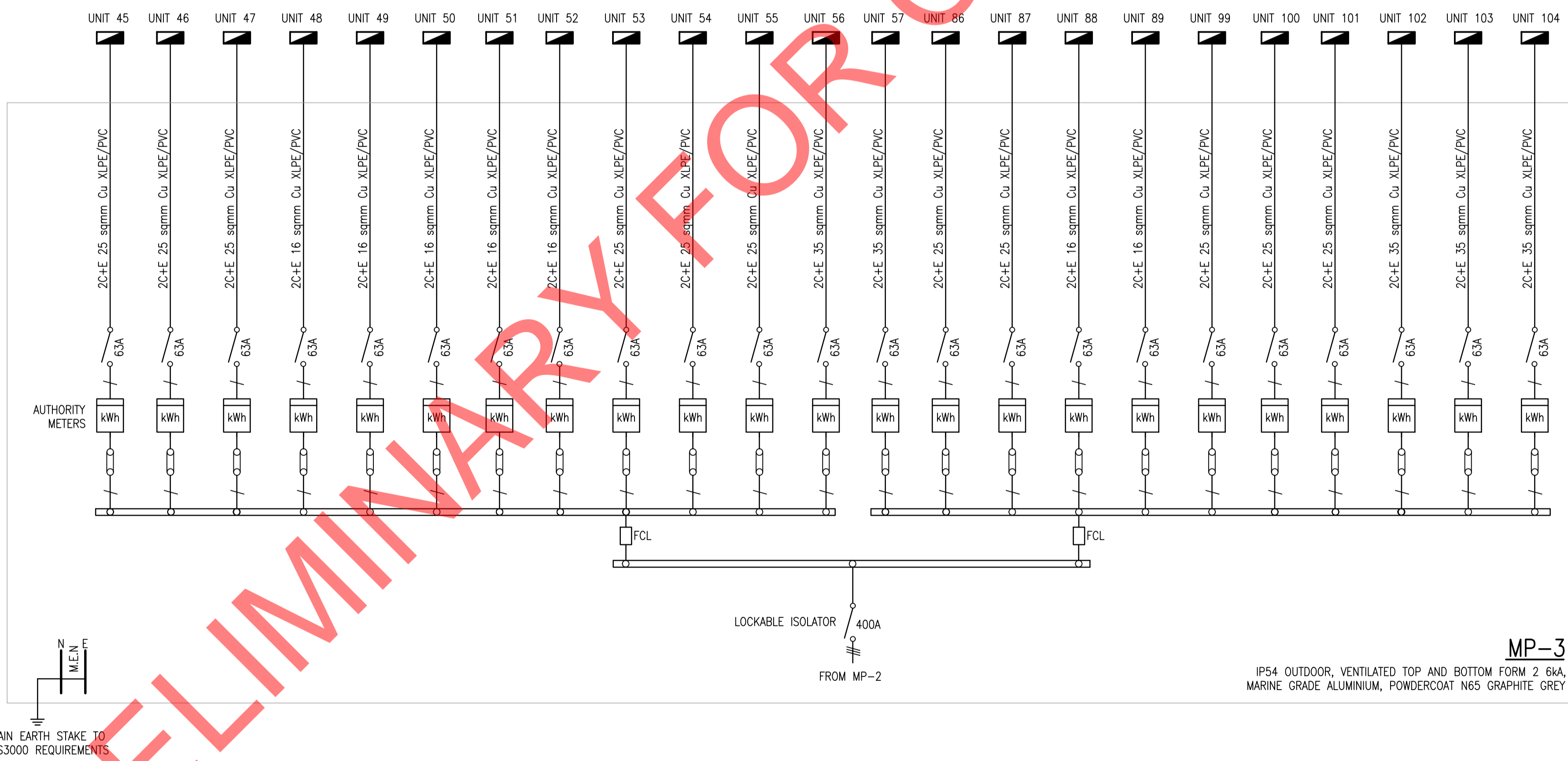
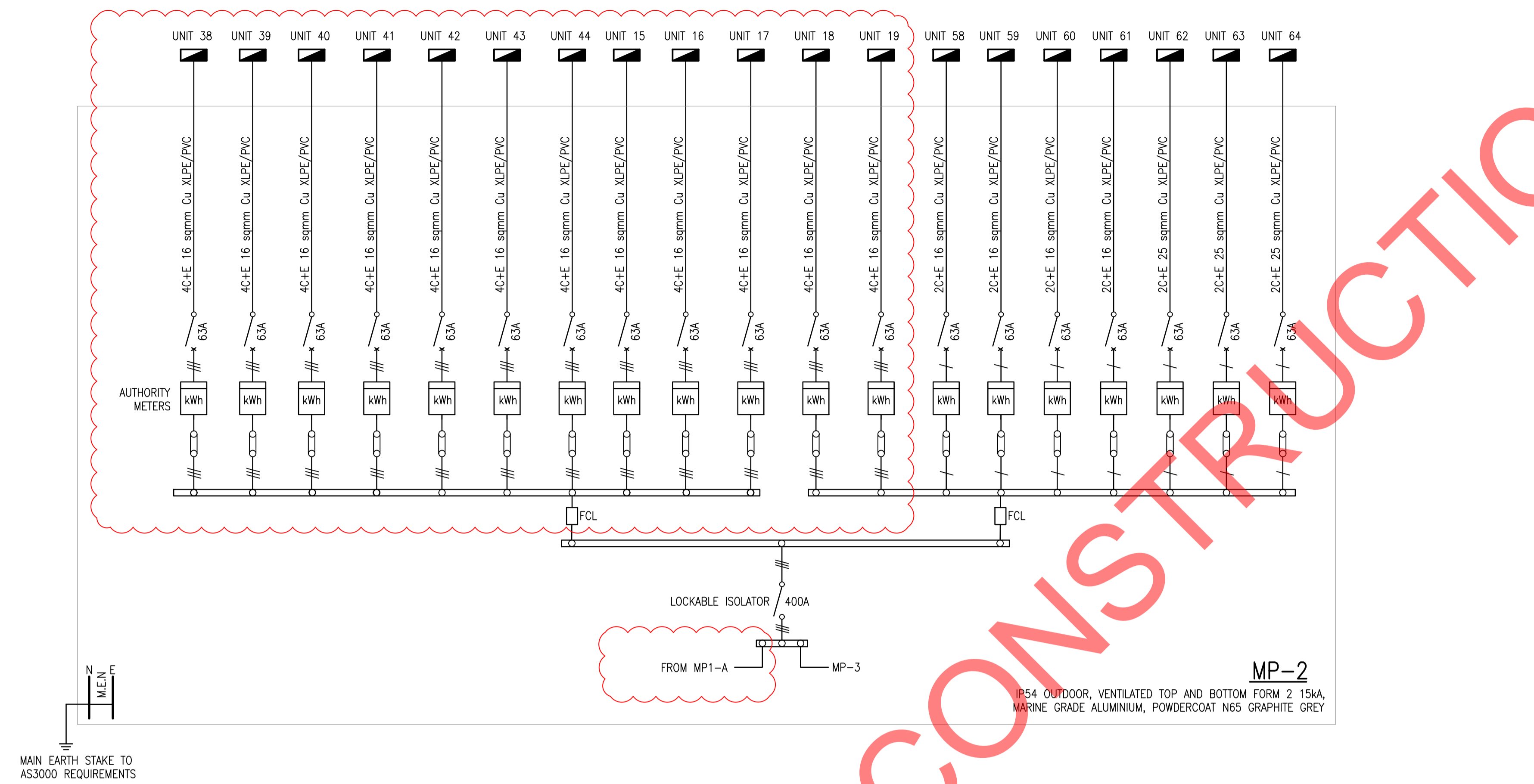


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MOBILE	HP GAS	DBYD	LOCAL AUTHORITY:	BCC	
FAX	WATER	DBYD	APPROVAL No:	-	
EMAIL	STORMWATER	DBYD			
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ELECTRICAL RETICULATION	
ASHFORD RESIDENCES STAGES 2-6	
SCHEMATIC SHEET 1	

SCALE : 1:500 @ A1	
10244-2-8	
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FOR CONSTRUCTION

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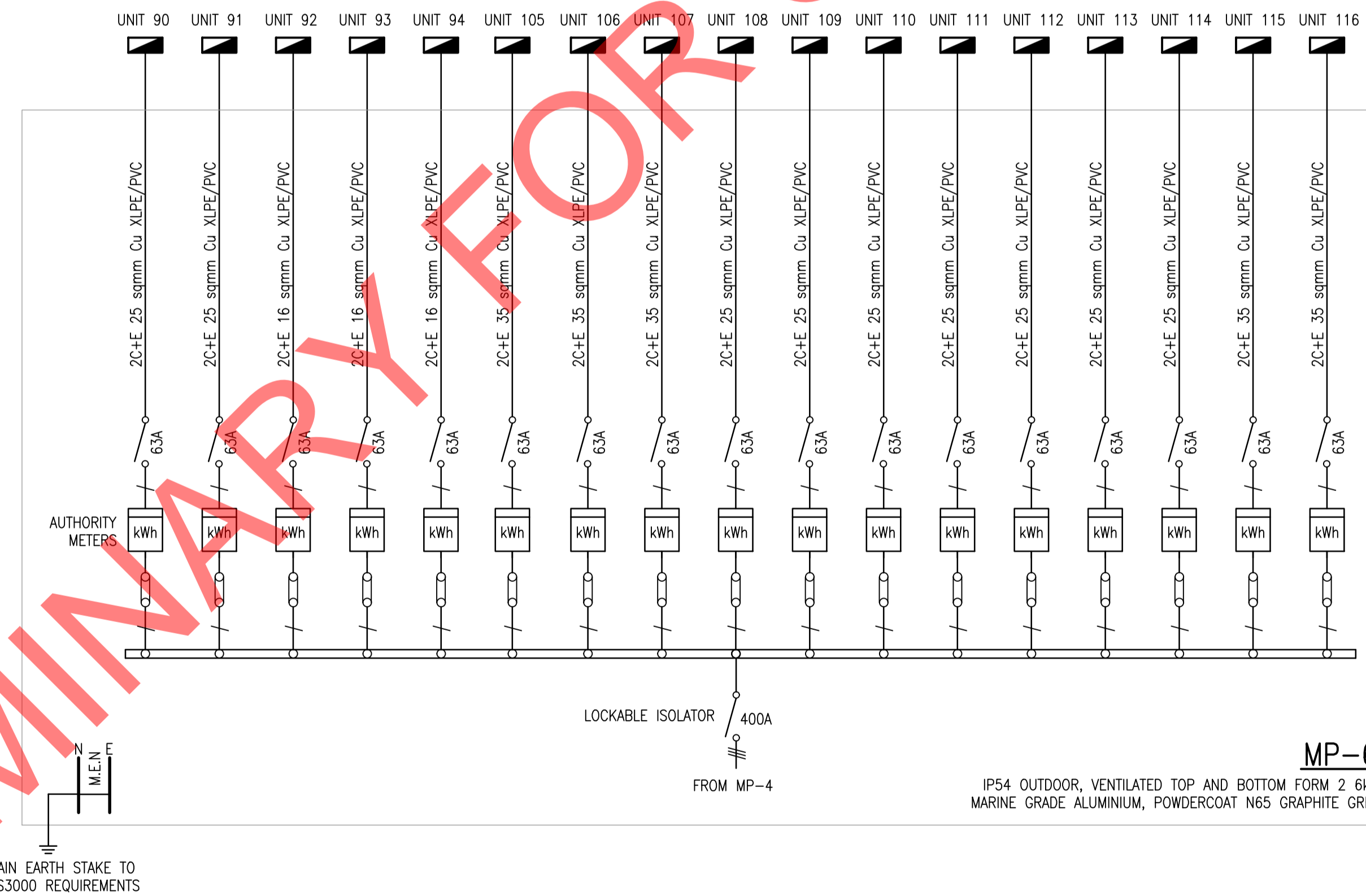
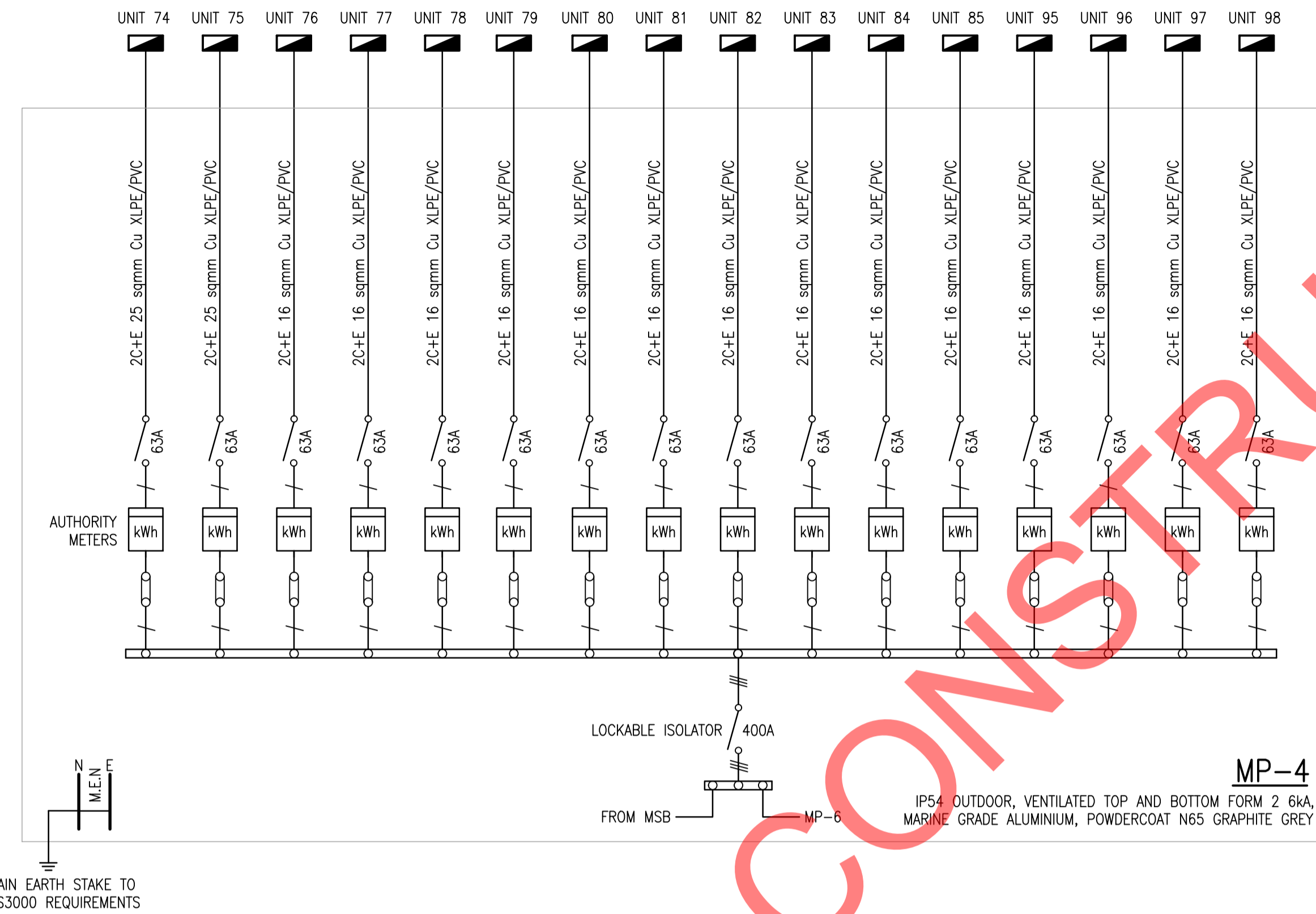


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 PHONE: 0448 903 388
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ELECTRICAL RETICULATION
ASHFORD RESIDENCES STAGES 2-6
 SCHEMATIC SHEET 2

SCALE : NTS @ A1
10244-2-8
 - B
 Sheet 5 of 7



FOR CONSTRUCTION

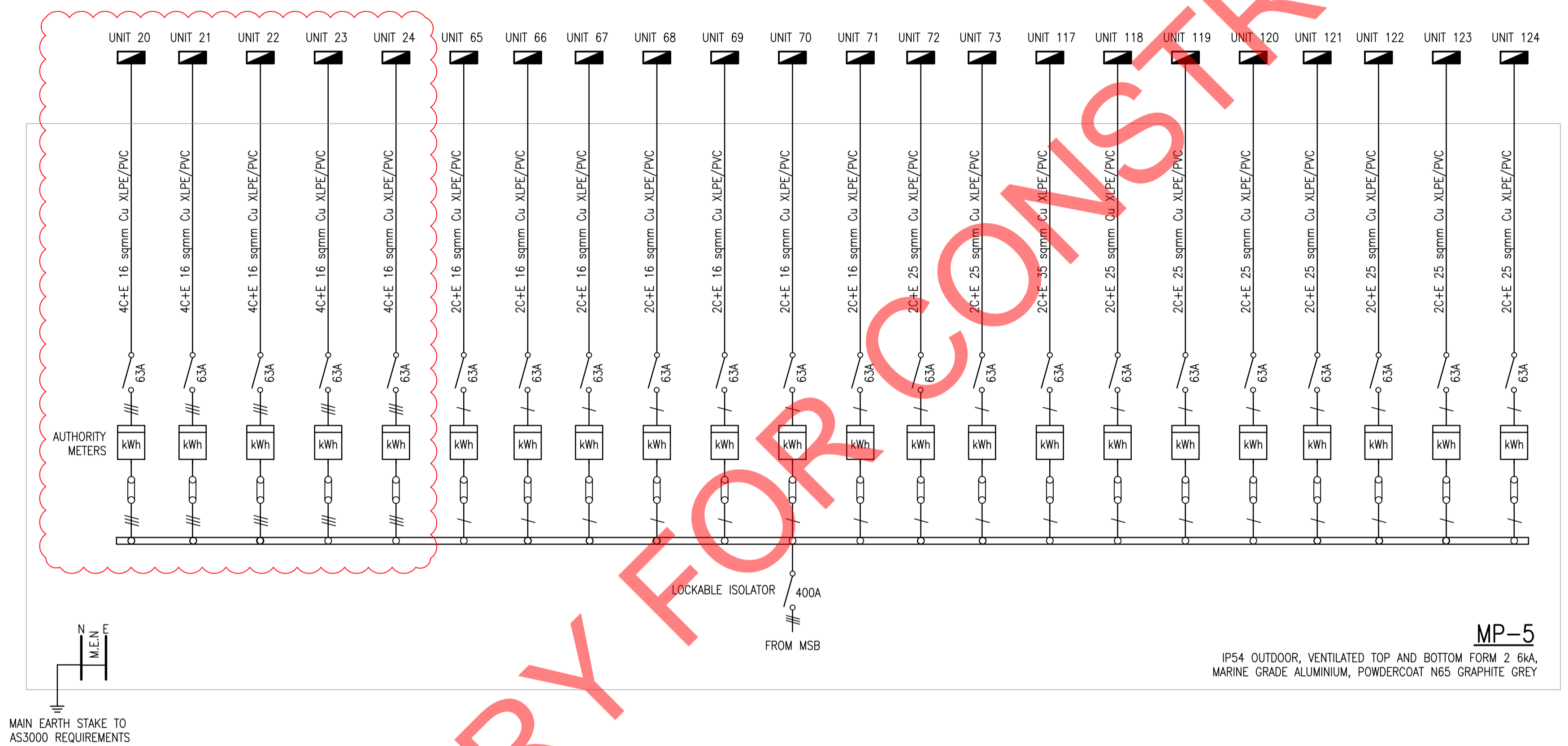
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ASHFORD RESIDENCES STAGES 2-6	10244-2-8
SCHMATIC SHEET 3	- B

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MAIN EARTH STAKE TO AS3000 REQUIREMENTS

MP-5

IP54 OUTDOOR, VENTILATED TOP AND BOTTOM FORM 2 6kA, MARINE GRADE ALUMINIUM, POWDERCOAT N65 GRAPHITE GREY

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ELECTRICAL RETICULATION
 ASHFORD RESIDENCES STAGES 2-6
 SCHEMATIC SHEET 4

SCALE : NTS @ A1
10244-2-8
 - B
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