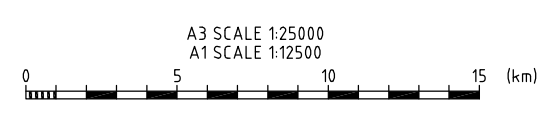


LEGEND

- ☼ A ASYMMETRICAL FULL CUT-OFF TWIN ARC TUBE 400W HIGH PRESSURE SODIUM FORWARD THROW WITH TWIN 3M OUTREACH ARMS MOUNTED ON 20M COLUMN
- ☼ B ASYMMETRICAL FULL CUT-OFF TWIN ARC TUBE 400W HIGH PRESSURE SODIUM FORWARD THROW WITH 3M OUTREACH ARM MOUNTED ON 20M COLUMN
- ☼ C SEMI CUT-OFF TWIN ARC TUBE 400W HIGH PRESSURE SODIUM FORWARD THROW WITH QUAD 1M OUTREACH ARMS MOUNTED ON 20M COLUMN
- ☼ D ASYMMETRICAL FULL CUT-OFF TWIN ARC TUBE 1000W HIGH PRESSURE SODIUM FORWARD THROW WITH THREE 1M OUTREACH ARMS MOUNTED ON 20M POLE
- ☼ E SEMI CUT-OFF TWIN ARC TUBE 400W HIGH PRESSURE SODIUM SIDE THROW WITH 3M OUTREACH ARM MOUNTED ON 15M POLE
- ☼ F ASYMMETRICAL FULL CUT-OFF TWIN ARC TUBE 1000W HIGH PRESSURE SODIUM FORWARD THROW WITH TWIN 1M OUTREACH ARMS MOUNTED ON 20M POLE
- ☼ G SEMI CUT-OFF TWIN ARC TUBE 250W HIGH PRESSURE SODIUM FORWARD THROW WITH 3M OUTREACH ARM MOUNTED ON 12m POLE
- H 150W HPS. BRACKET TO BE DESIGNED BY CONTRACTOR TO SUIT UNDER BRIDGE LIGHT.
- ☼ J EXISTING LUMINAIRE TO BE REMOVED
- ☼ K EXISTING LUMINAIRE TO BE RETAINED
- ☼ L LEDs, BLACK, MOUNTED ON 5m HOT-DIP GALVANISED PAINTED POLE
- ☼ M SEMI CUT-OFF TWIN ARC TUBE 250W HIGH PRESSURE SODIUM FORWARD THROW WITH 3M OUTREACH ARM MOUNTED ON 15m POLE
- ☼ N SEMI CUT-OFF TWIN ARC TUBE 250W HIGH PRESSURE SODIUM FORWARD THROW WITH TWIN 3M OUTREACH ARMS MOUNTED ON 12m POLE
- P 250W HPS. BRACKET TO BE DESIGNED BY CONTRACTOR TO SUIT UNDER BRIDGE LIGHT.
- ☼ R SEMI CUT-OFF TWIN ARC TUBE 150W HIGH PRESSURE SODIUM FORWARD THROW WITH 1M OUTREACH ARM MOUNTED ON 12m POLE



**FOR APPROVAL
NOT FOR CONSTRUCTION**

Base level: MSL AUCK. VERT. DATUM 1946	
Grid Reference: MT EDEN 2000	
Originator No.	
Project No. 20.1.11-3-D-C-161-100	Rev. B

No.	Revision	By	Chk	Appd	Date
B	FOR STATUTORY APPROVAL	BNRB			22.07.10
A	ISSUE FOR SRT / NZTA REVIEW	BNRB			25.06.10

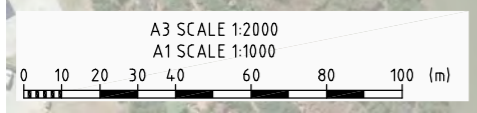
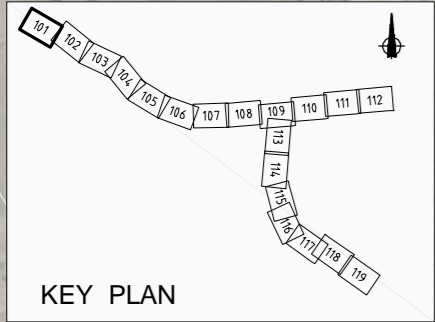
Drawing Originator:

Original Scale (A1) 1:12500	Designer GW
Reduced Scale (A3) 1:25000	Reviewer RM
	Drafting Checked -
	Consultant Approval AL
	Received by Beca

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION
PROJECT
SH16 / SH20

Title: PREMIINARY ROAD LIGHTING
KEY PLAN



LIMIT OF PROJECT

JOIN LINE SHEET 102

FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No.
20.1.11-3-D-E-161-101

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

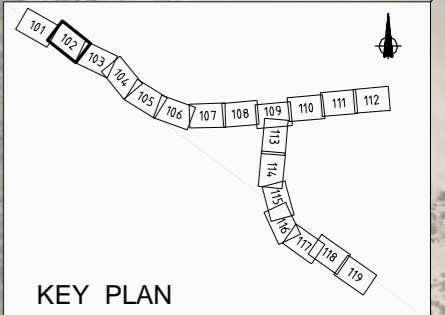
Drawing Originator:
aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
		Drafting Checked	WC
		Consultant Approval	JH
		Reviewed by	Beca



Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 1**



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946

Grid Reference:
MT EDEN 2000

Originator No.:

Project No. 20.111-3-D-E-161-102

Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

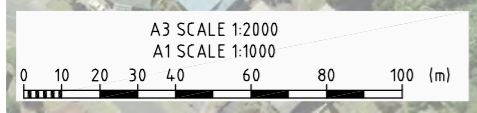
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aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
		Drafting Checked	WC
		Consultant Approval	JH
		Reviewed by Beqa	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 2**



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:
MT EDEN 2000

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

Drawing Originator:
aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8018
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

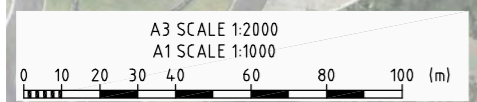
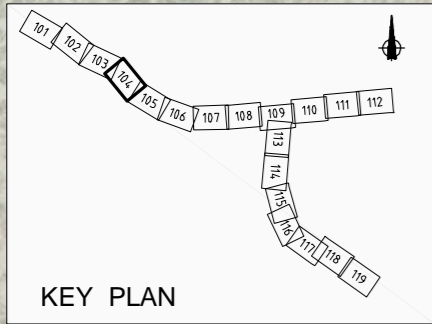
Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
		Drafting Checked	WC
		Consultant Approval	JH
		Reviewed by	Beca

NZ TRANSPORT AGENCY
WAKA KOTAHĪ

Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 3**

Originator No.	
Project No.	20.111-3-D-E-161-103
Rev.	B



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level: MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.111-3-D-E-161-104
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

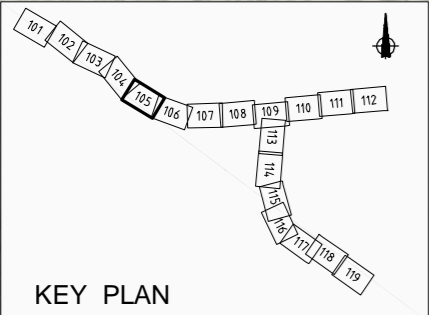
Drawing Originator:
aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
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		Consultant Approval	JH
		Reviewed by	Beca

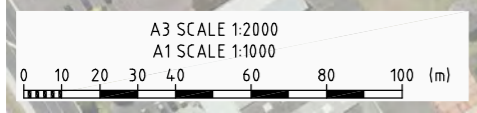


Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 4**



KEY PLAN



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No.
20.111-3-D-E-161-105
Rev.
B

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

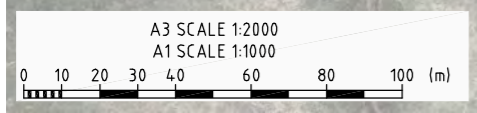
Drawing Originator:
aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aep.aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
		Drafting Checked	WC
		Consultant Approval	JH
		Reviewed by	Beca



Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 5**



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. **20.111-3-D-E-161-106** Rev. **B**

No.	Revision	By	Chk	Appd	Date
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A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

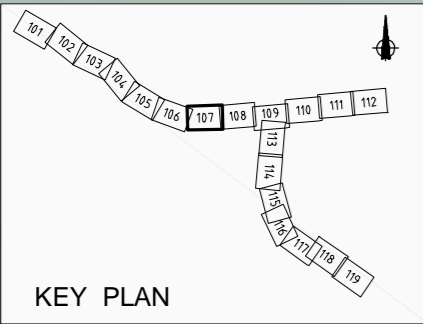
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aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
		Drafting Checked	WC
		Consultant Approval	JH
		Reviewed by	Beca



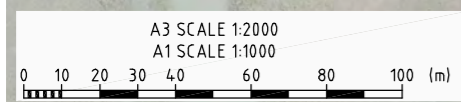
Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 6**



WAITEMATA HARBOUR

WATERVIEW ESTUARY



No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

Drawing Originator:
aurecon
 Aurecon New Zealand Limited
 139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
 Telephone: +64 9 520-8019
 Facsimile: +61 9 524-7816
 Email: auckland@aurecongroup.com

Original Scale (A1)	1:1000	Design Engineer	TT
Reduced Scale (A3)	1:2000	Review Engineer	AH
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		Consultant Approval	JH
		Reviewed by	Beca



Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

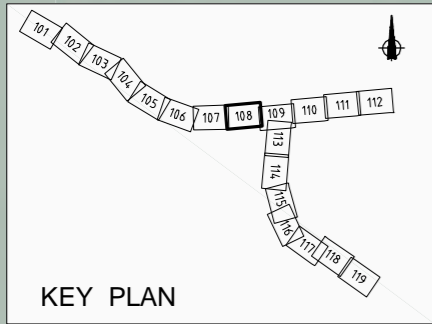
Title: **ROAD LIGHTING SHEET 7**

FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
 Grid Reference:
MT EDEN 2000

Originator No. _____

Project No. **20.111-3-D-E-161-107** Rev. **B**



WAITEMATA HARBOUR



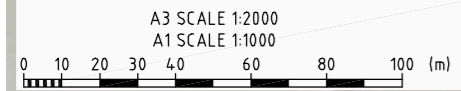
JOIN LINE SHEET 107

JOIN LINE SHEET 109

WATERVIEW ESTUARY INLET

OAKLEY INLET

HEMINGTON ST



FOR APPROVAL
NOT FOR CONSTRUCTION

Base Level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.111-3-D-E-161-108
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUED FOR STATUTORY APPROVAL	TT	COB	JH	02.08.10
A	ISSUED FOR NZTA/SRT REVIEW	TT	COB	JH	23.06.10

Drawing Originator:
aurecon
Aurecon New Zealand Limited
139 Carlton Gore Road (PO Box 9762) Newmarket, Auckland New Zealand
Telephone: +64 9 520-8019
Facsimile: +61 9 524-7816
Email: auckland@aurecongroup.com

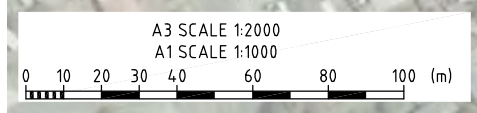
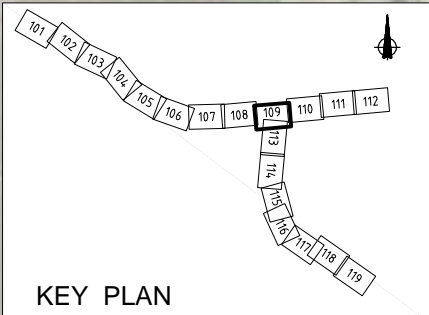
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		Consultant Approval	JH
		Reviewed by	Beca

NZ TRANSPORT AGENCY
WAKA KOTAHU

Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 8**

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Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000

Originator No.
Project No. 20.1.11-3-D-C-161-109
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

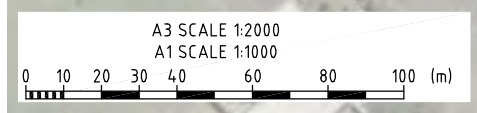
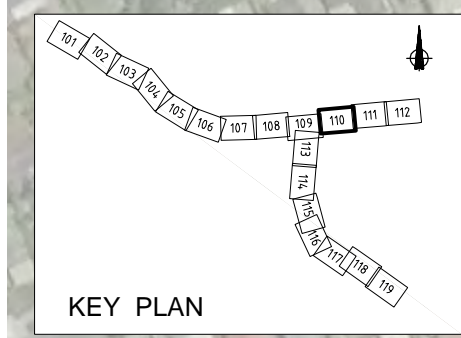
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Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHĪ

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 9



No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL				23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

Drawing Originator:

Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
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		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

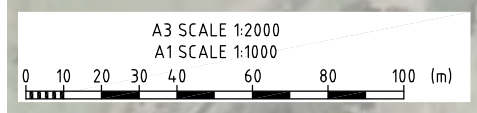
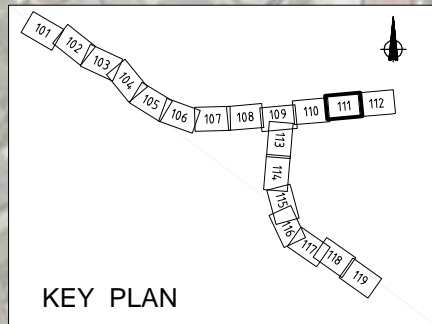
Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 10

FOR APPROVAL
NOT FOR CONSTRUCTION

Base level: MSL AUCK. VERT. DATUM 1946
Grid Reference: MT EDEN 2000

Originator No. [blank]
Project No. 20.1.11-3-D-C-161-110
Rev. B



FOR APPROVAL
NOT FOR CONSTRUCTION

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.1.11-3-D-C-161-111
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

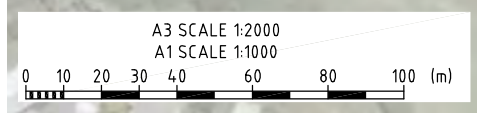
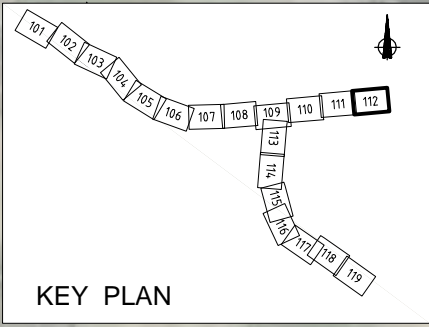
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		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 11



FOR APPROVAL
NOT FOR CONSTRUCTION

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.1.11-3-D-C-161-112
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

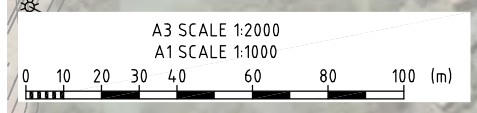
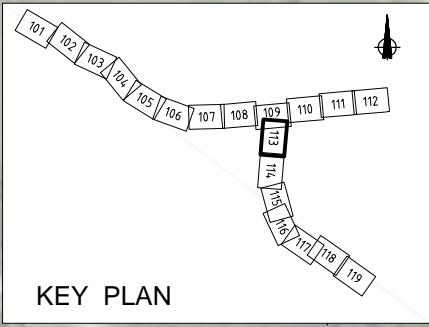
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Reduced Scale (A3)	1:2000	Review Engineer	RM
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		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION
PROJECT
SH16 / SH20

Title: ROAD LIGHTING
SHEET 12



No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL				23.07.10
A	ISSUE FOR SRT / NZTA REVIEW				25.06.10

Drawing Originator:

Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 13

FOR APPROVAL
NOT FOR CONSTRUCTION

Base level:
MSL AUCK. VERT. DATUM 1946

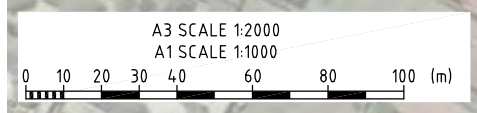
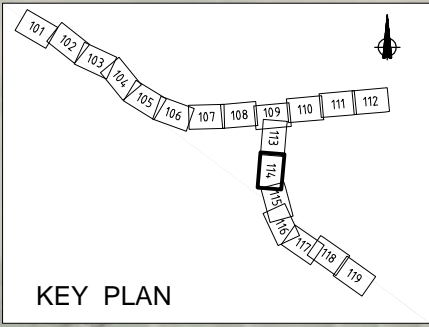
Grid Reference:
MT EDEN 2000

Originator No.:

Project No. 20.111-3-D-C-161-113

Rev. B

XR 00 - - - -02-



FOR APPROVAL
NOT FOR CONSTRUCTION

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000

Originator No.

Project No. 20.1.11-3-D-C-161-114

Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL				23.07.10
A	ISSUE FOR SRT / NZTA REVIEW				25.06.10

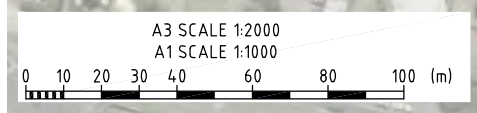
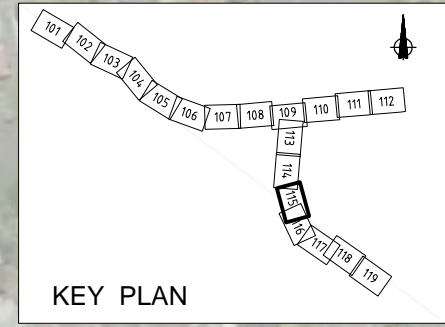
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Reduced Scale (A3)	1:2000	Review Engineer	RM
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		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION
PROJECT
SH16 / SH20

Title: ROAD LIGHTING
SHEET 14



**FOR APPROVAL
NOT FOR CONSTRUCTION**

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000

Originator No.
Project No. 20.1.11-3-D-C-161-115
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL				23.07.10
A	ISSUE FOR SRT / NZTA REVIEW				25.06.10

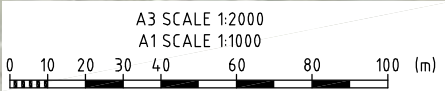
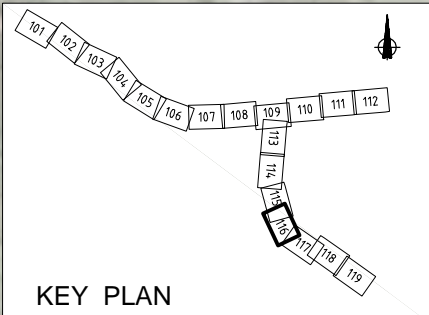
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Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 15



FOR APPROVAL
NOT FOR CONSTRUCTION

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.1.11-3-D-C-161-116
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

Drawing Originator:

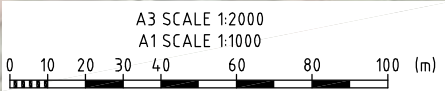
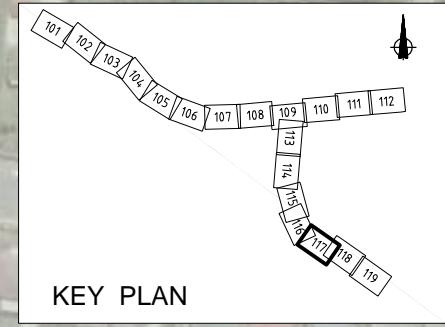
Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION
PROJECT
SH16 / SH20

Title: ROAD LIGHTING
SHEET 16

XR 08 - - - - -02-



**FOR APPROVAL
NOT FOR CONSTRUCTION**

Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.1.11-3-3-D-C-161-117
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

Drawing Originator:

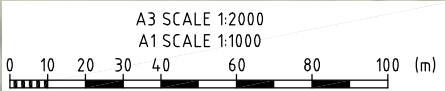
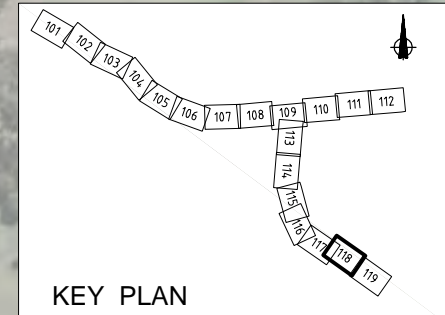
Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **ROAD LIGHTING SHEET 17**

XR 08



FOR APPROVAL
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Base level:
MSL AUCK. VERT. DATUM 1946
Grid Reference:

MT EDEN 2000
Originator No.
Project No. 20.1.11-3-D-C-161-118
Rev. B

No.	Revision	By	Chk	Appd	Date
B	ISSUE FOR STATUTORY APPROVAL	ME			23.07.10
A	ISSUE FOR SRT / NZTA REVIEW	ME			25.06.10

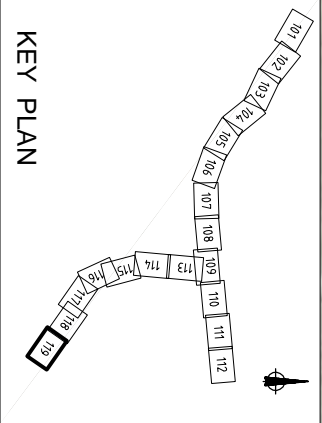
Drawing Originator:

Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received by Beca	

NZ TRANSPORT AGENCY
WAKA KOTAHI

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: ROAD LIGHTING SHEET 18



A3 SCALE 1:2000
 A1 SCALE 1:1000
 0 10 20 30 40 60 80 100 (m)

No.	Revision	By	CHK	Appl	Date
A	ISSUE FOR SRT / NZTA REVIEW	HE			23.07.10
B	ISSUE FOR STATUTORY APPROVAL	HE			25.06.10



Original Scale (A1)	1:1000	Design Engineer	GW
Reduced Scale (A3)	1:2000	Review Engineer	RM
		Drafting Checked	-
		Consultant Approval	AL
		Received By Becca	



Project: WATERVIEW CONNECTION
 PROJECT SH16 / SH20

Title: ROAD LIGHTING
 SHEET 19

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Board level:
 MSL AUCK. VERT. DATUM 1946
 Grid Reference:
 MT EDEN 2000

Originator No. MT EDEN 2000
 Project No. 20.111-3-D-C-161-119
 Rev. B