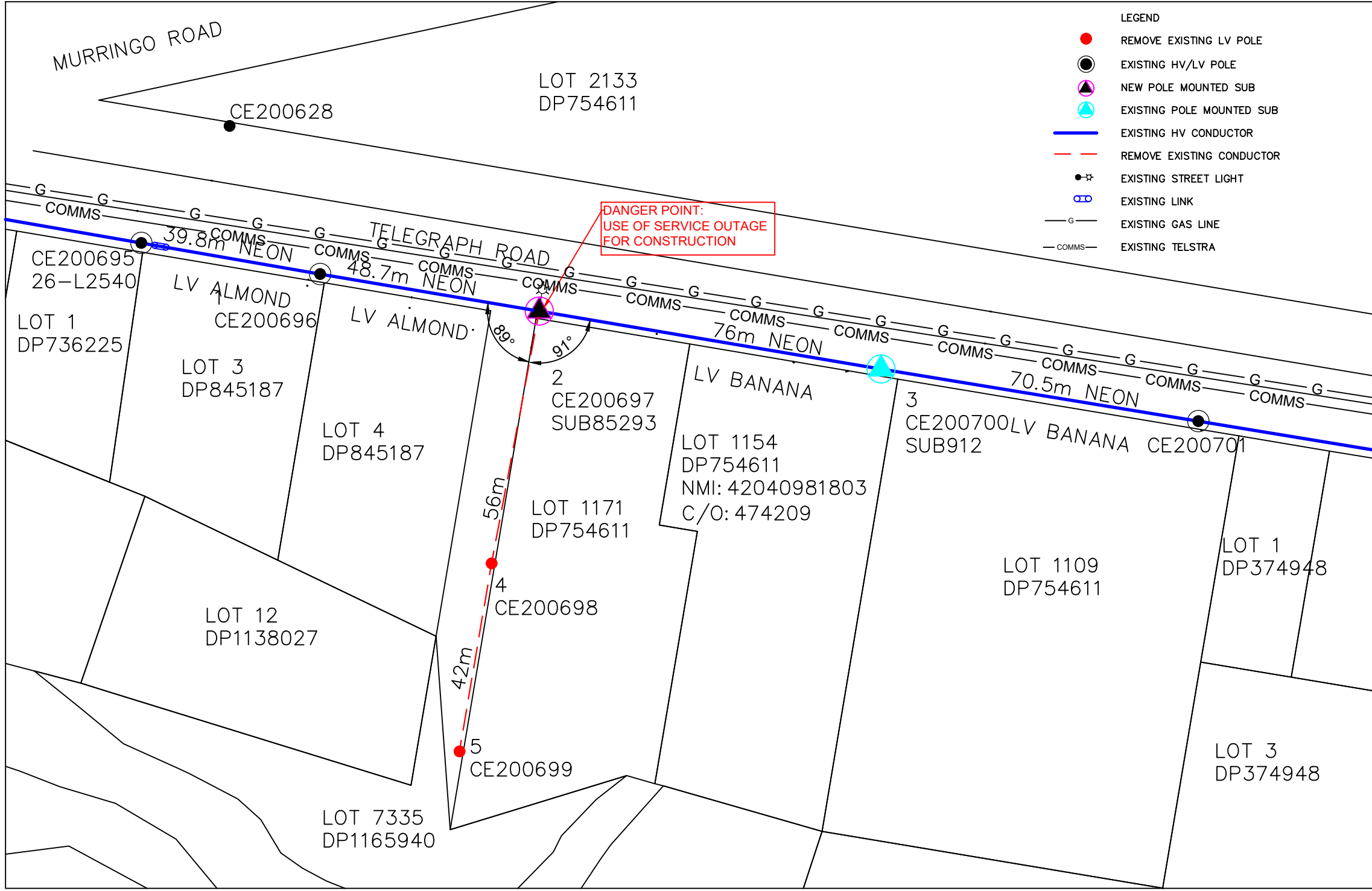




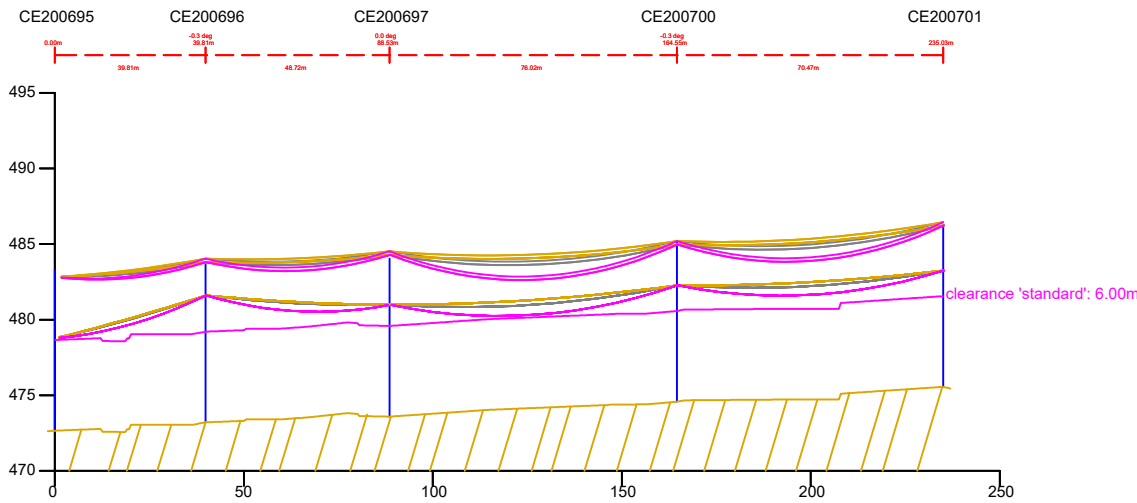
CEOF1070.01 & CEOF1070.02 DOCUMENTS COMPLETED FOR THIS PROJECT. CONSTRUCTING ASP TO ENSURE ALL CONTROL MEASURES FROM THESE DOCUMENTS ARE PUT IN PLACE PRIOR TO ANY CONSTRUCTION WORK AND IF ISSUES ARISE DURING CONSTRUCTION THEY CONSULT WITH LEVEL 3 ASP TO ENSURE ENVIRONMENTAL RISKS ARE ASSESSED IN ACCORDANCE WITH ESSENTIAL ENERGY POLICYS

RETURNED MATERIALS SCHEDULE HAS BEEN COMPLETED AND IS ATTACHED AS SEPARATE SHEET:
RETURNED ESSENTIAL ENERGY DEPOT: **BATHURST FSC**
ESSENTIAL ENERGY CONTACT: **MICK WICKS 02 6338 3592**



Overhead Construction Schedule				
Location	Asset Label	Construction Number	Ass. Number	Construction Notes
1	CE200696			EXISTING POLE IS TO REMAIN AS IS
				REMOVE EXISTING POLE AND POLE ASSEMBLY AND RETURN TO EE
		7101.03	8	INSTALL NEW 12.5M 12KN TIMBER POLE SUNK 2.05M
		7103.10	P	FOOTING ID: 12.5 / 12PT 85 / P
		7101.54	1	INSTALL NEW 11KV 3PH SMALL DELTA COMP X-ARM FG72 @ 0.23m FROM POLE TOP
		7104.05	2	INSTALL NEW 11KV 500KVA POLE MOUNTED SUBSTATION
		7104.20	5	INSTALL NEW 11KV 3PH FUSE ARM ARRANGEMENT WITH NEW 80A K-TYPE FUSES
		7103.63	3	INSTALL NEW LV 4 WIRE STRAIN COMP X-ARM FG53 @ 1.8M FROM TOP X-ARM
		7104.23	4	INSTALL NEW 11KV 3PH 500KVA TOWN TRANSFORMER
				PRIMARY TAP SETTING 11.275V
2	CE200697 SUB85293	7104.24	5	INSTALL NEW 3PH 630A LV FUSE SWITCH DISCONNECTOR WITH 630A LV FUSES
				RE CONNECT EXISTING STREETLIGHT AT EXISTING HEIGHT AND EXISTING ORIENTATION, CLARENCE DISTANCES TO BE MAINTAINED AS PER 7107.07
		7104.25	2	INSTALL NEW MAX DEMAND INDICATOR
		7104.28	1	INSTALL NEW WOODEN POLE SUBSTATION LV NEUTRAL TERMINAL
		7109.11	4	INSTALL NEW TIMBER POLE SUBSTATION SEPARATE EARTHING SYSTEM AS PER NEUTRON REPORT
3	CE200700 SUB912			EXISTING POLE IS TO REMAIN AS IS
4	CE200698			REMOVE EXISTING POLE AND POLE ASSEMBLY AND RETURN TO EE
5	CE200699			REMOVE EXISTING POLE AND POLE ASSEMBLY AND RETURN TO EE

OVERHEAD CONDUCTOR SCHEDULE							
FROM	TO	ACTION	CONDUCTOR DETAILS VOLTAGE/WIRES/CONDUCTORS	ROUTE LENGTH	DESIGN TENSION	RULING SPAN	MIN DESIGN GC @ MAX OPERATING TEMP 100°C
1	3	REINSTALL	3PH 11KV NEON 19/3.75 AAAC	124.7m	EXISTING	64.2m	7.86m
1	2	REINSTALL	LV 4 WIRE ALMOND 6/1/2.50 ACSR/GZ	48.7m	EXISTING	44.9m	7.65m
2	5	REMOVE	1 PH 7/0.064 HDBC CONDUCTOR	98m	-	-	-
2	3	REINSTALL	LV 4 WIRE BANANA 6/1/3.75 ACSR/GZ	76m	EXISTING	73.4m	6.39



- PROJECT NOTES:
- CABLE DESTINATION TAGS ARE REQUIRED ON ALL CABLES. TAGS ARE TO COMPLY WITH CEOP8042 CLAUSE 4.7
 - ALL EXCAVATION WORK TO COMPLY WITH ESSENTIAL ENERGY'S OPERATIONAL PROCEDURE: WORK NEAR ESSENTIAL ENERGY'S UNDERGROUND ASSETS CEOP8041.
 - ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL ESSENTIAL ENERGY STANDARDS, AUSTRALIAN STANDARDS AND SERVICE AND INSTALLATION RULES OF NSW.
 - REFER TO BRIEFING FROM 1-6-17 THAT STATES THAT A DEDICATED SUBSTATION IN THE ROAD RESERVE CAN HAVE THE FUSES AS THE POINT OF COMMON COUPLING

EARTHING RESISTIVITY CHART		
TEST TAKEN BY:	David	
TEST METHOD	Wenner	
SOIL CONDITIONS	NORMAL	
DATE TAKEN:	16/01/2020	
EXPECTED HV EARTH RESISTANCE		10.1
EXPECTED LV EARTH RESISTANCE		10.1
TOP SOIL RESISTIVITY		13.6
BOTTOM SOIL RESISTIVITY		2
POLE ID	DISTANCE	RESISTIVITY
CE200697 SUB85293	1	18.6
	2	12.1
	4	8.6
	6	8.2
	8	7.9
	10	4.2

MINIMUM SEPARATION BETWEEN HV AND LV EARTHING SYSTEMS IS **3.9m**

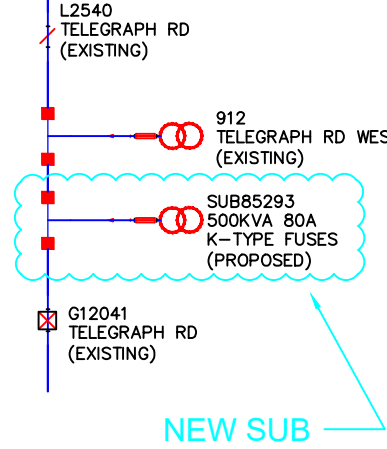
HV EARTHING
LENGTH OF STRIP EARTH
ELECTRODE LENGTH
NUMBER OF ELECTRODES
ELECTRODE SPACINGS

LV EARTHING
LENGTH OF STRIP EARTH
ELECTRODE LENGTH
NUMBER OF ELECTRODES
ELECTRODE SPACINGS

EPR HAZARD ZONES:
430V
1000V
NOTE: NO TELECOMMUNICATIONS EQUIPMENT IS PERMITTED WITHIN THE EPR HAZARD ZONES

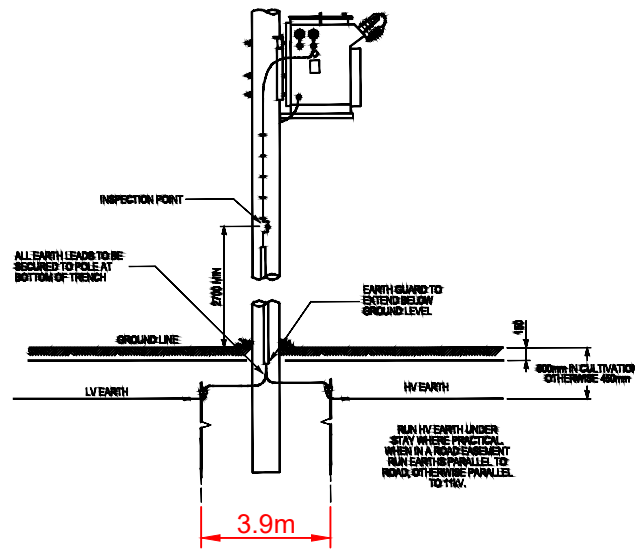
- NOTES:
- ALL MATERIALS USED WITHIN THE ESSENTIAL ENERGY NETWORK MUST BE ON CEOM7004 - MATERIALS INVENTORY: CONTESTABILITY (APPROVED), ANY ITEMS NOT ON THIS LIST MUST BE APPROVED FOR NON STANDARD INSTALLATION PRIOR TO BEING INSTALLED.
 - CERTIFIED DESIGN REMAINS VALID FOR A PERIOD OF 6 MONTHS AFTER CERTIFICATION BY ESSENTIAL ENERGY.
 - THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE TO ENSURE ACCURACY AND NOTIFY DESIGNER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
 - ALL CONSTRUCTION WORKS ARE TO COMPLY WITH ESSENTIAL ENERGY CONSTRUCTION STANDARDS AND RELEVANT AUSTRALIAN STANDARDS/CODES OF PRACTICE

HV SCHEMATIC
ZONE SUBSTATION - YOUNG
FEEDER - YOUNG388 YOUNG TOWN 5
MAINTENANCE AREA - YOUNG - 26014 - 1590
1591 1600B



CEOM7108.11

11.250.30V
WOOD POLE
SUBSTATION
SEPARATE
EARTHING
SYSTEM



Safety In Design Report					
Project Location	YOUNG	CW Number	120599	Design Department	DSD L3
Designer	David Bridle	Qualification	Adv Dip ESI	Designation	Designer
Issue Date	18/02/2020	Revision	A		
Designer Intent	UPGRADE POLE 1242 AND INSTALL NEW 500 KVA 3PH POLE MOUNTED SUB REMOVE POLES CE200699 CE200698				
Note: This is not a list of all hazard present. This report only shows unusual or non standard hazards identified at time of design					
Design Safety Report - Residual Hazard Register					
Hazard	Location	Possible Controls		Life Cycle Phase	
UNBALANCED POLE TOP LOADINGS	ALL POLES	SUPPORT POLES UNTIL LOADS ARE BALANCED		CONSTRUCTION	
WORKING ON EXISTING POLES	ALL POLES	CHECK POLE STABILITY PRIOR TO CLIMBING - USE OF SERVICE OUTAGE TO WORK ON POLE		CONSTRUCTION	

DIAL BEFORE YOU DIG
The Essential First Step
Excavation Works

"DIAL BEFORE YOU DIG" SITE LOCATIONS ARE VALID FOR 30 DAYS AFTER DATE OF REQUEST. IT IS RECOMMENDED THAT NEW INFORMATION IS REQUESTED AT TIME OF CONSTRUCTION TO ENSURE NEW INFORMATION IS AVAILABLE.

Cautions:
PLEASE REFER DBYD JOB: 19064401
DATE OF REQUEST: 19/02/2020
UNDERGROUND ASSETS IN VICINITY. ALL SERVICES TO BE LOCATED PRIOR TO ANY EXCAVATION WORKS.

Rev	Date	Comments
1	27/02/2020	DRAFT FOR CLIENT AND COUNCIL REVIEW
A	17/04/2020	CERTIFICATION SUBMISSION
B	18/05/2020	CERTIFICATION RESUBMISSION

NOTE:
1. THE INTENDED PURPOSE OF THIS PLAN IS THAT OF A CONSTRUCTION DRAWING FOR ELECTRICAL RETICULATION REQUIREMENTS. THIS PLAN IS NOT TO BE USED BY ANY OTHER PERSON OR COMPANY. DELTA STAR DESIGNS ACCEPTS NO RESPONSIBILITY FOR ANY LOSS OR DAMAGE SUFFERED FROM USE OF THIS PLAN IN ANY CAPACITY FROM WHAT ITS INTENDED PURPOSE IS.
2. DIMENSIONS, AREAS AND ITEMS SHOWN ARE APPROXIMATE ONLY AND MAY VARY. THE ELECTRICAL DESIGN SHOWN MAY BE SUBJECT TO VARIATION DEPENDING ON CONDITIONS ENCOUNTERED DURING INSTALLATION WORKS.
3. THIS PLAN IS NOT TO BE REPRODUCED UNLESS THIS NOTE IS INCLUDED. WRITTEN CONSENT FROM DELTA STAR DESIGNS IS REQUIRED PRIOR TO REPRODUCING THIS PLAN.

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Project Name	JACKSON NEW SUB	Contestable Works #	120599
Project Location	TELEGRAPH ROAD YOUNG LOT 1154 DP754611	Designer	ANGUS
Customer	COMPLETE POWER	Checked	DARCY
DSD - 336	PLOT SIZE - A2	Revision	B
		Issue Date	18/05/2020
		Scale	1:1000
		Sheet	1 OF 1