LIGHTING SCHEDULE

Refer to attached lighting schedule within design report fordetails of luminaires, specification & mounting details

DESIGN CRITERIA

1. Designed in accordance with AS/NZS 1158.3.1:2020 subcategory PP4 & PP5 for shared path;
2. Isolux lines indicate maintained values in lux from calculation points on the ground at 1m centres
3. Mounting heights, column locations & mounting details are as indicated on attached drawings & noted within lighting schedule.
4. All luminaires to be controlled via Casambi controls that includes a remote gateway (smartphone with 24/7 power supply and pre-loaded app) & Casambi hardware.
5. All LED luminaires are designed using 3000K chip unless they are colour changing RGBW as noted in lighting schedule.
6. All cabling to comply with local network requirements.
7. If the area of shared Pathway between railbridge & Mersey Street is considered to be within flood zone then P20-P22 could be substituted with column mounted lights & integral solar panels (Option 3)

MAXIMUM DESIGN SPACING

Pole ID	Design Width	Arrangement	Offset	Max. Spacing	Mounting Height	Tilt	Category	Luminaire description	Option (Design report reference)
SP1-SP3	2.2m/3m	Single Sided	0.7m	54.2m/54.1m	7.5m	0°	PP5	Ligman Solar/NXT DC	A
SP4-SP7	2.2m/3m	Single Sided	0.7m	54.2m/54.1m	7.5m	0°	PP5	Ligman Solar/NXT DC	A
SP1-SP4	2.2m/3m	Single Sided	0.7m	42.8m/42.5m	7.5m	0°	PP5	GEC/G03 Series	C*
SP5-SP8	2.2m/3m	Single Sided	0.7m	42.8m/42.5m	7.5m	0°	PP5	GEC/G03 Series	C*
SB1-SB22	2.2m	Single Sided	0.3m	7m	1.5m	N/A	PP5	SBL2 120W AWW	B*
SB23-SB53	2.2m	Single Sided	0.3m	7m	1.5m	N/A	PP5	SBL2 120W AWW	B*
SB54-SB197	1m	Single Sided	0.3m	6.4m	0.6m	N/A	PP5	SBL2 120W AWW	B*
H1-H16	3m	Staggered	0m	10m	1.3m	0°	PP4	EWO ID Standard	
P1-P26	2.2m/3m	Single Sided	0.7m	41.3m	7.5m	0°	PP4	NXT14W Mains Power	
P1-P26	2.2m/3m	Single Sided	0.7m	48m	7.5m	0°	PP5	NXT14W Mains Power	
M1-M8	Design criteria non applicable, mast feature lighting								
LS1-LS34	LED Strip lighting design criteria non applicable, horizontal feature lighting								

* NOT RECOMMENDED BY ELC

SYMBOLS:

- New column and luminaire.
- E Existing column outreach arm and luminaire to remain.
- F Future luminaire on new column
- Handrail & projector luminaires
- Linear LED profile
- New U/G S/L cable to local Network Company's requirements

SYMBOLS LEGEND:

L1	Lighting Schedule Reference
xxxW	Lamp Wattage
Px	Column
SPx	Solar Column Option
SBx	Solar Bollard Option
Mx	Mast feature lighting
LSx	LED strip feature lighting

KEY PLAN



Rev	Description	Date	Des	Dn	Chk	Apd	Or Acp	Contractor	Designed	S.Muir	OCT 20
A	Issue for approval	OCT 20	SM	SM					Drawn	S.Muir	OCT 20
B	Issue for approval	OCT 20	SM	SM					Checked		
									Approved		

ESSENTIAL LIGHTING CONSULTANCY

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Scale: N.T.S.

Revision: B

MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
COVER PAGE

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 001	1/9



Cut line A-A See sheet 3

N

OPTION A

ESSENTIAL LIGHTING CONSULTANCY

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B	Issue for approval	OCT 20	SM	SM				

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Approved		

Scale: 1:1000

Revision: B

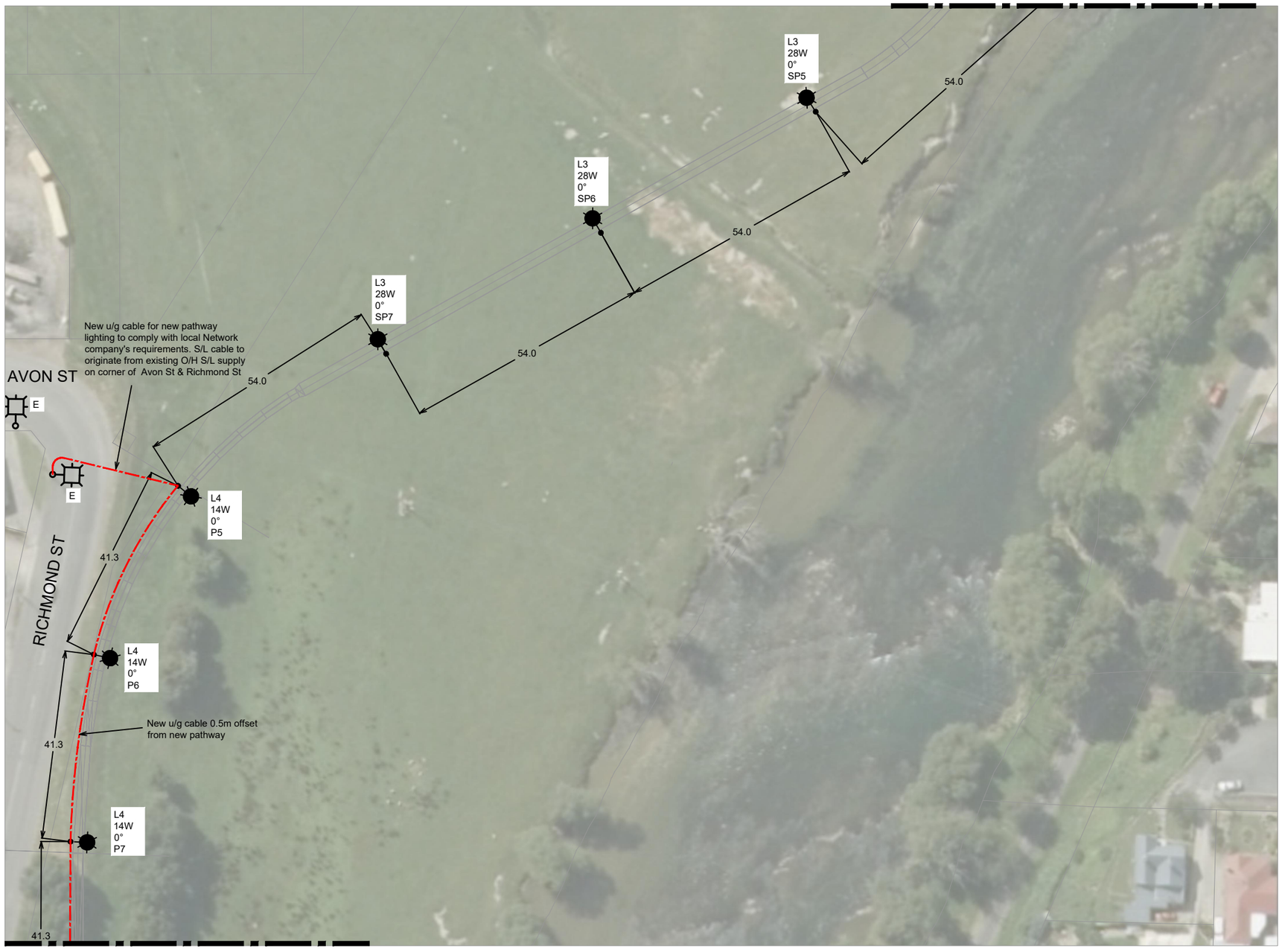
MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
OPTION A

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 002A	2A / 9

Cut line A-A See sheet 2



Cut line B-B See sheet 4

OPTION A

Rev	Description	Date	Des	Dn	Chk	Apd	Or Acp	Contractor			
A	Issue for approval	OCT 20	SM	SM					Designed	S.Muir	OCT 20
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									Checked		
									Approved		

Scale: 1:1000

Revision: B

ESSENTIAL LIGHTING CONSULTANCY

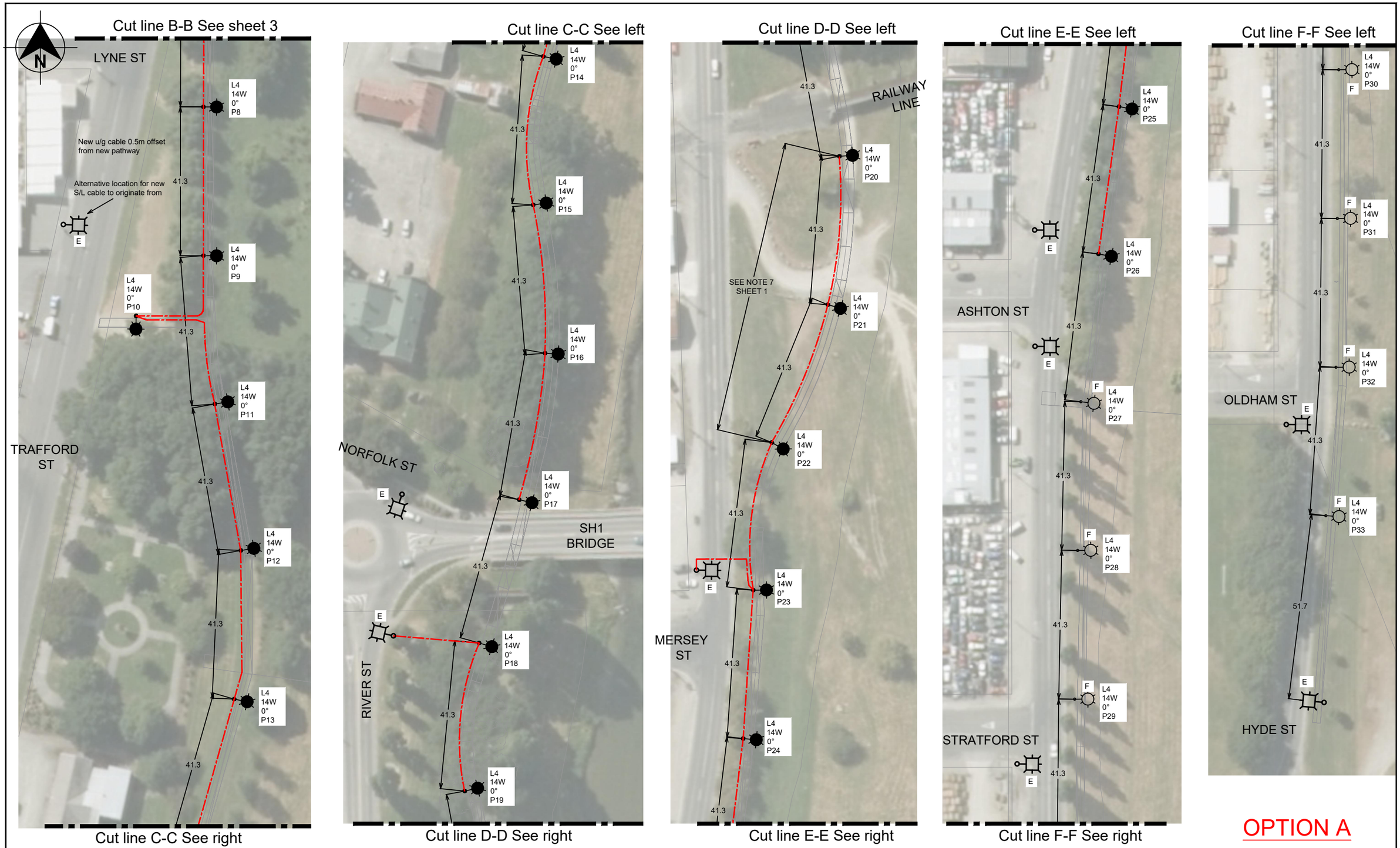
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MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
OPTION A

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 003A	3A / 9



OPTION A

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Approved		

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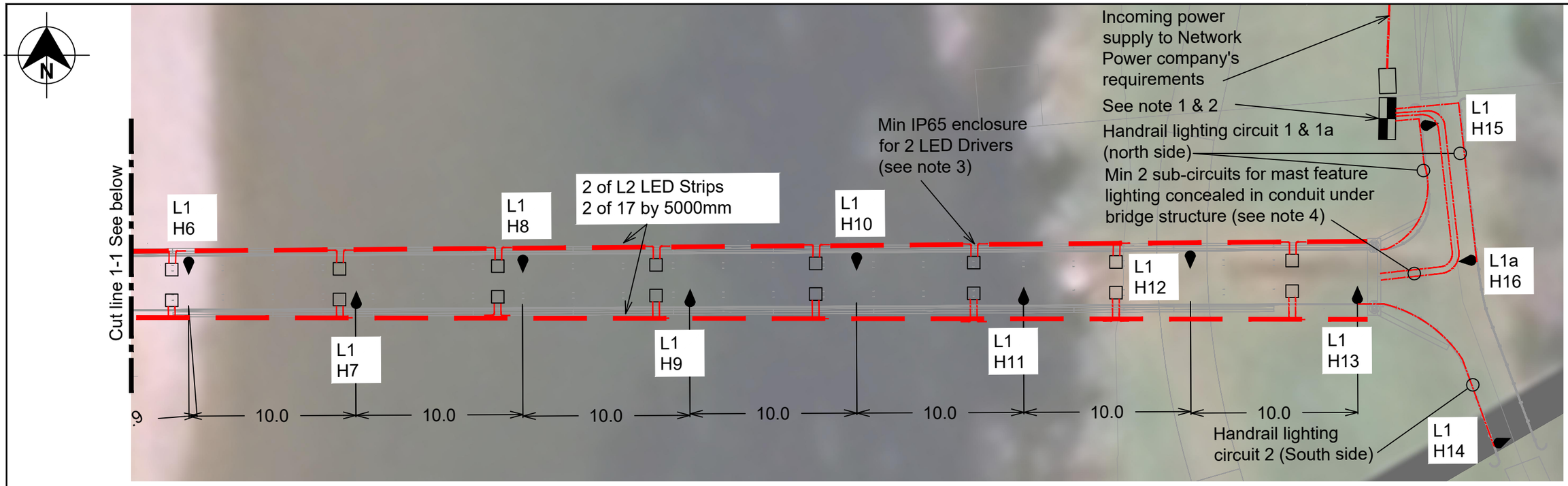
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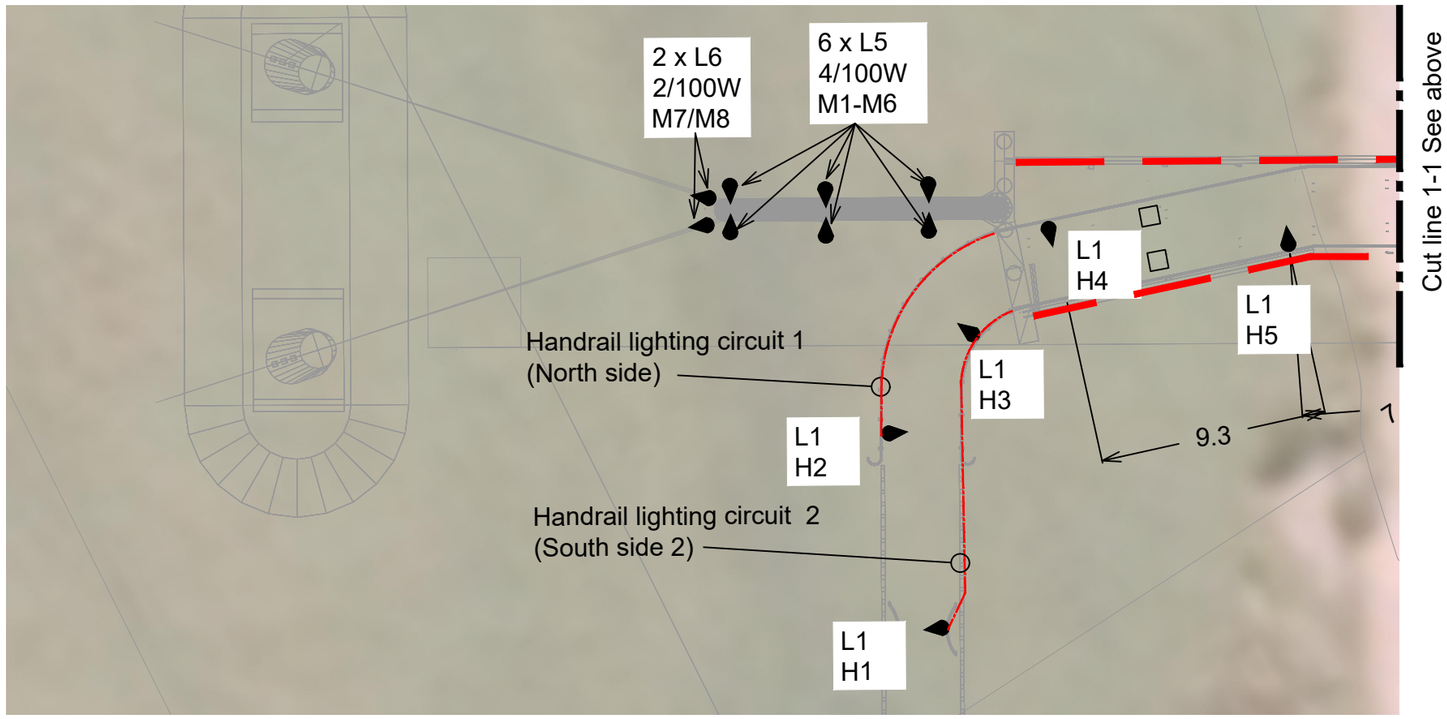
MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
OPTION A

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 004A	4A / 9





Notes:

1. Boundary box supplied & installed by Network Power company to provide LV supply for bridge power supply.
2. LV switchboard with 63A main switch & min. 3 phase 4 way distribution board with sub-circuit protection for all bridge lighting circuits. Switchboard to be housed within IP65 sealed polycarbonate enclosure located adjacent to Network Boundary Box. Min 25% spare capacity within enclosure for future use along with space for 2 Handrail lighting drivers each within min dimensions of 125mm long x 80mm wide x 31mm deep.
3. Each length of LED strip lighting requires a driver housed within an IP65 sealed polycarbonate enclosure. Preference is for 2 drivers per enclosure. Enclosure to be mounted on timber balustrade (below beam level) & wiring access to LED strip is via pre-drilled 25mm diametre hole in web of beam to allow connection of two strips (back to back) at one location.
4. Minimum two sub-circuits originating from LV switchboard for Mast Feature lighting. All cabling to be concealed under bridge structure in grey 25mm Ø rigid conduit. Conduit to be supported or attached throughout its route.

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ESSENTIAL LIGHTING CONSULTANCY

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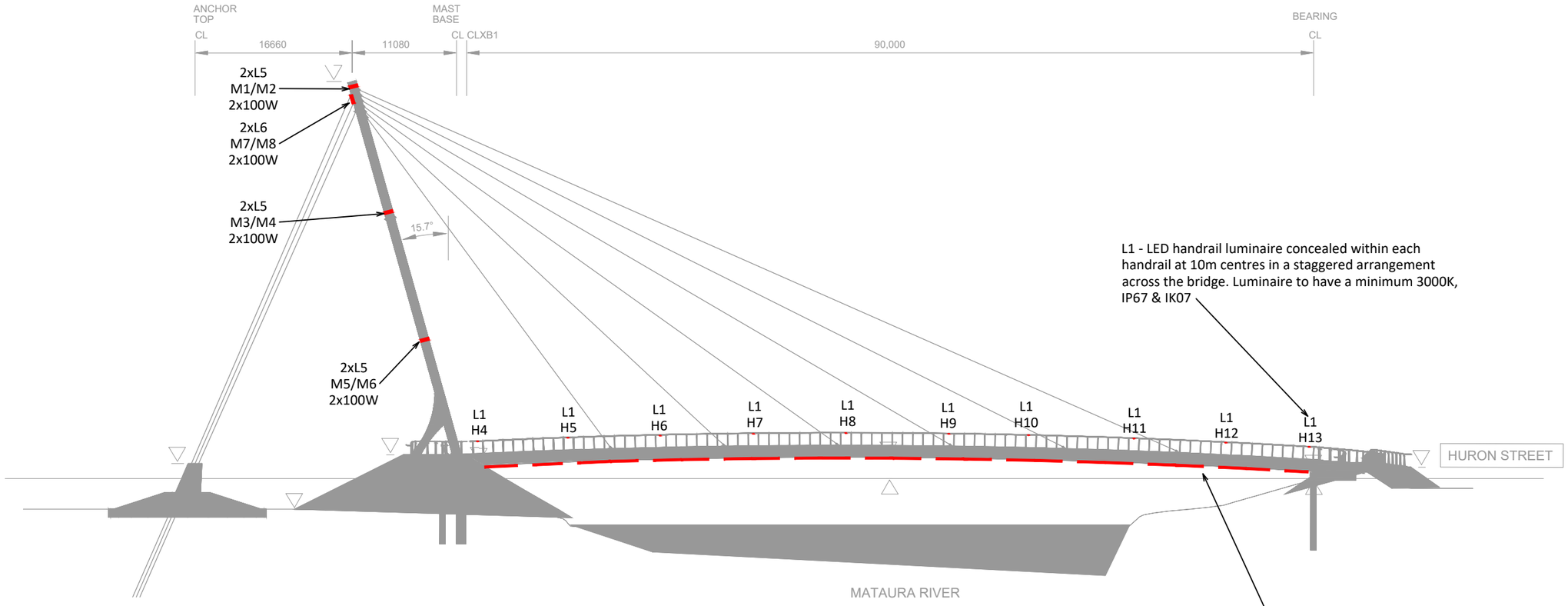
Revision: B

MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
BRIDGE LIGHTING
PLAN VIEW

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 005	5/9



L1 - LED handrail luminaire concealed within each handrail at 10m centres in a staggered arrangement across the bridge. Luminaire to have a minimum 3000K, IP67 & IK07

L2 - 34 off x 5m lengths of LED RGBW strip mounted within aluminum extrusion concealed on underside of steel beam across each side of the bridge. Min attributes to include:

1. 5 m lengths butted together;
2. Side cable entry;
3. Mounting clips every 500mm;
4. IP67, 3000K,
5. 24V DC remote dimmable driver & Casambi controls capability
6. Each length to have a separate driver housed within an IP65 enclosure located max 15m from cable entry

BRIDGE ELEVATION
SCALE 1:500 (A3)

ESSENTIAL LIGHTING CONSULTANCY

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Approved		

Scale: See DWG

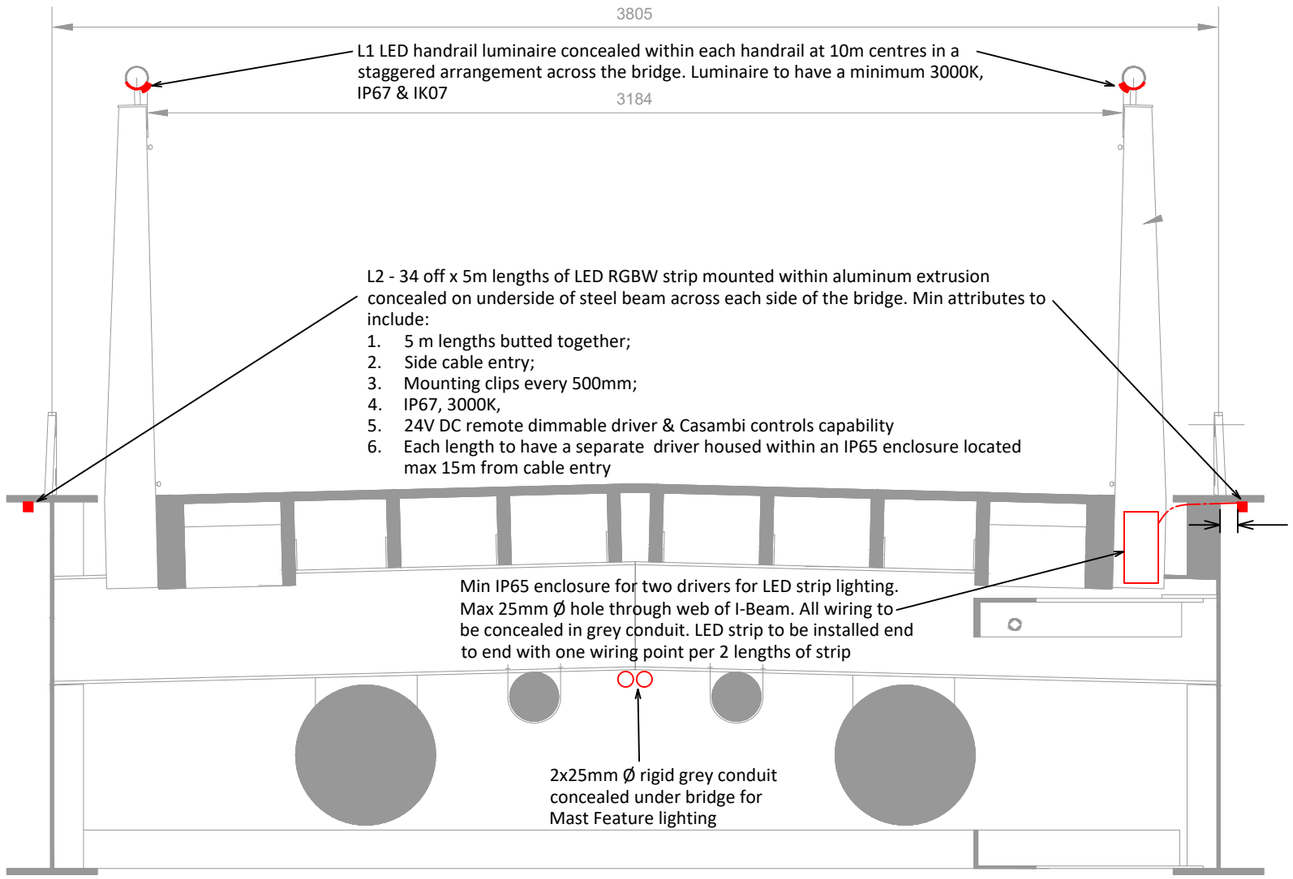
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MATAURA CYCLEBRIDGE LIGHTING

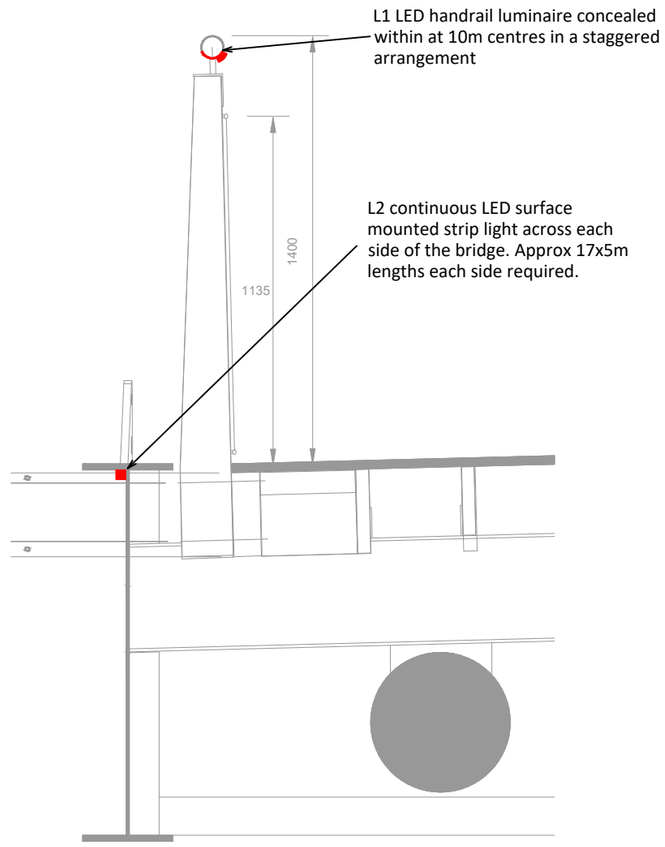
LONGFORD BRIDGE & SHARED PATHWAY
GORE
BRIDGE LIGHTING
BRIDGE ELEVATION

ESSENTIAL LIGHTING CONSULTANCY

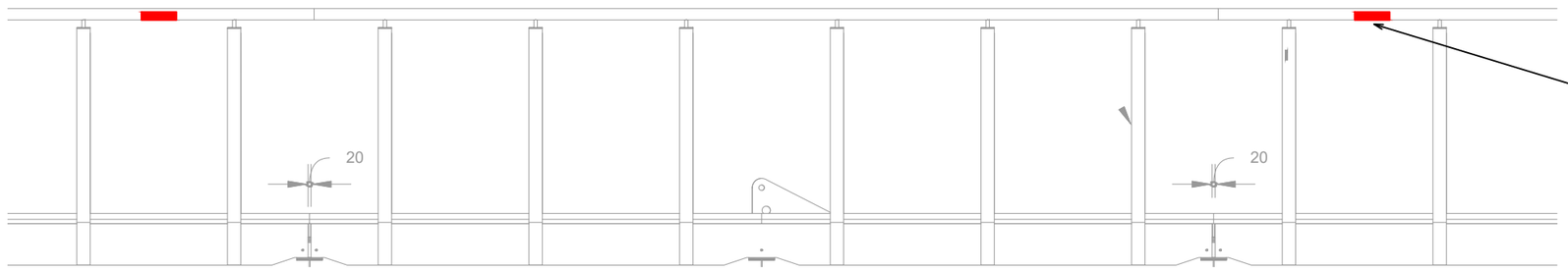
Size	Drawing Number	Sheet
A3	ELC 006	6/9



CROSS SECTION AT CROSS BEAM (& CABLE STAY)
SCALE 1:50 (A3)



SECTION OF CYCLEWAY POST & RAIL (AT 1M CENTRES)
SCALE 1:50 (A3)



ELEVATION OF TYPICAL BALUSTRADE SET-OUT
SCALE 1:25 (A3)

ESSENTIAL LIGHTING CONSULTANCY

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Scale: See DWG

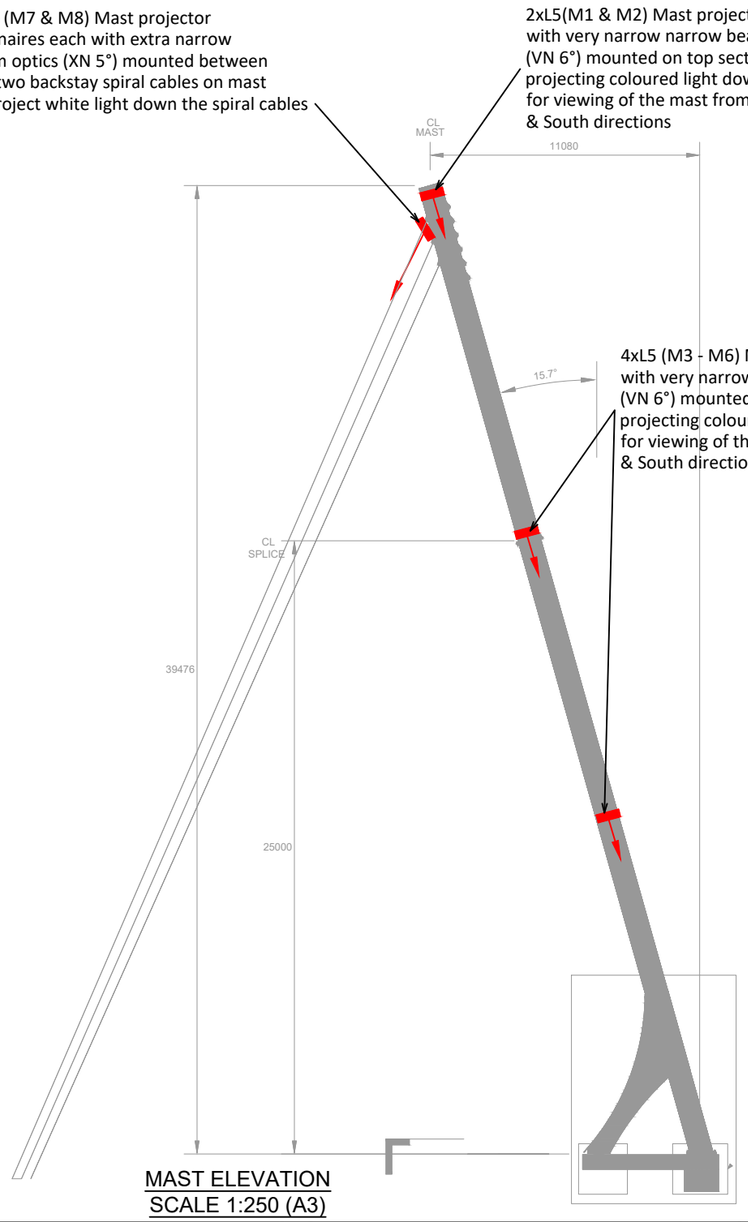
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MATAURA CYCLEBRIDGE LIGHTING

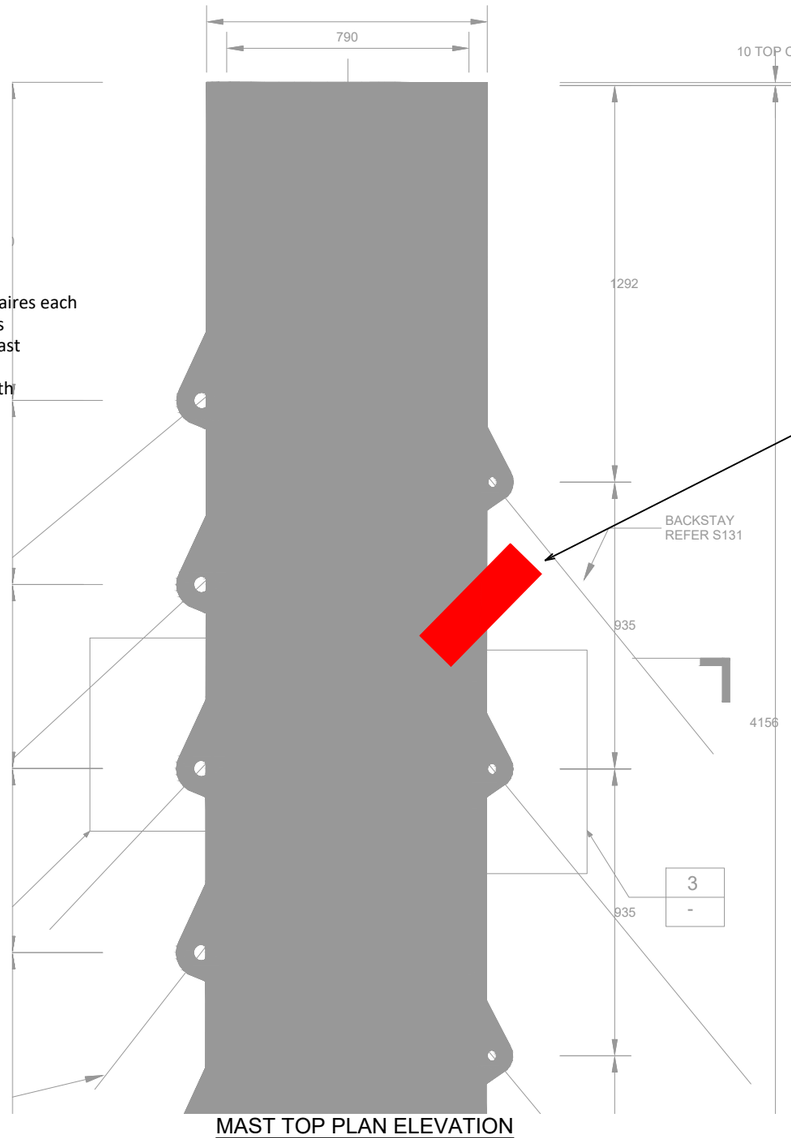
LONGFORD BRIDGE & SHARED PATHWAY
GORE
BRIDGE LIGHTING
HANDRAIL LIGHTING DETAILS

ESSENTIAL LIGHTING CONSULTANCY

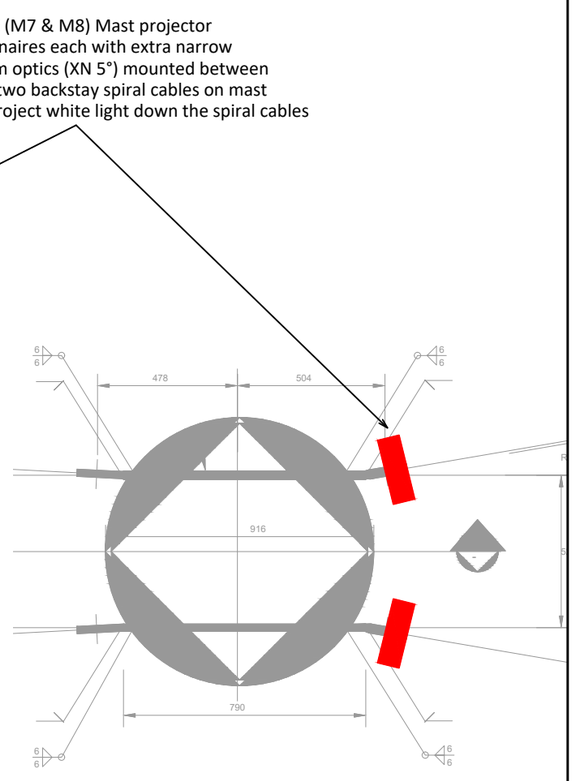
Size	Drawing Number	Sheet
A3	ELC 007	7/9



MAST ELEVATION
SCALE 1:250 (A3)



MAST TOP PLAN ELEVATION
SCALE 1:50 (A3)



MAST TOP PLAN SECTION
SCALE 1:50 (A3)

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Scale: See DWG

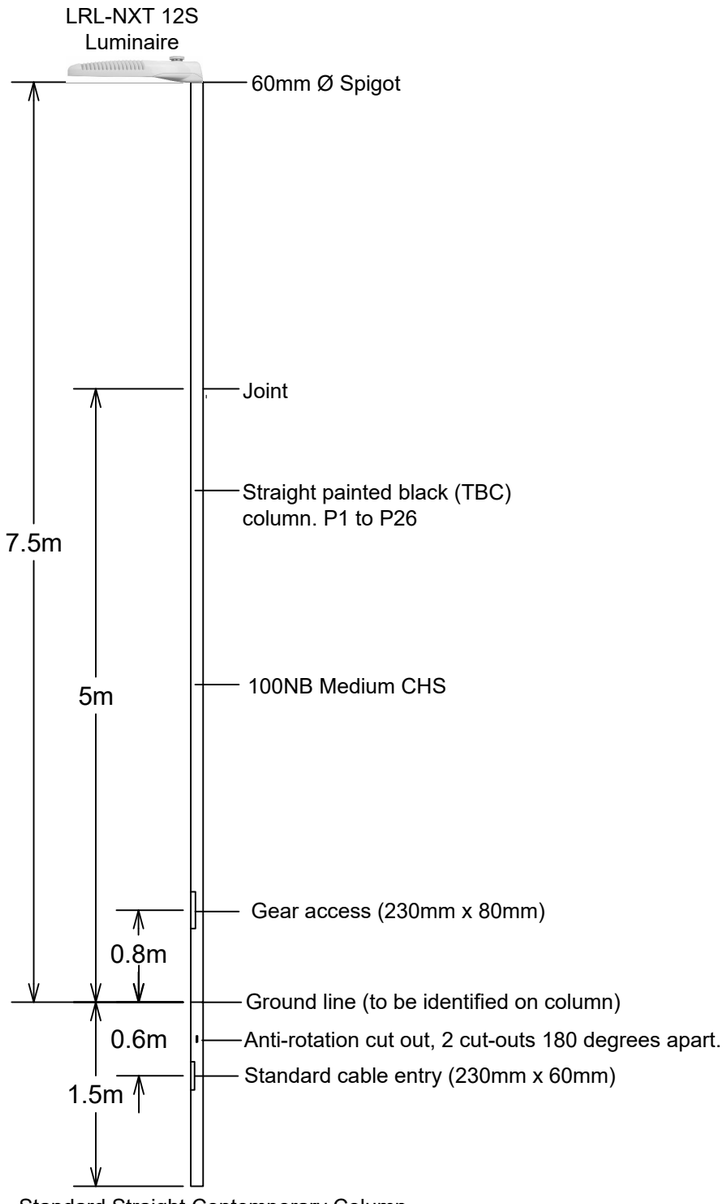
Revision: B

MATAURA CYCLEBRIDGE LIGHTING

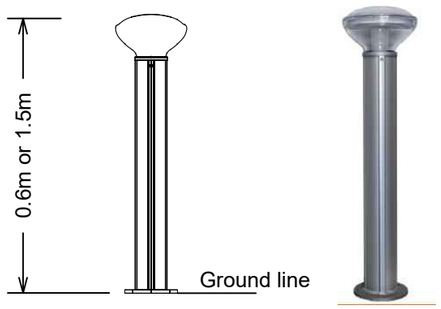
LONGFORD BRIDGE & SHARED PATHWAY
GORE
BRIDGE LIGHTING
MAST LIGHTING DETAILS

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 008	8/9



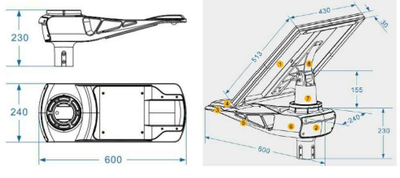
Standard Straight Contemporary Column
Option A & C (on flood bank)
Scale - 1:20



Solar Bollard - SBL NZ Ltd.
Option B
Scale - 1:40

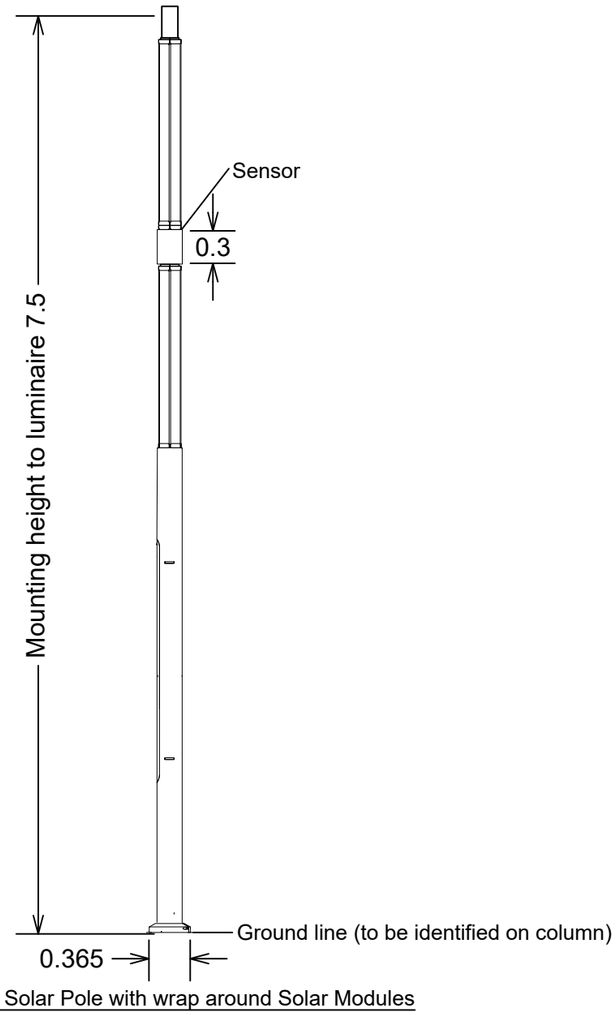
NOT RECOMMENDED BY ELC





GES-G03
Option C (in flood zone)
Scale - 1:40

NOT RECOMMENDED BY ELC



Ligman Solar Pole with wrap around Solar Modules
Option A (in flood zone)
Scale - 1:20

PREFERRED OPTION BY ELC FOR LIGHTING WITHIN FLOOD ZONE

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Scale: See dwg

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MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
COLUMN DETAILS

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 009	9/9



NOTE:
SBL2 Solar Bollard Option B.
Solar Bollard Lighting NZ Ltd.
120W AWW located in direct sunlight

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Scale: 1:1000

Revision: B

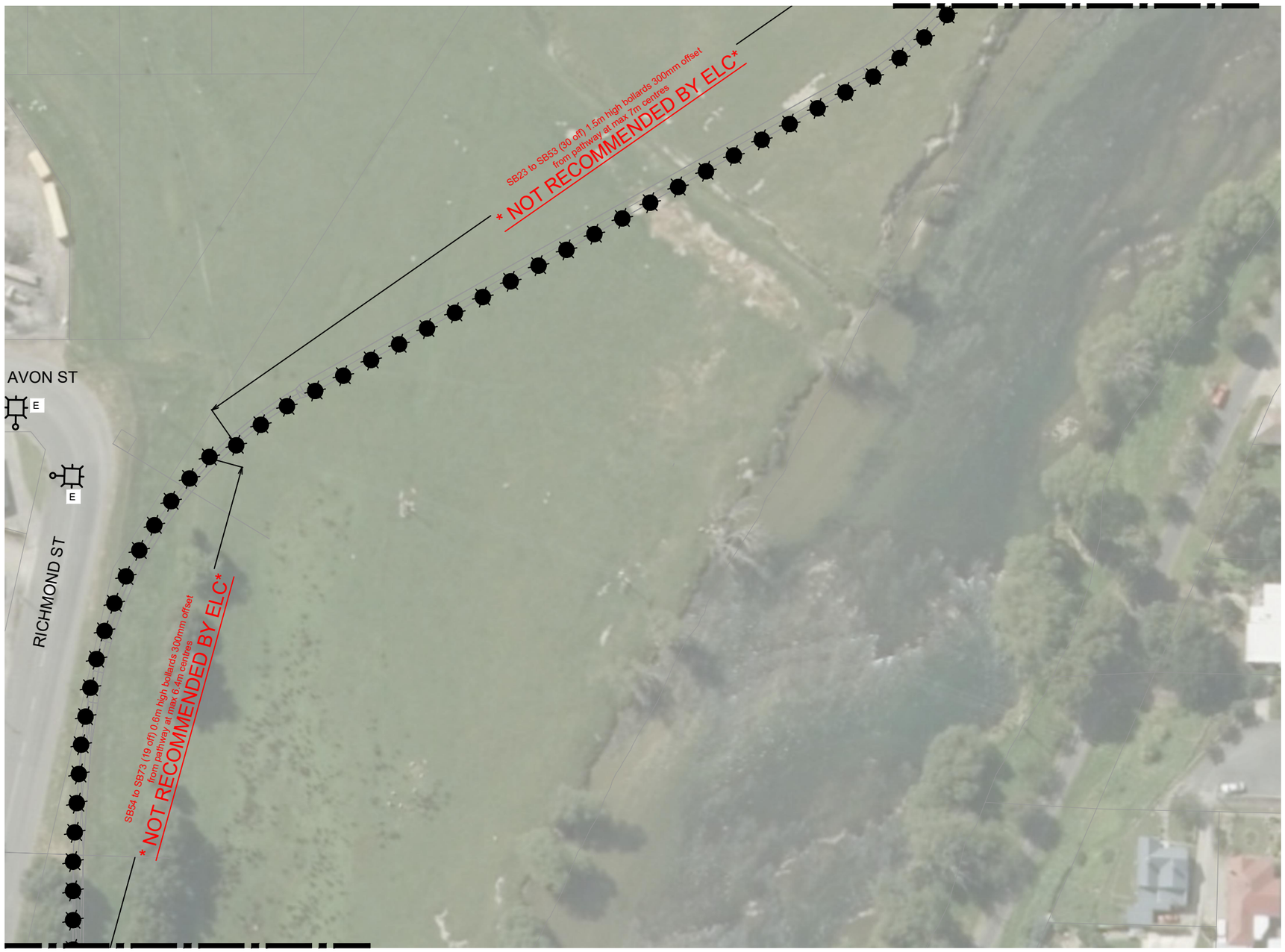
MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
SBL2 SOLAR BOLLARD OPTION B
NOT RECOMMENDED

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 002B	2B / 9

Cut line A-A See sheet 2B



Cut line B-B See sheet 4B

NOTE:
SBL2 Solar Bollard Option B.
Solar Bollard Lighting NZ Ltd.
120W AWW located in direct sunlight

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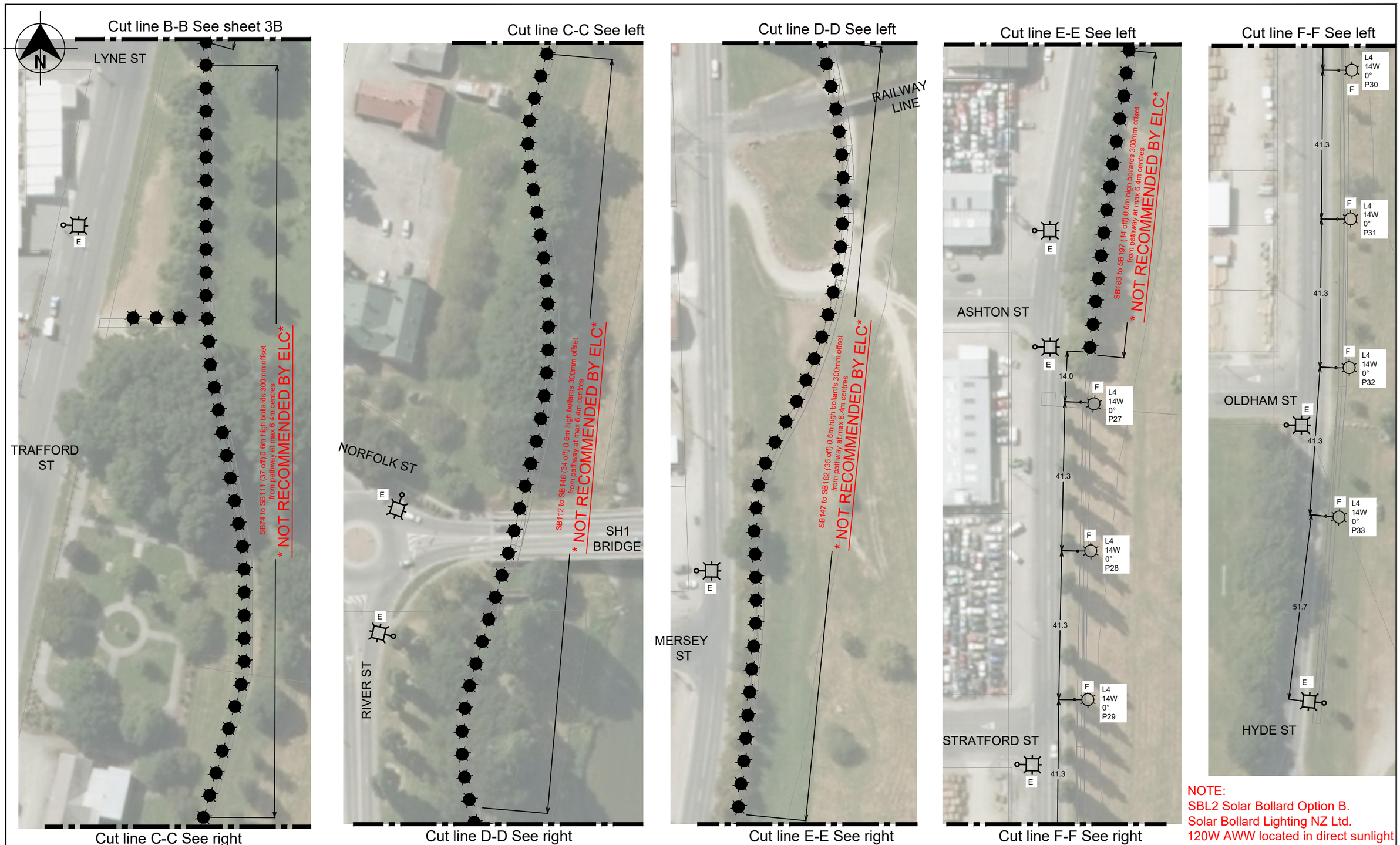
Revision: B

MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
SBL2 SOLAR BOLLARD OPTION B
NOT RECOMMENDED

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 003B	3B / 9



NOTE:
SBL2 Solar Bollard Option B.
Solar Bollard Lighting NZ Ltd.
120W AWW located in direct sunlight

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MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
OPTION B

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 004B	4B / 9



NOTE:
GES Solar Column Option C
G03 30W Series

Rev	Description	Date	Des	Dn	Chk	Apd	Or Acp	Contractor
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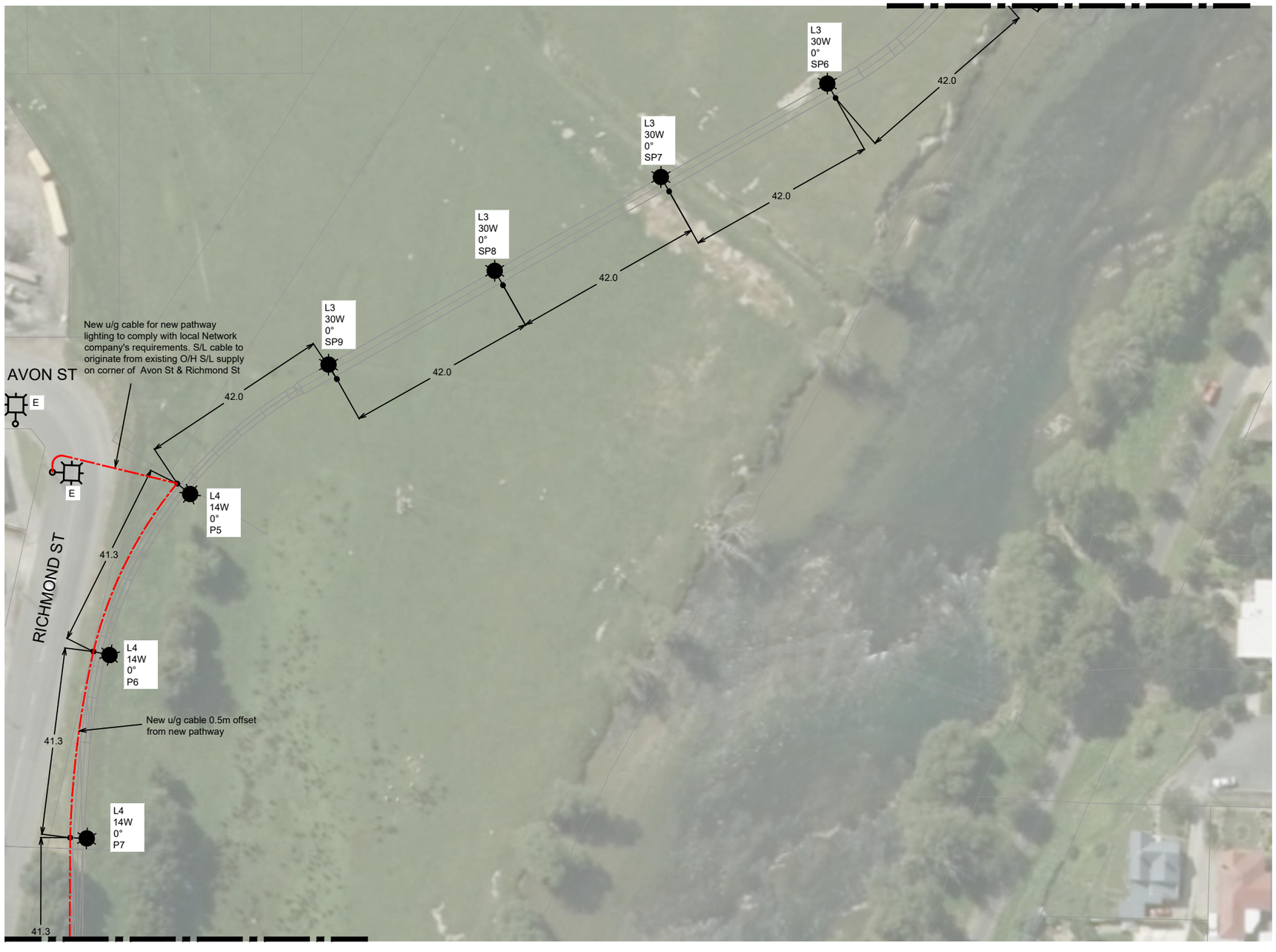
MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
GES SOLAR COLUMN OPTION C

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 002C	2C / 9

Cut line A-A See sheet 2C



Cut line B-B See sheet 4

NOTE:
GES Solar Column Option C
G03 30W Series

Rev	Description	Date	Des	Dn	Chk	Apd	Or Acp	Contractor
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MATAURA CYCLEBRIDGE LIGHTING

LONGFORD BRIDGE & SHARED PATHWAY
GORE
PATHWAY LIGHTING
GES SOLAR COLUMN OPTION C

ESSENTIAL LIGHTING CONSULTANCY

Size	Drawing Number	Sheet
A3	ELC 003C	3C / 9