# 2 0 1 9 0 0 3 5

## PROPOSED RESIDENTIAL DEVELOPMENT 101 NUWARRA ROAD, MOOREBANK STORMWATER CONCEPT DESIGN



	DRAWING REGISTER			
SHEET No.	No. TITLE		REV	
1	SW100	COVER SHEET	A	
2	SW200	STORMWATER CONCEPT DESIGN - BASEMENT 02 PLAN	A	
3	SW201	STORMWATER CONCEPT DESIGN - LOWER GROUND FLOOR PLAN	А	
4	SW202	STORMWATER CONCEPT DESIGN - UPPER GROUND FLOOR PLAN	Α	
5	SW203	STORMWATER CONCEPT DESIGN - ROOF PLAN	А	
6	SW300	STORMWATER CONCEPT DESIGN - DETAILS SHEET	А	
7	SW400	EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS	A	
8	SW500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN	A	

LOCALITY PLAN

NOT TO SCALE

COPYRIGHT OF GOOGLE MAP, VERSION 3



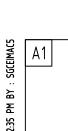
PREPARED BY:

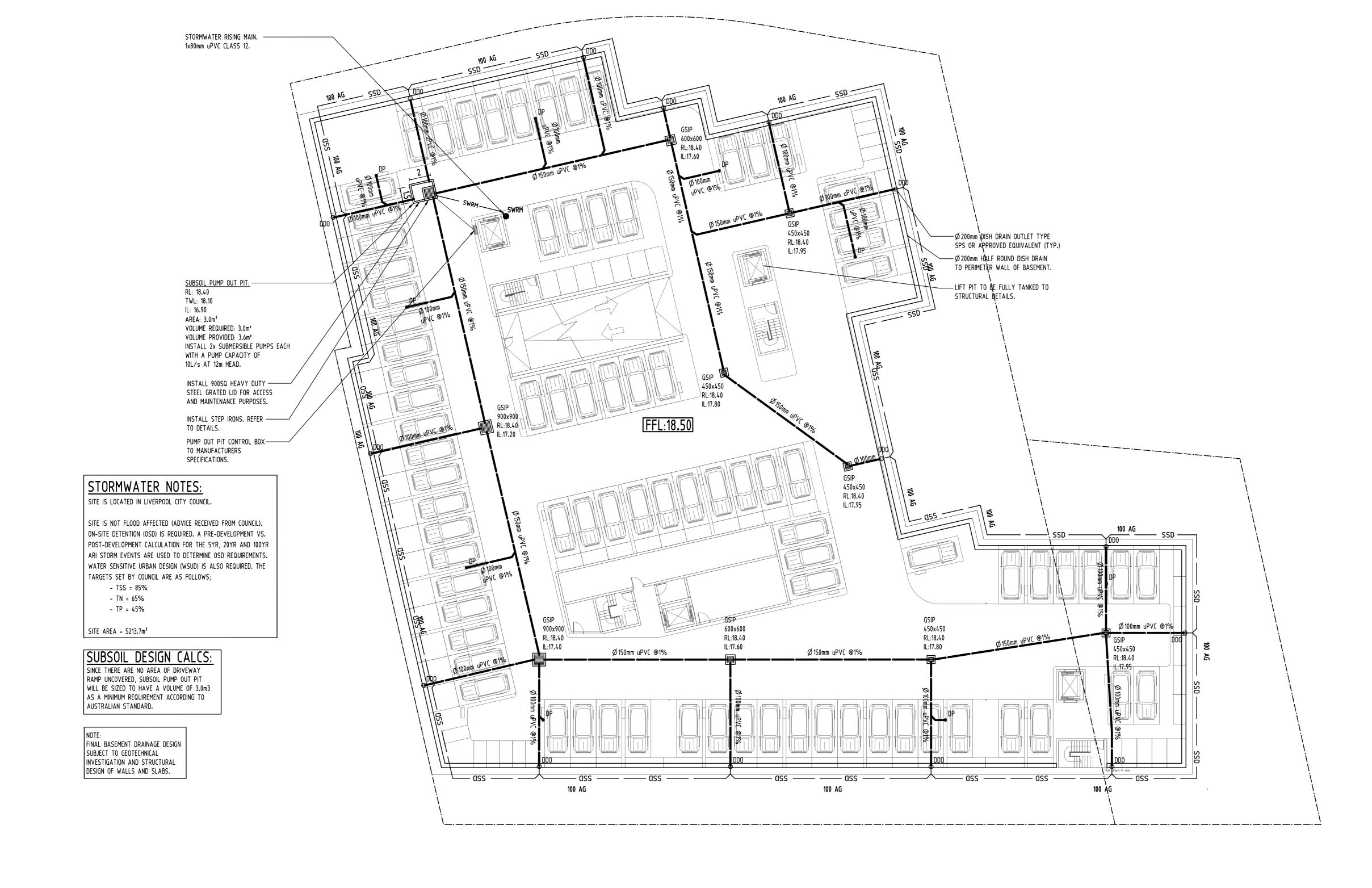
SGC Consulting Engineers
Suite 5.03, Level 5
156 Pacific Highway
St Leonards, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au

ARCHITECT:

KENNEDY ASSOCIATES CLIENT:

OMAR ABDUL-RAHMAN

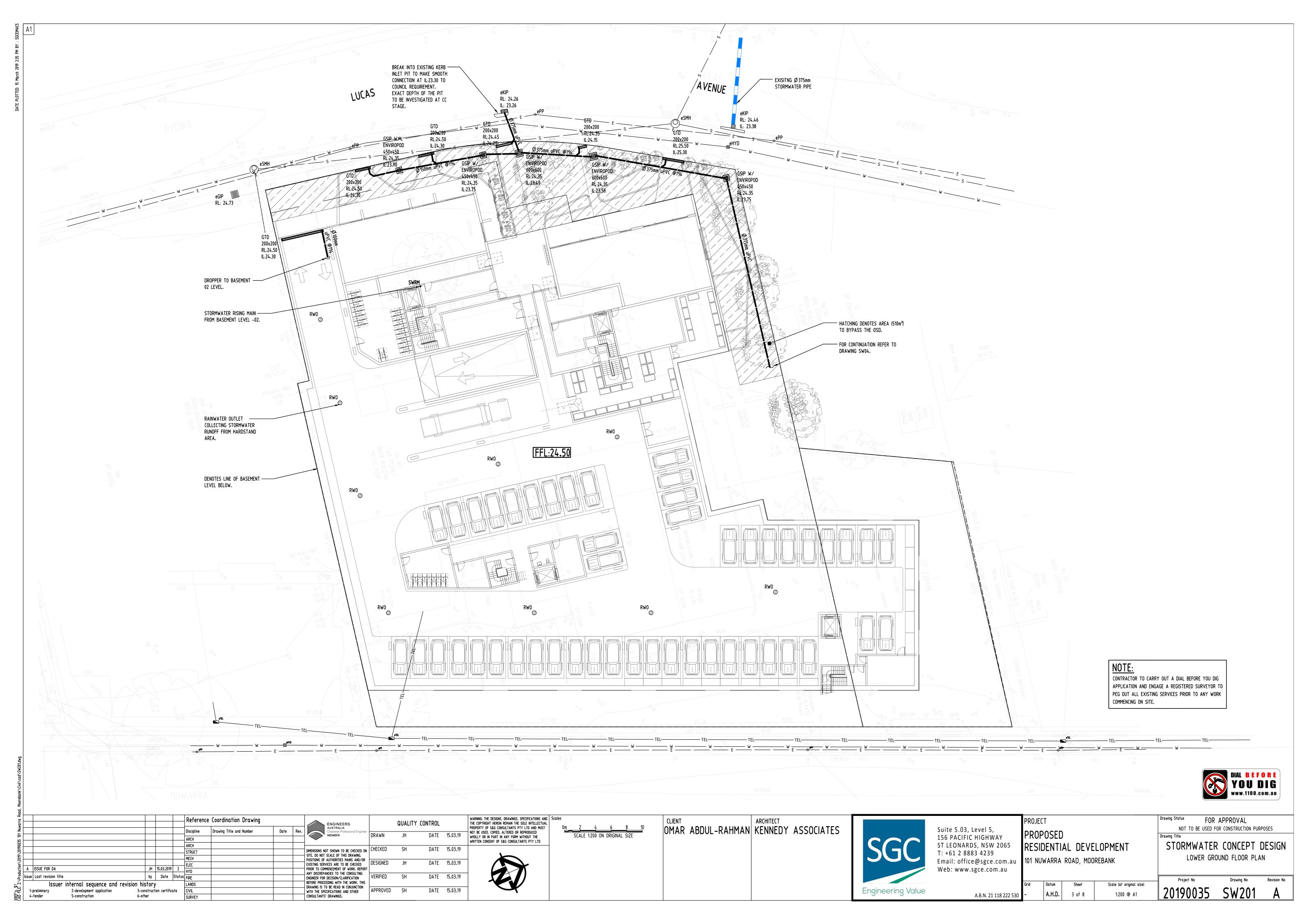






WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST 0 Reference Coordination Drawing ARCHITECT PROJECT PRELIMINARY QUALITY CONTROL OMAR ABDUL-RAHMAN KENNEDY ASSOCIATES NOT TO BE USED FOR CONSTRUCTION PURPOSES Suite 5.03, Level 5, Discipline Drawing Title and Number NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD SCALE 1:200 ON ORIGINAL SIZE PROPOSED DATE 15.03.19 156 PACIFIC HIGHWAY STORMWATER CONCEPT DESIGN RESIDENTIAL DEVELOPMENT ST LEONARDS, NSW 2065 DIMENSIONS NOT SHOWN TO BE CHECKED ON CHECKED

SITE. DO NOT SCALE OF THIS DRAWING. DATE 15.03.19 T: +61 2 8883 4239 BASEMENT 02 PLAN POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT 101 NUWARRA ROAD, MOOREBANK Email: office@sgce.com.au DESIGNED DATE 15.03.19 A ISSUE FOR DA JH 15.03.2019 2 Web: www.sgce.com.au ANY DISCREPANCIES TO THE CONSULTING Issue Last revision title by Date Status FIRE DATE 15.03.19 ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS Issuer internal sequence and revision history Datum Scale (at original size) DRAWING IS TO BE READ IN CONJUNCTION 20190035 APPROVED SH DATE 15.03.19 Engineering Value 2-development application 3-construction certificate WITH THE SPECIFICATIONS AND OTHER **A.H.D.** 2 of 8 1:200 @ A1 A.B.N. 21 118 222 530 5-construction 6-other SURVEY



AVENUE LUCAS STORMWATER RISING MAIN — FROM BASEMENT 02 — FOR CONTINUATION REFER TO DRAWING SW03. −Ø375mm uPVC OUTLET Ø100mm uPVC @1% - OVERFLOW PIT 900x900 RL:27.50 IL:25.92 \_\_\_ABOVE GROUND OSD BASIN AREA = 212.20m2VOL. REQ. = 36.20m3 RAINWATER OUTLET COLLECTING — RL:27.25 VOL. PROV. = 43.68m3 (20% RW0 STORMWATER RUNOFF FROM IL:26.07 EXTRA FOR VEGETATION GROWTH) FFL:29.50 HARDSTAND AREA. (TYP) MAX DEPTH = 0.25m - GSIP TYPE SPS TRUFLO CODE TIA100F RL: 27.25 900x900 OR EQUAL (TYP) RL:27.30 TWL: 27.50 IL:26.12 TOW: 27.60 (MIN.) DENOTES LINE OF BASEMENT — Ø100mm ⊮PVC @1% LEVEL BELOW. ---- BIO-RETENTION AREA: 180m² EXTENDED DEPTH: 50mm TWL: 27.30 RL: 27.25 UNDERLAID WITH 0.5m DEEP FILTER MEDIA WRAPPED WITH GEOTEXTILE FABRIC. LOCATIONS OF DOWNPIPE ARE NOMINAL AND TO BE CONFIRMED BY HYDRAULIC CONSULTANTS AT CC STAGE. RL:27.25 FFL:28.50 IL:26.45 - 1:4 BATTER Ø300mm uPVC @1% Ø 225mm uPVC @1% Ø 300mm uPVC @1% — PIPE PENETRATIONS THROUGH BASEMENT WALL TO FULLY SEALED AND HAVE A PUDDLE FLANGE (TYP.). Ø 150mm\_uPVC @1% Ø 150mm uPVC/@1% GSIP 450x450 GTD GTD GTD RL:27.80 RL:27.80 RL:27.80 RL:27.80 200x200 RL:28.00 200x200 200x200 200x200 IL:27.35 IL:27.10 IL:26.85 IL:26.70 RL:27.90 RL:27.90 RL:27.90 IL:27.70 IL:27.70 IL:27.70 IL:27.80 NUWARRA ROAD WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST Reference Coordination Drawing ARCHITECT PROJECT QUALITY CONTROL OMAR ABDUL-RAHMAN KENNEDY ASSOCIATES Suite 5.03, Level 5, Discipline Drawing Title and Number SCALE 1:200 ON ORIGINAL SIZE PROPOSED NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD DATE 15.03.19 156 PACIFIC HIGHWAY ST LEONARDS, NSW 2065 DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. DATE 15.03.19 T: +61 2 8883 4239 POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT DESIGNED DATE 15.03.19

A ISSUE FOR DA

Issue Last revision title

Issuer internal sequence and revision history

2-development application

5-construction

JH 15.03.2019 2

3-construction certificate

6-other

by Date Status FIRE

SURVEY

ANY DISCREPANCIES TO THE CONSULTING

ENGINEER FOR DECISION/CLARIFICATION
BEFORE PROCEEDING WITH THE WORK. THIS

DRAWING IS TO BE READ IN CONJUNCTION
WITH THE SPECIFICATIONS AND OTHER

APPROVED SH

DATE 15.03.19

DATE 15.03.19

DIAL BEFORE
YOU DIG
www.1100.com.au

FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES STORMWATER CONCEPT DESIGN RESIDENTIAL DEVELOPMENT UPPER GROUND FLOOR PLAN 101 NUWARRA ROAD, MOOREBANK Email: office@sgce.com.au Web: www.sgce.com.au Datum Scale (at original size) 20190035 Engineering Value A.H.D. 1:200 @ A1 4 of 8 A.B.N. 21 118 222 530

LUCAS FFL:44.50

NOTE:

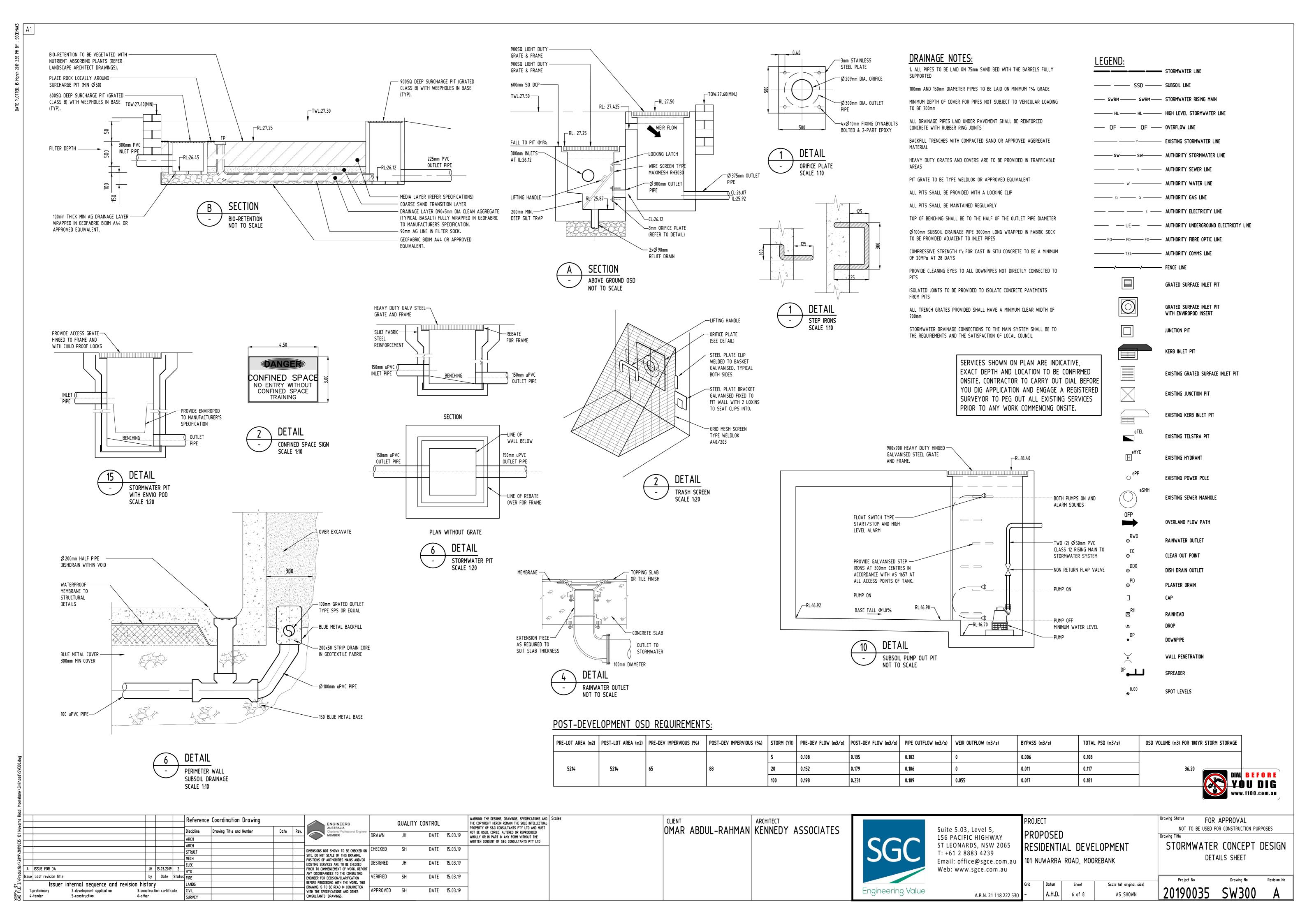
DOWNPIPE (DP), PLANTER DRAIN (PD), RAIN WATER OUTLET (RWO) AND DROPPER LOCATIONS ARE INDICATIVE ONLY AND ARE SUBJECTED TO FUTURE DESIGN DURING CONSTRUCTION CERTIFICATE.

NUWARRA

ROAD



A DITE	Reference Coordination Drawing QUALITY CONTROL	WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL THE COPYRIGHT HEREIN REMAIN THE COPYRIGHT HEREIN	CLIENT ARCHITECT		PROJECT	Drawing Status FOR APPROVAL
101 Nu	Discipline Drawing Title and Number Date Rev.  ARCH Discipline Drawing Title and Number Date Rev.  ARCH DRAWN JH DATE 15.03.19	PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST  NOT BE USED, COPIED, ALTERED OR REPRODUCED  WHOLLY OR IN PART IN ANY FORM WITHOUT THE  WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD  WE SEE TO SEE	OMAR ABDUL-RAHMAN KENNEDY ASSOCIATES	Suite 5.03, Level 5, 156 PACIFIC HIGHWAY	PROPOSED	Drawing Title
019/201900	ARCH STRUCT DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR POSITIONS OF AUTHORITIES MAINS AND/OR POSITIONS OF AUTHORITIES MAINS AND/OR			1: +61 2 8883 4239	RESIDENTIAL DEVELOPMENT	STORMWATER CONCEPT DESIGN ROOF PLAN
A ISSUE FOR DA JH 15.03.2019	ELEC EXISTING SERVICES ARE TO BE CHECKED DESIGNED JH DATE 15.03.19  PRIOR TO COMMENCEMENT OF WORK, REPORT  ANY DISCREPANCIES TO THE CONCILITING			Web: www.sgce.com.au	101 NUWARRA ROAD, MOOREBANK	
Issue Last revision title   by   Date   St	LANDS BEFORE PROCEEDING WITH THE WORK, THIS DRAWING IS TO BE READ IN CONJUNCTION ADDROVED SHEET AF 03 40			Engineering Value	Grid Datum Sheet Scale (at original size)	Project No Drawing No Revision No
逆분 1-preliminary 2-development application 3-construction certificate 발달 4-tender 5-construction 6-other	SURVEY WITH THE SPECIFICATIONS AND OTHER APPROVED SHIP DATE 15.05.19  CONSULTANTS' DRAWINGS.	•		Engineering Value  A.B.N. 21 118 222 530	0 - A.H.D. 5 of 8 1:200 @ A1	20190035 SW203 A



WITH GRATE

Reference Coordination Drawing

JH 15.03.2019 2

3-construction certificate

6-other

by Date Status FIRE

## **EROSION & SEDIMENTATION CONTROL NOTES**

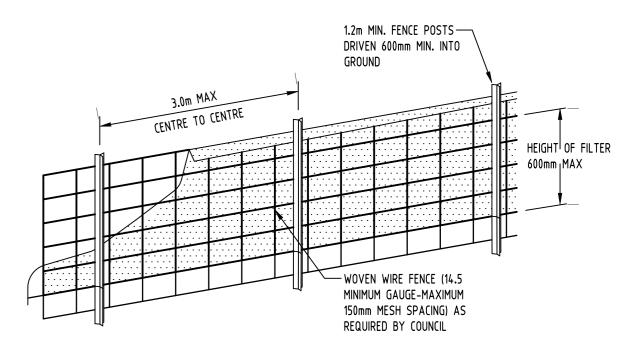
- 1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- 2. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- 3. NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- 4. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- 5. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

### GENERAL NOTES

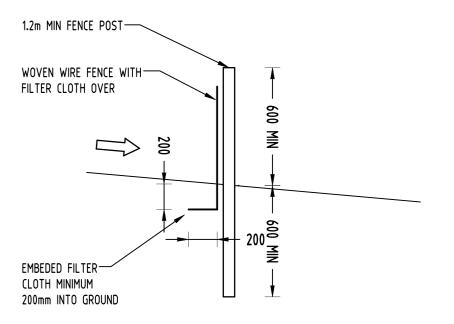
- 1. THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
- 2. ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

### CLAY SOILS

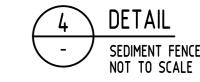
- A SYSTEM SHALL BE INSTALLED TO EITHER:
- 1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
- 2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL

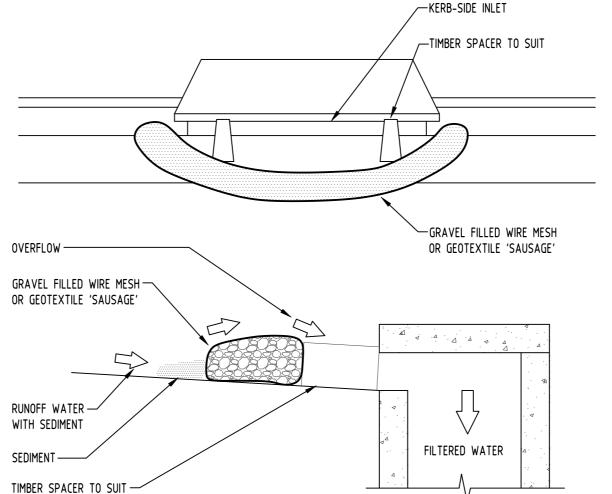


### DIAGRAMMATIC VIEW



TYPICAL SECTION





### CONSTRUCTION NOTES:

FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAT THE LENGTH OF THE INLET PIT

FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL

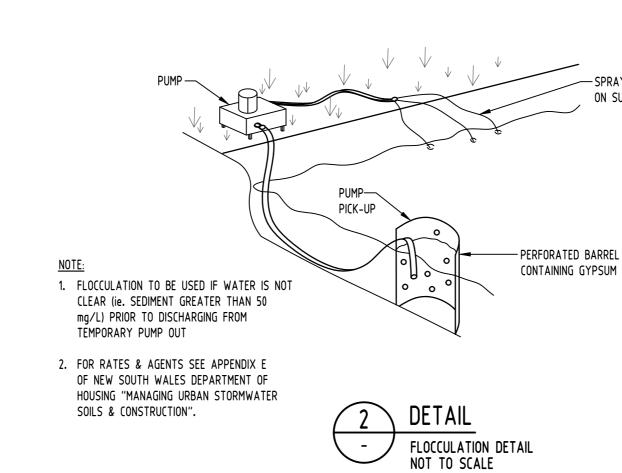
FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY

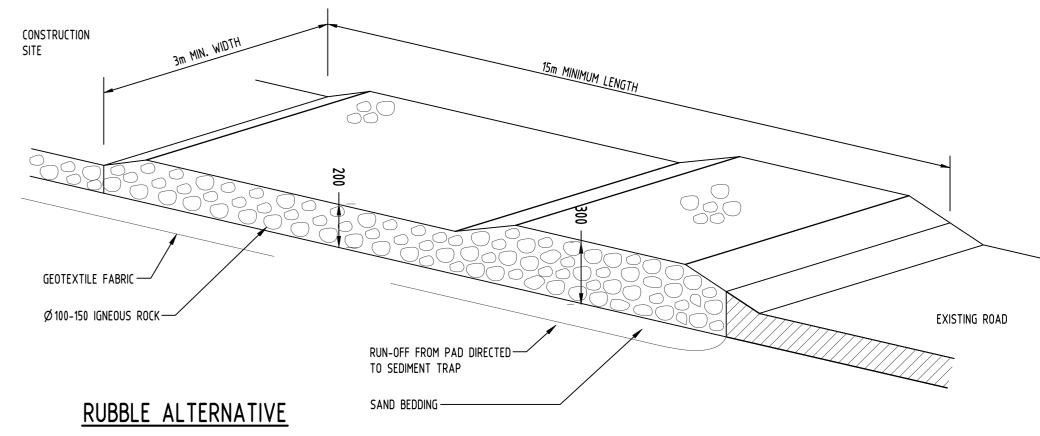
MAINTAIN THE OPENING WITH SPACER BLOCKS

FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER

FIT TO ALL KERB INLETS AT SAG POINTS











oduction\2019\20190035 101 Nuwarra Road, Moore		
&		
Var		
3		
5		
90		
200		
66		
[2]		
<u> </u>	A	ISSUE FOR DA
핑	l	Last sociales title

Issuer internal sequence and revision history

2-development application

5-construction

QUALITY CONTROL DIMENSIONS NOT SHOWN TO BE CHECKED ON CHECKED DATE 15.03.19 SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED DESIGNED DATE 15.03.19 PRIOR TO COMMENCEMENT OF WORK, REPORT ANY DISCREPANCIES TO THE CONSULTING DATE 15.03.19 ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS - DRAWING IS TO BE READ IN CONJUNCTION APPROVED SH DATE 15.03.19 WITH THE SPECIFICATIONS AND OTHER

SILT FENCE-

RUN-OFF WATER

WITH SEDIMENT

FABRIC

BURIED

SUMP SEDIMENT TRAP

NOT TO SCALE

0.2m

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

FILTERED

WATER

OMAR ABDUL-RAHMAN KENNEDY ASSOCIATES



Suite 5.03, Level 5, 156 PACIFIC HIGHWAY ST LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au

PROJECT PROPOSED RESIDENTIAL DEVELOPMENT 101 NUWARRA ROAD, MOOREBANK

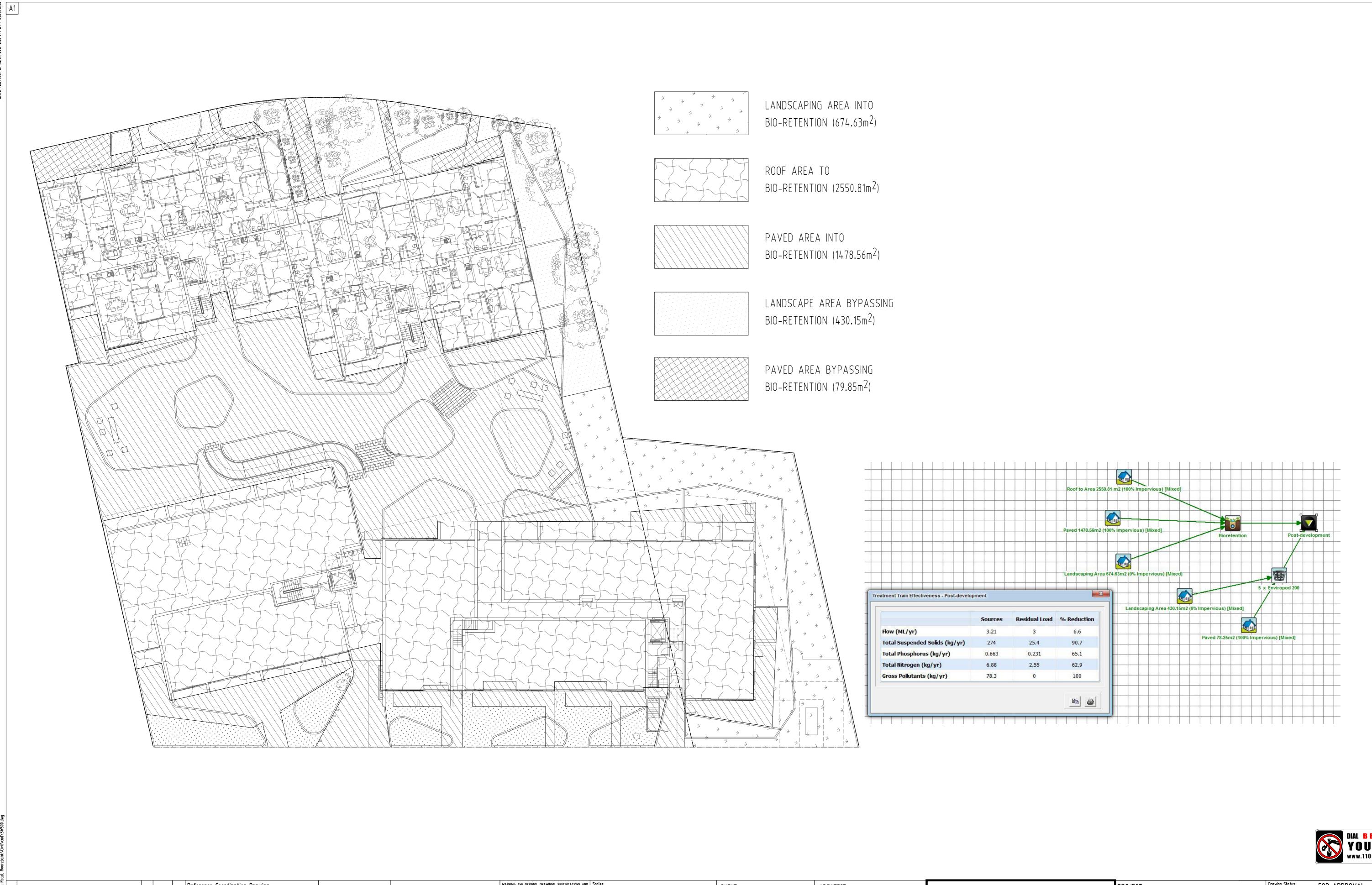
FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES SEDIMENT AND EROSION CONTROL PLAN AND DETAILS

15 20 25 ORIGINAL SIZE		SC
		Engineer

A.B.N. 21 118 222 530

Datum 7 of 8

Scale (at original size) 1:500 @ A1



DIAL BEFORE
YOU DIG
www.1100.com.au

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST Reference Coordination Drawing PROJECT FOR APPROVAL QUALITY CONTROL OMAR ABDUL-RAHMAN KENNEDY ASSOCIATES NOT TO BE USED FOR CONSTRUCTION PURPOSES Suite 5.03, Level 5, SCALE 1:200 ON ORIGINAL SIZE NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD 156 PACIFIC HIGHWAY RESIDENTIAL DEVELOPMENT STORMWATER CONCEPT DESIGN ST LEONARDS, NSW 2065 DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING.
POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED
PRIOR TO COMMENCEMENT OF WORK. REPORT T: +61 2 8883 4239 MUSIC CATCHMENT PLAN 101 NUWARRA ROAD, MOOREBANK Email: office@sgce.com.au DATE 15.03.19 A ISSUE FOR DA JH 15.03.2019 2 Web: www.sgce.com.au ANY DISCREPANCIES TO THE CONSULTING Issue Last revision title by Date Status FIRE DATE 15.03.19 ENGINEER FOR DECISION/CLARIFICATION
BEFORE PROCEEDING WITH THE WORK. THIS Issuer internal sequence and revision history Datum Scale (at original size) DRAWING IS TO BE READ IN CONJUNCTION APPROVED SH DATE 15.03.19 Engineering Value 3-construction certificate 2-development application WITH THE SPECIFICATIONS AND OTHER **A.H.D.** 8 of 8 1:200 @ A1 A.B.N. 21 118 222 530 5-construction 6-other