

# PAUL ANTHONY ELECTRICAL Pty Ltd

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ACN: 602 017 185 ABN: 75 602 017 185

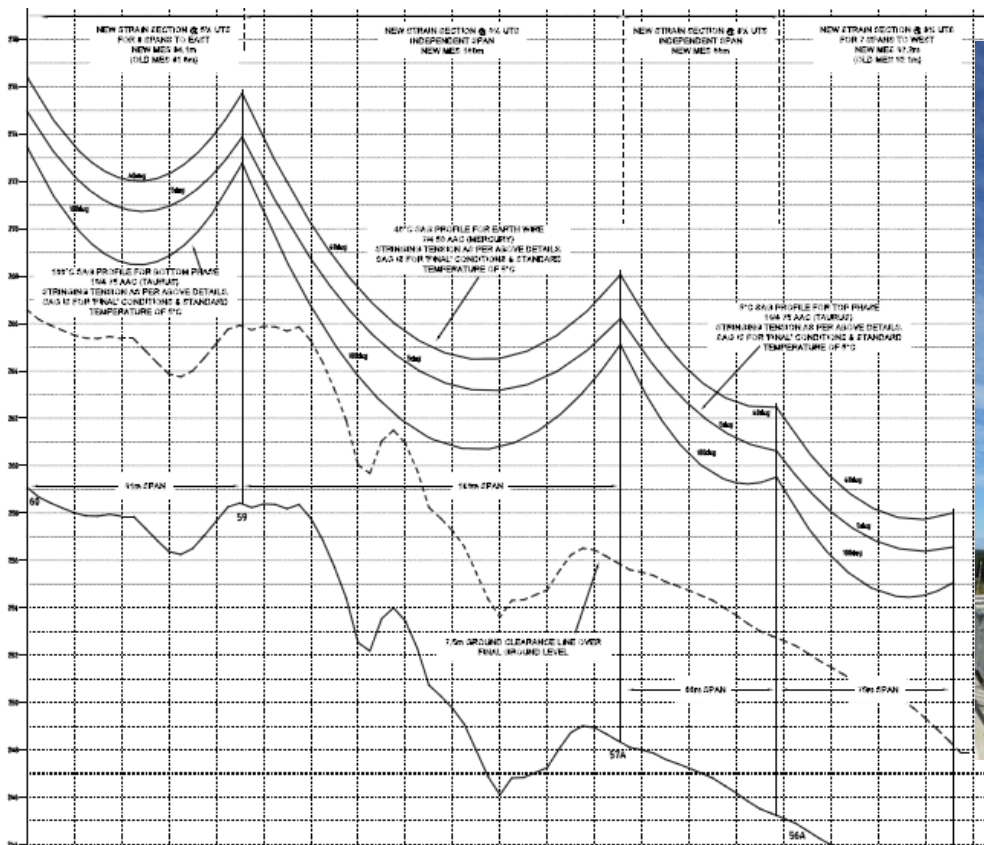
Department of Trade & Infrastructure Level 3 Design Accreditation Number: 4128

## Company Profile and Capabilities

Paul Anthony Electrical Pty Ltd was founded in 2014, with our main aim being to provide a one-stop shop for Level 3 Accredited Service Provider design services and Electrical Infrastructure Project designs. Our Principal Electrical Engineer - Paul Anthony, has over 20 years' experience working within the Electricity Distribution Industry. Paul has worked for Integral Energy and Endeavour Energy as well as various privately owned firms, specialising in the Design, Consultancy and Project Management of medium to large scale electrical infrastructure projects. Paul is a Professional Electrical Engineer with experience in all facets of Electrical Infrastructure Projects ranging from Low Voltage (400V) to High Voltage (132kV) in both overhead and underground networks.

Our experience and capabilities are best demonstrated by the examples below –

### 1. Distribution & Transmission Overhead Line Design

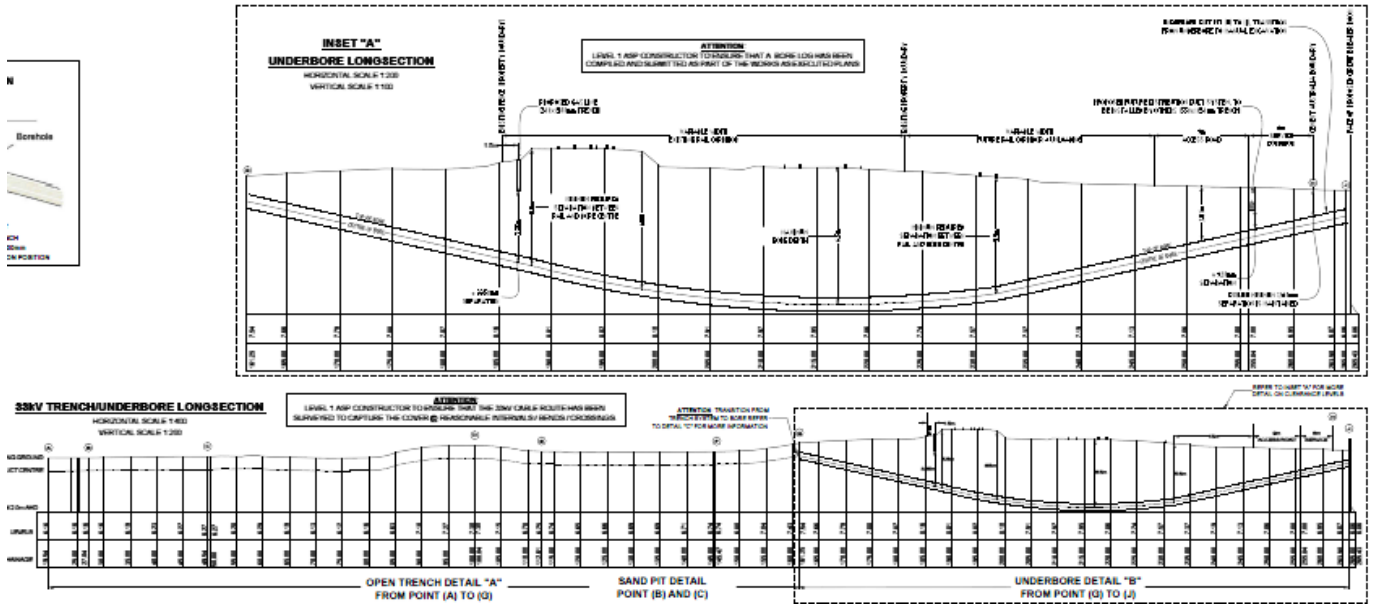


Ground Line Profile of 66kV Line



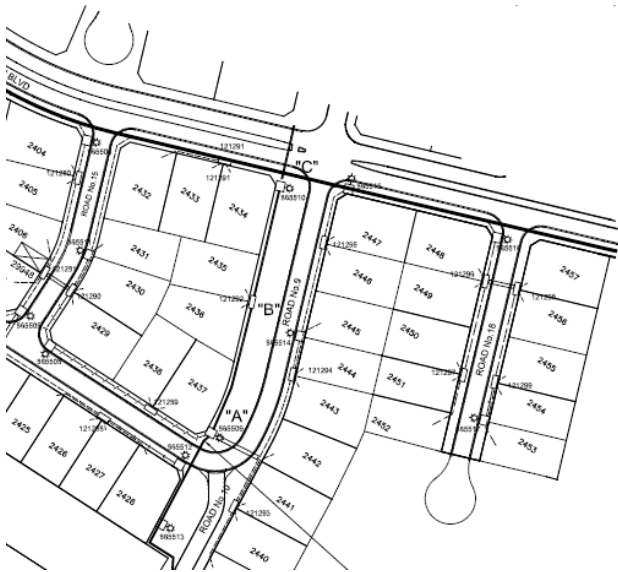
132kV Pole Relocation

## 2. Distribution & Transmission Underground Mains Design

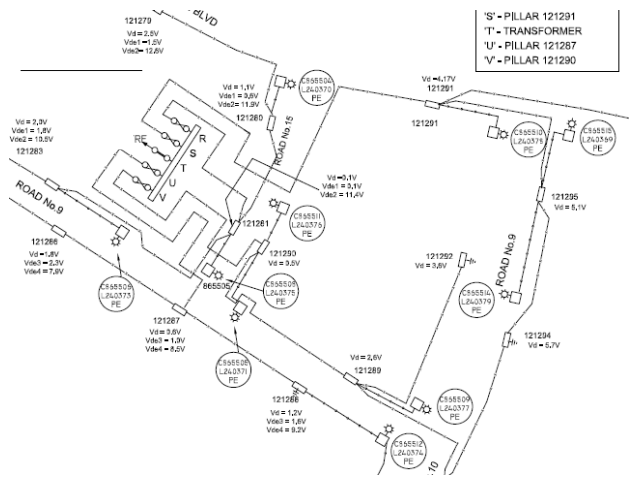


Underground Profile of 33kV Cable

## 3. Residential Subdivision Design

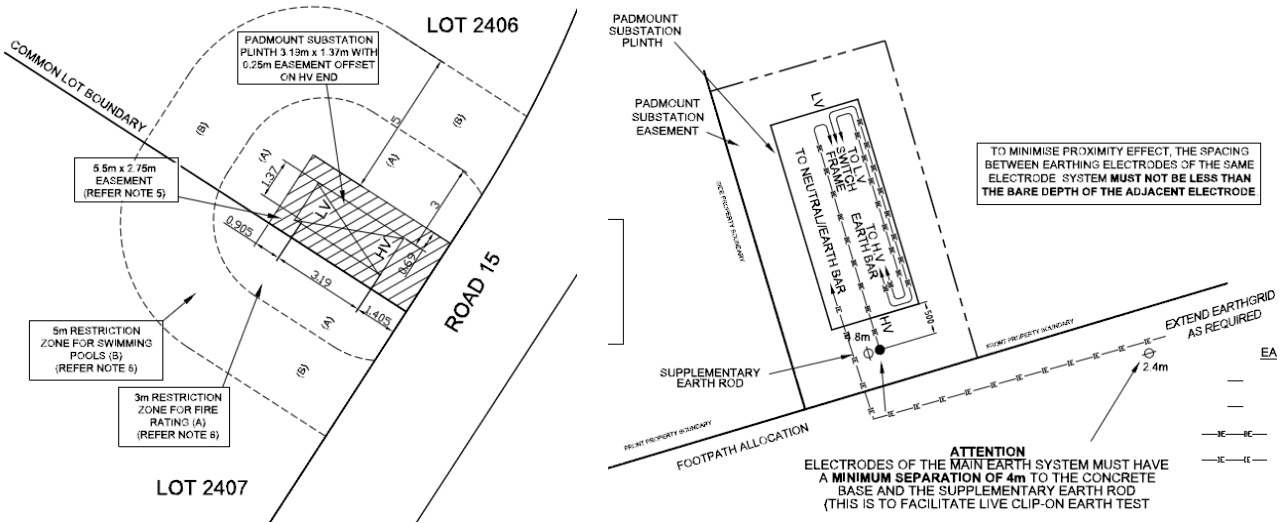


Site Plans & Layout



Final Schematic Circuits

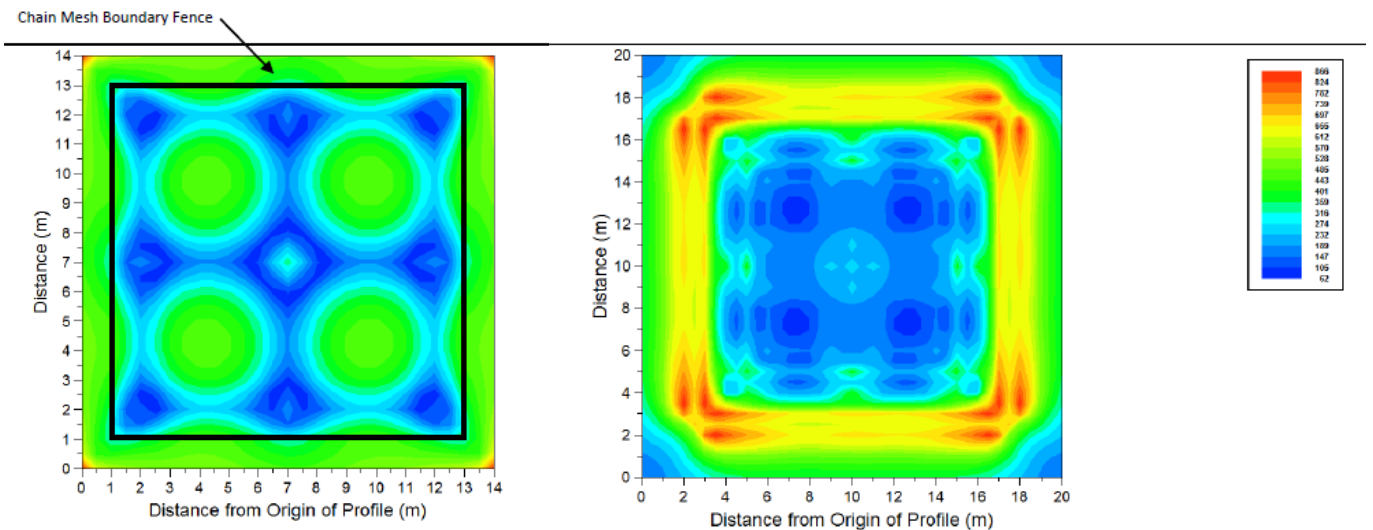
#### 4. Padmount Substation Easement and Earthing Design



Easement & Restriction Zones

Earthing Diagrams

#### 5. Substation Earth Grid Design and Analysis



Recently Designed 33/11kV Substation Earth Grid with "Touch" and "Step" Potential Analysis

## 6. Planning and Consultancy

Existing Substation Capacity (kVA)	Existing "Spare" Capacity (kVA)	Current Day		2012 - 2016	
		Existing Maximum Demand (kVA)	Existing 2012 Feeder Load (kVA)	Proposed Max Demand (kVA)	2012/16 Feeder
1000	855	145	MYP2	800	MYP2
1000	203	797	MYB2	797	MYB2
1000	203	797	MYP2	797	No.3 Fdr
1000	518	482	MYP2	600	No.3 Fdr
1000	105	895	MYP2	600	MYP2
1500	929	571	MYB2	650	MYB2
1000	418	582	MYB2	750	MYB2
2000	810	1190	MYB2	800	MYB2
500	158	342	MYP2	1400	No.3 Fdr
1000	388	612	MYB2	800	MYB2
1000	676	324	MYB2	700	MYB2
1000	621	379	MYP2	379	No.3 Fdr
1000	548	452	MYP2	452	MYP2
400	79	321	MYQ2	0	MYQ2
1000	856	144	MYP2	144	MYP2
1500	---	---	---	1400	MYP2
1000	---	---	---	300	No.3 Fdr
1000	---	---	---	300	MYQ2
1000	---	---	---	800	No.3 Fdr
1000	---	---	---	---	---

*Projected Distribution Substation and Feeder Loads for Future Planning*

## 7. Highrise & Commercial Development



*Site Planning*



*Transformer Sizing*



*LV Switchboards*

8. High Voltage Customer and Private Substation/Line Design



*Recently Designed 33kV Private Line with ABS/Recloser/Metering Unit for HVC*



*Recently Designed 33kV/11kV Private Substation for HVC*



*High Voltage Switchgear*



*High Voltage Metering*

Paul Anthony Electrical Pty Ltd specialises in all aspects of Level 3 Accredited Service provider Design Services and can assist you with any or all of the following portions of your project –

- Application submission to the Supply Authority
- Preparation of all documentation for 'Method of Supply' and 'Design' submissions
- Planning and staging layouts
- Recommendations for transformer sizing & locations
- Recommendations for switchgear and substation layouts
- Earthing design
- Electrical Engineering consultancy
- Overhead Line Design up to 132kV
- Underground Cable Design up to 132kV
- HV Protocols / HV Protection / HV Metering / NMI's
- High Voltage Customer negotiations with the Supply Authority
- Accredited Service Provider – Level 3 ASP Design
- Accredited Service Provider – Level 2 ASP Consultancy

Contact:

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