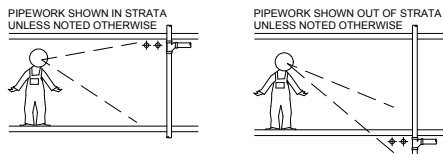


LINETYPES

SERVICES & UTILITIES

NOTE:
'e' ON SERVICE LINE DENOTES EXISTING SERVICE.
'x' ON SERVICE LINE DENOTES SERVICE TO BE ABANDONED.

 BARRIER FENCE
 SILT FENCE



ABBREVIATIONS, SYMBOLS AND LINETYPES IN THE LEGEND MAY NOT APPEAR ELSEWHERE ON THE DRAWINGS. THIS LEGEND SHOULD BE USED AS A GUIDE ONLY

	VERTICAL RISER IN DRAINAGE
	CLEAROUT OR INSPECTION OPENING
	DRAINAGE TURN-UP
	FLOW DIRECTION ARROW
	PENETRATION CORE THROUGH STRUCTURAL ELEMENT
	DOWNPIPE (150mm DIAMETER)
	RISER
	DROPPER
	DROPS TO BELOW / RISES FROM BELOW
	CAPPED OFF SERVICE
	CONTINUATION OF SERVICE NOT SHOWN
	CONTINUATION OF SERVICE SHOWN ELSEWHERE
	FLANGED CONNECTION
	SERVICE CAST IN SLAB
	SERVICE CONCRETE ENCASED
	ISOLATION VALVE
	BALANCING VALVE (STAD)
	CHECK VALVE
	BACKFLOW PREVENTION DEVICE
	PRESSURE LIMITING VALVE
	PRESSURE REDUCTION VALVE
	STRAINER
	FILTER
	PUMP
	HOSE TAP
	COLD WATER POINT
	THRUST BLOCK
	TUNDISH
	REFLUX VALVE
	RAINWATER OUTLET
	SQUARE RAINWATER OUTLET
	SPREADER
	RAINWATER HEAD
	STORMWATER PIT (ACCESS ONLY)
	STORMWATER PIT (INLET)
	KERB INLET PIT
	GRATED TRENCH DRAIN
	FALL ARROW
	OVERLAND FLOW PATH DIRECTIONAL ARROW
	STORMWATER HEADWALL
	SWALE OR SPEED HUMP
	ELECTRICAL CONTROL PANEL
	DIRECTION OF FLOW
	SERVICE SIZE
	CONTINUED ON DWG XX

AV	AIR ADMITTANCE VALVE
AB	ACCESSIBLE BASIN
AC	AIR CONDITIONING
AV	AIR RELEASE VALVE
AWC	ACCESSIBLE TOILET (WATER CLOSET)
B	BASIN
BG	BOX GUTTER
BGO	BOX GUTTER OUTLET
BT	BOUNDARY TRAP
BTWF	BUCKET TRAP FLOOR WASTE
BTH	BATH
BWU	BOWLING WATER UNIT
CAC	CIRCULAR ACCESS CHAMBER
CHVP	CHAMBER VENT PIPE
CTS	CENTRES
ℓ	CENTRE LINE
CI	CAST IRON
CIC	CAST IN COLUMN
CIS	CAST IN SLAB
CO	CLEAR OUT
Cu	COPPER
CW	COLD WATER
DI	DUCTILE IRON
DIA	DIAMETER
DP	DOWN PIPE
DPFH	DOUBLE PILLAR FIRE HYDRANT
DST	DRAINAGE STACK
DTU	DRAINAGE TURN-UP
DWG	DRAWING
ED	ELEVATED DRAINAGE
EGL	EXISTING GROUND LEVEL
EGO	EAVES GUTTER OUTLET
EJ	EXPANSION JOINT
Ex	EXISTING
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FSC	FIRE STOP COLLAR
FW	FLOOR WASTE
GALV	GALVANISED
GDO	GRADED DRAIN OUTLET
GMS	GALVANISED MILD STEEL
GVP	GREASE VENT PIPE
HD	HEAVY DUTY
HDC	HEAVY DUTY COVER
HDG	HEAVY DUTY GRATE
HDPE	HIGH DENSITY POLYETHYLENE
H/L	HIGH LEVEL
HP	HIGH POINT
HT	HOSE TAP
HW	HOT WATER
HWU	HOT WATER UNIT
IDW	INTERNAL DIAMETER
IL	INVERT LEVEL
IO	INSPECTION OPENING
IPMF	INDUCT PIPE MICA FLAP
KIP	KERB INLET PIT
KFW	KITCHEN FLOOR WASTE
KO	KEY OPERATED
LDC	LIGHT DUTY COVER
LDG	LIGHT DUTY GRATE
LL	LOW LEVEL
L.O.C.	LIMIT OF CONTRACT
MAX.	MAXIMUM
MIN.	MINIMUM
NB	NOMINAL BORE
NG	NATURAL GAS
N.I.C.	NOT IN CONTRACT
NOM	NOMINAL
No.	NUMBER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
O/F	OVERFLOW
ORG	OVERFLOW RELIEF GULLY
P	PENETRATION
PLV	PRESSURE LIMITING VALVE
PRV	PRESSURE REDUCING VALVE
REV	REVISION
RL	REDUCED LEVEL
RO	RAINWATER OUTLET
RPZD	REDUCED PRESSURE ZONE DEVICE
RST	RECESSED STOP TAP
RTD	RECESSED TUNDISH
RV	REFLUX VALVE
RWH	RAINWATER HEAD
RWO	RAINWATER OUTLET

S	SINK
SHR	SHOWER
SMH	SEWER MANHOLE
SQ	SQUARE
SST	SOIL STACK
ST	STOP TAP
STD	STANDARD
STW	STORMWATER
SV	STOP VALVE (ISOLATION VALVE)
SWP	STORMWATER PIT
TBC	TO BE CONFIRMED
TD	TUNDISH
TG	TRENCH GRATE
TMV	THERMOSTATIC MIXING VALVE
TOK	TOP OF KERB
TTD	TRAPPED TUNDISH
TWL	TOP WATER LEVEL
TWVP	TRADE WASTE VENT PIPE
U.N.O.	UNLESS NOTED OTHERWISE
uPVC	UNPLASTICISED POLYVINYL CHLORIDE
UT	UTENSIL WASHING MACHINE
VB	VACUUM BASIN / VACUUM BREAKER
VERT	VERTICAL
VP	VENT PIPE
WC	TOILET SUITE (WATER CLOSET)
WST	WASTE STACK

	<u>DRAINAGE LEVELS</u>
BWL	BOTTOM WATER LEVEL
IL	INVERT LEVEL
OL	OBVERT LEVEL
RL	REDUCED LEVEL
SL	SURFACE LEVEL
TWL	TOP WATER LEVEL

	<u>GRATES & COVERS</u>
LD	LIGHT DUTY CLASS 'B'
MD	MEDIUM DUTY CLASS 'C'
HD	HEAVY DUTY CLASS 'D'
EHD	EXTRA HEAVY DUTY CLASS 'E'
MP	MULTI PART COVER OR GRATE

DCP	<u>PITS</u>
JP	DISCHARGE CONTROL PIT
KEP	JUNCTION PIT
SWP	KERB ENTRY PIT
	STORMWATER PIT

SS	<u>DRAINAGE LINES</u>
STW	SUBSOIL DRAINAGE
	STORMWATER DRAIN

	<u>FEATURES</u>
CO	CLEAROUT
DP	DOWN PIPE
FP	FLUSHING POINT
IO	INSPECTION OPENING
OF	GUTTER OVERFLOW PIPE
RWO	RAINWATER OUTLET
DTU	DRAINAGE TURNUP

L/s	LITRES PER SECOND
m/s	METRES PER SECOND
CUMecs	CUBIC METRES PER SECOND
Q	QUANTITY OF FLOW

1. DRAWINGS ARE DIAGRAMMATIC ONLY. FOR DIMENSIONS AND CONSTRUCTION DETAILS OF BUILDING REFER ARCHITECTURAL DRAWINGS AND SITE.
2. PIPEWORK SIZES ARE NOMINAL BORE FOR COPPER AND CAST IRON AND INTERNAL BORE FOR POLYMER BASED PIPEWORK. REFER SPECIFICATION FOR MATERIAL TYPE.
3. ALL PIPEWORK ON DRAWINGS IS SHOWN BELOW SLAB (OR GROUND) UNLESS NOTED OTHERWISE.

DO NOT SCALE: FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK. THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD SHEET SIZE: A1	NORTH POINT	NOTES 1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST. 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE. 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.	ISSUE A B C	AMENDMENT	DATE 15.05.2020 04.06.2020 01.10.2020	ARCHITECT marchesepartners masterplanning architecture interior design engineering passionate about... happiness	PROJECT 280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW	CONSULTANT A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000 P: GPO Box 2662 Sydney NSW 2001 E: info@lp-consulting.com.au T: +61 (2) 9223 4444 W: www.lp-consulting.com.au	TITLE STORMWATER DRAINAGE LEGEND AND ABBREVIATIONS
			SCALE N.T.S. @ A1 DATE Oct 01, 2020 JOB No. 2017-1138	DRAWN RM DRAWING No. DA-STW-002	DESIGNED LP ISSUE C	CHECKED LP APPROVED	DEVELOPMENT APPLICATION		

NOTES

GENERAL

1. ALL DIMENSIONS IN MILLIMETRES UNO. REDUCED LEVELS AND CHAINAGES ARE IN METRES. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS.
2. THE PROPOSED WORKS DETAILED HEREIN SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF COUNCIL GENERALLY AS DETAILED HEREUNDER.
3. ALL EXISTING SERVICES SHALL BE VERIFIED FOR DEPTH AND HORIZONTAL POSITION BY PHYSICAL MEANS PRIOR TO EXCAVATION. ANY DISCREPANCIES SHALL BE BROUGHT FORTHWITH TO THE PROJECT MANAGER'S ATTENTION.

STORMWATER AND SUBSOIL DRAINAGE

MATERIALS:

1. PIPES AND FITTINGS FOR STORMWATER DRAINAGE SHALL BE AS FOLLOWS UNO ON THE DRAWINGS:
- A. POLYVINYL CHLORIDE (PVC) WITH SOLVENT WELDED JOINTS FOR BELOW GROUND DRAINAGE UP TO 225mm.
- B. REINFORCED CONCRETE WITH RUBBER RINGS FOR PIPE DIA'S GREATER THAN 225mm UNO.
- C. REINFORCED CONCRETE WHERE REQUIRED BY AS.3500 FOR EXCESSIVE DEPTH.
- D. INSTALL IN ACCORDANCE WITH AUSTRALIAN STANDARD AS.3500 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. PIPES & FITTINGS FOR SUBSOIL DRAINAGE SHALL BE SLOTTED POLYVINYL CHLORIDE (PVC) WITH SOLVENT WELDED JOINTS, MIN. 150mm DIAMETER.
3. IN GROUND DRAINAGE PIPEWORK SERVING DP's SHALL BE MINIMUM 150mm DIA. UNO.
4. GRATED DRAINS SHALL BE 150mm NOM.
- A. 150mm NOM. WIDTH IN NON TRAFFICABLE AREAS.
- B. 225mm NOM. WIDTH IN TRAFFICABLE AREAS.
5. STORMWATER PITS ARE AS SHOWN & SPECIFIED ON THE PLANS. PRECAST TYPE ACCEPTABLE WITH STEP IRONS FOR DEPTH GREATER THAN 1000. BENCH ALL PITS MIN. 50mm & FORM SMOOTH TRANSITION FROM INLET TO OUTLET.
6. SELECT FILL SHALL BE MATERIAL OBTAINED FROM EXCAVATION OF THE PIPE TRENCH OR IMPORTED WITH A PARTICLE SIZE FOR ROCK NOT GREATER THAN 75mm OR FOR OTHER THAN ROCK NOT GREATER THAN 150mm.
7. IMPORTED FILL SHALL BE EITHER, AND GENERALLY CONSIST OF SINGLE SIZED AGGREGATE WITH PARTICLE SIZE NOT GREATER THAN 5mm WRAPPED ALL ROUND WITH GEOTEXTILE FILTER FABRIC OR APPROVED HIGH COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR.
8. STORMWATER PITS AND GRATES TO CONFORM WITH STANDARD COUNCIL REQUIREMENTS, WHERE ON PUBLIC LAND. GRATES TO BE SUPPLIED IN CLASS SHOWN ON THE DRAWINGS.
- INSTALLATION REQUIREMENTS:
9. PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRES OF THE INLET PIPES INTERSECT WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT.
10. MINIMUM GRADES FOR GRAVITY STORMWATER DRAINAGE SHALL CONFORM TO AS3500 PART3 AS FOLLOWS, UNO:
- 1% FOR 100 AND 150 mm DIA.
- 0.5% FOR 225 mm DIA
- 0.4% FOR 300 mm DIA
- 0.35% FOR 375 mm DIA
11. MINIMUM DEPTH OF COVER SHALL BE :-
- 300mm IN PRIVATE PROPERTY (NON VEHICULAR TRAFFIC).
- 450mm IN PUBLIC AREAS.
- 600mm IN VEHICULAR TRAFFICABLE AREAS (FOOTWAY/ROADWAY).
12. BED ALL PIPES FIRMLY AND EVENLY ONTO IMPORTED BEDDING FILL MATERIAL.
13. LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND:
- AS 3725-1989 LOADS ON BURIED CONCRETE PIPES
- AS 2566-1998 BURIED FLEXIBLE PIPELINES
- AS 1597.2-1996 PRECAST REINFORCED CONCRETE BOX CULVERTS.
- AS 3500-1990 NATIONAL PLUMBING & DRAINAGE CODE.
- PART 2, SANITARY PLUMBING AND SANITARY DRAINAGE.
- SYDNEY WATER REQUIREMENTS.
14. ALLOW TO TEST ALL PIPES AND PITS TO MANUFACTURERS REQUIREMENTS.

CONCRETE WORKS

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600, THE STANDARDS ASSOCIATION AUSTRALIA, STANDARDS CITED IN AS3600, THE DRAWINGS AND THE SPECIFICATION
2. ALL CONCRETE SHALL BE 80mm NOMINAL SLUMP, 20mm MAXIMUM AGGREGATE WITH NO ADMIXTURES OR FLY ASH, UNLESS OTHERWISE APPROVED.
- ALL CONCRETE WORK IN CONTACT WITH SEWER TO HAVE TYPE SL PORTLAND CEMENT, OTHERWISE TYPE A CEMENT.
- FOR BRIDGE WORKS, A MAXIMUM 56 DAYS SHRINKAGE OF 600 MICROSTRAIN, A MINIMUM CEMENT CONTENT 350kg/m3 AND MAXIMUM WATER:CEMENT RATIO OF 0.40
3. STRENGTH GRADE OF CONCRETE SHALL BE:
- 25 MPa (KERBS, EDGE STRIPS & CONCRETE ENCASEMENT) AND 32 MPa ELSEWHERE.
4. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR APPROVED. GENERALLY FOR HAND PLACED KERB & GUTTER 6mm THICK APPROVED BITUMINOUS MASTIC JOINTING MATERIAL SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 6m. FOR MACHINE PLACED KERB & GUTTER 6mm THICK APPROVED BITUMINOUS MASTIC JOINTING MATERIAL SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 12m & GUILLOTINED DUMMY GROOVED JOINTS, 25mm IN DEPTH, SHALL BE FORMED EVERY 3m OF GUTTER. JOINTS ARE ALSO REQUIRED AT EACH END OF GUTTER CROSSING AND GULLY PITS. JOINTS SHALL BE SET VERTICAL AND SQUARE TO THE KERB.
5. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
6. WELDING OR SPLICES IN REINFORCEMENT SHALL BE USED ONLY IN POSITIONS APPROVED BY THE ENGINEER.
7. CONCRETE CURING SHALL BE IN ACCORDANCE WITH AS3600. CURING SHALL BE COMMENCED WITHIN TWO HOURS OF FINISHING OPERATIONS AND SHALL BE CONTINUED FOR A MINIMUM OF SEVEN DAYS BY AN APPROVED PROPRIETARY COMPOUND OR BY KEEPING CONTINUOUSLY WET.
8. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS3610. FORMWORK SHALL NOT BE STRIPPED NOR PROPS REMOVED WITHOUT APPROVAL.
9. FABRIC LAP DETAILS SHALL BE IN ACCORDANCE WITH FIG.13.2.4 OFAS3600.
10. HOOKS, LAPS AND BENDS SHALL BE IN ACCORDANCE WITH AS3600 UNO.
11. ALL CHEMICAL ANCHORS SHALL BE EITHER 'CHEMSET' BY 'RAMSET' WITH THE GLASS CAPSULE SYSTEM INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS OR HILTI HVU ADHESIVE ANCHOR WITH FOIL CAPSULE SYSTEM INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTION. ALL CHEMICAL ANCHORS SHALL BE HOT DIPPED GALVANIZED AND BE MIN M16 DIA. U.N.O.

GENERAL EARTHWORKS, SITEWORKS & FILLING:

FILLING:

1. THESE CLAUSES SHALL BE READ IN CONJUNCTION WITH "REPORT ON GEOTECHNICAL INVESTIGATION BY _____ REPORT No. _____ PH 9 _____ FAX: 9 _____" N/A
2. THE RECOMMENDATIONS CONTAINED IN THE GEOTECH REPORT SHALL OVERRIDE THE CLAUSES PRESENTED HEREIN.
3. STRIP ALL TOPSOIL AND UNDERLYING FILL AND STOCKPILE TOPSOIL FOR LATER REUSE FOR LANDSCAPING PURPOSES.
4. NEW FILL REQUIRED TO REINSTATE CUT LEVELS TO PROPOSED BENCHING LEVELS SHALL BE SOURCED FROM OTHER PARTS OF THE EXCAVATION AS SELECT FILL OR IMPORTED FILL AS SPECIFIED BELOW IN NOTES 5 AND 6.
5. SELECT FILL SHALL CONSIST OF LOCALLY DERIVED OR CUT NATURAL CLAYS.
6. IMPORTED FILL SHALL CONSIST OF RIPPED SANDSTONE OR SHALE OR SIMILAR MATERIAL WITH MAXIMUM PARTICLE SIZE NOT GREATER THAN 120mm AND A MOISTURE CONTENT WITHIN 2-3% OF STANDARD OPTIMUM.
7. ALL FILL (COHESIVE SOIL) SHALL BE PLACED IN LAYERS OF 200mm MAXIMUM THICKNESS, COMPACTED BY MACHINE ROLLING TO ACHIEVE A DRY DENSITY RATIO OF NOT LESS THAN 98% STANDARD MAXIMUM AT A CORRESPONDING MOISTURE CONTENT WITHIN 2-3% OF STANDARD OPTIMUM.
- EXCAVATION BATTERS:
8. ALL TEMPORARY BATTERS CUT IN CLAY SUBSTRATE SHALL BE 1 HORIZ : 1 VERT. ALL LONG TERM EXPOSED BATTERS CUT IN CLAY SUBSTRATE SHALL BE 2 HORIZ : 1 VERT. ALL DETENTION BASIN BATTERS IN CLAY SUBSTRATE SHALL BE 3 HORIZ : 1 VERT. ALL DETENTION BASIN BATTERS IN ROCK SUBSTRATE SHALL BE NEAR VERTICAL.
9. GEOTECHNICAL TESTING IS TO BE UNDERTAKEN TO AT LEAST LEVEL 1 CONTROL OF FILL COMPACTION STANDARD, AS DEFINED IN AS. 3738 AS FOLLOWS:
- FOR GENERAL FILL AREAS OR CUT AREAS OVER THE AREA PROVIDE ONE (1) TEST PER 200mm LAYER, OVER AN AREA NOT GREATER THAN 500m².
- FOR GENERAL FILL AREAS IN CONCENTRATED AREAS ADJACENT TO AND BEHIND THE STRUCTURE AND ADJACENT TO AND BEHIND RETAINING WALLS PROVIDE ONE (1) TEST PER 200mm LAYER, OVER AN AREA NOT GREATER THAN 50m².
10. SUBMIT ALL GEOTECHNICAL TEST RESULTS TO LP CONSULTING AUSTRALIA FOR REVIEW PRIOR TO CONTINUATION WITH SUBSEQUENT SECTION OF WORK.

EARTHWORKS FOR SERVICES

1. EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO RE-USE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED FROM SITE.
2. BEDDING MATERIAL SHALL CONSIST OF IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN O.T.R. AND 200mm IN ROCK.
3. EMBED ALL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT AND 150mm OVERLAY ABOVE PIPE CROWN.
4. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR FOOTWAY FILL. MATERIAL SHALL BE AS FOLLOWS :

UNDER ROADWAY:

TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR.

OTHER THAN ROADWAY:

TRENCH FILL MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 75mm & 150mm AND NONE LARGER THAN 150mm. PRIOR TO THE USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE CONSULTANT.

5. COMPACT BEDDING, EMBEDMENT AND TRENCH FILL MATERIALS AS FOLLOWS:

EMBEDMENT:-

FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOILS) EG. COARSE AGGREGATE FILL, HIGH GRADE COMPACTION SAND, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.

TRENCH FILL:-

FOR GRANULAR MATERIAL (NON-COHESIVE SOILS), THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.

FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS), THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%.

6. MEASURE OF COMPACTION:-

THE DEGREE OF COMPACTION SHALL BE MEASURED BY ONE OF THE FOLLOWING PARAMETERS :-

GRANULAR FILL (NON-COHESIVE SOILS). THE DENSITY INDEX (ID) DETERMINED IN ACCORDANCE WITH AS 1289.E6.1 BASED ON THE MAXIMUM AND MINIMUM DRY DENSITIES IN ACCORDANCE WITH AS 1289.E5.1 AND THE FIELD DRY DENSITY IN ACCORDANCE WITH AS 1289.5.3.2, AS 1289.E3.5 OR AS 1289.E8.1.

NON-GRANULAR FILL (COHESIVE SOILS). THE DRY DENSITY RATION (RD) DETERMINED IN ACCORDANCE WITH AS 1289.5.4.1 BASED ON THE FIELD DRY DENSITY IN ACCORDANCE WITH AS 1289.5.3.2 AND THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289.5.1.1.

7. GEOTECHNICAL TESTING IS TO BE UNDERTAKEN TO AT LEAST LEVEL 1 CONTROL OF FILL COMPACTION STANDARD, AS DEFINED IN AS. 3738 AS FOLLOWS:

TEST EACH 300mm LAYER ABOVE PIPE CROWN.

TEST BASE & SUB-BASE LAYERS WHERE APPLICABLE.

TESTS SHALL BE REQUIRED AT EACH 50m CENTRES WHERE THE LENGTH OF TRENCH IS WITHIN THE 50m REQUIREMENT.

8. SUBMIT ALL GEOTECHNICAL TEST RESULTS TO LP CONSULTING AUSTRALIA FOR REVIEW PRIOR TO CONTINUATION WITH SUBSEQUENT SECTION OF WORK.

RESTORATION

1. RESTORE ALL TRAFFIC AREAS TO PRE EXISTING CONDITION.
2. FOR ALL SURFACES OTHER THAN IN TRAFFIC AREAS RESTORE DISTURBED SURFACES TO PRE-EXISTING CONDITIONS AND COMPACT AS SPECIFIED.
3. RESTORE ALL AUTHORITY OWNED AREAS TO COUNCIL STANDARDS.

APPROVALS

1. THE AS CONSTRUCTED WORKS SHALL BE INSPECTED BY DESIGN CONSULTANT. MINIMUM 48 HOURS NOTICE SHALL APPLY TO ALL INSPECTIONS.
2. THE DESIGN PLANS HEREIN ARE SUBJECT TO COUNCIL APPROVAL PRIOR TO CONSTRUCTION. OBTAIN EXPRESS (WRITTEN) ADVICE TO PROCEED FROM PROJECT MANAGER PRIOR TO COMMENCEMENT.
3. SUBMIT WORK-AS-EXECUTED DRAWINGS IN AUTOCAD "DWG" DIGITAL FORMAT AND HARD COPY FORMAT. VERIFY ALL CONSTRUCTION WORKS SHOWN HEREON.
4. CERTIFY THAT THE AS CONSTRUCTED SYSTEM HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS ISSUED FOR CONSTRUCTION.

SERVICES UNDER ROAD SURFACES

1. ALL OTHER SERVICES INCLUDING BUT NOT LIMITED TO WATER, HYDRANT, GAS, SEWER, ELECTRICAL AND COMMUNICATIONS CONDUITS OR CABLES SHALL BE LAID WITH MINIMUM 600mm U.N.O. COVER BELOW PROPOSED ROAD SURFACE OR APPROVED OTHER MEANS TO PROTECT DURING CONSTRUCTION.

HYDRAULIC SERVICES (WHERE REQUIRED)

1. ALL WORKS CARRIED OUT SHALL COMPLY WITH AS-3500, SYDNEY WATER & COUNCIL REQUIREMENTS. OBTAIN NECESSARY AUTHORITIES APPROVALS PRIOR TO COMMENCING WORKS.
2. PRIOR TO COMMENCING WORKS SURVEY & INSPECT SITE & CONFIRM LOCATION & LEVELS OF ALL HYDRAULIC SERVICES PIPEWORK. NO CLAIMS FOR ADDITIONAL COSTS RESULTING FROM THE LACK OF KNOWLEDGE OF SITE CONDITIONS RELATING TO WORKS TO BE DONE OR LOCATIONS AND LEVELS OF EXISTING AND NEW SERVICES WILL BE ACCEPTED.
3. PRIOR TO CAPPING OFF & REMOVAL OF REDUNDANT SERVICES CONFIRM ON SITE THAT SERVICE IS NOT SUPPLYING EXISTING BUILDINGS OR AMENITIES.
4. COLD WATER PIPEWORK SHALL CONSIST OF COPPER TUBE & FITTINGS IN ACCORDANCE WITH AS 1432 TYPE B. PIPES AND FITTINGS SHALL BE JOINTED WITH 15% SILVER SOLDER.
5. ALL NEW UNDERGROUND METAL PIPEWORK SHALL BE INSTALLED WITH POLYETHYLENE SLEEVING OBTAINED FROM "TYCO WATER AUST" AND INSTALLED TO MANUFACTURE'S REQUIREMENTS.
6. LANDSCAPE IRRIGATION WATERING PIPEWORK SHALL CONSIST OF MEDIUM DENSITY POLYETHYLENE PIPE CLASS PN16 WITH ELECTRO FUSION JOINTS OR EQUAL TO EXISTING PIPEWORK.

DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD

NORTH POINT

SHEET SIZE: A1

NOTES

1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- A ISSUE FOR DEVELOPMENT APPLICATION
- B ISSUE FOR DEVELOPMENT APPLICATION
- C ISSUE FOR DEVELOPMENT APPLICATION

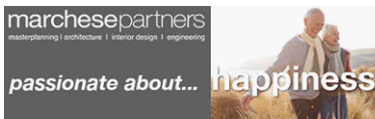
DATE

15.05.2020

04.06.2020

01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
GENERAL NOTES

SCALE
N.T.S. @ A1

DATE
Oct 01, 2020

JOB No
2017-1138

DRAWN
RM

DRAWING No
DA-STW-003

DESIGNED
LP

CHECKED
LP

ISSUE

APPROVED
C

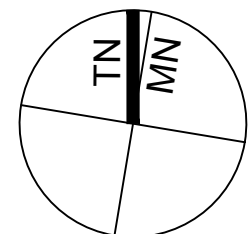
DEVELOPMENT APPLICATION

X:\04- 2017\1138_X\TILEBANK\1 - 2017\1138_XS_SURVEY
Plot Date: 01/10/2020 10:05:13 Log Name: kitchan Cad File: Z:\Project\2017\1138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\2017\1138_DA-STW-004.dwg

DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS
APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START
OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
SURVEY PLAN

SCALE
1:250 @ A1

DATE
Oct 01, 2020

JOB No.
2017-1138

DRAWN
RM

DESIGNED
LP

CHECKED
LP

APPROVED

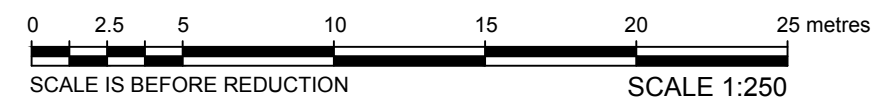
DRAWING No.

DA-STW-004

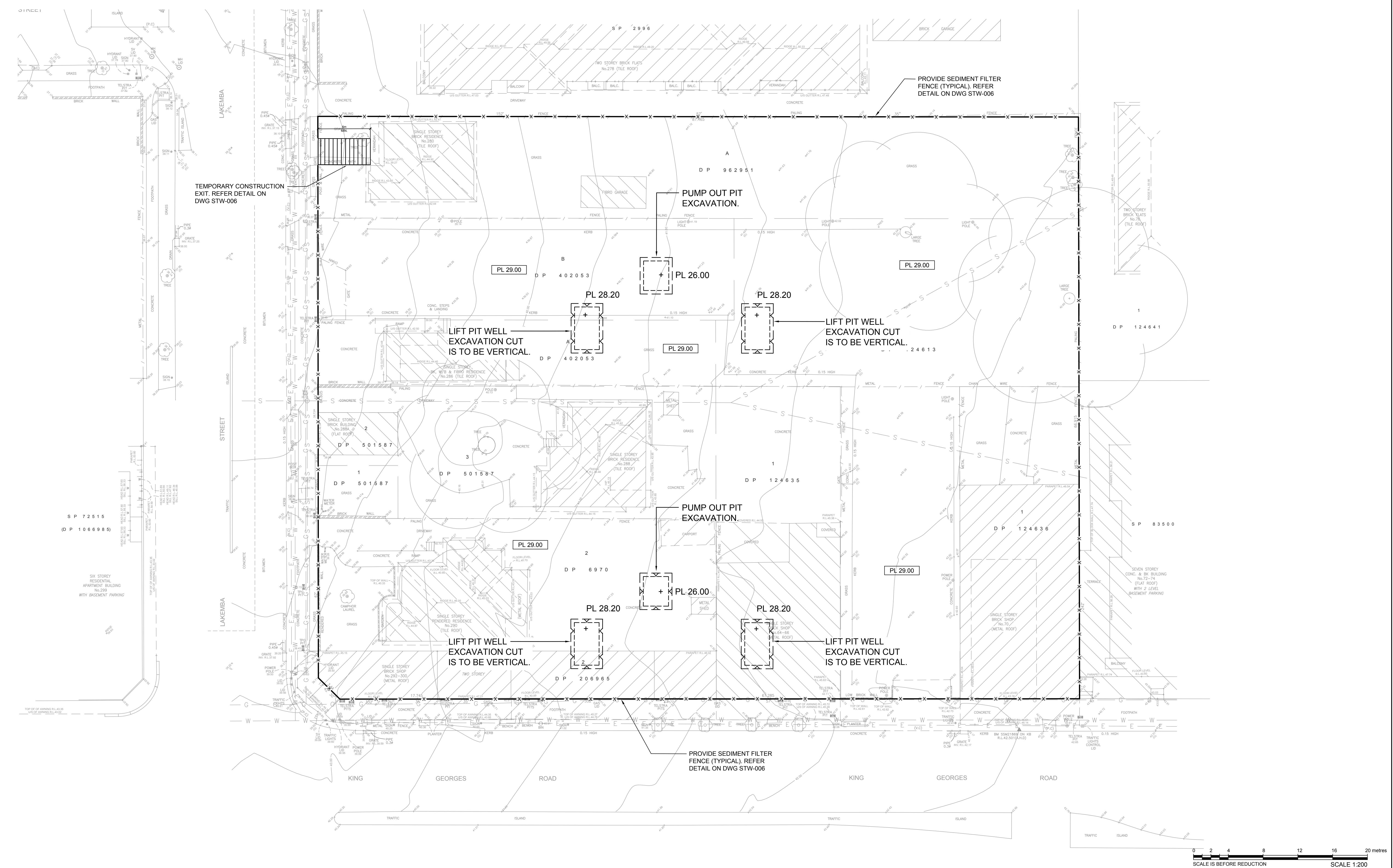
DEVELOPMENT APPLICATION

ISSUE

C



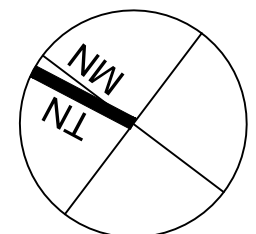
Xref: 20171138_A1.TITLEBKA1 - 20171138_VS_SURVEY
Print Date: 01/10/2020 10:09:20 Login Name: Admin4
Caf File: Z:\p0404\20171138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138_DA-STW-005.dwg



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR 'DIAL BEFORE YOU DIG' SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | ISSUE | AMENDMENT | DATE |
|-------|-----------------------------------|------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION | 15.05.2020 |
| B | ISSUE FOR DEVELOPMENT APPLICATION | 04.06.2020 |
| C | ISSUE FOR DEVELOPMENT APPLICATION | 01.10.2020 |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd Wiley Park, NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
EROSION AND SEDIMENT CONTROL
PLAN

SCALE 1:200 @ A1

DATE Oct 01, 2020

JOB No. 2017-1138

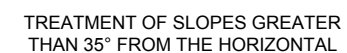
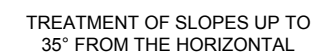
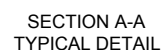
DRAWN RM

DESIGNED LP

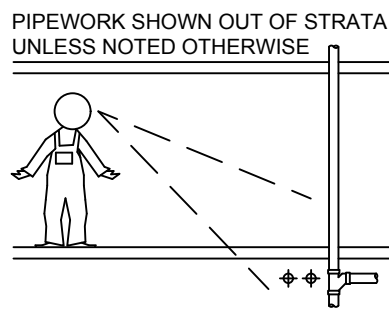
CHECKED LP

APPROVED C

DRAWING No. DA-STW-005
DEVELOPMENT APPLICATION



DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK. THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD	NORTH POINT	NOTES 1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST. 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE. 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.	ISSUE	AMENDMENT	DATE	ARCHITECT marchese partners masterplanning architecture interior design engineering passionate about... happiness 	PROJECT 280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW	CONSULTANT  LP CONSULTING AUSTRALIA PTY LTD A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000 P: GPO Box 2662 Sydney NSW 2001 E: info@lp-consulting.com.au T: +61 (2) 9223 4444 W: www.lp-consulting.com.au	TITLE	STORMWATER DRAINAGE EROSION AND SEDIMENT CONTROL DETAILS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
			DATE							CLIENT		SCALE	N.T.S. @ A1	DRAWN	RM	DESIGNED	LP	CHECKED	LP	APPROVED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</



STORMWATER CALCS:

C = 1.0 (ROOF)

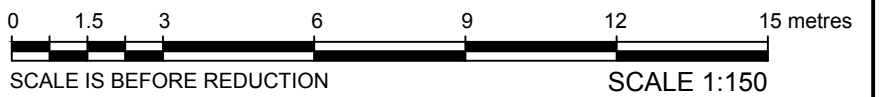
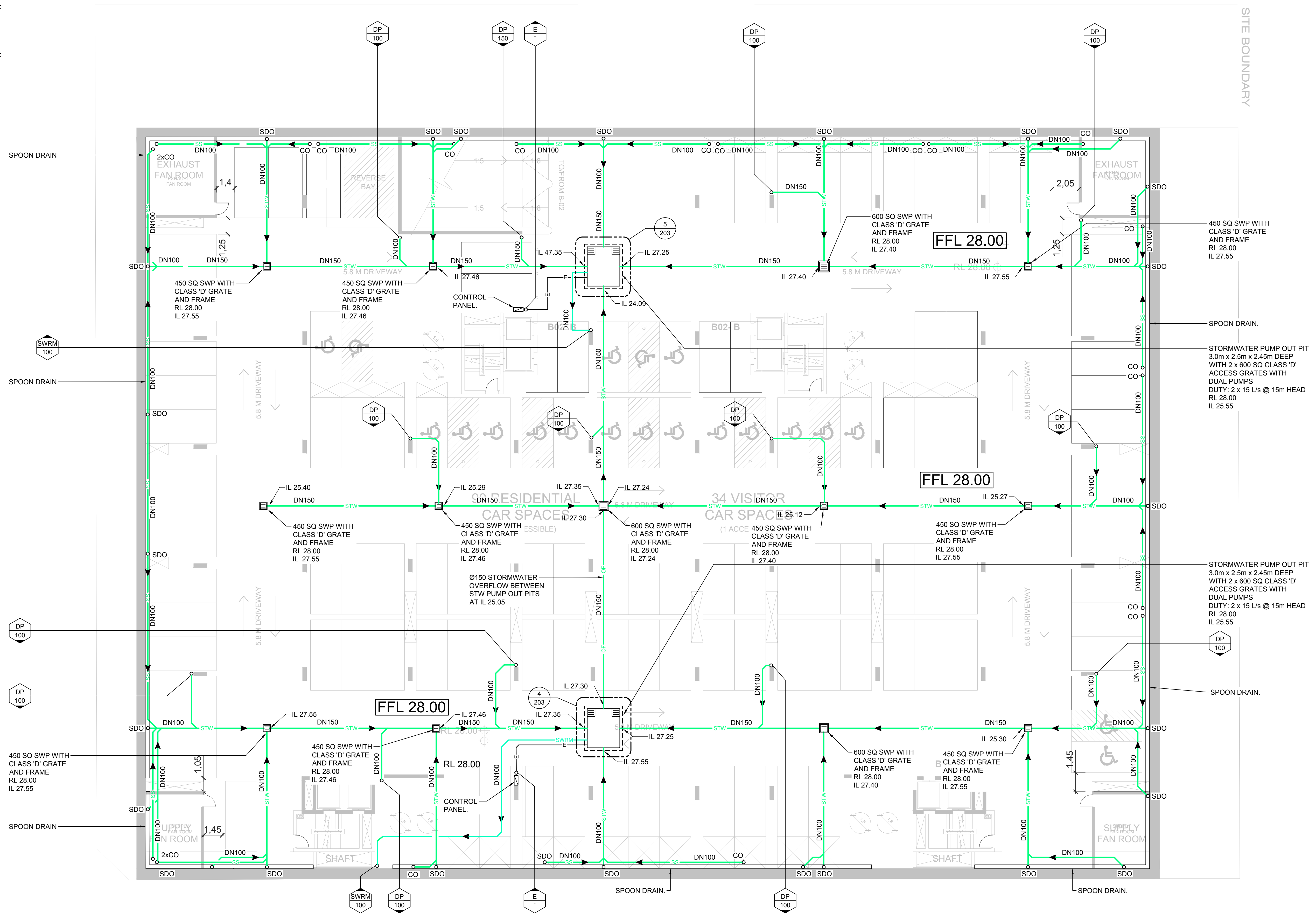
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

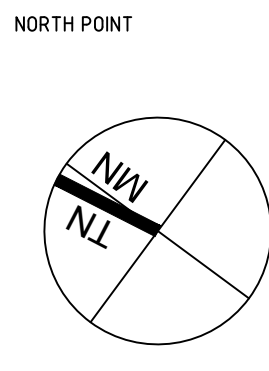
$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

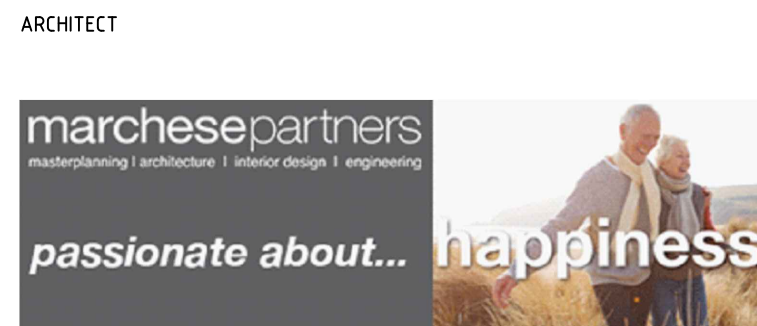
THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



SHEET SIZE: A1

- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR 'DIAL BEFORE YOU DIG' SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT
280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



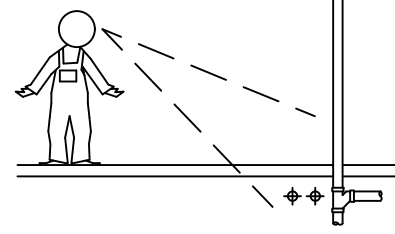
CONSULTANT

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE				
STORMWATER DRAINAGE BASEMENT 3				
SCALE 1:150 @ A1	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
DATE Oct 01, 2020	DRAWING No. DA-STW-101		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



SPOON DRAIN DOWNPIPES
TO DISCHARGE TO SPOON
DRAIN BELOW. (TYPICAL)

SPOON DRAIN DOWNPIPES
TO DISCHARGE TO SPOON
DRAIN BELOW. (TYPICAL)

STORMWATER CALCS:

C = 1.0 (ROOF)

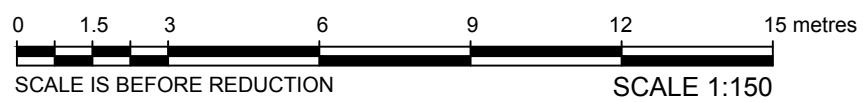
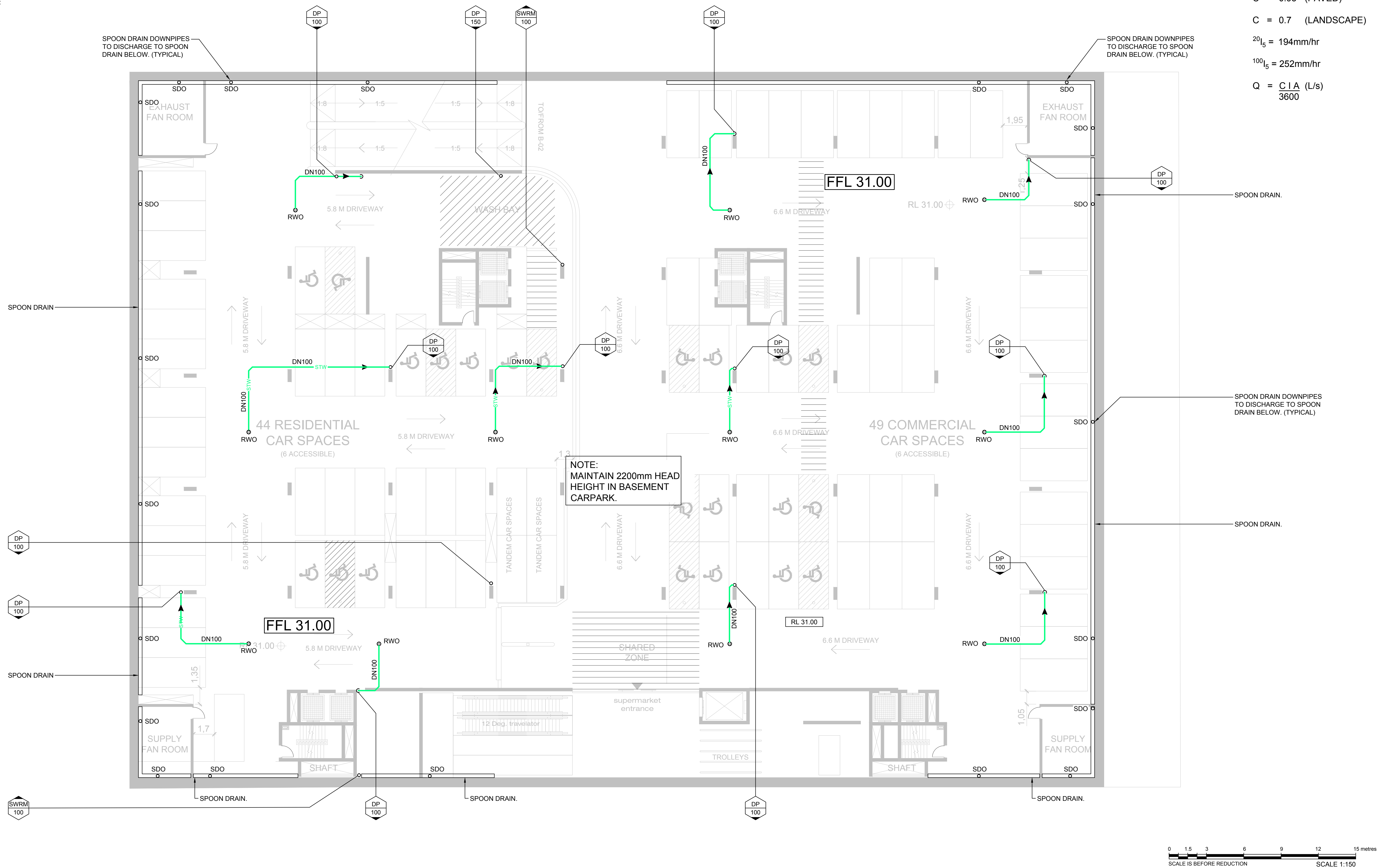
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

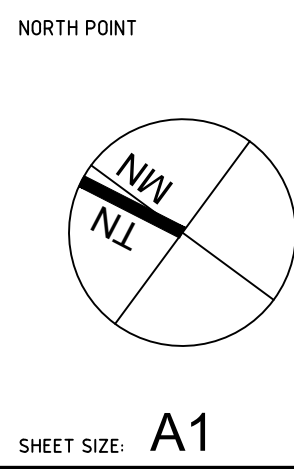
$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)



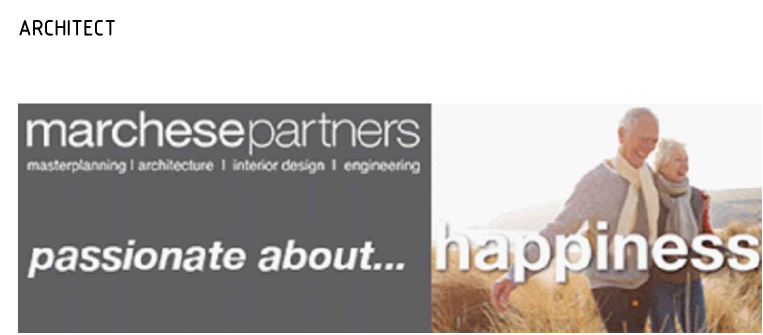
DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT
280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



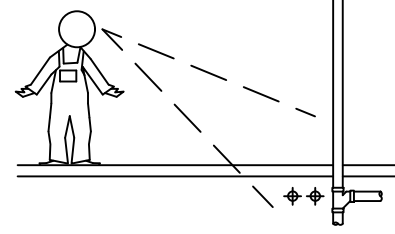
CONSULTANT

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE	STORMWATER DRAINAGE BASEMENT 2	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
SCALE	1:150 @ A1	DRAWING No.	DA-STW-102	ISSUE	C
DATE	Oct 01, 2020	JOB No.	2017-1138	DEVELOPMENT APPLICATION	

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



SPOON DRAIN LOCATED UNDER
RAMP & DRAIN DOWNPIPES TO
DISCHARGE TO SPOON DRAIN
BELOW. (TYPICAL)

SPOON DRAIN DOWNPIPES
TO DISCHARGE TO SPOON
DRAIN BELOW. (TYPICAL)

STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

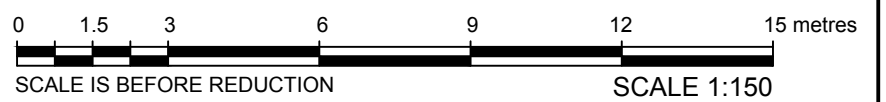
$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

SPOON DRAIN

SPOON DRAIN.

SPOON DRAIN DOWNPIPES
TO DISCHARGE TO SPOON
DRAIN BELOW. (TYPICAL)

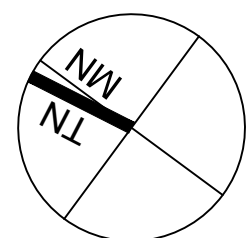
SPOON DRAIN.



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- A
B
C
- ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
BASEMENT 1

SCALE 1:150 @ A1

DATE Oct 01, 2020

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

CHECKED LP

APPROVED

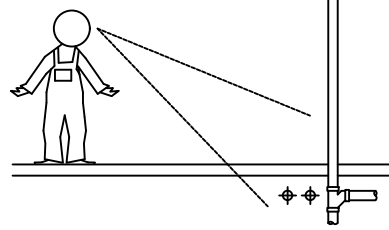
DA-STW-103

DEVELOPMENT APPLICATION

C

X:\2017\1138_20171138_VA_LEV102_B2
Plot Date: 01/10/2020 10:09:44 Log Name: A102.dwg
C:\p\2017\1138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138_DA-STW-103.dwg

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

2x900 SQ x 300 DEEP
SUMPS IN BASE OF
DETENTION TANK ABOVE.

LINE OF DETENTION TANK
ABOVE AT HIGH LEVEL B1.

LINE OF TREATMENT TANK
ABOVE AT HIGH LEVEL B1.

OSD TANK ABOVE

DIVISION WALL BETWEEN
RAINWATER TANK AND
WSUD ABOVE.

VOID - CAR PARK BELOW

SUPERMARKET BELOW

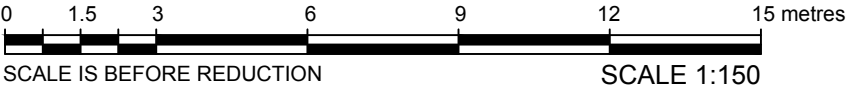
VOID - ENTRANCE BELOW

SPOON DRAIN.

SPOON DRAIN DOWNPIPES
TO DISCHARGE TO SPOON
DRAIN BELOW. (TYPICAL)

SPOON DRAIN.

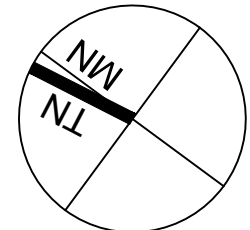
SPOON DRAIN.



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

A
B
C

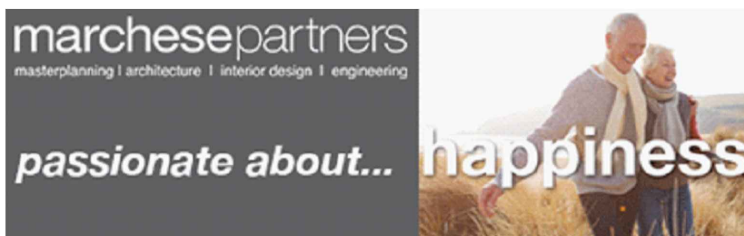
AMENDMENT

ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
BASEMENT 00

SCALE

1:150 @ A1

DATE

Oct 01, 2020

JOB No.

2017-1138

DRAWN

RM

DRAWING No.

DA-STW-104

CHECKED

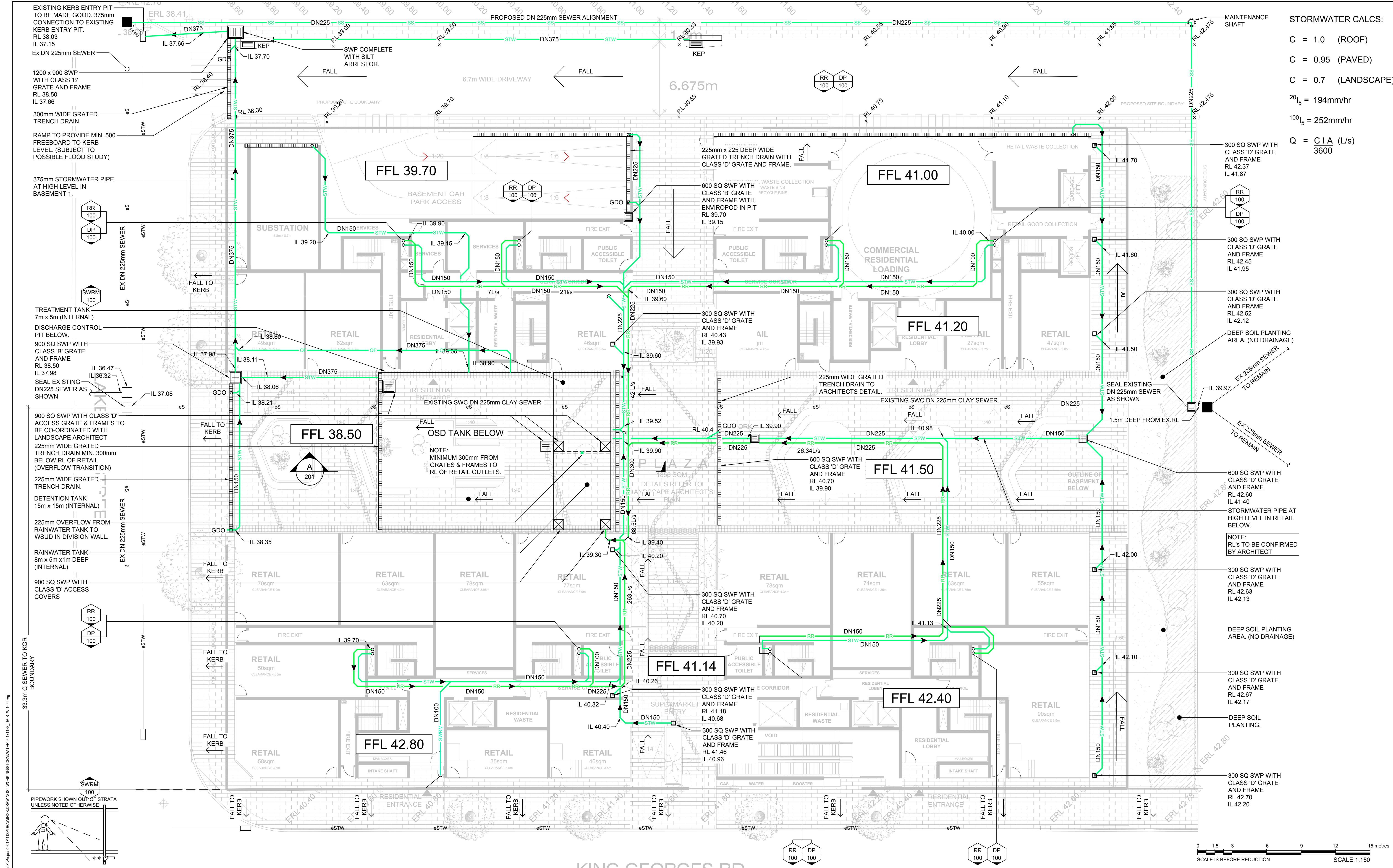
LP

ISSUE

C

APPROVED

DEVELOPMENT APPLICATION



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_s = 194\text{mm/hr}$

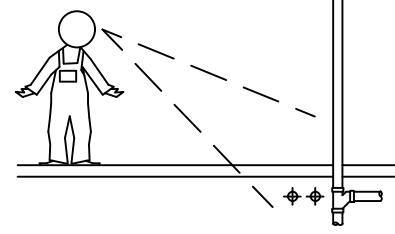
$100I_s = 252\text{mm/hr}$

$Q = C I A \text{ (L/s)}$

3600

DO NOT SCALE FROM DRAWINGS. CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.		NOTES		ISSUE		AMENDMENT		DATE		ARCHITECT		PROJECT		CONSULTANT		TITLE	
THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD		1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.		A		ISSUE FOR DEVELOPMENT APPLICATION		15.05.2020		marchesepartners		280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW		LP CONSULTING AUSTRALIA PTY LTD		STORMWATER DRAINAGE GROUND FLOOR	
		2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.		B		ISSUE FOR DEVELOPMENT APPLICATION		04.06.2020		passionate about... happiness		CLIENT				SCALE 1:150 @ A1	
		3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.		C		ISSUE FOR DEVELOPMENT APPLICATION		01.10.2020		AlliedBuilding		PROJECT		CONSULTANT		DRAWN RM	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW		LP CONSULTING AUSTRALIA PTY LTD		DESIGNED LP	
												CLIENT				CHECKED LP	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				DRAWING No.	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				DATE	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				Oct 02, 2020	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				DA-STW-105	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				2017-1138	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				DEVELOPMENT APPLICATION	
												280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW				C	

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



DP
100

RR
100

DP
100

STORMWATER DRAINAGE
PIPEWORK LOCATED AT
HIGH LEVEL IN RETAIL
SPACE BELOW. (TYPICAL)

DP
100

RR
100

DP
100

STORMWATER DRAINAGE
PIPEWORK LOCATED AT
HIGH LEVEL IN RETAIL
SPACE BELOW. (TYPICAL)

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

RR
100

DP
100

STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

3600

STORMWATER DRAINAGE
PIPEWORK LOCATED AT
HIGH LEVEL IN RETAIL
SPACE BELOW. (TYPICAL)

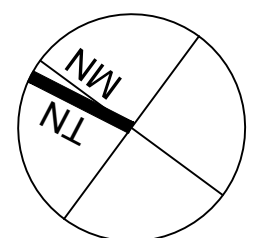
STORMWATER DRAINAGE
PIPEWORK LOCATED AT
HIGH LEVEL IN RETAIL
SPACE BELOW. (TYPICAL)

0 1.5 3 6 9 12 15 metres
SCALE IS BEFORE REDUCTION SCALE 1:150

DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | ISSUE | AMENDMENT | DATE |
|-------|-----------------------------------|------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION | 15.05.2020 |
| B | ISSUE FOR DEVELOPMENT APPLICATION | 04.06.2020 |
| C | ISSUE FOR DEVELOPMENT APPLICATION | 01.10.2020 |

AMENDMENT

DATE

ARCHITECT

15.05.2020
04.06.2020
01.10.2020

ARCHITECT

masterplanning | architecture | interior design | engineering

passionate about... happiness

passionate about... happiness

PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT

AlliedBuilding

CONSULTANT

LP CONSULTING AUSTRALIA PTY LTD

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
LEVEL 1

SCALE 1:150 @ A1

DATE Oct 01, 2020

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

CHECKED LP

APPROVED

DA-STW-106

DEVELOPMENT APPLICATION

ISSUE

C

2017-1138

DEVELOPMENT APPLICATION

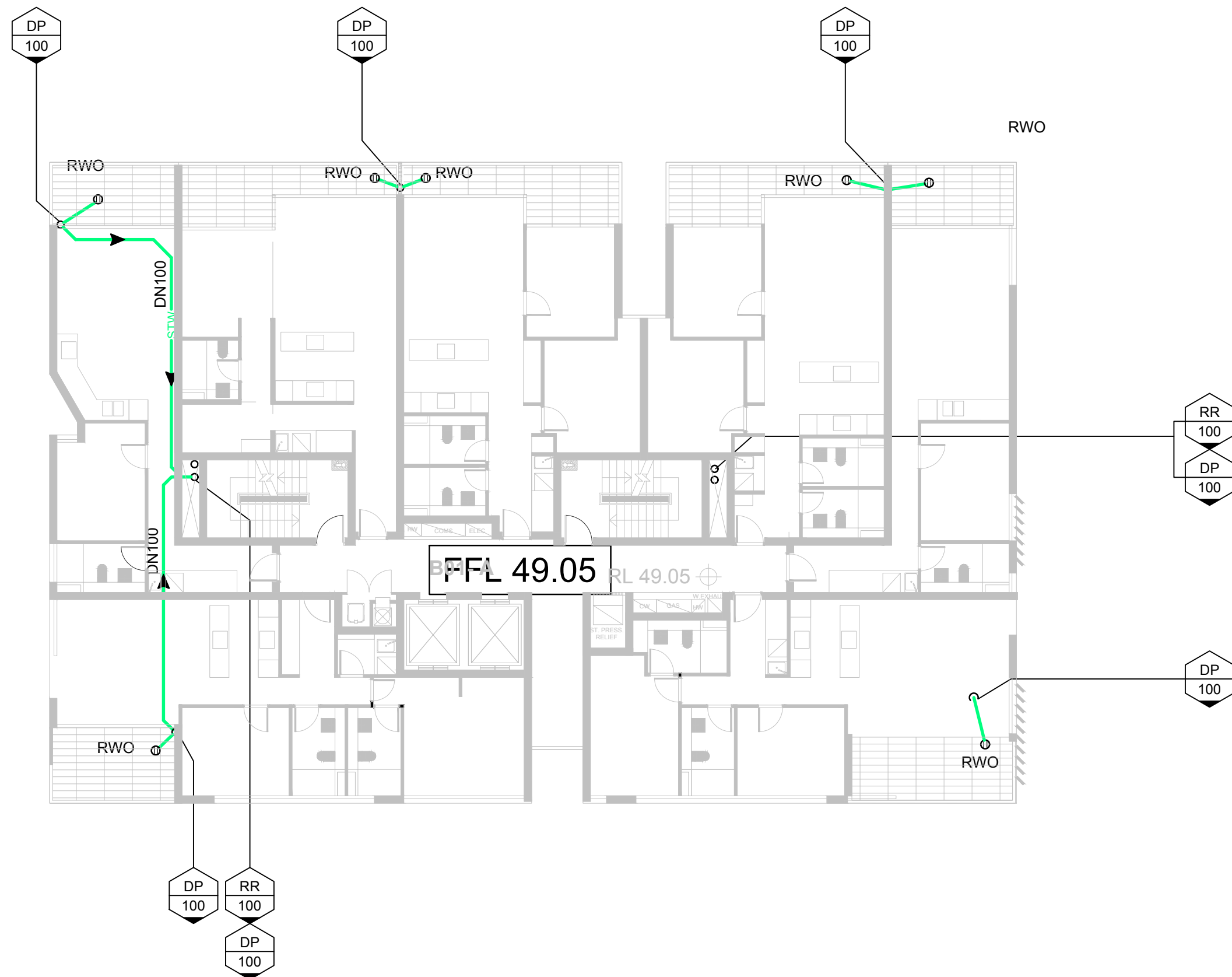
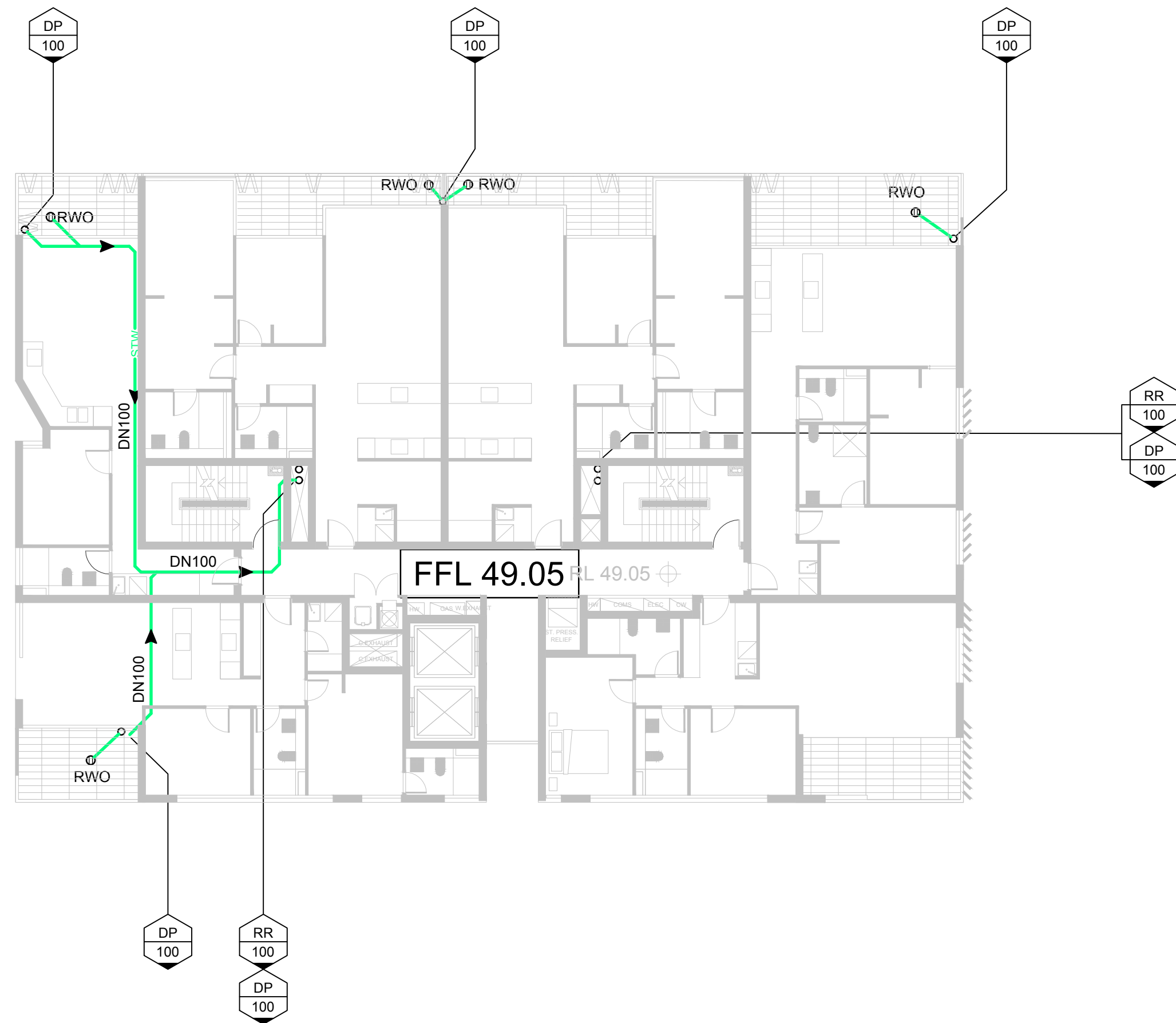
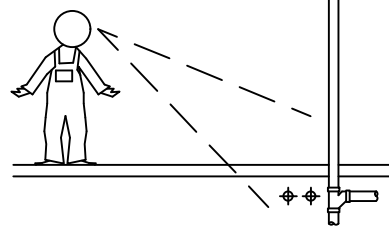
DEVELOPMENT APPLICATION

DEVELOPMENT APPLICATION

DEVELOPMENT APPLICATION

DEVELOPMENT APPLICATION

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

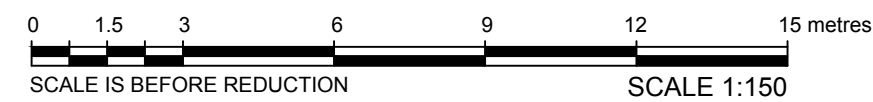
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

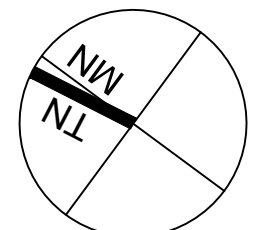
$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
LEVEL 2

SCALE 1:150 @ A1

DATE Oct 01, 2020

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

CHECKED LP

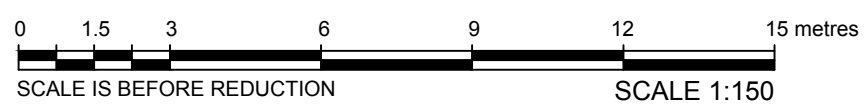
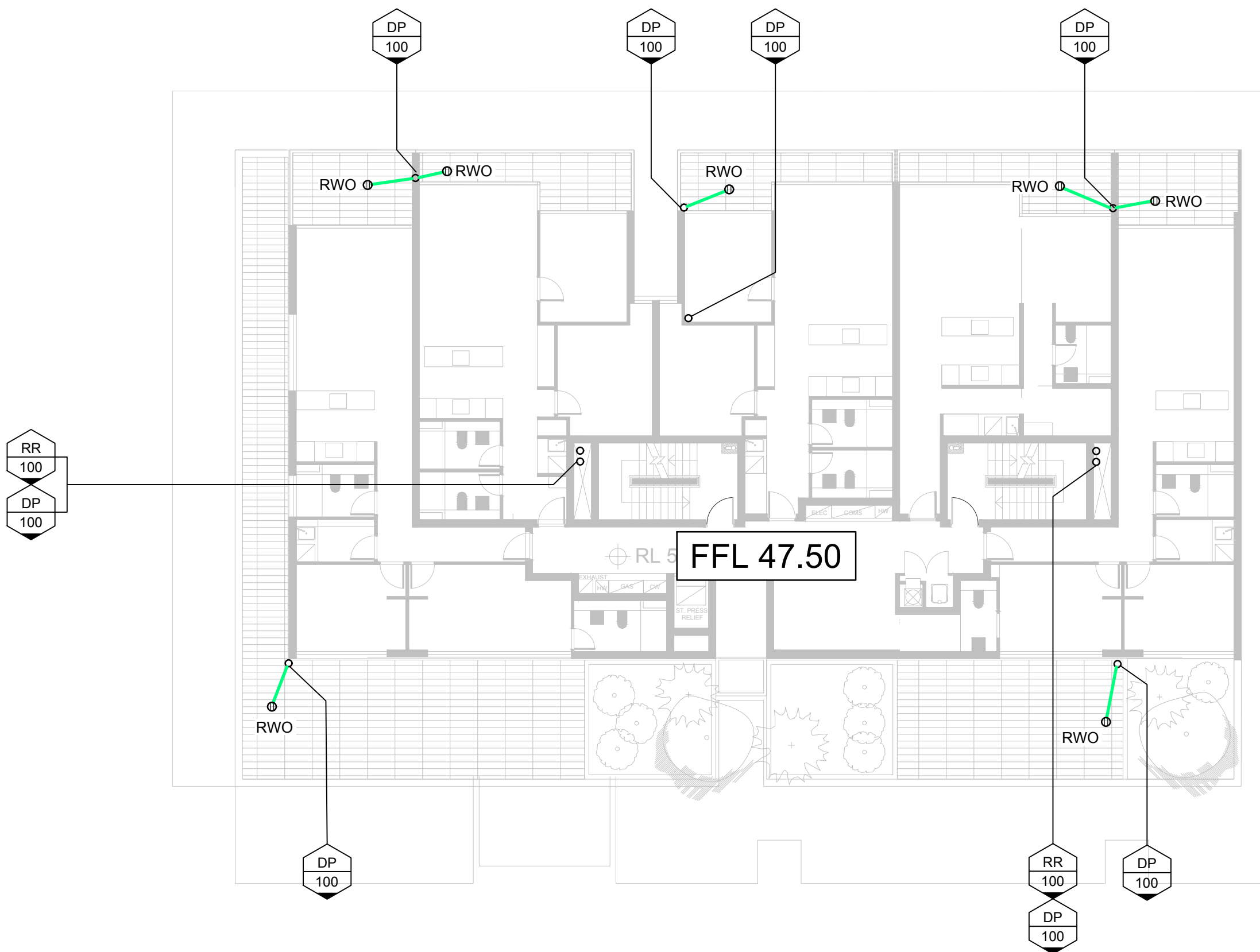
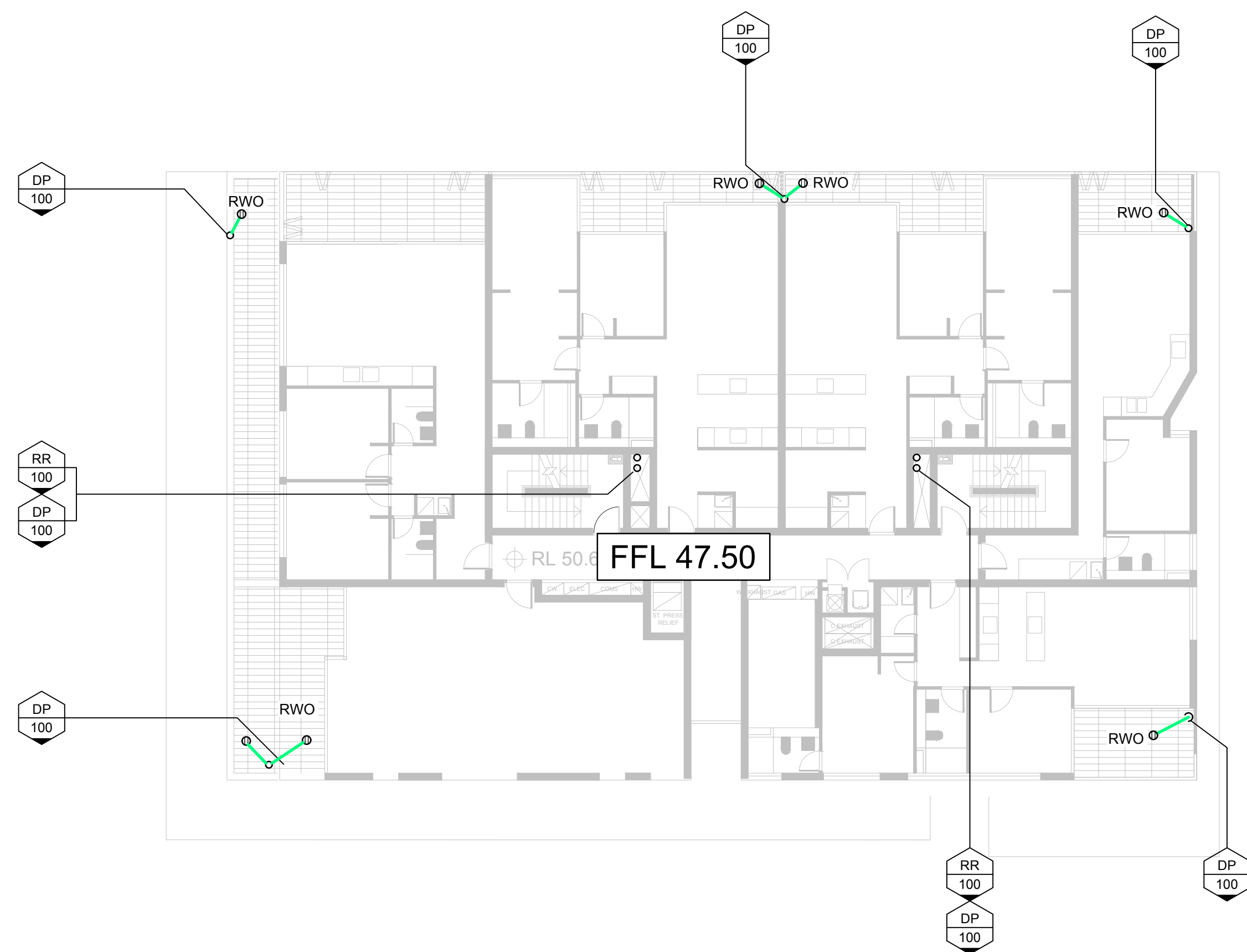
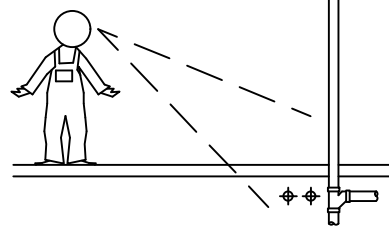
APPROVED

ISSUE

C

DA-STW-107
DEVELOPMENT APPLICATION

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

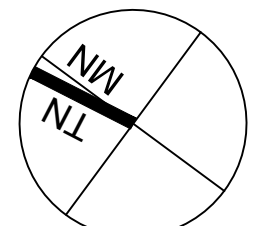
$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$

DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

A
B
C

AMENDMENT

ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
LEVEL 3

SCALE 1:150 @ A1

DATE Oct 02, 2020

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

CHECKED LP

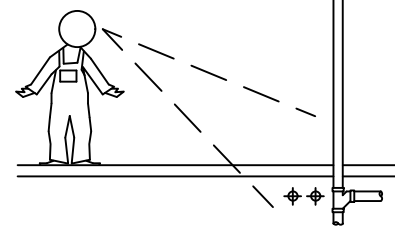
APPROVED

ISSUE

C

DA-STW-108
DEVELOPMENT APPLICATION

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

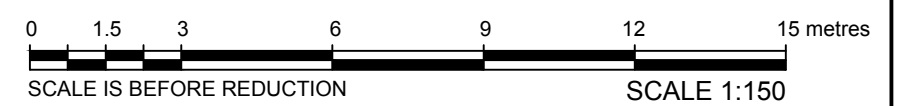
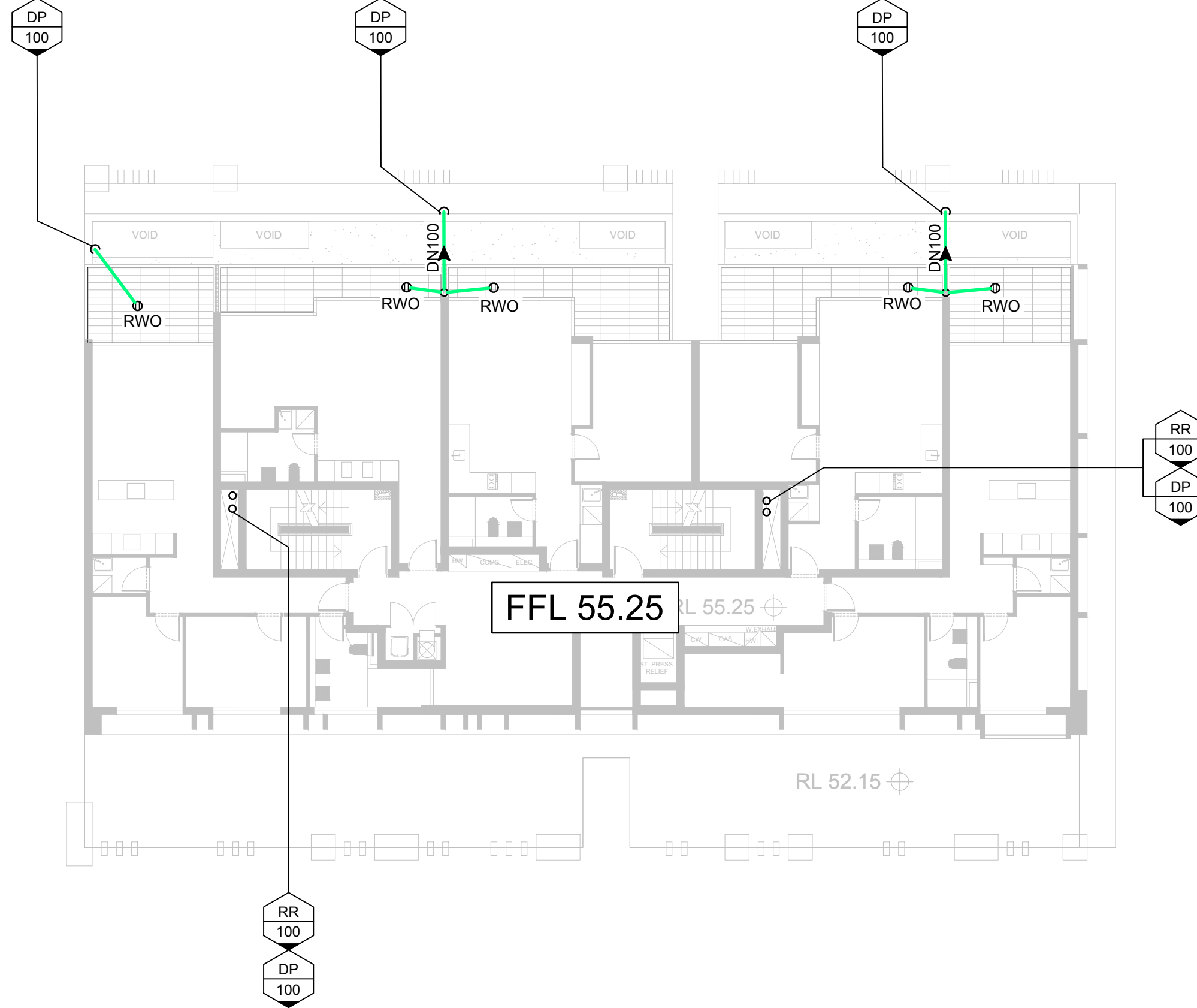
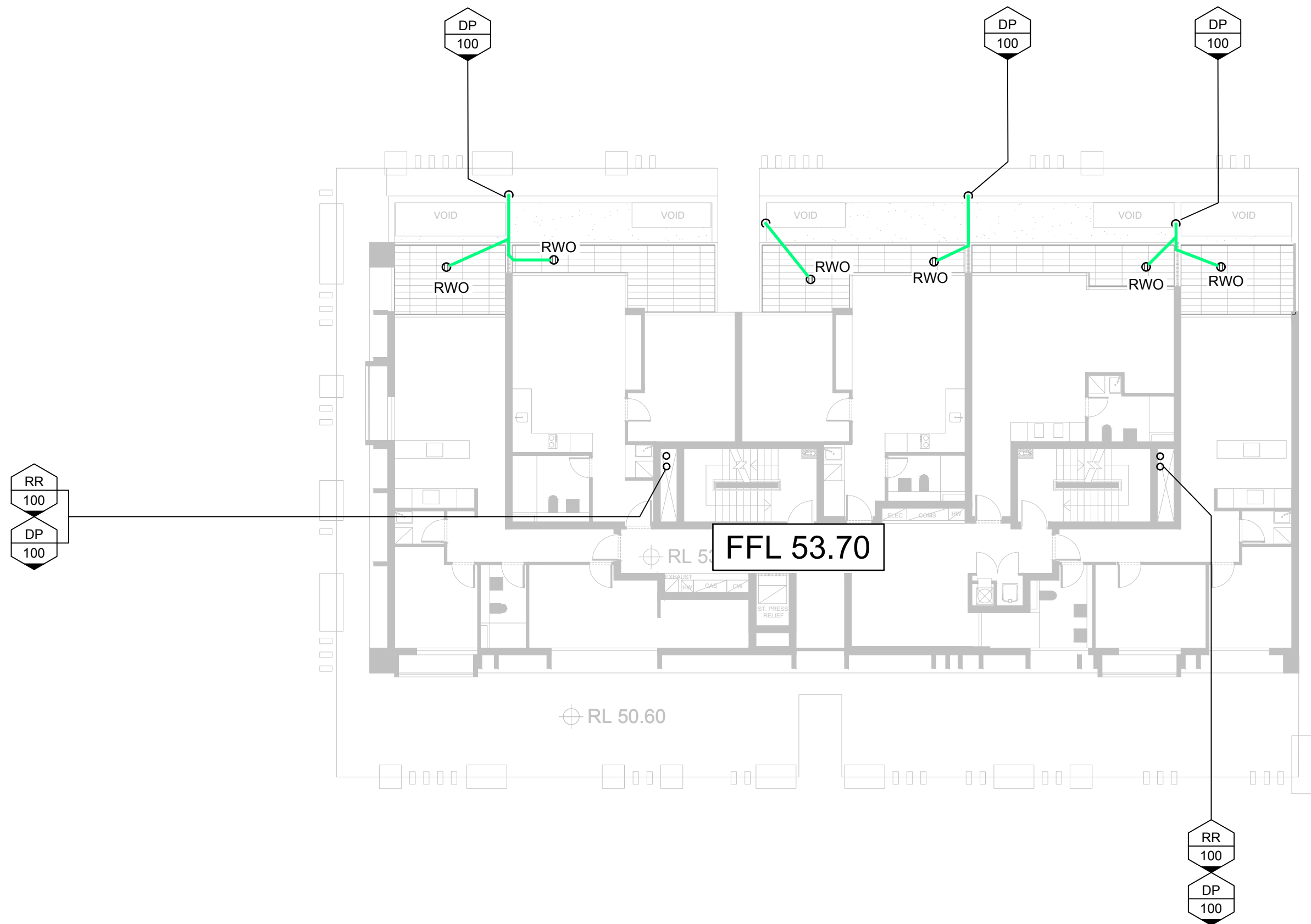
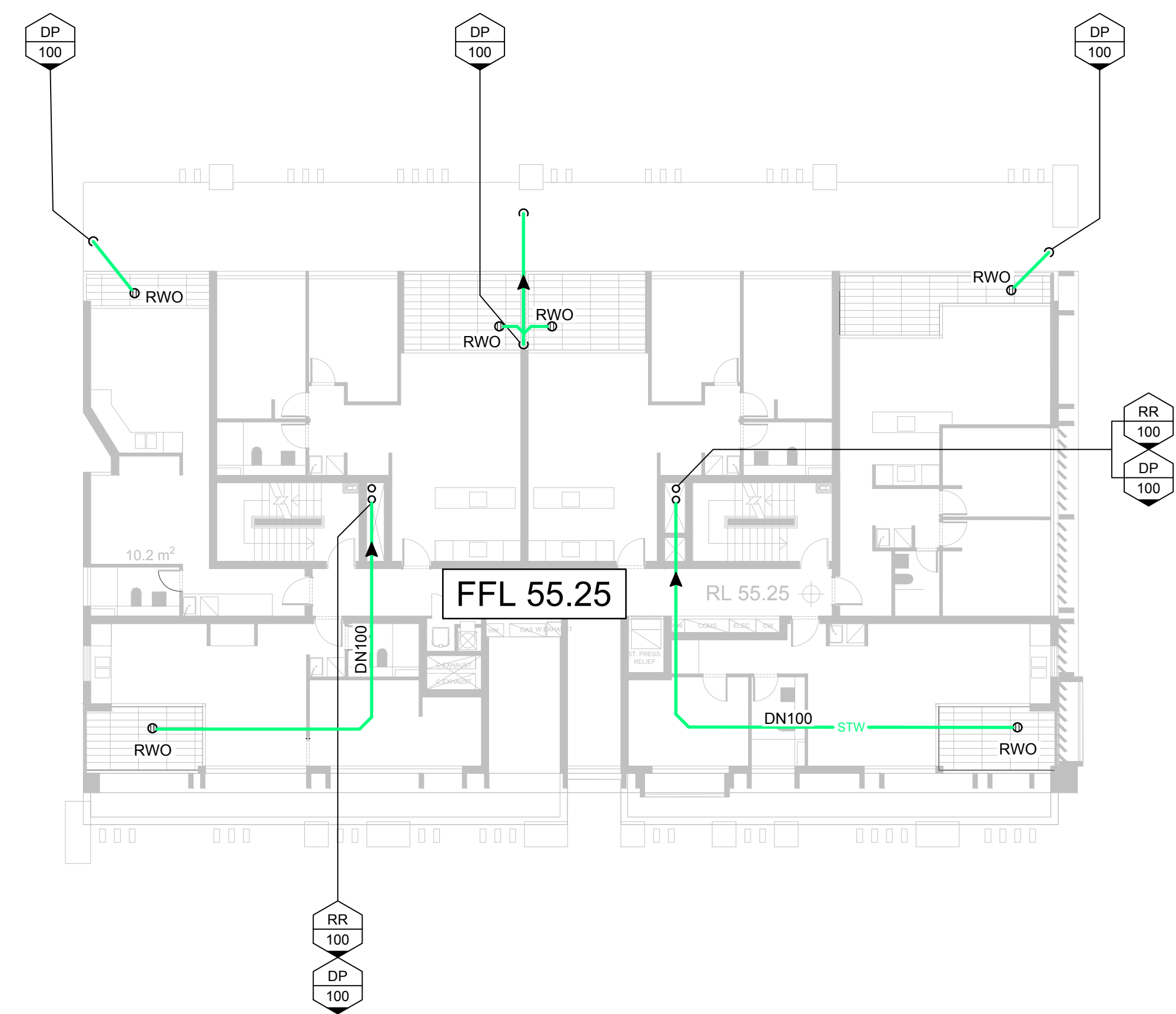
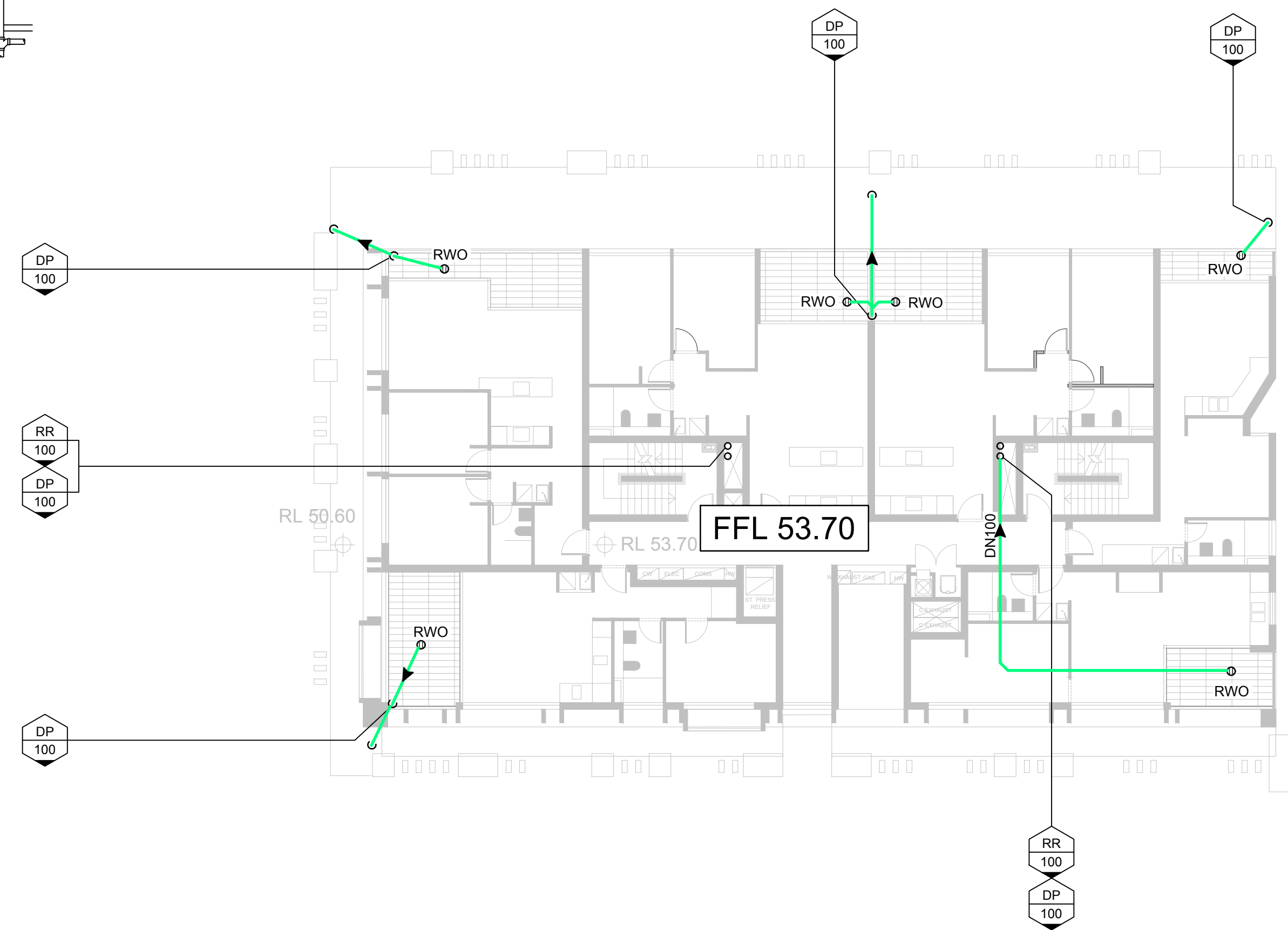
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

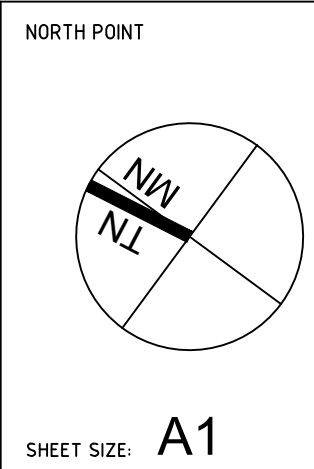
$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$



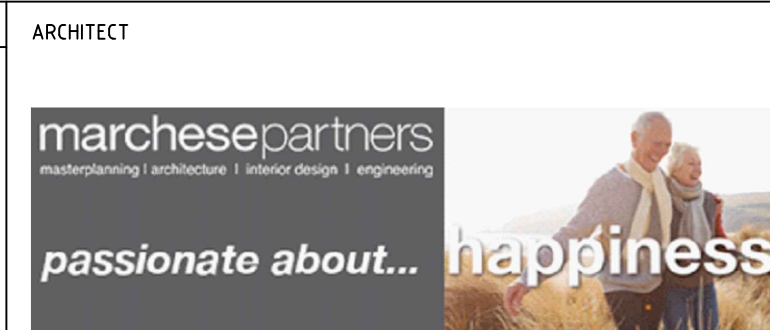
DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT
280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



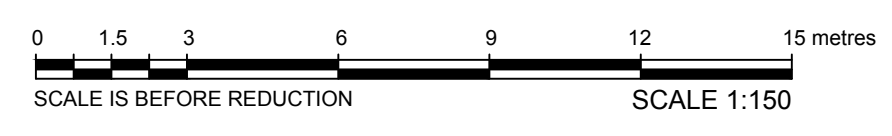
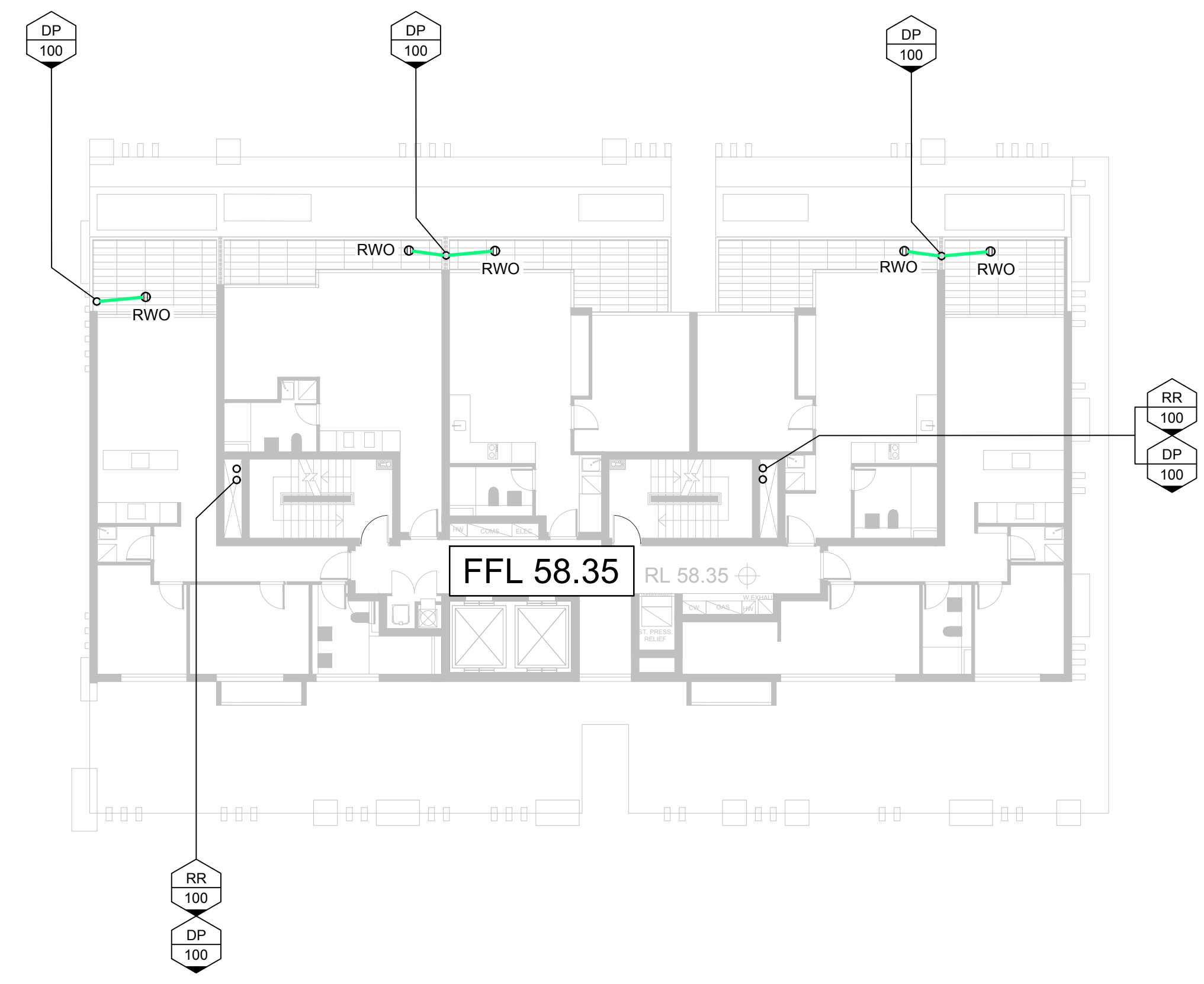
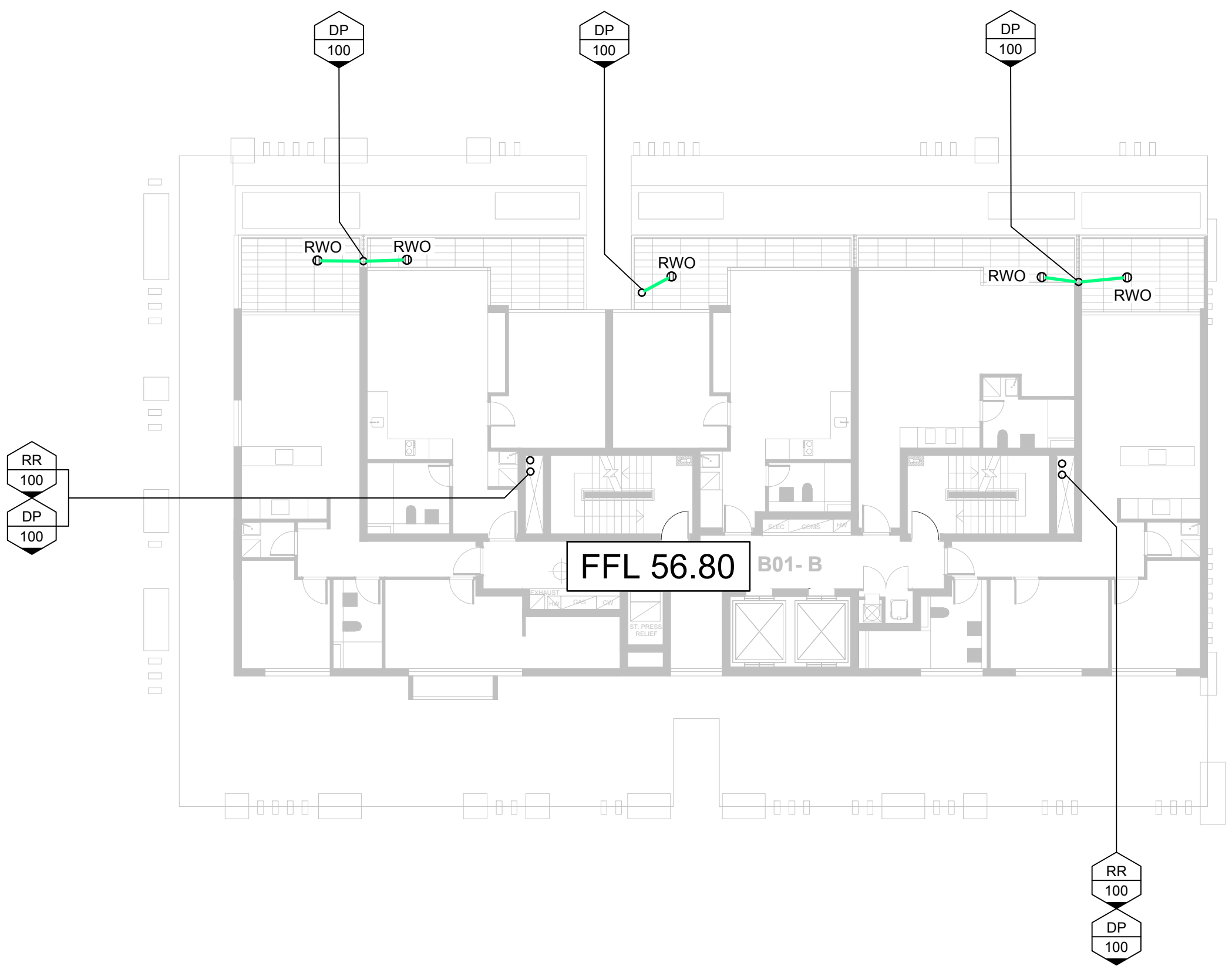
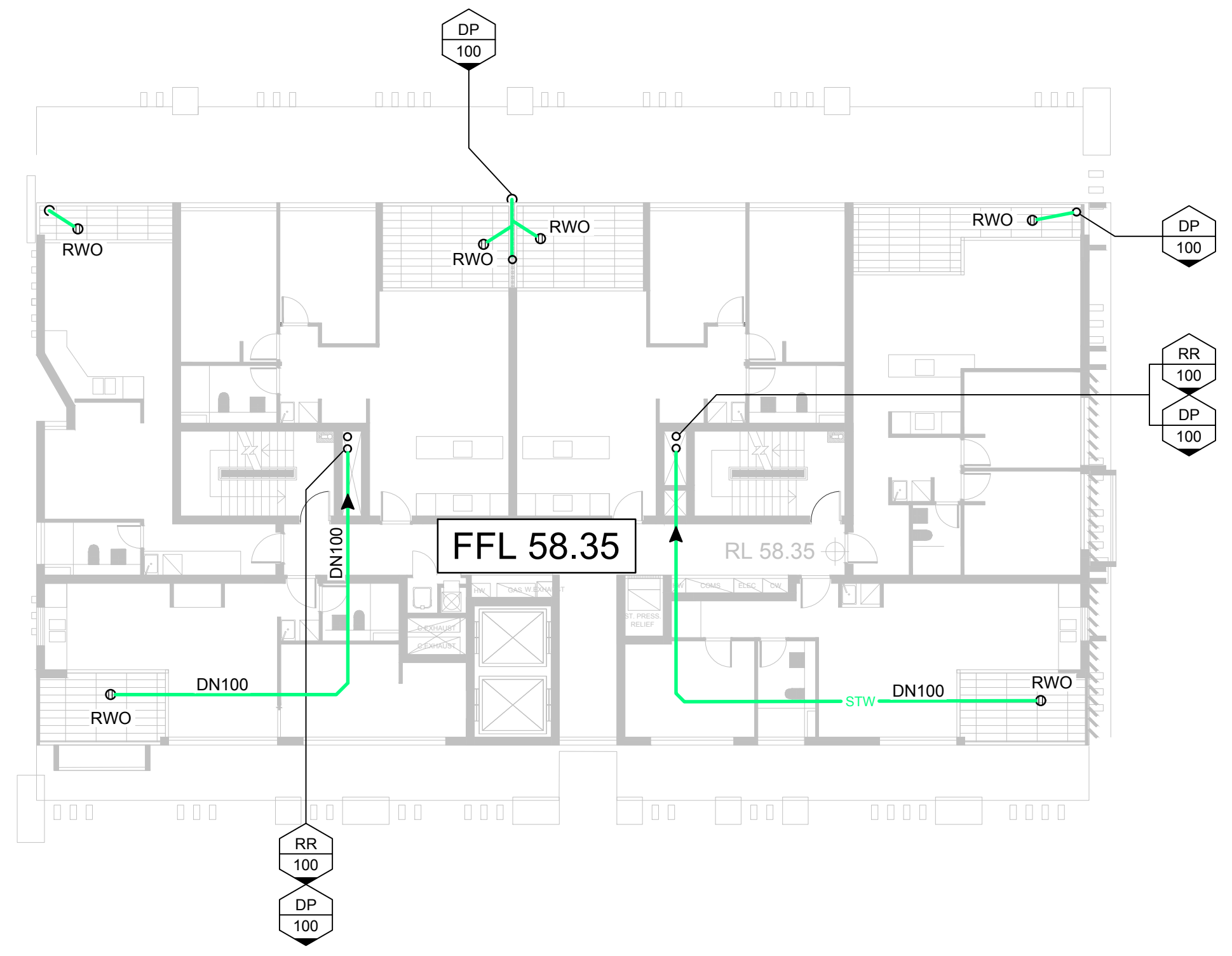
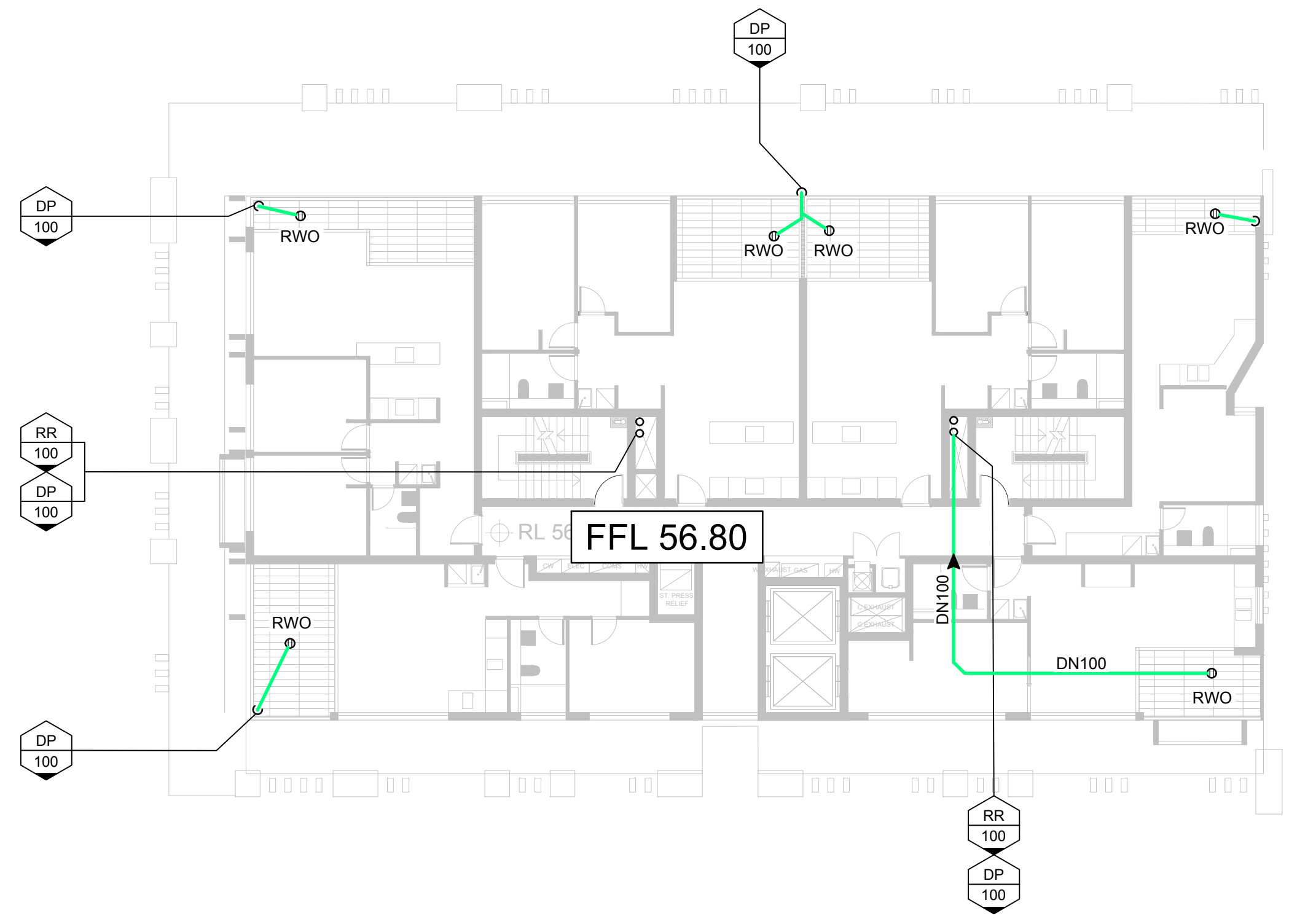
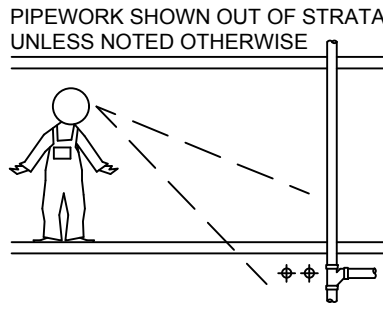
CONSULTANT

LP CONSULTING
AUSTRALIA PTY LTD

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE	SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
STORMWATER DRAINAGE LEVEL 4	1:150 @ A1	RM	LP	LP	
DATE	Oct 02, 2020	DRAWING No.	DA-STW-109	ISSUE	C
JOB No.	2017-1138	DEVELOPMENT APPLICATION			



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

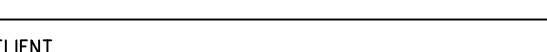
C = 0.7 (LANDSCAPE)

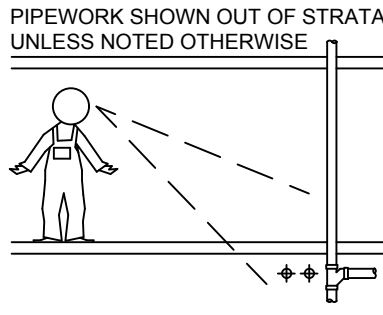
$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

X:\w\20171138_2171138_002\DA-STW-002\20171138_XA_LEVEL_05.dwg
Pld Date: 02/10/2020 11:20 LpH Name: AlanaH
C:\p\20171138_2171138_002\DA-STW-002\20171138_XA_LEVEL_05.dwg

DO NOT SCALE FROM DRAWINGS. CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK. THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD	NORTH POINT  SHEET SIZE: A1	NOTES 1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST. 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE. 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.	ISSUE A B C ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION	AMENDMENT	DATE 15.05.2020 04.06.2020 01.10.2020	ARCHITECT  passionate about... happiness 	PROJECT 280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW	CONSULTANT  LP CONSULTING — AUSTRALIA PTY LTD A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000 P: GPO Box 2662 Sydney NSW 2001 E: info@lp-consulting.com.au T: +61 (2) 9223 4444 W: www.lp-consulting.com.au	TITLE STORMWATER DRAINAGE LEVEL 5			
							CLIENT 	SCALE 1:150 @ A1	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
								DATE Oct 02, 2020	DRAWING No. DA-STW-110		ISSUE C	
								JOB No. 2017-1138	DEVELOPMENT APPLICATION			



STORMWATER CALCS:

C = 1.0 (ROOF)

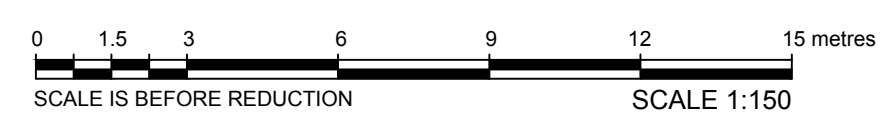
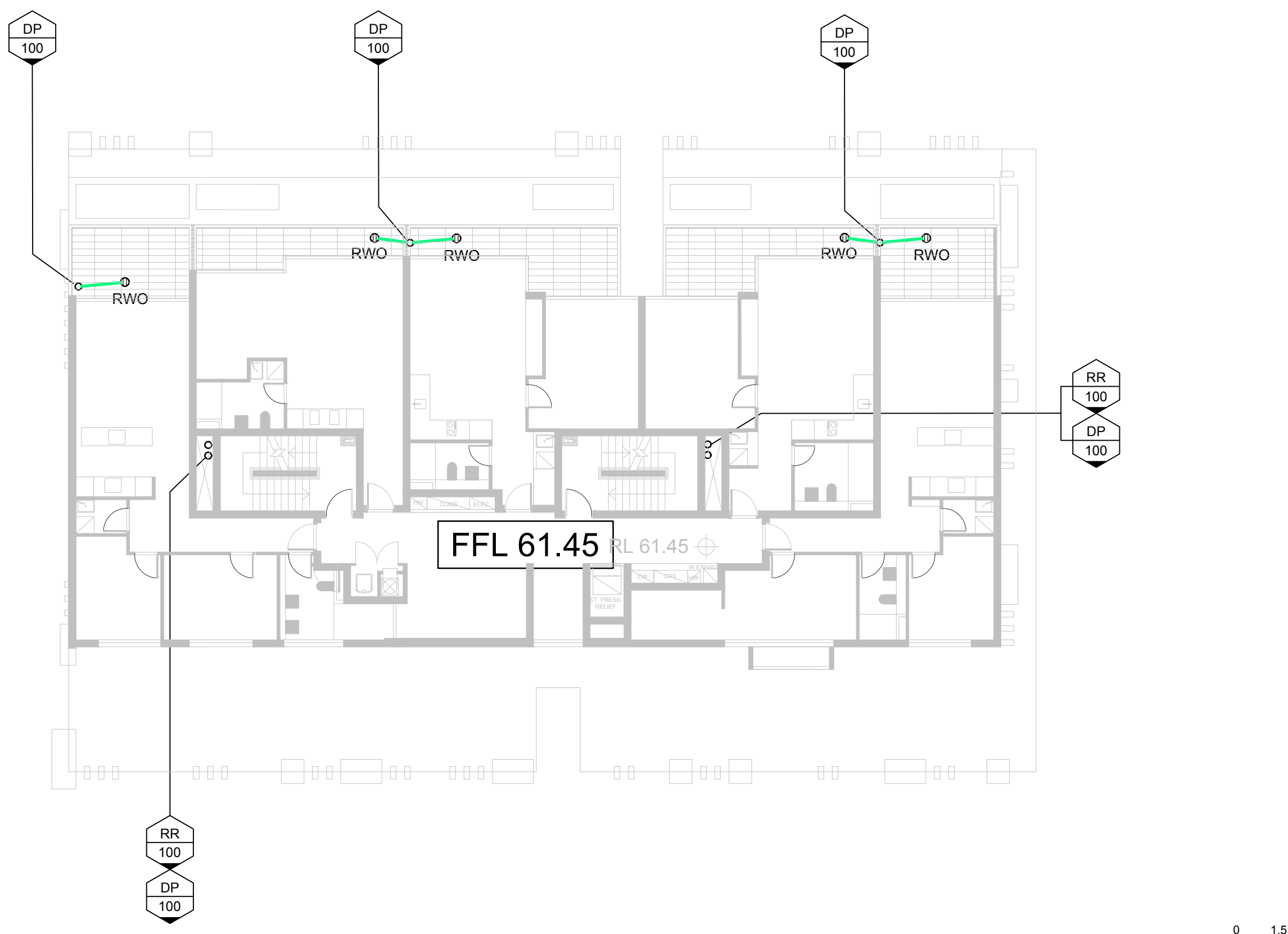
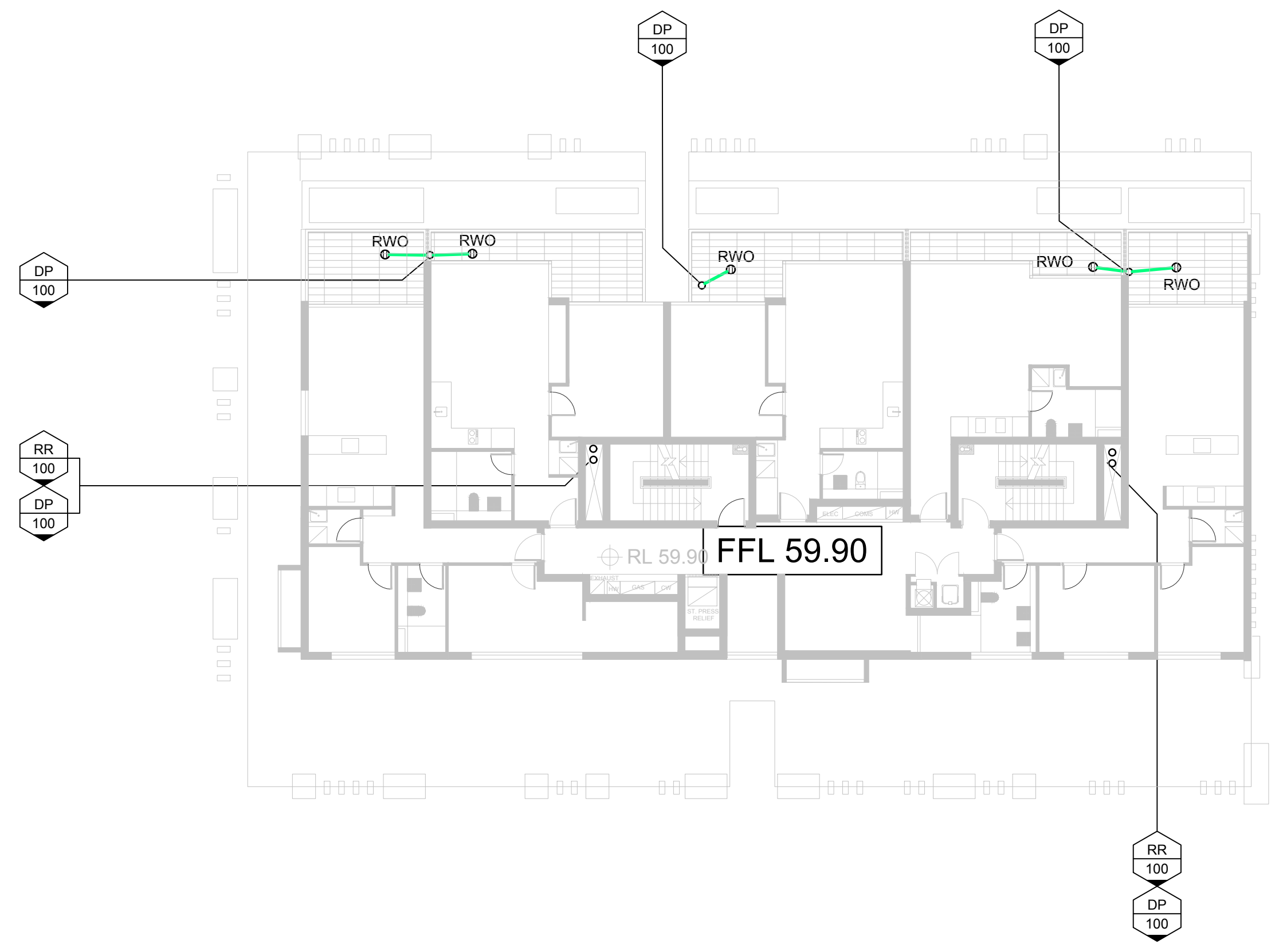
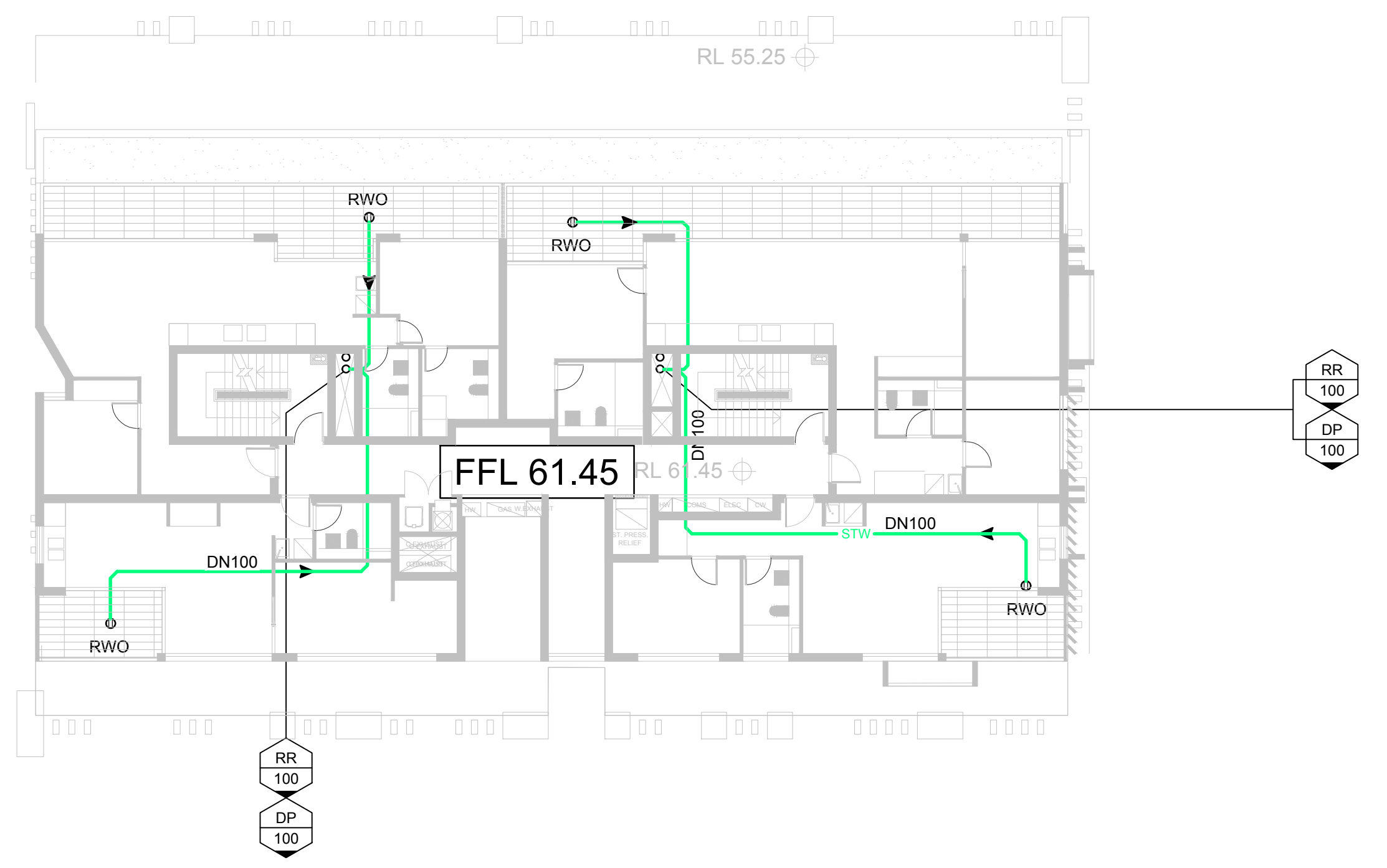
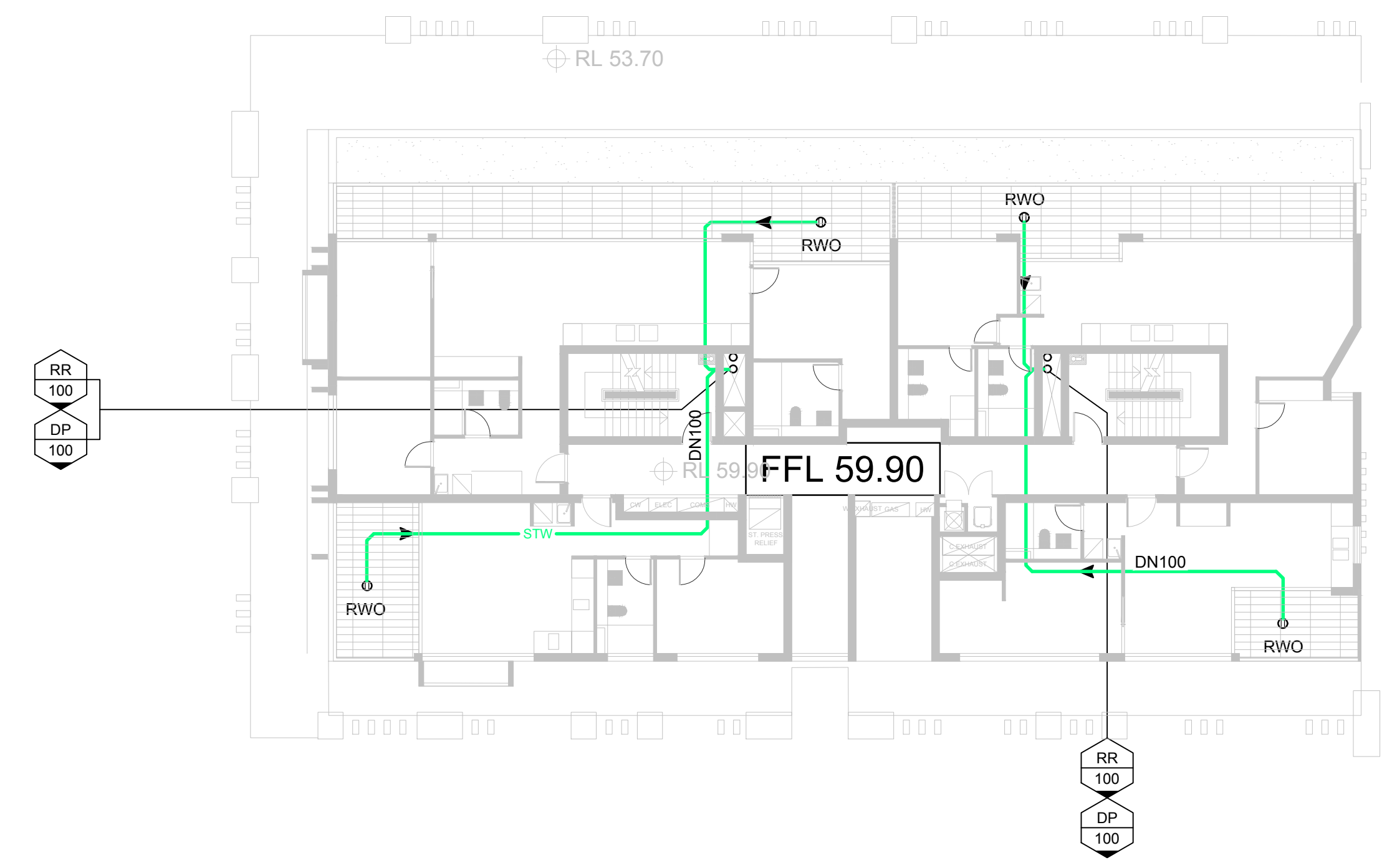
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

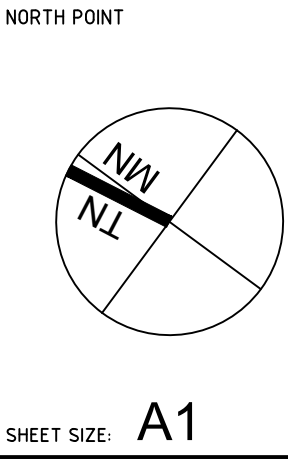
$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

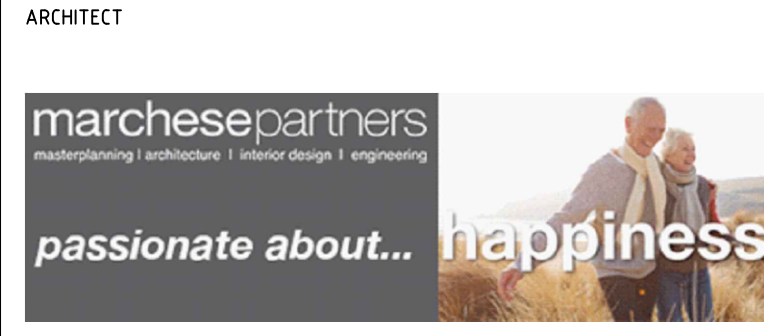


DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.



- NOTES
1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL-BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



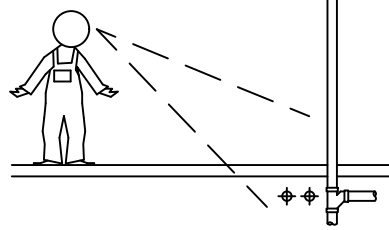
CONSULTANT

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE				
STORMWATER DRAINAGE LEVEL 6				
SCALE 1:150 @ A1	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
DATE Oct 01, 2020	DRAWING No. DA-STW-111		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

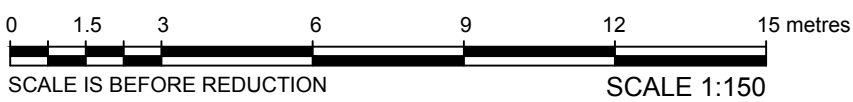
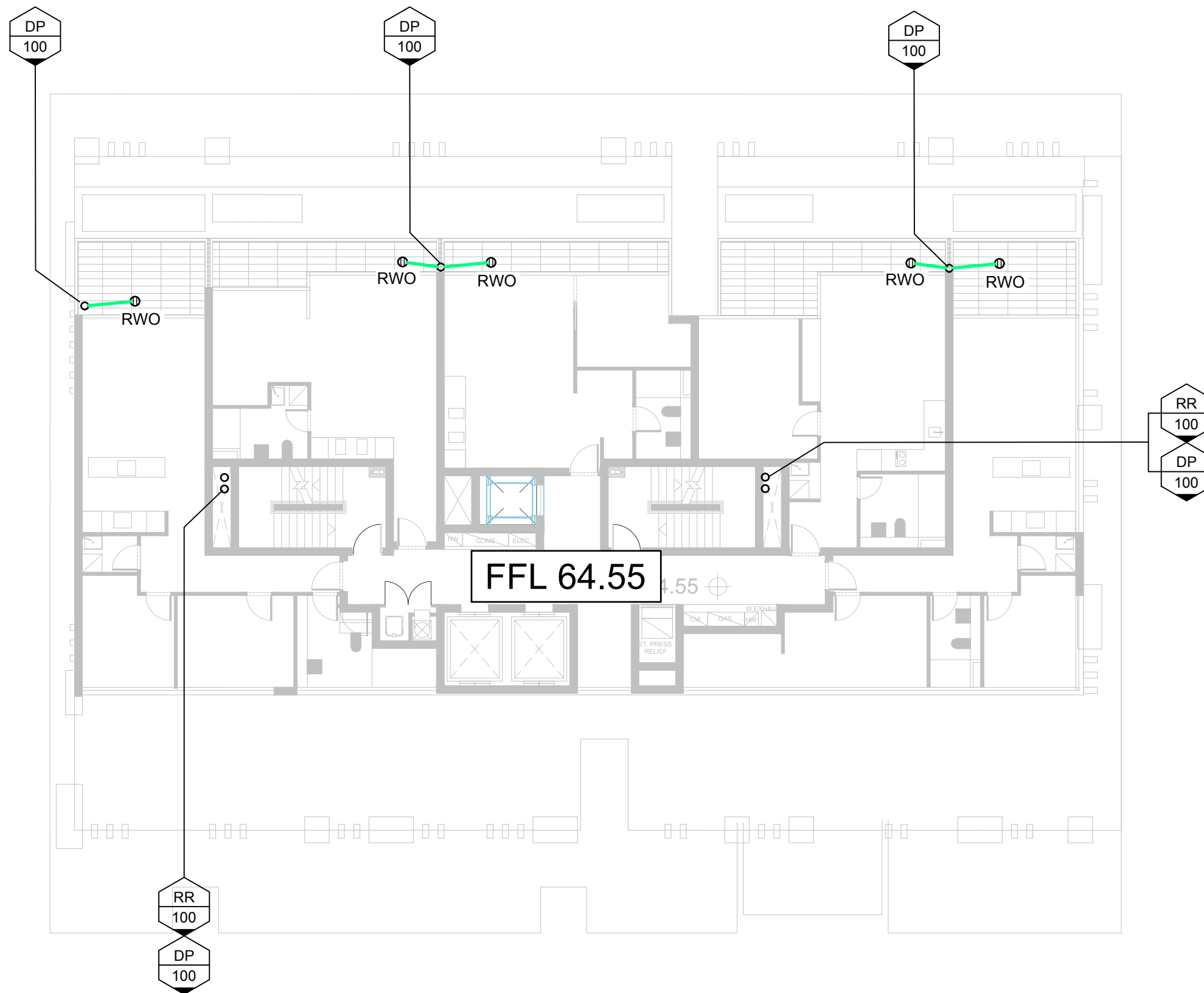
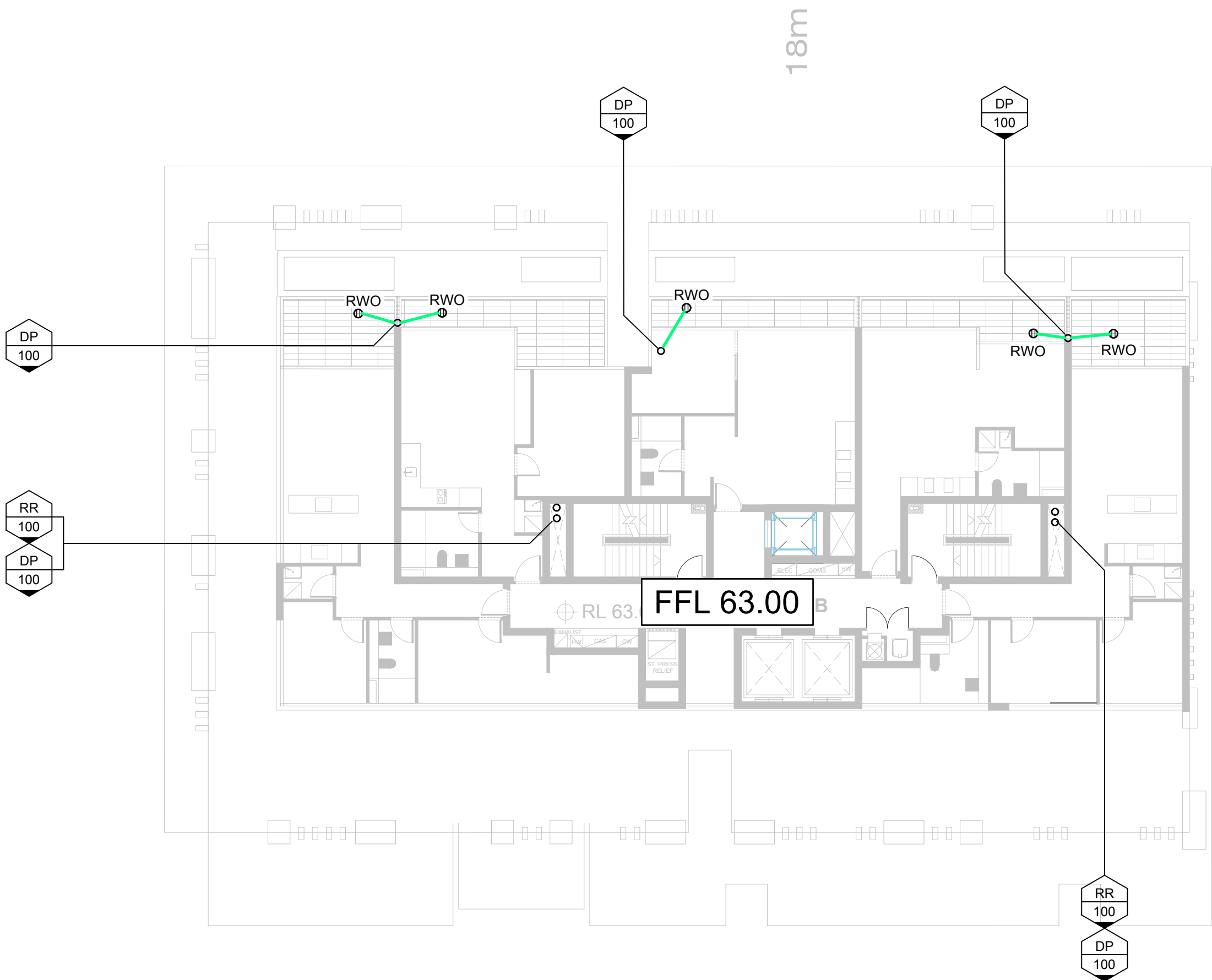
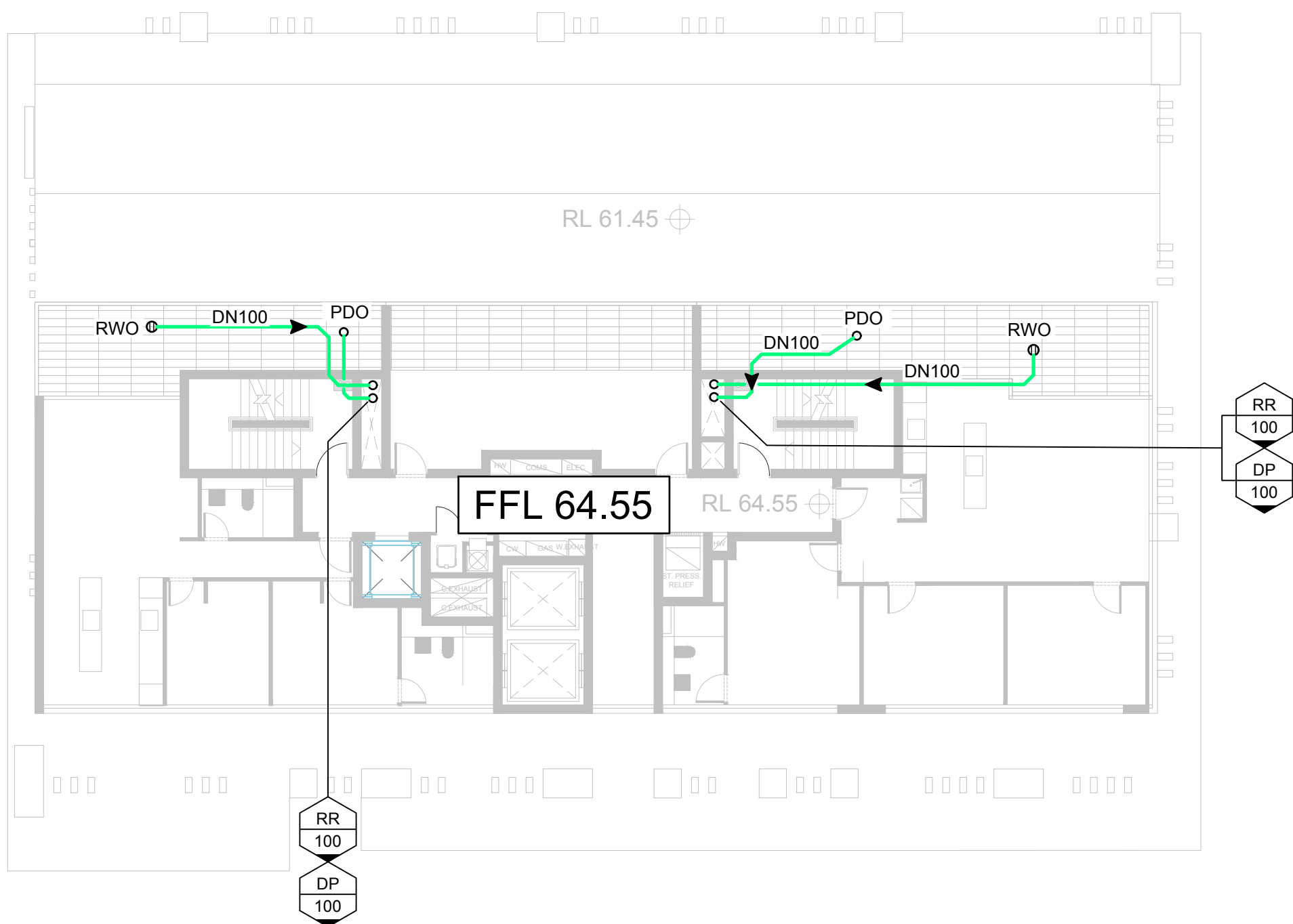
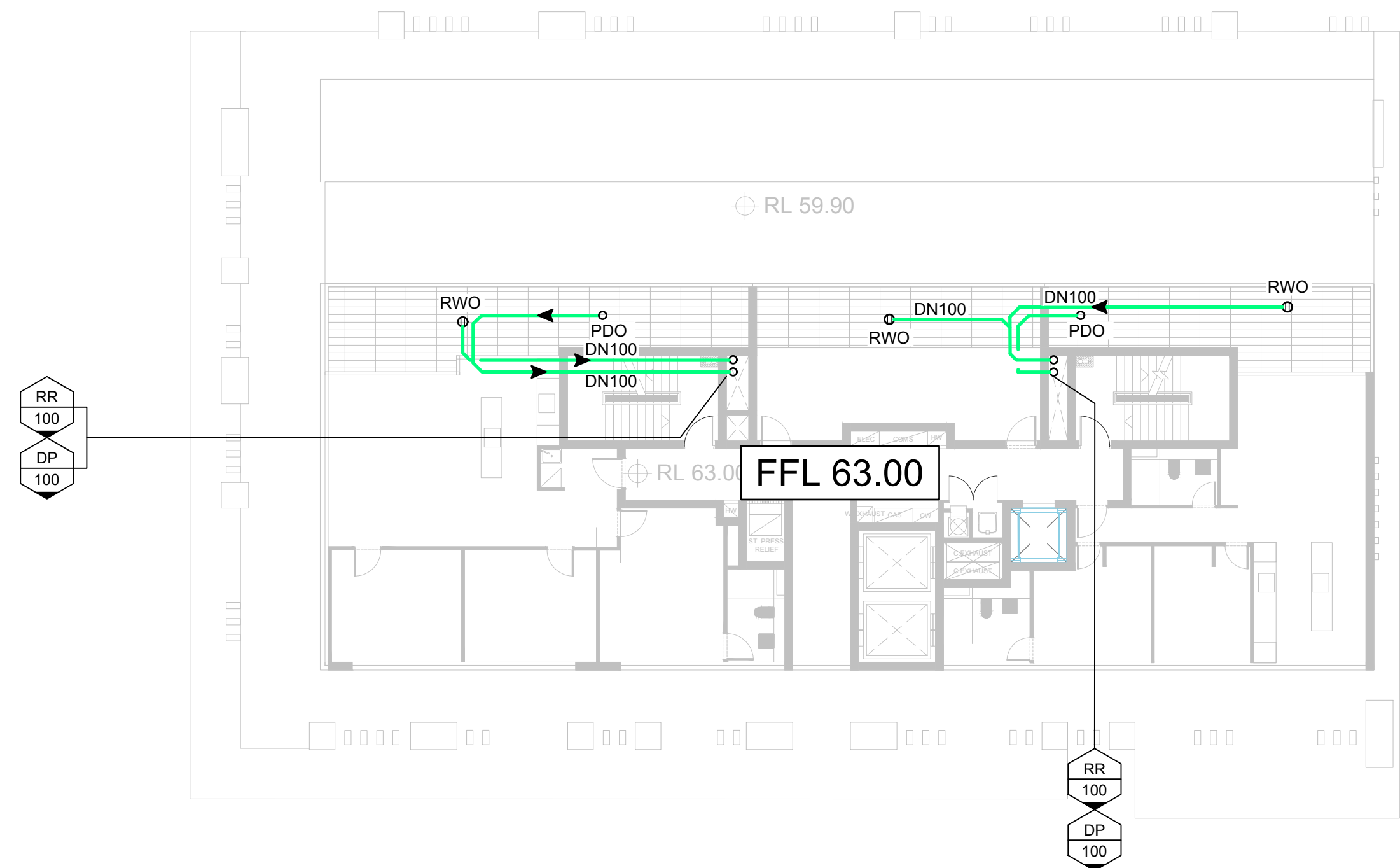
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

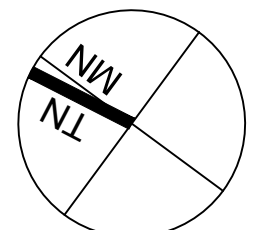
$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
LEVEL 7

SCALE 1:150 @ A1

DATE Oct 01, 2020

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

CHECKED LP

APPROVED

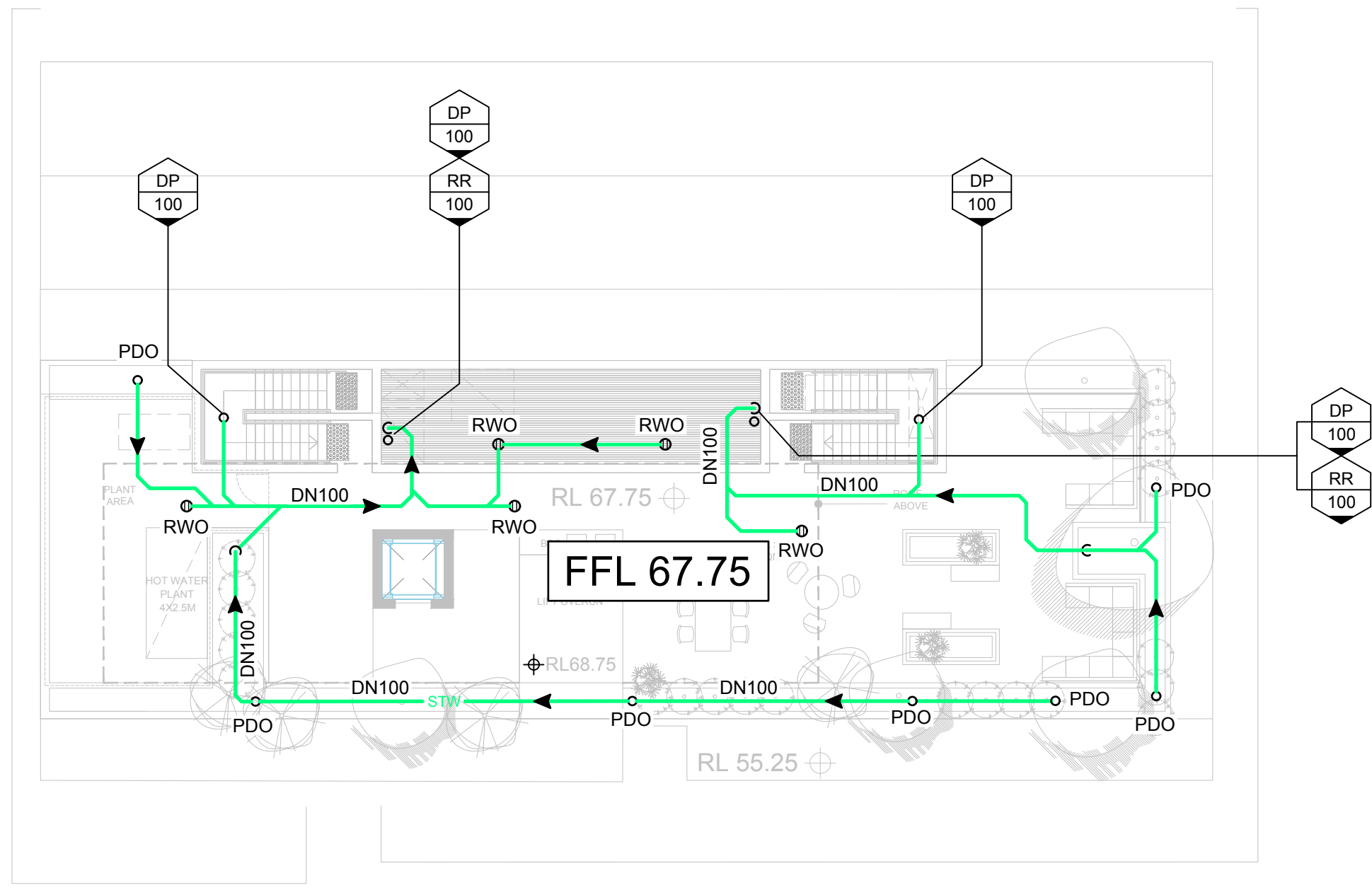
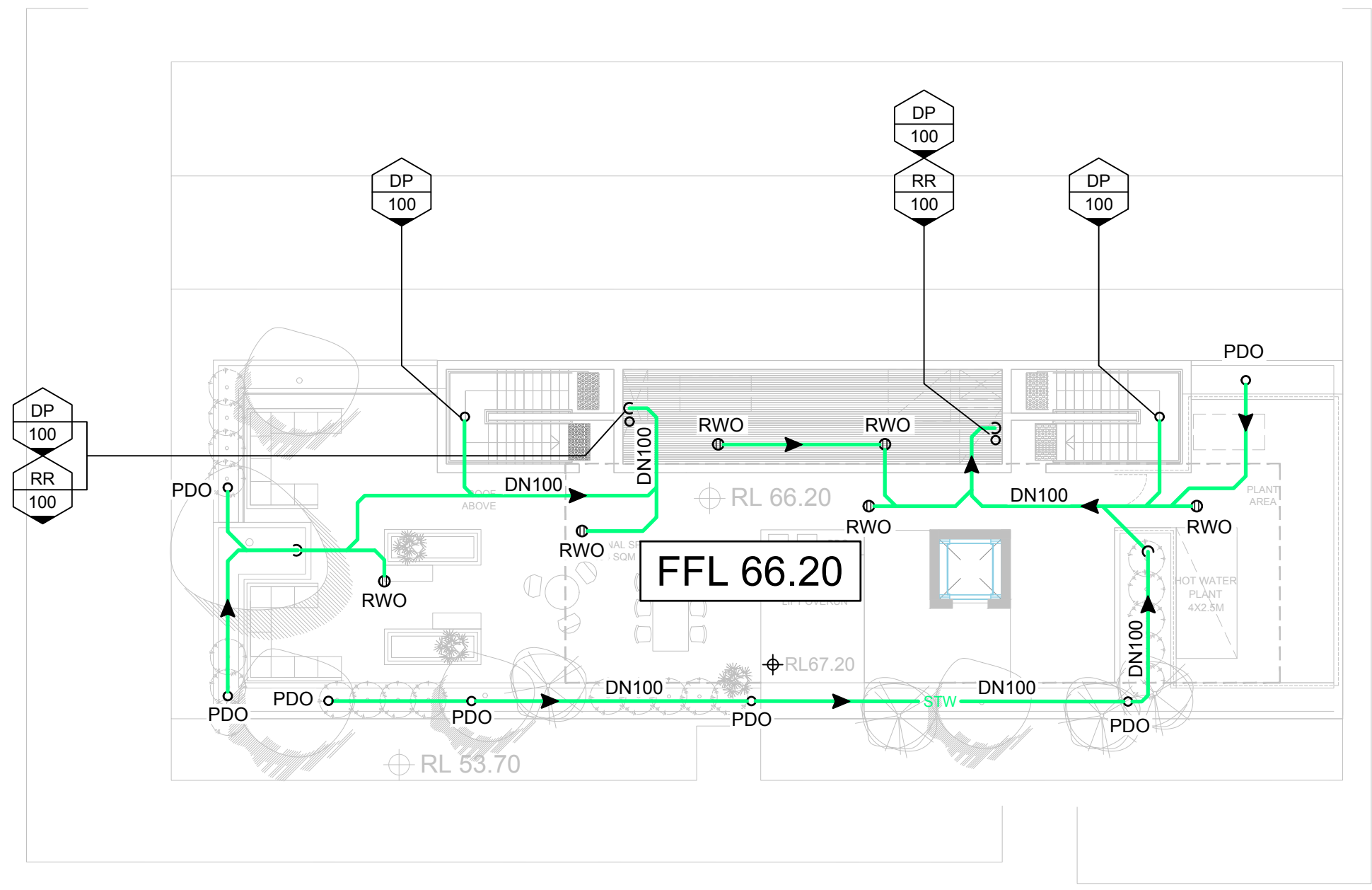
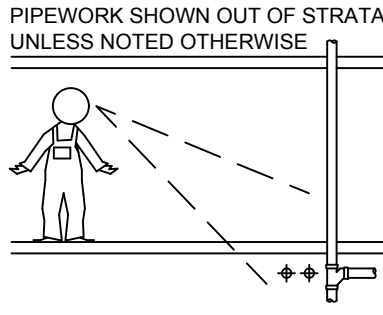
DRAWING No.

DA-STW-112

ISSUE

C

DEVELOPMENT APPLICATION



STORMWATER CALCS:

$C = 1.0$ (ROOF)

$C = 0.95$ (PAVED)

$C = 0.7$ (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)

$A_p = 1033.1 \text{ m}^2$

$100Q_5 = \frac{C \cdot I \cdot A}{3600}$

$= \frac{0.95 \times 252 \times 1033.1}{3600}$

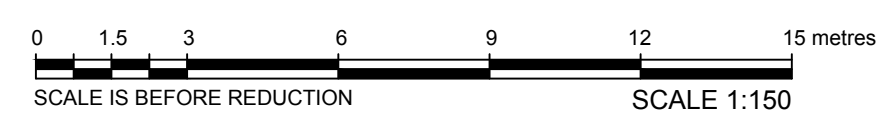
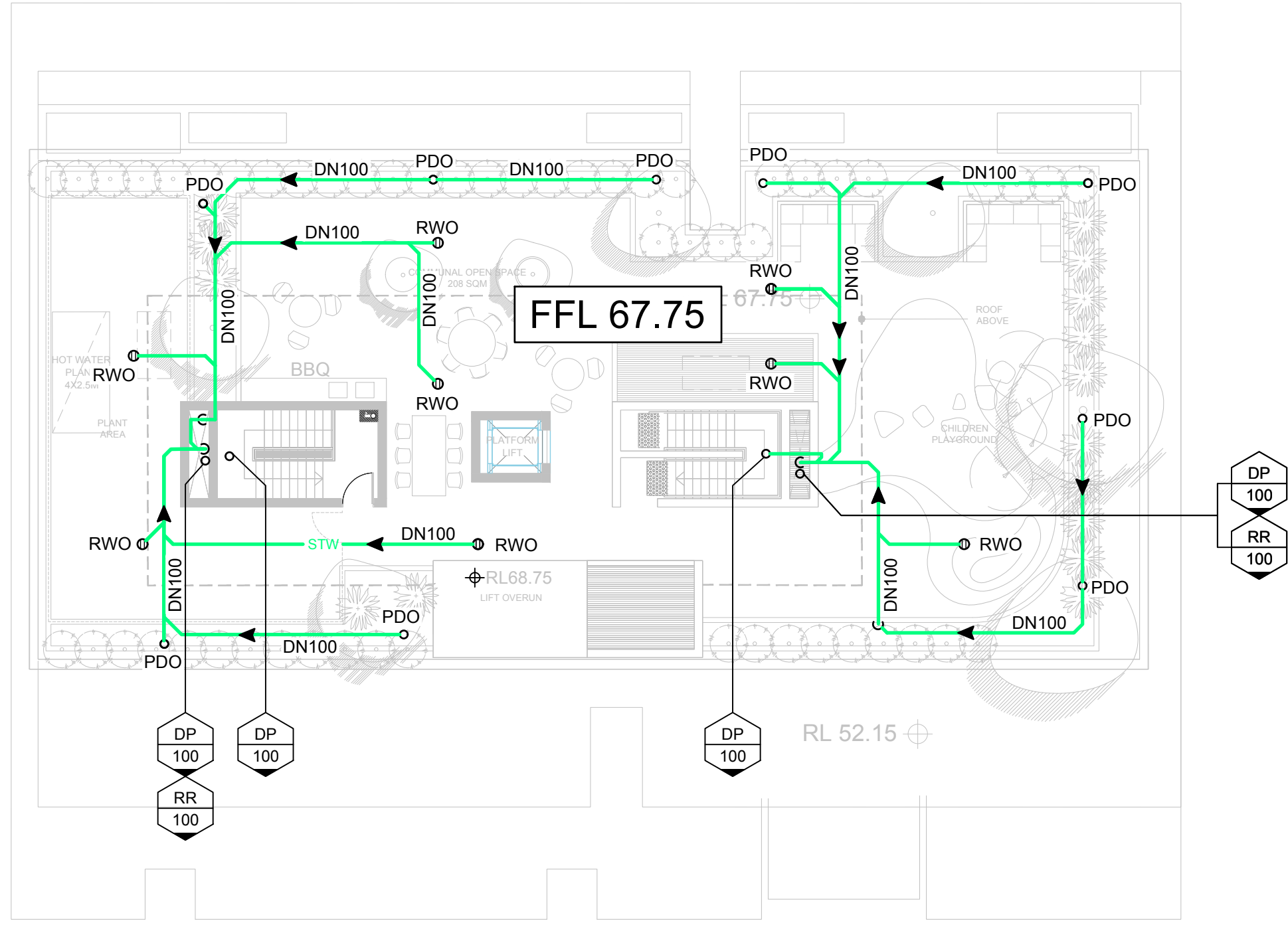
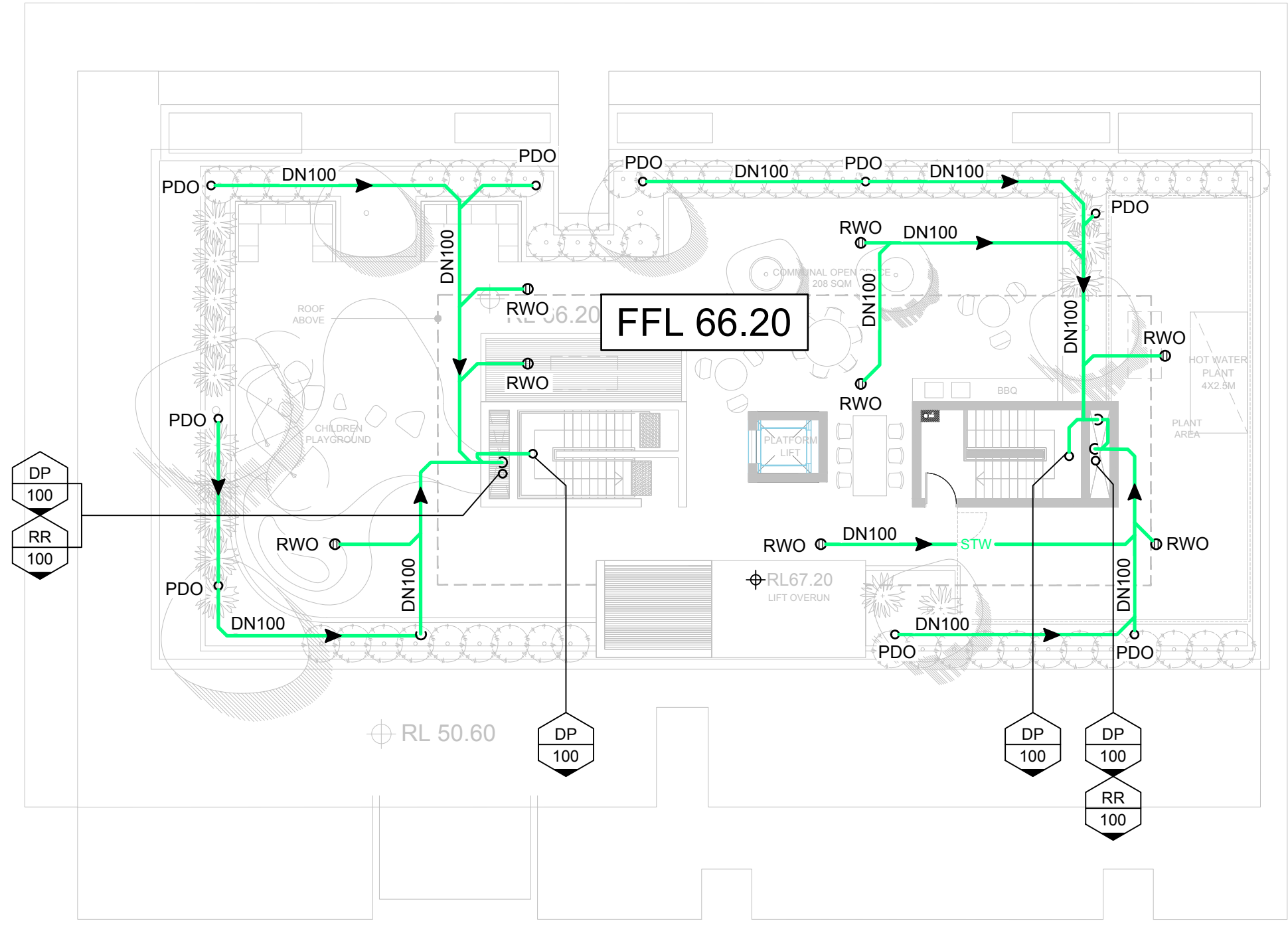
$= 68.7 \text{ mm/hr}$

$A_L = 231.56 \text{ m}^2$

$100Q_5 = \frac{C \cdot I \cdot A}{3600}$

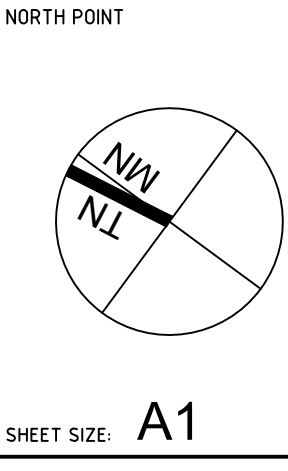
$= \frac{0.7 \times 252 \times 231.56}{3600}$

$= 11.34 \text{ mm/hr}$



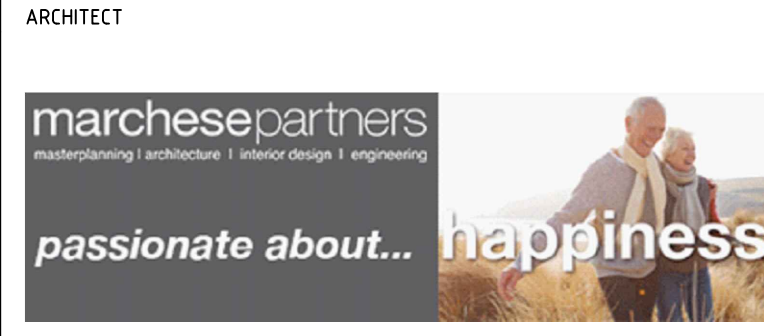
DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



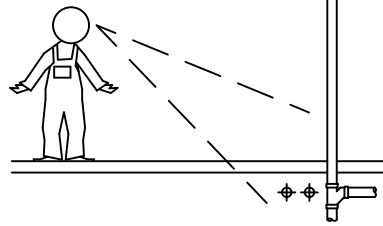
CONSULTANT

A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE				
STORMWATER DRAINAGE LEVEL 8				
SCALE 1:150 @ A1	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
DATE Oct 01, 2020	DRAWING No. DA-STW-113		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			

PIPEWORK SHOWN OUT OF STRATA
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

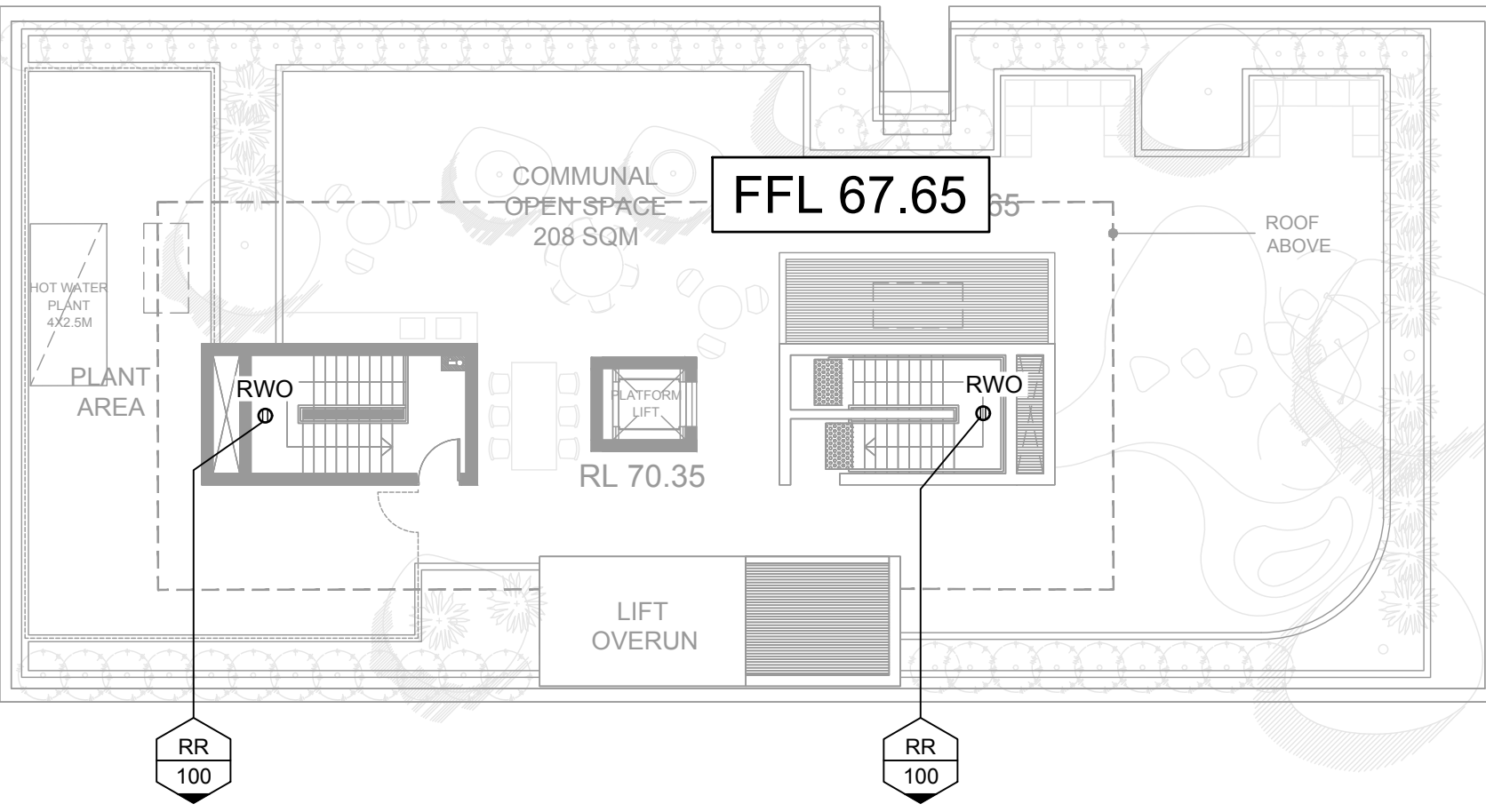
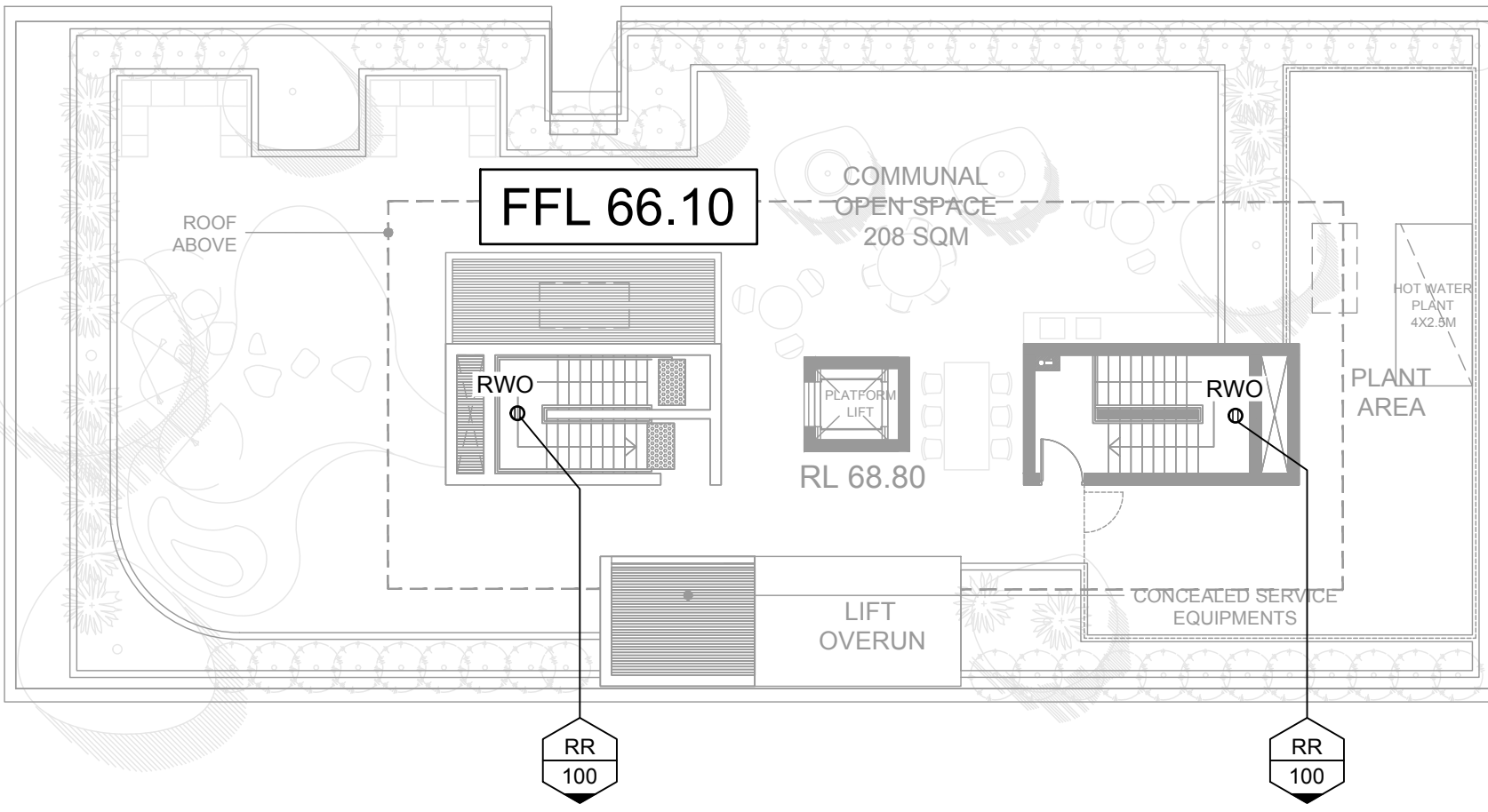
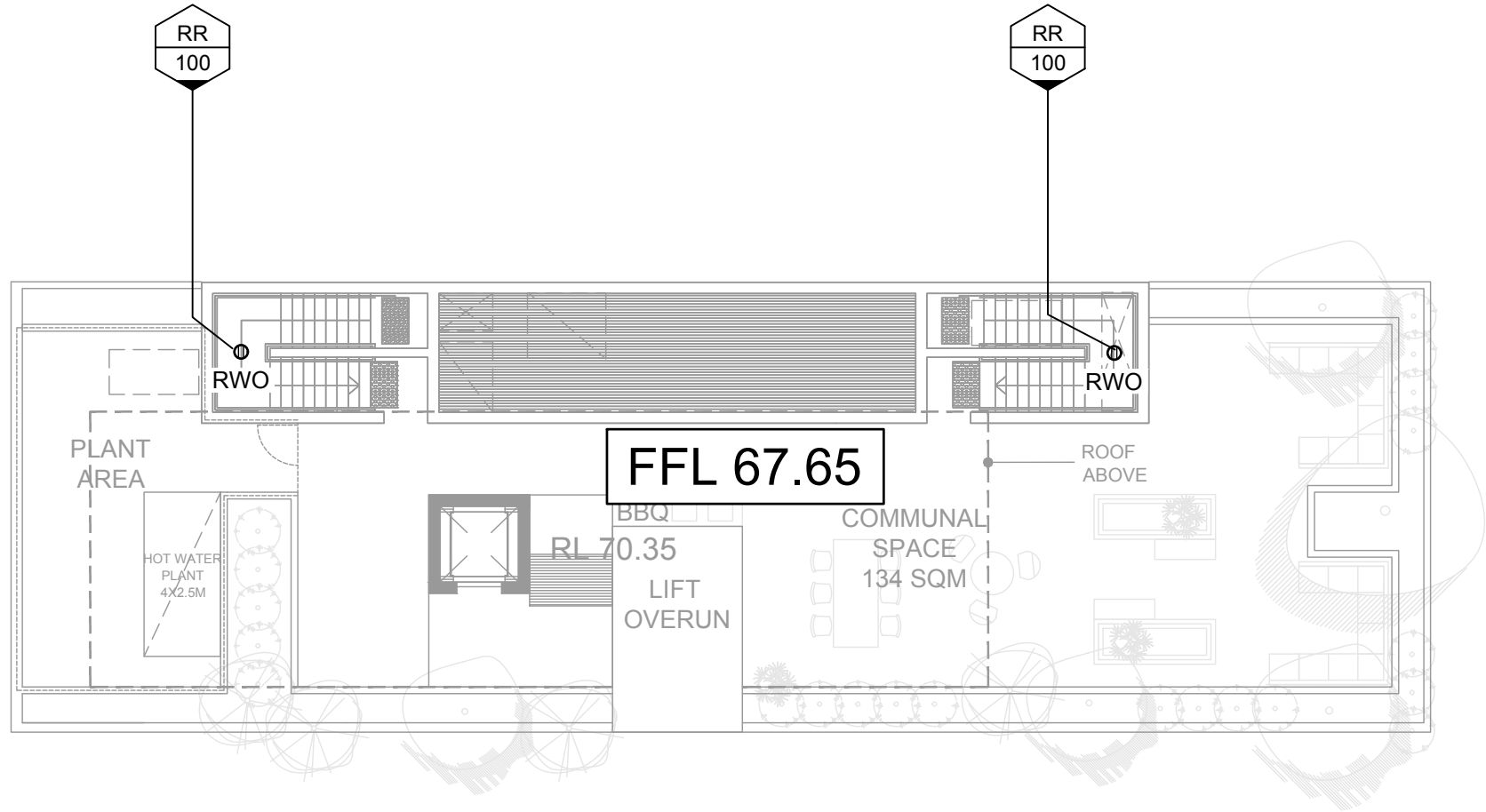
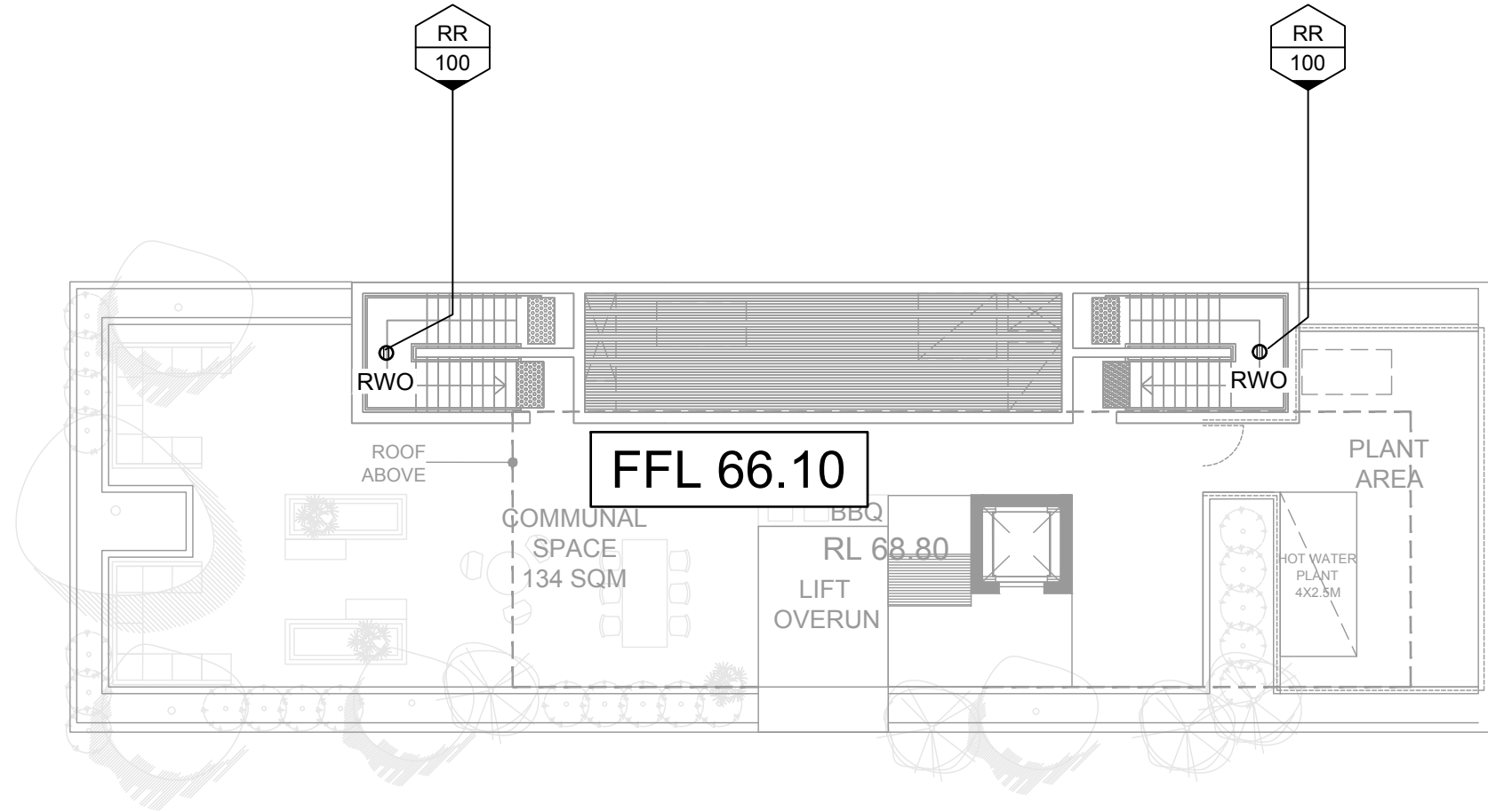
C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$20I_5 = 194\text{mm/hr}$

$100I_5 = 252\text{mm/hr}$

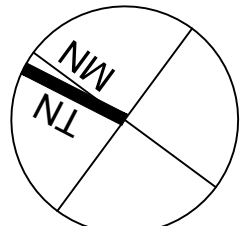
$Q = \frac{C \cdot I \cdot A}{3600}$ (L/s)



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
ROOF LEVEL

SCALE
1:150 @ A1

DATE
Oct 01, 2020

JOB No.
2017-1138

DRAWN
RM

DESIGNED
LP

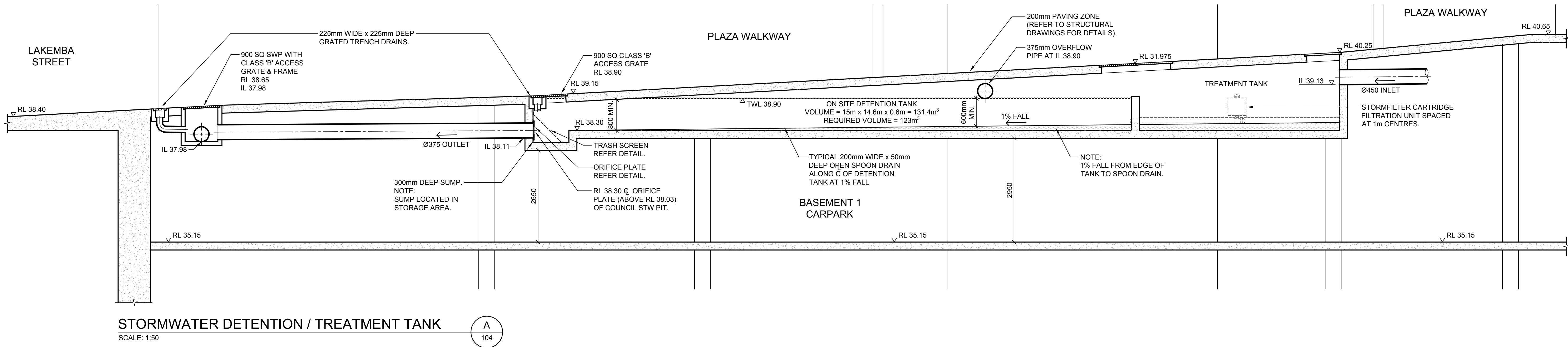
CHECKED
LP

APPROVED

DRAWING No.
DA-STW-114

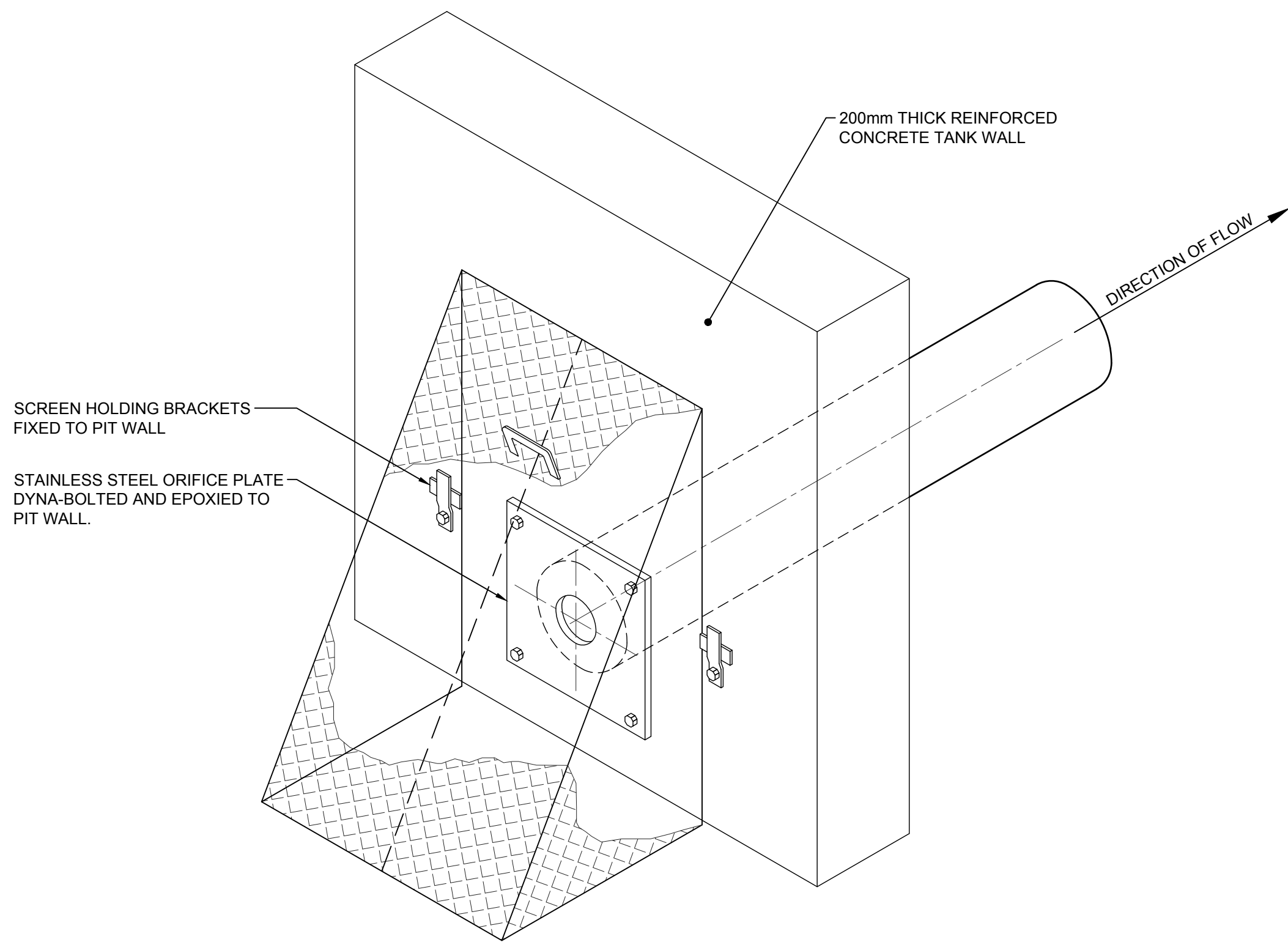
ISSUE
C

DEVELOPMENT APPLICATION



STORMWATER DETENTION / TREATMENT TANK
SCALE: 1:50

A
104



DETAIL
MAXI-MESH RH3030
TRASH SCREEN
NOT TO SCALE

1
-

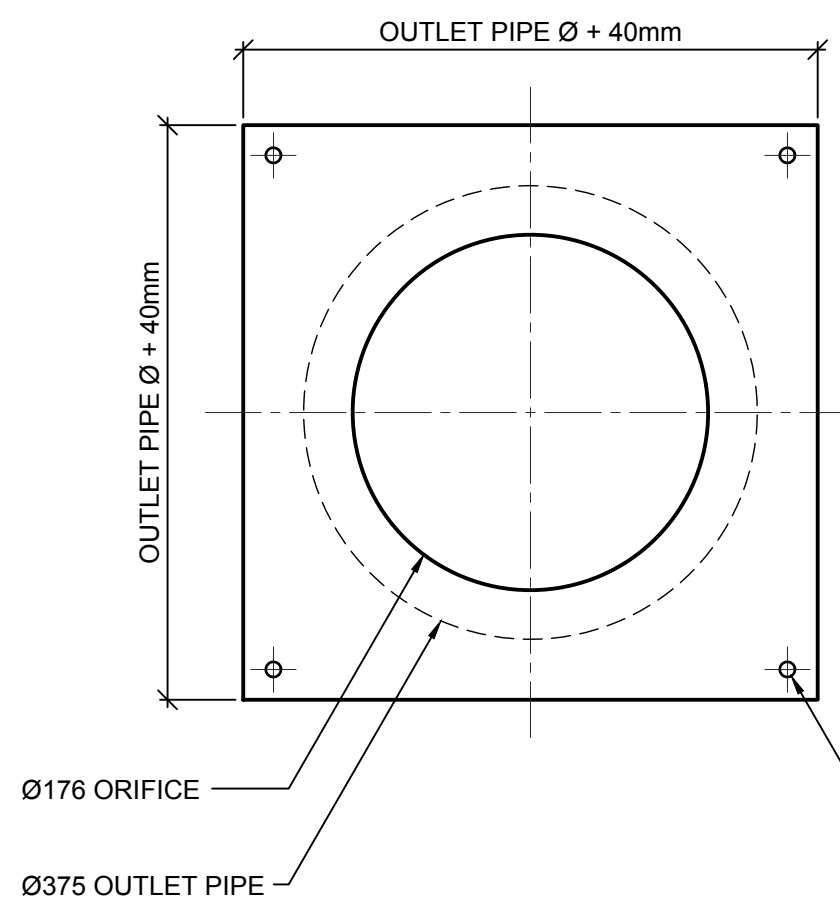


COLOURS:
"DANGER" AND BACKGROUND - WHITE
ELLIPTICAL AREA - RED
RECTANGLE CONTAINING ELIPSE - BLACK
OTHER LETTERING AND BORDER - BLACK

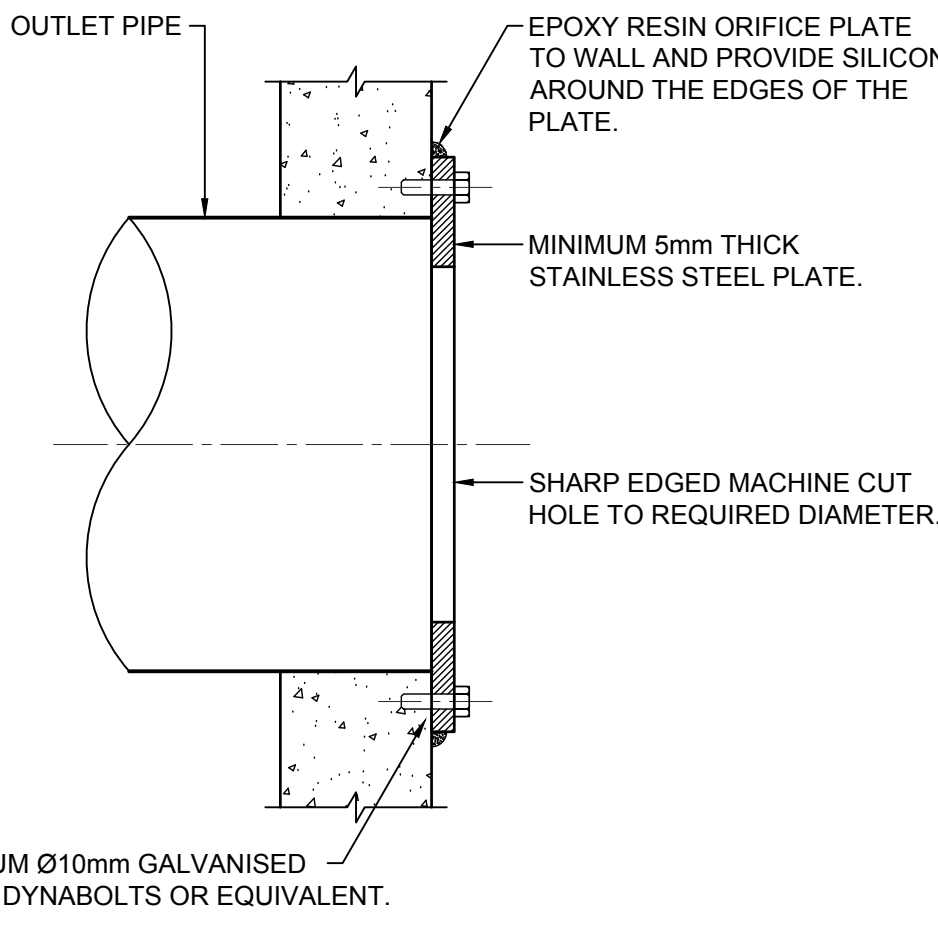
MATERIALS:
POLYPROPYLENE

DETAIL
CONFINED SPACE
SIGNATURE
NOT TO SCALE

2
-



ELEVATION



SECTION

DETAIL
ORIFICE PLATE
SCALE 1:5

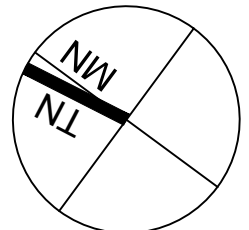
3
-



DO NOT SCALE FROM DRAWINGS.
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

STORMWATER DRAINAGE
OSD TANK GENERAL
ARRANGEMENT AND DETAILS

SCALE

1:50 @ A1

DATE

Oct 01, 2020

JOB No.

2017-1138

DRAWN

RM

DESIGNED

LP

CHECKED

LP

APPROVED

ISSUE

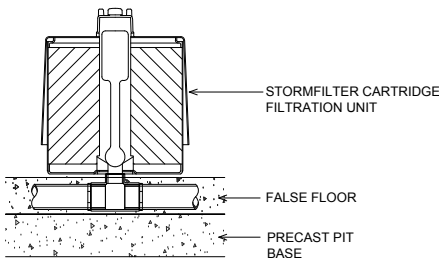
DA-STW-201

C

DEVELOPMENT APPLICATION

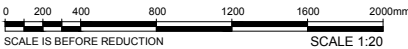
GENERAL NOTES

1. INLET AND OUTLET FILTERING SHALL BE SPECIFIED BY SITE CIVIL ENGINEER (SEE PLANS) AND PROVIDED BY CONTRACTOR. STORMFILTER IS PROVIDED WITH PENINGS AT INLET AND OUTLET LOCATIONS.
2. 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



SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID		TBC	
WATER QUALITY FLOW RATE (L/S)		6.6	
PEAK FLOW RATE (L/S)		-	
RETURN PERIOD OF PEAK FLOW (yrs)		1/4	
# OF CARTRIDGES REQUIRED		6	
CARTRIDGE HEIGHT (310, 460 or 690mm)		690	
MEDIA TYPE (PERLITE, PERLITE/ZEOLITE OR ZPG)		PSORB	
PRECAST VAULT WEIGHT		TBA kg	
PRECAST LID WEIGHT		TBA kg	
PIPE DATA:	I.L.	MATERIAL	DIAMETER
INLET PIPE #1	-	PVC	-
INLET PIPE #2	N/A	N/A	N/A
OUTLET PIPE	-	RC	-
RIM RLs UPSTREAM DOWNSTREAM 17.55 FLOW			
LADDER		YES/NO	
ANTI-FLOTATION BALLAST	N/A	N/A	
	N/A	N/A	
NOTES/SPECIAL REQUIREMENTS:			

NOT TO SCALE



Xrefs: 20171138_X-TITLEBLK-A1 Login Name: Mitchell Cad File: Z:\Projects\2017\1138\DRAWINGSDRAWINGS - WORKING\STORMWATER\20171138_DA-STW-2012.dwg
Plot Date: 01/10/2020@10:11:17

Xref: 20171138_A1_TITLEBKA1
Plot Date: 01.10.2020@10:08:55
Caf File: Z:\p04da\20171138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138_DA-STW-203.dwg
User Name: M02rahl

DO NOT SCALE FROM DRAWINGS,
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

SHEET SIZE: **A1**

NORTH POINT

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



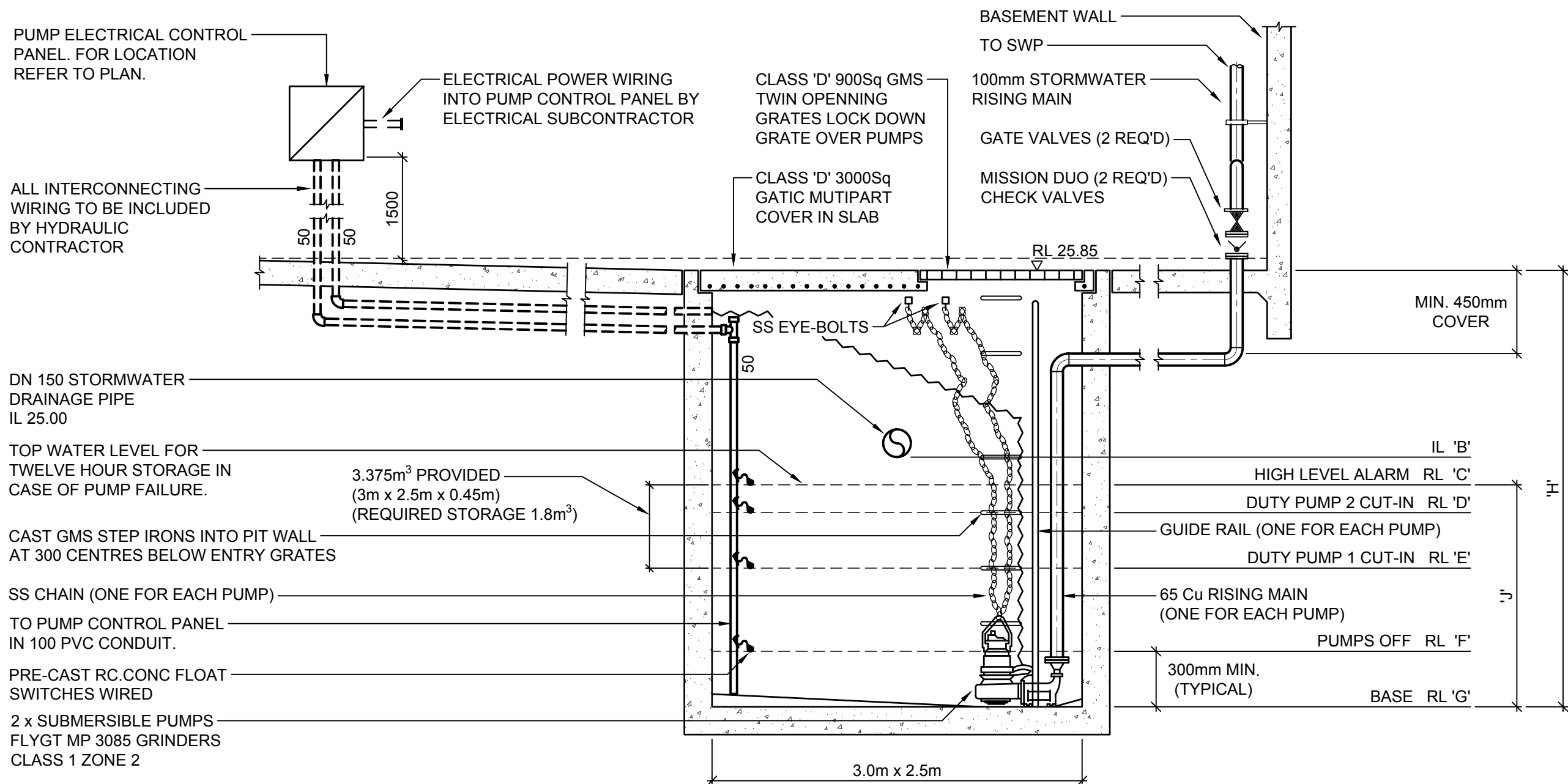
CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

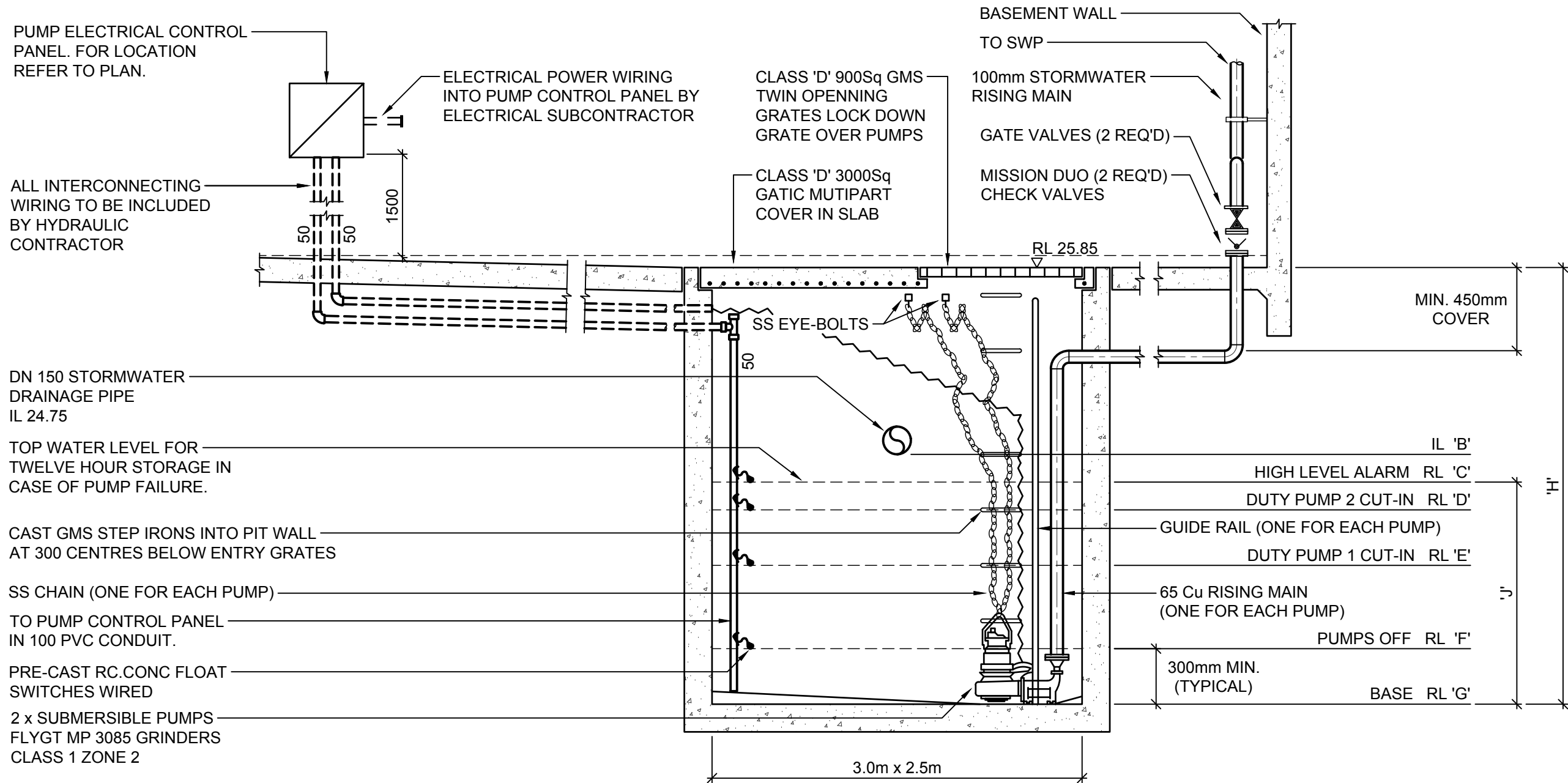
TITLE				
STORMWATER DRAINAGE DETAILS				
SCALE 1:20 @ A1	DRAWN RM	DESIGNED LP	CHECKED LP	APPROVED
DATE Oct 01, 2020	DRAWING No. DA-STW-203		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			



DETAIL
STORMWATER PUMPOUT CHAMBER
SCALE: 1:25

SCHEDULE OF LEVELS	
LEVEL	RL
A	25.85
B	25.00
C	24.85
D	24.70
E	24.40
F	23.95
G	23.40
H	2.45m
J	1.45m

HIGH LEVEL ALARM TO BE
LINKED TO VISUAL AND
AUDIBLE ALARM LOCATED AT
ENTRY RAMP TO BASEMENT



DETAIL
STORMWATER PUMPOUT CHAMBER
SCALE: 1:25

SCHEDULE OF LEVELS	
LEVEL	RL
A	25.85
B	24.75
C	24.60
D	24.45
E	24.15
F	23.70
G	23.40
H	2.45m
J	1.2m

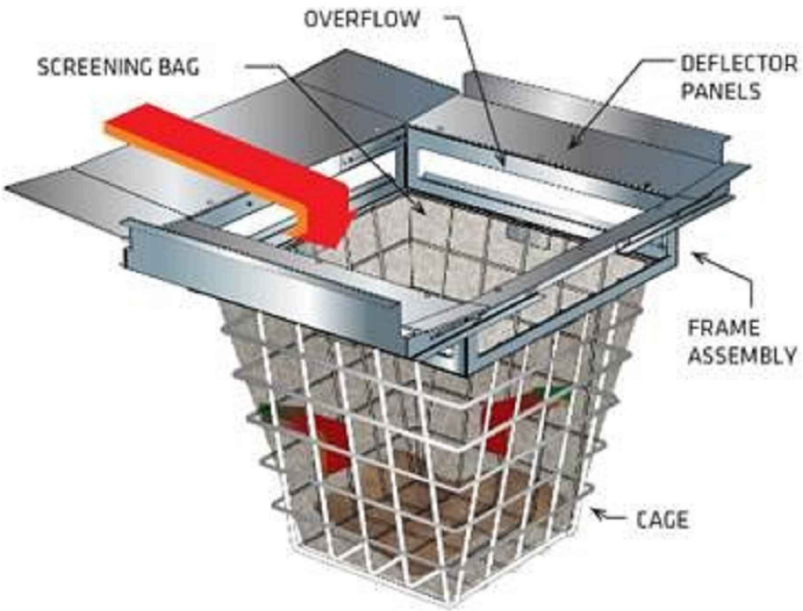
HIGH LEVEL ALARM TO BE
LINKED TO VISUAL AND
AUDIBLE ALARM LOCATED AT
ENTRY RAMP TO BASEMENT

EnviroPod®

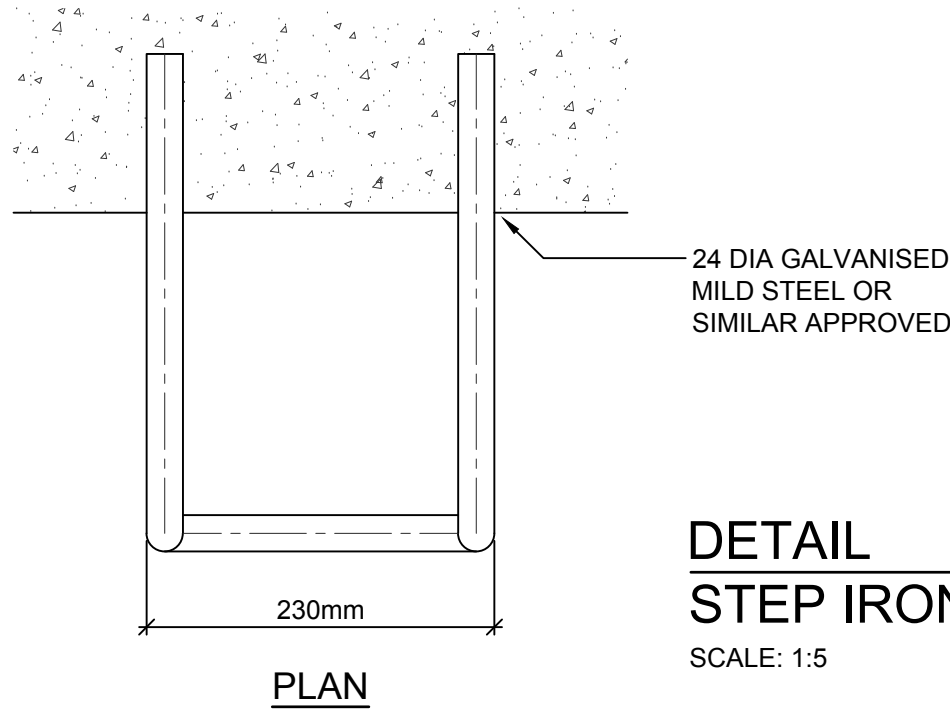
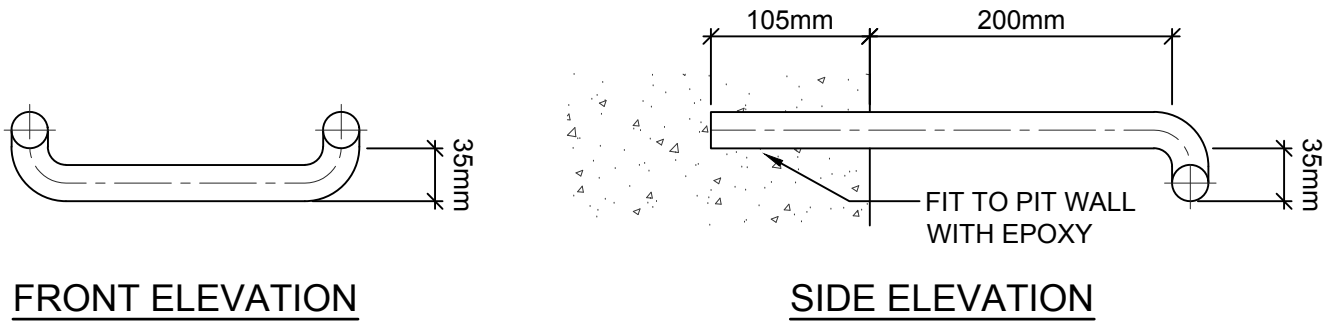
The EnviroPod® is an effective, easily maintained catch pit insert that captures and retains litter, debris and other pollutants as runoff enters the storm drain system.

This catch-basin insert can be installed in either a curb inlet or drop-in catch basin. With several mesh screen sizes and effective oil-absorbent media available, it can be customised to meet site-specific requirements.

The EnviroPod® is effective as a pre-treatment device in a treatment train and is often the most practical solution for retrofits.



DETAIL
ENVIROPOD
NOT TO SCALE



DETAIL
STEP IRONS
SCALE: 1:5

CALCULATION:

$$Q = \frac{C \cdot I \cdot A}{3600}$$

WHERE

C	=	0.9 (CONCRETE)
$100 I_{2hr}$	=	30.1mm/hr
A	=	24m ²
	=	24m ² x 30.1mm/hr x 2 hrs
	=	1.44m ³

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

COLOURS:
WARNING - RED
BORDER AND OTHER - BLACK

NOTES:

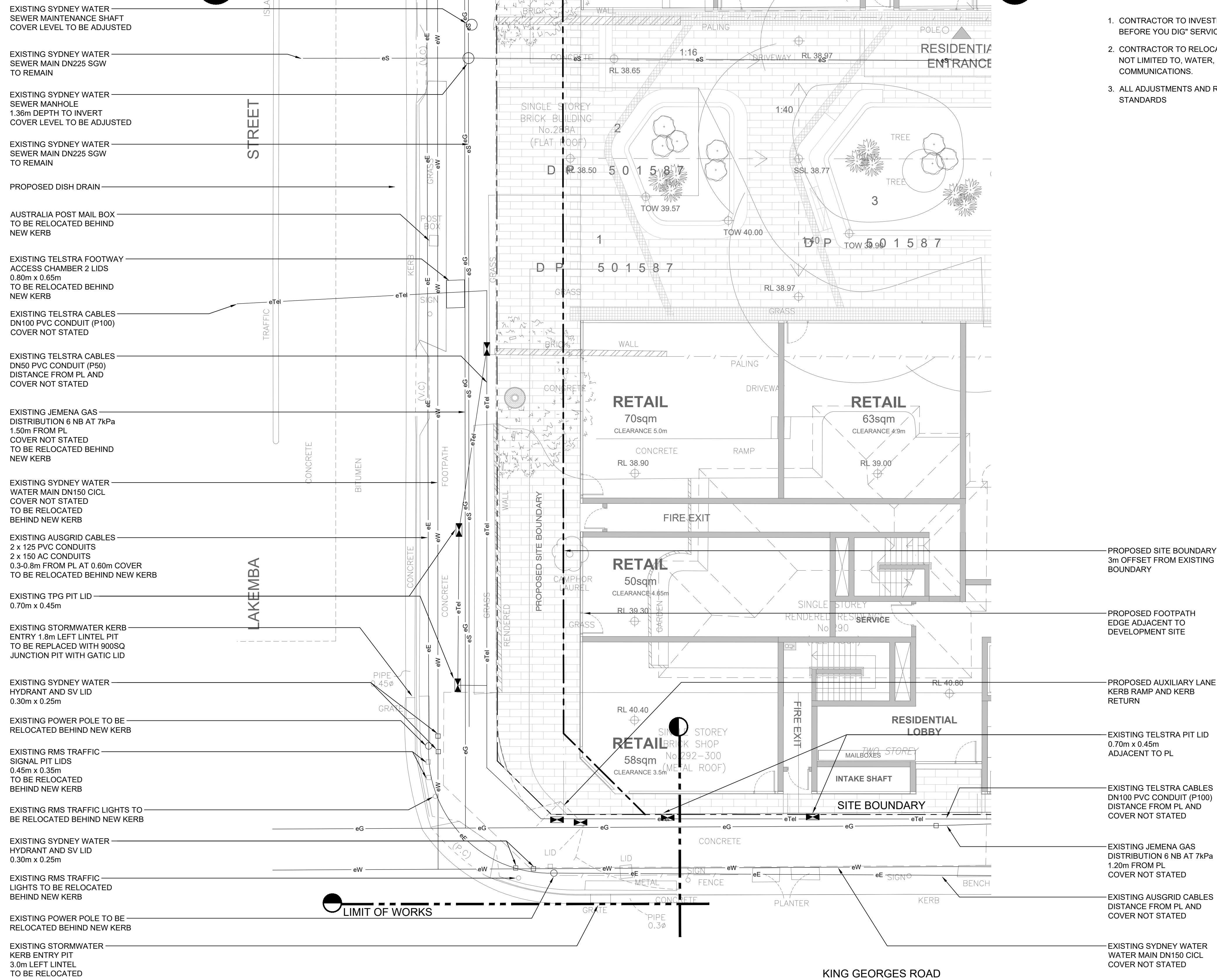
SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE
LOCATION WHERE VEHICLES ENTER THE BASEMENT.

A SUITABLE ALARM SYSTEM POSITIONED AT
ENTRANCE OF BASEMENT CARPARK TO PROVIDE A
FLOOD WARNING IN CASE OF PUMP FAILURE (TO
COUNCILS SPEC).

DETAIL
PUMP-OUT PIT WARNING SIGN
NOT TO SCALE

CONTINUED ON DWG C-012

1. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.
2. CONTRACTOR TO RELOCATE WHERE SHOWN EXISTING SERVICES INCLUDING, BUT NOT LIMITED TO, WATER, HYDRANT, GAS, SEWER, ELECTRICAL, RMS TRAFFIC AND COMMUNICATIONS.
3. ALL ADJUSTMENTS AND RELOCATIONS SHALL COMPLY WITH UTILITY PROVIDER STANDARDS



THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020

An advertisement for Marchese Partners. The top left corner has the word "ARCHITECT" in a bold, sans-serif font. Below it, the company name "marchesepartners" is written in a large, lowercase, sans-serif font. Underneath the name, the services "masterplanning | architecture | interior design | engineering" are listed in a smaller, lowercase, sans-serif font. At the bottom left, the phrase "passionate about..." is written in a large, italicized, lowercase, sans-serif font. To the right of this text is a photograph of an elderly couple standing in a field of tall grass, looking towards the camera. The word "happiness" is written in a large, lowercase, sans-serif font across the bottom right of the image, partially overlapping the photograph.

CLIENT

Allied Building

CONSULTANT



LP CONSULTING
AUSTRALIA PTY LTD

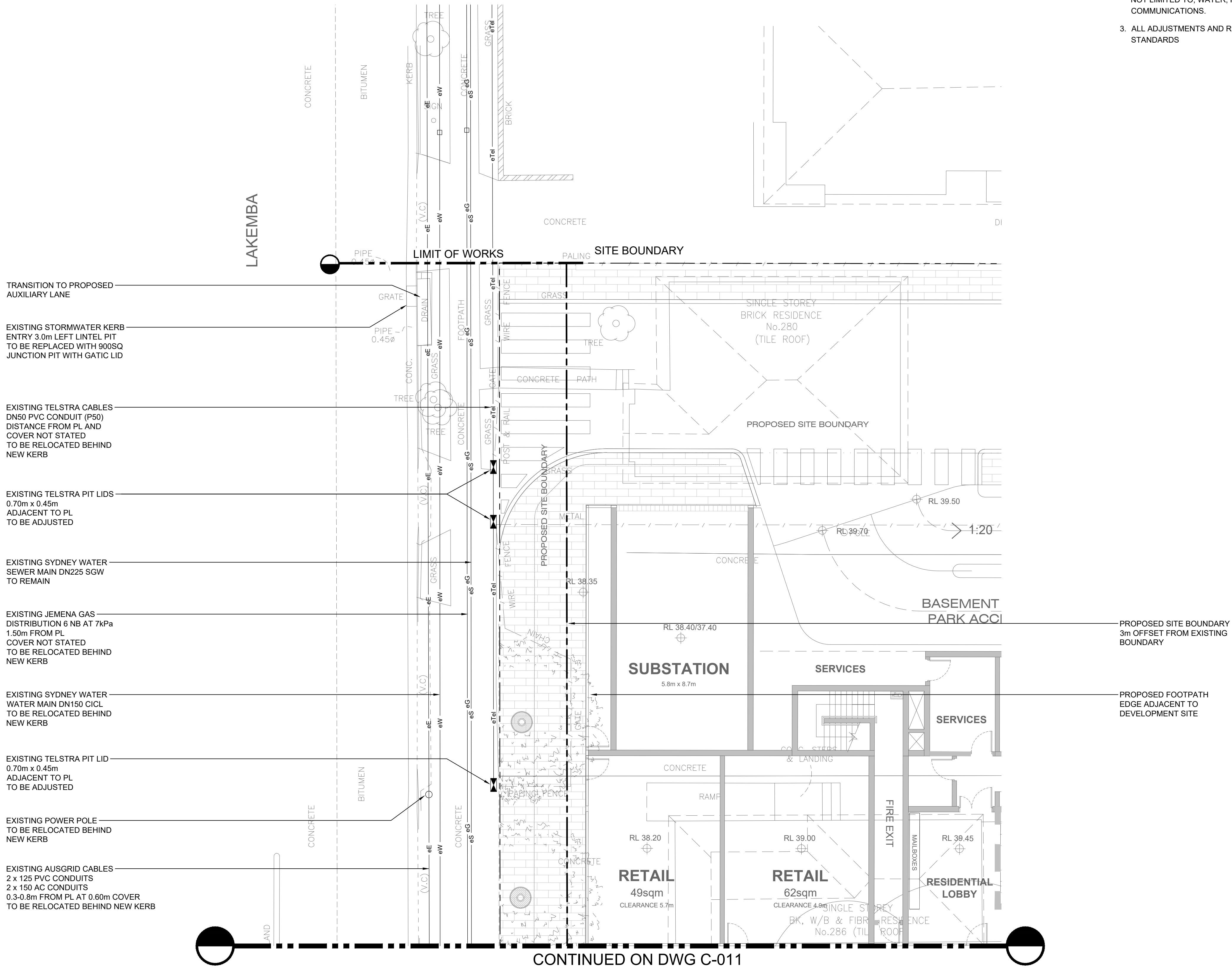
A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

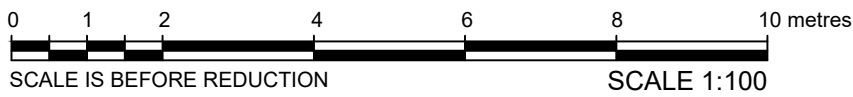
TITLE				
CIVIL WORKS				
COORDINATED SERVICES				
SHEET 1				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:100 @ A1	AT	AT	LP	LP
DATE	DRAWING No.		ISSUE	
Oct 02, 2020,	DA-C-011		C	
JOB No.	DEVELOPMENT APPLICATION			
2017-1138				

NOTES:

1. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.
2. CONTRACTOR TO RELOCATE WHERE SHOWN EXISTING SERVICES INCLUDING, BUT NOT LIMITED TO, WATER, HYDRANT, GAS, SEWER, ELECTRICAL, RMS TRAFFIC AND COMMUNICATIONS.
3. ALL ADJUSTMENTS AND RELOCATIONS SHALL COMPLY WITH UTILITY PROVIDER STANDARDS



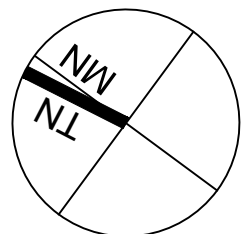
CONTINUED ON DWG C-011



DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD

NORTH POINT



SHEET SIZE: A1

NOTES

1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | ISSUE | AMENDMENT | DATE |
|-------|-----------------------------------|------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION | 15.05.2020 |
| B | ISSUE FOR DEVELOPMENT APPLICATION | 04.06.2020 |
| C | ISSUE FOR DEVELOPMENT APPLICATION | 01.10.2020 |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

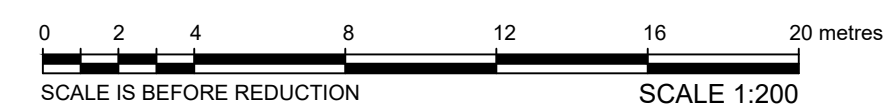
T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

CIVIL WORKS
COORDINATED SERVICES
SHEET 2

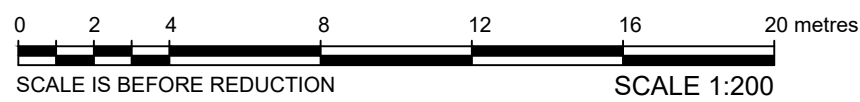
SCALE	DRAWN	AT	DESIGNED	CHECKED	APPROVED
1:100 @ A1	AT	AT	LP	LP	
DATE	DRAWING No.	ISSUE			
Oct 02, 2020	DA-C-012	C			
JOB No.	2017-1138	DEVELOPMENT APPLICATION			

1. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.
2. CONTRACTOR TO RELOCATE ALL EXISTING SERVICES INCLUDING, BUT NOT LIMITED TO, WATER, HYDRANT, GAS, SEWER, ELECTRICAL, RMS TRAFFIC AND COMMUNICATIONS.
3. REFER DWG. C-501 FOR STORMWATER DRAINAGE PLAN.



SCALE 1:200 @ A1	DRAWN AT	DESIGNED AT	CHECKED LP	APPROVED
DATE Oct 02, 2020	DRAWING No.		ISSUE	
JOB No.	DA-C-101		C	
2017-1138	DEVELOPMENT APPLICATION			

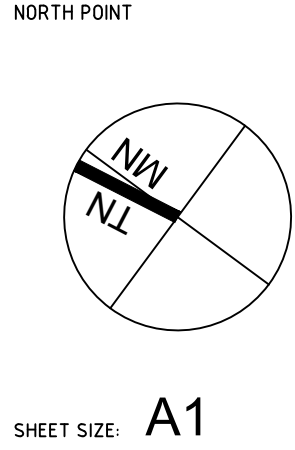
Xrefs: 20171138_X-TITLEBLK.k4; 20171138_XS_SURVEY_UPDATED_190703; 20171138_C3D_OUTPUT_ALIGNMENT & CONTOURS; 20171138_DA-C501; 20171138_XA_LEVEL.00
 Plot Date: 02/10/2020 10:05:04 User: Cad File: Z:\Projects\20171138\DRAWINGS\CS\DRAWINGS - WORKING\CIVIL 20171138_DA-C2-101.dwg



X:\46- 2017\1138_X-1\TILEBAK-1 2017\1138_X-1 SURVEY_UPDATED_102010_2017\1138_X-1 LEVEL_00_2017\1138_CSD OUT/OUT KERB RETURNS
Plot Date: 12/10/2020 09:51:30 User: C:\Frederick Z\Projects\2017\1138\DRAWINGS\DRAWINGS - WORKING\DWG\2017\1138_DA-C-202.dwg

DO NOT SCALE FROM DRAWINGS,
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD



- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE	AMENDMENT	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020
B	ISSUE FOR DEVELOPMENT APPLICATION	04.06.2020
C	ISSUE FOR DEVELOPMENT APPLICATION	01.10.2020



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



CONSULTANT

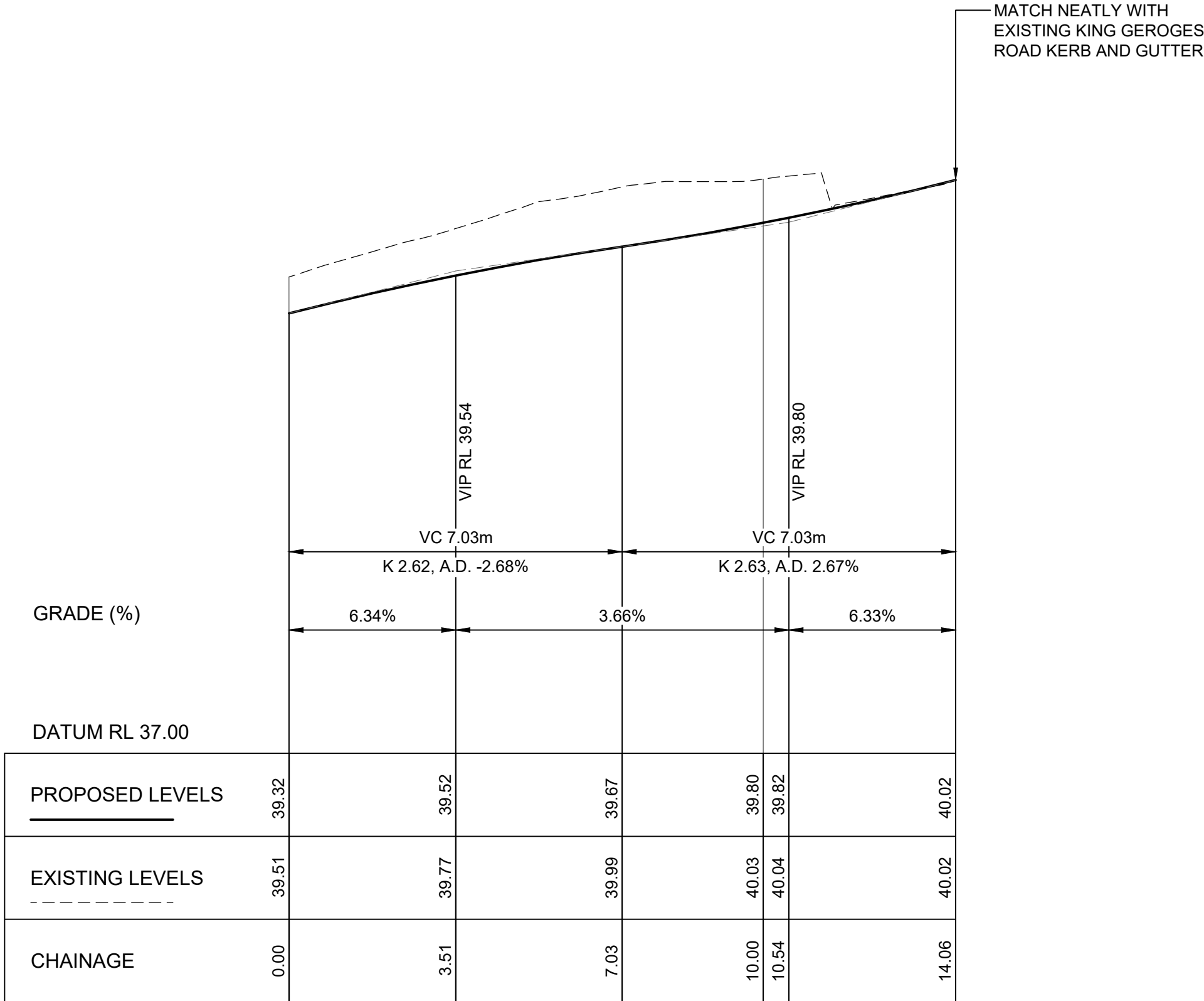
A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE							
CIVIL WORKS KERB RETURN DETAIL							
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED			
1:100 @ A1	AT	AT	LP				
DATE	DRAWING No.		ISSUE				
Oct 02, 2020	DA-C-202		C				
JOB No.							
2017-1138	DEVELOPMENT APPLICATION						

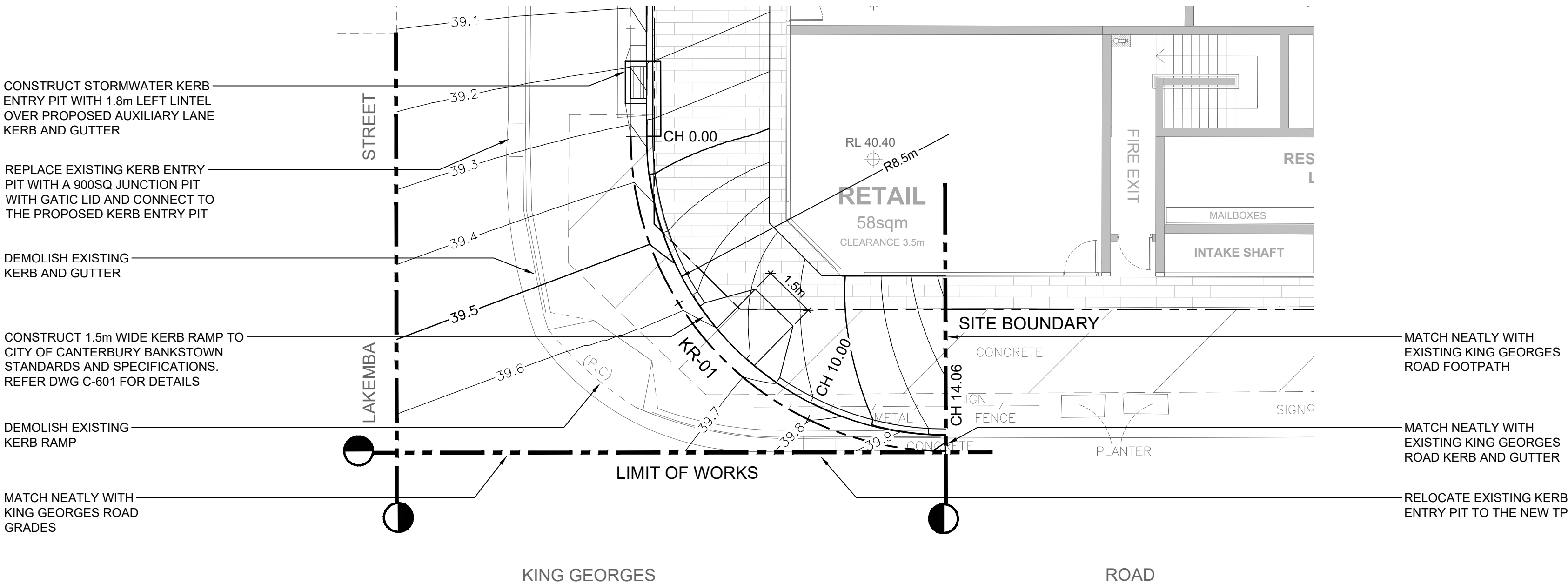
NOTES:

- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.
- CONTRACTOR TO RELOCATE ALL EXISTING SERVICES INCLUDING, BUT NOT LIMITED TO, WATER, HYDRANT, GAS, SEWER, ELECTRICAL, RMS TRAFFIC AND COMMUNICATIONS.



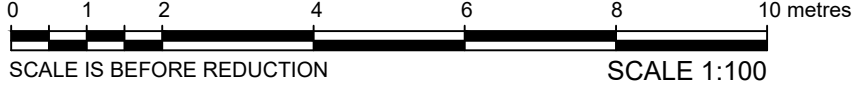
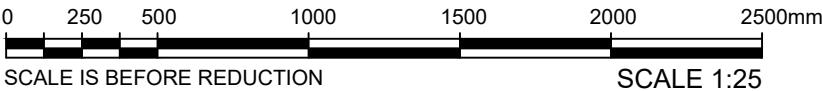
KERB RETURN (KR-01)
LONGITUDINAL SECTION

SCALE: 1:100 HORIZONTAL
1:25 VERTICAL



KERB RETURN (KR-01)
DETAIL PLAN

SCALE: 1:100

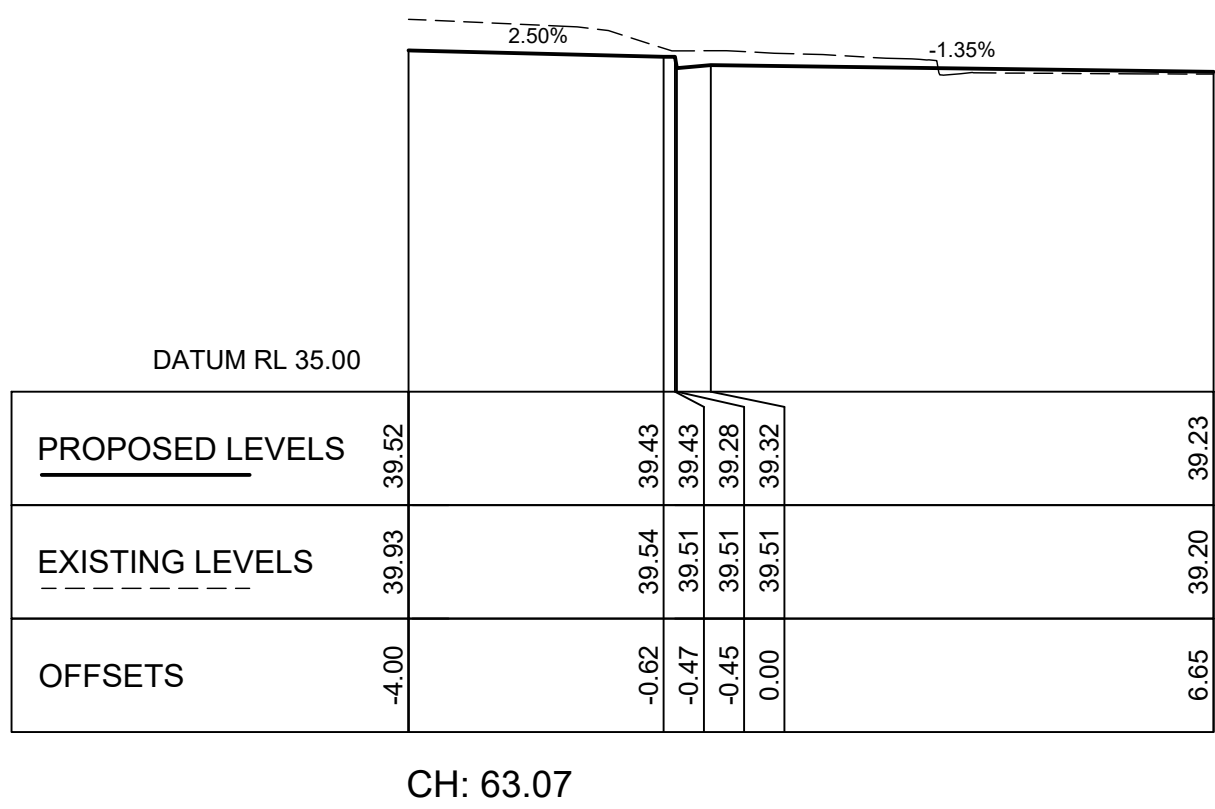
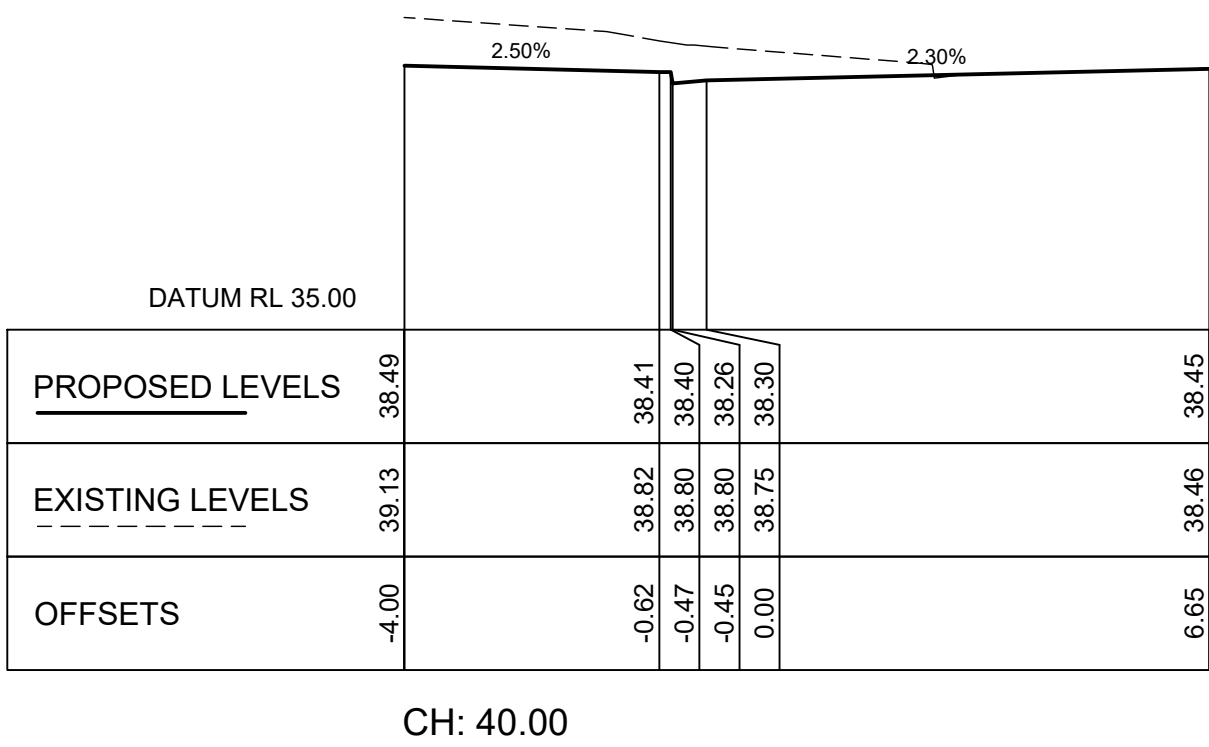
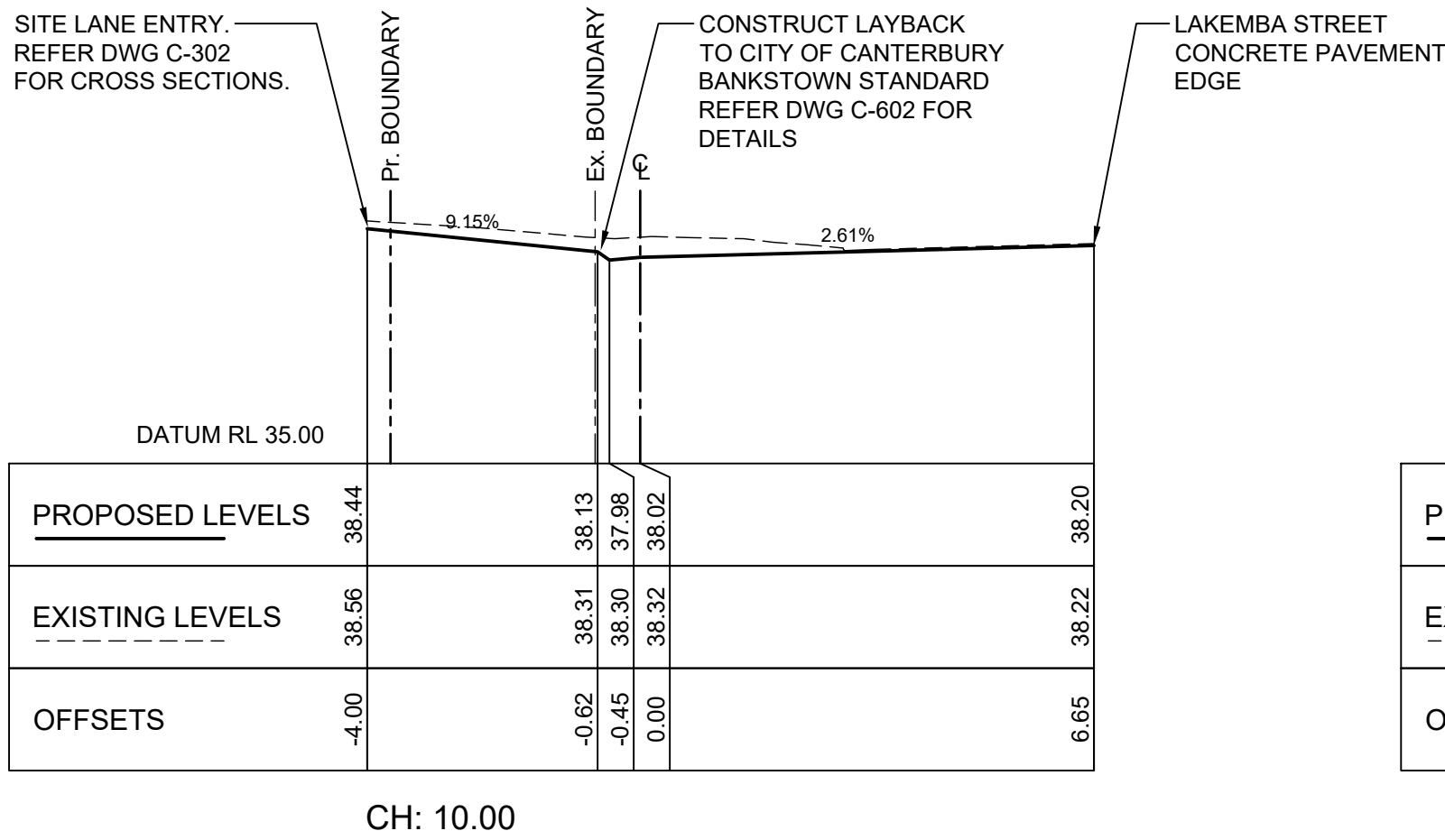
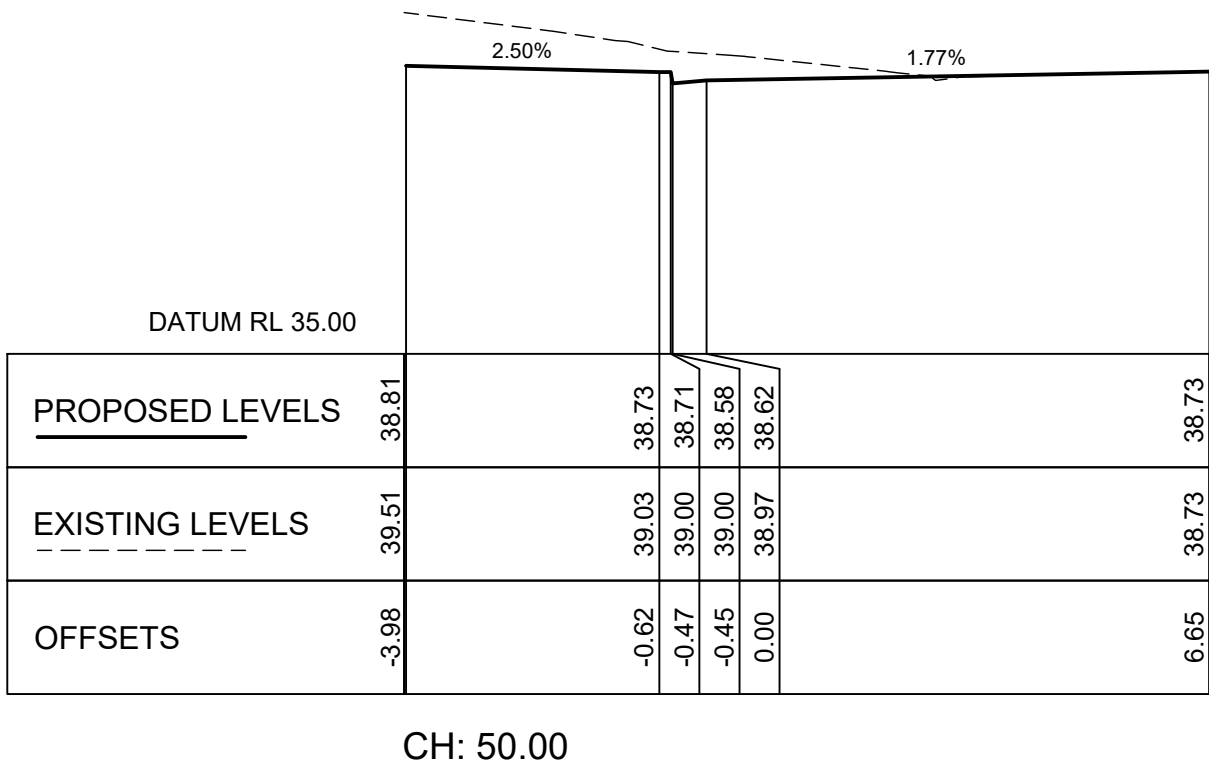
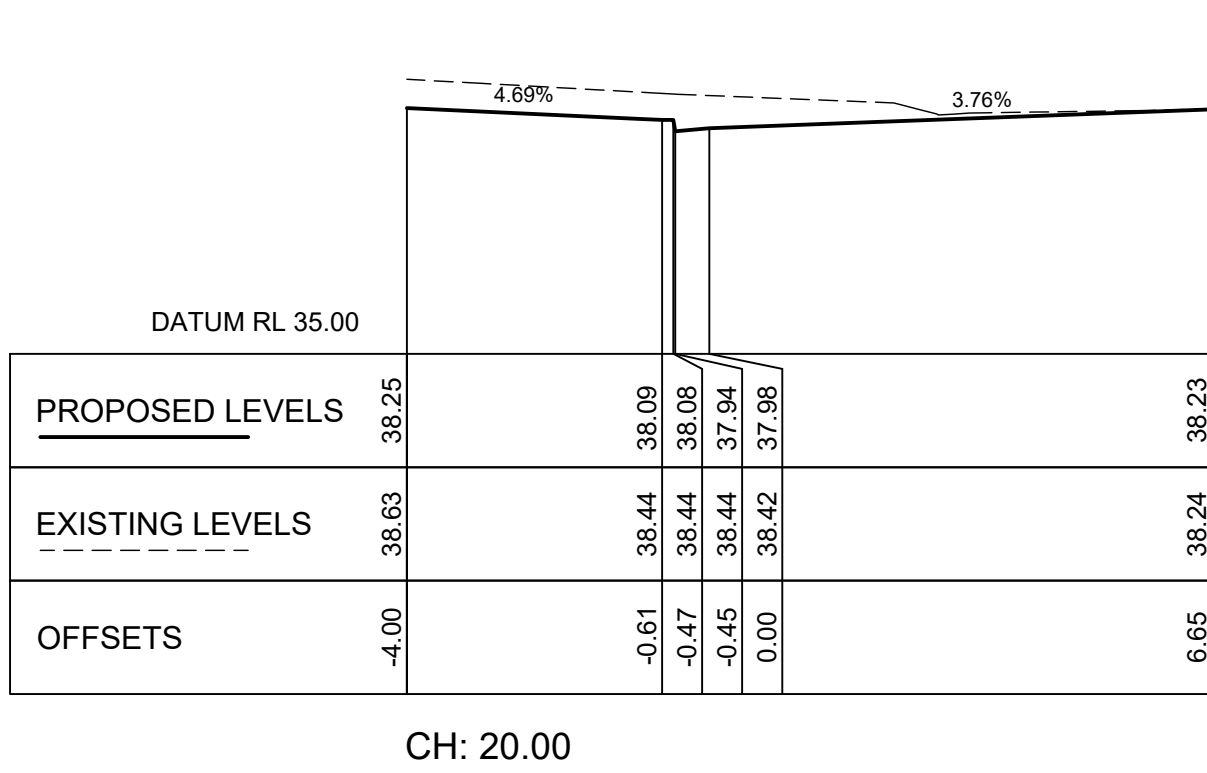
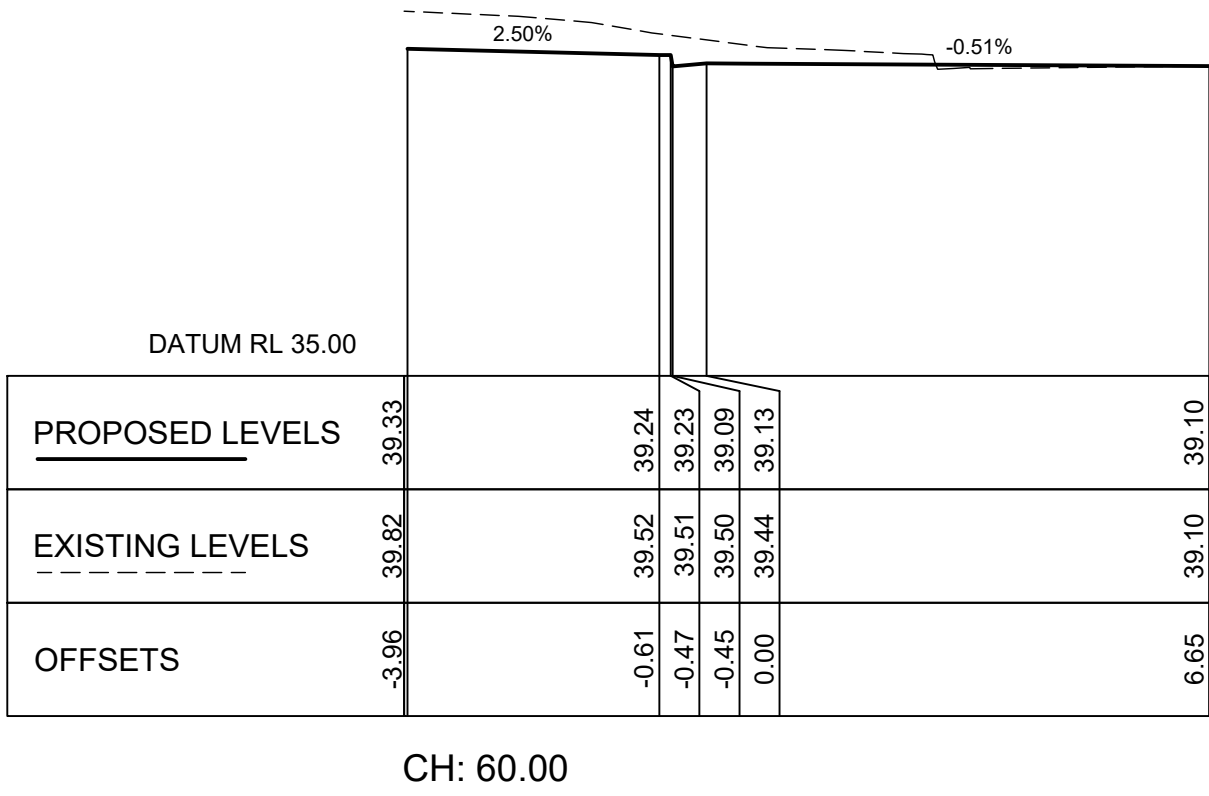
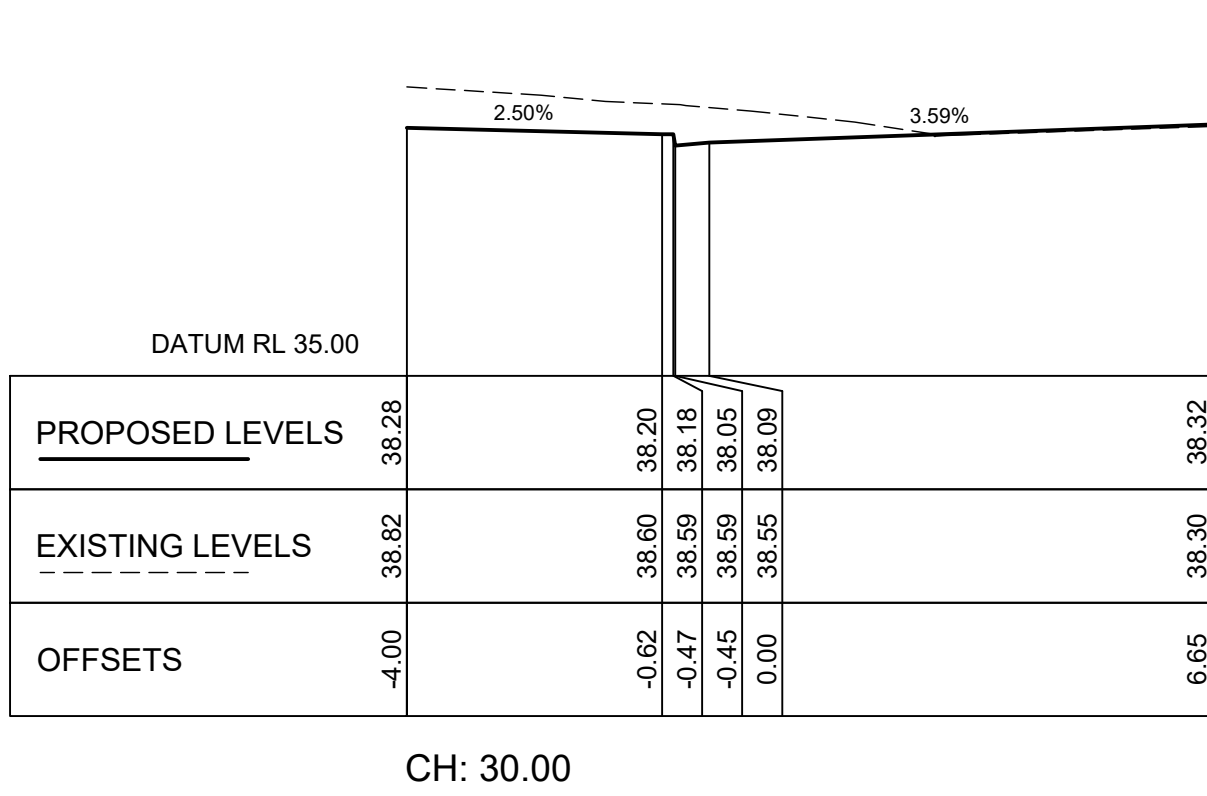




DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.	NORTH POINT	NOTES 1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST. 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE. 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.	ISSUE	AMENDMENT	DATE	ARCHITECT	PROJECT	CONSULTANT	TITLE CIVIL WORKS TYPICAL SECTIONS				
			A B C	ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020 04.06.2020 01.10.2020	marchesepartners Masterplanning architecture interior design engineering passionate about... happiness  280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW	LP CONSULTING AUSTRALIA PTY LTD A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000 P: GPO Box 2662 Sydney NSW 2001 E: info@lp-consulting.com.au T: +61 (2) 9223 4444 W: www.lp-consulting.com.au	SCALE 1:50 @ A1		DRAWN AT	DESIGNED AT	CHECKED LP	APPROVED LP
THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD	SHEET SIZE: A1					CLIENT			DATE Sep 29, 2020	DRAWING No. DA-C-300	ISSUE C	JOB No. 2017-1138	DEVELOPMENT APPLICATION

Kreis: 2017138_X-TITLEBLK-A1
 Login Name: User
 Plot Date: 29.09.2020@15:42:34
 Cad File: Z:\Projects\20171138\DRAWINGS\DRAWINGS - WORKING\CIVIL\20171138_DA-C-300.dwg

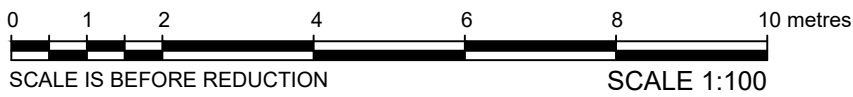
X:\446_2017\1138_X-TITLE\BKA1
Rev Date: 30.09.2020@10:08:53
Cust File: Z:\Projects\2017\1138\DRAWINGS\DRAWINGS - WORKING\CS\2017\1138_DA-C-301-302.dwg
User: Login Name: User



AUXILIARY LANE CROSS SECTIONS

SCALE: 1:100

1
C-101



DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD

NORTH POINT

SHEET SIZE: A1

- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

A	ISSUE FOR DEVELOPMENT APPLICATION
B	ISSUE FOR DEVELOPMENT APPLICATION
C	ISSUE FOR DEVELOPMENT APPLICATION

DATE

15.05.2020
04.06.2020
01.10.2020



PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

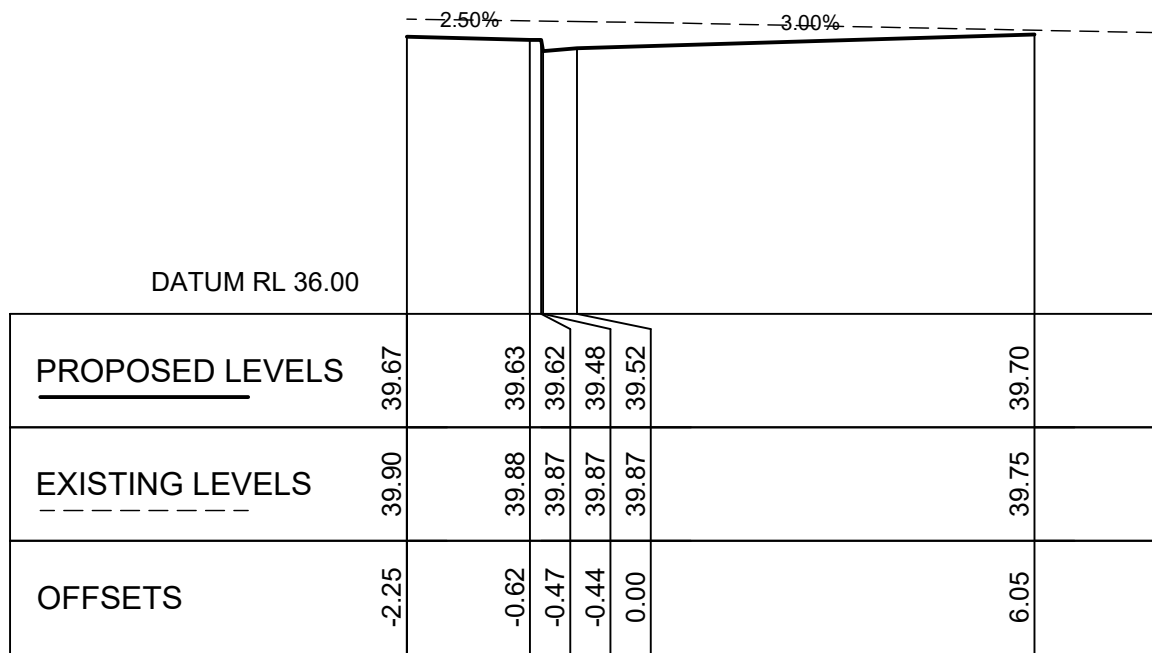
T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

CIVIL WORKS CROSS SECTIONS

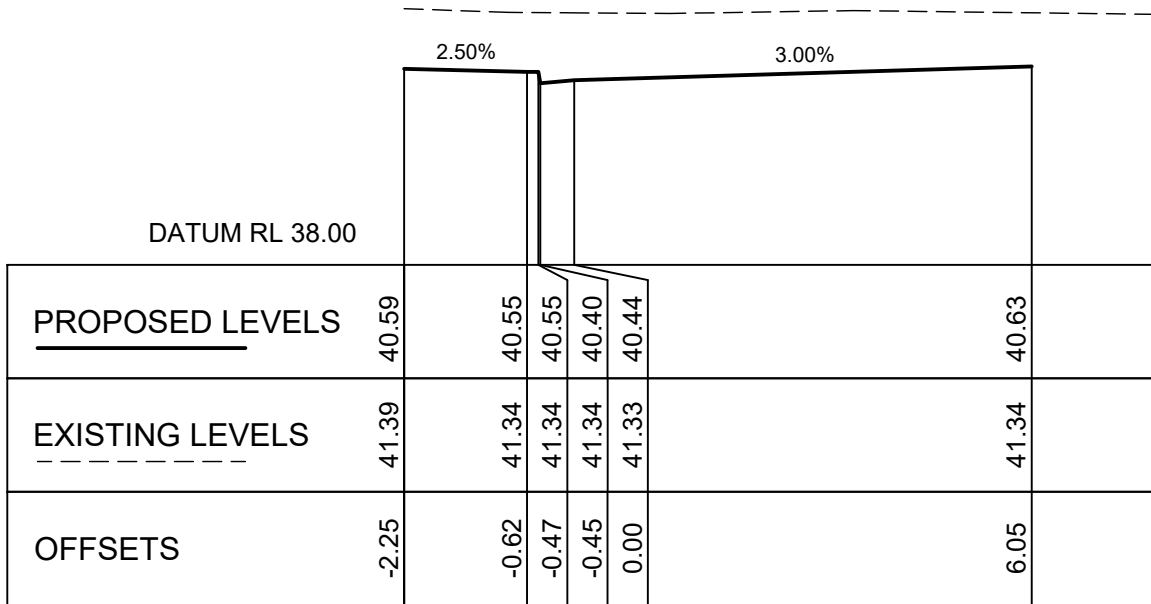
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:100 @ A1	AT	AT	LP	
DATE	DRAWING No.	ISSUE		
Sep 30, 2020	DA-C-301			
JOB No.	2017-1138			

DEVELOPMENT APPLICATION

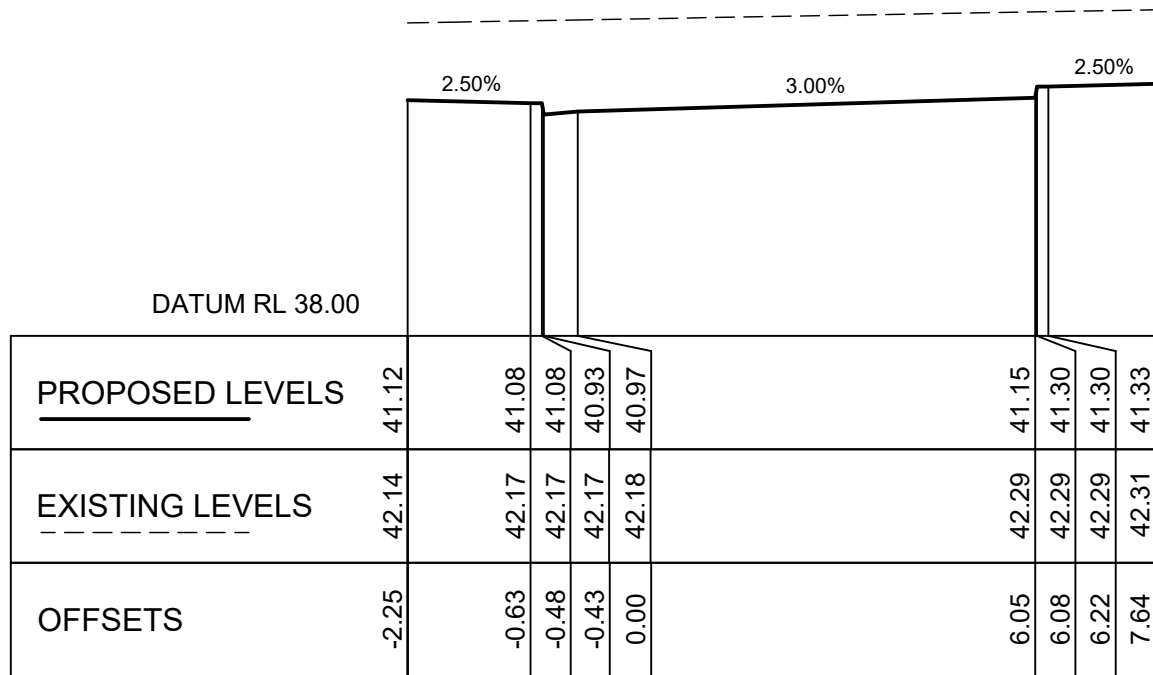
X:\446-2017\1138_X-1\TILEBANK41
Rev Date: 30.09.2020@10:05:51
Cust File: Z:\Projects\2017\1138\DRAWINGS\DRAWINGS - WORKING\2017\1138_DA-C-301-302.dwg
User: Login Name: User



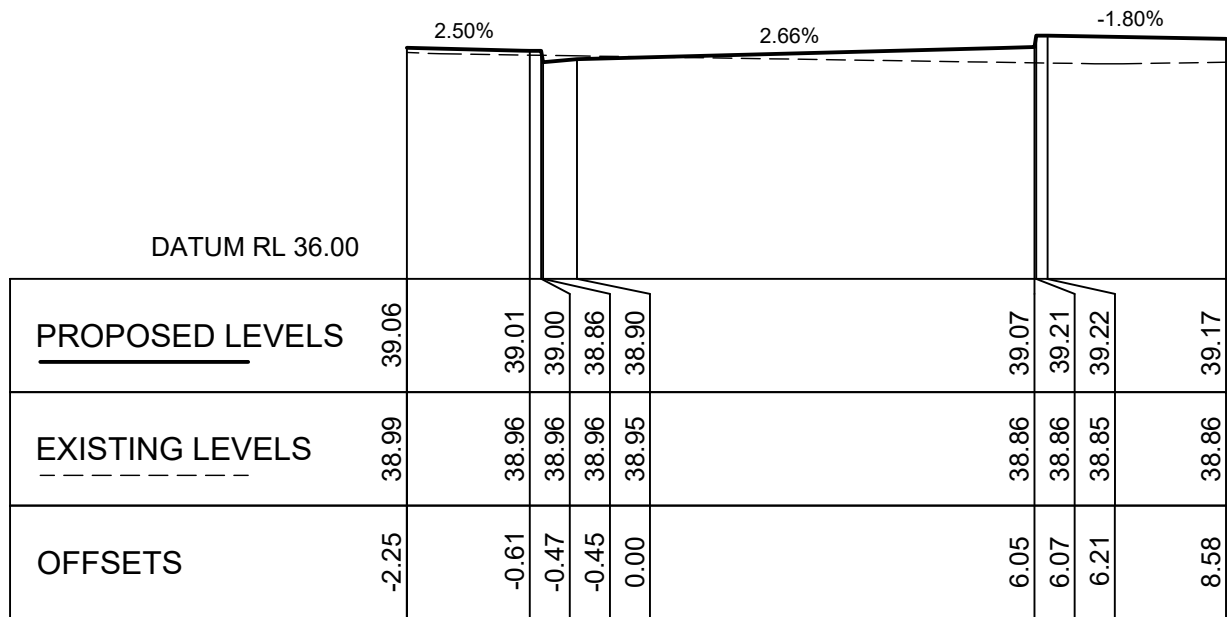
CH: 31.41



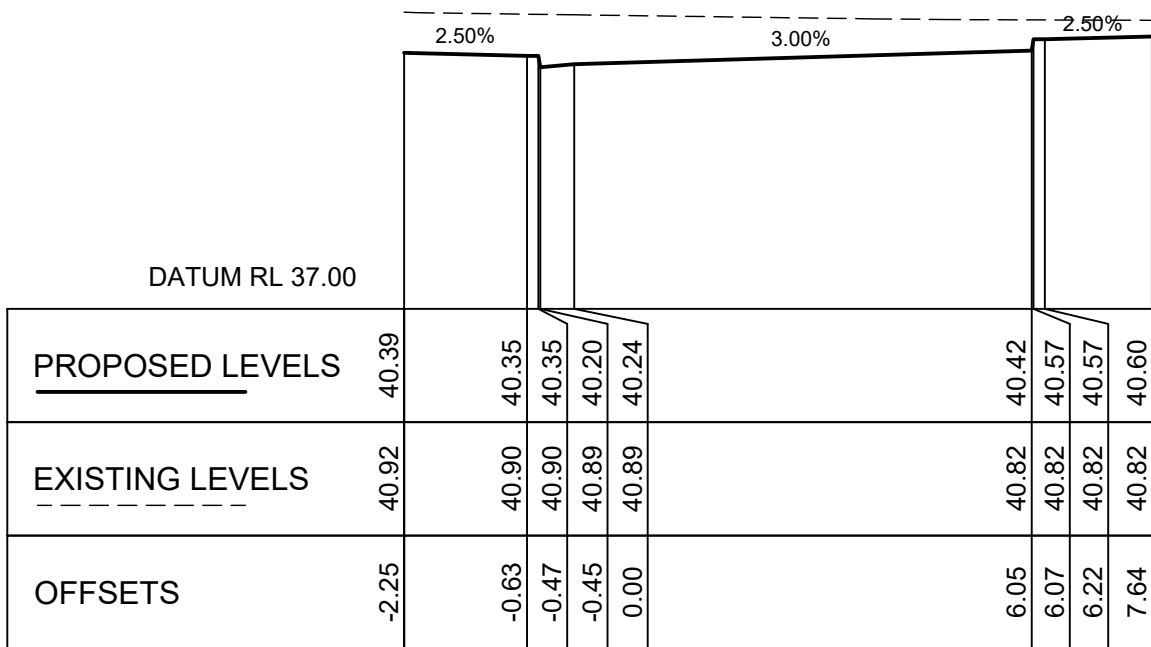
CH: 55.52



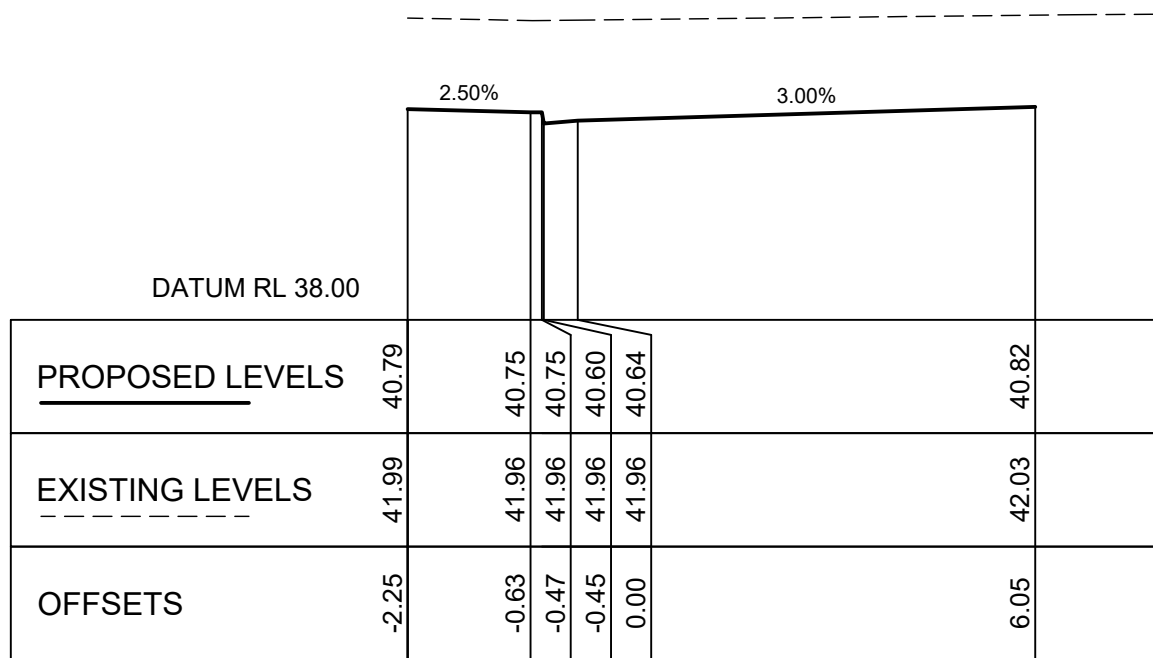
CH: 80.10



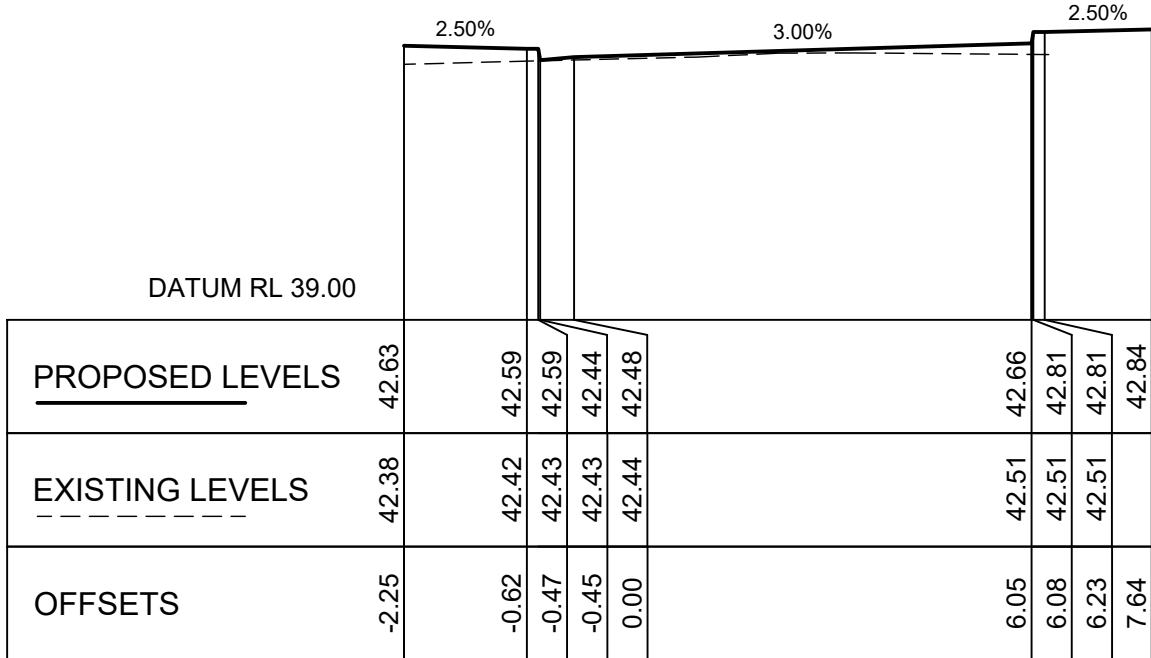
CH: 20.41



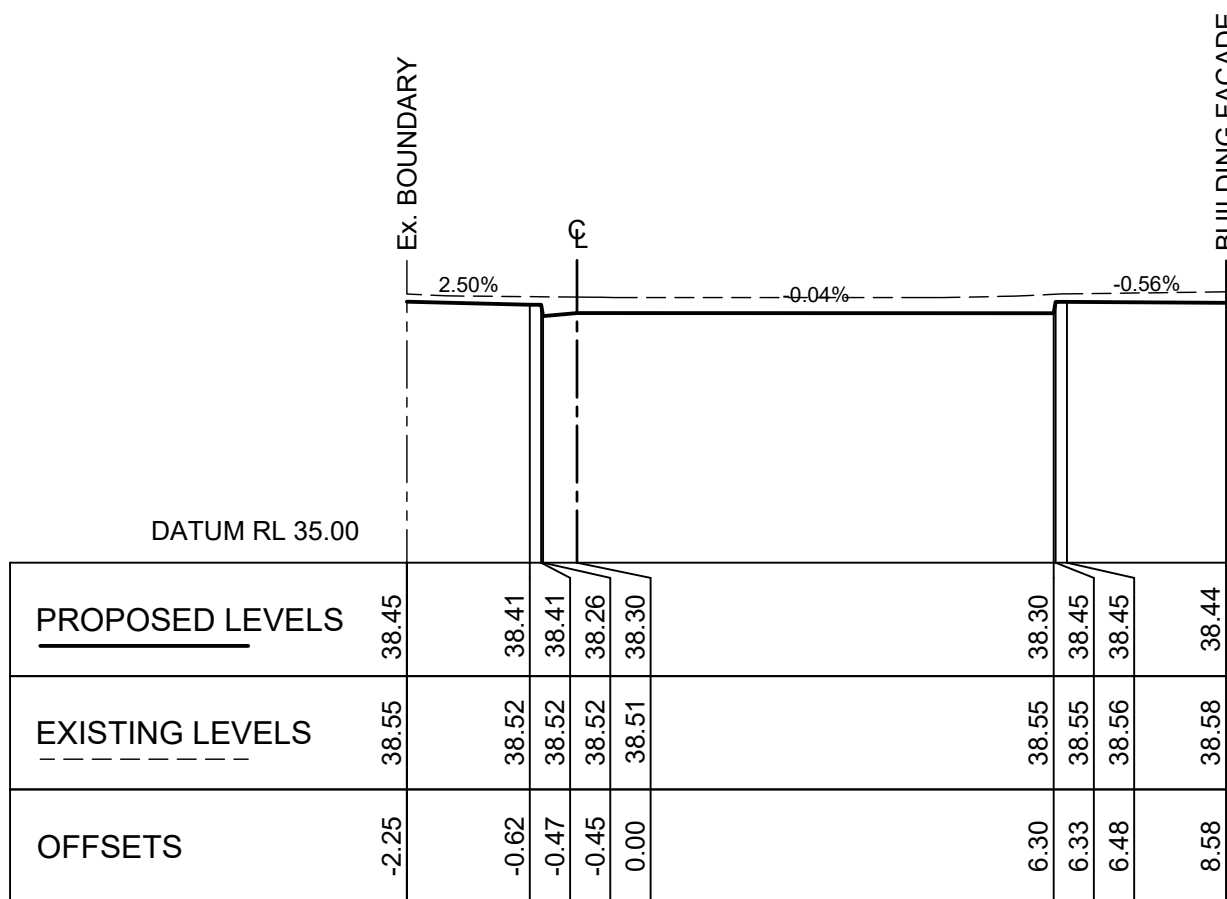
CH: 48.52



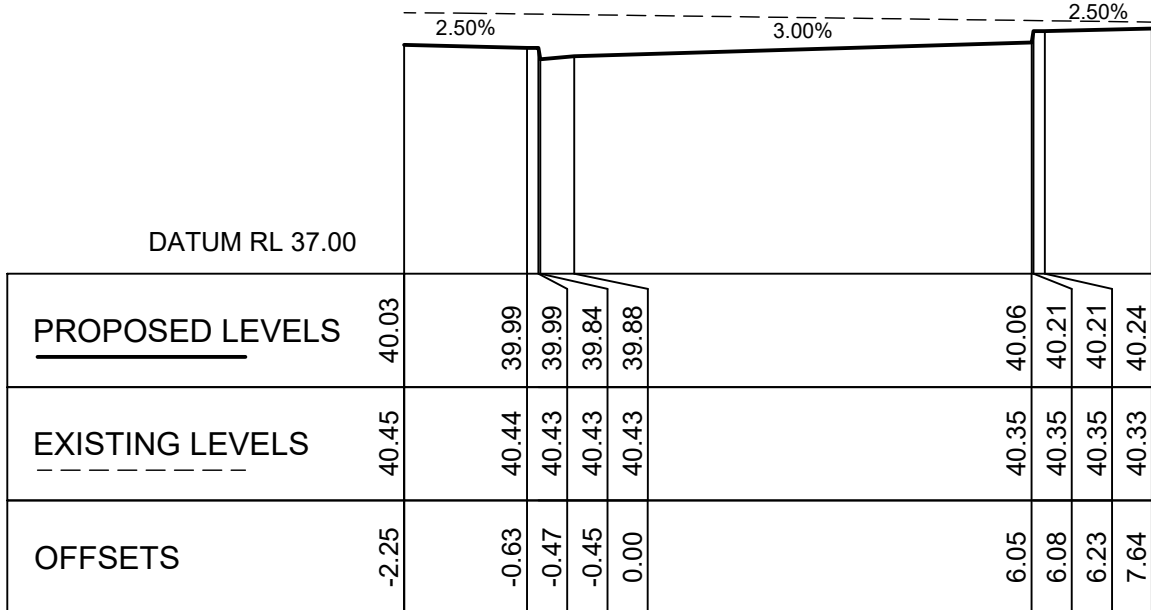
CH: 70.00



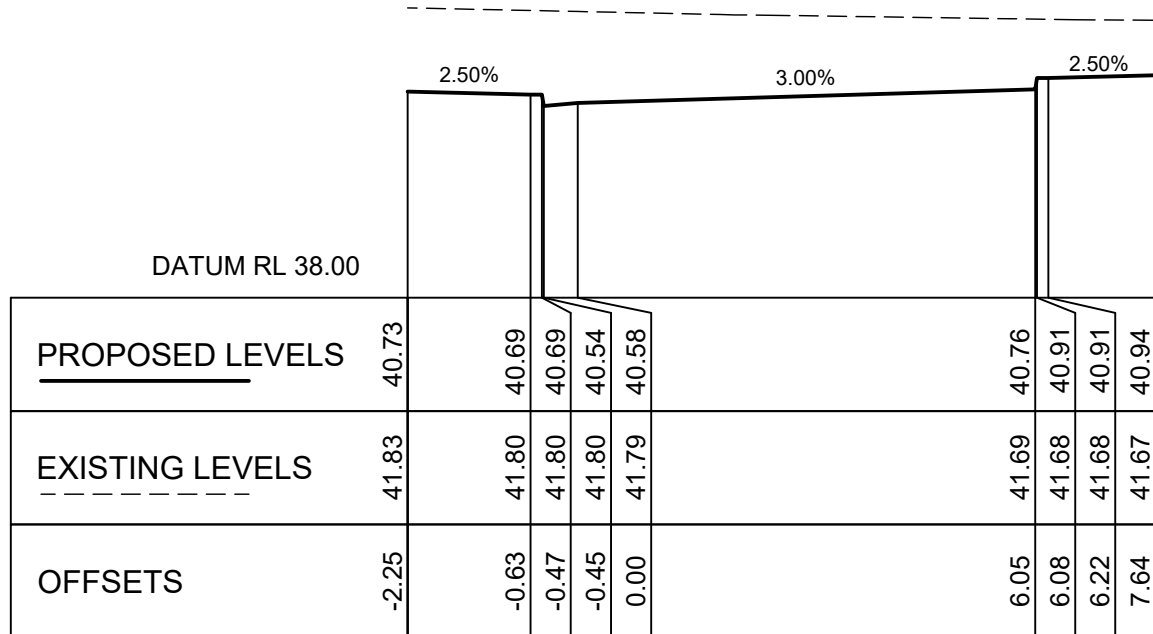
CH: 97.34



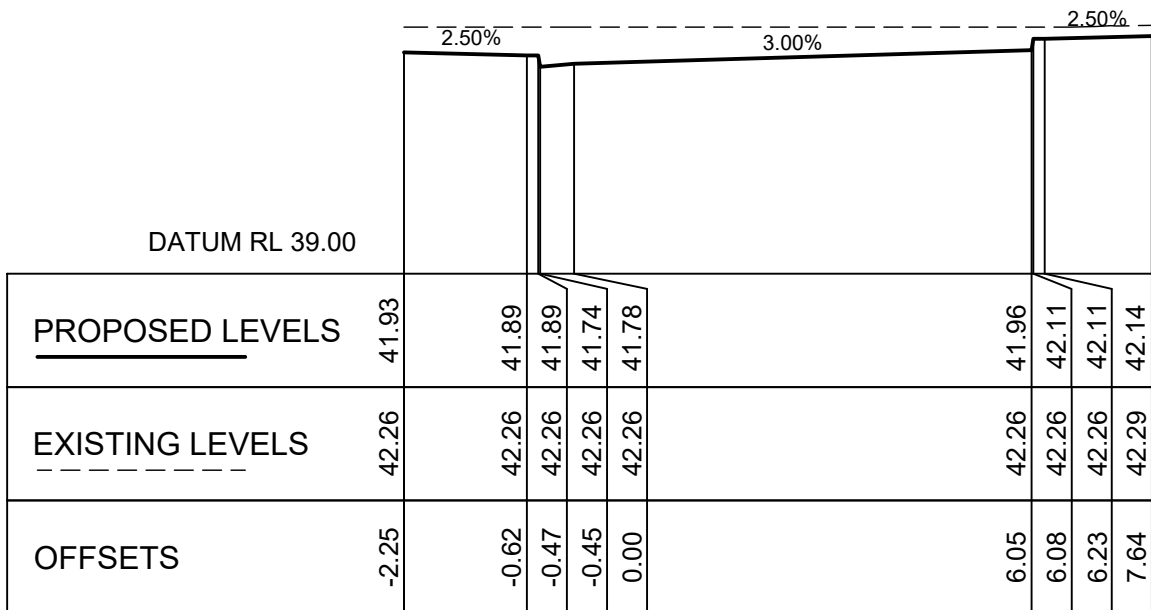
CH: 13.42



CH: 40.00



CH: 65.65



CH: 88.36

SITE LANE CROSS SECTIONS

SCALE: 1:100

2
C-101



DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD

NORTH POINT

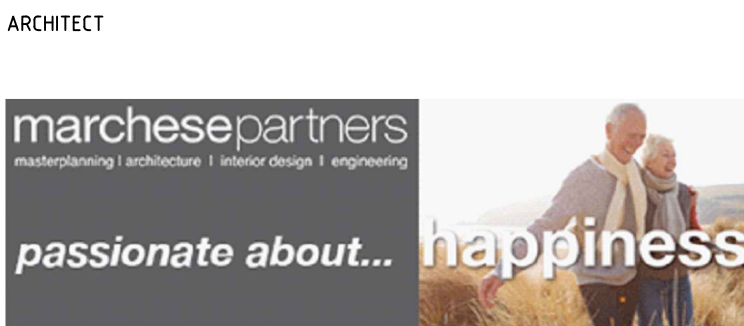
SHEET SIZE: A1

- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
 - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
 - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE
A
B
C

AMENDMENT
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION

DATE
15.05.2020
04.06.2020
01.10.2020



PROJECT
280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW



CONSULTANT



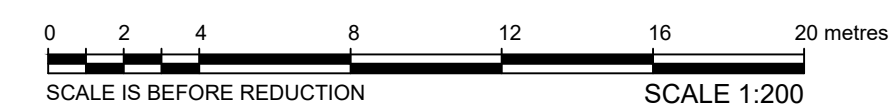
A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE
CIVIL WORKS
CROSS SECTIONS

SCALE 1:100 @ A1	DRAWN AT	DESIGNED AT	CHECKED LP	APPROVED
DATE Sep 30, 2020	DRAWING No. DA-C-302		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			

1. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.
2. CONTRACTOR TO RELOCATE ALL EXISTING SERVICES INCLUDING, BUT NOT LIMITED TO, WATER, HYDRANT, GAS, SEWER, ELECTRICAL, RMS TRAFFIC AND COMMUNICATIONS.
3. REFER DWG. C-605 FOR CANTERBURY BANKSTOWN CITY COUNCIL STANDARD DRAWINGS.



TITLE				
CIVIL WORKS STORMWATER DRAINAGE PLAN				
SCALE 1:200 @ A1	DRAWN AT	DESIGNED AT	CHECKED LP	APPROVED LP
DATE Oct 02, 2020	DRAWING No. DA-C-501		ISSUE C	
JOB No. 2017-1138	DEVELOPMENT APPLICATION			

X:\46- 2017\1138 - 2\TILEBANK41
Rev Date: 28/08/2020@15:59:48
Cust File: Z:\Project\2017\1138\DRAWINGS\DRAWINGS - WORKING\DWG\2017\1138 - DA-C-601-005.dwg

DO NOT SCALE FROM DRAWINGS,
CHECK & VERIFY ALL
DIMENSIONS & LEVELS BEFORE
COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE
COPIED IN PART OR WHOLE
WITHOUT WRITTEN PERMISSION
FROM LP CONSULTING
AUSTRALIA PTY LTD

NORTH POINT

SHEET SIZE: **A1**

NOTES

1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.

2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.

3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

A
B
C

AMENDMENT

ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION
ISSUE FOR DEVELOPMENT APPLICATION

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT

marchese partners
masterplanning | architecture | interior design | engineering

passionate about... happiness

PROJECT

280-292 Lakemba St & 62 - 70
King G.Rd wiley Park,NSW

CLIENT

AlliedBuilding

CONSULTANT

LP CONSULTING
AUSTRALIA PTY LTD

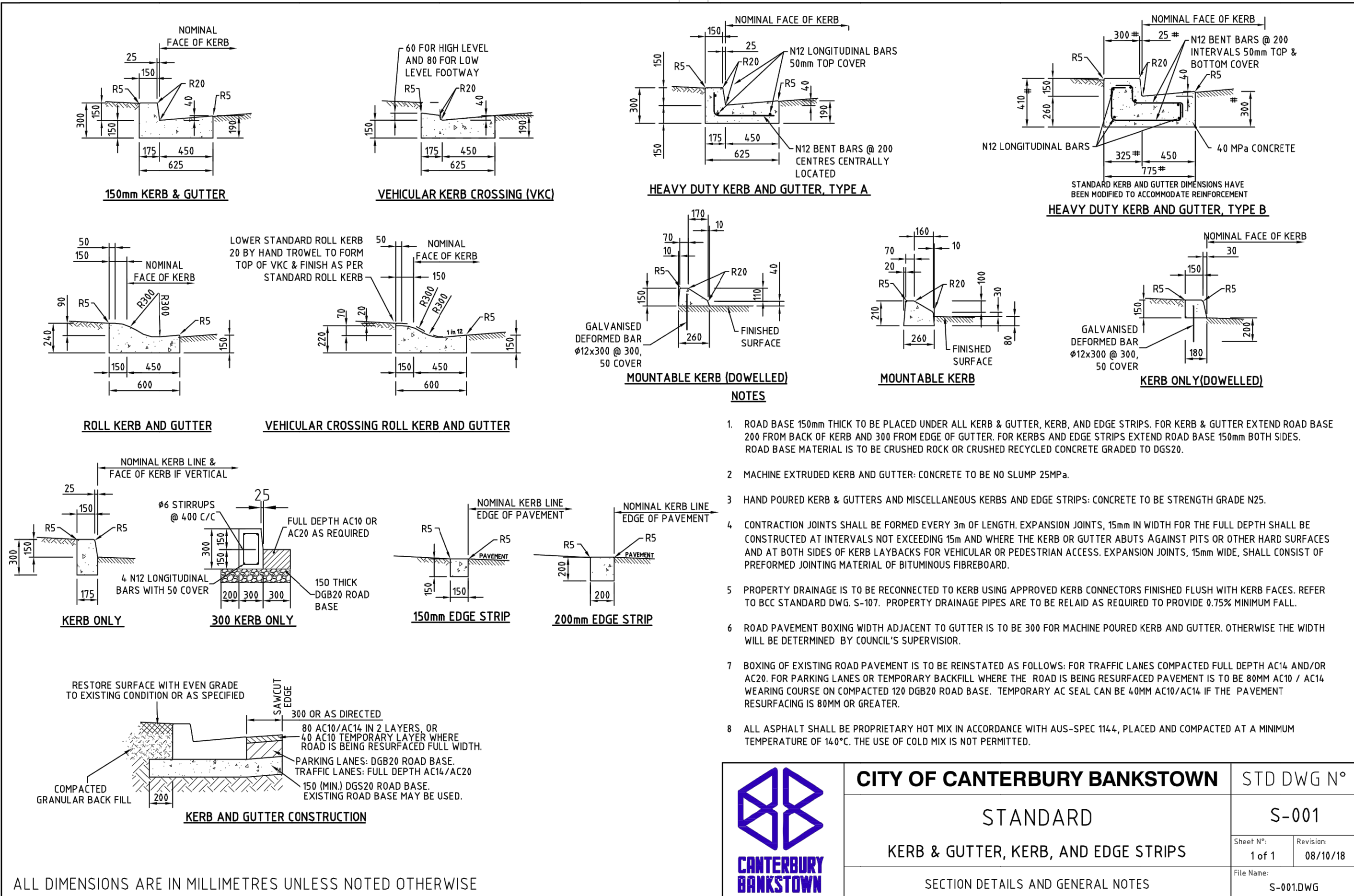
A: Suite 12.01, Level 12, 300 George Street
Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

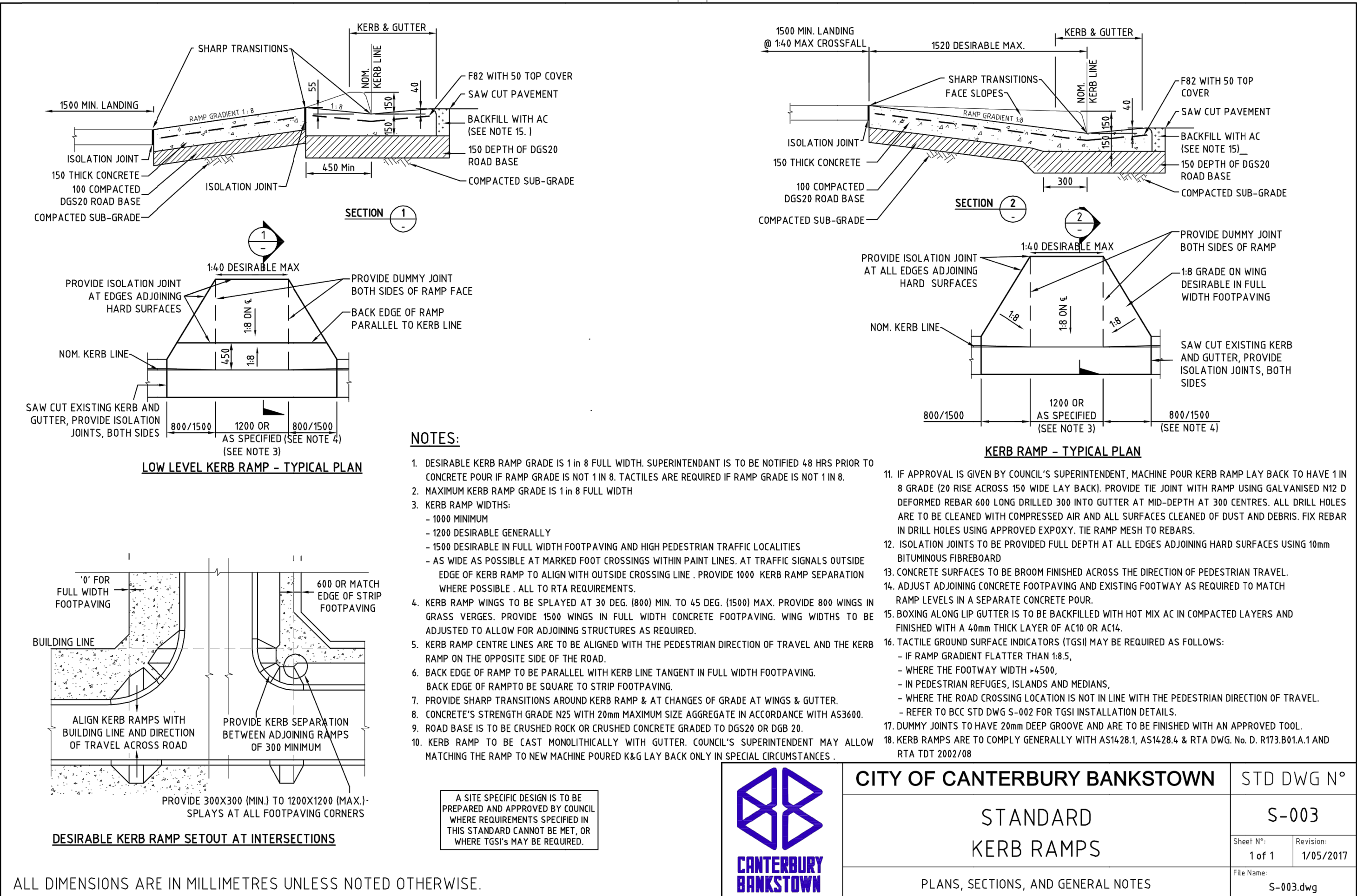
TITLE

CIVIL WORKS
DETAILS
SHEET 1

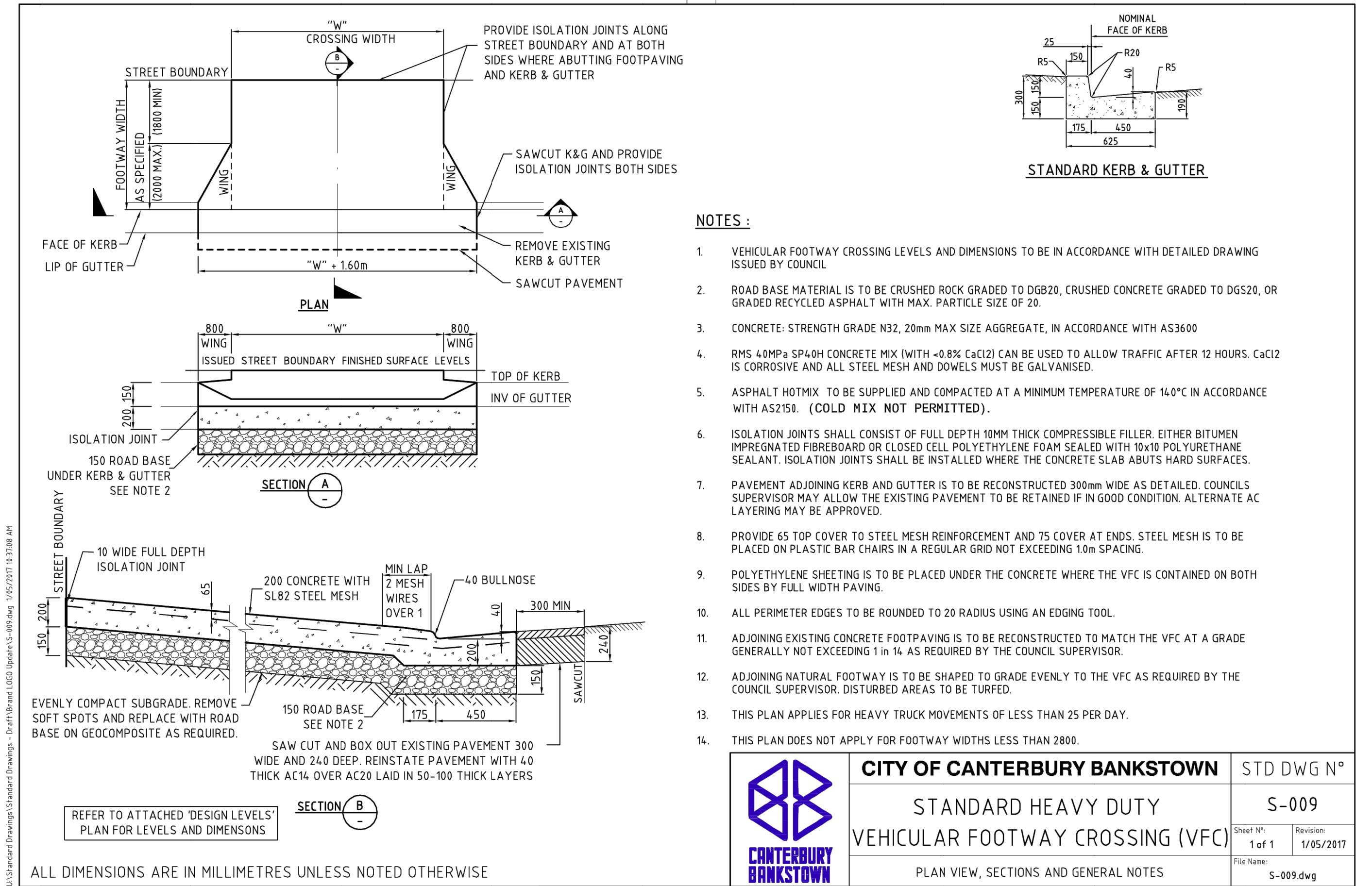
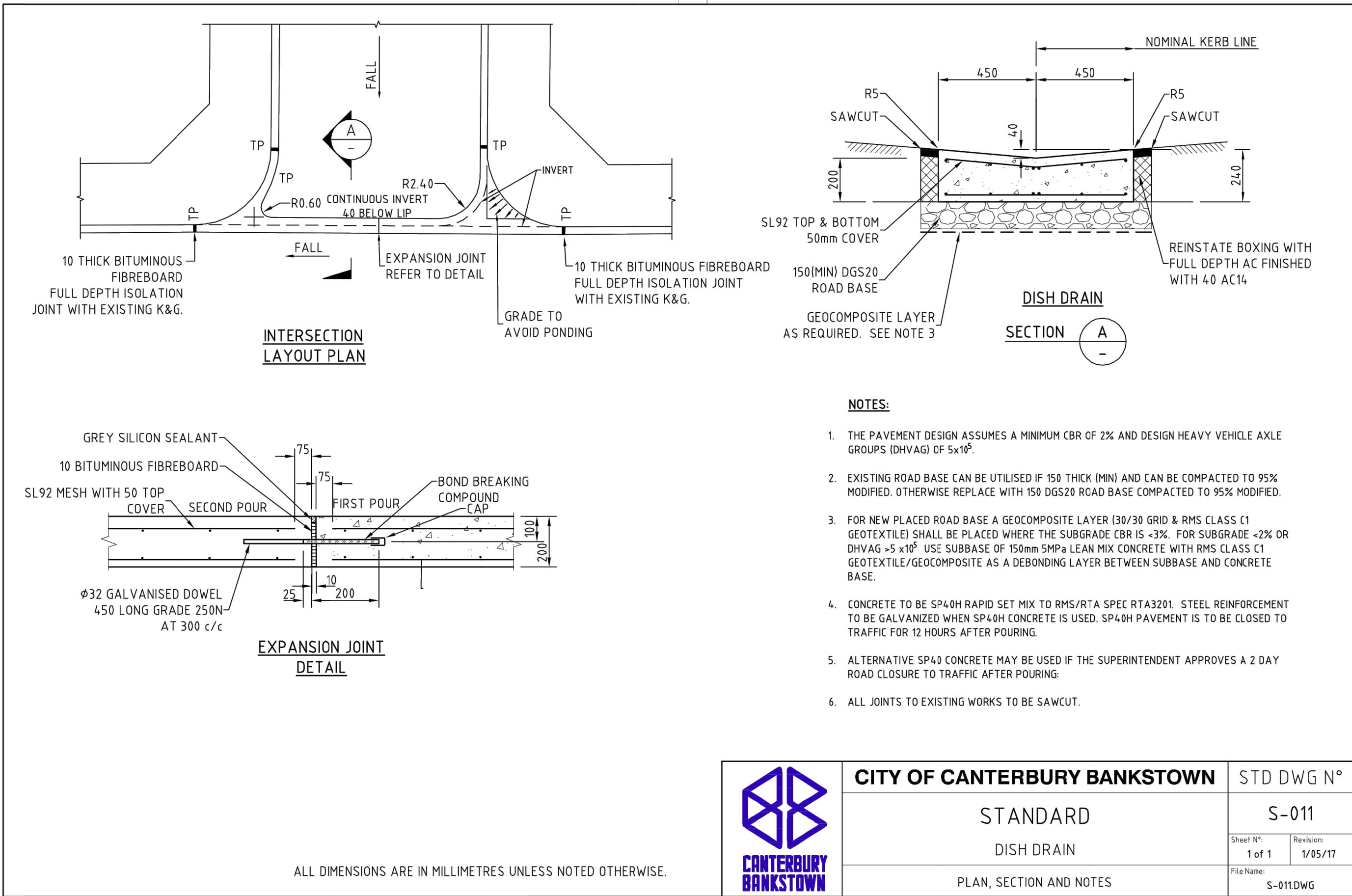
SCALE	NTS	DRAWN	AT	DESIGNED	AT	CHECKED	LP	APPROVED	LP
DATE	Sep 29, 2020	DRAWING No.	DA-C-601			C			
JOB No.	2017-1138	DEVELOPMENT APPLICATION							



U:\Standard Drawings\Standard Drawings - Draft\BANKSTOWN\2017\1138 - DA-C-601-005.dwg 1/05/2017 08:37:08 AM



U:\Standard Drawings\Standard Drawings - Draft\Brand LOGO update\25-05-2017\AS-011.DWG 25 May, 2017 11:30 am

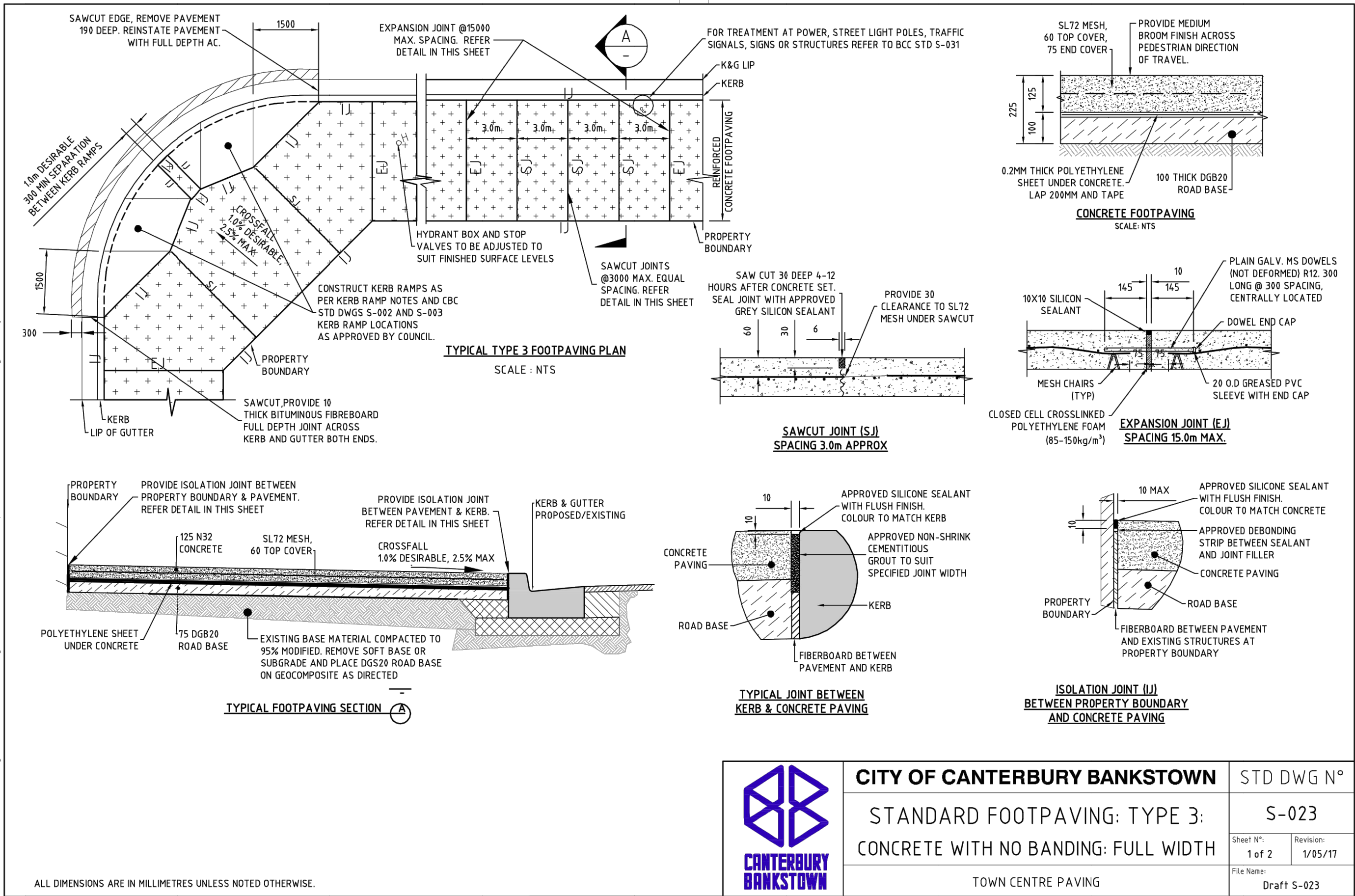


DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.	NORTH POINT	NOTES 1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST. 2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE. 3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.	ISSUE	AMENDMENT	DATE	ARCHITECT	PROJECT	CONSULTANT	TITLE CIVIL WORKS DETAILS SHEET 2
			A B C	ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION ISSUE FOR DEVELOPMENT APPLICATION	15.05.2020 04.06.2020 01.10.2020	marchese partners landscape planning architecture interior design engineering passionate about... 280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW	LP CONSULTING AUSTRALIA PTY LTD A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000 P: GPO Box 2662 Sydney NSW 2001 E: info@lp-consulting.com.au T: +61 (2) 9223 4444 W: www.lp-consulting.com.au		
THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD	SHEET SIZE: A1					CLIENT			SCALE NTS DATE Sep 29, 2020 JOB No. 2017-1138 DRAWN AT DESIGNED AT DRAWING No. DA-C-602 ISSUE C DEVELOPMENT APPLICATION

X:\46-2017\1138 - 2\TILEWORK\41
P:\01 Date: 23.09.2020@10:02:13 Logon Name: User
C:\F:\Z:\Project\2017\1138\DRAWINGS\DRAWINGS - WORKING\DWG\2017\1138 - DA-C-601-005.dwg

U:\Standard Drawings\Standard Drawings - Draft\Brand LOGO update\25-05-2017\AS-023.dwg 25 May 2017 11:35 am

U:\Standard Drawings\Standard Drawings - Draft\Brand LOGO update\25-05-2017\AS-023.dwg 25 May 2017 11:35 am



GENERAL

- A SITE SPECIFIC DESIGN IS TO BE PREPARED AND APPROVED BY COUNCIL PRIOR TO CONSTRUCTION. THE PLAN IS TO DETAIL KERB RAMP SETOUT, JOINT DETAILS AND TREATMENT TO EXISTING STRUCTURES.
- TRANSVERSE PAVEMENT BEDS TO BE PROVIDED AT EVEN SPACING OF ABOUT 12m MAX. OR AS SPECIFIED BY COUNCIL.
- TREE PLANTING BEDS ARE TO BE PROVIDED FOR ALL EXISTING TREES TO BE RETAINED. NEW TREE PLANTING BEDS ARE TO BE PROVIDED AT 8.0m TO 10.0m SPACING OR AT LOCATIONS APPROVED BY COUNCIL. ALL TREE BEDS ARE TO BE CONSTRUCTED TO DETAILS ON COUNCIL STANDARD.

SERVICES

- A FIELD CHECK FOR ALL EXISTING CABLES/ CONDUITS SHALL BE CARRIED OUT PRIOR TO COMMENCEMENT OF ANY WORK WITH A QUALIFIED CABLE LOCATOR
- ALL UTILITY FEATURES, e.g. STOP VALVE COVERS, HYDRANTS, TELECOMMUNICATION PITS, SHALL BE ADJUSTED TO SUIT FINISHED SURFACE
- TELECOMMUNICATION PIT COVERS SHALL BE TELSTRA APPROVED INFILL TYPE COVERS UNLESS NOTED OTHERWISE. INFILL PAVERS TO BE USED ACROSS BANDING, UTILITY & SERVICES PITS COVERS.
- APPROVED UTILITY ACCREDITED SUBCONTRACTORS SHALL BE USED FOR ADJUSTING ANY SERVICE.
- FOR SHALLOW STORMWATER PIPES AND LOCAL TELECOMMUNICATION CABLES WHERE APPROVED BY THE SUPERINTENDENT THE CONCRETE BASE THICKNESS MAY BE REDUCED BUT NOT LESS THAN 75mm THICK OVER A MAXIMUM WIDTH OF 300mm.

TGSI AND KERB RAMP NOTES:

- KR1. WHERE REQUIRED TACTILE GROUND SURFACE INDICATORS (TGSI) SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLAN AND COMPLYING WITH AS/NZS1428.4 AND CBC STANDARD DRAWING S-002.
- KR2. QUALITY CONTROL SAMPLES (MIN. 3 OF EACH UNIT) OF BOTH WARNING AND DIRECTIONAL TGSI TO BE USED SHALL BE SUBMITTED TO COUNCIL FOR APPROVAL.
- KR3. TGSI SHALL BE TILES OF SIZE, TYPE AND COLOUR AS SPECIFIED BY COUNCIL. TGSI ARE TO HAVE LUMINANCE CONTRAST OF MORE THAN 30% TO THE SURROUNDING SURFACE.
- KR4. KERB RAMP TO BE CONSTRUCTED IN ACCORDANCE WITH CBC STD DWG S-003. GUTTER, KERB, RAMP, AND WINGS OF THE KERB RAMP SHALL BE CAST MONOLITHICALLY IN PLAIN GREY CONCRETE TO MATCH ADJOINING KERB & GUTTER.
- KR5. KERB RAMP TO BE ALIGNED WITH THE DESIRED DIRECTION OF PEDESTRIAN TRAVEL, USUALLY PARALLEL WITH THE PROPERTY LINE, SUBJECT TO SITE SPECIFIC CONSTRAINTS.
- KR6. KERB RAMP TO BE AT GRADE 18 ALONG THE CENTRELINE. THE SUPERINTENDENT MUST BE NOTIFIED 48 HOURS PRIOR TO CONCRETE POUR IF GRADE 18 CANNOT BE ACHIEVED.
- KR7. CONCRETE TO HAVE STRENGTH GRADE N25 IN ACCORDANCE WITH AS1379.
- KR8. ROAD BASE WHERE REQUIRED UNDER THE KERB RAMP AND GUTTER TO BE CRUSHED ROCK OR CRUSHED RECYCLED CONCRETE GRADED TO DGB20, COMPACTION TO BE 98% MODIFIED.
- KR9. EXISTING GUTTER TO BE REMOVED AND KERB RAMP TO BE CAST MONOLITHICALLY WITH GUTTER.
- KR10. ROAD PAVEMENT 300mm WIDE ADJOINING NEW GUTTER TO BE REMOVED TO 190mm DEPTH. PAVEMENT IS TO BE REINSTATE USING FULL DEPTH AC. WEARING SURFACE TO BE AC10 40mm THICK. BASE AC TO BE AC20 IN 2 LAYERS, OR APPROVED EQUIVALENT.
- KR11. PLAIN CONCRETE SURFACES ARE TO BE BROOM FINISHED ACROSS THE DIRECTION OF PEDESTRIAN TRAVEL.

FOOTPAVING TREATMENT FOR STRUCTURES

FTS1. FOOTPAVING TREATMENT FOR FIXTURES AS SPECIFIED BY COUNCIL. AND AS DETAILED ON CBC STANDARD DRAWING S-031.

SUB SOIL DRAINAGE

SSD1. SUBSOIL DRAINAGE SHALL BE PROVIDED IN ACCORDANCE WITH CBC STANDARD DRAWING S-116. SUBSOIL DRAINAGE IS TO BE CONNECTED TO EXISTING STORMWATER DRAINAGE SYSTEM. CLEANOUTS ARE TO BE PROVIDED AT THE COMMENCEMENT OF THE SUBSOIL DRAINAGE AND EVERY 60m OR AS DIRECTED BY THE SUPERINTENDENT.

SSD2. SUBSOIL DRAINAGE PIPE SHALL BE Ø100mm TYPE 1, CLASS 1000 SLOTTED PLASTIC CIRCULAR PIPE AND SHALL BE FITTED WITH A FILTER SOCK. BOTH THE SUBSOIL DRAINAGE PIPE AND THE FILTER SOCK SHALL COMPLY WITH AUS-SPEC 2

SSD3. SUBSOIL DRAINAGE TO BE PLACED IN ACCORDANCE WITH AUS-SPEC 2 WITH FILTER MATERIAL TO BE TYPE 'A' USING 5mm CRUSHED RECYCLED CONCRETE. GEOTEXTILE TRENCH LINER (BIDUM A14 OR APPROVED EQUAL) TO BE PROVIDED AROUND TYPE A FILTER MATERIAL. PROVIDE LAPS OF 500mm AT FABRIC JOINTS

KERB AND GUTTER

K1. NEW KERB AND GUTTER SHALL BE IN ACCORDANCE WITH CBC STD DWG S-001.

BUS STOPS

B51. FOR BUS STOPS REFER CBC STANDARD DWGS S-017(A), S-018(A) OR S-019(A).

TRAFFIC SIGNAGE

TS1. ALL Ø60 OD TRAFFIC SIGN POSTS REQUIRING INSTALLATION OR RELOCATION WITHIN AREAS OF CONCRETE OR PAVERS SHALL BE FIXED VERTICALLY USING AN AUTOMATIC POST SECURING DEVICE EQUAL TO 'KDC SYSTEMS' 'POST LOCK SYSTEM'. UNLESS NOTED OTHERWISE, THESE DEVICES SHALL BE INSTALLED USING A STANDARD 350mm UNIT IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THESE DEVICES CAN BE OBTAINED FROM EITHER, GRIBBLE & BRENNAN PTY. LTD, 8 ROWOOD RD, PROSPECT, 2148 PH: 9688 3255 OR HVS SERVICES, 31 WARREN AV, BANKSTOWN, PH: 9792 4799, FAX 9790 6799

TS2. ALL TRAFFIC SIGN POSTS TO BE LOCATED CLEAR OF BANDING PAVERS.

TS3. INSTALL SIGN POSTS AS PER CBC STD DWG S-351

TS4. EXISTING SIGNS OF A CONFLICTING NATURE SHALL BE COVERED TO COUNCILS SATISFACTION DURING THE CONSTRUCTION PERIOD

STREET TREE PLANTING

STP1. NEW TREE PLANTING AS SPECIFIED BY COUNCIL. CBC STANDARD DRAWINGS S-207 AND S-207A APPLY. EXISTING TREES TO BE RETAINED AND PROTECTED UNLESS OTHERWISE SPECIFIED BY COUNCIL. CBC STANDARD DRAWINGS S-209 AND S-210 APPLY.

CONCRETE PAVEMENT:

C1. STANDARD: 100mm THICK, SL72 MESH, 40 TOP COVER VEHICLE CROSSINGS: 200mm THICK, SL82 MESH, 70 TOP COVER COLOUR: NATURAL FINISH: MEDIUM BROOM TO EDGE. BROOM ACROSS DIRECTION OF PEDESTRIAN TRAVEL



CITY OF CANTERBURY BANKSTOWN

STANDARD FOOTPAVING: TYPE 3:

CONCRETE WITH NO BANDING: FULL WIDTH

TOWN CENTRE PAVING

STD DWG N°

S-023

Sheet N°

2 of 2

Revision

1/05/17

File Name

S-023.dwg

DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD

NORTH POINT

SHEET SIZE: A1

NOTES

- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
- CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
- CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE

- | | |
|---|-----------------------------------|
| A | ISSUE FOR DEVELOPMENT APPLICATION |
| B | ISSUE FOR DEVELOPMENT APPLICATION |
| C | ISSUE FOR DEVELOPMENT APPLICATION |

DATE

15.05.2020
04.06.2020
01.10.2020

ARCHITECT



PROJECT

280-292 Lakemba St & 62 - 70 King G.Rd wiley Park,NSW

CLIENT



CONSULTANT



A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000
P: GPO Box 2662 Sydney NSW 2001
E: info@lp-consulting.com.au

T: +61 (2) 9223 4444
W: www.lp-consulting.com.au

TITLE

CIVIL WORKS
DETAILS
SHEET 4

SCALE

NTS

DATE

Sep 29, 2020

2017-1138

DRAWN

AT

DESIGNED

AT

CHECKED

LP

APPROVED

LP

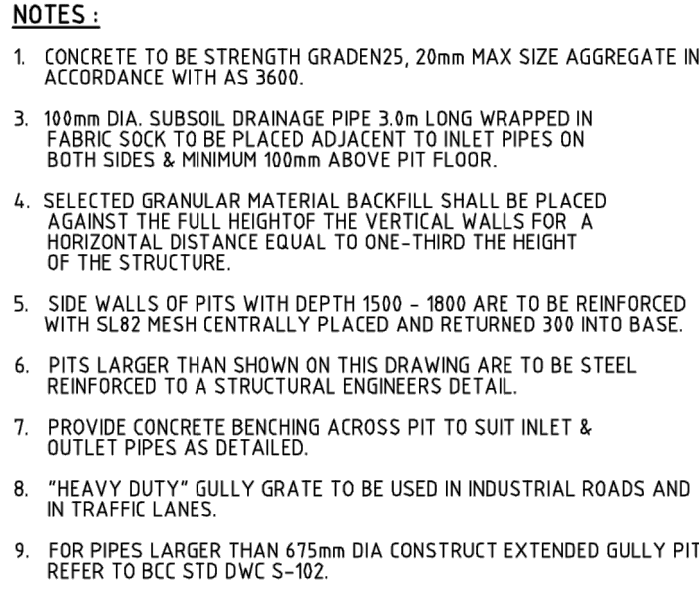
DRAWING No.

DA-C-604

ISSUE

C

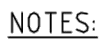
DEVELOPMENT APPLICATION



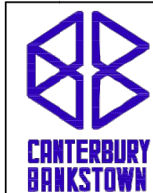
STANDARD GULLY PIT ON GRADE

PLAN VIEW, SECTIONS AND GENERAL NOTES

File Name: S-101.dwg



1. MINIMUM INTERNAL DIMENSIONS :
 - 600 x 600 FOR DEPTH LESS THAN 800.
 - 900 x 600 FOR DEPTH OF 800 TO 1800.
2. SIDE WALLS OF PITS WITH DEPTH 1500 TO 1800 ARE TO BE REINFORCED WITH SLR2 MESH CENTRALLY PLACED AND RETURNED 300 INTO BASE. IF DEPTH OF PIT EXCEEDS 1800, REFER TO STANDARD DRAWING S-104.
3. COMPRESSIVE STRENGTH OF CONCRETE (f_c) AT 28 DAYS TO BE MIN. 25MPa.
4. 100 DIA. SUBSOIL DRAINAGE PIPE 3000 LONG WRAPPED IN FABRIC SOCK TO BE PLACED ADJACENT TO INLET PIPES ON BOTH SIDES AND 100 MINIMUM ABOVE PIT FLOOR.
5. STEP INLET LEADER TO BE PROVIDED FOR PITS DEEPER THAN 1200 AND PLACED ON A WALL CLEAR OF FLOW WHERE POSSIBLE. REFER TO BCE S-122 FOR DETAILS.
6. SELECTED GRANULAR MATERIAL BACK FILL SHALL BE PLACED AGAINST THE FULL HEIGHT OF THE VERTICAL WALLS FOR A HORIZONTAL DISTANCE EQUAL TO ONE-THIRD THE HEIGHT OF THE STRUCTURE.
7. APPROVED PRE CAST CONCRETE PITS MAY BE USED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.
8. PROVIDE CONCRETE BENCHING ACROSS PIT TO SUIT INLET & OUTLET PIPES AS DETAILLED.
9. THE INLET PIPE OVERTOP IS TO BE NO HIGHER THAN THE OUTLET PIPE OVERTOP.
10. ALL DIMENSIONS ARE IN MILLIMETRES.



PLAN VIEW, SECTIONS AND GENERAL DETAILS

1 of 1

PLAN VIEW, SECTIONS AND GENERAL DETAILS

2017-1138	DEVELOPMENT APPLICATION
-----------	-------------------------