

CONCEPT DRAINAGE AUGMENTATION WORKS

STAGE 1 EXPANSION WORKS

SECTION 96 APPLICATION

WARRINGAH MALL, BROOKVALE

GENERAL NOTES

- CG1.

THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR CIVIL ENGINEERING PURPOSES ONLY. ALL DISCREPANCIES WITH OTHER CONSULTANTS' DOCUMENTATION THAT COULD RESULT IN CHANGES TO THE CIVIL ENGINEERING DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- CG2.

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS FOR THESE WORKS AND/OR AS DIRECTED BY THE SUPERINTENDENT.
- CG3.

THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY. IS NOT GUARANTEED COMPLETE NOR CORRECT.
- CG4.

CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER AND SUPERINTENDENT.
- CG5.

CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS, ETC. TO THE EXTENT SPECIFIED.
- CG6.

ALL SITE REGRAVING AREAS SHALL BE FINALLY GRADED TO THE SATISFACTION OF THE SUPERINTENDENT.
- CG7.

SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- CG8.

ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- CG9.

ANY QUANTITIES GIVEN ARE FOR GUIDANCE ONLY.
- CG10.

PLANS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL PLANS BY WESTFIELD

DATE PLOTTED: 30 August, 2013 - 5:01pm

XREF: X-BORDER
CAD FILE: H:\Projects\805\FY14\500_599 Other Cardno Business Units\89914\004 Warringah Mall - Stage 1\Stage 1 Culverts\Drawings\Build\Civil\TeW\4548-300(C).dwg

REV	DATE	REVISIONS	DN	DN	DN
C	30/08/2013	LAYOUT AMENDMENTS	NIX	SGB	
B	22/05/2013	CLIENT AMENDMENTS	NIX	SGB	
A	07/05/2013	SECTION 96 APPLICATION	NIX	SGB	

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APPROVED	PROJECT DIRECTOR	DATE	PROJECT MANAGER	DATE
DESIGNED	SCB	BP		
DRAWN	NIX	SGB		
REVIEWED				



WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
COVER SHEET, GENERAL NOTES AND DRAWING SCHEDULE

DRAWING STATUS:	DRAWING NUMBER	REV
NOT FOR CONSTRUCTION	W4548-300	C

REV	DATE	REVISIONS	DRN	CHK
C	20/06/2013	AMENDED FLOOD LEVELS	LDB	SGB
B	22/05/2013	CLIENT AMENDMENTS	NDK	SGB
A	07/05/2013	SECTION 96 APPLICATION	NDK	SGB

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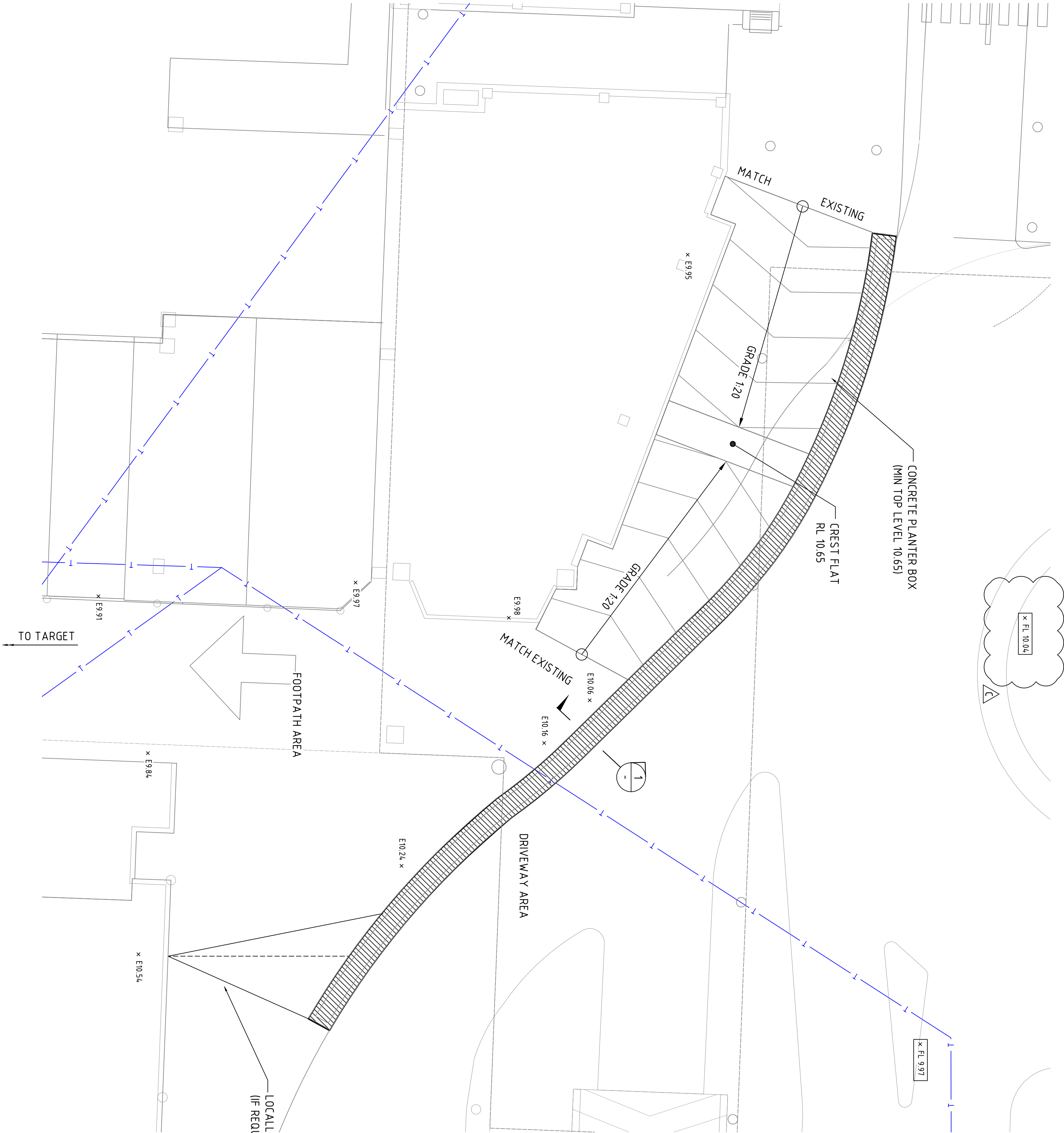
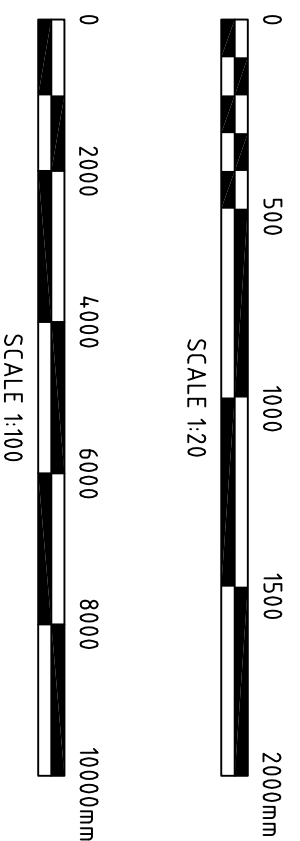


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PROJECT DIRECTOR	DRAWN	NDK	SGB
DATE	PROJECT MANAGER	DATE	

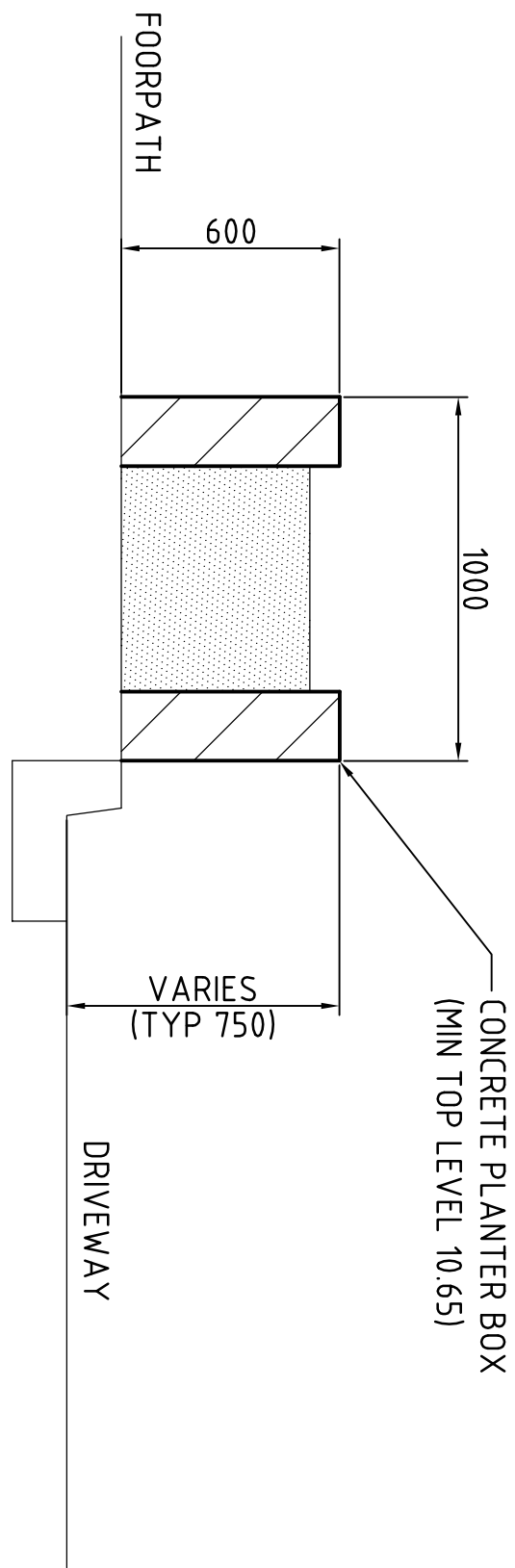


WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
TARGET ENTRY - CONCRETE PLANTER BOX

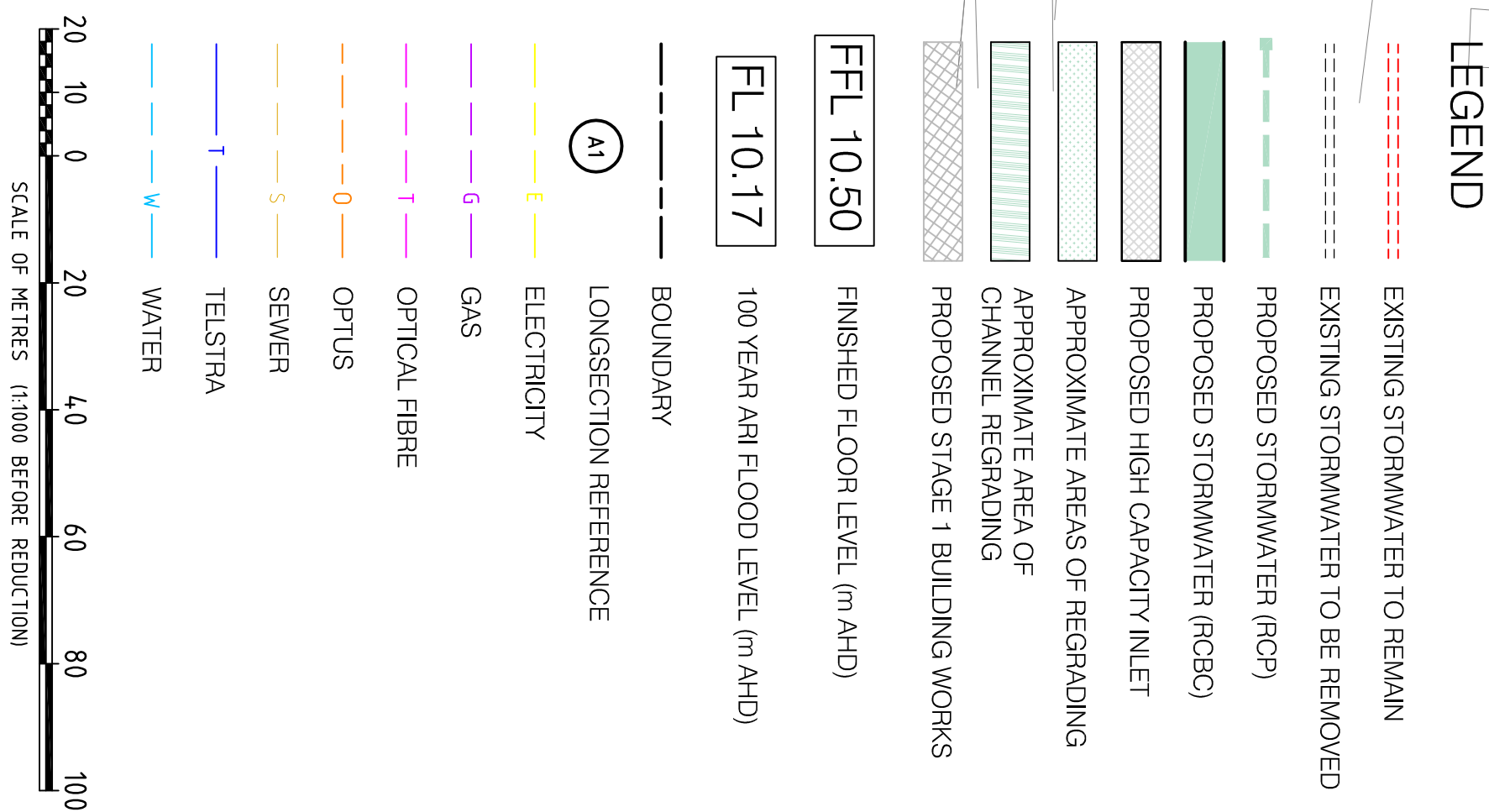
NOT FOR CONSTRUCTION
DRAWING NUMBER:
W4548-317
REV: **C**



SECTION 1
SCALE 1:20



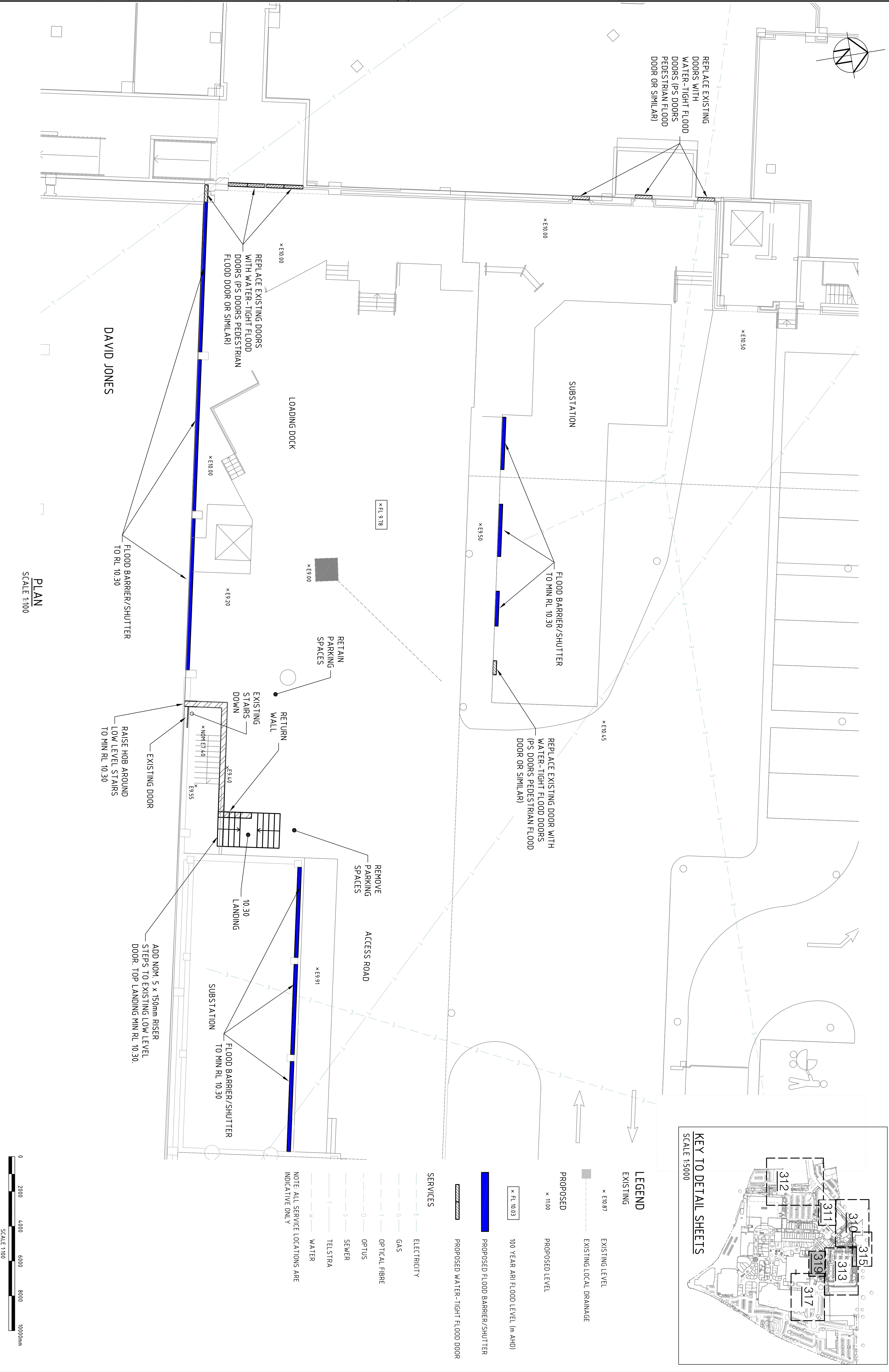
LEGEND
EXISTING
× E10.24
× FL 1109
EXISTING LEVEL
100 YEAR ARI FLOOD LEVEL (m AHD)



NOTE:
LOCATION AND LEVEL OF ALL
SERVICES TO BE CONFIRMED ON SITE

WESTFIELD DESIGN & CONSTRUCTION WARRINGAH MALL CONCEPT DRAINAGE AUGMENTATION WORKS STAGE 1 EXPANSION WORKS GENERAL ARRANGEMENT PLAN - STAGE 1 EXPANSION WORKS	DRAWING STATUS:	NOT FOR CONSTRUCTION
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	REV	E

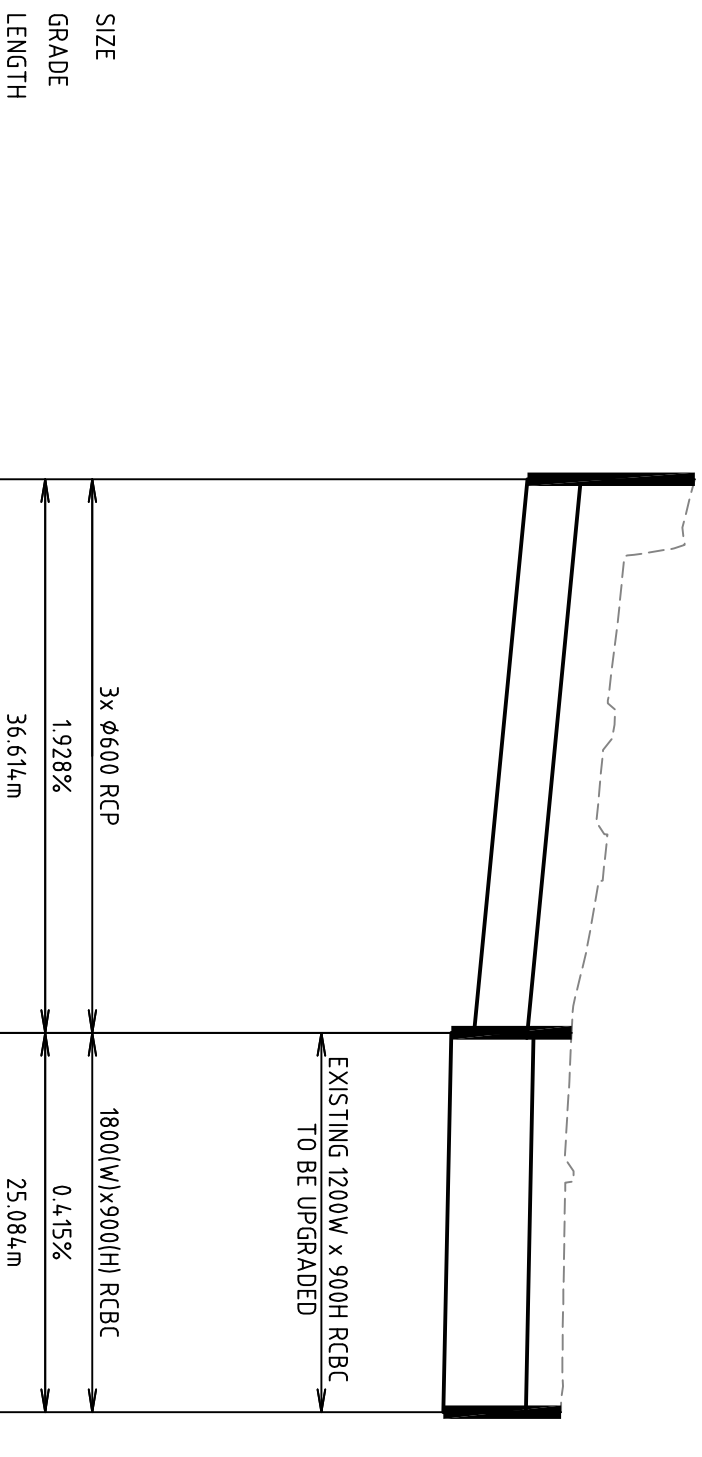
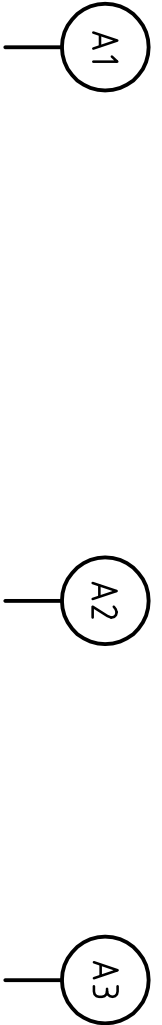
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DRAWING NUMBER:		
W4548-319		REV



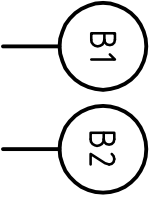
INVERT LEVEL		
SURFACE LEVEL		
DEPTH TO INVERT		
CHAINAGE		
0		
	36.614	61.698
	1.290	1.557
	9.544	9.407
	8.254	7.850
	7.954	

LONGITUDINAL SECTION PIT A1-A3
SCALE 1:500(H) 1:100(V)

SCALE 1:500(H) 1:100(V)



INVERT LEVEL	EXISTING SURFACE LEVEL	PROPOSED SURFACE LEVEL	TOP OF CULVERT ROOF	DEPTH TO INVERT	DEPTH OF CUT/FILL	CULVERT COVER (PROPOSED SURFACE LEVEL LESS TOP OF CULVERT ROOF)	CHAINAGE
8.000	10.665	10.665	9.765	2.665	0.000	0.900	0
7.983	10.634	10.634	9.748	2.651	0.000	0.886	6.8
7.740	9.420	9.805	9.505	1.680	0.385	0.300	103.109
7.500		9.792	9.265	2.290	0.000	0.527	198.657



EX-ELECTRICITY (TO BE CONFIRMED
AND ADJUSTED IF REQUIRED)



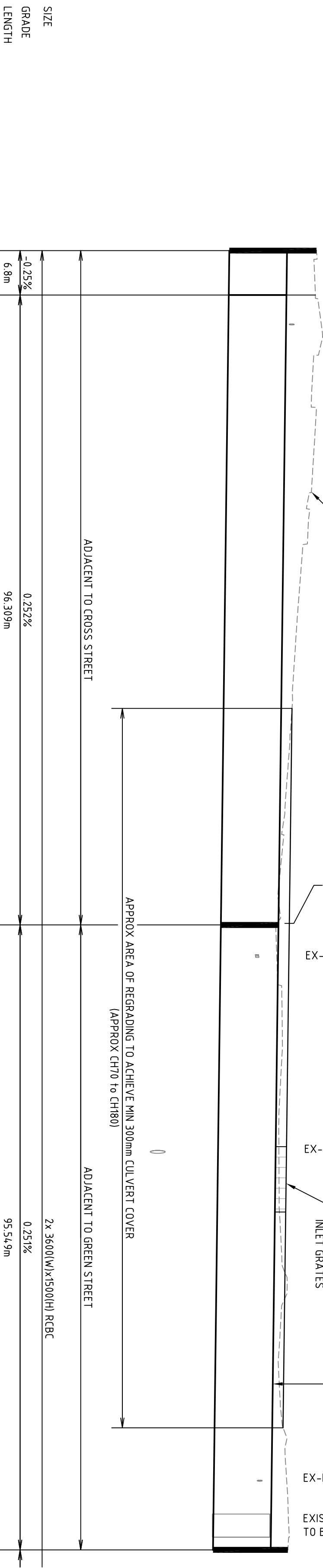
EX-TELSTRA (TO BE ADJUSTED)

EX-TELSTRA (TO BE ADJUSTED)

EX-SEWER (TO REMAIN)

PROPOSED S
HCAPACITY
ET GRATES

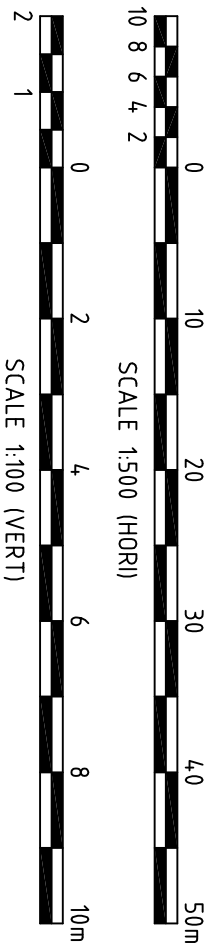
EXISTING 3300W x 1800H RCBC
TO BE PARTIALLY REMOVED



LONGITUDINAL SECTION PIT B1-B4
SCALE 1:50(H) 1:100(V)

SCALE 1:500(H) 1:100(V)

NOTE:
LOCATION AND LEVELS OF ALL SERVICES IS
INDICATIVE ONLY. SERVICES TO BE LOCATED AND
POTHOLED PRIOR TO CONSTRUCTION

[illegible]

PROJECT DIRECTOR DATE		PREPARED	CHECKED
	DESIGNED	SGB	BP
	DRAWN	NDK	SGB
APPROVED	REVIEWED		
PROJECT MANAGER DATE			



WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
 CONCEPT DRAINAGE AUGMENTATION WORKS
 STAGE 1 EXPANSION WORKS
 STORMWATER LONGSECTIONS

DRAWING STATUS: **NOT FOR CONSTRUCTION**

DRAWING NUMBER: **W4548-320**

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm A10N ORIGINAL

REV	DATE	SECTION	96 APPLICATION	REVISIONS	DRN	CHK
A	07/05/2013	SECTION 96 APPLICATION	NDK	SGB		
B	22/05/2013	CLIENT AMENDMENTS	NDK	SGB		
C	30/08/2013	LAYOUT AMENDMENTS	NDK	SGB		

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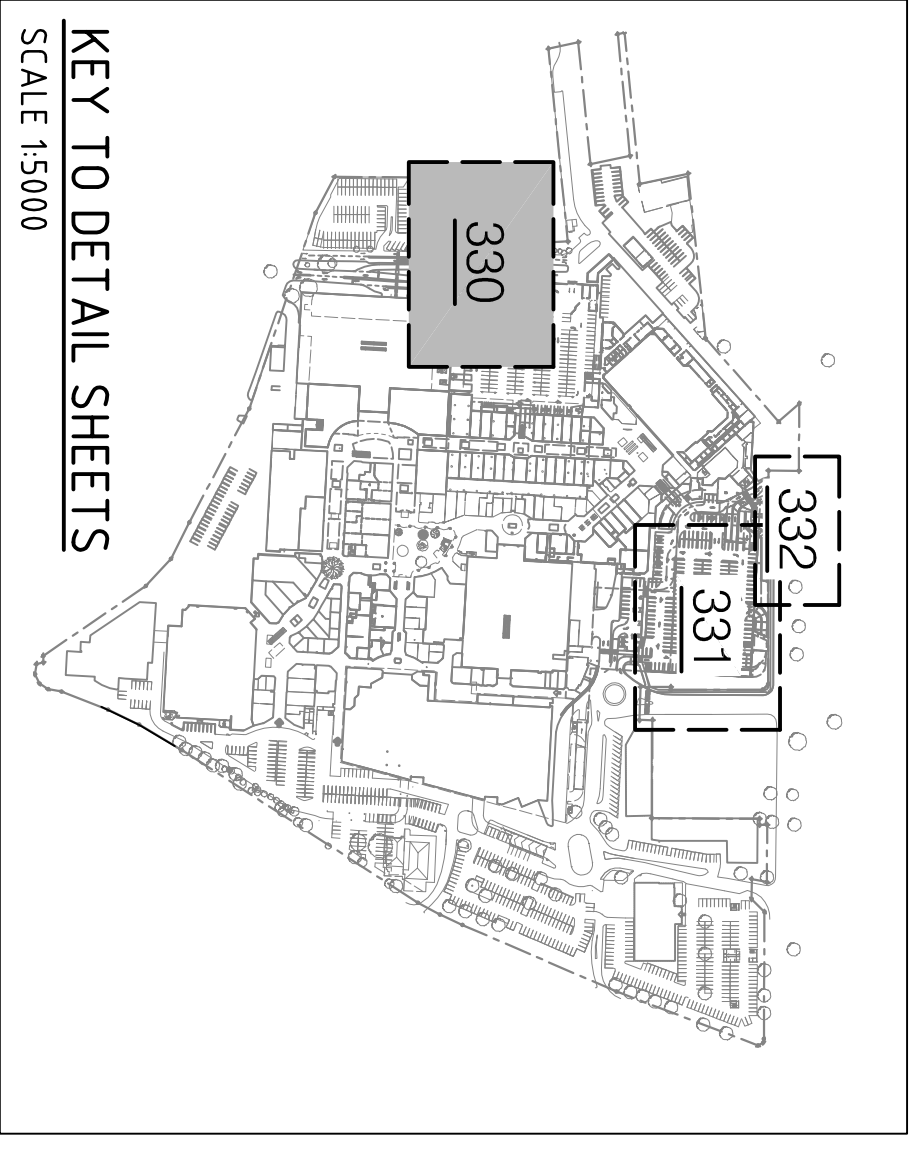
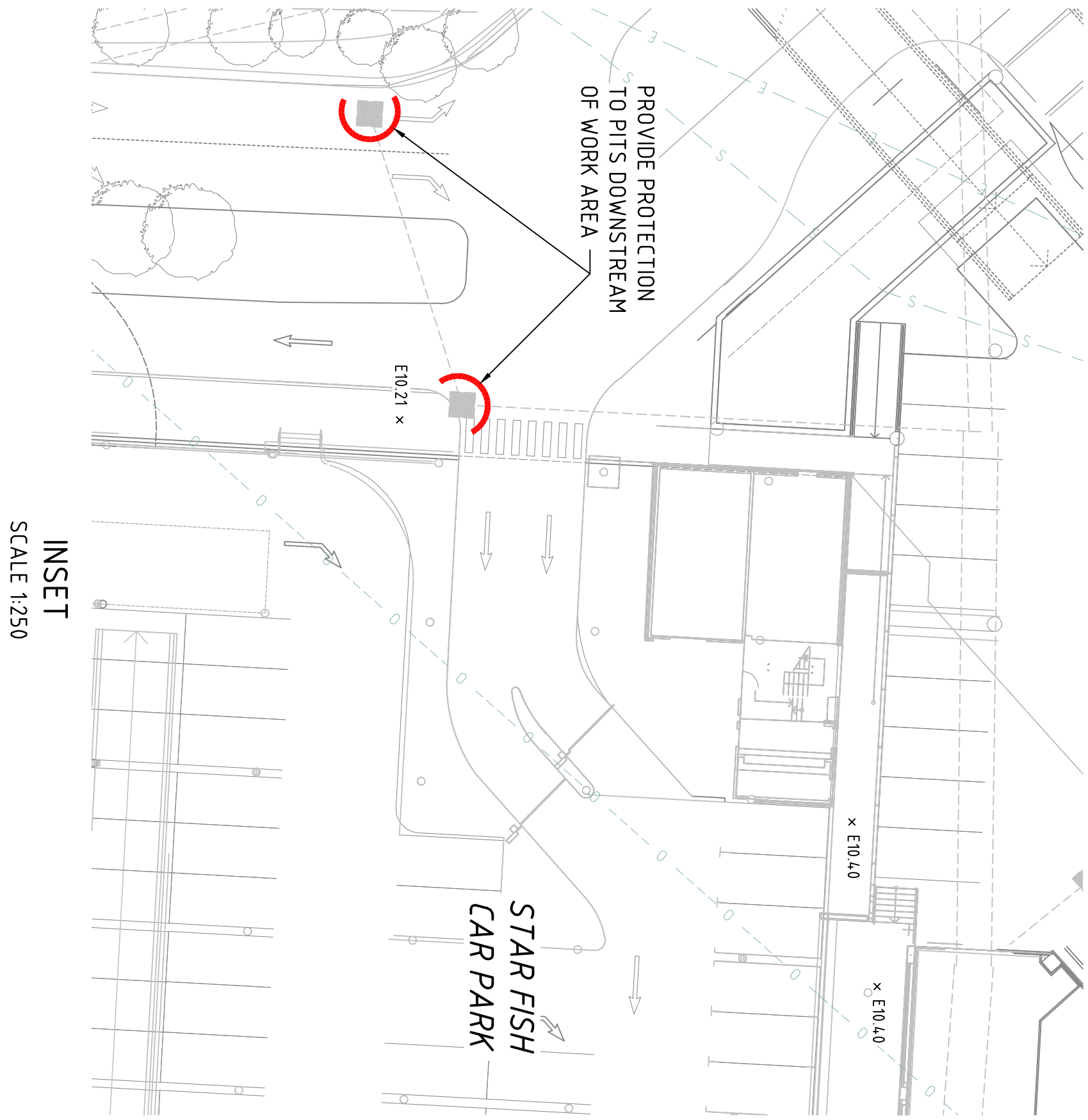
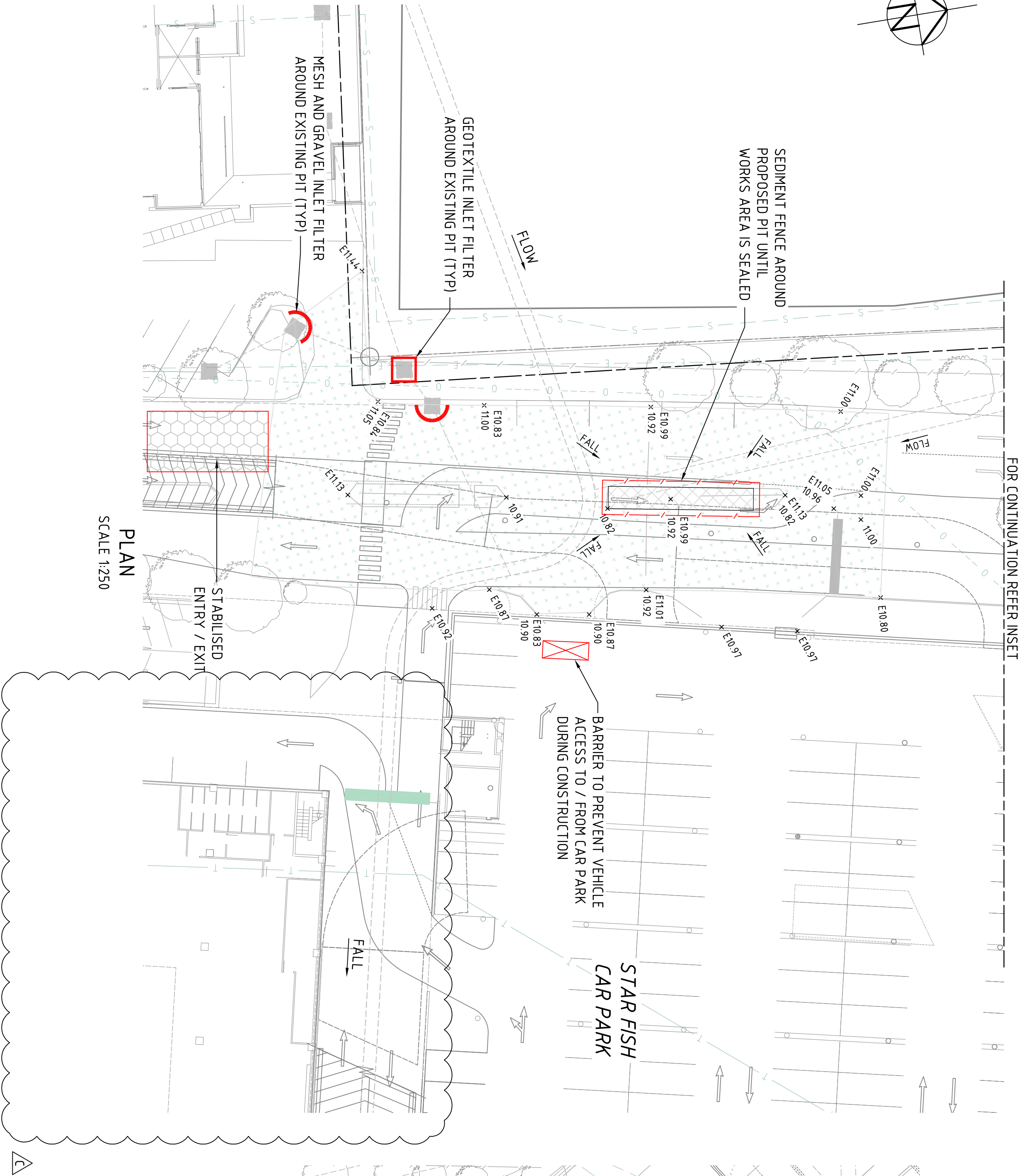
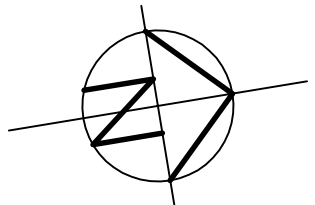


APPROVED	PROJECT DIRECTOR	DATE
DESIGNED	SGB	BP
DRAWN	NDK	SGB
REVIEWED		
PROJECT MANAGER		DATE



WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
EROSION & SEDIMENT CONTROL PLAN SHEET 1 OF 3

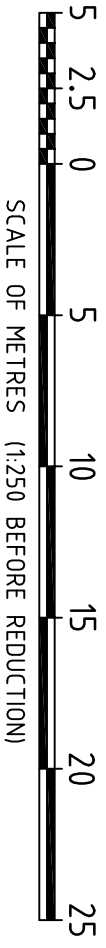
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DRAWING NUMBER	W4548-330
REV	C

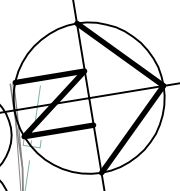


LEGEND

- EXISTING LEVEL
- EXISTING LOCAL DRAINAGE
- APPROXIMATE AREA OF REGRADE
- MESH AND GRAVEL INLET FILTER
- GEOTEXTILE INLET FILTER
- SEDIMENT FENCE AROUND PROPOSED PIT
- STABILISED ENTRY / EXIT
- BARRIER

NOTE
LOCATION OF STOCKPILES TO BE CONFIRMED ON SITE





CROSS STREET

EXISTING KERB LINE

EXISTING KERB LINE

EXISTING KERB LINE

GEOTEXTILE INLET FILTER
AROUND EXISTING PITS (TYP)

PROPOSED
'PALM TREE'
CARPARK

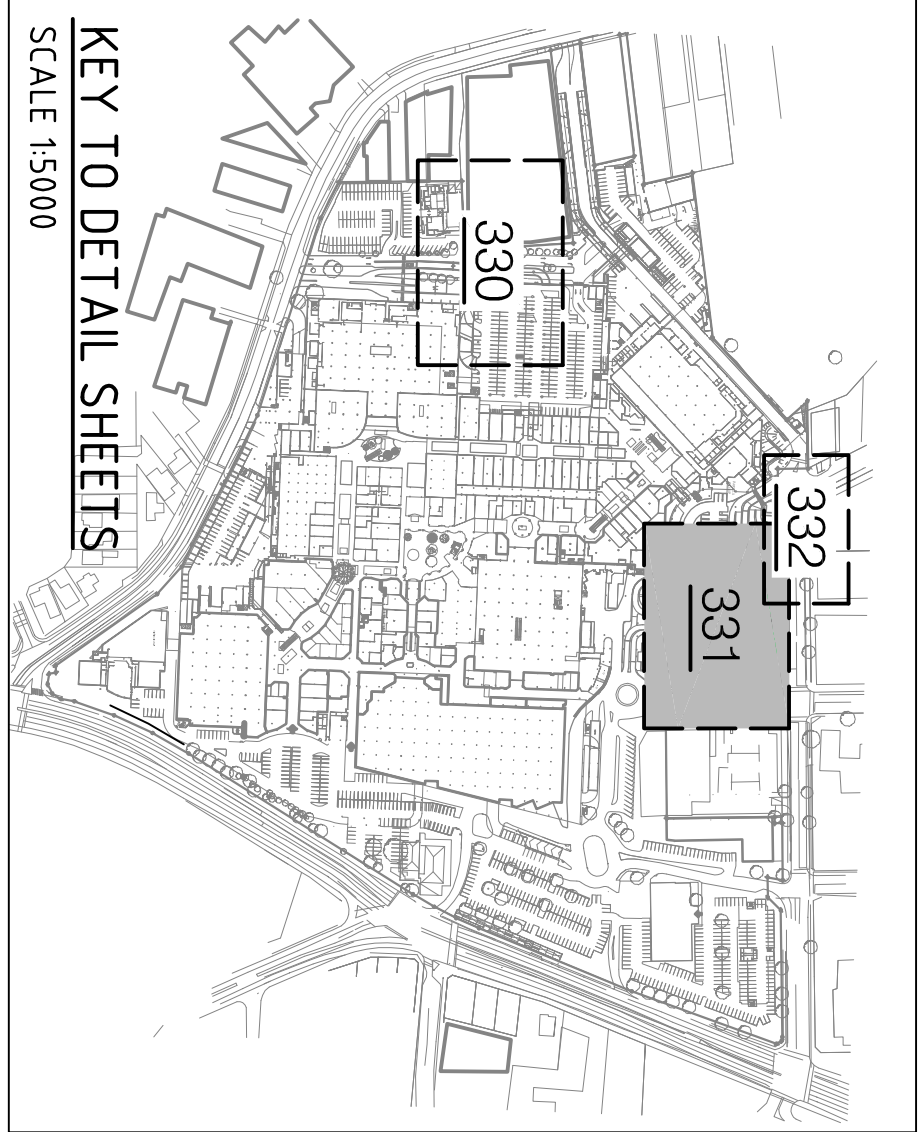
GREEN STREET

PROVIDE SILT FENCE
AROUND PERIMETER
OF WORKS

MESH AND GRAVEL INLET
FILTER AROUND EXISTING PITS

MESH AND GRAVEL PROTECTION ACROSS
EXISTING ROUNDABOUT LEG TO PREVENT
SEDIMENT WASHING FROM CONSTRUCTION SITE

GEOTEXTILE INLET FILTER
AROUND EXISTING PITS (TYP)

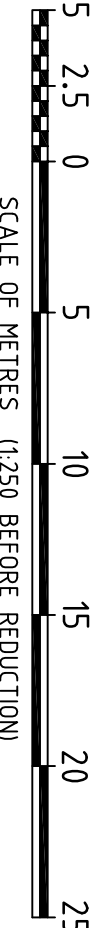


KEY TO DETAIL SHEETS
SCALE 1:5000

LEGEND

- EXISTING LEVEL
- EXISTING LOCAL DRAINAGE
- MESH AND GRAVEL INLET FILTER
- GEOTEXTILE INLET FILTER
- SILT FENCE

NOTE
1. LOCATION OF STOCKPILES TO BE
CONFIRMED ON SITE
2. LOCATION OF STABILISED ENTRY/EXIT
TO BE CONFIRMED ON SITE



PLAN
SCALE 1:250

XREF: X-BORDER, X-Services, X-Drainage, X-Carpark, X-Survey, X-Architect
C:\01\Projects\1805\1716\500_589\Other\Cardno Business Units\899\16\004_Warringah Mall - Stage 1\Stage 1\Culverts\Drawings\Build\Civil\TeW\4548-331\01.dwg

DATE PLOTTED: 16 October, 2013 - 5:46pm

REV	DATE	REVISIONS	DN	CR
D	16/10/2013	LAYOUT AMENDMENTS	NOK	SCB
C	30/08/2013	LAYOUT AMENDMENTS	NOK	SCB
B	22/05/2013	CLIENT AMENDMENTS	NOK	SCB
A	07/05/2013	SECTION 96 APPLICATION	NOK	SCB

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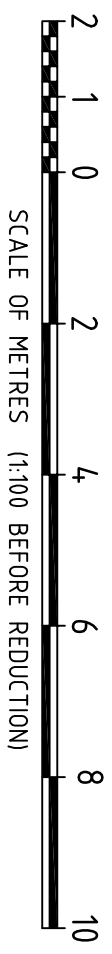


DESIGNED	SCB	BP
DRAWN	NOK	SCB
REVIEWED		



WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
EROSION & SEDIMENT CONTROL PLAN SHEET 2 OF 3

DRAWING NUMBER
W4548-331
REV D



LEGEND

- × E10.87
- EXISTING LEVEL
- EXISTING LOCAL DRAINAGE
- APPROXIMATE AREA OF REGRADE
- MESH AND GRAVEL INLET FILTER
- GEOTEXTILE INLET FILTER
- SILT FENCE
- DIVERSION OF CLEAN STORMWATER



DRAWING STATUS:		NOT FOR CONSTRUCTION
DRAWING NUMBER:		
W4548-332		REV



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following positions:

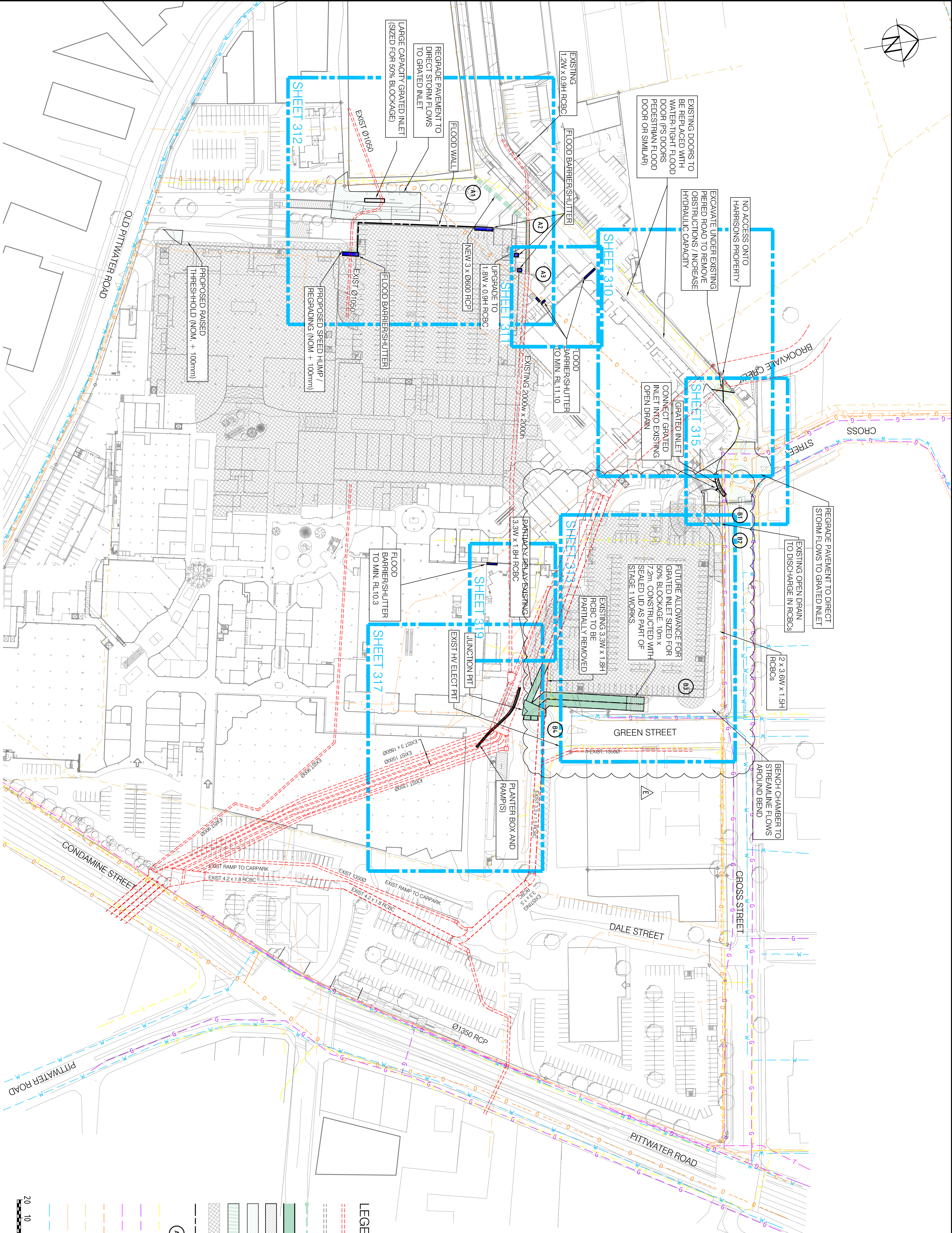
 **Cardno**

Cardno (NSW) Pty Ltd

ABN 95 007 115 035

Level 3 810 Pacific Highway, Darling NSW Australia 2072
Phone (615) 736 7776, Fax (615) 736 3982
Email: sydney@cardno.com.au Web: www.cardno.com.au

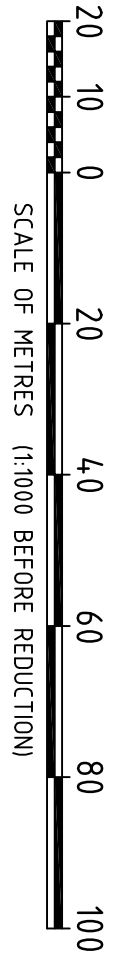
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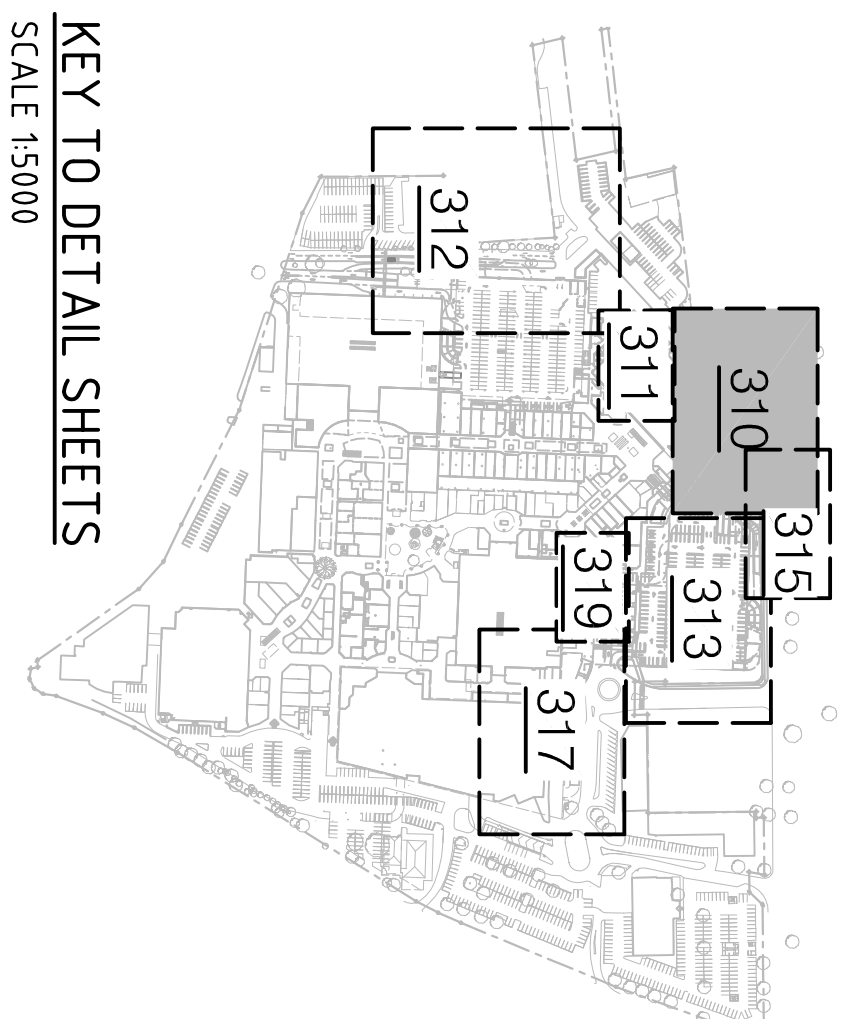
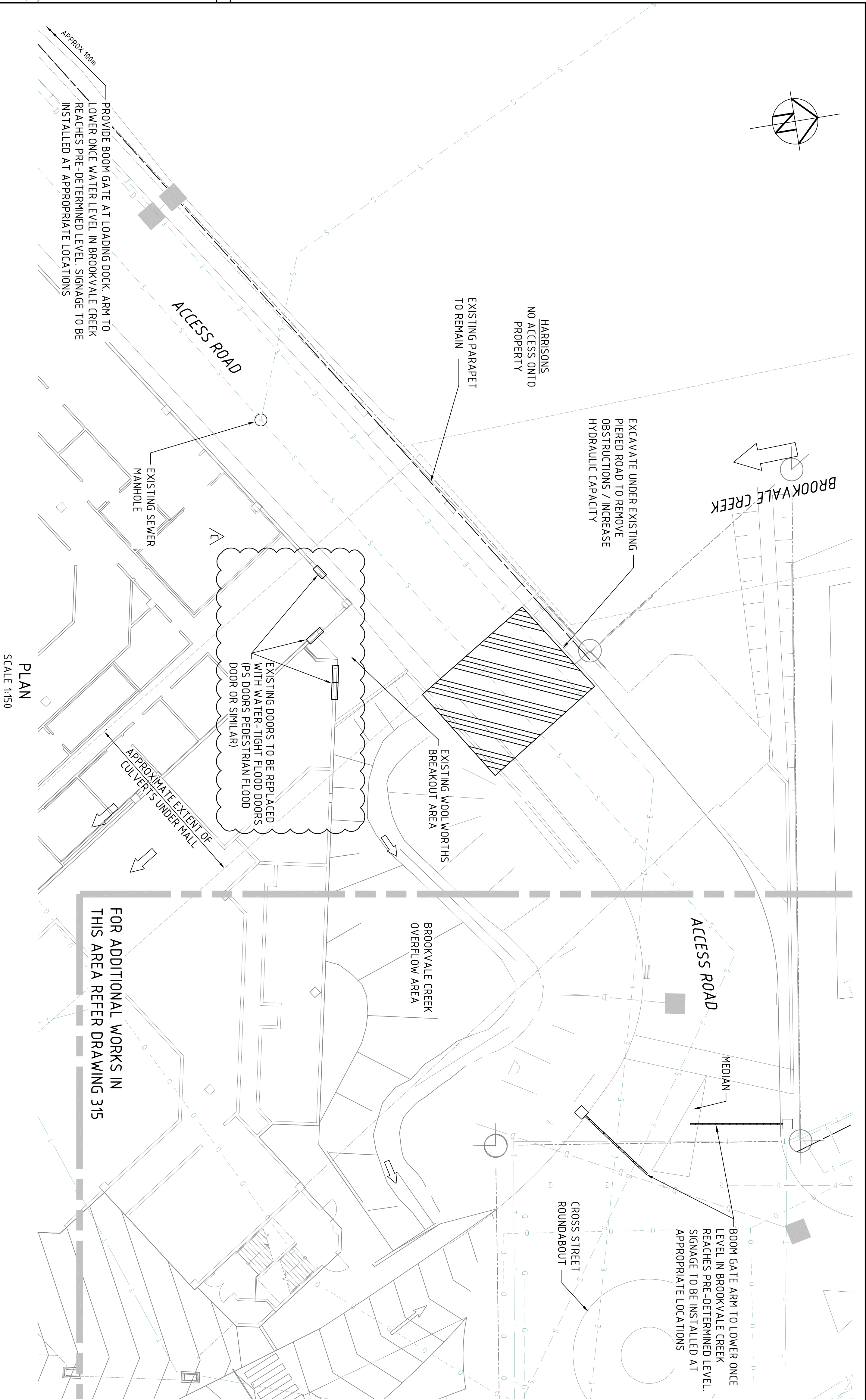


NOTE:
LOCATION AND LEVEL OF ALL
SERVICES TO BE CONFIRMED ON SITE

Legend:

- EXISTING STORMWATER TO REMAIN
- EXISTING STORMWATER TO BE REMOVED
- PROPOSED STORMWATER (RCP)
- PROPOSED STORMWATER (RBCP)
- PROPOSED HIGH CAPACITY INLET
- APPROXIMATE AREAS OF REGRADING
- APPROXIMATE AREA OF CHANNEL REGRADING
- PROPOSED STAGE 1 BUILDING WORKS
- BOUNDARY
- LONGSECTION REFERENCE
- ELECTRICITY
- GAS
- OPTICAL FIBRE
- OPTUS
- SEWER
- TELSTRA
- WATER

[illegible]



LEGEND

APPROXIMATE AREA OF REGRAIDING

FLOOD BARRIER

BOOM GATE ARM

DIRECTION OF FLOW

SERVICES

ELECTRICITY

GAS

OPTICAL FIBRE

OPTUS

SEWER

TELSTRA

WATER

NOTE: ALL SERVICE LOCATIONS ARE INDICATIVE ONLY

REV

DATE

DESCRIPTION

REVISIONS

C

17/06/2013

COUNCIL AMENDMENTS

LDB

SGB

B

22/05/2013

CLIENT AMENDMENTS

NDK

SGB

A

07/05/2013

SECTION 96 APPLICATION

NDK

SGB

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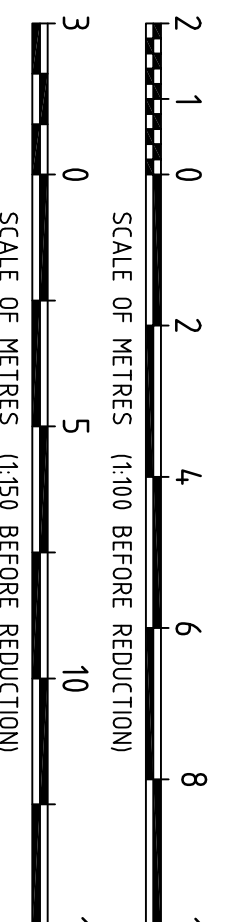
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DESIGNED	SCB	BP
REVIEWED	NDK	SCB

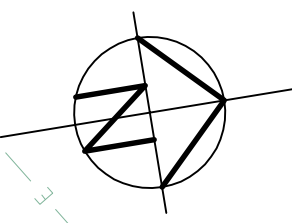
Cardno (NSW) Pty Ltd

ABN: 95 001 145 035
Level 3, 390 Pacific Highway, Gordon, NSW Australia 2072
Phone: (61) 2 9466 7700 Fax: (61) 2 9466 3992
Email: styming@cardno.com.au Web: www.cardno.com.au

WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
DETAIL ARRANGEMENT PLAN - CROSS STREET & BROOKVALE CREEK

DRAWING STATUS:
NOT FOR CONSTRUCTION
DRAWING NUMBER:
W4548-310
REV: C



PROPOSED LEVE

× FL 10.03

— 100 —

SERVICE

- E — ELECTRICITY
 G — GAS
 T — OPTICAL FIBRE
 O — OPTUS
 S — SEWER
 T — TELSTRA
 W — WATER

NOTE: ALL SERVICE LOCATIONS ARE INDICATIVE ONLY

[illegible]

REV	DATE	REVISIONS	DN	CR
D	30/08/2013	LAYOUT AMENDMENTS	NOK	SCB
C	17/06/2013	CLIENT AMENDMENTS	LDB	SCB
B	22/05/2013	CLIENT AMENDMENTS	NOK	SCB
A	07/05/2013	SECTION 96 APPLICATION	NOK	SCB

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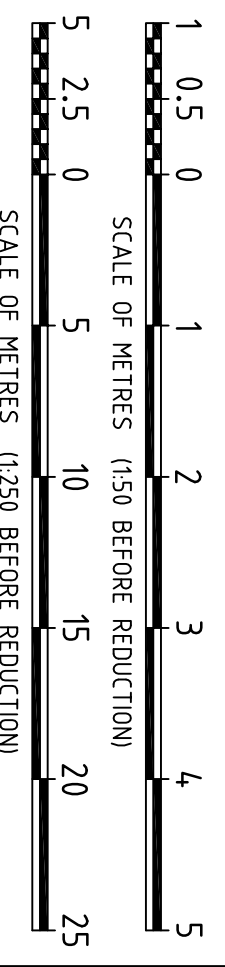


		PREPARED	CHECKED
		DESIGNED	SGB BP
		DRAWN	NDK SGB
	APPROVED:	REVIEWED:	
PROJECT DIRECTOR	DATE	PROJECT MANAGER	DATE



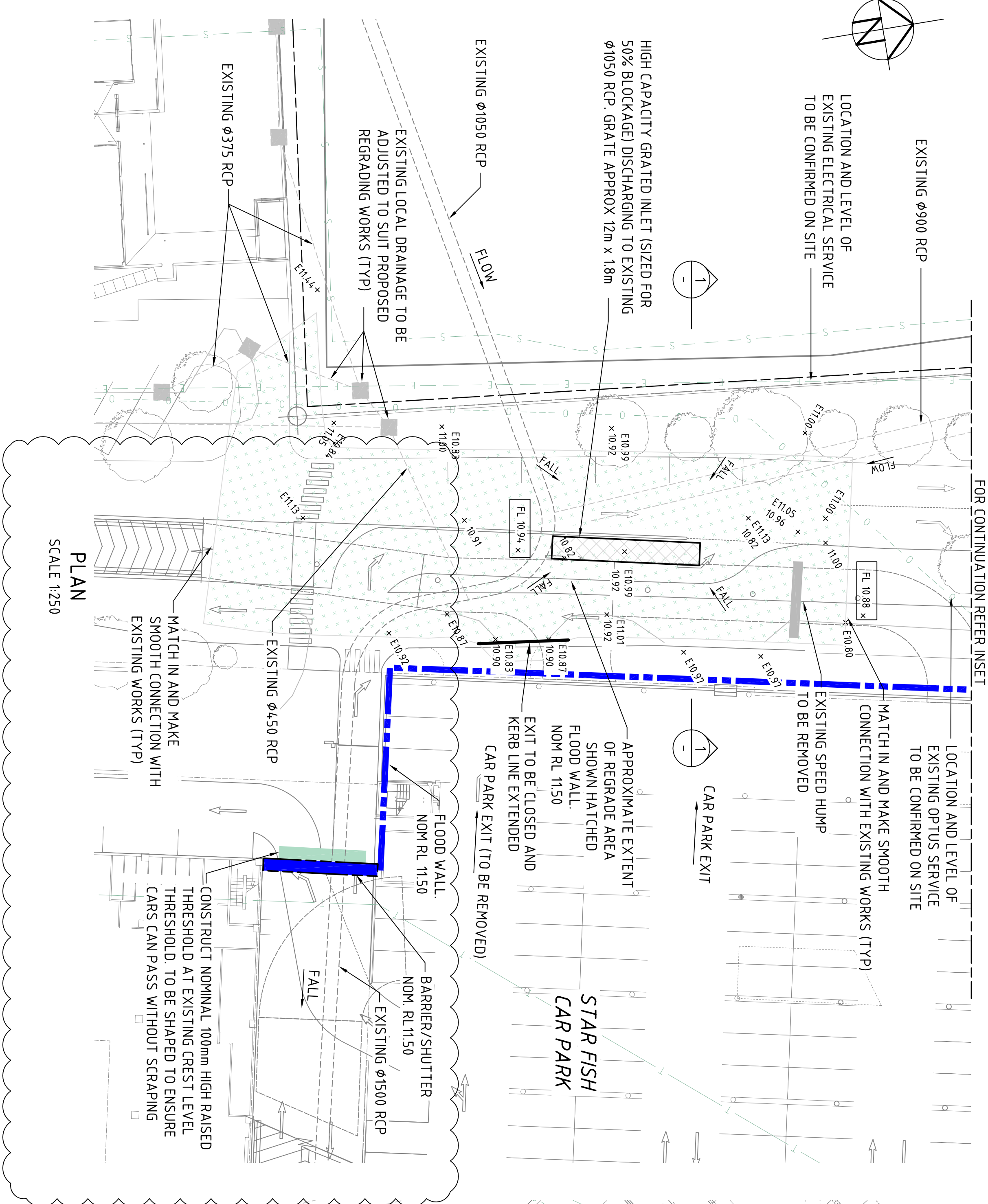
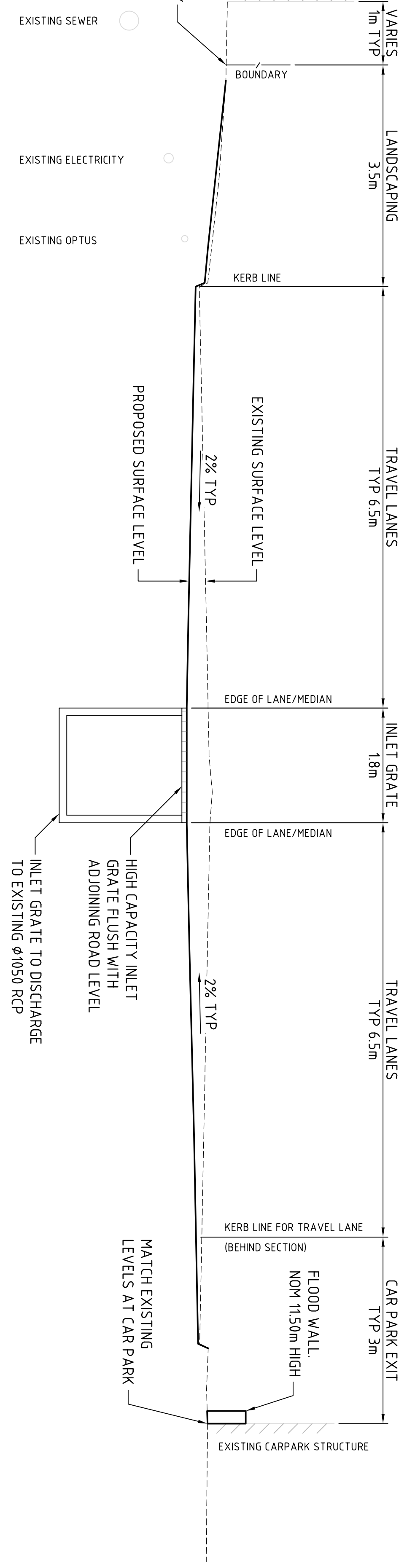
WESTFIELD DESIGN & CONSTRUCTION
WARRINGAH MALL
CONCEPT DRAINAGE AUGMENTATION WORKS
STAGE 1 EXPANSION WORKS
DETAIL ARRANGEMENT PLAN - STARFISH CARPARK

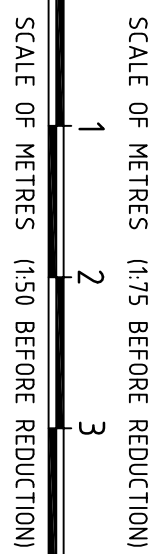
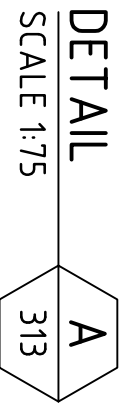
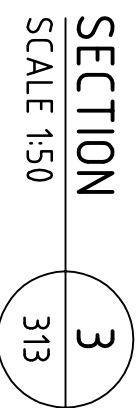
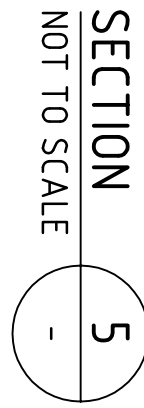
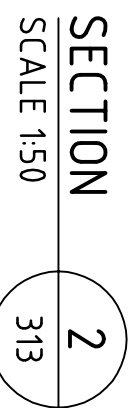
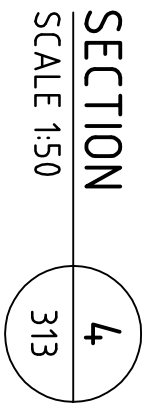
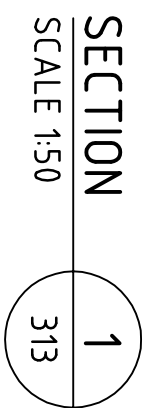
DRAWING NUMBER	REV
W4548-312	D



SECTION 1
SCALE 1:50

NOTE:
LOCATION AND LEVEL OF ALL
SERVICES TO BE CONFIRMED ON SITE





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Industrial Districts & Communities Inc.
100 William Street, Sydney NSW 2011
Phone (02) 9332 7000 Fax (02) 9332 7713
GPO Box 4646, Sydney NSW 2051
Email info@wdfld.com.au
Web www.wdfld.com.au

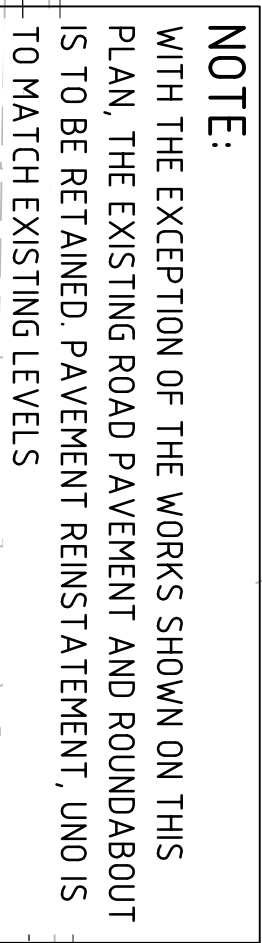
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Cardno (NSW) Pty Ltd

ABN 95 001 142 035

Level 3, 970 Pacific Highway, Gordon, NSW Australia 2072
Phone (+61 2) 9266 7700 Fax (+61 2) 9269 3902
Email: sydney@cardno.com.au Web: www.cardno.com.au

DRAWING STATUS:		NOT FOR CONSTRUCTION
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EXISTING LOCAL DRAINAGE

100 YEAR ARI FLOOD LEVEL (m)



PROPOSED RAILING

PROPOSED LIP OF KERB LEVEL

SERVICES

ELECTRICITYGAS

SPECIAL ADVERTISING SECTION

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WALKER

NOTE: ALL SERVICE LOCATIONS ARE

INDICATIVE ONLY

SCALE OF METRES (1:100)

DRAWING STATUS	
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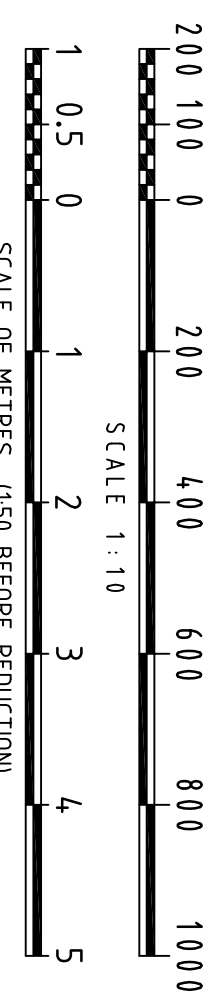
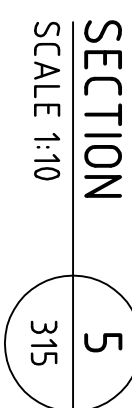
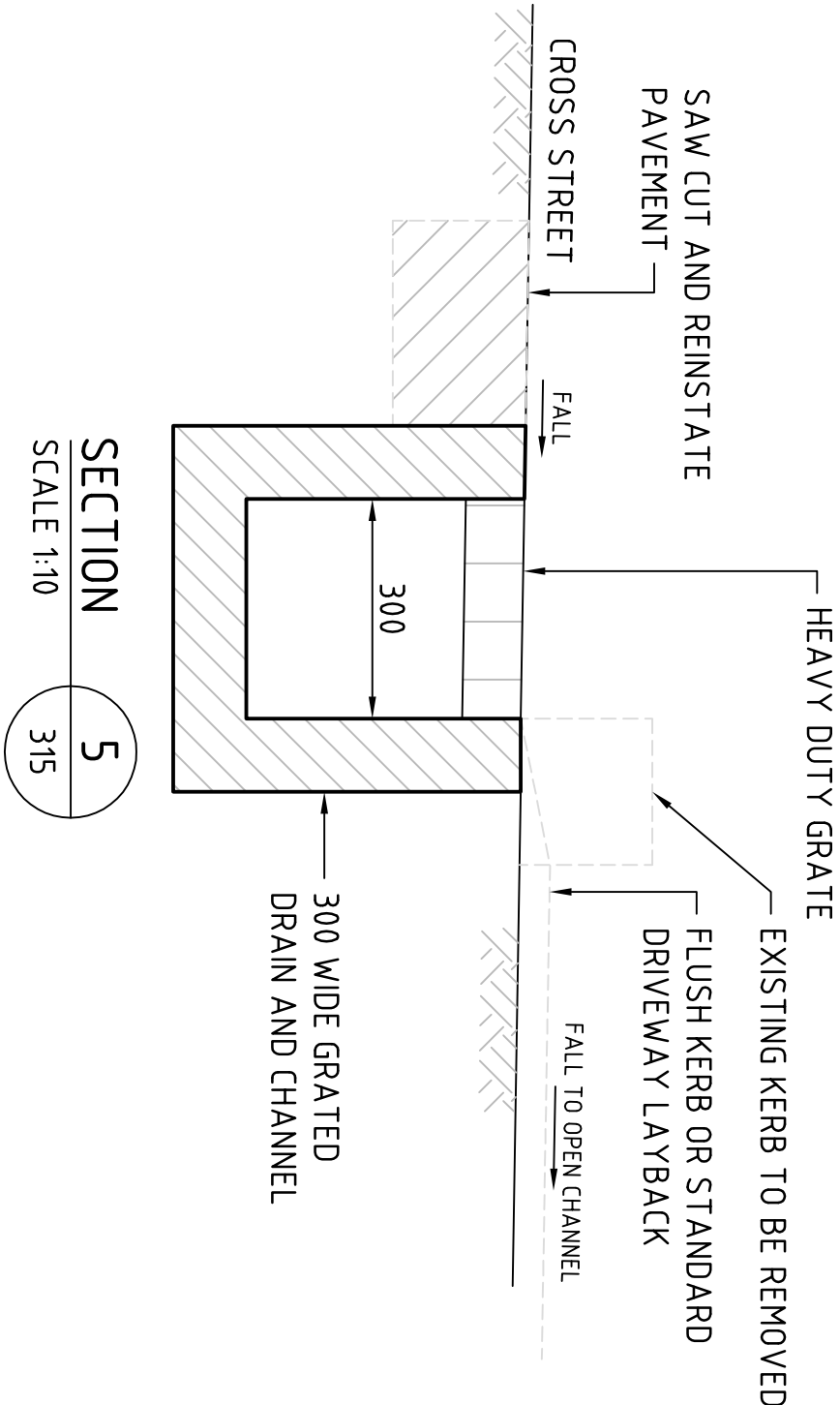
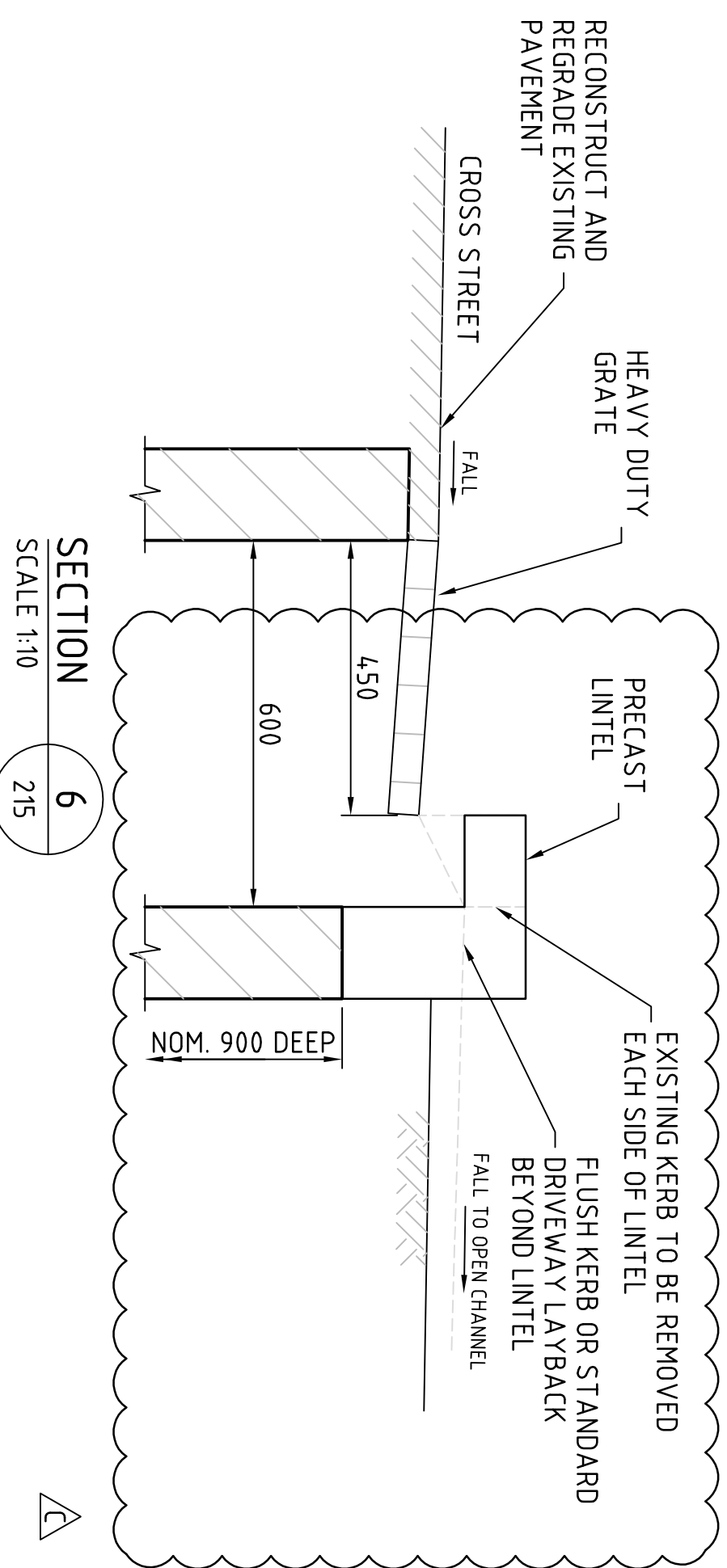
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