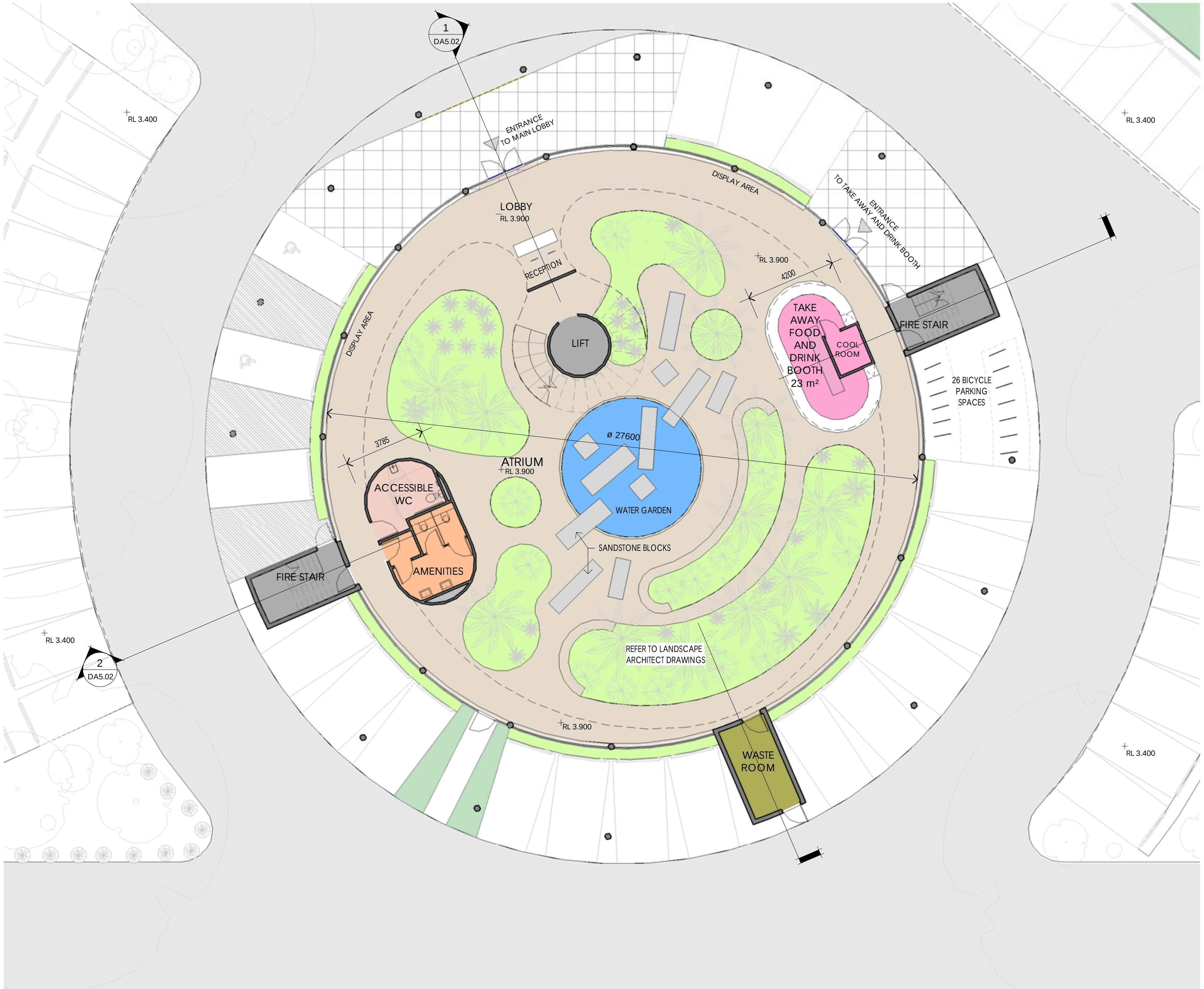


NOT FOR CONSTRUCTION

Scale 1: 200

0 1000 2000 5000 10000

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO JSA STUDIO PRIOR TO CONSTRUCTION.
TO BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTS.
NSW ARCHITECTS REGISTRATION BOARD REGISTERED ARCHITECTS:
KIM JONES Registration No. 6460

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		16.02.17
3	Revised DA Issue		19.09.17
4	Issue for consultant coordination		26.04.17

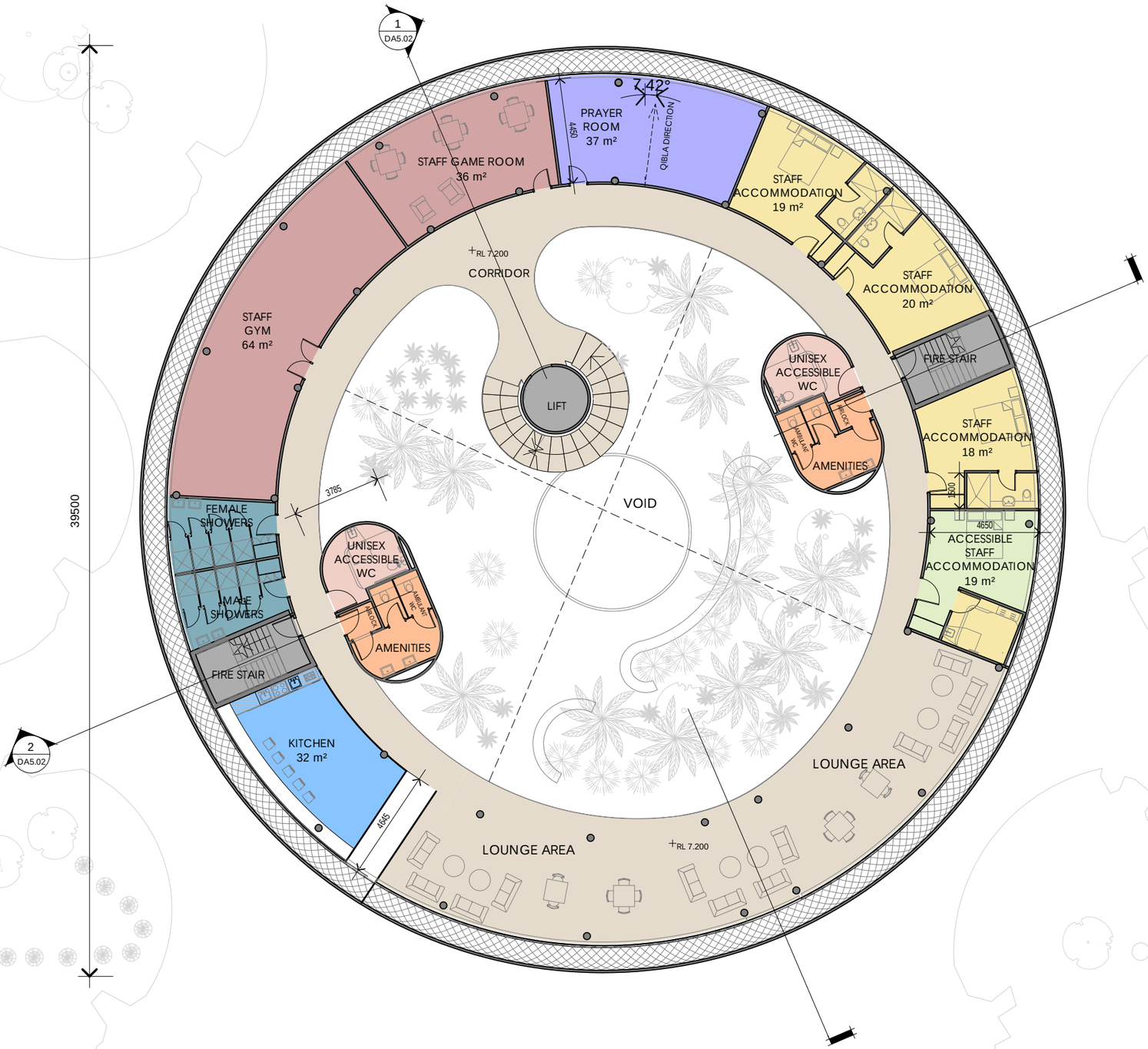
Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

J S A STUDIO
Suite 2 Level 1
505 Balmain Rd
Lilyfield NSW
PO Box 483
Rozelle NSW 2039
phone: 02 9555 7464
mail @ jsastudio.com.au

Title
Ancillary Office - Ground Floor Plan
Stage 2 Works

Scales	Drawn
1 : 200 @ A3	AM
Project No. 160701	Checked: Checker
	Approved: Approver
Drawing No. DA3.05	Revision 4

Plot Date: 24/04/2018 12:09:33 PM



NOT FOR CONSTRUCTION

Scale 1: 200

0 1000 2000 5000 10000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		16.02.17
3	Revised DA Issue		19.09.17
4	Issue for consultant coordination		26.04.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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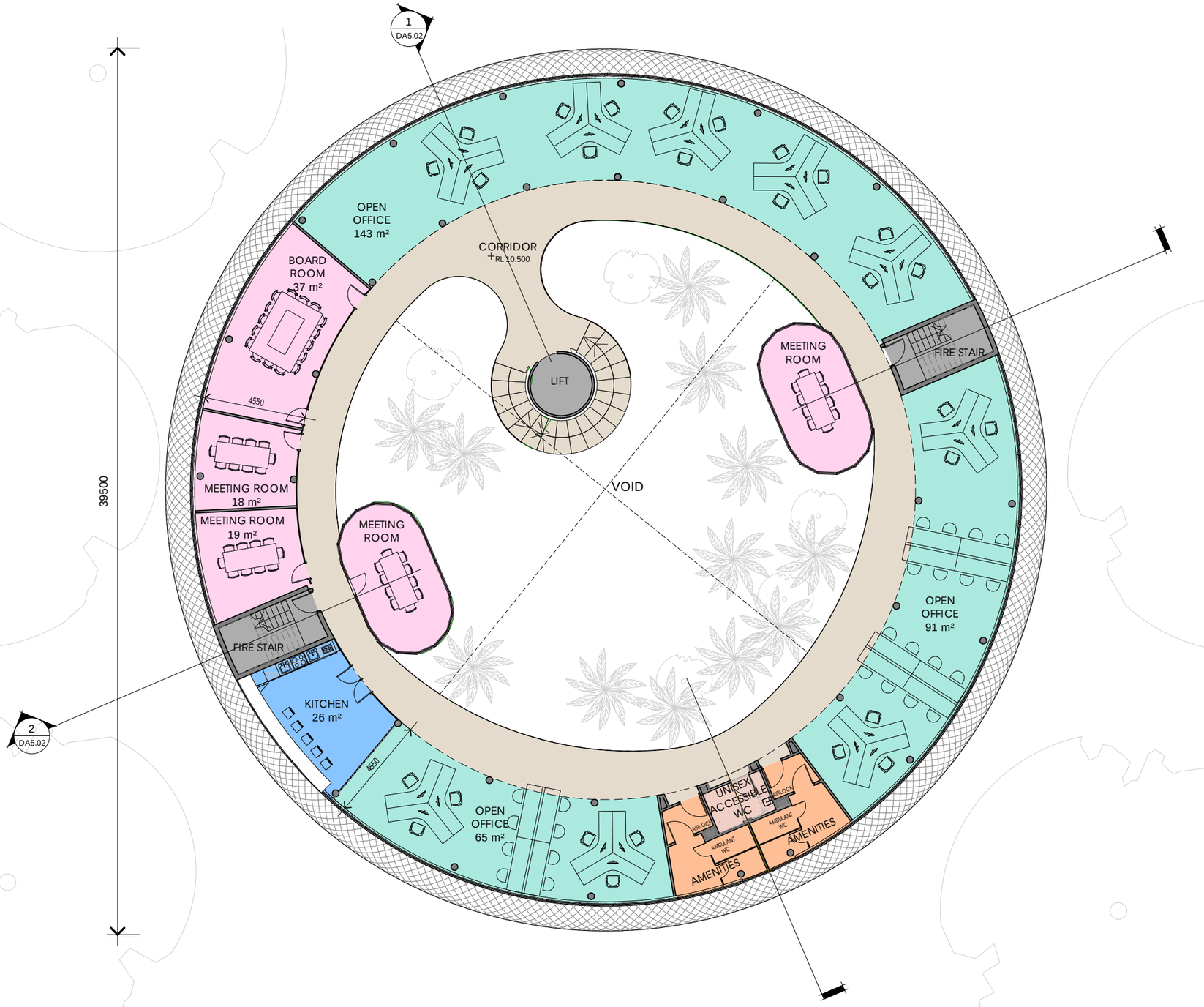
Title
Ancillary Office - Level 1 Floor Plan
Stage 2 Works

Scales 1 : 200 @ A3	Drawn AM
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA3.06	Revision 4
Plot Date: 24/04/2018 12:10:44 PM	



NOT FOR CONSTRUCTION

Scale 1: 200

0 1000 2000 5000 10000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		16.02.17
3	Revised DA Issue		19.09.17
4	Issue for consultant coordination		26.04.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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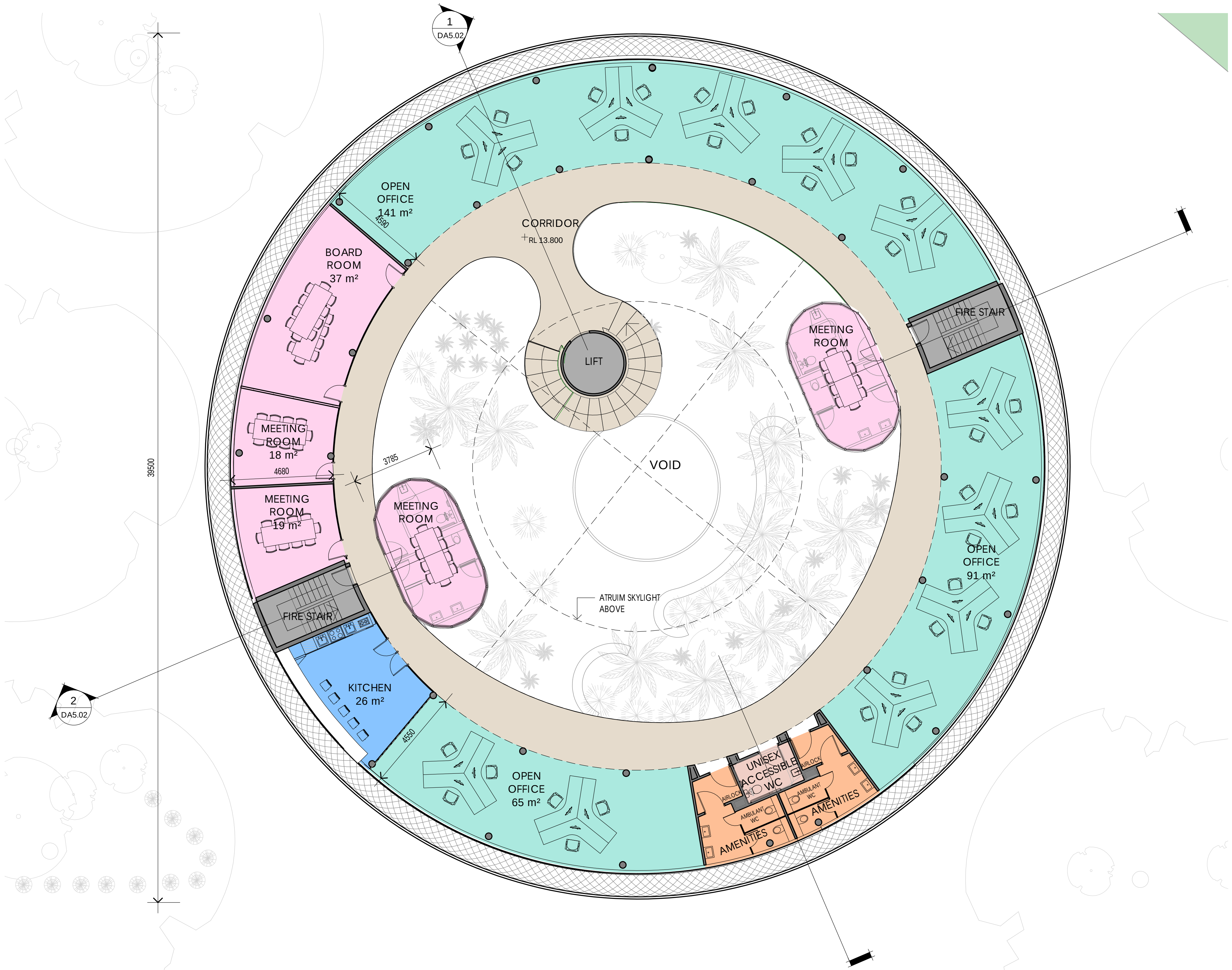
ARCHITECTS

Title
Ancillary Office - Level 2 Floor Plan
Stage 2 Works

Scales	1 : 200 @ A3
Drawn	AM
Project No.	160701
Checked	Checker
Approved	Approver
Drawing No.	DA3.07
Revision	4
Plot Date:	24/04/2018 12:13:20 PM



NOT FOR CONSTRUCTION

Scale 1: 200

0 1000 2000 5000 10000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		16.02.17
3	Revised DA Issue		19.09.17
4	Issue for consultant coordination		26.04.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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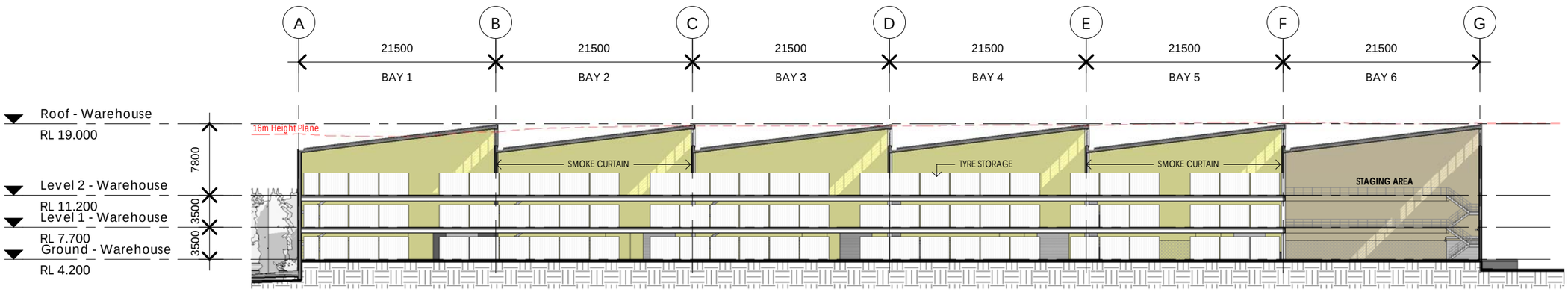
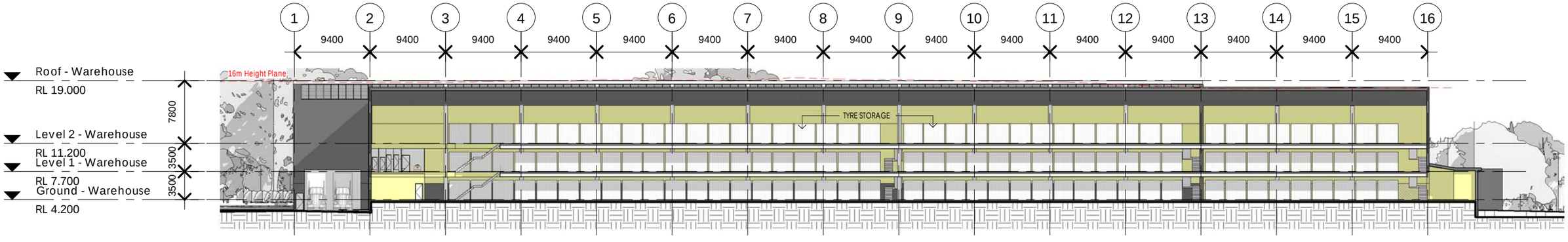
Title
Ancillary Office - Level 3 Floor Plan
Stage 2 Works

Scales	1 : 200 @ A3	Drawn	AM
Project No.	160701	Checked	Checker
		Approved	Approver
Drawing No.	DA3.08	Revision	4

Plot Date: 24/04/2018 12:14:12 PM



1 Section A
1 : 500



2 Section B
1 : 500

NOT FOR CONSTRUCTION

Scale 1: 500
0 2500 5000 12500 25000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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Title
Warehouse - Sections

Scales 1 : 500 @ A3	Drawn KHH
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA5.01	Revision 2
Plot Date: 24/04/2018 12:16:58 PM	

1 Section A - Ancillary Office
1 : 200

2 Section B - Ancillary Office
1 : 200

NOT FOR CONSTRUCTION

Scale 1: 100
0 500 1000 2500 5000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17
3	Issue for consultant coordination		26.04.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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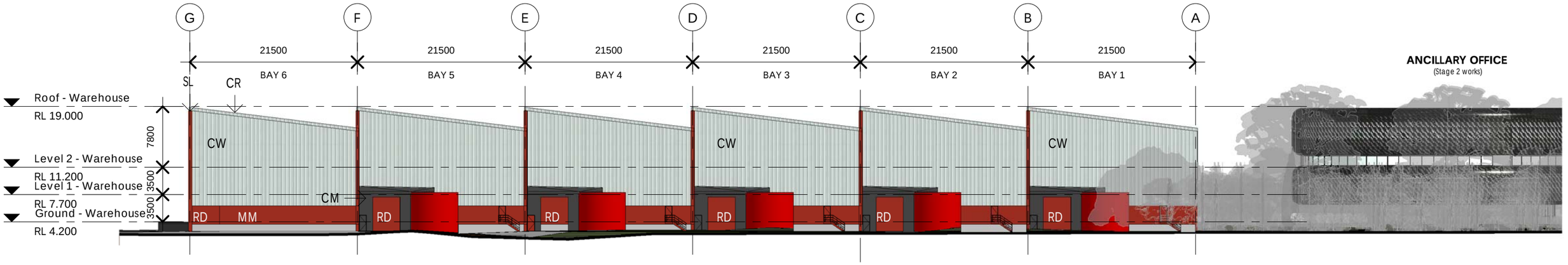
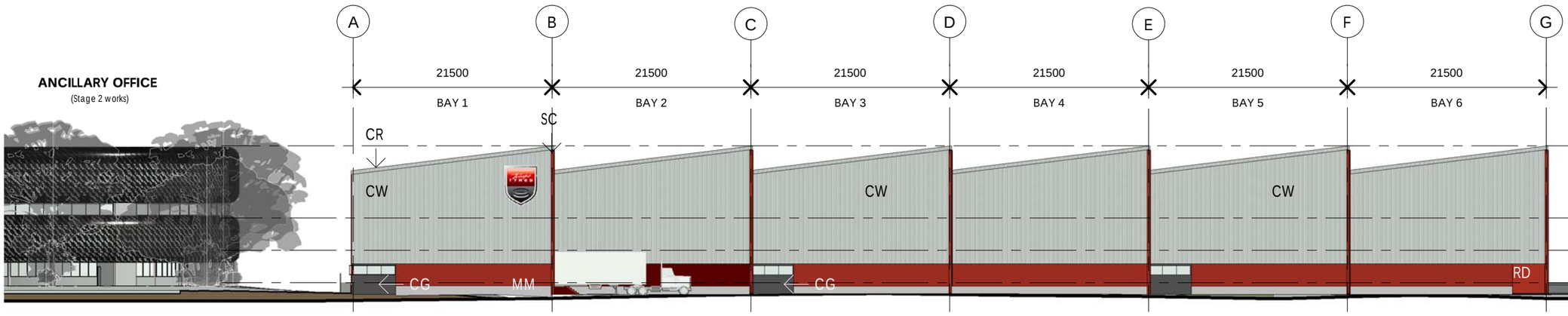
Title
Section - Ancillary Office
Stage 2 Works

Scales	1 : 200 @ A3
Drawn	Author
Project No.	160701
Checked	Checker
Approved	Approver
Drawing No.	DA5.02
Revision	3
Plot Date:	24/04/2018 12:19:56 PM



1 North Elevation
1 : 500



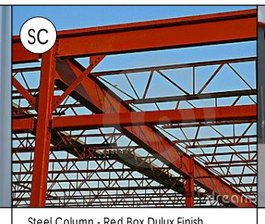
2 South Elevation
1 : 500

Fixed Aluminum Louvers -Red Box Dulux Finish

Lysaght Roof Sheeting - Kiplok 700 Surfmist Finish

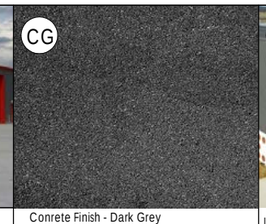
Colorbond Walls - Kiplok 700 Surfmist Finish

Fixed Aluminum Louvers



Steel Column - Red Box Dulux Finish

Roller Doors - Red Box Dulux Finish



Conrete Finish - Dark Grey

Lysaght Roof Sheeting - Kiplok 700 Monument Finish

NOT FOR CONSTRUCTION

Scale 1: 500
0 2500 5000 12500 25000

Rev.	Revision Description	Chk.	Date
A	Issued for Information		08.11.16
B	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		16.02.17
3	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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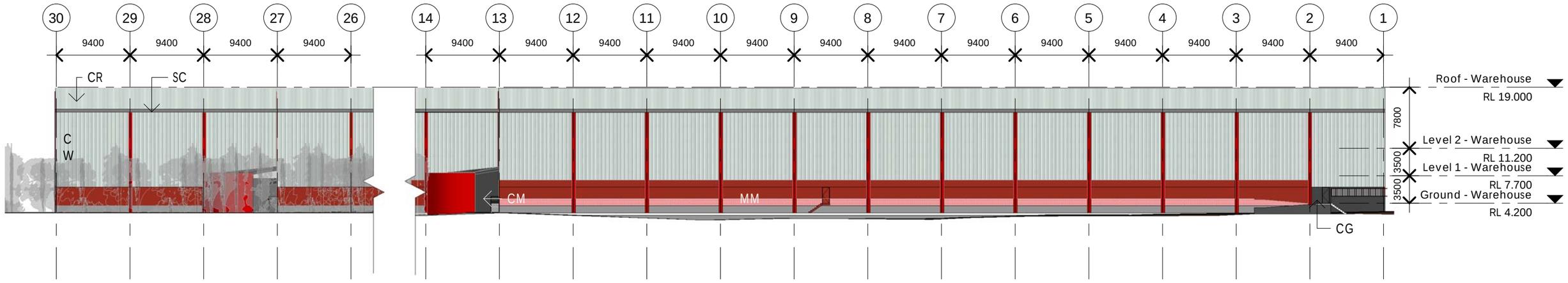
ARCHITECTS

Title
Warehouse - North & South Elevations

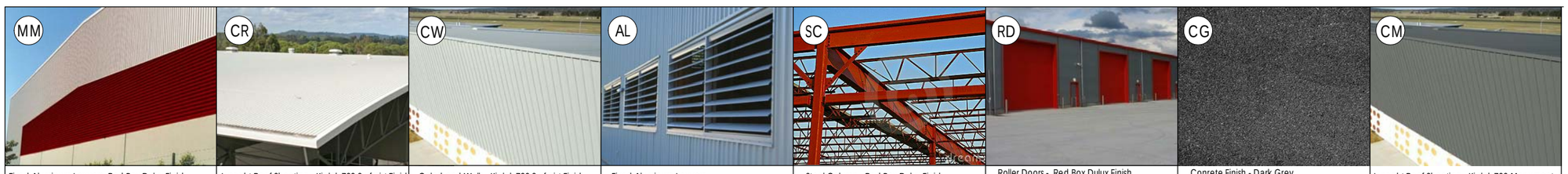
Scales: As indicated @ A3	Drawn: KHH
Project No.: 160701	Checked: Checker
	Approved: Approver
Drawing No.: DA6.01	Revision: 3

Plot Date: 24/04/2018 12:20:41 PM



1 West Elevation
1 : 500

2 West Elevation
1 : 1000



Fixed Aluminum Louvers -Red Box Dulux Finish	Lysaght Roof Sheeting - Kiplok 700 Surfmist Finish	Colorbond Walls - Kiplok 700 Surfmist Finish	Fixed Aluminum Louvers	Steel Column - Red Box Dulux Finish	Roller Doors - Red Box Dulux Finish	Conrete Finish - Dark Grey	Lysaght Roof Sheeting - Kiplok 700 Monument Finish

NOT FOR CONSTRUCTION

Scale 1: 500

0 2500 5000 12500 25000

Rev.	Revision Description	Chk.	Date
A	Issued for Information		08.11.16
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3	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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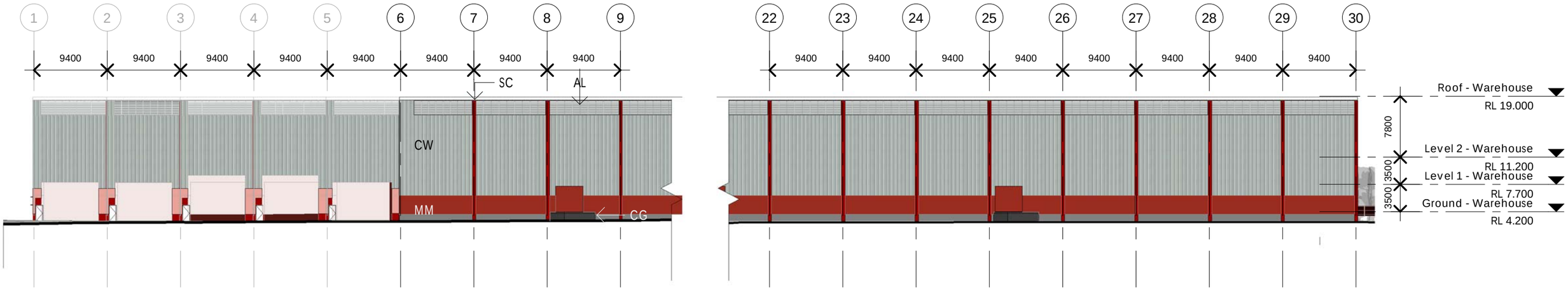
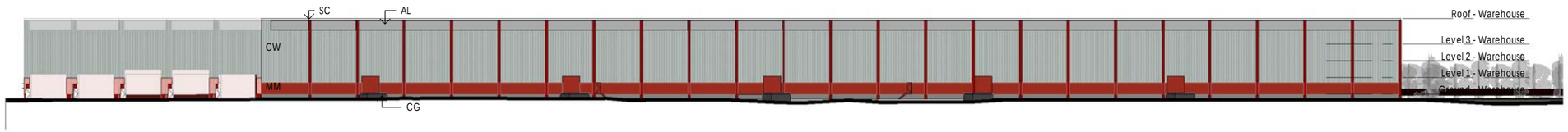
Title
Warehouse - West Elevation

Scales	Drawn
As indicated @ A3	KHH
Project No.	Checked / Approved
160701	Checker / Approver
Drawing No.	Revision
DA6.02	3

Plot Date: 24/04/2018 12:21:25 PM



1 East Elevation
1 : 500



2 East Elevation
1 : 1000

MM	CR	CW	AL	SC	RD	CG	CM
Fixed Aluminum Louvers -Red Box Dulux Finish	Lysaght Roof Sheeting - Kiplok 700 Surfmist Finish	Colorbond Walls - Kiplok 700 Surfmist Finish	Fixed Aluminum Louvers	Steel Column - Red Box Dulux Finish	Roller Doors - Red Box Dulux Finish	Conrete Finish - Dark Grey	Lysaght Roof Sheeting - Kiplok 700 Monument Finish

NOT FOR CONSTRUCTION

Scale 1: 500

0 2500 5000 12500 25000

Rev.	Revision Description	Chk.	Date
A	Issued for Information		08.11.16
B	DA Final Draft		17.11.16
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3	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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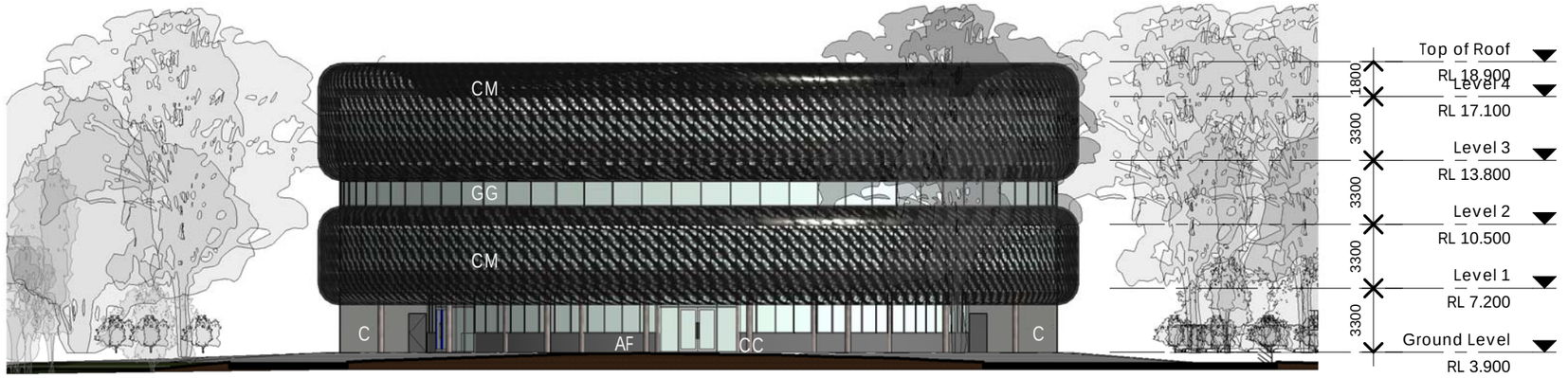
ARCHITECTS

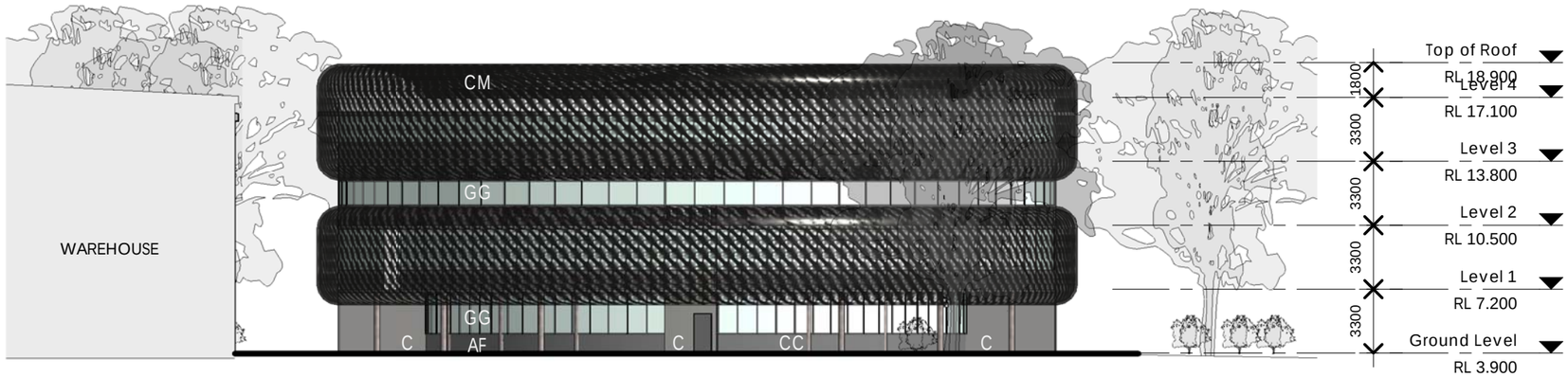
Title
Warehouse - East Elevation

Scales: As indicated @ A3	Drawn: KHH
Project No.: 160701	Checked: Checker
	Approved: Approver
Drawing No.: DA6.03	Revision: 3

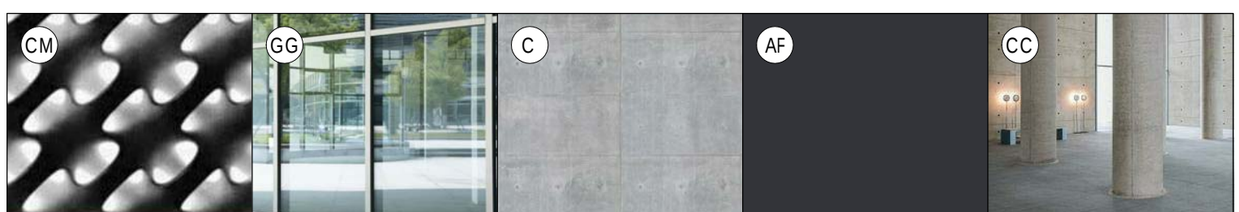
Plot Date: 24/04/2018 12:22:19 PM



1 North Elevation
1 : 300



2 South Elevation
1 : 300



NOT FOR CONSTRUCTION

Scale 1: 300
0 1500 3000 7500 15000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17
3	Issue for consultant coordination		26.04.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
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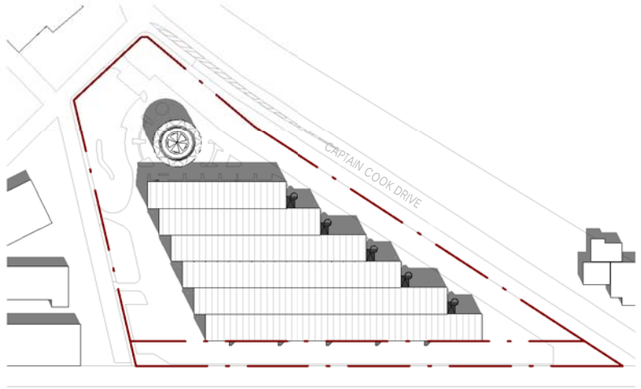
ARCHITECTS

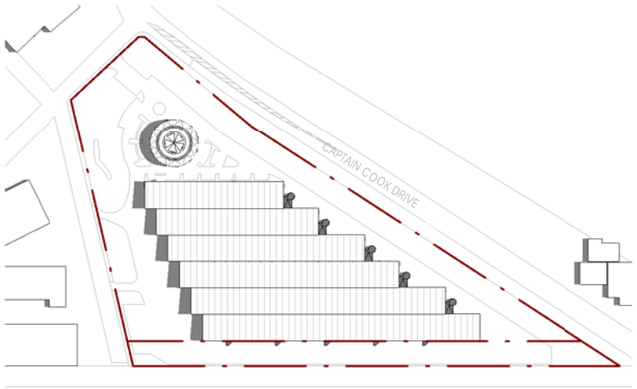
Title
Ancillary Office - North & South Elevations
Stage 2 Works

Scales: As indicated @ A3	Drawn: Author
Project No.: 160701	Checked: Checker
	Approved: Approver
Drawing No.: DA6.04	Revision: 3
Plot Date: 24/04/2018 12:22:55 PM	

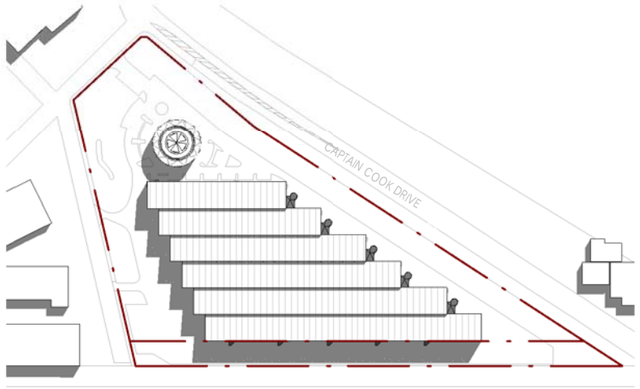
EQUINOX - MARCH 21ST & SEPTEMBER 22ND



9AM

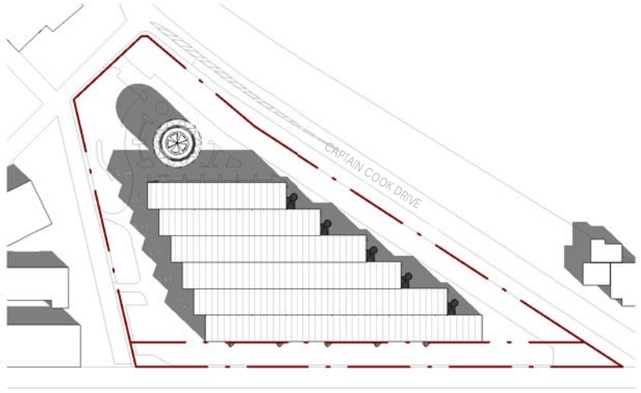


12PM

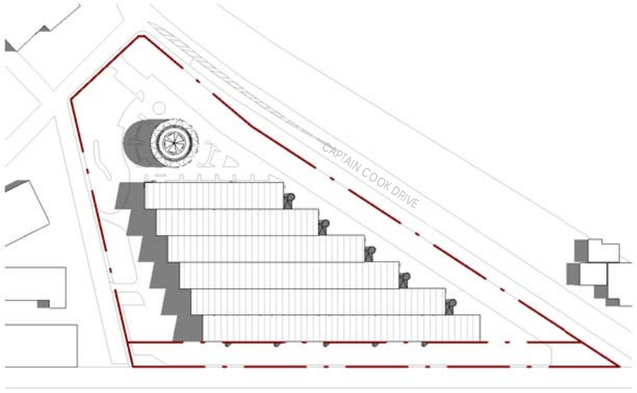


3PM

SOLSTICE - JUNE 21ST



9AM



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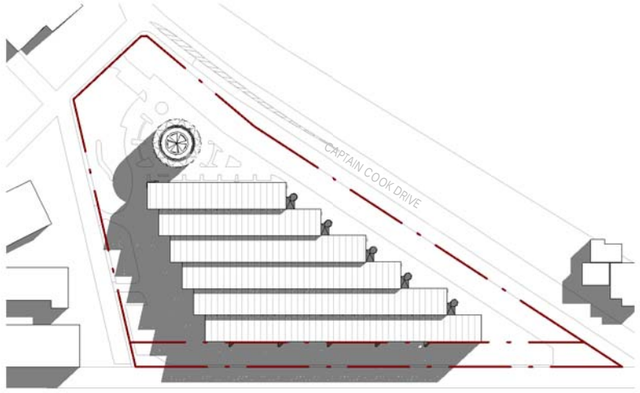

3PM

NOT FOR CONSTRUCTION

Scale 1: 5000

0 25000 50000 125000 250000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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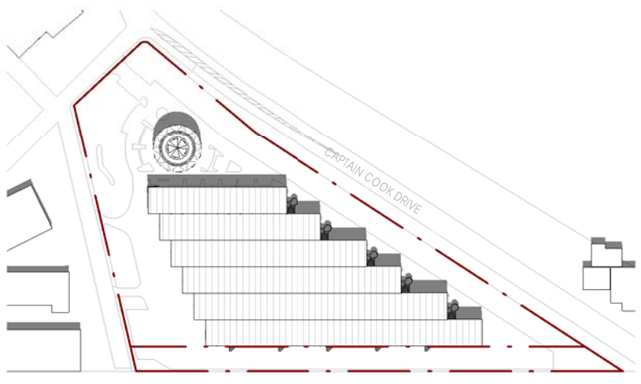
ARCHITECTS

Title
Shadow Diagrams
Equinox - March 21st & September 22nd
Solstice - June 21st

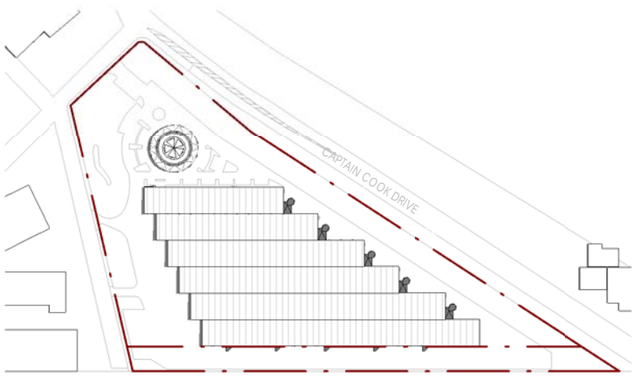
Scales 1 : 5000 @ A3	Drawn KHH
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA7.01	Revision 2

Plot Date: 6/10/2017 11:08:10 AM

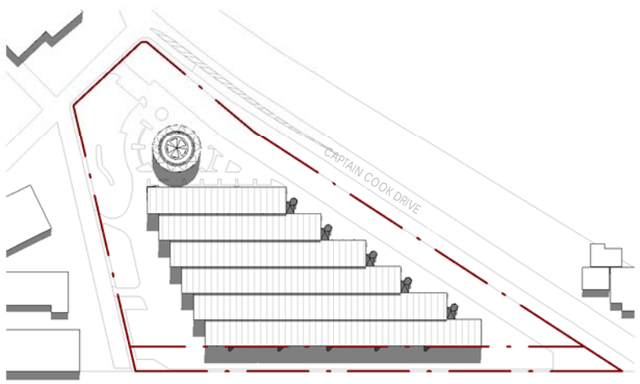
SOLSTICE- DECEMBER 21ST



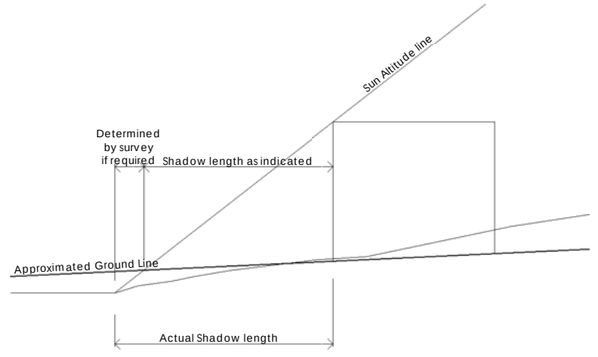
9AM



12PM



3PM



Latitude 35° South

		9am & 3pm		12pm	
		Azimuth	Altitude	Azimuth	Altitude
June	21	43°	18°	0°	31°

NOT FOR CONSTRUCTION

Scale 1: 5000

0 25000 50000 125000 250000

Rev.	Revision Description	Chk.	Date
A	DA Final Draft		17.11.16
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
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Title
Shadow Diagrams
Solstics - December 21st

Scales	Drawn
As indicated @ A3	Author
Project No. 160701	Checked / Approved: Checker / Approver
Drawing No. DA7.02	Revision 2

Plot Date: 6/10/2017 11:08:43 AM

NOT FOR CONSTRUCTION

Rev.	Revision Description	Chk.	Date
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
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ARCHITECTS

Title
3D Perspective
View From Captain Cook Drive
Shown with existing and proposed landscape

Scales @ A3	Drawn KHH
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA7.03	Revision 2

Plot Date: 6/10/2017 11:10:15 AM

NOT FOR CONSTRUCTION

Rev.	Revision Description	Chk.	Date
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

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ARCHITECTS

Title
3D Perspective
View From Captain Cook Drive
With planting removed

Scales @ A3	Drawn JSA
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA7.04	Revision 2
Plot Date: 6/10/2017 11:10:39 AM	

NOT FOR CONSTRUCTION

Rev.	Revision Description	Chk.	Date
1	DA Issue		13.12.16
2	Revised DA Issue		19.09.17

Project
Tempe Tyres Warehouse with Ancillary Office & Staff Amenities
186-206 Captain Cook Drive Kurnell
For
Taleb Property Pty. Ltd.

JSA STUDIO
Suite 2 Level 1
505 Balmain Rd
Lilyfield NSW
PO Box 483
Rozelle NSW 2039
phone: 02 9555 7464
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Title
3D Perspective
View From Entrance

Scales @ A3	Drawn JSA
Project No. 160701	Checked Checker
	Approved Approver
Drawing No. DA7.05	Revision 2

Plot Date: 6/10/2017 11:11:09 AM

PLANT SCHEDULE : Individual Tree Plantings and Eastern Swale

Symbol	Name	Number/ Density	Size	Anticipated Height
A	Angophora costata	8	50 litre	20000 mm
Y	Eucalyptus botryoides	8	50 litre	30000 mm
N	Casuarina glauca	33	20 litre	8000 mm
L	Lomandra longifolia	4 per m2	200 mm pot	900 mm
F	Ficinia nodosa	3 per m2	200mm pot	1000 mm
J	Juncus usitatus	4 per m2	200mm pot	800 mm

LANDSCAPE PLAN

TEMPE TYRES WAREHOUSE
186-206 CAPTAIN COOK DRIVE KURNELL

CAB CONSULTING PTY LTD.
ABN: 48076670990
Heritage Urban Design
Landscape and Architecture
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SCALE : 1:1500 / 1:100
DATE : DECEMBER 2016 AMENDED SEPT 2017 AUG 2018
DWG NO : LA-01A

PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL

GENERAL

G1 These drawings shall be read in conjunction with all architectural and other consultants drawings and specifications and with such other written instructions and sketches as may be issued during the course of the Contract. Any discrepancies shall be referred to the Superintendent before proceeding with any related works. Construction from these drawings, and their associated consultant's drawings is not to commence until approved by the Local Authorities.

G2 All materials and workmanship shall be in accordance with the relevant and current Standards Australia codes and with the By-Laws and Ordinances of the relevant building authorities except where varied by the project specification.

G3 All set out dimensions shall be obtained from Architect's and Engineer's details. All discrepancies shall be referred to the Architect and Engineer for decision before proceeding with related work.

G4 During construction the structure shall be maintained in a stable condition and no part shall be overstressed. Temporary bracing shall be provided by the builder/subcontractor to keep the works and excavations stable at all times.

G5 Unless noted otherwise levels are in metres and dimensions are in millimetres.

G6 The alignment and level of all services shown are approximate only. The contractor shall confirm the position and level of all services prior to commencement of construction. Any damage to services shall be rectified at the contractors expense.

G7 Any substitution of materials shall be approved by the Engineer and included in any tender.

G8 All services, or conduits for servicing shall be installed prior to commencement of pavement construction.

G9 Subsoil drainage, comprising 100 agriculture pipe in geo-stocking to be placed as shown and as may be directed by the superintendent. Subsoil drainage shall be constructed in accordance with the relevant local authority construction specification.

G10 The structural components detailed on these drawings have been designed in accordance with the relevant Standards Australia codes and Local Government Ordinances for the following loadings. Refer to the Architectural drawings for proposed floor usage. Refer to drawings for live loads and superimposed dead loads.

DRAINAGE NOTES

D1 All drainage levels to be confirmed on site, prior to any construction commencing.

D2 All pipes within the property to be a minimum of 100 dia upvc @ 1% minimum grade, uno.

D3 All pits within the property are to be fitted with "weldlok" or approved equivalent grates:
- Light duty for landscaped areas
- Heavy duty where subjected to vehicular traffic

D4 All pits within the property to be constructed as one of the following:
1) Precast stormwater pits
2) Cast insitu mass concrete
3) Cement rendered 230mm brickwork subject to the relevant local authority construction specification.

D5 Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the engineer. All invert levels are to be achieved.

D6 Any pipes beneath relevant local authority road to be rubber ring jointed RCP, uno.

D7 All pits in roadways are to be fitted with heavy duty grates with locking bolts and continuous hinge.

D8 Provide step irons to stormwater pits greater than 1200 in depth.

D9 Trench back fill in roadways shall comprise sharp, clean granular back fill in accordance with the relevant local authority specification to non-trafficable areas to be compacted by rodding and tamping using a flat plate vibrator.

D10 Where a high early discharge (hed) pit is provided all pipes are to be connected to the hed pit, uno.

D11 Down pipes shall be a minimum of dn100 sw grade upvc or 100 x100 colorbond/zincalume steel, uno.

D12 Colorbond or zincalume steel box gutters shall be a minimum of 450 wide x 150 deep.

D13 Eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel, uno.

D14 Subsoil drainage shall be provided to all retaining walls & embankments, with the lines feeding into the stormwater drainage system, uno.

EROSION AND SEDIMENT CONTROL NOTES

E1 These notes are to be read in conjunction with erosion and sediment control details in this drawing set.

E2 The contractor shall implement all soil erosion and sediment control measures as necessary and to the satisfaction of the relevant local authority prior to the commencement of and during construction. No disturbance to the site shall be permitted other than in the immediate area of the works and no material shall be removed from the site without the relevant local authority approval. All erosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing urban stormwater - soils and constructions".

E3 Place straw bales length wise in a row as parallel as possible to the site contours, uno. Bale ends to be tightly butted. Bales are to be placed so that straws are parallel to the row. Bales are to be placed 1.5m to 2m downslope from the toe of the disturbed batter, uno.

E4 Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be a minimum SF2000 or better. Fix fabric to posts with wire ties or as recomended with manufacturer's specifications. Fabric joints to have a minimum of 150mm overlap. Wire to be strung between posts with filter fabric overlap to prevent sagging.

E5 Stabalised entry/exit points to remain intact until finished driveway is complete. Construction of entry/exit points to be maintained and repaired as required so that it's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set.

E6 All drainage pipe inlets to be capped until:
- downpipes connected
- pits constructed and protected with silt barrier

E6 Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.

E7 The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated silt from such devices such that more than 60% of their capacity is lost. All the silt is to be placed outside the limit of works. The period for maintaining these devices shall be at least until all disturbed areas are revegetated and further as may be directed by the superintendent or council.

E8 The contractor shall implement dust control by regularly wetting down (but not saturating) disturbed area.

E9 Topsoil shall be stripped and stockpiled outside hazard areas such as drainage lines. This topsoil shall be respread later on areas to be revegetated and stabilised only, (i.e. all footpaths, batters, site regarding areas, basins and catchdrains). Topsoil shall not be respread on any other areas unless specifically instructed by the superintendent. If they are to remain for longer than one month stockpiles shall be protected from erosion by covering them with a mulch and hydroseeding and, if necessary, by locating banks or drains downstream of a stockpile to retard silt laden runoff.

E10 Lay 300 wide minimum turf strip on 100 topsoil behind all kerb and gutter with 1000 long returns every 6000 and around structures immediately after backfilling as per the relevant local authority specification.

E11 The contractor shall grass seed all disturbed areas with an approved mix as soon as practicable after completion of earthworks and regrading.

E12 Revegetate all trenches immediately upon completion of backfilling.

E13 When any devices are to be handed over to council they shall be in clean and stable condition.

STANDARD LINE TYPES AND SYMBOLS

- PROPOSED KERB & GUTTER
- EXISTING KERB & GUTTER
- PROPOSED BELOW GROUND PIPELINE
- PROPOSED SUSPENDED PIPELINE
- EXISTING PIPELINE
- SUBSOIL DRAINAGE LINE
- PROPOSED KERB INLET PIT
- EXISTING KERB INLET PIT
- PROPOSED JUNCTION OR INLET PIT
- EXISTING JUNCTION OR INLET PIT
- DESIGN CENTRELINE
- EXISTING EDGE OF BITUMEN
- TELECOMUNICATION CONDUIT
- GAS MAIN
- WATER MAIN
- SEWER MAIN
- UNDERGROUND ELECTRICITY CABLES
- PERMANENT MARK & S.S.M.
- BENCH MARK, SURVEY STATION

STANDARD LINE TYPES AND SYMBOLS

- OVERLAND FLOW PATH
- GUTTER DRAINAGE DIRECTION
- DP — DOWNPIPE
- DP — DOWNPIPE WITH SIDE OVERFLOW
- PERVIOUS (GRASSED) AREAS
- × RL= ?? — EXISTING (PRE-DEVELOPMENT) RL
- × RL= ?? — POST DEVELOPMENT RL
- FALL — GRADED IMPERVIOUS AREA (ROOF, CONC SLABS ETC)
- SEDIMENT FENCE
- CROSSING PIPES
- 1 — NODE POINT

LEGEND

AHD	Australian height datum	SS	Stainless steel
AG	Ag-pipe (Sub soil drainage)	SU	Box gutter sump
ARI	Average recurrence interval	TW	Top of wall
BG	Box Gutter	TWL	Top water level
BWL	Bottom water level	U/S	Underside of slab
CL	Cover level	VG	Vally gutter
CO	Clean out inspection opening	UNO	Unless noted otherwise
DCP	Discharge control pit		
DP	Down pipe		
DRP	Dropper pipe		
EBG	Existing box gutter		
EDP	Existing down pipe		
EEG	Existing eaves gutter		
EG	Eaves gutter		
FRC	Fiber reinforced concrete		
FW	Floor waste		
GD	Grated drain		
GSIP	Grated surface inlet pit		
HED	High early discharge		
HP	High point of gutter		
IL	Invert level		
IO	Inspection opening		
O/F	Overflow		
OSD	On-site detention		
PSD	Permissible site discharge		
P1	Pipe 1		
RCP	Reinforced concrete pipe		
RHS	Rectangular hollow section		
RL	Reduced level		
RRJ	Rubber ring joint		
RRT	Rainwater re-use tank		
RWH	Rain water head		
RWO	Rain water outlet		
SLAP	Sealed lid access pit		
SP	Spreader pipe		
SPR	Spreader		

SCHEDULE OF DRAWINGS

C00.01	GENERAL NOTES
C01.01	SEDIMENT AND EROSION CONTROL PLAN
C02.01	STORMWATER DRAINAGE PLAN SHEET 1
C02.02	STORMWATER DRAINAGE PLAN SHEET 2
C02.02	STORMWATER DRAINAGE PLAN SHEET 3
C02.03	STORMWATER DETAILS SHEET

RECOMMENDED MAINTENANCE SCHEDULE

DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Owner	Revove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate & screen to inspect orifice. see plan for location of dcp.
Inspect dcp sump & remove any sediment-sludge.	Six monthly	Owner	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Owner	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage and return any blockage.	Six monthly	Owner	Remove grate and screen. ventilate underground storage if present. open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and screen. ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance Contractor	Remove grate and ensure fixings secure prior to placing weight on step iron.
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and open cover to ventilate underground storage if present. ensure weir clear of blockages.
Empty basket at overflow weir (if present).	Six monthly	Maintenance Contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixings secure and not corroded.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate and screen. ensure plate mounted securely, tighten fixings if required. seal gaps as required.
Check attachment of screen to wall of pit.	Annually	Maintenance Contractor	Remove grate and screen. ensure screen fixings secure. repair as required.
Check screen for corrosion.	Annually	Maintenance Contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of .	Annually	Maintenance Contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance Contractor	Remove grate. fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance Contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks or spalling.	Annually	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance Contractor	Compare diameter to design (see work-as- executed) and ensure edge is not pitted or damaged.
STORAGE			
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate and screen. remove sediment/sludge build-up.
Check orifice diameter correct and retains sharp edge.	Six monthly	Owner	Remove blockages from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Owner	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance	Remove grate to inspect internal walls. repair as required. clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
G	21.05.18	REVISED STORMWATER LAYOUT	F.I.
F	18.05.18	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
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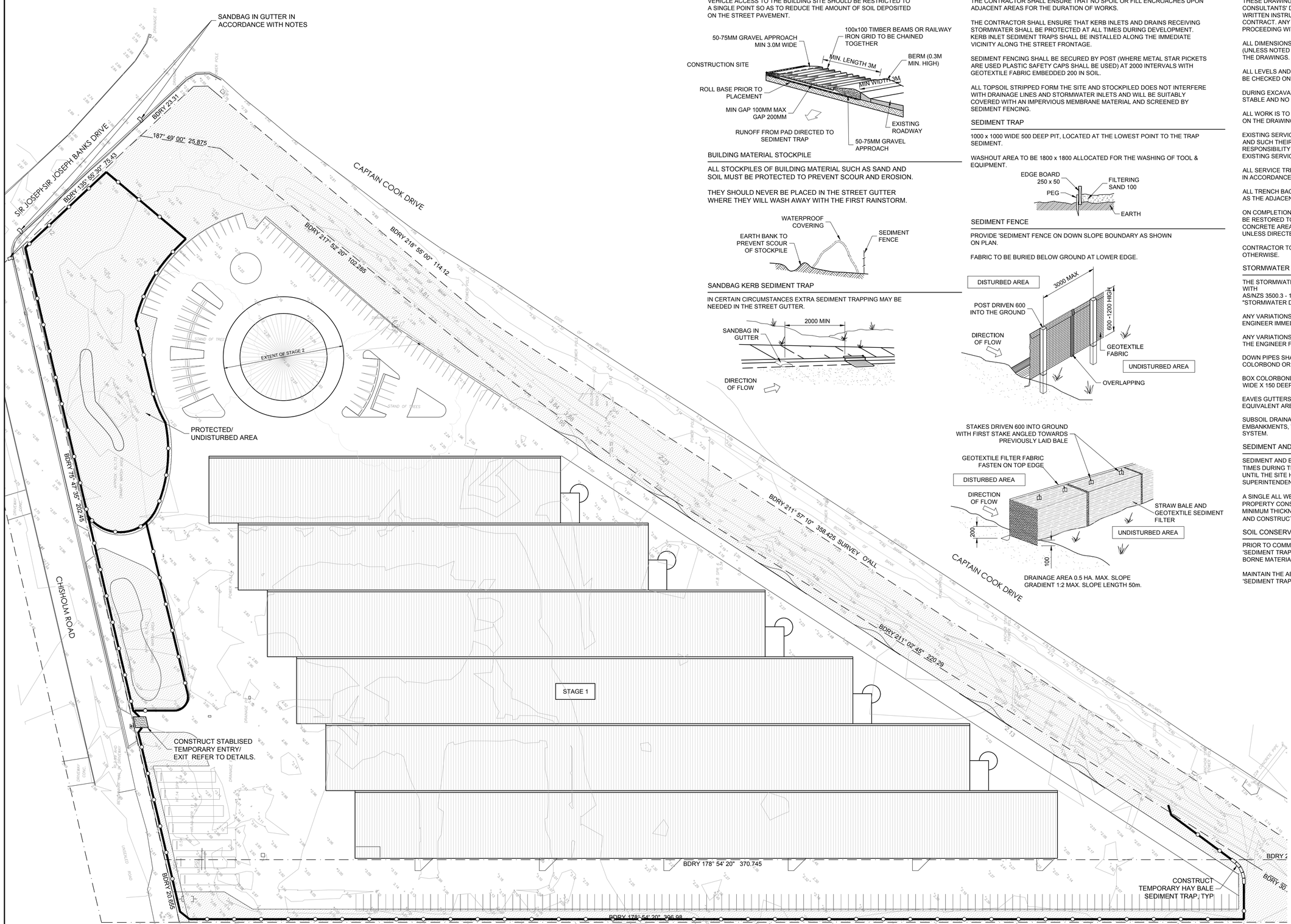
PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

GENERAL NOTES

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C00.01	A1
DESIGNED BY:	DATE:	
D.B.	OCTOBER 2016	
DRAWN BY:	SCALE:	
B.C.	N.T.S.	



SEDIMENT AND EROSION CONTROL PLAN

1:500

- DENOTES SEDIMENT FENCE

TEMPORARY CONSTRUCTION ENTRY/EXIT

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.

BUILDING MATERIAL STOCKPILE

ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION.

THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.

SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.

COMMENCEMENT OF WORKS

THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCROACHES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.

THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.

SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.

ALL TOPSOIL STRIPPED FORM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.

SEDIMENT TRAP

1000 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

WASHOUT AREA TO BE 1800 x 1800 ALLOCATED FOR THE WASHING OF TOOL & EQUIPMENT.

SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN.

FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.

GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE). NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH
AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE uPVC OR 100 X 100 COLORBOND OR ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION

A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.

SOIL CONSERVATION NOTE

PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE,' 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE.

MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP AFTER EACH STORM.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
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F	18.05.18	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
E	06.10.17	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
D	06.09.17	REVISED DRAINAGE LAYOUT	O.G.

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BAULKHAM HILLS NSW 2153

PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

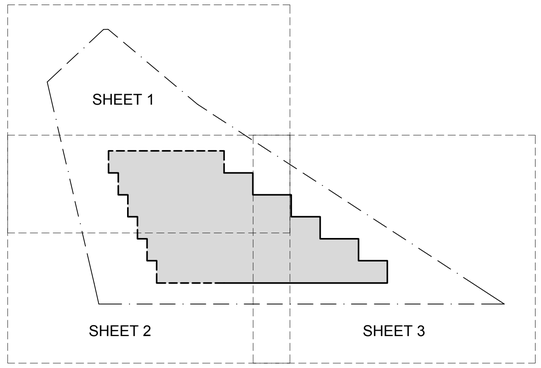
SEDIMENT & EROSION CONTROL PLAN

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C01.01	A1
DESIGNED BY:	DATE:	
D.B.	OCTOBER 2016	
DRAWN BY:	SCALE:	
B.C.	1:500 U.N.O.	

CATCHMENT TREATMENT EFFECTIVENESS

	POST DEVELOPMENT (UNTREATED)	POST DEVELOPMENT (TREATED)	% REDUCTION	COUNCIL TARGETS %
TOTAL SUSPENDED SOLIDS (Kg/yr)	5950	0	100	80
TOTAL PHOSPHOROUS (kg/yr)	11.8	0	100	40
TOTAL NITROGEN (kg/yr)	74	0	100	40
GROSS POLLUTANTS (Kg/yr)	840	0	100	90

A MUSIC MODEL HAS BEEN PREPARED TO DETERMINE EFFECTIVENESS OF WATER QUALITY TREATMENT DEVICES.
AN ELECTRONIC COPY OF THE MUSIC MODEL IS AVAILABLE ON REQUEST.



LOCALITY KEY
1:3000

STORMWATER DESIGN SUMMARY

TOTAL SITE AREA = 5.88 ha

EXISTING IMPERVIOUS AREA = 1.25 ha
PROPOSED IMPERVIOUS AREA = 4.25 ha

IMPERVIOUS AREA DIRECTED TO ATLANTIS DRAINAGE INFILTRATION TRENCHES. INFILTRATION TRENCHES DESIGNED FOR UP TO 1% A.E.P STORM EVENT.

INFILTRATION STORAGE CAPACITY = 808.78 m^3

DESIGN INFILTRATION RATE = 54mm/hr (0.015l/s/hr)

REFER TO CALCULATION SHEET ON DWG C12.04 FOR INFILTRATION CALCULATIONS.

STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O.**

LEGEND

DP1	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
(s)	PROPOSED SUSPENDED PIPELINE
ss	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(sp)	SLOTTED PIPE

STORMWATER DRAINAGE PLAN - SHEET 1
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

STORMWATER DRAINAGE PLAN SHEET 1

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.01	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	

HATCHED AREA DENOTES SUSPENDED BUILDING AREAS TO ALLOW FOR STORAGE/ CONVEYANCE OF FLOOD WATERS.

CHISHOLM ROAD

BDRY 75° 4' 35" 202.45

BDRY 211° 57' 10" 358.425 SURVEY O'ALL

BDRY 178° 54' 20" 396.98

BDRY 20.655

600 SQ. SIP SL = 3.10 IL = 2.50

450 SQ. SIP SL = 2.25 IL = 1.60

450 SQ. SIP SL = 2.10 IL = 1.60

450 SQ. SIP SL = 2.80 IL = 1.60

450 SQ. SIP SL = 3.10 IL = 2.65

600 SQ. SIP SL = 3.10 IL = 2.55

600 SQ. SIP SL = 3.10 IL = 2.40

150m³ RAINWATER RE-USE TANK. HIGH LEVEL OVERFLOW DIRECTED TO SLOTTED UNDERGROUND PIPE

GROUND RL = 4.20

STAGE 1

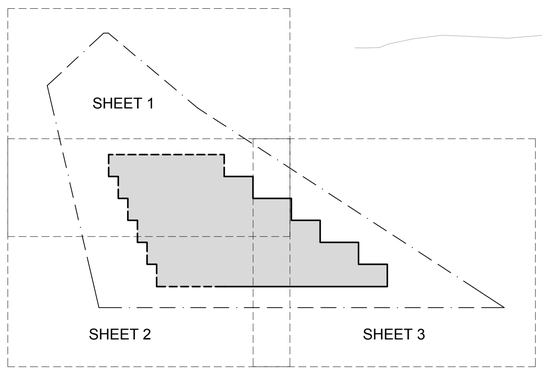
CONTINUOUS ATLANTIS DRAINAGE CELL INFILTRATION TRENCH (SINGLE MODULE)
LENGTH = 572.66m (836 MODULES)
WIDTH = 3.26m (8 MODULES)
VOLUME = 799.02 m³ (6688 MODULES)

STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O**.

LEGEND

DP	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
(s)	PROPOSED SUSPENDED PIPELINE
SS	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(sp)	SLOTTED PIPE



LOCALITY KEY
1:3000

STORMWATER DRAINAGE PLAN - SHEET 2
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
G	21.05.18	REVISED STORMWATER LAYOUT	F.I.
F	18.05.18	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
E	06.10.17	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
D	06.09.17	REVISED DRAINAGE LAYOUT	O.G.

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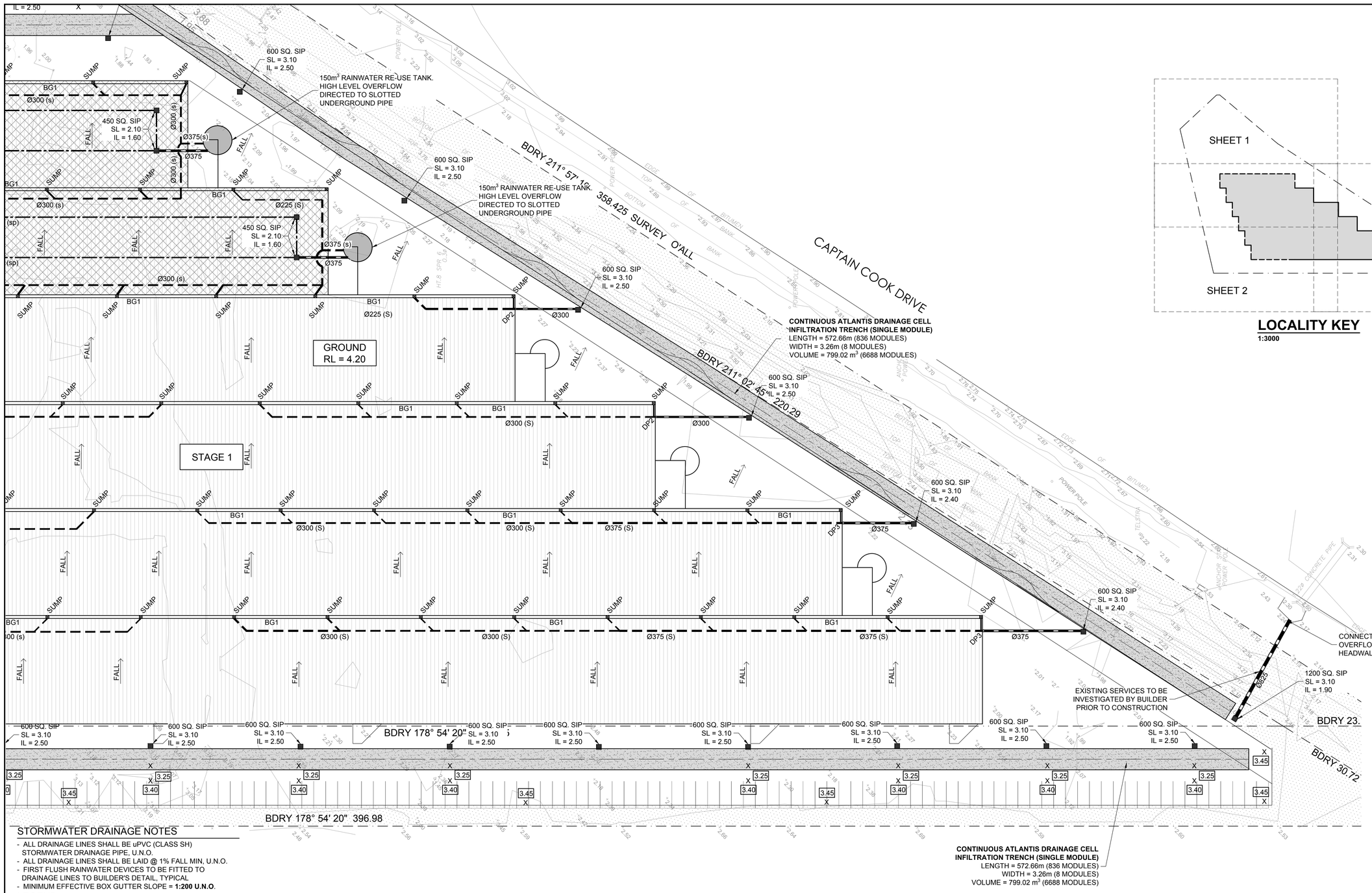
PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

STORMWATER DRAINAGE PLAN SHEET 2

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.02	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	



LOCALITY KEY
1:3000

STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O.**

LEGEND

DP	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
(s)	PROPOSED BELOW GROUND PIPELINE
(s)	PROPOSED SUSPENDED PIPELINE
SS	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(sp)	SLOTTED PIPE

STORMWATER DRAINAGE PLAN - SHEET 3
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
G	21.05.18	REVISED STORMWATER LAYOUT	F.I.
F	18.05.18	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
E	06.10.17	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
D	06.09.17	REVISED DRAINAGE LAYOUT	O.G.

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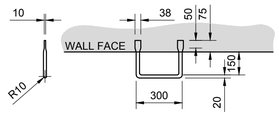
PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

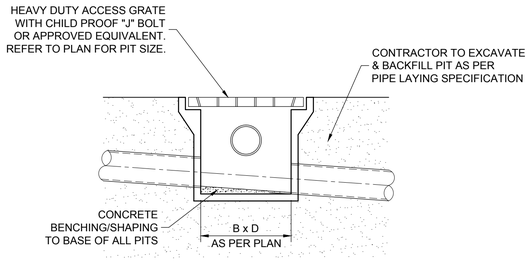
STORMWATER DRAINAGE PLAN
SHEET 3

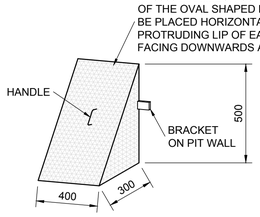
JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.03	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	

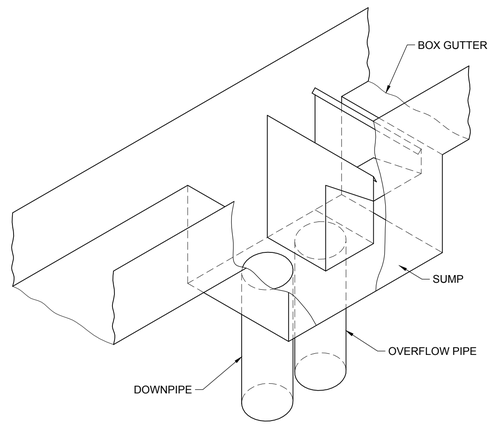


NOTE:
1. FIRST RUNG 150mm DOWN FROM TOP, THEN SPACED AT 300 CENTRES.
2. STEP IRON MATERIAL, 20m DIAMETER MILD STEEL, HEAVY GALVANISED.

STEP IRONS FOR DRAINAGE PITS
1:20



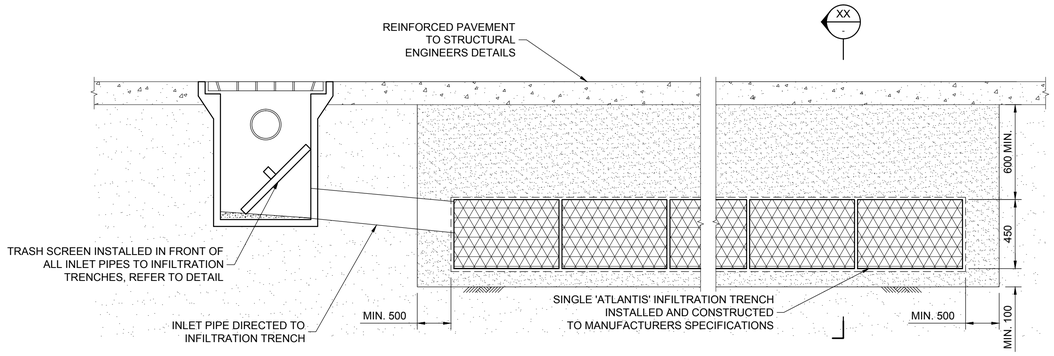




ABSORPTION TRENCH DESIGN							
186-206 Captain Cook Drive, Kurnell							
COUNCIL: Sutherland Council							
Absorption Trench							
Inflow/Outflow Data							
Impervious Area	42540.00 m2						
C	1.00						
ARI	100.00 years						
Advised Absorption Rate	0.015 L/m2/s						
Absorption Trench Dimensions					**Rainwater Tank**		
Trench Dimensions		Trench Dimensions			Storage Volume	300000 L	
Length	576 m	Length	366.8 m		Adopted 1/3 Storage	100000 L	
Width	4.26 m	Width	3.86 m				
Thickness	0 m	Thickness	0 m		**Subfloor Absorption**		
Height	0.45 m	Height	0.45 m		Area	5125 m^2	
Drainage Cell Volume	1395 L/m	Drainage Cell Volume	1220 L/m		Ponding Depth	0.3 m2	
					Volume	1537500 L	

ARI	Storm (min)	Intensity (mm/hr)	Outflow Adsorption (Litres)	Inflow Rate (l/s)	Storm Inflow Volume (l)	Required Storage (l)	Available Storage (l)	Suitability
1 in 100	6	226	53152.9	2672.7	962173.1	909020.2	2888516.0	OK
1 in 100	10	187	88588.2	2211.5	1326890.7	1238302.5	2888516.0	OK
1 in 100	15	155	132882.2	1833.0	1649743.7	1516861.5	2888516.0	OK
1 in 100	30	107	265764.5	1265.4	2277710.7	2011946.3	2888516.0	OK
1 in 100	45	83.7	398646.7	989.8	2672584.9	2273938.2	2888516.0	OK
1 in 100	60	70.3	531528.9	831.4	2992954.4	2461425.5	2888516.0	OK
1 in 100	90	55	797293.4	650.4	3512357.6	2715064.3	2888516.0	OK
1 in 100	120	46.3	1063057.8	547.5	3942355.4	2879297.5	2888516.0	OK

TYPICAL SURFACE INLET PIT DETAIL
1:20

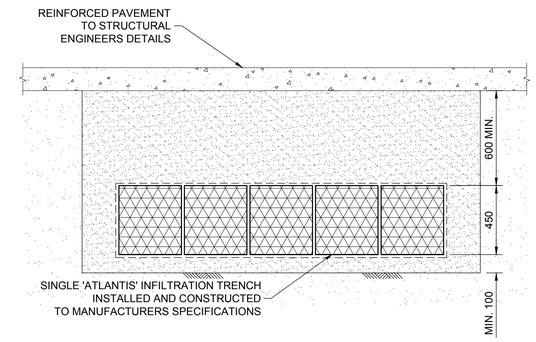


STANDARD TRASH SCREEN
NTS

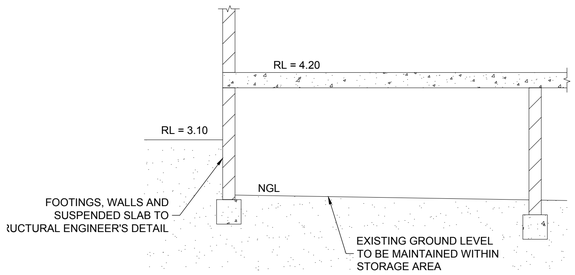
SUMP/HIGH CAPACITY OVERFLOW DEVICE
NTS

INSTALLATION PROCEDURES
1. EXCAVATE PIT ALLOWING FOR TANK DIMENSIONS AND AT LEAST 500mm TO EACH SIDE AND 500mm TO THE SURFACE. ENSURE THE BASE IS LEVEL USING A 100mm BASE OF SAND.
2. INSTALL AUSDRAIN ENVIROSUMP ADJACENT TO THE PIT AND CONNECT DOWN PIPES IN THE TOP OF THE ENVIROSUMP.
3. PLACE GEOTEXTILE FABRIC INSIDE THE PIT AND ALLOW FOR AT LEAST 150mm OVERLAP AT EACH SEAM.
4. PLACE THE TANK MODULES ON TOP OF AND BESIDE ONE ANOTHER ENSURING THE 450mm SIDE IS IN THE UPRIGHT POSITION AND SECURE USING AUSDRAIN CONNECTOR PINS.
5. CONNECT THE ENVIROSUMP AND OVERFLOW PIPE TO THE MODULAR TANK USING AUSDRAIN 150mm PIPE CONNECTORS. REDUCERS MAY BE NEEDED FOR 90mm AND 100mm CONNECTORS.
6. CONNECT PVC PIPES TO THE TANK AND SECURE ALL SEAMS AND FABRIC AROUND PIPE CONNECTIONS USING ADHESIVE TAPE.
7. BACK-FILL WITH WASHED COURSE RIVER SAND (2.0mm TO 0.5mm PARTICULAR SIZE) INCLUDING 100mm ABOVE THE TANK AND LAY 400mm OF CLEAN TOPSOIL AVOIDING CLAY ELEMENTS ABOVE THE SAND PROFILE. WHEN INSTALLED UNDER A DRIVEWAY THE MINIMUM COVER IS 200mm PROVIDED A 150mm REINFORCED PAVEMENT IS USED.
8. ONCE INSTALLED, SECTION OFF THE TANK AREA TO PREVENT HEAVY TRAFFIC FROM DAMAGING THE MODULES DURING CONSTRUCTION WORKS.

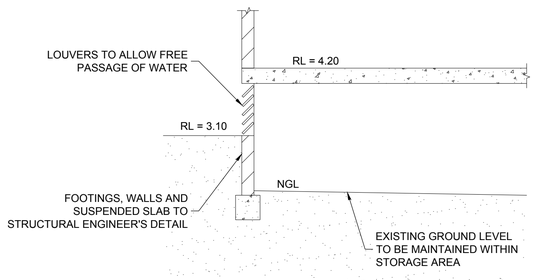
INFILTRATION TRENCH CALCULATIONS



TYPICAL ATLANTIS INFILTRATION TRENCH DETAIL
1:20



SECTION 1
1:50 C11.01



SECTION 2
1:50 C11.01

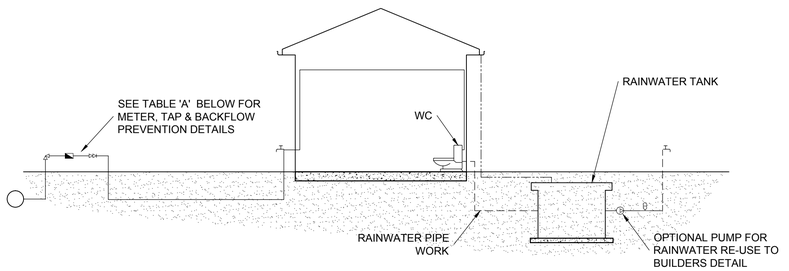


TABLE A

RAINWATER TANK LOCATION	METER SIZE (mm)	TYPE OF TAP	TYPE OF BACKFLOW PREVENTION
ABOVE GROUND	20	BALL VALVE	DUAL CHECK VALVE (COMBINED WITH METER)
	25	BALL VALVE	DUAL CHECK VALVE
	≥ 32	BALL VALVE	DUAL CHECK VALVE
BELOW GROUND	20	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	25	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	≥ 32	BALL VALVE	TESTABLE DOUBLE CHECK VALVE

LEGEND
- PRESSURE VESSEL
- METER
- BALL VALVE RIGHT ANGLE TYPE
- DCV DUAL CHECK VALVE
- PUMP
- GARDEN TAP
- DRINKING WATER SUPPLY PIPES
- RAINWATER SUPPLY PIPES
- DOWN PIPES

DIAGRAM NOTES:
1 DRAWING TO BE READ IN CONJUNCTION WITH SYDNEY WATER PLUMBING REQUIREMENTS
2 FOR TANKS 10,000 LITRES OR LESS, COUNCIL DEVELOPMENT CONSENT IS NOT REQUIRED, IF THEIR CONDITIONS FOR INSTALLATION ARE FOLLOWED.
3 FOR TANKS GREATER THAN 10,000 LITRES COUNCIL DEVELOPMENT CONSENT IS GENERALLY REQUIRED.
4 FOR TANKS MORE THAN 10,000 LITRES APPROVAL IS REQUIRED FOR BUILDING OVER SEWERS.
5 SYDNEY WATER'S APPROVAL IS REQUIRED FOR ANY TOP UP FROM DRINKING WATER SUPPLY, REGARDLESS OF TANK SIZE. NO DIRECT CONNECTION IS ALLOWED BETWEEN THE DRINKING WATER SUPPLY AND THE RAINWATER TANK SUPPLY.
6 RAINWATER PIPEWORK IS SHOWN ON THE DIAGRAM AS SUPPLYING INTERNAL AND EXTERNAL RAINWATER USES. CUSTOMERS MAY WANT ONE OR THE OTHER.
7 ANY DESIGNED ACCESS LID INTO RAINWATER RE-USE TANK IS TO HAVE A LOCKABLE LID. IF THE LID IS DESIGNED TO BE ACCESSED BY A MAINTENANCE PERSON, IT MUST BE AT LEAST 600 mm x 900 mm IN SIZE.

DUAL DRINKING WATER & RAINWATER SUPPLY DIAGRAM
N.T.S.

SECTION XX
1:20

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
G	21.05.18	REVISED STORMWATER LAYOUT	F.I.
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PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

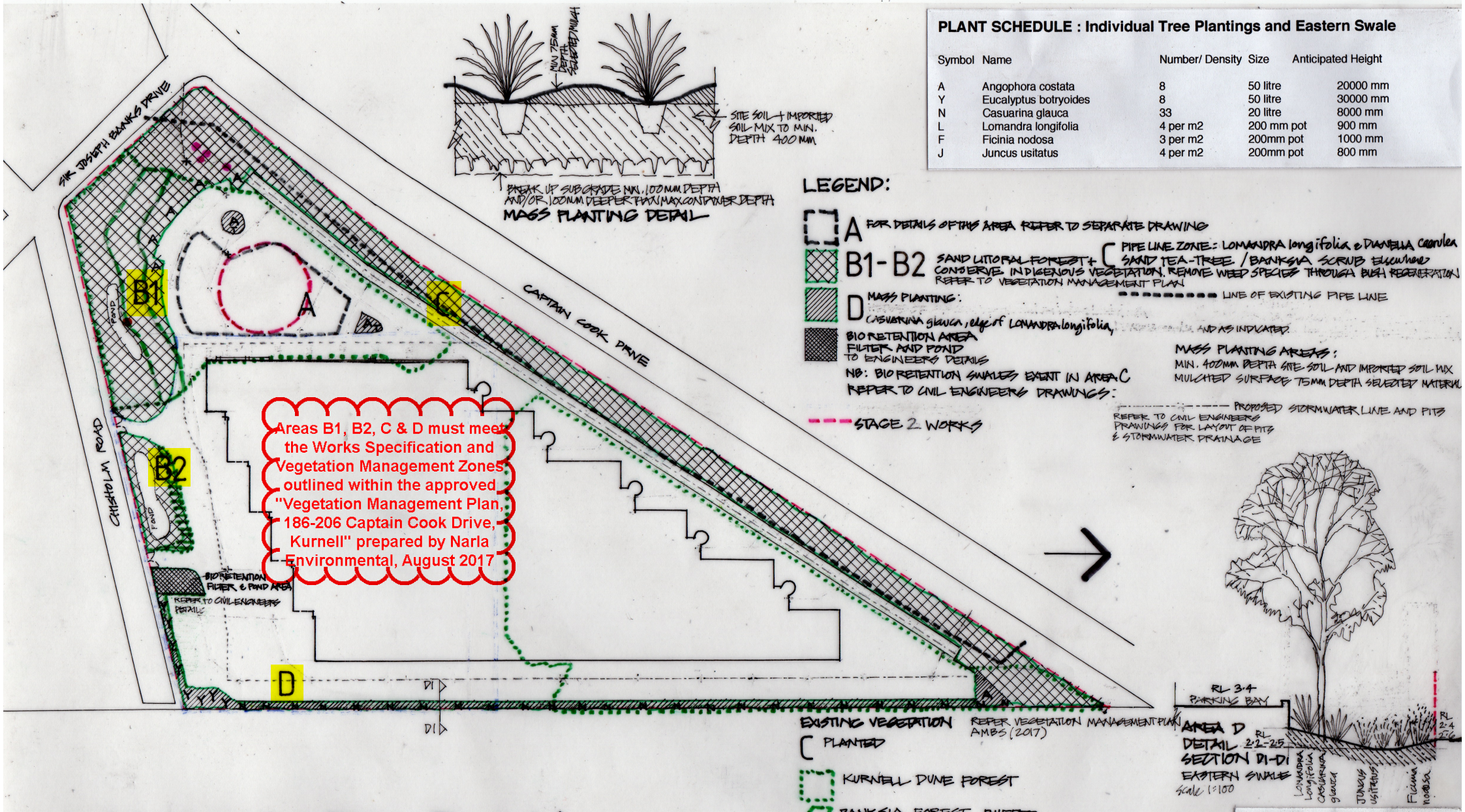
STORMWATER DETAILS SHEET

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.04	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:20 U.N.O.	

LANDSCAPE PLAN

TEMPE TYRES WAREHOUSE
186-206 CAPTAIN COOK DRIVE KURNELL

SSPP (Sydney South) Report Appendices (2017SSH0007)



PLANT SCHEDULE : Individual Tree Plantings and Eastern Swale

Symbol	Name	Number/ Density	Size	Anticipated Height
A	Angophora costata	8	50 litre	20000 mm
Y	Eucalyptus botryoides	8	50 litre	30000 mm
N	Casuarina glauca	33	20 litre	8000 mm
L	Lomandra longifolia	4 per m2	200 mm pot	900 mm
F	Ficinia nodosa	3 per m2	200mm pot	1000 mm
J	Juncus usitatus	4 per m2	200mm pot	800 mm

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SCALE : 1:1500 / 1:100 @ A1
DATE : DECEMBER 2016 AMENDED SEPT 2017 AUG 2018
DWG NO : LA-01A

PLANT SCHEDULE

Symbol	Name	Number/ Density	Size	Anticipated Height
A	Angophora costata	9	50 litre	20000 mm
B	Bismarckia nobilis	2	200 litre	12000 mm
X	Howea forsteriana	4	200 litre	10000 mm
K	Banksia integrifolia	6	20 litre	15000 mm
C	Cupaniopsis anacardioides	4	100 litre	8000 mm
S	Syzygium paniculatum	21	20 litre	8000 mm
E	Elaeocarpus reticularis	5	20 litre	8000 mm
R	Raphis excelsa	9	Clump	4000 mm
M	Macrozammia communis	11	35 litre	1800 mm
T	Lomandra 'Tanika'	4 per m2	200mm pot	900 mm
L	Lomandra longifolia	4 per m2	200 mm pot	900 mm
D	Dianella caerulea	5 per m2	200 mm pot	600 mm

LEGEND:

MASS PLANTING AREAS
MIN. 400mm IMPORTED SOIL MIX DEPTH WITH 75mm DEPTH SELECTED MULCH

WATER GARDEN
WATER DEPTH 300mm TO DETAIL

SANDSTONE BLOCKS
SELECTED SANDSTONE BLOCKS OF VARYING DIMENSIONS AND HEIGHTS INTEGRATED WITH WATER JET IN POND AREA TO DETAIL

EXTENT OF AREA A

LANDSCAPE PLAN DETAIL AREA A

TEMPE TYRES WAREHOUSE
186-206 CAPTAIN COOK DRIVE KURNELL

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website: www.cabconsulting.com.au

SCALE : 1:200
DATE : DECEMBER 2016
DWG LA-02A

PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL

GENERAL

G1 These drawings shall be read in conjunction with all architectural and other consultants drawings and specifications and with such other written instructions and sketches as may be issued during the course of the Contract. Any discrepancies shall be referred to the Superintendent before proceeding with any related works. Construction from these drawings, and their associated consultant's drawings is not to commence until approved by the Local Authorities.

G2 All materials and workmanship shall be in accordance with the relevant and current Standards Australia codes and with the By-Laws and Ordinances of the relevant building authorities except where varied by the project specification.

G3 All set out dimensions shall be obtained from Architect's and Engineer's details. All discrepancies shall be referred to the Architect and Engineer for decision before proceeding with related work.

G4 During construction the structure shall be maintained in a stable condition and no part shall be overstressed. Temporary bracing shall be provided by the builder/subcontractor to keep the works and excavations stable at all times.

G5 Unless noted otherwise levels are in metres and dimensions are in millimetres.

G6 The alignment and level of all services shown are approximate only. The contractor shall confirm the position and level of all services prior to commencement of construction. Any damage to services shall be rectified at the contractors expense.

G7 Any substitution of materials shall be approved by the Engineer and included in any tender.

G8 All services, or conduits for servicing shall be installed prior to commencement of pavement construction.

G9 Subsoil drainage, comprising 100 agriculture pipe in geo-stocking to be placed as shown and as may be directed by the superintendent. Subsoil drainage shall be constructed in accordance with the relevant local authority construction specification.

G10 The structural components detailed on these drawings have been designed in accordance with the relevant Standards Australia codes and Local Government Ordinances for the following loadings. Refer to the Architectural drawings for proposed floor usage. Refer to drawings for live loads and superimposed dead loads.

DRAINAGE NOTES

D1 All drainage levels to be confirmed on site, prior to any construction commencing.

D2 All pipes within the property to be a minimum of 100 dia upvc @ 1% minimum grade, uno.

D3 All pits within the property are to be fitted with "weldlok" or approved equivalent grates:
- Light duty for landscaped areas
- Heavy duty where subjected to vehicular traffic

D4 All pits within the property to be constructed as one of the following:
1) Precast stormwater pits
2) Cast insitu mass concrete
3) Cement rendered 230mm brickwork subject to the relevant local authority construction specification.

D5 Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the engineer. All invert levels are to be achieved.

D6 Any pipes beneath relevant local authority road to be rubber ring jointed RCP, uno.

D7 All pits in roadways are to be fitted with heavy duty grates with locking bolts and continuous hinge.

D8 Provide step irons to stormwater pits greater than 1200 in depth.

D9 Trench back fill in roadways shall comprise sharp, clean granular back fill in accordance with the relevant local authority specification to non-trafficable areas to be compacted by rodding and tamping using a flat plate vibrator.

D10 Where a high early discharge (hed) pit is provided all pipes are to be connected to the hed pit, uno.

D11 Down pipes shall be a minimum of dn100 sw grade upvc or 100 x100 colorbond/zincalume steel, uno.

D12 Colorbond or zincalume steel box gutters shall be a minimum of 450 wide x 150 deep.

D13 Eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel, uno.

D14 Subsoil drainage shall be provided to all retaining walls & embankments, with the lines feeding into the stormwater drainage system, uno.

EROSION AND SEDIMENT CONTROL NOTES

E1 These notes are to be read in conjunction with erosion and sediment control details in this drawing set.

E2 The contractor shall implement all soil erosion and sediment control measures as necessary and to the satisfaction of the relevant local authority prior to the commencement of and during construction. No disturbance to the site shall be permitted other than in the immediate area of the works and no material shall be removed from the site without the relevant local authority approval. All erosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing urban stormwater - soils and constructions".

E3 Place straw bales length wise in a row as parallel as possible to the site contours, uno. Bale ends to be tightly butted. Bales are to be placed so that straws are parallel to the row. Bales are to be placed 1.5m to 2m downslope from the toe of the disturbed batter, uno.

E4 Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be a minimum SF2000 or better. Fix fabric to posts with wire ties or as recomended with manufacturer's specifications. Fabric joints to have a minimum of 150mm overlap. Wire to be strung between posts with filter fabric overlap to prevent sagging.

E5 Stabalised entry/exit points to remain intact until finished driveway is complete. Construction of entry/exit points to be maintained and repaired as required so that it's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set.

E6 All drainage pipe inlets to be capped until:
- downpipes connected
- pits constructed and protected with silt barrier

E6 Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.

E7 The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated silt from such devices such that more than 60% of their capacity is lost. All the silt is to be placed outside the limit of works. The period for maintaining these devices shall be at least until all disturbed areas are revegetated and further as may be directed by the superintendent or council.

E8 The contractor shall implement dust control by regularly wetting down (but not saturating) disturbed area.

E9 Topsoil shall be stripped and stockpiled outside hazard areas such as drainage lines. This topsoil shall be respread later on areas to be revegetated and stabilised only, (i.e. all footpaths, batters, site regarding areas, basins and catchdrains). Topsoil shall not be respread on any other areas unless specifically instructed by the superintendent. If they are to remain for longer than one month stockpiles shall be protected from erosion by covering them with a mulch and hydroseeding and, if necessary, by locating banks or drains downstream of a stockpile to retard silt laden runoff.

E10 Lay 300 wide minimum turf strip on 100 topsoil behind all kerb and gutter with 1000 long returns every 6000 and around structures immediately after backfilling as per the relevant local authority specification.

E11 The contractor shall grass seed all disturbed areas with an approved mix as soon as practicable after completion of earthworks and regrading.

E12 Revegetate all trenches immediately upon completion of backfilling.

E13 When any devices are to be handed over to council they shall be in clean and stable condition.

STANDARD LINE TYPES AND SYMBOLS

- PROPOSED KERB & GUTTER
- EXISTING KERB & GUTTER
- PROPOSED BELOW GROUND PIPELINE
- PROPOSED SUSPENDED PIPELINE
- EXISTING PIPELINE
- SUBSOIL DRAINAGE LINE
- PROPOSED KERB INLET PIT
- EXISTING KERB INLET PIT
- PROPOSED JUNCTION OR INLET PIT
- EXISTING JUNCTION OR INLET PIT
- DESIGN CENTRELINE
- EXISTING EDGE OF BITUMEN
- TELECOMUNICATION CONDUIT
- GAS MAIN
- WATER MAIN
- SEWER MAIN
- UNDERGROUND ELECTRICITY CABLES
- PERMANENT MARK & S.S.M.
- BENCH MARK, SURVEY STATION

STANDARD LINE TYPES AND SYMBOLS

- OVERLAND FLOW PATH
- GUTTER DRAINAGE DIRECTION
- DP — DOWNPIPE
- DP — DOWNPIPE WITH SIDE OVERFLOW
- PERVIOUS (GRASSED) AREAS
- × RL= ?? — EXISTING (PRE-DEVELOPMENT) RL
- × RL= ?? — POST DEVELOPMENT RL
- FALL — GRADED IMPERVIOUS AREA (ROOF, CONC SLABS ETC)
- SEDIMENT FENCE
- CROSSING PIPES
- 1 — NODE POINT

LEGEND

AHD	Australian height datum	SS	Stainless steel
AG	Ag-pipe (Sub soil drainage)	SU	Box gutter sump
ARI	Average recurrence interval	TW	Top of wall
BG	Box Gutter	TWL	Top water level
BWL	Bottom water level	U/S	Underside of slab
CL	Cover level	VG	Vally gutter
CO	Clean out inspection opening	UNO	Unless noted otherwise
DCP	Discharge control pit		
DP	Down pipe		
DRP	Dropper pipe		
EBG	Existing box gutter		
EDP	Existing down pipe		
EEG	Existing eaves gutter		
EG	Eaves gutter		
FRC	Fiber reinforced concrete		
FW	Floor waste		
GD	Grated drain		
GSIP	Grated surface inlet pit		
HED	High early discharge		
HP	High point of gutter		
IL	Invert level		
IO	Inspection opening		
O/F	Overflow		
OSD	On-site detention		
PSD	Permissible site discharge		
P1	Pipe 1		
RCP	Reinforced concrete pipe		
RHS	Rectangular hollow section		
RL	Reduced level		
RRJ	Rubber ring joint		
RRT	Rainwater re-use tank		
RWH	Rain water head		
RWO	Rain water outlet		
SLAP	Sealed lid access pit		
SP	Spreader pipe		
SPR	Spreader		

SCHEDULE OF DRAWINGS

RECOMMENDED MAINTENANCE SCHEDULE

DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Owner	Revove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate & screen to inspect orifice. see plan for location of dcp.
Inspect dcp sump & remove any sediment-sludge.	Six monthly	Owner	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Owner	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage and return any blockage.	Six monthly	Owner	Remove grate and screen. ventilate underground storage if present. open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and screen. ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance Contractor	Remove grate and ensure fixings secure prior to placing weight on step iron.
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and open cover to ventilate underground storage if present. ensure weir clear of blockages.
Empty basket at overflow weir (if present).	Six monthly	Maintenance Contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixings secure and not corroded.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate and screen. ensure plate mounted securely, tighten fixings if required. seal gaps as required.
Check attachment of screen to wall of pit.	Annually	Maintenance Contractor	Remove grate and screen. ensure screen fixings secure. repair as required.
Check screen for corrosion.	Annually	Maintenance Contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of .	Annually	Maintenance Contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance Contractor	Remove grate. fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance Contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks or spalling.	Annually	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance Contractor	Compare diameter to design (see work-as- executed) and ensure edge is not pitted or damaged.
STORAGE			
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate and screen. remove sediment/sludge build-up.
Check orifice diameter correct and retains sharp edge.	Six monthly	Owner	Remove blockages from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Owner	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance	Remove grate to inspect internal walls. repair as required. clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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Postal Address
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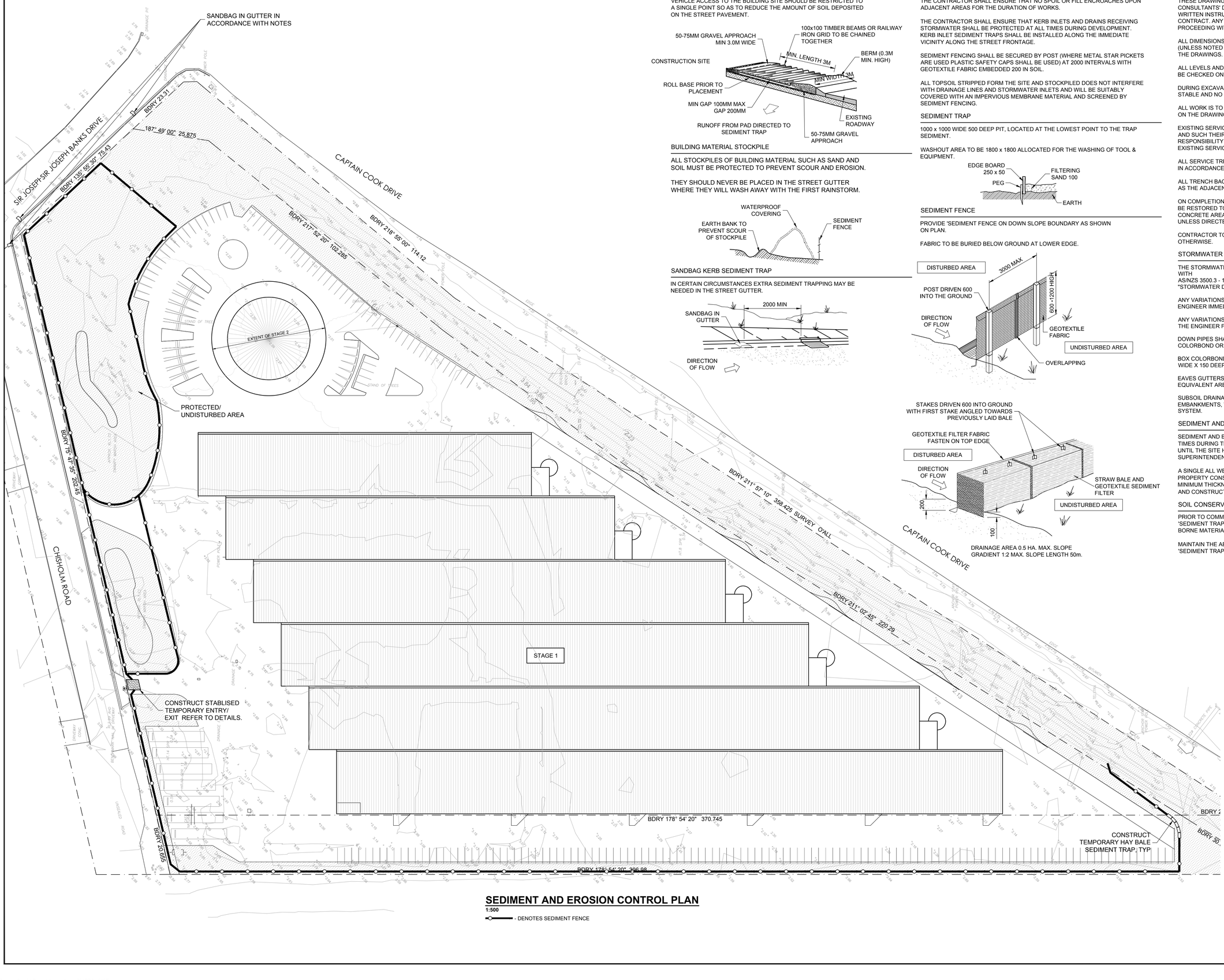
BAULKHAM HILLS NSW 2153

PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

GENERAL NOTES

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C00.01	A1
DESIGNED BY:	DATE:	
D.B.	OCTOBER 2016	
DRAWN BY:	SCALE:	
B.C.	N.T.S.	



SEDIMENT AND EROSION CONTROL PLAN

1:500

- DENOTES SEDIMENT FENCE

TEMPORARY CONSTRUCTION ENTRY/EXIT

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.

BUILDING MATERIAL STOCKPILE

ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION.

THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.

SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.

COMMENCEMENT OF WORKS

THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCROACHES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.

THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.

SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.

ALL TOPSOIL STRIPPED FORM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.

SEDIMENT TRAP

1000 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

WASHOUT AREA TO BE 1800 x 1800 ALLOCATED FOR THE WASHING OF TOOL & EQUIPMENT.

SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN.

FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.

GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE). NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH
AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE uPVC OR 100 X 100 COLORBOND OR ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION

A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.

SOIL CONSERVATION NOTE

PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE,' 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE.

MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP AFTER EACH STORM.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL FOR JSA STUDIO

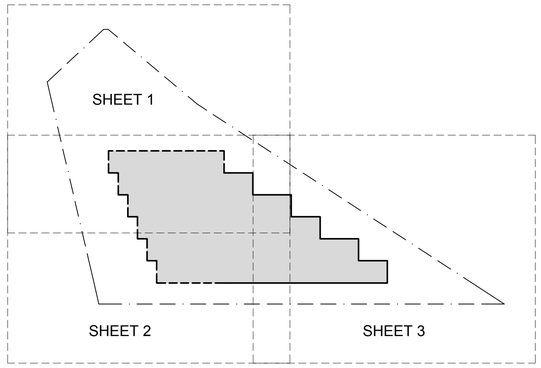
SEDIMENT & EROSION CONTROL PLAN

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C01.01	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:500 U.N.O.	

CATCHMENT TREATMENT EFFECTIVENESS

	POST DEVELOPMENT (UNTREATED)	POST DEVELOPMENT (TREATED)	% REDUCTION	COUNCIL TARGETS %
TOTAL SUSPENDED SOLIDS (Kg/yr)	5950	0	100	80
TOTAL PHOSPHOROUS (kg/yr)	11.8	0	100	40
TOTAL NITROGEN (kg/yr)	74	0	100	40
GROSS POLLUTANTS (Kg/yr)	840	0	100	90

A MUSIC MODEL HAS BEEN PREPARED TO DETERMINE EFFECTIVENESS OF WATER QUALITY TREATMENT DEVICES.
AN ELECTRONIC COPY OF THE MUSIC MODEL IS AVAILABLE ON REQUEST.



LOCALITY KEY
1:3000

STORMWATER DESIGN SUMMARY

TOTAL SITE AREA = 5.88 ha

EXISTING IMPERVIOUS AREA = 1.25 ha
PROPOSED IMPERVIOUS AREA = 4.25 ha

IMPERVIOUS AREA DIRECTED TO ATLANTIS DRAINAGE INFILTRATION TRENCHES. INFILTRATION TRENCHES DESIGNED FOR UP TO 1% A.E.P STORM EVENT.

INFILTRATION STORAGE CAPACITY = 808.78 m^3

DESIGN INFILTRATION RATE = 54mm/hr (0.015l/s/hr)

REFER TO CALCULATION SHEET ON DWG C12.04 FOR INFILTRATION CALCULATIONS.

STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O.**

LEGEND

DP1	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
(S)	PROPOSED SUSPENDED PIPELINE
SS	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(SP)	SLOTTED PIPE

SIR JOSEPH BANKS DRIVE
CAPTAIN COOK DRIVE
CHISHOLM ROAD
BDRY 23.31
BDRY 135° 55' 30" 75.43
187° 49' 00" 25.875
BDRY 217° 20" 102.285
00" 114.12
BDRY 75° 4' 35" 202.45
3.81
3.84
3.88
7.69

600 SQ. SIP SL = 3.40 IL = 2.25
450 SQ. SIP SL = 3.40 IL = 2.90
600 SQ. SIP SL = 3.40 IL = 2.80
600 SQ. SIP SL = 3.40 IL = 2.60
600 SQ. SIP SL = 3.40 IL = 2.90
600 SQ. SIP SL = 3.40 IL = 2.80
450 SQ. SIP SL = 3.40 IL = 2.95
600 SQ. SIP SL = 3.10 IL = 2.50
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600 SQ. SIP SL = 3.10 IL = 2.50
450 SQ. SIP SL = 3.10 IL = 2.65
600 SQ. SIP SL = 3.10 IL = 2.50
450 SQ. SIP SL = 3.10 IL = 2.65
600 SQ. SIP SL = 3.10 IL = 2.50
600 SQ. SIP SL = 3.10 IL = 2.50

Ø150 Ø225 Ø300 Ø375 Ø375(s)

GROUND RL = 3.90
EXTENT OF STAGE 2
CONNECTION TO OFFICE DRAINAGE TO FUTURE DETAIL
GROUND RL = 4.20

PROPOSED CONTINUOUS ATLANTIS DRAINAGE CELL INFILTRATION TRENCH (SINGLE MODULE) SHOWN SHADED
LENGTH = 366.48 m (535MODULES)
WIDTH = 2.86 m (7 MODULES)
VOLUME = 447.42 m^3 (3745 MODULES)

CONTINUOUS ATLANTIS DRAINAGE CELL INFILTRATION TRENCH (SINGLE MODULE)
LENGTH = 572.66m (836 MODULES)
WIDTH = 3.26m (8 MODULES)
VOLUME = 799.02 m^3 (6688 MODULES)

DOTTED REGION DENOTES EXTENT OF EXISTING LANDSCAPE WETLAND AREA TO REMAIN UNDEVELOPED, EXCLUDED FROM SITE CALCULATIONS

DOTTED REGION DENOTES EXTENT OF EXISTING LANDSCAPE WETLAND AREA TO REMAIN UNDEVELOPED, EXCLUDED FROM SITE CALCULATIONS

HATCHED AREA DENOTES SUSPENDED BUILDING AREAS TO ALLOW FOR STORAGE/ CONVEYANCE OF FLOOD WATERS.

150m^3 RAINWATER RE-USE TANK. HIGH LEVEL OVERFLOW DIRECTED TO SLOTTED UNDERGROUND PIPE

STORMWATER DRAINAGE PLAN - SHEET 1
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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STORMWATER DRAINAGE PLAN SHEET 1

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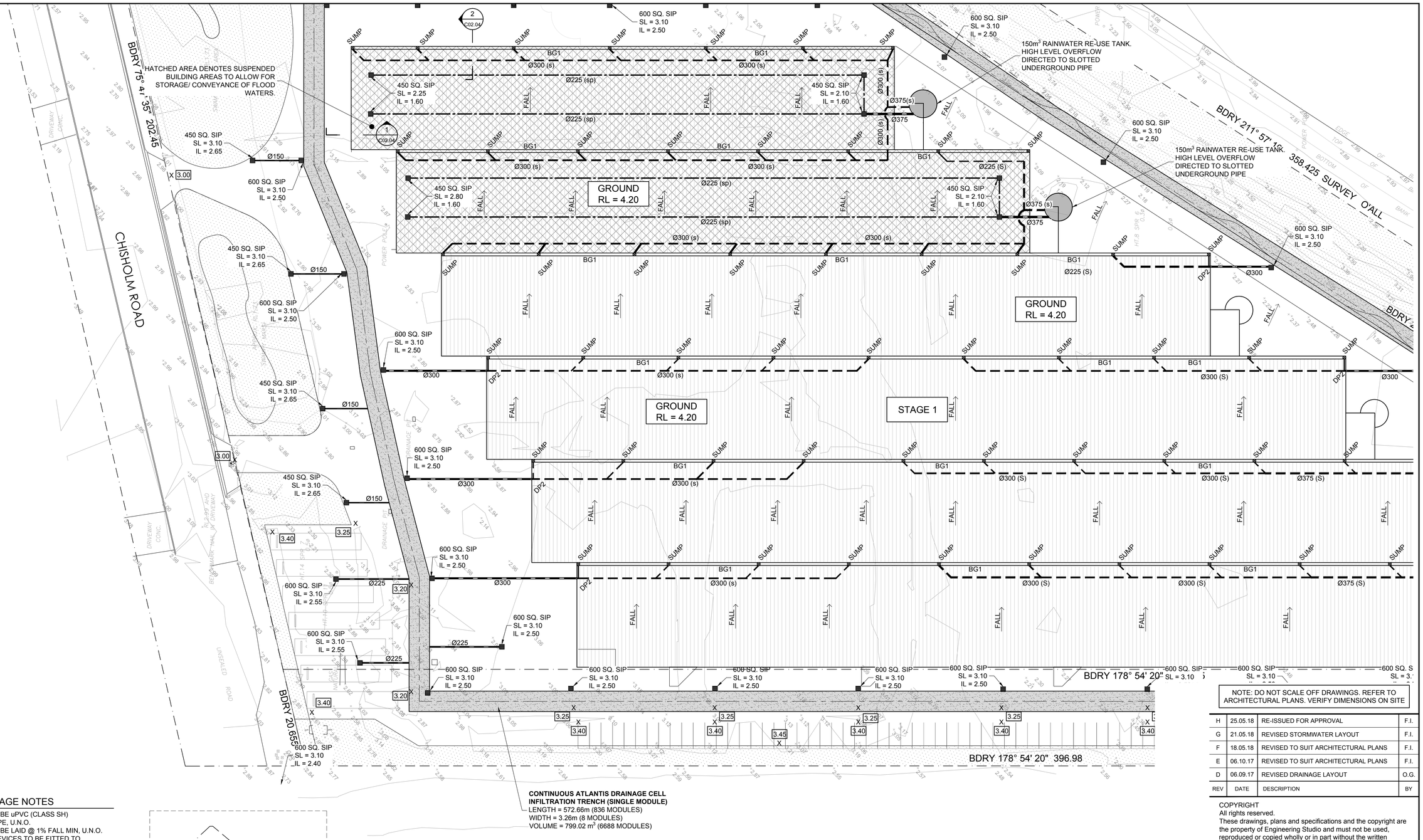
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	

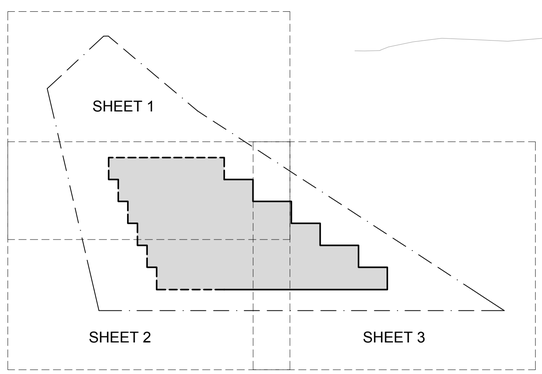


STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O**.

LEGEND

DP	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
(s)	PROPOSED SUSPENDED PIPELINE
SS	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(sp)	SLOTTED PIPE



LOCALITY KEY
1:3000

STORMWATER DRAINAGE PLAN - SHEET 2
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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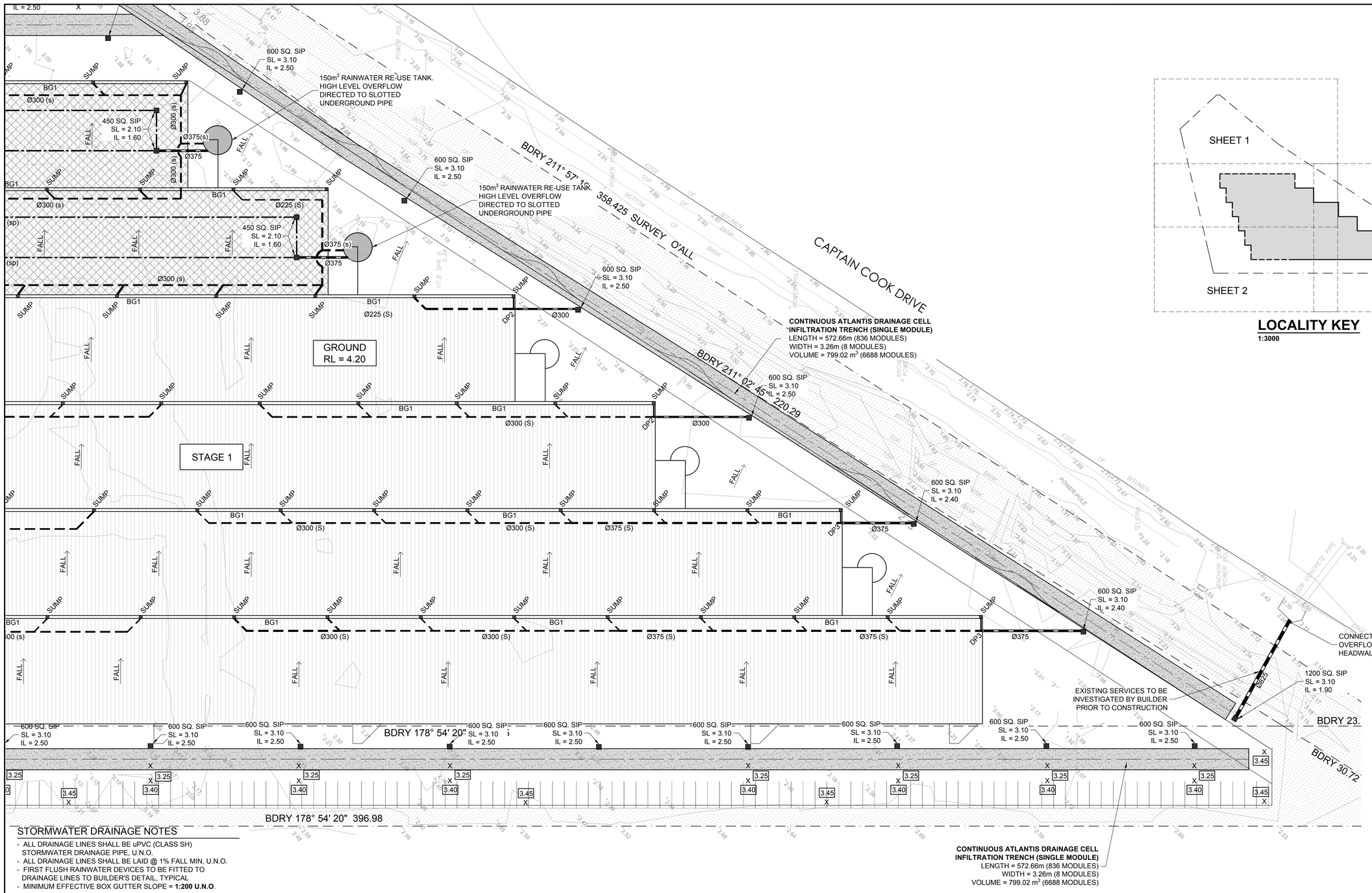
PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

STORMWATER DRAINAGE PLAN SHEET 2

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.02	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	



LOCALITY KEY
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STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL
- MINIMUM EFFECTIVE BOX GUTTER SLOPE = **1:200 U.N.O.**

LEGEND

DP	Ø225 DOWN PIPE
DP2	Ø300 DOWN PIPE
DP3	Ø375 DOWN PIPE
SP	RAINWATER SPREADER
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
(s)	PROPOSED SUSPENDED PIPELINE
SS	SUBSOIL DRAINAGE LINE
	PROPOSED SURFACE INLET PIT
BG1	BOX GUTTER 600W x 200D
SUMP	600W x 150D x 700L FITTED WITH Ø225 DOWNPIPE WITH Ø225 OVERFLOW PIPE
	DENOTES ABSORPTION TRENCH, REFER TO DETAIL
(sp)	SLOTTED PIPE

STORMWATER DRAINAGE PLAN - SHEET 3
1:400

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
H	25.05.18	RE-ISSUED FOR APPROVAL	F.I.
G	21.05.18	REVISED STORMWATER LAYOUT	F.I.
F	18.05.18	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
E	06.10.17	REVISED TO SUIT ARCHITECTURAL PLANS	F.I.
D	06.09.17	REVISED DRAINAGE LAYOUT	O.G.

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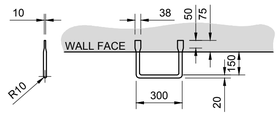
PROPOSED WAREHOUSE
AT 186-206 CAPTAIN COOK DRIVE, KURNELL
FOR JSA STUDIO

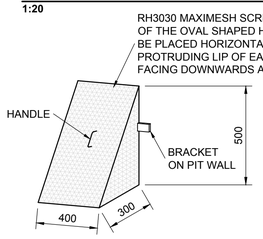
STORMWATER DRAINAGE PLAN SHEET 3

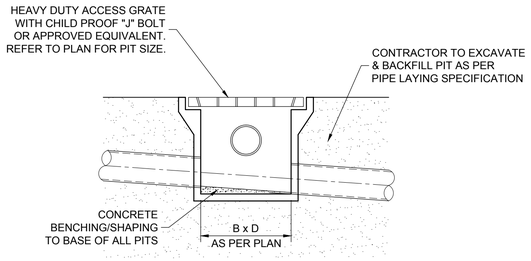
JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
16624	C02.03	A1
DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:400 U.N.O.	



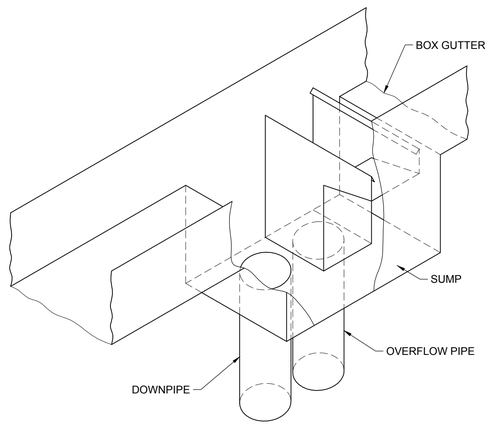
NOTE:
1. FIRST RUNG 150mm DOWN FROM TOP, THEN SPACED AT 300 CENTRES.
2. STEP IRON MATERIAL, 20m DIAMETER MILD STEEL, HEAVY GALVANISED.

STEP IRONS FOR DRAINAGE PITS
1:20

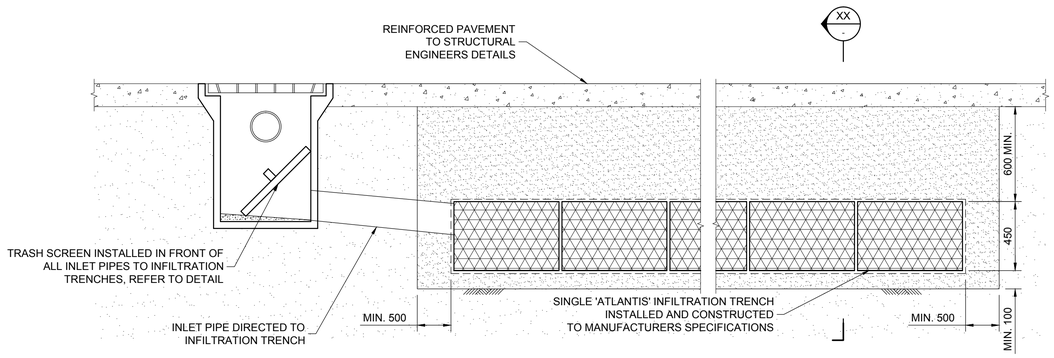




TYPICAL SURFACE INLET PIT DETAIL
1:20



STANDARD TRASH SCREEN
NTS



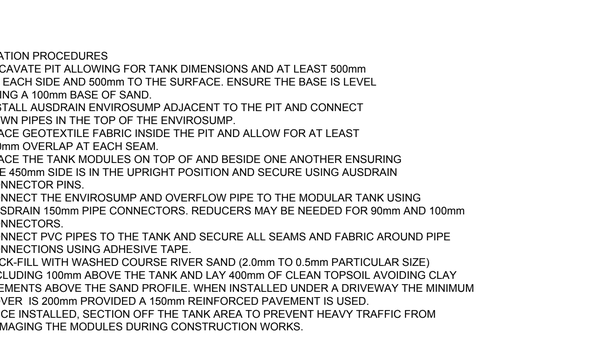
SUMP/HIGH CAPACITY OVERFLOW DEVICE
NTS

INSTALLATION PROCEDURES
1. EXCAVATE PIT ALLOWING FOR TANK DIMENSIONS AND AT LEAST 500mm TO EACH SIDE AND 500mm TO THE SURFACE. ENSURE THE BASE IS LEVEL USING A 100mm BASE OF SAND.
2. INSTALL AUSDRAIN ENVIROSUMP ADJACENT TO THE PIT AND CONNECT DOWN PIPES IN THE TOP OF THE ENVIROSUMP.
3. PLACE GEOTEXTILE FABRIC INSIDE THE PIT AND ALLOW FOR AT LEAST 150mm OVERLAP AT EACH SEAM.
4. PLACE THE TANK MODULES ON TOP OF AND BESIDE ONE ANOTHER ENSURING THE 450mm SIDE IS IN THE UPRIGHT POSITION AND SECURE USING AUSDRAIN CONNECTOR PINS.
5. CONNECT THE ENVIROSUMP AND OVERFLOW PIPE TO THE MODULAR TANK USING AUSDRAIN 150mm PIPE CONNECTORS. REDUCERS MAY BE NEEDED FOR 90mm AND 100mm CONNECTORS.
6. CONNECT PVC PIPES TO THE TANK AND SECURE ALL SEAMS AND FABRIC AROUND PIPE CONNECTIONS USING ADHESIVE TAPE.
7. BACK-FILL WITH WASHED COURSE RIVER SAND (2.0mm TO 0.5mm PARTICULAR SIZE) INCLUDING 100mm ABOVE THE TANK AND LAY 400mm OF CLEAN TOPSOIL AVOIDING CLAY ELEMENTS ABOVE THE SAND PROFILE. WHEN INSTALLED UNDER A DRIVEWAY THE MINIMUM COVER IS 200mm PROVIDED A 150mm REINFORCED PAVEMENT IS USED.
8. ONCE INSTALLED, SECTION OFF THE TANK AREA TO PREVENT HEAVY TRAFFIC FROM DAMAGING THE MODULES DURING CONSTRUCTION WORKS.

INFILTRATION TRENCH CALCULATIONS

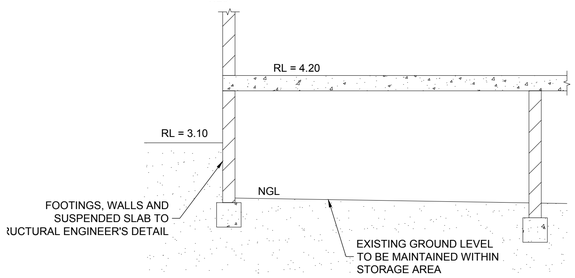
ABSORPTION TRENCH DESIGN								
186-206 Captain Cook Drive, Kurnell								
COUNCIL: Sutherland Council								
Absorption Trench								
Inflow/Outflow Data								
Impervious Area		42540.00	m2					
C		1.00						
ARI		100.00	years					
Advised Absorption Rate		0.015	L/m2/s					
Absorption Trench Dimensions						Rainwater Tank		
Trench Dimensions		Trench Dimensions				Storage Volume	300000	L
Length	576 m	Length	366.8	m		Adopted 1/3 Storage	100000	L
Width	4.26 m	Width	3.86	m				
Thickness	0 m	Thickness	0	m		Subfloor Absorption		
Height	0.45 m	Height	0.45	m		Area	5125	m^2
Drainage Cell Volume	1395 L/m	Drainage Cell Volume	1220	L/m		Ponding Depth	0.3	m2
						Volume	1537500	L

ARI	Storm (min)	Intensity (mm/hr)	Outflow Adsorption (Litres)	Inflow Rate (l/s)	Storm Inflow Volume (l)	Required Storage (l)	Available Storage (l)	Suitability
1 in 100	6	226	53152.9	2672.7	962173.1	909020.2	2888516.0	OK
1 in 100	10	187	88588.2	2211.5	1326890.7	1238302.5	2888516.0	OK
1 in 100	15	155	132882.2	1833.0	1649743.7	1516861.5	2888516.0	OK
1 in 100	30	107	265764.5	1265.4	2277710.7	2011946.3	2888516.0	OK
1 in 100	45	83.7	398646.7	989.8	2672584.9	2273938.2	2888516.0	OK
1 in 100	60	70.3	531528.9	831.4	2992954.4	2461425.5	2888516.0	OK
1 in 100	90	55	797293.4	650.4	3512357.6	2715064.3	2888516.0	OK
1 in 100	120	46.3	1063057.8	547.5	3942355.4	2879297.5	2888516.0	OK

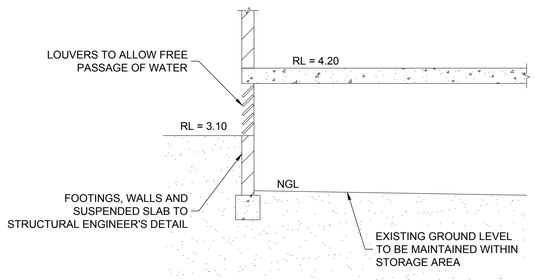


SECTION XX
1:20

TYPICAL ATLANTIS INFILTRATION TRENCH DETAIL
1:20



SECTION 1
1:50 C11.01



SECTION 2
1:50 C11.01

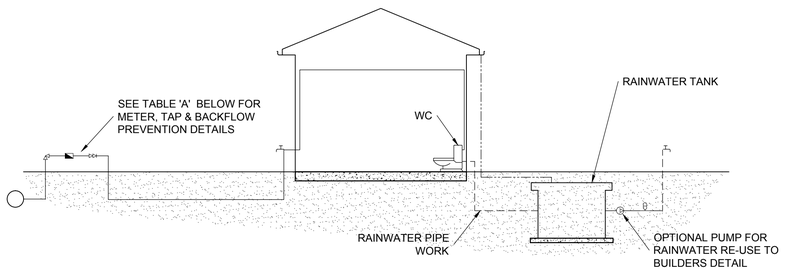


TABLE A

RAINWATER TANK LOCATION	METER SIZE (mm)	TYPE OF TAP	TYPE OF BACKFLOW PREVENTION
ABOVE GROUND	20	BALL VALVE	DUAL CHECK VALVE (COMBINED WITH METER)
	25	BALL VALVE	DUAL CHECK VALVE
	≥ 32	BALL VALVE	DUAL CHECK VALVE
BELOW GROUND	20	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	25	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	≥ 32	BALL VALVE	TESTABLE DOUBLE CHECK VALVE

LEGEND
- PRESSURE VESSEL
- METER
- BALL VALVE RIGHT ANGLE TYPE
- DUAL CHECK VALVE
- PUMP
- GARDEN TAP
- DRINKING WATER SUPPLY PIPES
- RAINWATER SUPPLY PIPES
- DOWN PIPES

DIAGRAM NOTES:
1. DRAWING TO BE READ IN CONJUNCTION WITH SYDNEY WATER PLUMBING REQUIREMENTS
2. FOR TANKS 10,000 LITRES OR LESS, COUNCIL DEVELOPMENT CONSENT IS NOT REQUIRED, IF THEIR CONDITIONS FOR INSTALLATION ARE FOLLOWED.
3. FOR TANKS GREATER THAN 10,000 LITRES COUNCIL DEVELOPMENT CONSENT IS GENERALLY REQUIRED.
4. FOR TANKS MORE THAN 10,000 LITRES APPROVAL IS REQUIRED FOR BUILDING OVER SEWERS.
5. SYDNEY WATER'S APPROVAL IS REQUIRED FOR ANY TOP UP FROM DRINKING WATER SUPPLY, REGARDLESS OF TANK SIZE. NO DIRECT CONNECTION IS ALLOWED BETWEEN THE DRINKING WATER SUPPLY AND THE RAINWATER TANK SUPPLY.
6. RAINWATER PIPEWORK IS SHOWN ON THE DIAGRAM AS SUPPLYING INTERNAL AND EXTERNAL RAINWATER USES. CUSTOMERS MAY WANT ONE OR THE OTHER.
7. ANY DESIGNED ACCESS LID INTO RAINWATER RE-USE TANK IS TO HAVE A LOCKABLE LID. IF THE LID IS DESIGNED TO BE ACCESSED BY A MAINTENANCE PERSON, IT MUST BE AT LEAST 600 mm x 900 mm IN SIZE.

DUAL DRINKING WATER & RAINWATER SUPPLY DIAGRAM
N.T.S.

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FOR JSA STUDIO

STORMWATER DETAILS SHEET

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DESIGNED BY: D.B.	DATE: OCTOBER 2016	
DRAWN BY: B.C.	SCALE: 1:20 U.N.O.	

Vegetation Management Plan

186 – 206 Captain Cook Drive, Kurnell, NSW 2231

Report Prepared for Taleb Property Pty Ltd

c/o AMBS Ecology & Heritage Pty Ltd

August 2017