



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
 Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
 PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
 email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
 PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
 SIMON ELIASS

**DRAWING TITLE :**  
 PERSPECTIVES 01

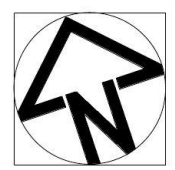
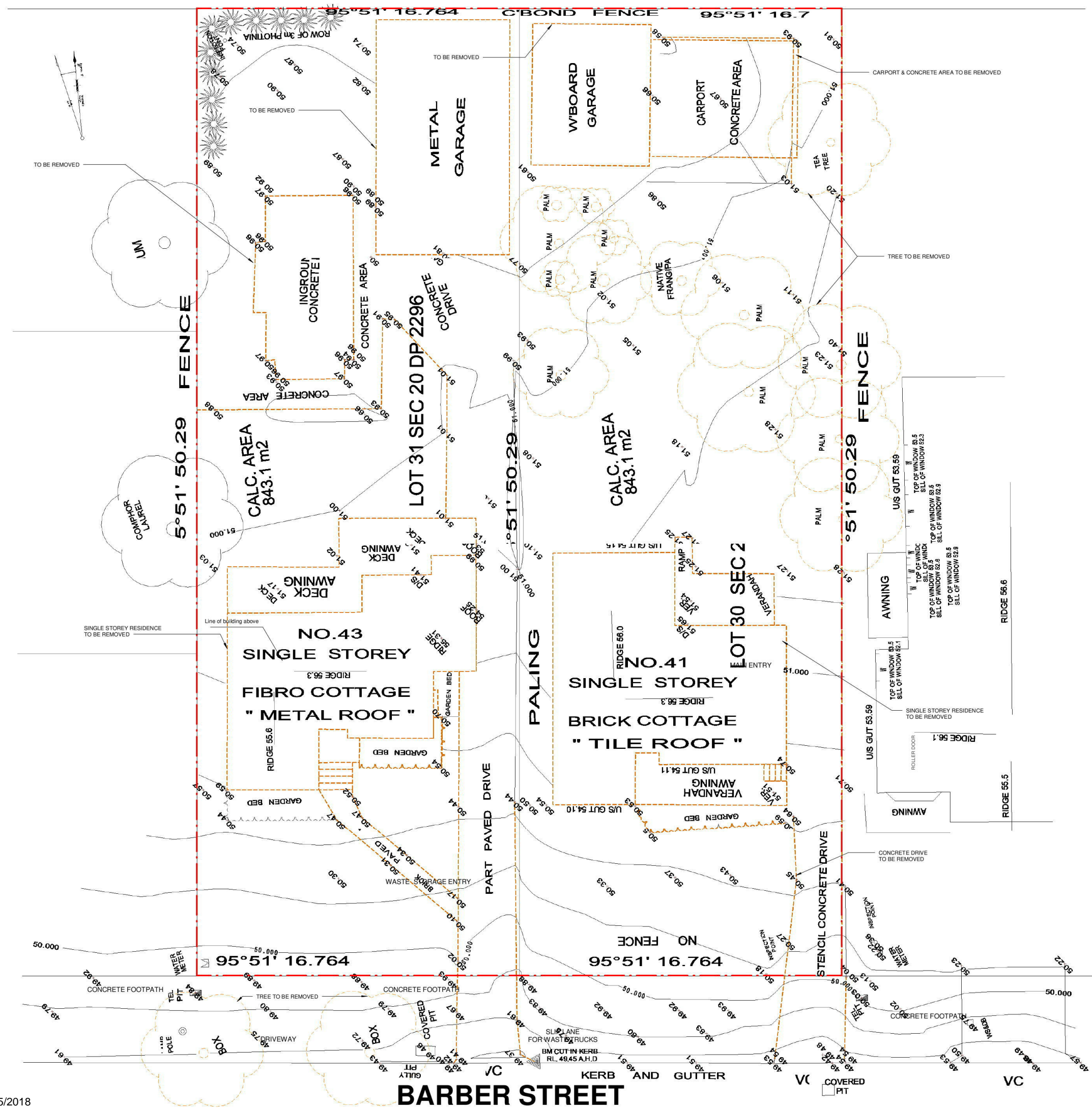
**DRAWN :** MT  
**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18 **DRAWING No's:**

**SCALE :** AS SHOWN

**PROJECT No:**  
 047-15/16 **1 /31**

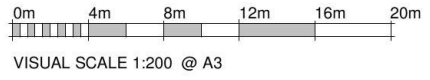




Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
DEMOLITION PLAN

**DRAWN :** MT

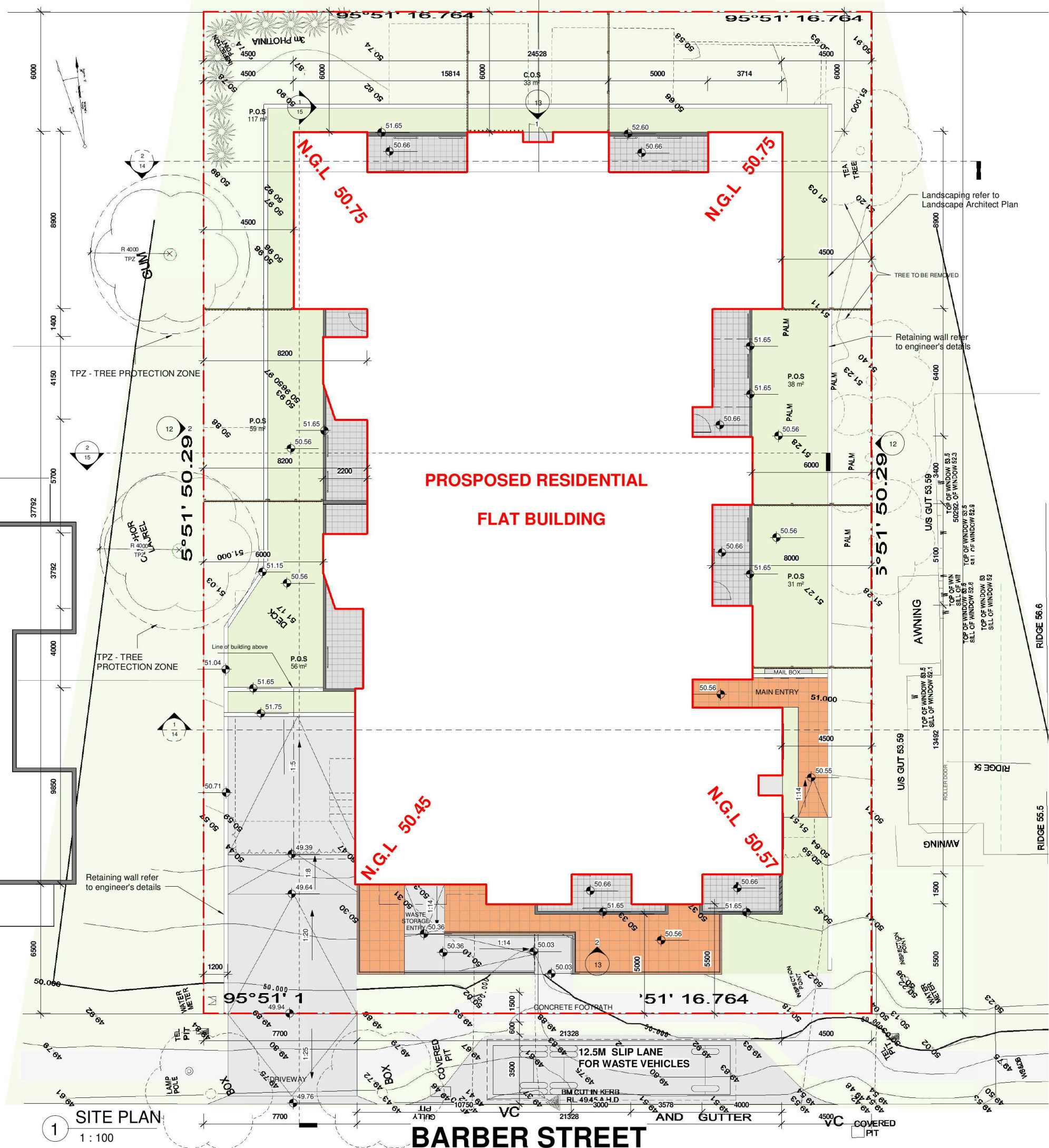
**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18 **DRAWING No's:**

**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16 **3 / 31**



1 SITE PLAN  
1 : 100

BARBER STREET

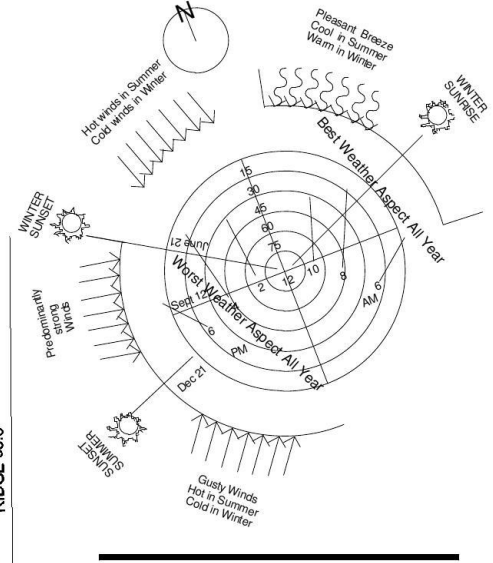
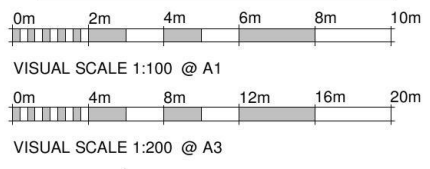
ADJACENT APPROVED  
RESIDENTIAL  
FLAT BUILDING

PROPOSED RESIDENTIAL  
FLAT BUILDING

Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

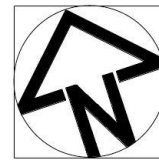
**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SITE PLAN

**DRAWN :** MT  
**CHECKED :** SIMON OCHUDZAWA MAIA #6865  
**DATE :** 23/02/18 **DRAWING No's :**  
**SCALE :** AS SHOWN  
**PROJECT No:**

047-15/16 **4 / 31**

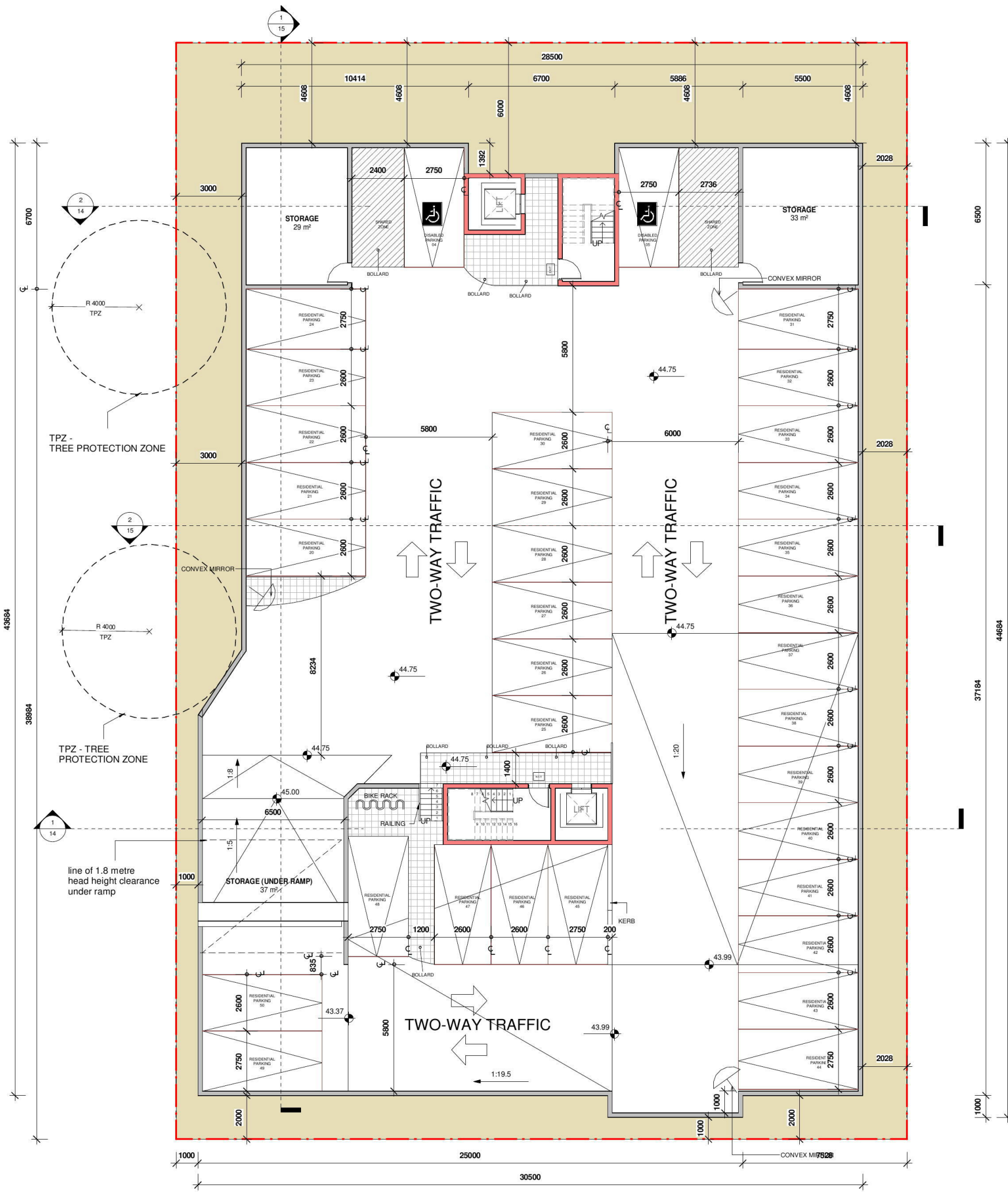


Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :			
No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



VISUAL SCALE 1:200 @ A1



1 BASEMENT 2 PLAN  
1 : 100



ARCHITECTS INTERIORS LANDSCAPE PLANNING

OFFICE :  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

PROJECT :  
PROPOSED FLAT DEVELOPMENT

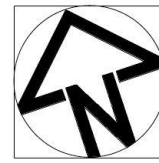
CLIENT :  
SIMON ELIASS

DRAWING TITLE :  
BASEMENT 2

DRAWN : MT  
CHECKED : SIMON OCHUDZAWA MAIA #6865

DATE : 23/02/18  
SCALE : AS SHOWN  
DRAWING No's:

PROJECT No:  
047-15/16  
5 /31

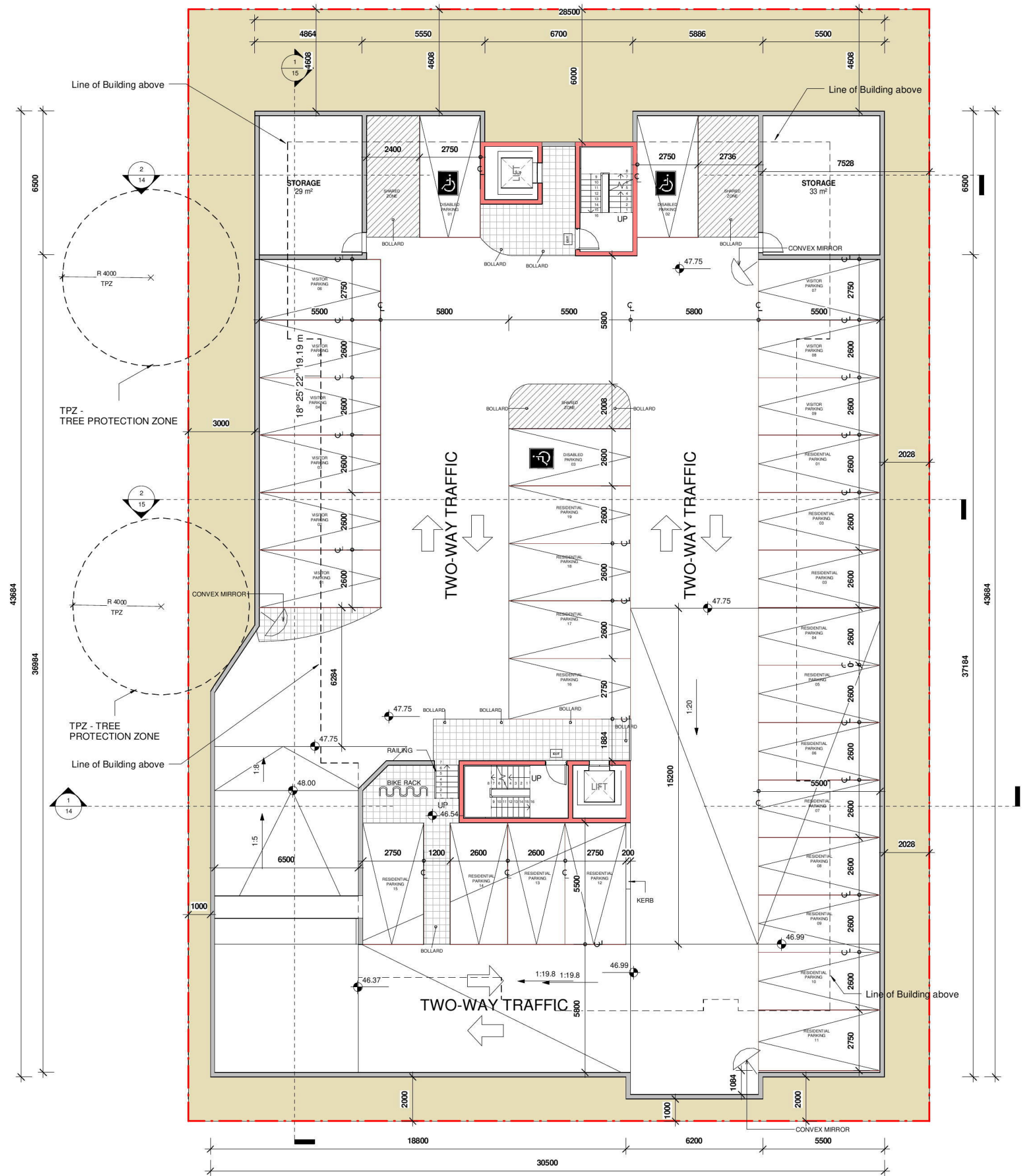


Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :		
No	AMENDMENTS	By Date
A	DA ISSUE	MT 23.02.18



VISUAL SCALE 1:200 @ A1



PROPOSED DEEP SOIL = 406.436 m<sup>2</sup> / 24.10%  
 REQUIRED DEEP SOIL = 252.93 m<sup>2</sup> / 15.00 %  
 SITE = 1686.19 m<sup>2</sup>

**1** BASEMENT 1 PLAN  
1 : 100



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
BASEMENT 1

**DRAWN :** MT  
**CHECKED :** SIMON OCHUDZAWA MAIA #6865

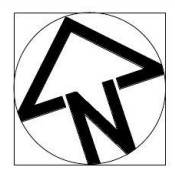
**DATE :** 23/02/18 **DRAWING No's:**

**SCALE :** AS SHOWN

**PROJECT No:**  
047-15/16 **6 / 31**



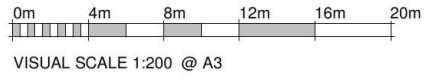
1 BED  
2 BED



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
GROUND FLOOR

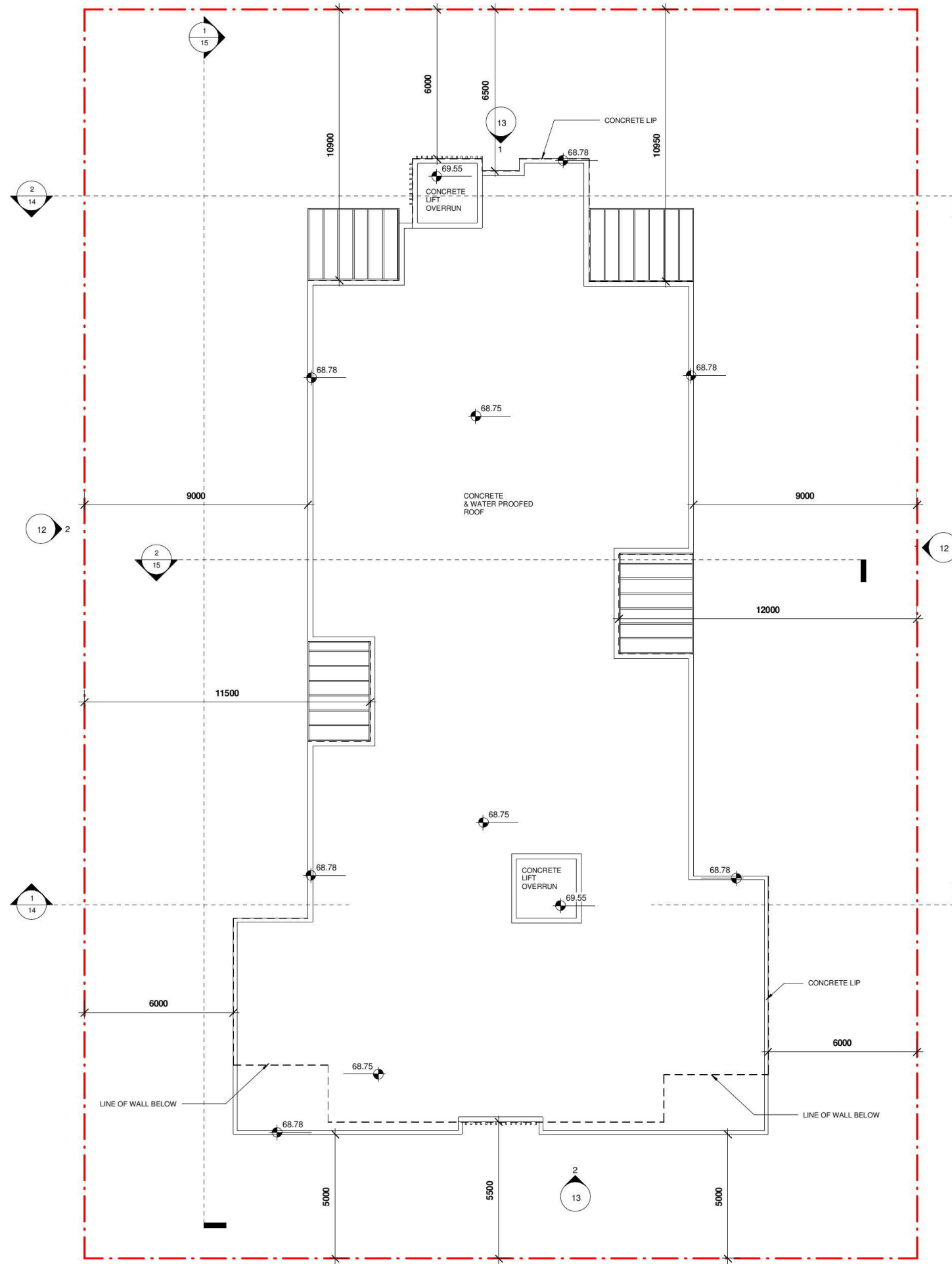
**DRAWN :** MT  
**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18  
**SCALE :** AS SHOWN  
**DRAWING No's :**

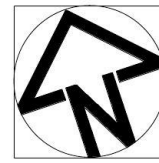
**PROJECT No:**  
047-15/16  
**7 / 31**

GROUND FLOOR PLAN

BARBER STREET



1 ROOF PLAN  
1 : 100



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :		
No	AMENDMENTS	By Date
A	DA ISSUE	MT 23.02.18



VISUAL SCALE 1:100 @ A1



VISUAL SCALE 1:200 @ A3



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
ROOF

**DRAWN :** MT

**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18

**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16

**DRAWING No's:**

11/31





1 EAST ELEVATION  
1 : 100



2 WEST ELEVATION  
1 : 100

Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :		
No	AMENDMENTS	By Date
A	DA ISSUE	MT 23.02.18



VISUAL SCALE 1:100 @ A1



VISUAL SCALE 1:200 @ A3



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
EAST & WEST ELEVATIONS

**DRAWN :** MT

**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18

**DRAWING No's:**

**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16

12/31



1 NORTH ELEVATION  
1 : 100



2 SOUTH ELEVATION  
1 : 100

Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :		
No	AMENDMENTS	By Date
A	DA ISSUE	MT 23.02.18

0m 2m 4m 6m 8m 10m  
VISUAL SCALE 1:100 @ A1

0m 4m 8m 12m 16m 20m  
VISUAL SCALE 1:200 @ A3



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
NORTH & SOUTH ELEVATIONS

**DRAWN :** MT

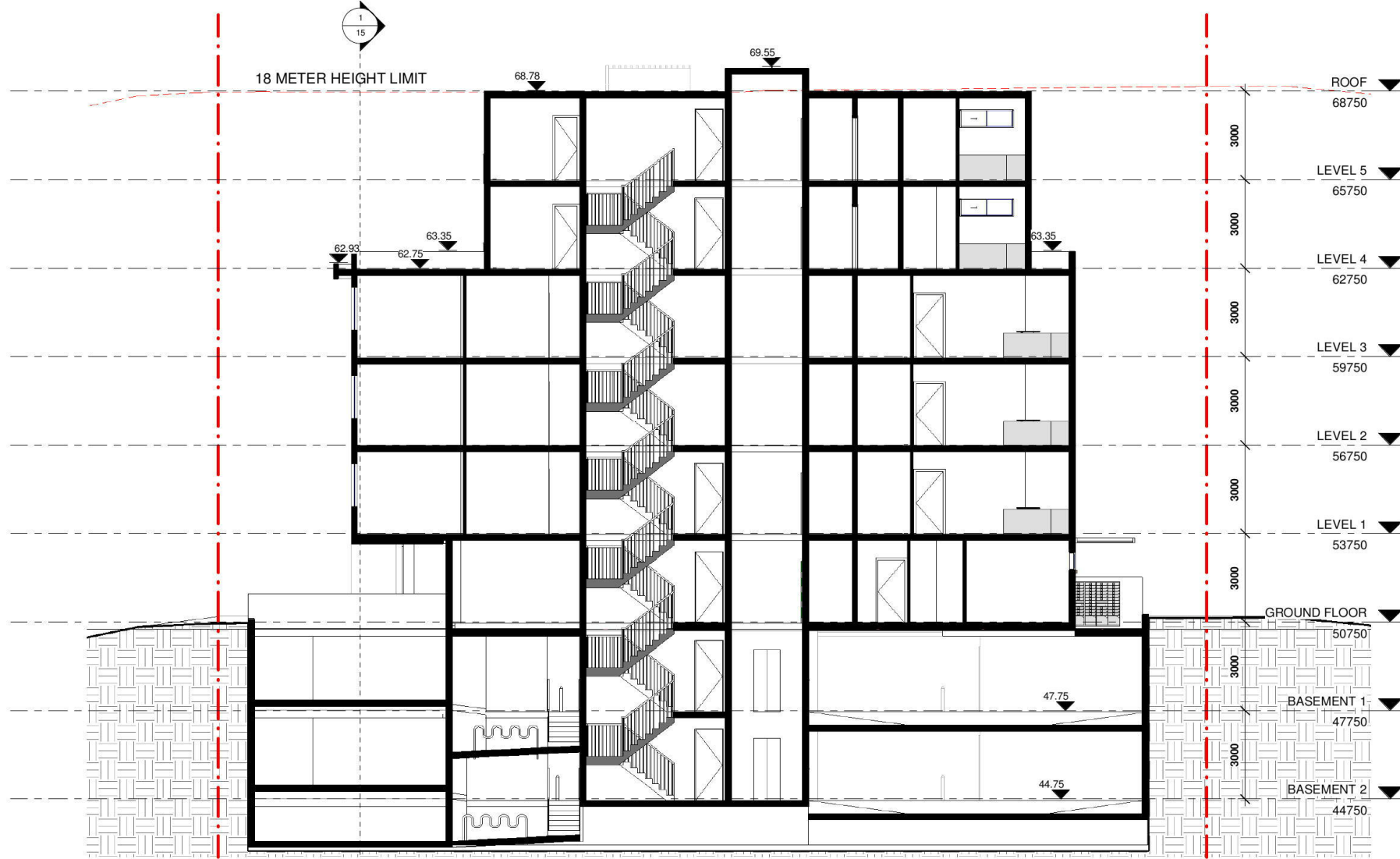
**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18 **DRAWING No's:**

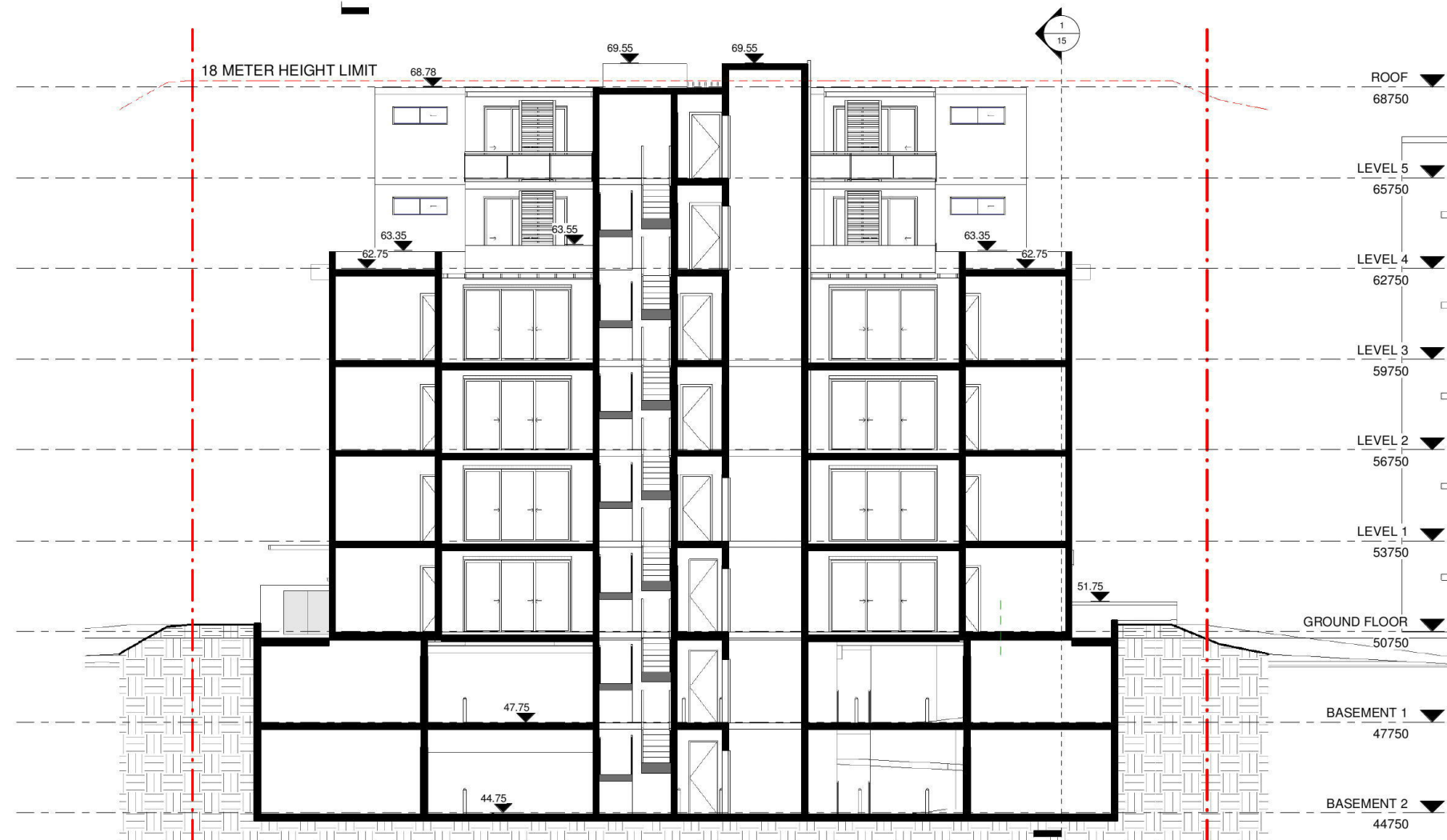
**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16 **13/31**



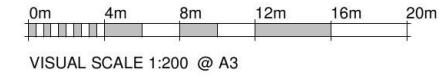
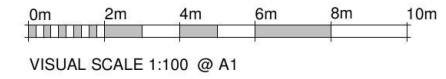
1 Section 1  
1 : 100



2 Section 2  
1 : 100

Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :			
No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

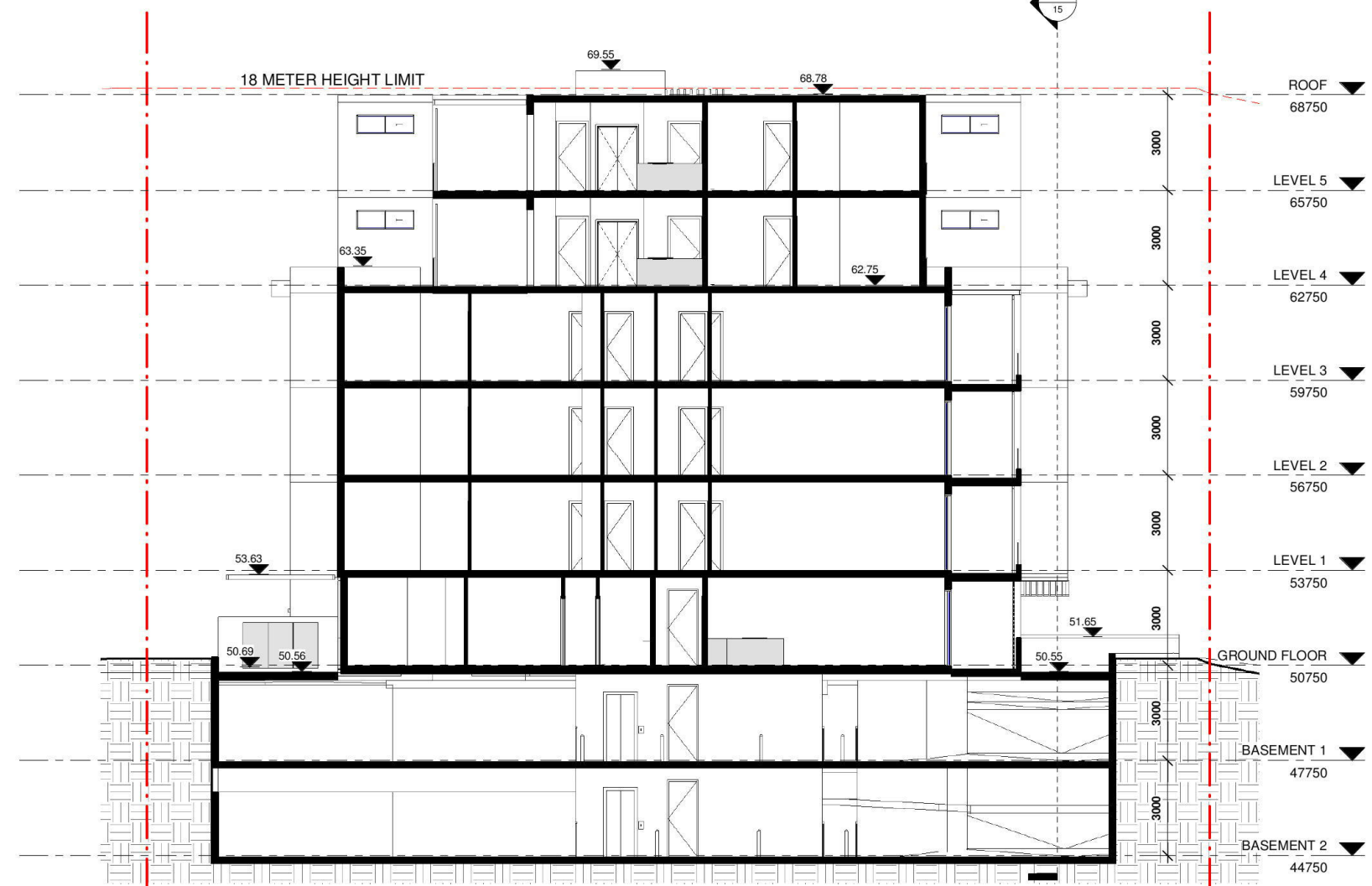
**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SECTIONS 01

<b>DRAWN :</b> MT	<b>DRAWING No's:</b>  <b>14/31</b>
<b>CHECKED :</b> SIMON OCHUDZAWA MAIA #6865	
<b>DATE :</b> 23/02/18	<b>PROJECT No:</b> <b>047-15/16</b>
<b>SCALE :</b> AS SHOWN	



1 Section 3  
1:100



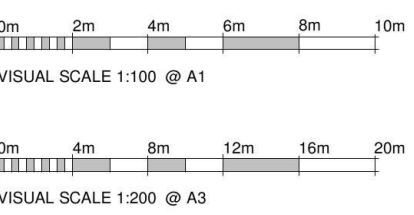
2 Section 4  
1:100



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



ARCHITECTS INTERIORS LANDSCAPE PLANNING

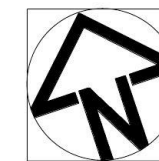
**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SECTIONS 02

<b>DRAWN :</b> MT	<b>DRAWING No's:</b>  <b>15/31</b>
<b>CHECKED :</b> SIMON OCHUDZAWA MAIA #6865	
<b>DATE :</b> 23/02/18	<b>PROJECT No:</b> <b>047-15/16</b>
<b>SCALE :</b> AS SHOWN	



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

REVISION :			
No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



VISUAL SCALE 1:200 @ A1



VISUAL SCALE 1:400 @ A3



**ADJACENT APPROVED  
RESIDENTIAL  
FLAT BUILDING**

1 Shadow Diagram @ 21ST JUNE - 9am  
1 : 200



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SHADOW DIAGRAMS - 21ST  
JUNE

**DRAWN :** MT

**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18

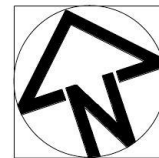
**DRAWING No's:**

**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16

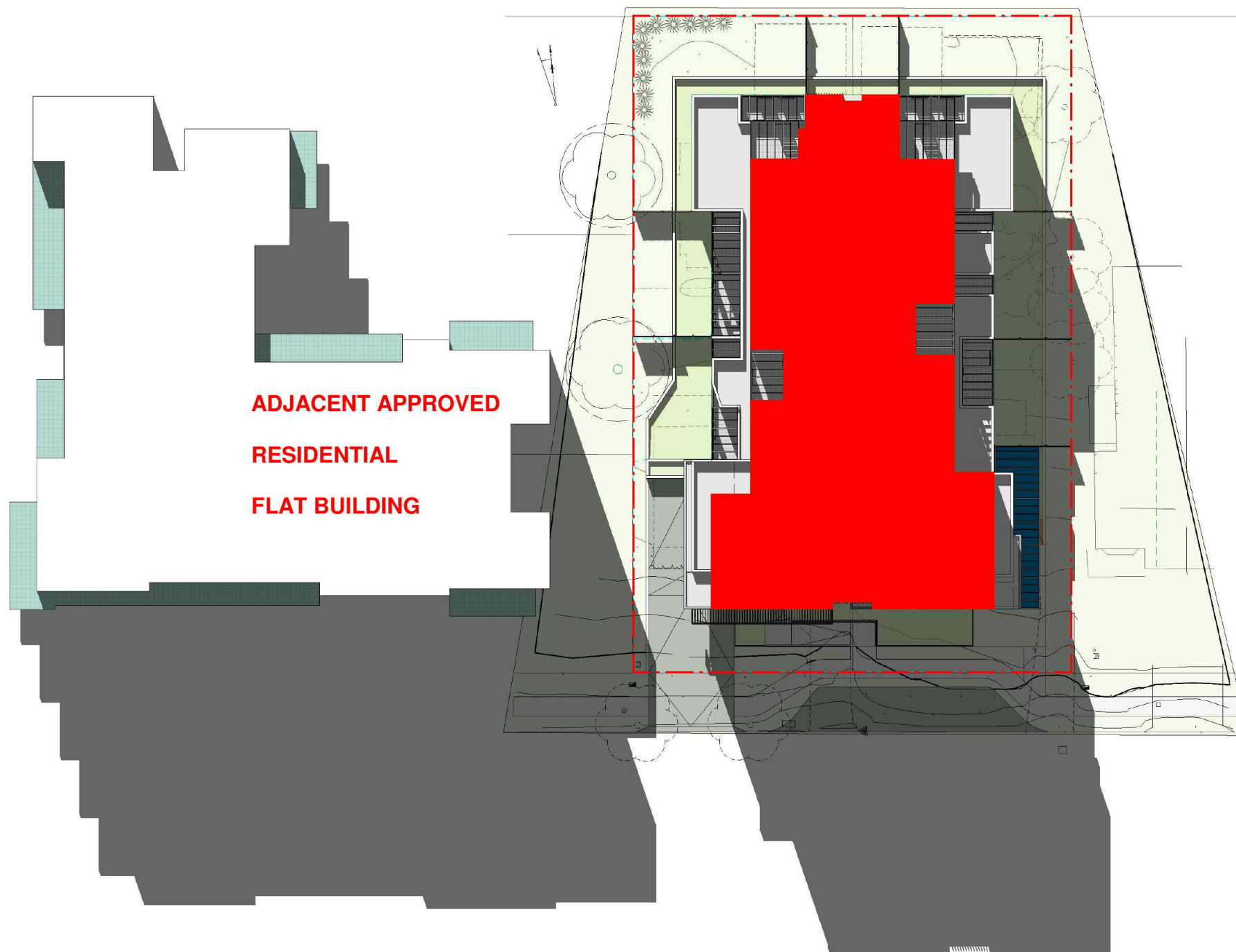
16/31



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



**ADJACENT APPROVED  
RESIDENTIAL  
FLAT BUILDING**

**1** Shadow Diagram @ 21ST JUNE - 12pm  
1 : 200

13



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SHADOW DIAGRAMS - 21ST  
JUNE

**DRAWN :** MT

**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18

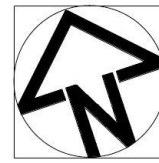
**SCALE :** AS SHOWN

**PROJECT No:**

047-15/16

**DRAWING No's:**

17/31



Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.

**REVISION :**

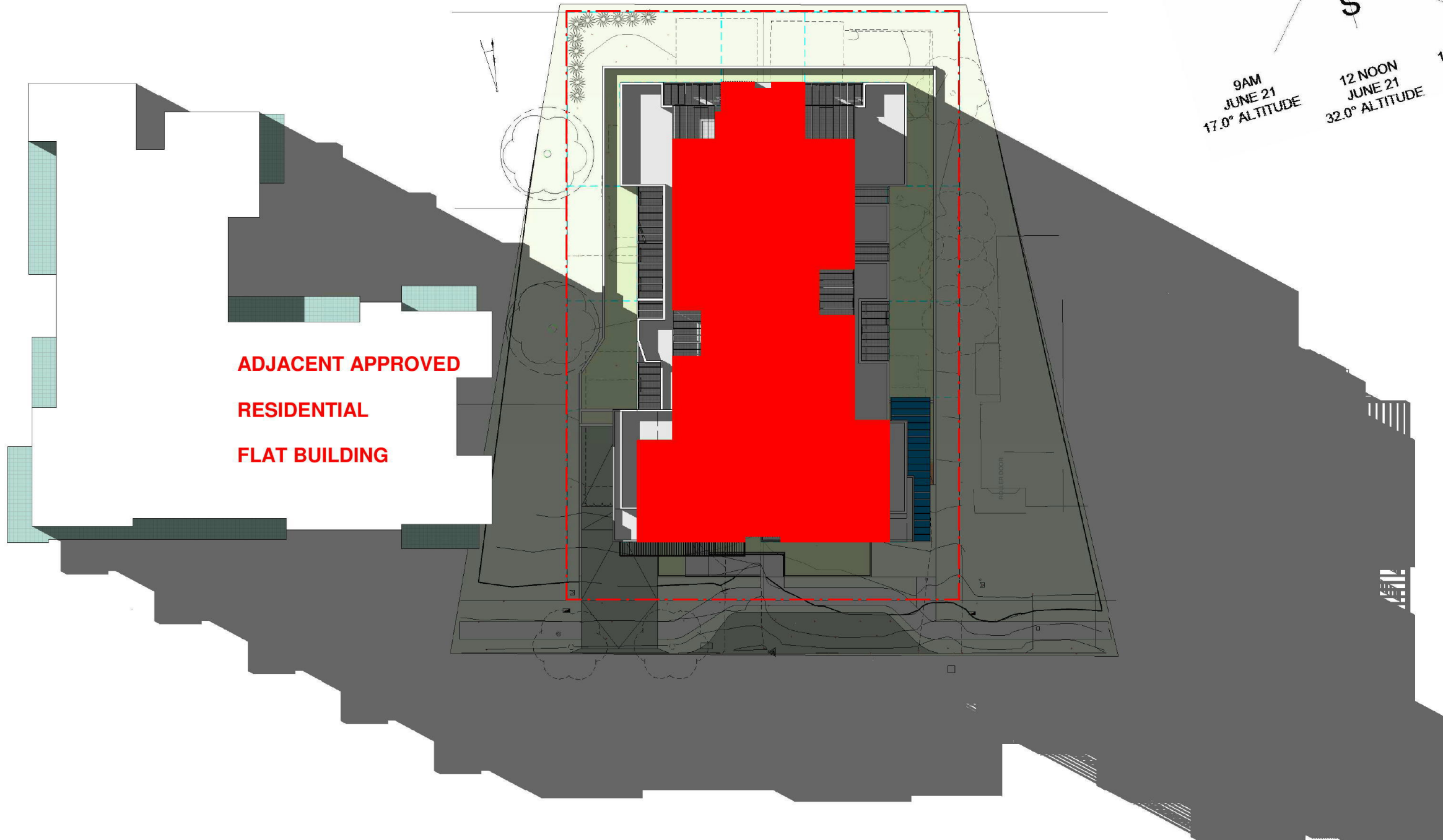
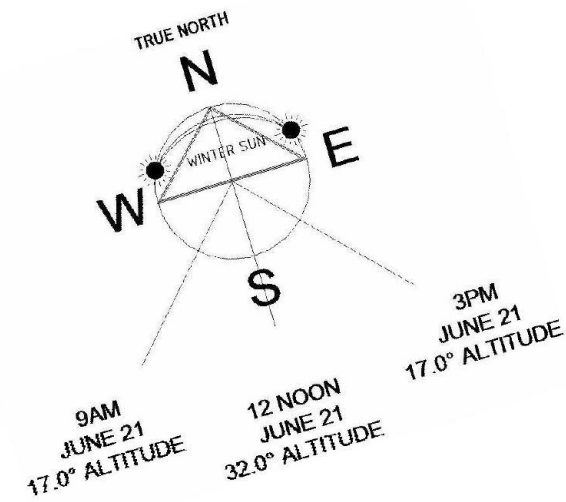
No	AMENDMENTS	By	Date
A	DA ISSUE	MT	23.02.18



VISUAL SCALE 1:100 @ A1



VISUAL SCALE 1:200 @ A3



1 Shadow Diagram @ 21ST JUNE -3pm  
1 : 200

SUN ANGLE INFORMATION		
Winter Solstice On June 21st		
TIME	ALTITUDE	AZIMUTH
9 AM	17 °	42° E OF N
12 NOON	32 °	0° NORTH
3 PM	17 °	42° W OF N



ARCHITECTS INTERIORS LANDSCAPE PLANNING

**OFFICE :**  
Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

**PROJECT :**  
PROPOSED FLAT DEVELOPMENT

**CLIENT :**  
SIMON ELIASS

**DRAWING TITLE :**  
SHADOW DIAGRAMS - 21ST  
JUNE

**DRAWN :** MT

**CHECKED :** SIMON OCHUDZAWA MAIA #6865

**DATE :** 23/02/18

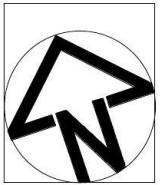
**DRAWING No's:**

**SCALE :** AS SHOWN

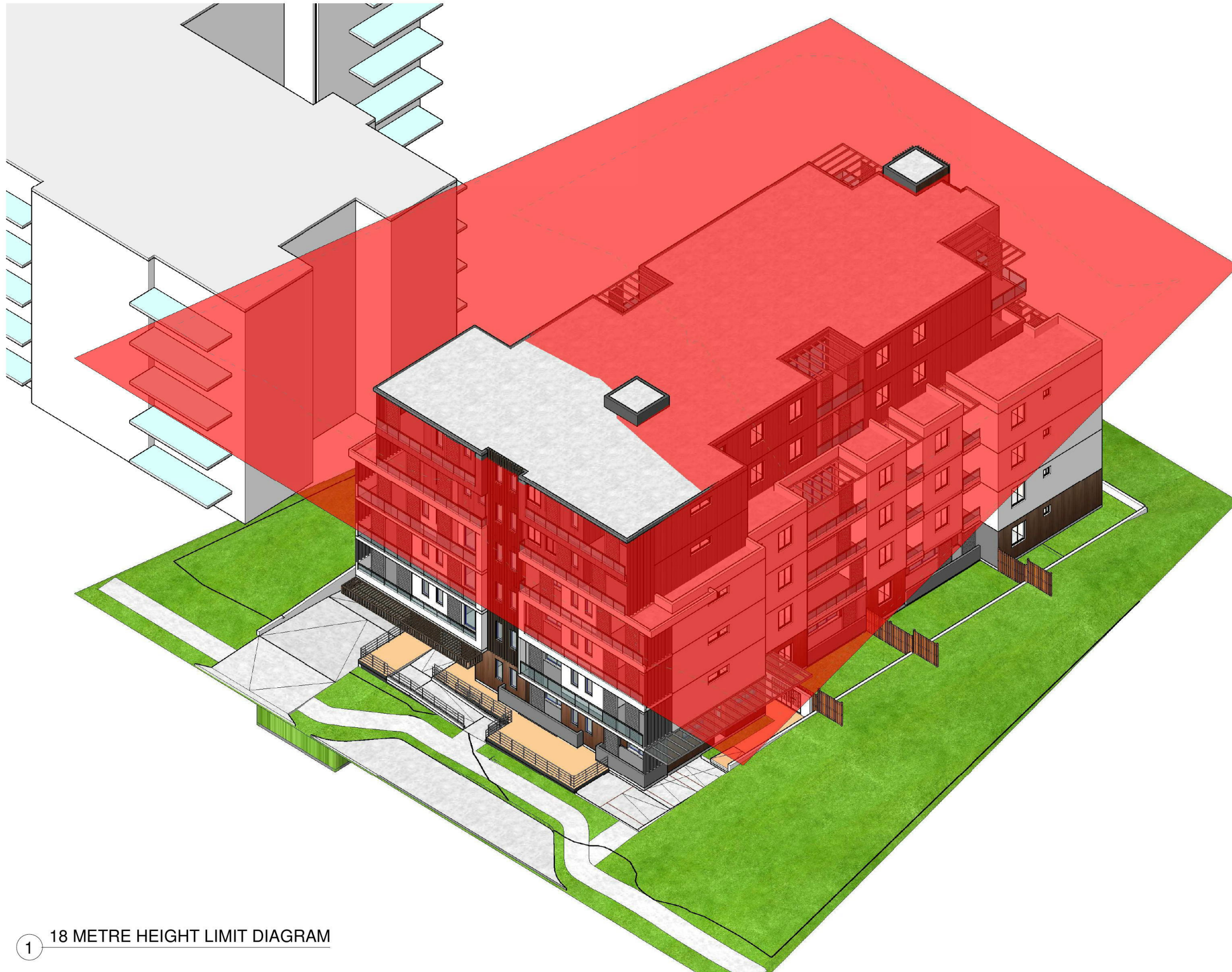
**PROJECT No:**

047-15/16

**18/31**



AMENDMENTS		APPROVED SIGNED		DATE
ISSUE DESCRIPTION		SO	SO	
A	ISSUED FOR CLIENT DA			15/12/2017
<small>CONCEPTS AND INFORMATION CONTAINED IN THIS DRAWING ARE COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR PART OR BY ANY MEDIUM, WITHOUT THE WRITTEN PERMISSION OF JS ARCHITECTS PTY LTD. DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY. VERIFY ALL PROJECT DIMENSIONS BEFORE COMMENCING ON-SITE WORK OR OFF-SITE FABRICATION. NOTIFY JS ARCHITECTS PTY LTD OF ANY DISCREPANCIES AND SEEK INSTRUCTIONS.</small>				



THIS DRAWING ISSUE HAS BEEN REVIEWED BY

DIRECTOR

PROJECT ARCHITECT

CLIENT  
SIMON ELIASS

DRAWING TITLE  
18 METRE HEIGHT LIMIT DIAGRAM

DATE 23/02/18	SCALE @ A1 AS SHOWN	DRAWN Author
PROJECT NUMBER 025-17/18	DRAWING No. 25 / 24	ISSUE A

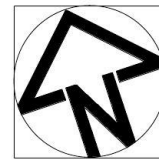
PROJECT  
PROPOSED FLAT  
DEVELOPMENT  
41-43 Barber St, Penrith

JS Architects Pty Ltd  
Suite 4.04, Level 4, No. 5 Celebration Drive  
BELLA VISTA - NSW 2153 Australia  
T : 61 2 8814-6991 FAX: 61 2 8814-6992  
M : 61 412 06 08 04  
E : jinfo@jsarchitects.com.au  
W : www.jsarchitects.com.au  
ABN 70 119 846 575  
Registered Architect, Ezyon Oshurawa (RAIA 6865)



1 18 METRE HEIGHT LIMIT DIAGRAM



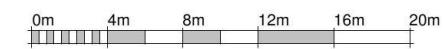


Copyright : JS ARCHITECTS PTY LTD - Do not scale drawings - All measurements shall be verified onsite by registered surveyor and certified by the Architect. If you are unsure always contact the designer Architect.


REVISION :		
No	AMENDMENTS	By Date
A	DA ISSUE	MT 23.02.18

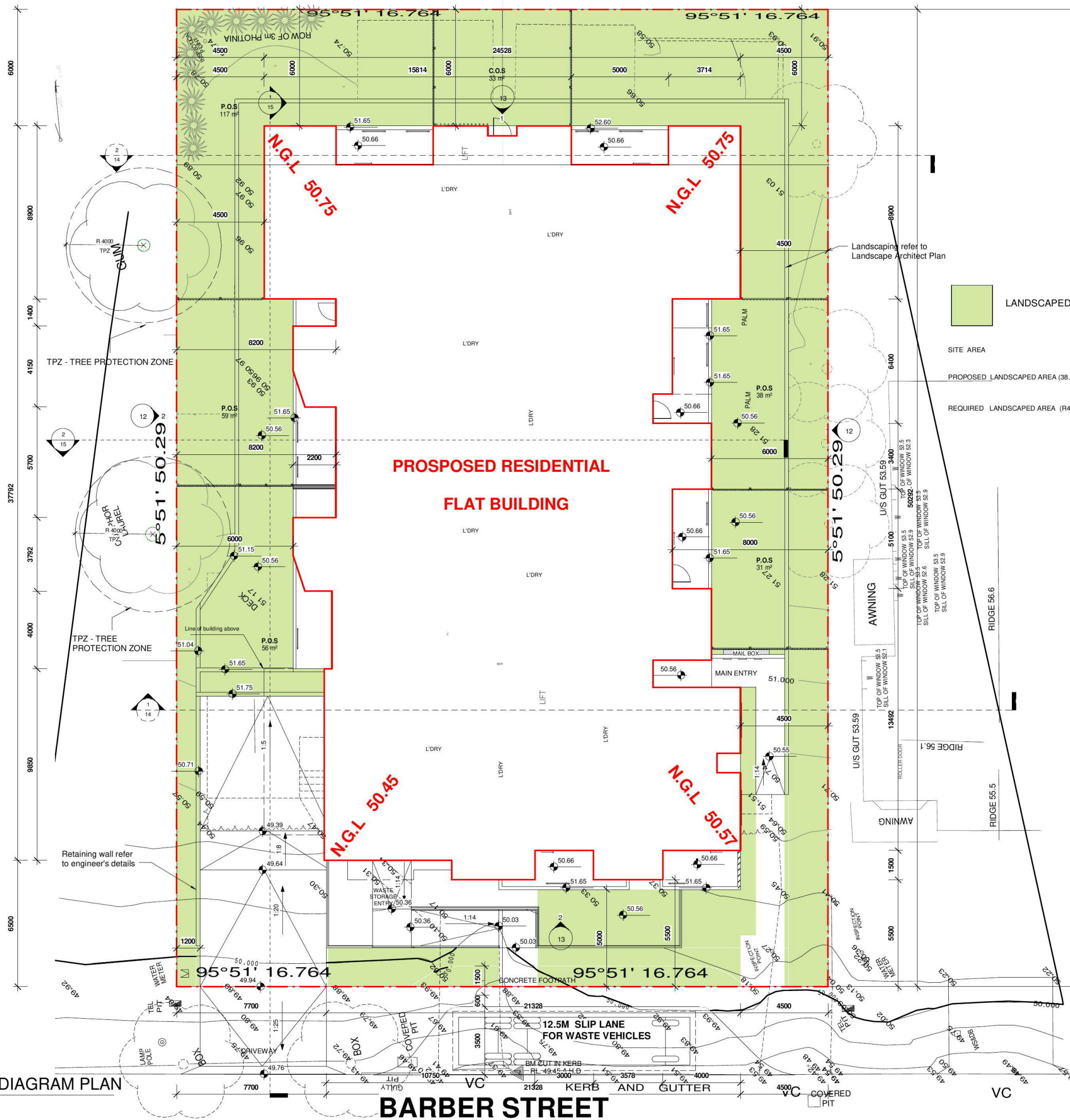


VISUAL SCALE 1:100 @ A1



VISUAL SCALE 1:200 @ A3

	LANDSCAPED AREA	
SITE AREA		1686.19 m <sup>2</sup>
PROPOSED LANDSCAPED AREA (38.66%)		651.947 m <sup>2</sup>
REQUIRED LANDSCAPED AREA (R4 RESIDENTIAL - 35%)		590.167 m <sup>2</sup>



ARCHITECTS INTERIORS LANDSCAPE PLANNING

OFFICE : Suite 4.04, Level 4, No: 5 Celebration Drive BELLA VISTA NSW 2153  
PH: (02) 8814-6991 FAX: (02) 8814-6992 M: 0412 06 06 04  
email: info@jsarchitects.com.au web: www.jsarchitects.com.au

PROJECT : PROPOSED FLAT DEVELOPMENT

CLIENT : SIMON ELIASS

DRAWING TITLE : LANDSCAPE DIAGRAM

DRAWN : MT

CHECKED : SIMON OCHUDZAWA MAIA #6865

DATE : 23/02/18

DRAWING No's:

SCALE : AS SHOWN

PROJECT No:

047-15/16

26/31

# LANDSCAPE DIAGRAM PLAN

1:100  
Document Set ID: 8190677  
Version: 1, Version Date: 16/05/2018

## BARBER STREET

**WARNING:**  
 EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS SUPPLIED BY THE PUBLIC UTILITY AUTHORITIES. LOCATIONS HAVE INTERPRETED FROM THESE RECORDS ARE APPROXIMATE ONLY. EXTREME CAUTION SHOULD BE TAKEN WHEN EXCAVATING

STORMWATER DESIGN AND CONSTRUCTION TO COMPLY WITH BCA 3.1.2

ALL DEMOLITION OF ANY STRUCTURES SHOULD SATISFY AS 2801-1991

ALL DRAINAGE AND PLUMBING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3:2 PLUMBING AND DRAINAGE CODE

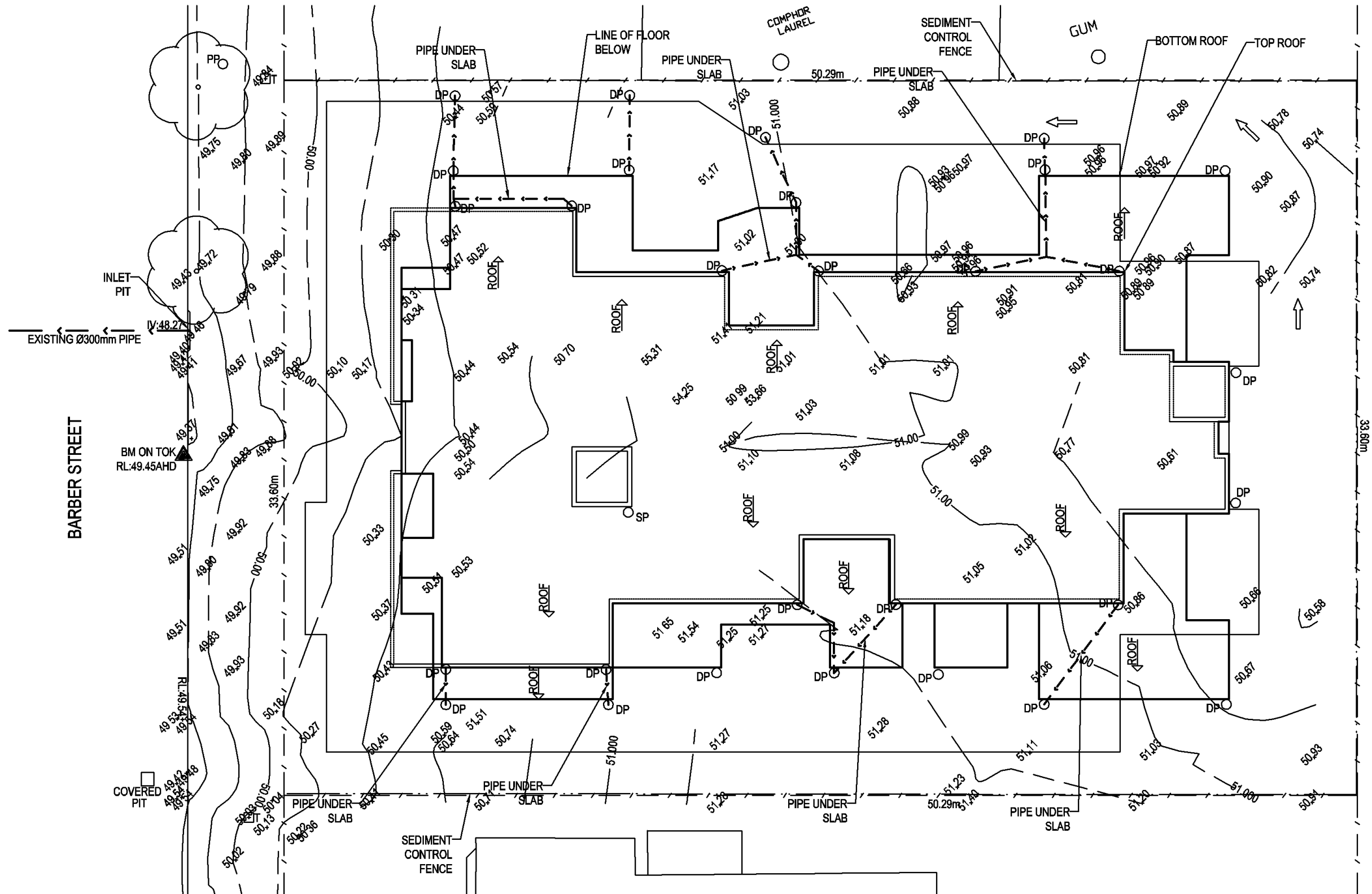
THE CHARGED PORTION OF DRAINAGE SYSTEM, RISING OUT OF THE GROUND, MUST BE SEALED. SEALED PORTION OF DOWN PIPE MUST BE PAINTED.

ANY GRATED PIT IN KID'S PLAY AREAS SHALL BE PROVIDED WITH CHILD PROOF "J" TYPE SPRING LOCK

ROOF GUTTER AND DRAINAGE DESIGN TO COMPLY WITH BCA AND AUSTRALIAN STANDARDS AS/NZS 3500:2003 PLUMBING AND DRAINAGE STANDARDS

EXISTING FOOTPATH AROUND NEW DRIVEWAY TO BE RECONSTRUCTED AS SATISFYING COUNCIL

DOWN PIPE TO BE 90mm OR 100\*75mm MINIMUM SIZE AND FOR 45 Sqm MAXIMUM



**STORMWATER MANAGEMENT PLAN-LEVEL 5**  
 SCALE 1 : 200 IN A3

ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA
		ISSUED FOR CONSTRUCTION
TITLE: STORMWATER AND SEDIMENT MANAGEMENT PLAN		DRAWN: MM
		DATE: 28/03/15
		SCALE: AS NOTED
JOB No: 5788		SHEET No: 01 OF 08

**NASTASI & ASSOCIATES**  
 CONSULTING CIVIL & STRUCTURAL ENGINEERS  
 B.E., M.I.E. AUST. CPENG NPER-3  
 ABN 45 533 226 008  
 UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
 PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
 MOB: 0419 041 401

APPROVED: \_\_\_\_\_  
 CLIENT: SIMON ELIAS  
 CLIENT No: 5788  
 PROJECT: 41-43 BARBER AVENUE  
 PENRITH

**WARNING:**  
 EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS SUPPLIED BY THE PUBLIC UTILITY AUTHORITIES. LOCATIONS HAVE INTERPRETED FROM THESE RECORDS ARE APPROXIMATE ONLY. EXTREME CAUTION SHOULD BE TAKEN WHEN EXCAVATING

EXISTING FOOTPATH AROUND NEW DRIVEWAY TO BE RECONSTRUCTED AS SATISFYING COUNCIL

REMOVAL OF TREES SUBJECT TO COUNCIL APPROVAL

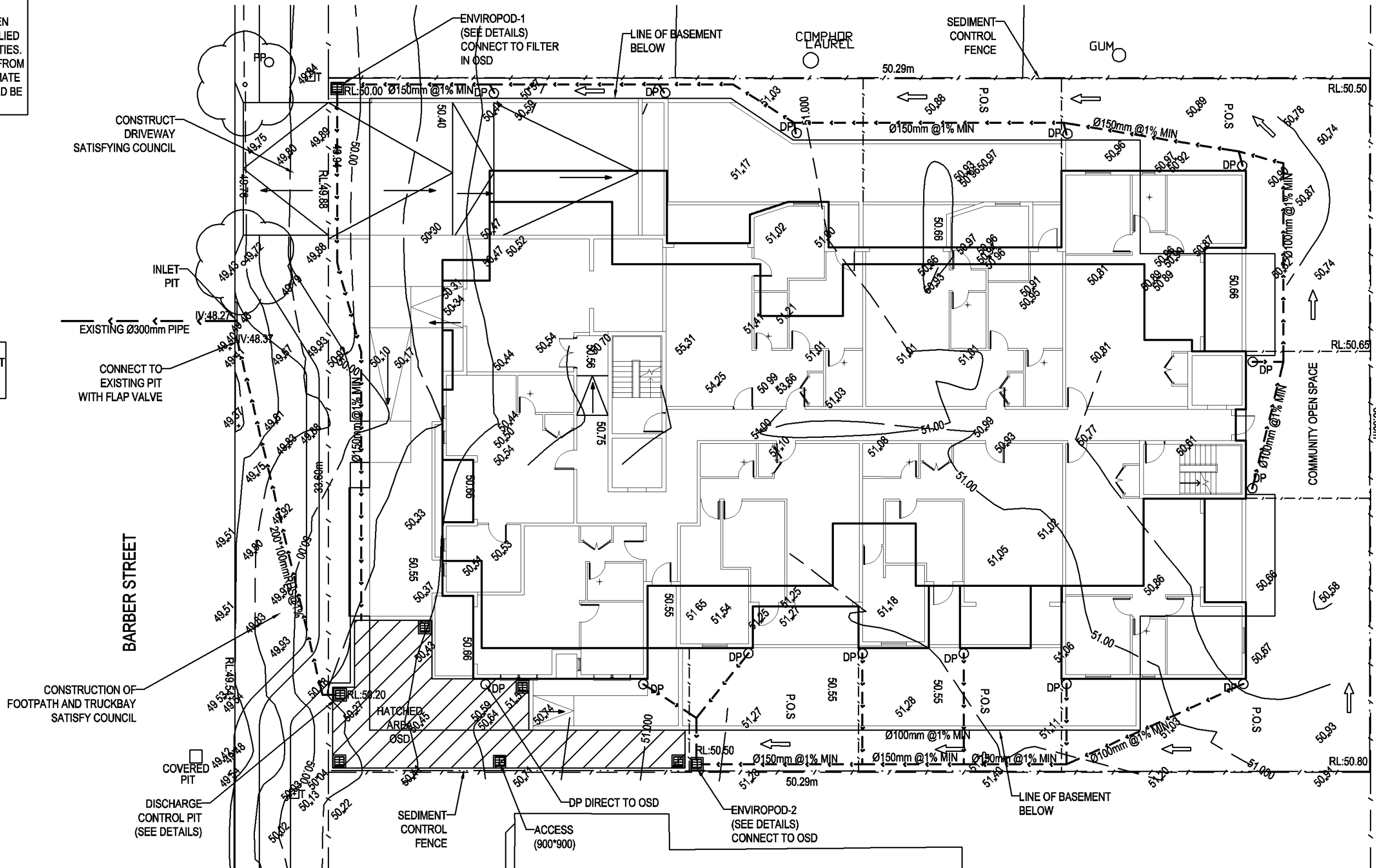
GUTTER SLOPE SHOULD BE 1 IN 500 MINIMUM AS PER AS/NZS:3500.3-2003

USE PIPE SYSTEM FROM ALL DOWN PIPES TO DISCHARGE POINT TO COMPLY WITH COUNCIL AND AUSTRALIAN STANDARDS.

DOWN PIPE TO BE INSTALLED NOT MORE THAN 12m INTERVALS

DESIGN AND LAYOUT OF PARKING AS PER AS2890.1-2004

EXCAVATION SHOULD SATISFY BCA 3.2.2



**STORMWATER MANAGEMENT PLAN-GROUND LEVEL**  
 SCALE 1 : 200 IN A3

ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA

**NASTASI & ASSOCIATES**  
 CONSULTING CIVIL & STRUCTURAL ENGINEERS  
 B.E., M.I.E. AUST. CPENG NPER-3  
 ABN 45 533 226 008  
 UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
 PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
 MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS  
 CLIENT No: 5788  
 PROJECT: 41-43 BARBER AVENUE  
 PENRITH

TITLE: STORMWATER AND SEDIMENT  
 MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION  
 DRAWN: MM  
 DATE: 28/03/15  
 SCALE: AS NOTED  
 JOB No: 5788 SHEET No: 02 OF 08

# STORMWATER DRAINAGE NOTES

ALL WORK IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT, COUNCIL'S STANDARD SPECIFICATION & CODES & TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.

THIS PLAN TO BE READ IN CONJUNCTION WITH PLANS PREPARED BY THE ARCHITECTS AND STRUCTURAL ENGINEER.

ALL LINES TO BE Ø100mm AT 1% MINIMUM GRADE UNLESS NOTED OTHERWISE ON PLAN.

INSTALL TEMPORARY SEDIMENT BARRIERS AROUND ALL INLET PITS TO DETAIL UNTIL SURROUNDING AREAS ARE PAVED OR TURFED.

CONTRACTOR IS TO VERIFY THE LOCATION & LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.

ALL PITS TO BE BENCHED TO HALF PIPE SECTION AND TO HAVE GALVANISED STEEL GRATES AND SURROUNDS.


PIPE GRADES SHOWN ARE INDICATIVE MINIMUM AND TO BE LAID TO INVERT LEVELS AS SHOWN REDUNDANT VEHICLE CROSSING ARE TO BE REMOVED AND REPLACED WITH INTERGRAL CONCRETE KERB AND GUTTER TO THE SATISFACTION OF COUNCIL.

PLANTER BOXES ARE TO BE LINED WITH 'BIDEM A24' PERMANENT GEOTEXTILE FABRIC. CONNECT PLANTERS VIA FLOOR WASTES, TO STORMWATER DRAINAGE SYSTEM  
BALCONIES ARE TO BE CONNECTED VIA FLOOR WASTES TO PROPOSED DRAINAGE SYSTEM  
REINFORCEMENTS DETAILS ARE ACCORDING TO STRUCTURAL PLAN  
REMOVAL OF ANY TREES MUST COMPLY WITH COUNCIL APPROVAL  
CONSTRUCTION OF FOOTPATH AND/OR DRIVEWAY TO SATISFY COUNCIL STANDARDS

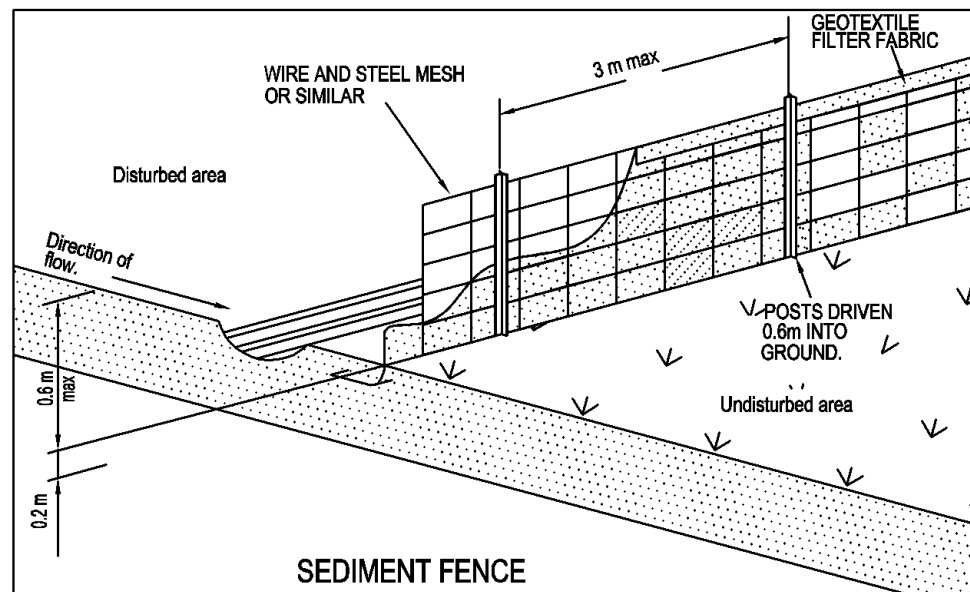
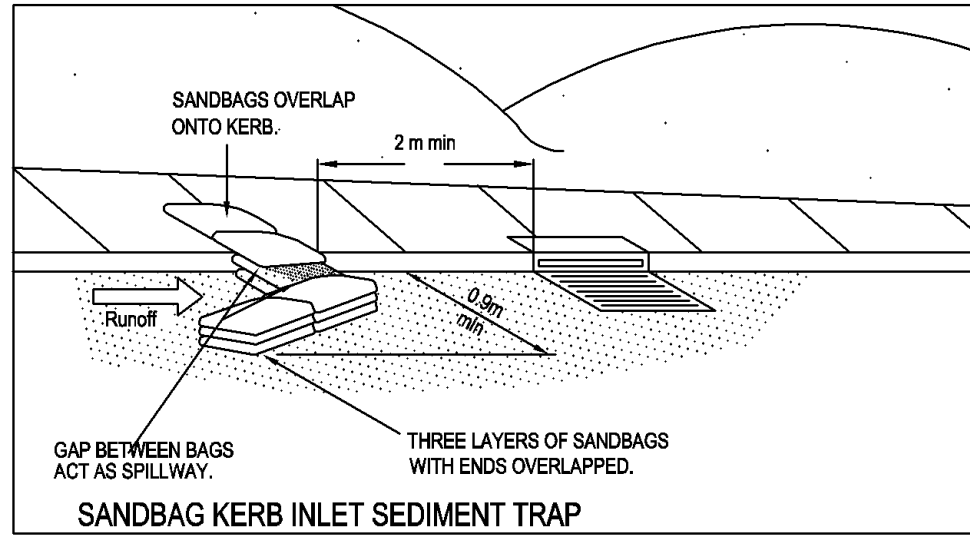
## ABBREVIATED ROOF WATER RUNOFF CALCULATIONS

ARI = 1:100 yr.  
I = 206.1mm/hr.  
Tc = 6 mm.  
C = 1  
Q = CIA/3600 l/s  
RUNOFF RATE FOR EACH CATCHMENT  
AREAS AREA MARKED ON THE PLAN.

## SYMBOLS & NOTATIONS

- ← ← ← ← ← STORMWATER DRAINAGE LINE
-  GRATED INLET PIT
- G. DESIGNED GRATE LEVEL
- I. INVERT LEVEL OF PIPE
- DP DOWN PIPE Ø90mm OR 100x75mm
- RL REDUCED LEVEL (DESIGNED)
- SILT BARRIER FENCE
- ← SURFACE RUNOFF DIRECTION

AREA CALCULATIONS	
SITE AREA	:1686.20 Sqm
EXISTING SITE	
BUILDING	:285.50 Sqm
METAL SHED	:84.42 Sqm
WBOARD SHED	:44.50 Sqm
GARAGE	:54.70 Sqm
METAL GARAGE	:84.70 Sqm
DRIVEWAYS	:213.20 Sqm
TOTAL IMPERVIOUS AREA	:767.02 Sqm
PERCENTAGE	:45.49%
PROPOSED SITE	
BUILDING	:1057.33 Sqm
DRIVEWAY	:50.40 Sqm
TOTAL IMPERVIOUS AREA	:1107.73 Sqm
PERCENTAGE	:65.70%
INCREASE OF IMP. AREA	:340.71 Sqm
AS PER COUNCIL STORMWATER DCP FOLLOWING PLAN IS REQUIRED	
STORMWATER MANAGEMENT PLAN	
1.	OSD
2.	PUMPOUT SYSTEM FOR BASEMENT
3.	INSTALLATION OF NEW PIPE SYSTEM



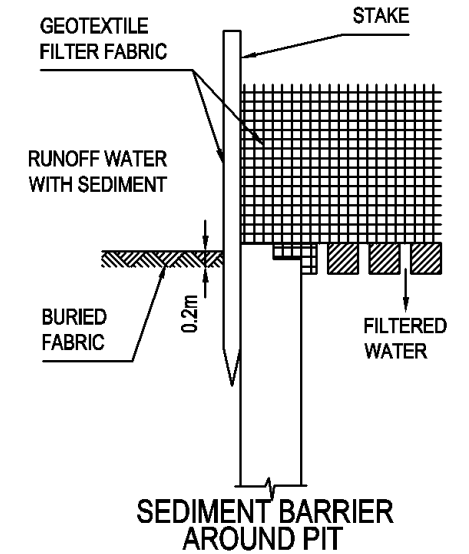
FULL SEARCH OF UNDERGROUND SERVICES SHOULD BE UNDERTAKEN BEFORE COMMENCE OF ANY WORKS

## EROSION & SEDIMENT CONTROL

- Sediment control devices are to be in place prior to any demolition or contraction.
- Construct a silt barrier fence where shown on plan and to details above.
- Sediment control devices are to be maintained, in good working order, until completion of all site works or to the satisfaction of Council's supervising officer.
- Provide HAY BALE BARRIERS around all existing surface inlet pits during cons.
- Install stabilised site access as per detail over.

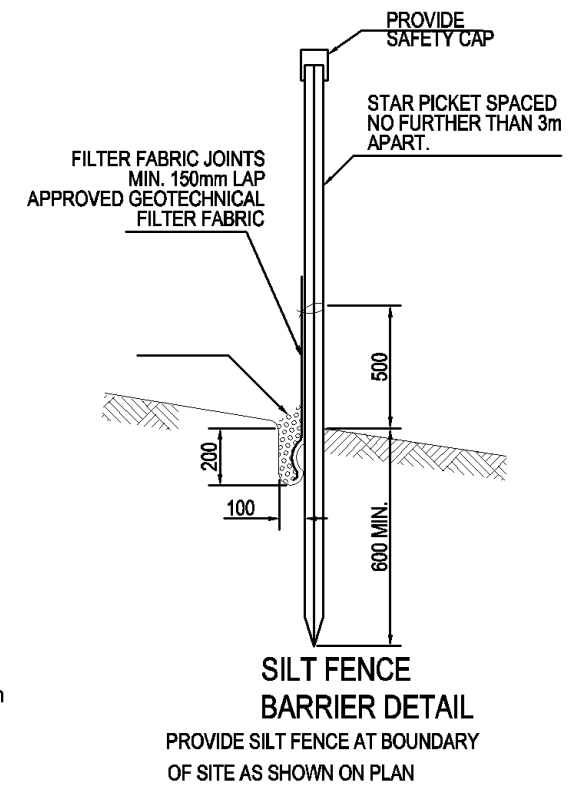
## IMPORTANT

All existing services shown on this plan are approximate location only. The contractor is to verify the exact location and level of all existing services prior to commencement of excavation work for pipe laying. The contractor is to meet the full cost to relocate or adjust Telstra, Energy Australia, Sydney water or Natural gasservices as required.



## CONSTRUCTION NOTES

- FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE
- SUPPORT GEOTEXTILE WITH MESH TIED TO POSTS AT 1000mm CENTRES.
- DO NOT COVER INLET WITH GEOTEXTILE.
- INSTALL & SUPPORGY GEOTEXTILE AS PER SITE FENCE BARRIER DETAIL.



ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA
ISSUED FOR CONSTRUCTION		
DRAWN: MM		SCALE: AS NOTED
DATE: 28/03/15		JOB No: 5788
TITLE: STORMWATER AND SEDIMENT MANAGEMENT PLAN		SHEET No: 03 OF 08

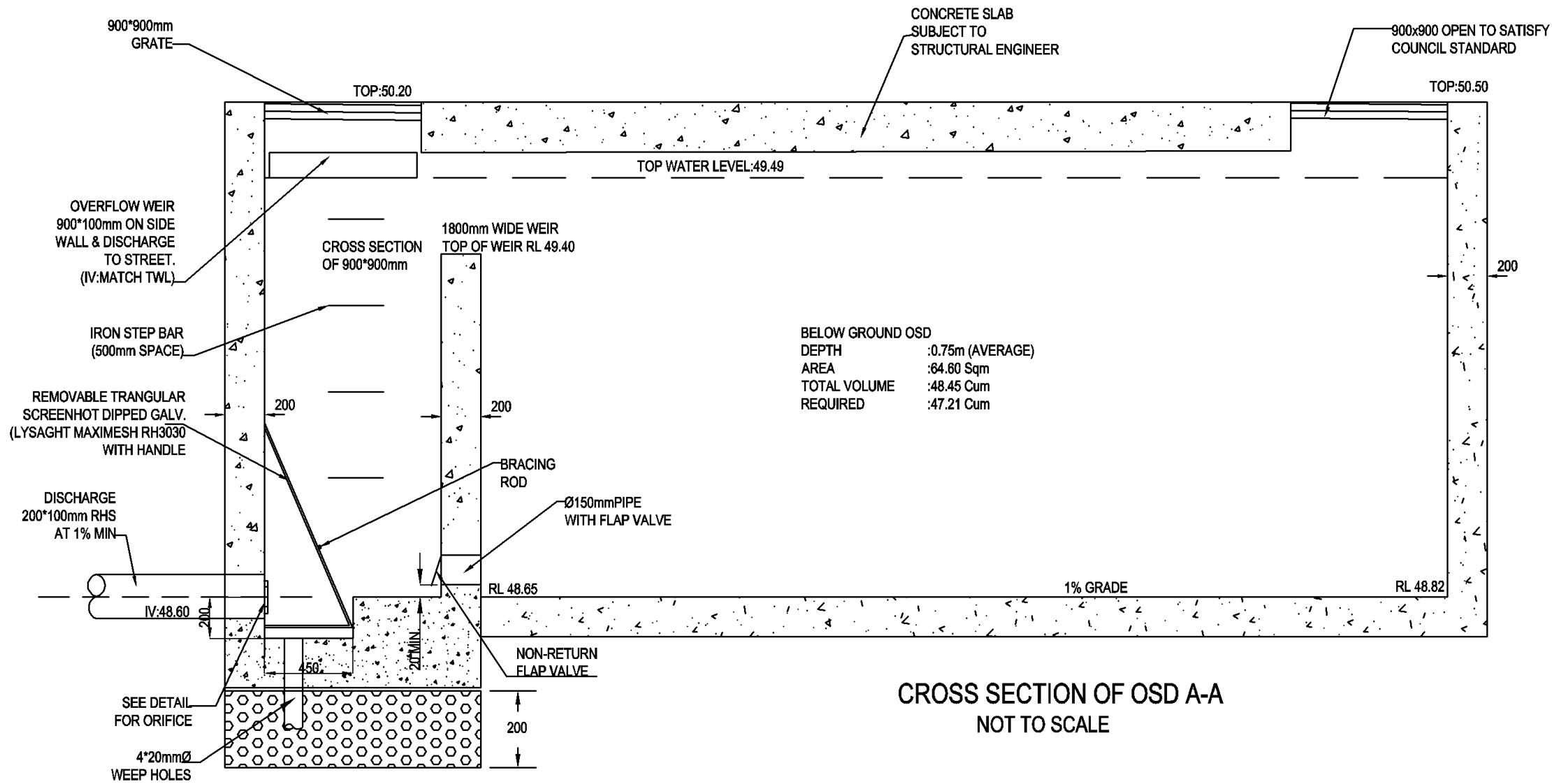
**NASTASI & ASSOCIATES**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
B.E., M.I.E. AUST. CPENG NPER-3  
ABN 45 533 226 008  
UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
MOB: 0419 041 401

APPROVED:

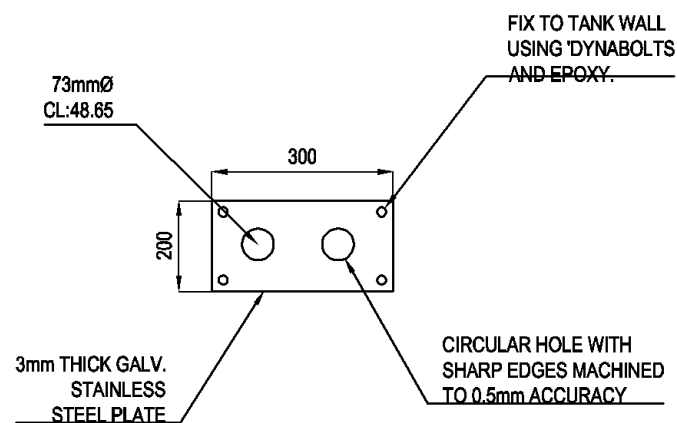
CLIENT: SIMON ELIAS

CLIENT No: 5788

PROJECT: 41-43 BARBER AVENUE  
PENRITH



CROSS SECTION OF OSD A-A  
NOT TO SCALE



ORIFICE PLATE  
(NOT TO SCALE)

SEE SHEET 4 FOR  
STORMWATER FILTER  
AND INTERNAL SECTION  
DETAILS AND FOR MORE DETAILS  
PLEASE VISIT  
[www.stormwater360.com.au](http://www.stormwater360.com.au)  
OR  
CALL 1300 354 722  
FOR INSTALLATION OF STORMWATER  
FILTER AND MAINTENANCE

OSD CALCULATIONS	
SITE AREA	=1686.20 Sq.m
AREA TO OSD	:1686.20 Sqm
AS PER COUNCIL STORMWATER MANUAL	
PSD	:120 lit/sec/hac
SSR	:280 m <sup>3</sup> /hac
PSD	:20.23 lit/sec
SSR	:47.21 m <sup>3</sup>
AS DETAILED IN PLAN	
OSD AREA	:31.68 Sqm
TOTAL VOLUME PROVIDED	:49.42 m <sup>3</sup>
TOP WATER LEVEL	:49.49 m
ORIFICE CENTRELINE	:48.65 m
ORIFICE(DOUBLE)	:73 mm

THIS IS AN  
ON SITE STORMWATER  
DETENTION SYSTEM  
REQUIRED BY COUNCIL

IT IS AN OFFENSE TO REDUCE THE VOLUME OF THE  
TANK/BASIN OR TO INTERFERE WITH THE  
ORIFICE PLATE THAT CONTROL THE FLOW

THE BASIN OF THE OUTLET CONTROL PIT AND  
THE DEBRIS SCREEN MUST BE CLEANED OF DEBRIS  
AND SEDIMENT ON A REGULAR BASIC BY THE OWNER

THIS PLATE MUST NOT BE REMOVED

ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA
		ISSUED FOR CONSTRUCTION
		DRAWN: MM
		DATE: 28/03/15
		SCALE: AS NOTED
		JOB No: 5788 SHEET No: 04 OF 08

**NASTASI & ASSOCIATES**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
B.E., M.I.E. AUST. CPENG NPER-3  
ABN 45 533 226 008  
UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS

CLIENT No: 5788

PROJECT: 41-43 BARBER AVENUE  
PENRITH

TITLE: STORMWATER AND SEDIMENT  
MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION

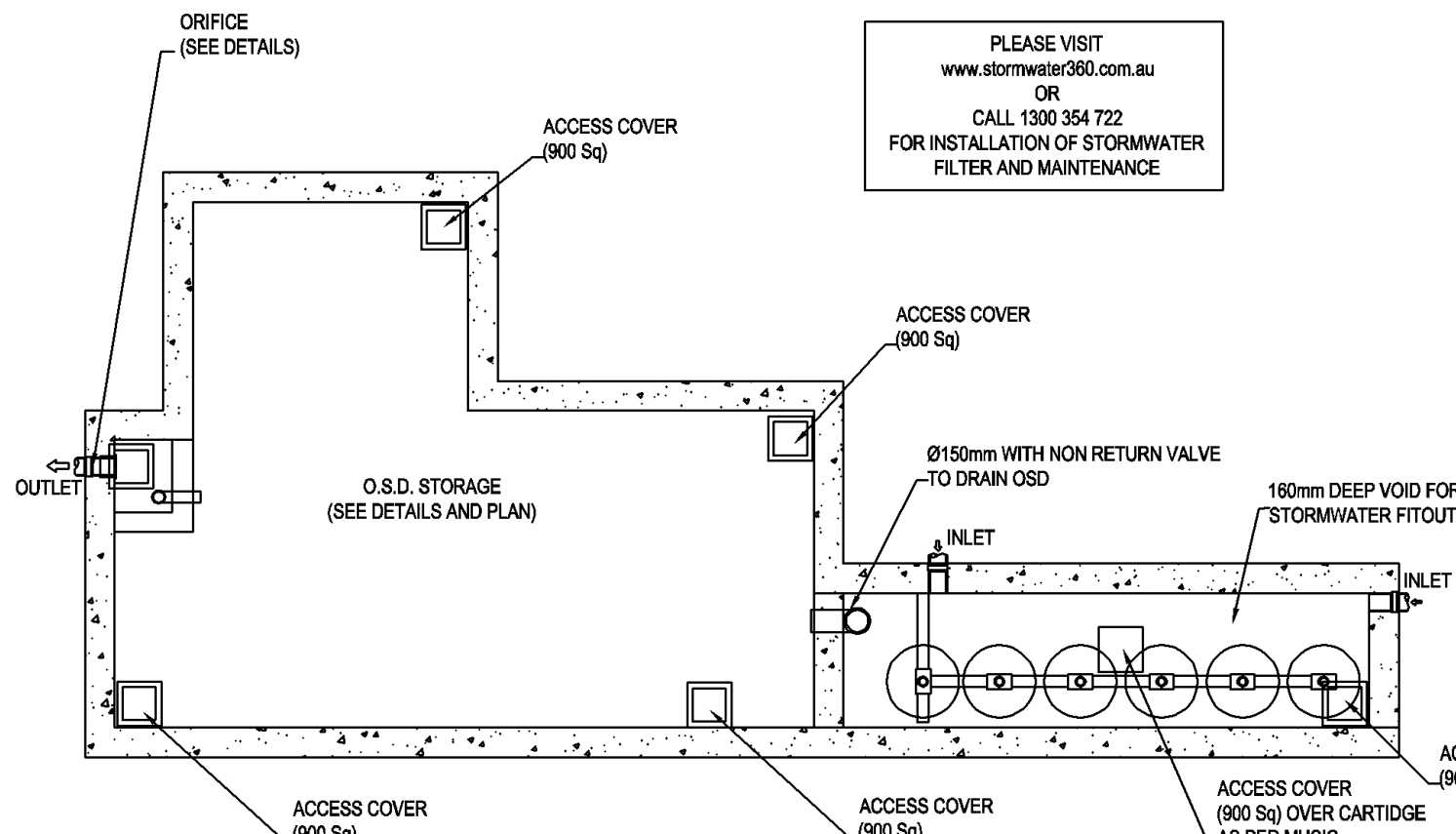
DRAWN: MM

DATE: 28/03/15

SCALE: AS NOTED

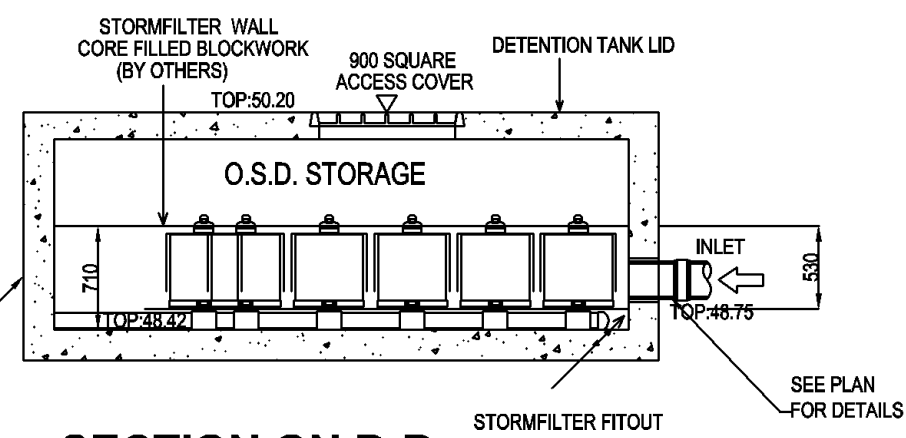
JOB No: 5788

SHEET No: 04 OF 08

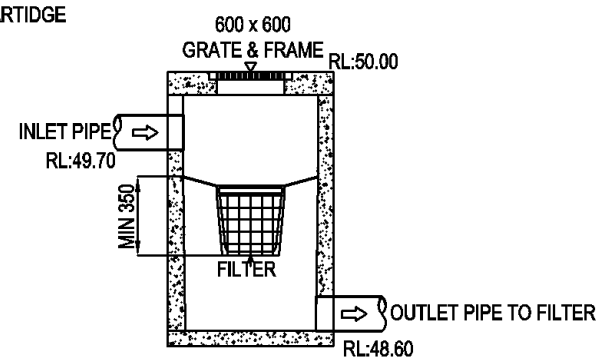


PLEASE VISIT  
[www.stormwater360.com.au](http://www.stormwater360.com.au)  
 OR  
 CALL 1300 354 722  
 FOR INSTALLATION OF STORMWATER  
 FILTER AND MAINTENANCE

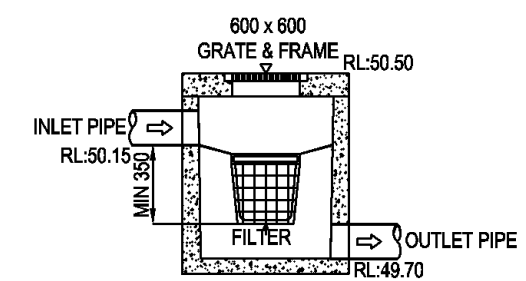
**PLAN LAYOUT**  
(NOT TO SCALE)



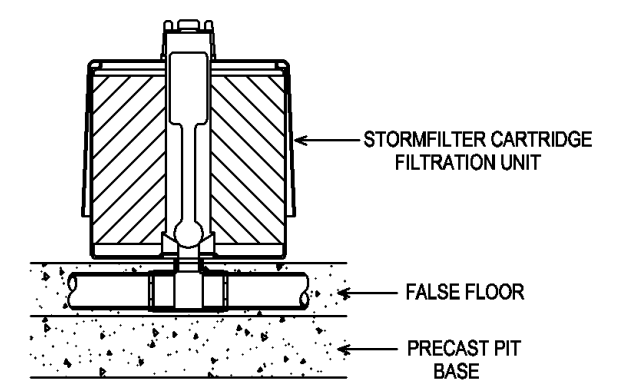
**SECTION ON B-B**



**ENVIROPOD-1**  
(NOT TO SCALE)



**ENVIROPOD-2**  
(NOT TO SCALE)



**STORMFILTER CARTRIDGE DETAIL**  
(NOT TO SCALE)

**STORMFILTER DESIGN TABLE**

• THE SIZE 3.2 x 1.8m STORMFILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED AND BY REGION SPECIFIC INTERNAL FLOW CONTROLS.  
 • THE STANDARD CONFIGURATION IS SHOWN. ACTUAL CONFIGURATION OF THE SPECIFIED STRUCTURE(S) PER CIVIL ENGINEER WILL BE SHOWN ON SUBMITTAL DRAWING(S).  
 • ALL PARTS PROVIDED AND INTERNAL ASSEMBLY BY STORMWATER360 UNLESS OTHERWISE NOTED.

CARTRIDGE HEIGHT	690	460	310			
SYSTEM HYDRAULIC DROP (H - REQ'D. MIN.)	930	700	550			
TREATMENT BY MEDIA SURFACE AREA L/S/m <sup>2</sup>	1.4	0.7	1.4	0.7		
CARTRIDGE FLOW RATE (L/s)	1.42	0.71	0.95	0.47	0.63	0.32

**GENERAL NOTES**

1. INLET AND OUTLET PIPING SHALL BE SPECIFIED BY SITE CIVIL ENGINEER (SEE PLANS) AND PROVIDED BY CONTRACTOR. STORMFILTER IS PROVIDED WITH OPENINGS AT INLET AND OUTLET LOCATIONS.
2. IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CIVIL ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE PRODUCT, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. PLEASE CONTACT STORMWATER360 FOR OPTIONS.
3. THE FILTER CARTRIDGE(S) ARE SIPHON-ACTUATED AND SELF-CLEANING. THE STANDARD DETAIL DRAWING SHOWS THE MAXIMUM NUMBER OF CARTRIDGES. THE ACTUAL NUMBER SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER ON SITE PLANS OR IN DATA TABLE BELOW. CONCRETE STRUCTURE TO BE PROVIDED BY OTHERS.
4. SEE STORMFILTER DESIGN TABLE FOR REQUIRED HYDRAULIC DROP. FOR SHALLOW, LOW DROP OR SPECIAL DESIGN CONSTRAINTS, CONTACT STORMWATER360 FOR DESIGN OPTIONS.
5. ALL WATER QUALITY PRODUCTS REQUIRE PERIODIC MAINTENANCE AS OUTLINED IN THE O&M GUIDELINES. PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS.
6. STRUCTURE AND ACCESS COVERS DESIGNED BY OTHERS. ACCESS COVERS TO BE A MINIMUM 900X900 ABOVE CARTRIDGES.
7. THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES AND VARY REGIONALLY.
8. ANY BACKFILL DEPTH, SUB-BASE, AND OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY SITE CIVIL ENGINEER.
9. CARTRIDGE HEIGHT AND ASSOCIATED DESIGN PARAMETERS PER STORMFILTER DESIGN TABLE.
10. STORMFILTER BY STORMWATER360: SYDNEY (AU) PHONE: 1300 354 722 [www.stormwater360.com.au](http://www.stormwater360.com.au)

ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA

**NASTASI & ASSOCIATES**  
 CONSULTING CIVIL & STRUCTURAL ENGINEERS  
 B.E., M.I.E. AUST. CPENG NPER-3  
 ABN 45 533 226 008  
 UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
 PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
 MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS  
 CLIENT No: 5788  
 PROJECT: 41-43 BARBER AVENUE  
 PENRITH

TITLE: STORMWATER AND SEDIMENT  
 MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION  
 DRAWN: MM  
 DATE: 28/03/15  
 SCALE: AS NOTED  
 JOB No: 5788 SHEET No: 05 OF 08

**WARNING:**

PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

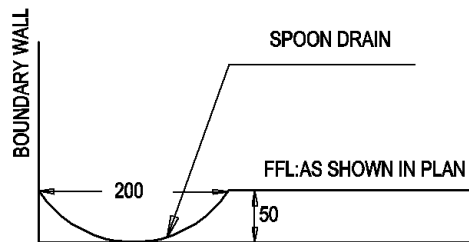
**BASEMENT PUMPOUT FAILURE WARNING SIGN**

NOTE:  
1- SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOUR:  
WARNING : RED  
BORDER AND LETTERING : BLACK

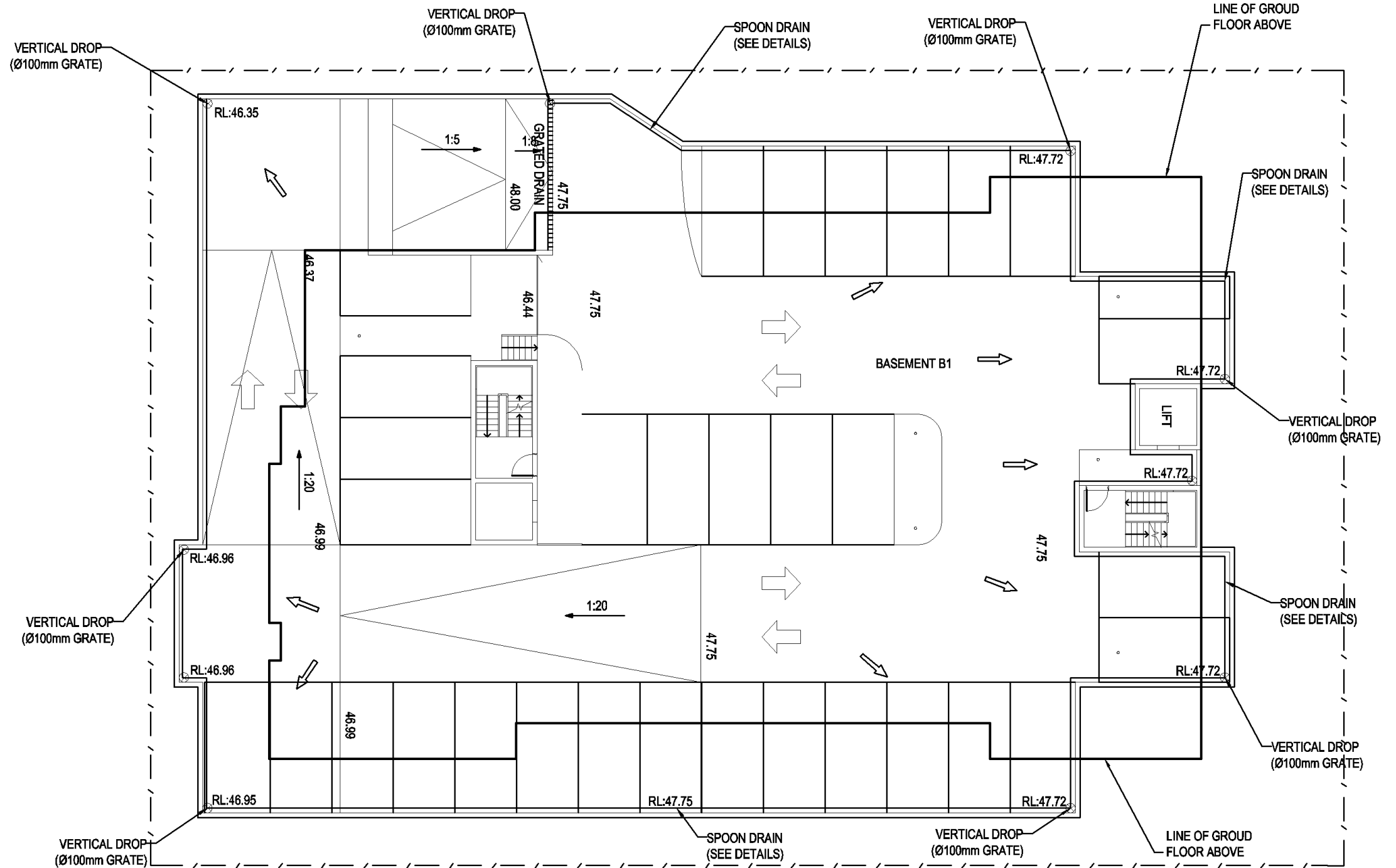
SUBSOIL DRAINAGE SYSTEM AS PER SECTION 6, AS3500.3-1990

DESIGN AND CONSTRUCTION OF SUBSOIL DRAINAGE AS PER AS3500.3-1990



**SECTION OF SPOON DRAIN**

SCALE N.T.S.



**STORMWATER MANAGEMENT PLAN-UPPER BASEMENT**

SCALE 1 : 200 IN A1

DESIGN AND LAYOUT OF PARKING AS PER AS2890.1-2004

SUBSOIL DRAINAGE SYSTEM AS PER SECTION 6, AS3500.3-1990

FULL SEARCH OF UNDERGROUND SERVICES SHOULD BE UNDERTAKEN BEFORE COMMENCE OF ANY WORKS

DESIGN AND CONSTRUCTION OF SUBSOIL DRAINAGE AS PER AS3500.3-1990

ISSUE:	DATE:	REVISIONS
A	28/03/15	ISSUED FOR DA

**NASTASI & ASSOCIATES**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
B.E., M.I.E. AUST. CPENG NPER-3

UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS

CLIENT No: 5788

PROJECT: 41-43 BARBER AVENUE  
PENRITH

TITLE: STORMWATER AND SEDIMENT  
MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION

DRAWN: MM

DATE: 28/03/15

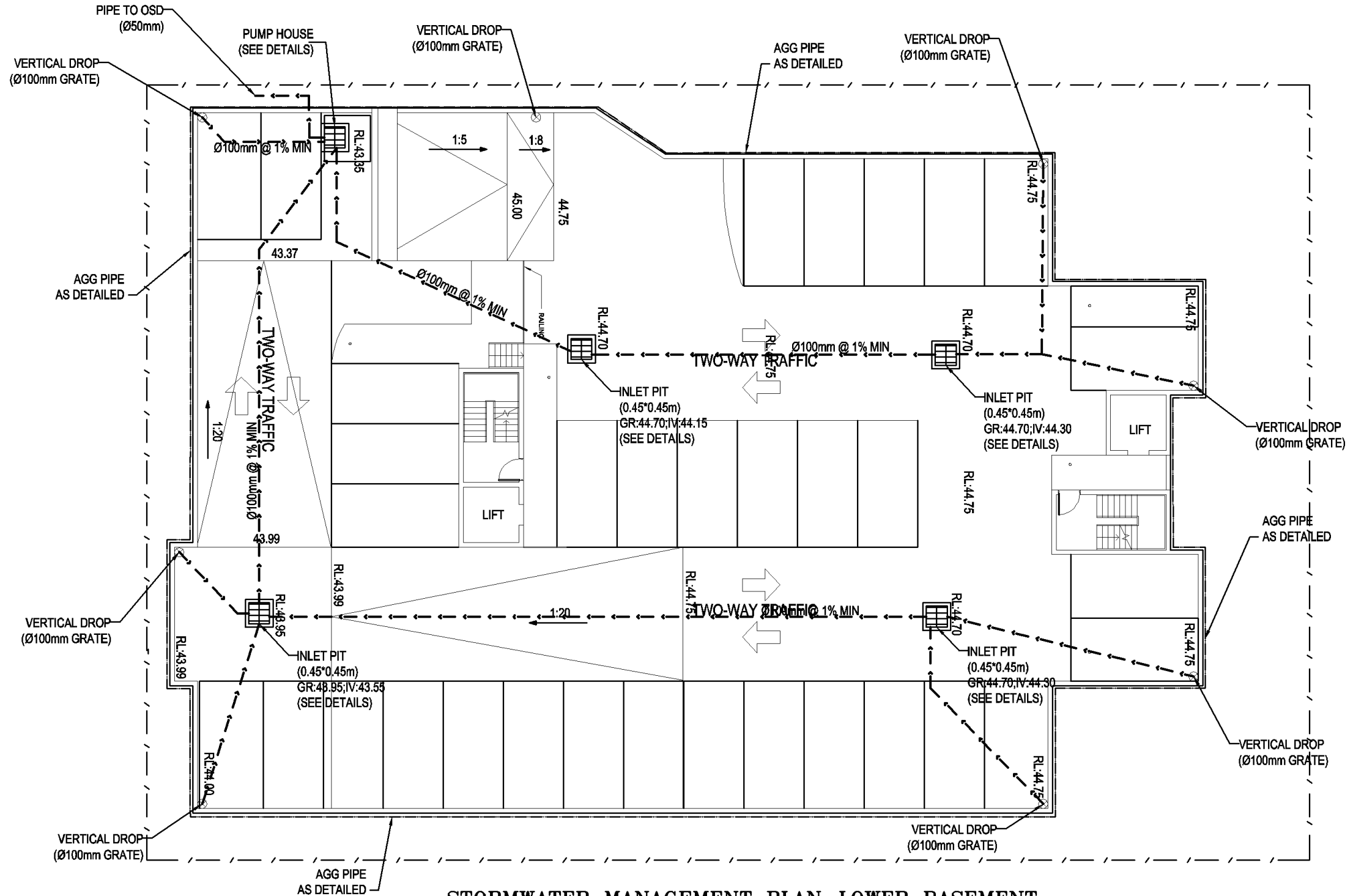
SCALE: AS NOTED

JOB No: 5788

SHEET No: 06 OF 08



FULL SEARCH OF UNDERGROUND SERVICES SHOULD BE UNDERTAKEN BEFORE COMMENCE OF ANY WORKS



**STORMWATER MANAGEMENT PLAN—LOWER BASEMENT**

SCALE 1 : 200 IN A1

A	28/03/15	ISSUED FOR DA	
ISSUE:	DATE:	REVISIONS	
		ISSUED FOR CONSTRUCTION	
		DRAWN: MM	
		DATE: 28/03/15	
		SCALE:	AS NOTED
		JOB No: 5788	SHEET No: 07 OF 08

**NASTASI & ASSOCIATES**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
B.E., M.I.E. AUST. CPENG NPER-3  
ABN 45 533 226 008  
UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS  
CLIENT No: 5788  
PROJECT: 41-43 BARBER AVENUE  
PENRITH

TITLE: STORMWATER AND SEDIMENT  
MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION  
DRAWN: MM  
DATE: 28/03/15  
SCALE: AS NOTED  
JOB No: 5788 SHEET No: 07 OF 08





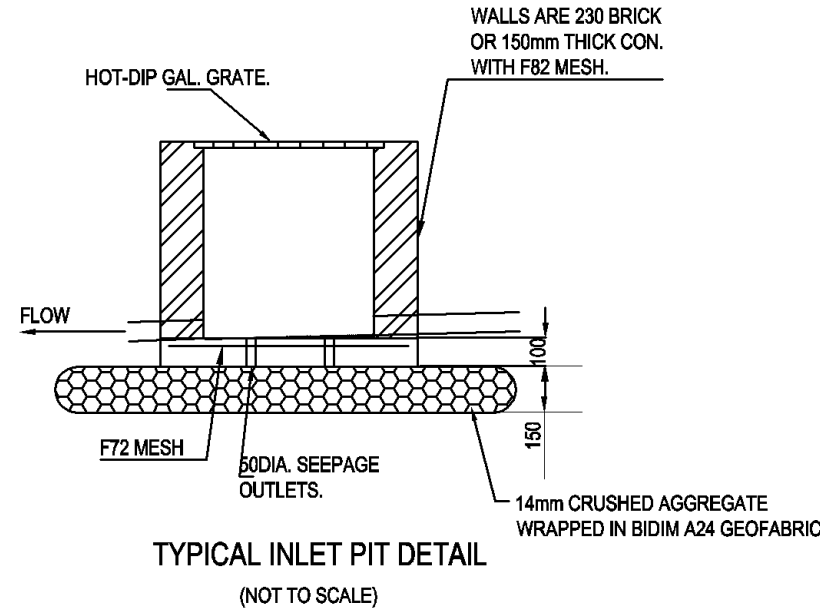
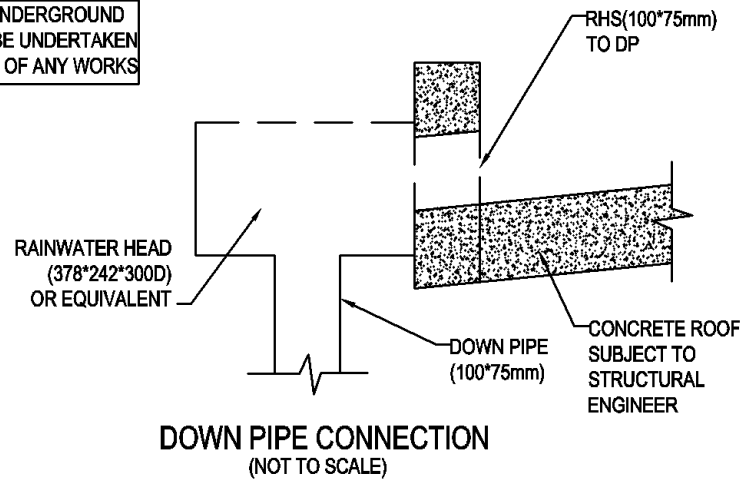
FULL SEARCH OF UNDERGROUND SERVICES SHOULD BE UNDERTAKEN BEFORE COMMENCE OF ANY WORKS

**WARNING:**  
PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

**BASEMENT PUMPOUT FAILURE WARNING SIGN**

NOTE:  
1- SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOUR:  
WARNING : RED  
BORDER AND LETTERING : BLACK



**PUMP SPECIFICATIONS**

**STANDARD PUMP-OUT NOTES**

THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -

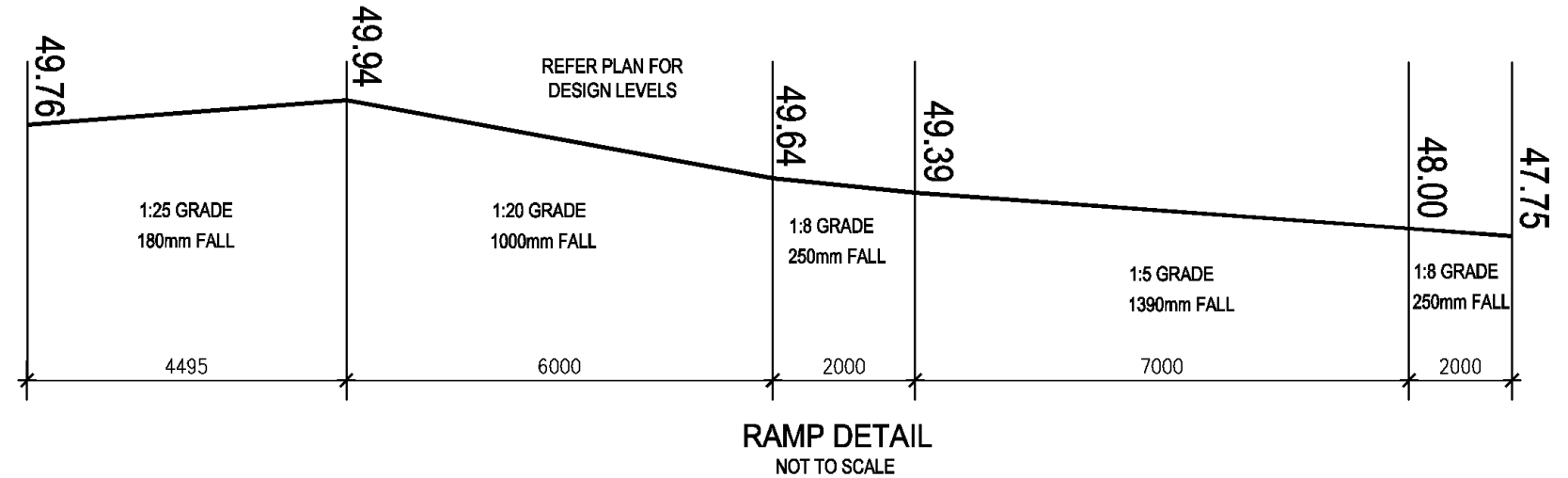
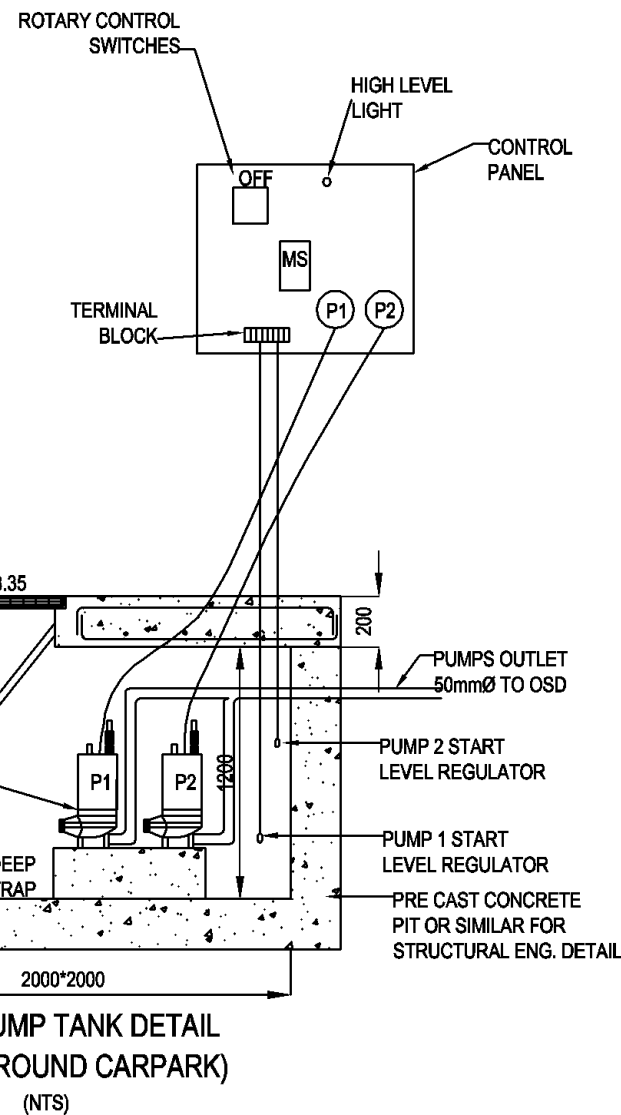
THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE EQUAL OPERATION LOAD & PUMP LIFE.

A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.

A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.

A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING & ACTIVATE THE ALARM.

AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.



**PUMP WELL DETAILS**

SUMP SIZE AND PUMP SIZE BASE ON 100 YEAR 90 MIN STORM INTENSITY IS 52.60 mm/hr  
DRIVEWAY:50.40 Sqm  
VOLUME=(50.40\*52.60/3600)\*90\*60=3.98 m<sup>3</sup>  
STORAGE PROVIDED 2000x2000x1000 = 4.00 m<sup>3</sup>  
PUMP OUT RATE BASED ON 5 YR 60 MIN. STORM = 38.40mm/hr  
PUMP RATE = 52.60\*38.40/3600 = 0.56 lit/Sec (MIN)  
DUAL PUMPS TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO ACT ALTERNATIVELY PUMPING 0.6 lit/sec AT 10 m HEAD (MIN)

NOTE: IN ORDER TO MAXIMISE VISIBILITY IN THE BASEMENT CAR PARKS, ALL BASEMENT CEILINGS ARE TO BE PAINTED WHITE

ALL THE BASEMENT WALLS TO BE WATERPROOFED AND PROVIDE AGG LINES AND SPOON DRAIN TO REMOVE SEEPAGE WATER.

PROVIDE TWIN DUTY-STANDBY SUBMERSIBLE PUMPS, WITH ALL RELEVANT EQUIPMENT AS SPECIFIED BY MANUFACTURER

ISSUE:	DATE:	REVISIONS
B	01/11/17	PLAN MODIFIED, DESIGN CHANGED AND ISSUED FOR DA
A	28/03/15	ISSUED FOR DA

**NASTASI & ASSOCIATES**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
B.E., M.I.E. AUST. CPENG NPER-3  
ABN 45 533 226 008  
UNIT 5, 1-3 WHYALLA PLACE, PRESTONS NSW 2170  
PH: (02) 9607 2864 OR (02) 8798 5617 FAX: (02) 9731 2081  
MOB: 0419 041 401

APPROVED:

CLIENT: SIMON ELIAS

CLIENT No: 5788

PROJECT: 41-43 BARBER AVENUE  
PENRITH

TITLE: STORMWATER AND SEDIMENT  
MANAGEMENT PLAN

ISSUED FOR CONSTRUCTION

DRAWN: MM

DATE: 28/03/15

SCALE: AS NOTED

JOB No: 5788

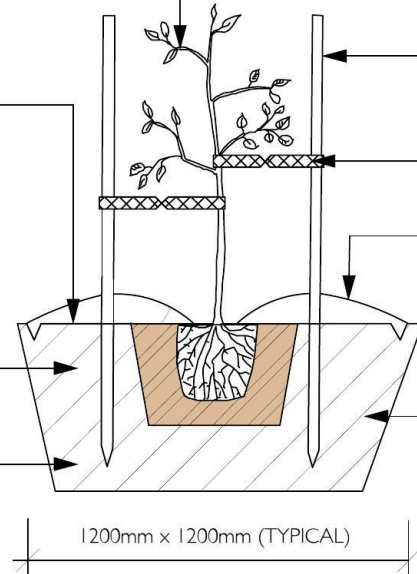
SHEET No: 08 OF 08

HEALTHY 25L TREE AS PER PLANT SCHEDULE WITH SINGLE LEADER AND PROPORTIONATE CROWN. PLACE CENTRAL AND PLUMB IN PLANTING HOLE. TOP OF ROOTBALL TO FINISH FLUSH WITH ADJACENT SURFACE

IF TREE PLANTING IN LAWN PROVIDE 100mm DEEP SPADE CUT EDGE AROUND PLANT BETWEEN TURF AND MULCH

RIP BASE AND SIDES OF PLANTING HOLE TO 100mm

SOIL PREPARATION AS PER GENERAL NOTES



**TYPICAL TREE PLANTING AND STAKING DETAIL**

SCALE 1:20

2 HARDWOOD STAKES 50 X 50 X 1800 MM AT EDGE OF ROOTBALL WITH 50MM HESSIAN TIES IN FIGURE OF EIGHT AND STAPLED TO STAKE AS SPECIFIED.

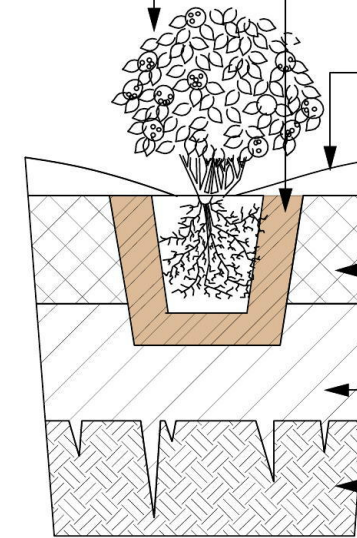
50mm HESSIAN TIES IN FIGURE 8 PATTERN AROUND TREE STEM AND STAPLED TO STAKES.

75mm MULCH, 25mm GRADED 'PINEBARK' MULCH. REDUCE COVER AROUND BASE OF PLANT CLEAR OF STEM TO CREATE WATERING DISH.

MAKE PLANTING HOLE APPROX. TWICE SIZE OF ROOTBALL. BACKFILL WITH PREMIUM ORGANIC GARDENMIX. LIGHTLY TAMP AND WATER WELL.

HEALTHY PLANT AS SPECIFIED PLACED CENTRAL AND PLUMB IN PLANTING HOLE

CONSOLIDATED SOIL 675mm DEPTH



**TYPICAL PLANTING DETAIL**

SCALE 1:20

MAKE PLANTING HOLE 200mm WIDER AND 100mm DEEPER THAN ROOTBALL. BACKFILL WITH PREMIUM GARDENMIX, LIGHTLY TAMP AND WATER WELL.

75mm LAYER, 25mm GRADED 'PINEBARK' MULCH AND/ OR GRAVEL AS SELECTED. REDUCE COVER AROUND BASE OF PLANT CLEAR OF STEM TO CREATE WATERING DISH

ADD 100mm LAYER OF ORGANIC SOIL CONDITIONER SUCH AS 'GREENLIFE' OR EQUIVALENT AND CULTIVATE INTO TOP 150mm OF SOIL.

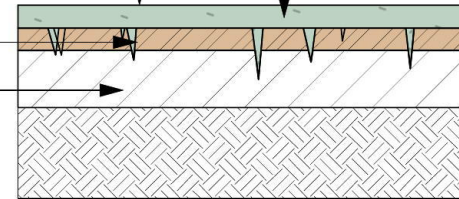
RIP SOIL TO 100mm DEPTH PRIOR TO CULTIVATING WITH ORGANIC SOIL CONDITIONER.

ENSURE RIP FRACTURES SUBGRADE

'SAPPHIRE FINE LEAF BUFFALO' TURF ROLLS - LAY ROLLS SO THAT TURF FINISHES 30mm OF ADJACENT SURFACES. CONSOLIDATE SOIL EDGES TO RESTRICT SUBSIDENCE

SPREAD AND RAKE MIN. 100mm LAYER TURF UNDERLAY (80/20 SAND/SOIL MIX). GRADE TO FINISHED LEVELS AND LIGHTLY CONSOLIDATE.

LAWN UNDERLAY  
150mm RIPPED SUBGRADE.



**TYPICAL LAWN DETAIL**

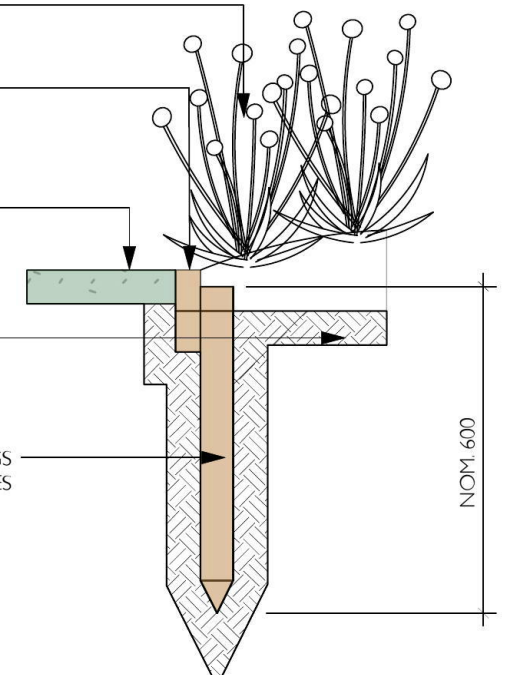
SCALE 1:20

MULCHED GARDEN BED  
PROVIDE 12mm DEEP SAW CUTS AT 50mm INTERVALS TO OUTSIDE FACE OF TIMBER FOR CURVED EDGING

LAWN AS SPECIFIED

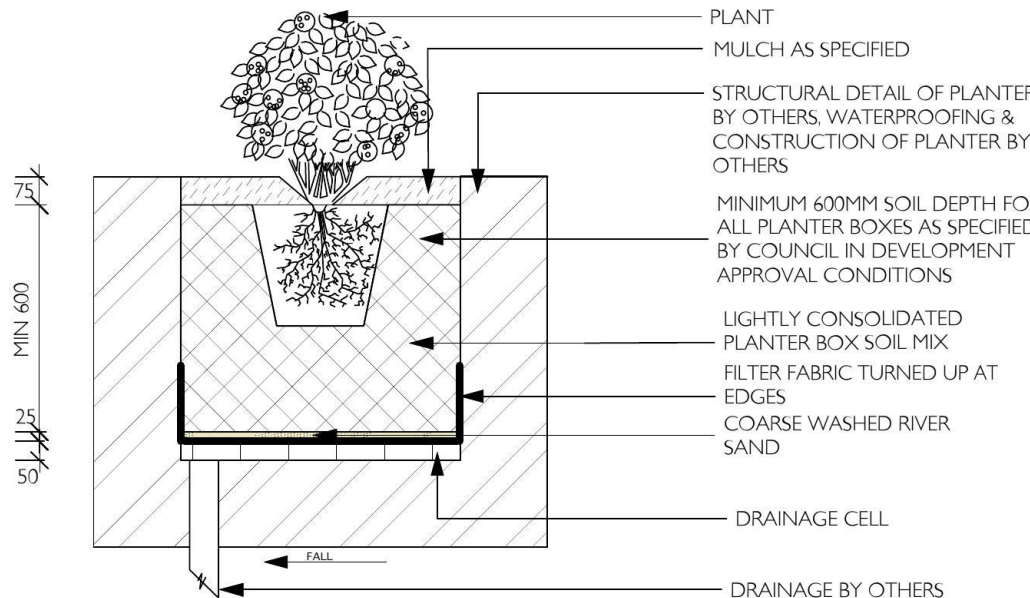
100 x 25mm H4 TREATED TIMBER EDGE BOARD FASTENED TO PEGS WITH GALVANIZED STEEL NAILS

40 x 40 x 450mm TREATED TIMBER PEGS AT MAX. 1200mm CENTRES



**TYPICAL TIMBER LAWN EDGING DETAIL**

SCALE 1:50



**PLANTER OVER SLAB DETAIL**

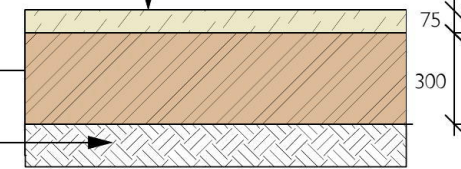
SCALE 1:20

PLANT  
MULCH AS SPECIFIED  
STRUCTURAL DETAIL OF PLANTER BY OTHERS, WATERPROOFING & CONSTRUCTION OF PLANTER BY OTHERS  
MINIMUM 600MM SOIL DEPTH FOR ALL PLANTER BOXES AS SPECIFIED BY COUNCIL IN DEVELOPMENT APPROVAL CONDITIONS  
LIGHTLY CONSOLIDATED PLANTER BOX SOIL MIX  
FILTER FABRIC TURNED UP AT EDGES  
COARSE WASHED RIVER SAND  
DRAINAGE CELL  
DRAINAGE BY OTHERS

75MM DEPTH OF DECORATIVE PEBBLE

CULTIVATED EXISTING SITE SOIL WITH BOTANY HUMUS INCORPORATED

EXISTING SUBGRADE



**DECORATIVE PEBBLE**

SCALE 1:20

NOTE: DO NOT SCALE FROM DRAWINGS



www.onlinelandscaping.com.au

<b>PROJECT</b>		LANDSCAPE DETAILS	
<b>ADDRESS</b>		41 - 43 BARBER STREET, PENRITH	
<b>CLIENT</b>	SIMON ELIAS	<b>SHEET</b>	L02
<b>DATE</b>	03/01/2018	<b>REVISION</b>	A
<b>SCALE</b>	REFER TO SCALE	<b>DRAWN</b>	BW
<b>PROJECT</b>	JS ARCHITECTS	<b>CHECKED</b>	EA

# SPECIFICATION

## PRELIMINARIES/ GENERAL

The following general conditions should be considered prior to the commencement of landscape works:

The landscape plans should be read in conjunction with the architectural plans, hydraulic plans, service plans and survey prepared for the proposed development. All services including existing drainage should be accurately located prior to the commencement of landscape installation. Any proposed tree planting which falls close to services will be relocated on site under the instruction of the landscape architect. Installation of conduit for required irrigation, electrical and other services shall be completed prior to the commencement of landscape works and hardstand pours. All outdoor lighting specified by architect or client to be installed by qualified electrician. Anomalies that occur in these plans should be brought to our immediate attention. Where an Australian Standard applies for any landscape material testing or installation technique, that standard shall be followed.

## PROTECTION OF ADJACENT FINISHES

The Contractor shall take all precautions to prevent damage to all or any adjacent finishes by providing adequate protection to these areas / surfaces prior to the commencement of the Works

## EROSION & POLLUTION CONTROL

The Contractor shall take all proper precautions to prevent the erosion of soil from the subject site. The contractor shall install erosion & sediment control barriers and as required by council, and maintain these barriers throughout the construction period. Note that the sediment control measures adopted should reflect the soil type and erosion characteristics of the site. Erosion & pollution control measures shall incorporate the following: Construction of a sediment trap at the vehicle access point to the subject sit, sediment fencing using a geotextile filter fabric in the location indicated on the erosion control plan or as instructed on site by the landscape architect, earth banks to prevent scour of stockpile, sandbag kerb sediment traps, straw bale & geotextile sediment filter, exposed banks shall be pegged with an approved Jute matting in preparation for mass planting.

## SOIL WORKS/PLANTING

Planting Mix: Planting mix for tree pit backfill shall be "Organic Garden Mix" consisting of 50% Black Soil 20% Coarse Sand 30% Organic Material as available from Australian Native Landscapes, Phone: [02] 9450 1444, or approved equivalent. Samples shall be provided to the Superintendent prior to ordering or delivery to site. Any material delivered to site, that is rejected by the Superintendent, shall be removed by the contractor at his own expense. Minimum depths of mix to all planting bed areas is as specified on details.

Mulch to garden bed: Mulch to planter beds shall be graded 'pinebark' mulch, free from fines and is available from Australian Native Landscapes Pty Ltd Phone (02) 9450 1444, or approved equivalent. Spread mulch so that after settling, it is smooth and evenly graded between design surface levels. Flush with adjacent finished levels of the required depths (75mm); and sloped towards the base of plant stems in plantation beds, but not in contact with the stem (not closer than 50mm in the case of gravel mulches). Place after the preparation of the garden bed, planting and all other work.

Plant Material: All plant material must be true to the species. No substitutes will be allowed. All plants shall be free of fungus and insect damage. All plants shall be healthy, well shaped, not soft or force grown and not root bound.

Timber Edging: Timber edging shall be 100 x 25mm h4 treated timber edge board fastened to pegs with galvanized steel nails.

Treated timber pegs to be 40 x 40 x 450mm at max. 1200mm centre.

Stakes: Trees in 2 x 50x50x1800mm Hardwood Stake with double Nylon tie. Staking Use durable hardwood, straight, free from knots or twists, pointed at one end. Drive stakes into the ground a minimum one third of their length, avoiding damage to the root system.

Ties: Provide a 50mm wide Nylon webbing tie per stake, fixed securely to the stakes, one tie at half the height of the main stem and the other as necessary to stabilise the plant.

Lawn Areas: All new turfed areas are to be selected weed free Soft Leaf Buffalo. Turf shall be laid neatly butted with staggered joints, flush with adjacent surfaces and have even running falls to all drainage points. All new turfed area shall have a minimum 150mm depth of weed free top soil, placed and leveled prior to turfing.

## DECORATIVE PEBBLE

Decorative Pebble Material: Decorative pebble shall be Crushed Western White Gravel, gravel to be of uniform size or graded material in the size 20-50 mm grade to nominal 75mm thickness as available from Australian Native Landscapes. Ph: (02) 9450 1444.

## RETAINING WALLS

Details of retaining walls, position, materials and structural engineering by others.

## CLOTHESLINE

Clothesline shall be positioned as shown on the plan. install as per manufacturer's details to Landscape Architect's approval.

## PAVING

Paving area to be filled of excavated as falls and levels of the plan. Stormwater system to be installed by builder with Surface drainage on paving towards grated drains with all drains connected to stormwater system.

## STEPPING STONES

Stepping stones shall be positioned as shown on the plan. They shall be placed on 25mm river bed as indicated on the details sheet. Dimensions of the stepping stone as shown on the plan or as indicated otherwise.

## FENCING

Fencing to be retained unless advised by others. Refer to landsape plan..

## IRRIGATION SYSTEM AND REQUIREMENTS DESCRIPTION OF WORKS

The scope of works in this section comprises the design and specification ( for comment by Superintendent ), supply, and installation of fully automated commercial drip irrigation system to all landscaped areas and to Councils requirements. The general location and extent of the areas to be irrigated is as shown on plans and includes: i. Planter bed areas to be irrigated by "Techline" dripline at 750mm intervals, capable of delivering 20mm / week ii. Garden bed areas to be irrigated by "Techline" dripline at 750mm intervals, capable of delivering 20mm / week iii. Turfed areas to be irrigated by "Uniram" dripline at 500mm intervals, capable of delivering 30mm / week. The Contractor shall provide shop drawings and materials and equipment specifications for comment by the Superintendent. Not with standing comments on the irrigation design being provided by the Superintendent responsibility for the technical design, operation and adequacy of performance of the irrigation system will remain with the Contractor.

## PROTECTION OF EXISTING TREES

Existing trees identified to be retained shall be done so in accordance with a qualified Arborist. Where general works are occurring around such trees, or pruning is required, a qualified Arborist shall be engaged to oversee such works and manage tree health. Existing trees designated on the drawing for retention shall be protected at all times during the construction period. Any soil within the drip-line of existing trees shall be excavated and removed by hand only. No stockpiling shall occur within the root zone of existing trees to be retained. Any roots larger in diameter than 50mm shall only be severed under instruction by a qualified arborist. Roots smaller than 50mm diameter shall be cut cleanly with a saw. Temporary fencing shall be installed around the base of all trees to be retained prior to the commencement of landscape works. Where possible this fencing will be located around the drip line of these trees, or a minimum of 3m from the trunk. The fencing shall be maintained for the full construction period.

## FEES, PERMITS AND APPROVALS

The Contractor shall be responsible for securing all necessary inspections and approvals. Before commencement of any works on the site the Contractor shall obtain approval from the Superintendent for the works to proceed and submit the necessary notification forms to all authorities having jurisdiction. These shall include but are not limited to the following: Connection Fees & Inspection Fees, Water Authority Document Inspection Fees, Water Authority Service Connection Charges, Water Authority, The Contractor shall pay all fees, permits, royalties, deposits, and charges and shall produce documentary evidence to the Superintendent upon request.

## EXISTING FACILITIES, UTILITIES AND SERVICES

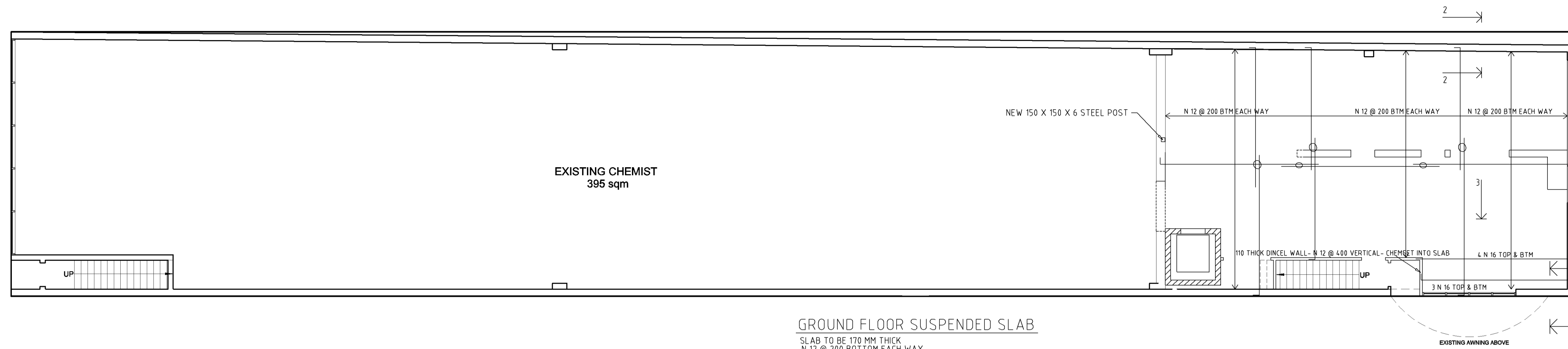
The Contractor's attention is drawn to the existence of utility services within the works site. The Contractor shall be fully responsible for ascertaining exact locations and levels of services or consumer mains which may be encountered during the course of the works. The Contractor shall liaise and consult with services authorities as required during the course of the project. Any damage to services or infrastructure facilities caused by any actions of the Contractor shall be repaired entirely to the satisfaction of the owner of such services and costs incurred shall be borne solely by the Contractor. When a service must be interrupted to enable the carrying out of works under this contract such interruption shall be at a time agreed with the responsible authority or owner and the Superintendent. The Contractor shall organise and be responsible for all necessary notifications and approvals required. Costs of relocation diversion, temporary removal and replacement of any service shall be borne by the Contractor.

## MAINTENANCE / PLANT ESTABLISHMENT

Maintenance shall apply to all hard and soft landscape materials installed prior to the "handover" and acceptance by Principles Representative and the Site Superintendent. The maintenance period shall commence at the granting of practical completion and shall extend for 26 weeks. Maintenance shall consist of the following works: Follow a daily watering programme to be approved by Superintendent. Water all plants individually, twice per week or when necessary to ensure constant plant growth. Water all turf and native grassed areas, twice per week. Apply appropriate weed control sprays and hand weed as required to maintain planting areas, native grassing bed areas, turfed areas, paved areas, and tree pits in turf free of weed or rogue grass growth. Regularly tidy and top up mulch and trim edges to prevent spill over onto paved / grassed areas. Spray to control pests and diseases. Replace plants, which fail with plants of a similar size and quality as originally specified to approval of Superintendent. Costs of replacement shall be the responsibility of the Contractor. Replacement planting will be undertaken within 2 weeks of identification of dead material or instruction by the Superintendent. Report any incidence of plants stolen or destroyed by vandalism. Adjust stakes and ties to plants as necessary. Ensure that strangulation of plants does not occur. Prune and shape plants as directed or where necessary. Make good any defects or faults arising out of defective workmanship or materials. Fertilise lawn areas to maintain healthy growth. Make good any erosion or soil subsidence, which may occur including soft areas in pathways. Mow lawn to maintain neat healthy growth. A final inspection shall be made by the Superintendent before handover. Any items requiring rectification shall be repaired before the works are finally approved, and retention moneys released.

 <a href="http://www.onlinelandscaping.com.au">www.onlinelandscaping.com.au</a>				<b>PROJECT</b>		LANDSCAPE SPECIFICATION	
				<b>ADDRESS</b>		41 - 43 BARBER STREET, PENRITH	
<b>CLIENT</b>		SIMON ELIAS		<b>SHEET</b>		L03	
<b>DATE</b>	03/01/2018	<b>REVISION</b>	A				
<b>SCALE</b>		<b>DRAWN</b>	BW				
<b>PROJECT</b>	JS ARCHITECTS	<b>CHECKED</b>	EA				

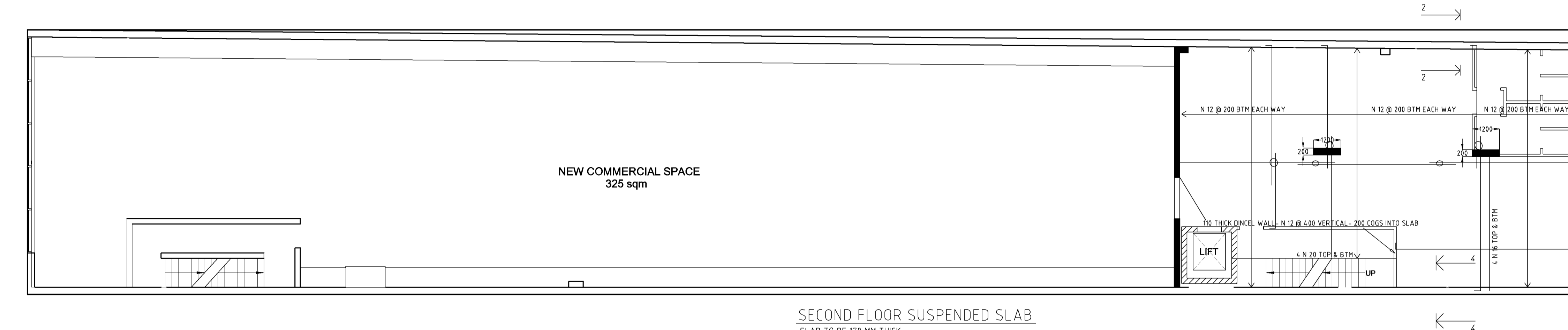
CHURCH STREET



**GROUND FLOOR SUSPENDED SLAB**

SLAB TO BE 170 MM THICK  
N 12 @ 200 BOTTOM EACH WAY  
F82 TOP MESH  
AND EXTRA BARS AS SHOWN  
2 N 12 TOP AND BOTTOM OVER OPENINGS

CHURCH STREET



**SECOND FLOOR SUSPENDED SLAB**

SLAB TO BE 170 MM THICK  
N 12 @ 200 BOTTOM EACH WAY  
F82 TOP MESH  
AND EXTRA BARS AS SHOWN  
2 N 12 TOP AND BOTTOM OVER OPENINGS  
■ DENOTES 200 MM THICK DINCAL WALL/COLUMN - 5 N 12 VERTICAL

**CONSTRUCTION NOTES**

- GENERAL**
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
  - DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWING.
  - SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER DURING CONSTRUCTION. THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
  - ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE SAA AND CODES AND THE LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY. ALL CODES SHALL BE CURRENT EDITIONS.
  - ANY CONFLICT BETWEEN THESE NOTES, THE SPECIFICATION OR THE DRAWINGS SHALL BE RESOLVED BY THE ENGINEER.
  - THE ENGINEER DOES NOT HOLD ANY LIABILITY OR IMPLIED LIABILITY FOR ANY OTHER PART OF THE STRUCTURE THAT IS NOT INCLUDED IN THESE DRAWINGS OR ANY OTHER WRITTEN SITE INSTRUCTIONS.
  - BUILDER TO CHECK/ENSURE EXISTING STRUCTURES/FOUNDATIONS/WALLS/BEAMS ARE ADEQUATE TO SUPPORT NEW SLABS/STRUCTURES.
- FOUNDATIONS**
- EXISTING FOUNDATION/STRUCTURES MATERIAL SHALL BE CHECKED PRIOR TO COMMENCING OF ANY WORKS AS UNDERPINNING MAY BE REQUIRED.

- CONCRETE**
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS
  - CONCRETE QUALITY

ELEMENT	STANDARD TO AS 3600 CURRENT EDITION WITH AMENDMENTS		
	FC 28 DAYS	SLUMP	MAX. SIZE AGG.
SUSPENDED SLAB	32 MPa	80 mm	20 mm
			NIL

- CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE

ELEMENT	CAST AGAINST FORMS COMPLYING WITH AS 1509 IN SHELTERED LOCATIONS		CAST AGAINST FORM WORK OR THE GROUND
	1	2	
AS 3600 EXPOSURE CONDITION			
SLABS	20	30	65
WALLS	20	30	65

- ALL CONCRETE PLACED SHALL BE WELL VIBRATED AND COMPACTED USING AN APPROVED VIBRATOR AND TECHNIQUE.
- SIZE OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWING SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY. IT IS NOT NECESSARY SHOWN IN TRUE PROJECTION.
- SPICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITION SHOWN. THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE OBTAINED FOR ANY OTHER SPICE IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3600.
- WELDING OF REINFORCEMENT WILL BE PERMITTED ONLY AFTER THE WRITTEN APPROVAL OF THE ENGINEER.
- REINFORCEMENT SYMBOLS

REINFORCEMENT TYPE	GRADE		MINIMUM YIELD STRENGTH (fy) MPa
(G) PLAIN BARS	250R	R	250
(B) DEFORMED BARS TO AS 1302	400M	M	400
STEEL WIRE PLAIN AND DEFORMED TO AS 1303	450W	W	450
WELDED WIRE FABRIC TO AS 1304	450F	F	450

- FABRIC TO BE IN ACCORDANCE WITH AS 1304.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS BEFORE REINFORCEMENT IS COMPLETED. THE CONTRACTOR SHALL ALLOW, AFTER THE COMPLETION OF THE REINFORCEMENT, TWO HOURS FOR THE ENGINEER'S INSPECTION.
- CONCRETE SHALL NOT BE ORDERED UNTIL REINFORCEMENT IS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS BEFORE POURING OF CONCRETE.
- CONCRETE CURING AND STRIPPING TO BE IN ACCORDANCE WITH THE RELEVANT ASS CODES. CONCRETE TO BE CURED A MINIMUM OF 7 DAYS AFTER POURING.
- BRICKWORK TO BEAMS AND SLABS SPANNING GREATER THAN 6m SHALL BE PRECAMBERED UPWARDS BY 1/200 OF CLEAR SPAN IN EACH SPAN UNLESS NOTED OTHERWISE ON THE DRAWINGS.

- REINFORCEMENT**
- ALL UNSUPPORTED BARS SHALL BE TIED IN TRANSVERSE DIRECTION TO 1/2 AT 400 CRS.
  - MINIMUM LAP TO FABRIC TO CONSIST OF TWO CROSSWIRES PLUS 25mm AND EXTEND 50mm WITH CROSSWIRE INTO WALLS UNLESS NOTED OTHERWISE.
  - TRENCH MESH 600mm MINIMUM LAP UNLESS NOTED OTHERWISE.

- BRICKWORK (OR BLOCKWORK)**
- SLIP JOINTS TO BE USED ON ALL LOAD-BEARING MASONRY WALLS USING 2 LAYERS OF GALVANIZED PLAT STEEL WITH GRAPHITE GREASE SANDWICHED BETWEEN. UNLGO ON PLAN.
  - WALLS SHOWN ON STRUCTURAL DRAWINGS ARE BEARING WALLS. NON LOAD BEARING WALLS SHALL BE SEPARATED FROM THE SLABS IN AN APPROVED MANNER. NO BRICKWORK WHICH IS SUPPORTED BY THE SLAB SHALL BE ERRECTED UNTIL FORMWORK HAS BEEN REMOVED.
  - BRICK MORTAR TO BE 1:1:4:3 PROPORTIONS BY VOLUME CEMENT, LIME & SAND.
  - BRICK STRENGTH FOR LOAD BEARING BRICKWORK TO BE A MINIMUM OF 15 MPa.
  - BLOCKWORK QUALITY: BLOCKWORK STRENGTH 20MPa.
  - BLOCKWORK SPOUT: F.C. (28 DAYS) 20.
  - SLUMP 230.
  - MAX. SIZE AGG. 10.
  - PROVIDE 10mm POLYSTYRENE EXPANSION JOINT BETWEEN ALL BRICK & CONCRETE BUTTING FACES ON ALL LEVELS.

ISSUE	REV NO	REVISION DESCRIPTION	APPROV DATE
A			

**PROPOSED RESIDENTIAL DEVELOPMENT**  
AT:  
240 CHURCH STREET  
PARRAMATTA  
M.M.FARAH  
CIVIL/STRUCTURAL PTY/LTD  
3/18 MCFARLANE STREET  
MERRYLANDS, N.S.W. 2160  
PH: 0411780327

DRAWING: SUSPENDED SLABS, SECTIONS AND NOTES		
DRAWN: M.F.	DESIGNED BY: M.M.FARAH	JOB NUMBER: STRUCTURAL - 240 CHURCH
DESIGNED: M.M.FARAH	CIVIL/STRUCTURAL PENG MIEAUST	DRAWING NUMBER: SHEET 1 OF 1
SCALE: AS SHOWN		

