

# DA ISSUE

## STORMWATER DRAINAGE

| DWG NO.    | TITLE                                                                    |          |                                |
|------------|--------------------------------------------------------------------------|----------|--------------------------------|
| DA-STW-001 | STORMWATER DRAINAGE<br>COVER SHEET AND DRAWING LIST                      | DA-C-011 | COORDINATED SERVICES - SHEET 1 |
| DA-STW-002 | STORMWATER DRAINAGE<br>LEGEND AND ABBREVIATIONS                          | DA-C-012 | COORDINATED SERVICES - SHEET 2 |
| DA-STW-003 | STORMWATER DRAINAGE<br>GENERAL NOTES                                     | DA-C-101 | SITE WORKS AND GRADING PLAN    |
| DA-STW-004 | STORMWATER DRAINAGE<br>SURVEY PLAN                                       | DA-C-201 | LONGITUDINAL SECTION - SHEET 1 |
| DA-STW-005 | STORMWATER DRAINAGE<br>EROSION AND SEDIMENT CONTROL<br>PLAN              | DA-C-202 | LONGITUDINAL SECTION - SHEET 2 |
| DA-STW-006 | STORMWATER DRAINAGE<br>EROSION AND SEDIMENT CONTROL<br>DETAILS           | DA-C-203 | GROUND CLEARANCE CHECK         |
| DA-STW-007 | STORMWATER DRAINAGE<br>STORMWATER QUALITY<br>CATCHMENT PLAN-GROUND FLOOR | DA-C-211 | KERB RETURN DETAIL             |
| DA-STW-101 | STORMWATER DRAINAGE<br>BASEMENT 3                                        | DA-C-300 | TYPICAL SECTION                |
| DA-STW-102 | STORMWATER DRAINAGE<br>BASEMENT 2                                        | DA-C-301 | CROSS SECTIONS - SHEET 1       |
| DA-STW-103 | STORMWATER DRAINAGE<br>BASEMENT 1                                        | DA-C-302 | CROSS SECTIONS - SHEET 2       |
| DA-STW-104 | STORMWATER DRAINAGE<br>BASEMENT 00                                       | DA-C-303 | CROSS SECTIONS - SHEET 3       |
| DA-STW-105 | STORMWATER DRAINAGE<br>GROUND FLOOR                                      | DA-C-304 | CROSS SECTIONS - SHEET 4       |
| DA-STW-106 | STORMWATER DRAINAGE<br>LEVEL 1                                           | DA-C-501 | STORMWATER DRAINAGE PLAN       |
| DA-STW-107 | STORMWATER DRAINAGE<br>LEVEL 2                                           | DA-C-502 | PAVEMENT PLAN                  |
| DA-STW-108 | STORMWATER DRAINAGE<br>LEVEL 3                                           | DA-C-601 | DETAILS - SHEET 1              |
| DA-STW-109 | STORMWATER DRAINAGE<br>LEVEL 4                                           | DA-C-602 | DETAILS - SHEET 2              |
| DA-STW-110 | STORMWATER DRAINAGE<br>LEVEL 5                                           | DA-C-603 | DETAILS - SHEET 3              |
| DA-STW-111 | STORMWATER DRAINAGE<br>LEVEL 6                                           | DA-C-604 | DETAILS - SHEET 4              |
| DA-STW-112 | STORMWATER DRAINAGE<br>LEVEL 7                                           | DA-C-605 | DETAILS - SHEET 5              |
| DA-STW-113 | STORMWATER DRAINAGE<br>ROOF                                              | DA-C-606 | DETAILS - SHEET 5              |
| DA-STW-201 | STORMWATER DRAINAGE<br>OSD TANK GENERAL ARRANGEMENT<br>AND DETAILS       |          |                                |
| DA-STW-202 | NOT USED                                                                 |          |                                |
| DA-STW-203 | STORMWATER DRAINAGE<br>DETAIL SHEET                                      |          |                                |



| <p>DO NOT SCALE FROM DRAWINGS, CHECK &amp; VERIFY ALL DIMENSIONS &amp; LEVELS BEFORE COMMENCEMENT OF ANY WORK.</p> <p>THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD</p> | <p>NORTH POINT</p>  <p>SHEET SIZE: <b>A1</b></p> | <p>NOTES</p> <p>1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.</p> <p>2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.</p> <p>3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.</p> | <table><tr><th>ISSUE</th><th>AMENDMENT</th><th>DATE</th></tr><tr><td>A</td><td>DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION</td><td>07.05.2021</td></tr><tr><td>B</td><td>DEVELOPMENT APPLICATION ISSUE</td><td>21.05.2021</td></tr></table> | ISSUE      | AMENDMENT | DATE    | A  | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION | 07.05.2021 | B | DEVELOPMENT APPLICATION ISSUE | 21.05.2021 | <p>ARCHITECT</p>  | <p>PROJECT</p> <p>280-292 Lakemba Street &amp; 62-70 King Georges Road, Wiley Park, NSW 2195</p> | <p>CLIENT</p>  | <p>CONSULTANT</p>  <p>A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000<br/>P: GPO Box 2662 Sydney NSW 2001<br/>E: info@lp-consulting.com.au</p> <p>T: +61 (2) 9223 4444<br/>W: www.lp-consulting.com.au</p> | <p>TITLE</p> <p><b>STORMWATER DRAINAGE COVER SHEET AND DRAWING LIST</b></p> | <table><tr><th>SCALE</th><th>N.T.S @ A1</th><th>DRAWN</th><th>RM</th><th>DESIGNED</th><th>LP</th><th>CHECKED</th><th>LP</th><th>APPROVED</th></tr><tr><td>DATE</td><td>May 28, 2021</td><td colspan="2">DRAWING No.</td><td colspan="2">DA-STW-001</td><td colspan="2">ISSUE</td><td>B</td></tr><tr><td>JOB No.</td><td>2017-1138</td><td colspan="7">DEVELOPMENT APPLICATION</td></tr></table> | SCALE | N.T.S @ A1 | DRAWN | RM | DESIGNED | LP | CHECKED | LP | APPROVED | DATE | May 28, 2021 | DRAWING No. |  | DA-STW-001 |  | ISSUE |  | B | JOB No. | 2017-1138 | DEVELOPMENT APPLICATION |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|---------|----|--------------------------------------------------|------------|---|-------------------------------|------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------|-------|----|----------|----|---------|----|----------|------|--------------|-------------|--|------------|--|-------|--|---|---------|-----------|-------------------------|--|--|--|--|--|--|
| ISSUE                                                                                                                                                                                                                                       | AMENDMENT                                                                                                                           | DATE                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                  |            |           |         |    |                                                  |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |
| A                                                                                                                                                                                                                                           | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION                                                                                    | 07.05.2021                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                  |            |           |         |    |                                                  |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |
| B                                                                                                                                                                                                                                           | DEVELOPMENT APPLICATION ISSUE                                                                                                       | 21.05.2021                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                  |            |           |         |    |                                                  |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |
| SCALE                                                                                                                                                                                                                                       | N.T.S @ A1                                                                                                                          | DRAWN                                                                                                                                                                                                                                                                           | RM                                                                                                                                                                                                                                               | DESIGNED   | LP        | CHECKED | LP | APPROVED                                         |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |
| DATE                                                                                                                                                                                                                                        | May 28, 2021                                                                                                                        | DRAWING No.                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  | DA-STW-001 |           | ISSUE   |    | B                                                |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |
| JOB No.                                                                                                                                                                                                                                     | 2017-1138                                                                                                                           | DEVELOPMENT APPLICATION                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                  |            |           |         |    |                                                  |            |   |                               |            |                                                                                                        |                                                                                                  |                                                                                                     |                                                                                                                                                                                                                                                                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                 |       |            |       |    |          |    |         |    |          |      |              |             |  |            |  |       |  |   |         |           |                         |  |  |  |  |  |  |

LEGEND

LINETYPES

|  |                           |
|--|---------------------------|
|  | OVERFLOW                  |
|  | RAINWATER RE-USE          |
|  | SIPHONIC DRAINAGE         |
|  | SUBSOIL DRAINAGE          |
|  | SUBSOIL RISING MAIN       |
|  | SEWER DRAINAGE            |
|  | STORMWATER DRAINAGE       |
|  | STORMWATER RISING MAIN    |
|  | STORMWATER DRAINAGE       |
|  | FILTERED RAINWATER RE-USE |
|  | IRRIGATION                |
|  | RECYCLED COLD WATER       |
|  | ELECTRICAL WIRING         |
|  | ELECTRICAL CONDUIT        |

SERVICES & UTILITIES

|  |                                  |
|--|----------------------------------|
|  | EXISTING ELECTRICAL              |
|  | EXISTING GAS                     |
|  | EXISTING TELSTRA                 |
|  | EXISTING SEWER                   |
|  | EXISTING STORMWATER              |
|  | EXISTING WATER                   |
|  | EXISTING SERVICE TO BE ABANDONED |

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

EROSION & SEDIMENT SYMBOLS

|  |                                                         |
|--|---------------------------------------------------------|
|  | BARRIER FENCE                                           |
|  | SILT FENCE                                              |
|  | STABILISED CONSTRUCTION SITE<br>VEHICLE ENTRY/EXIT GRID |
|  | STRAW BALE SEDIMENT FILTER                              |

DRAWING INFORMATION SYMBOLS

0 1m 2m 4m 6m  
SCALE BAR 1:100

PIPEWORK SHOWN IN STRATA  
UNLESS NOTED OTHERWISE

PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE

SECTION No.  
DRAWING REFERENCE No.

DETAIL No.  
DRAWING REFERENCE No.

AMENDMENT REFERENCE

SYDNEY WATER LEGEND

|  |                                        |
|--|----------------------------------------|
|  | EXISTING SYDNEY WATER MAINTENANCE HOLE |
|  | NEW SEWER MH                           |
|  | MAINTENANCE SHAFT                      |
|  | DEVIATION                              |

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

HYDRAULIC SERVICES SYMBOLS

|  |                                             |
|--|---------------------------------------------|
|  | 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                         |

GENERAL ABBREVIATIONS

|        |                                  |
|--------|----------------------------------|
| AAV    | 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                    |
| BTFW   | BUCKET TRAP FLOOR WASTE          |
| BTH    | BATH                             |
| BWU    | BOILING WATER UNIT               |
| CAC    | CIRCULAR ACCESS CHAMBER          |
| CHVP   | CHAMBER VENT PIPE                |
| CTS    | CENTRES                          |
| CL     | 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                 |
| HOG    | HEAVY DUTY GRATE                 |
| HDPE   | HIGH DENSITY POLYETHYLENE        |
| H/L    | HIGH LEVEL                       |
| HP     | HIGH POINT                       |
| HT     | HOSE TAP                         |
| HW     | HOT WATER                        |
| HWU    | HOT WATER UNIT                   |
| ID     | 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                 |

GENERAL ABBREVIATIONS CONT.

|        |                                  |
|--------|----------------------------------|
| 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 |
| UW     | UTENSIL WASHING MACHINE          |
| VB     | VANITY BASIN / VACCUM BREAKER    |
| VERT   | VERTICAL                         |
| VP     | VENT PIPE                        |
| WC     | TOILET SUITE (WATER CLOSET)      |
| WST    | WASTE STACK                      |

CIVIL ABBREVIATIONS

|     |                                         |
|-----|-----------------------------------------|
| BWL | DRAINAGE LEVELS<br>BOTTOM WATER LEVEL   |
| IL  | INVERT LEVEL                            |
| OL  | OBVERT LEVEL                            |
| RL  | REDUCED LEVEL                           |
| SL  | SURFACE LEVEL                           |
| TWL | TOP WATER LEVEL                         |
| LD  | GRATES & COVERS<br>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 | PITS<br>DISCHARGE CONTROL PIT           |
| JP  | JUNCTION PIT                            |
| KEP | KERB ENTRY PIT                          |
| SWP | STORMWATER PIT                          |
| SS  | DRAINAGE LINES<br>SUBSOIL DRAINAGE      |
| STW | STORMWATER DRAIN                        |
| CO  | FEATURES<br>CLEAROUT                    |
| DP  | DOWN PIPE                               |
| FP  | FLUSHING POINT                          |
| IO  | INSPECTION OPENING                      |
| OF  | GUTTER OVERFLOW PIPE                    |
| RWO | RAINWATER OUTLET                        |
| DTU | DRAINAGE TURNUP                         |

CATCHMENT ABBREVIATIONS

|        |                         |
|--------|-------------------------|
| L/s    | LITRES PER SECOND       |
| m/s    | METRES PER SECOND       |
| CUMECs | CUBIC METRES PER SECOND |
| Q      | QUANTITY OF FLOW        |

DRAWING NOTES

- DRAWINGS ARE DIAGRAMMATIC ONLY. FOR DIMENSIONS AND CONSTRUCTION DETAILS OF BUILDING REFER ARCHITECTURAL DRAWINGS AND SITE.
- PIPEWORK SIZES ARE NOMINAL BORE FOR COPPER AND CAST IRON AND INTERNAL BORE FOR POLYMER BASED PIPEWORK. REFER SPECIFICATION FOR MATERIAL TYPE.
- 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

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  | AMENDMENT                                                                         | DATE                     | ARCHITECT                         |
|--------|-----------------------------------------------------------------------------------|--------------------------|-----------------------------------|
| A<br>B | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION<br>DEVELOPMENT APPLICATION ISSUE | 07.05.2021<br>21.05.2021 | <br>passionate about... happiness |

PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

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<br>STORMWATER DRAINAGE<br>LEGEND AND ABBREVIATIONS |                         |             |            |          |
|----------------------------------------------------------|-------------------------|-------------|------------|----------|
| SCALE N.T.S @ A1                                         | DRAWN RM                | DESIGNED LP | CHECKED LP | APPROVED |
| DATE May 18, 2021                                        | DRAWING No. DA-STW-002  |             | ISSUE B    |          |
| JOB No. 2017-1138                                        | DEVELOPMENT APPLICATION |             |            |          |

## GENERAL

- ## STORMWATER AND SUBSOIL DRAINAGE

## MATERIALS:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600, THE STANDARDS ASSOCIATION AUSTRALIA, STANDARDS CITED IN AS3600, THE DRAWINGS AND THE SPECIFICATION

- ### GENERAL EARTHWORKS, SITEWORKS & FILLING:

FILLING:

1. EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO RE-USE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED FROM SITE.

- 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:

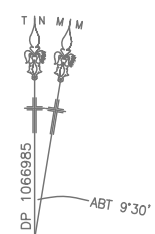
TEST EACH 300mm LAYER ABOVE PIPE CROWN.

TEST BASE &amp; 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.

Words: 20171130\_X-TITLEBLK-A1  
 Plot Date: 18.05.2021@10:11:27  
 Login Name: Mitchell  
 Cad File: Z:\Projects\20171113\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171130\_DA-STN-003.dwg

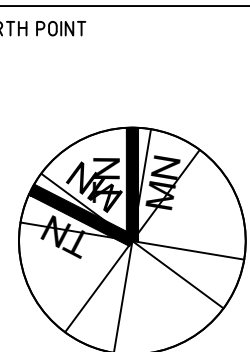


0 2.5 5 10 15 20 25 metres

SCALE IS BEFORE REDUCTION SCALE 1:250

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

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                                                                         |
| DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION<br>DEVELOPMENT APPLICATION ISSUE |

| DATE       |
|------------|
| 07.05.2021 |
| 21.05.2021 |

ARCHITECT



|         |
|---------|
| PROJECT |
|---------|

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

|        |  |
|--------|--|
| CLIENT |  |
|--------|--|



|            |
|------------|
| 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](mailto:info@lp-consulting.com.au)

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

| TITLE |
|-------|
|-------|

# STORMWATER DRAINAGE SURVEY PLAN

SCALE 1:250 @ A1  
1:500 @ A3

DATE \_\_\_\_\_

May 18, 2021

JOB No. **2015-1122**

|       |  |
|-------|--|
| DRAWN |  |
| RM    |  |

|   |             |            |
|---|-------------|------------|
| 1 | DRAWING No. | DA-STW-004 |
|---|-------------|------------|

[illegible]

|         |      |
|---------|------|
| CHECKED | DATE |
| IP      |      |

|  |       |
|--|-------|
|  | LI    |
|  | ISSUE |

100

100

|  |          |
|--|----------|
|  | APPROVED |
|--|----------|

|  |  |
|--|--|
|  |  |
|--|--|

B

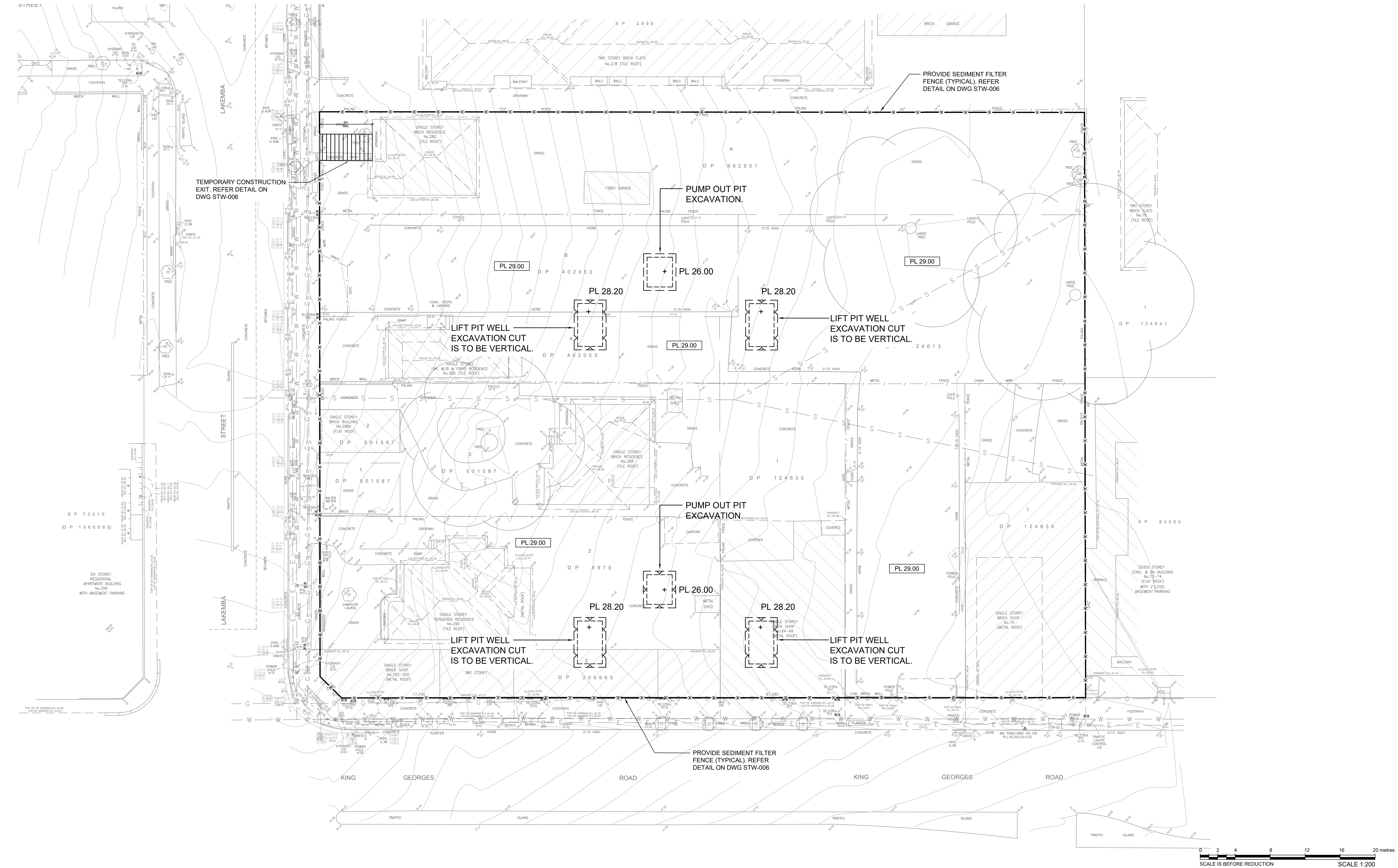
D

ICATION

## LOCATION

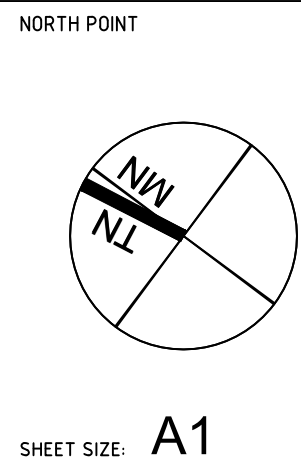
Xrefs: 20171138\_X-TITLEBLK-A1; 20171138\_XS\_SURVEY  
 Plot Date: 18.05.2021@10:11:33 Login Name: Mitchell  
 Cad File: Z:\Projects\20171138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138\_DA-STW-2004.dwg

Xref: 20171138\_X-TITLEBKA41-20171138\_VS\_SURVEY  
Pld Date: 18.05.2021@011137 Logn Name: Michael Cad File: Z:\Projects\20171138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138\_DA-STW-006.dwg



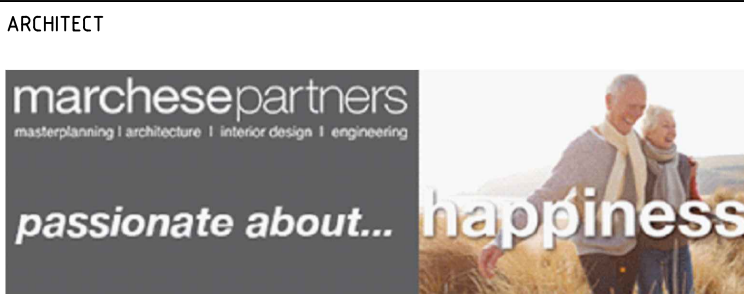
DO NOT SCALE FROM DRAWINGS.  
CHECK & VERIFY ALL  
DIMENSIONS & LEVELS BEFORE  
COMMENCEMENT OF ANY WORK.

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



- NOTES
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<br>B | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION<br>DEVELOPMENT APPLICATION ISSUE | 07.05.2021<br>21.05.2021 |



PROJECT  
280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

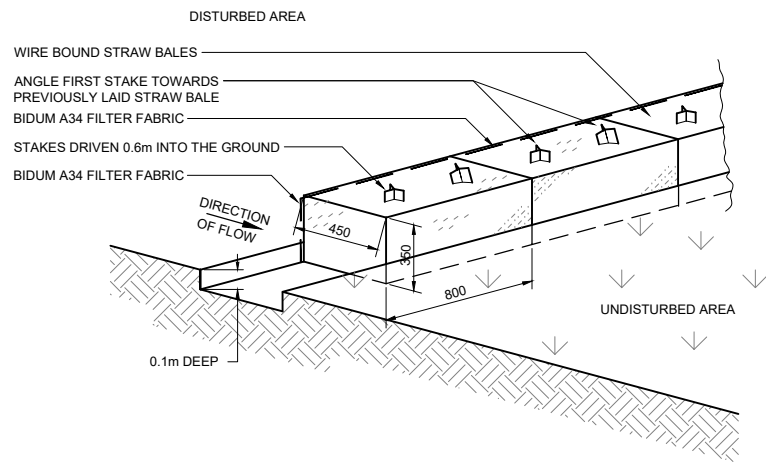
CLIENT  
**AlliedBuilding**

CONSULTANT  
**LP CONSULTING**  
AUSTRALIA PTY LTD

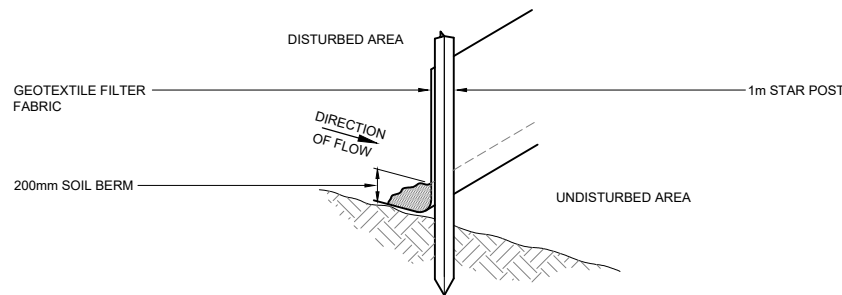
A: Suite 12.01, Level 12, 300 George Street  
Sydney NSW Australia 2000  
P: GPO Box 2662 Sydney NSW 2001  
E: info@lp-consulting.com.au

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

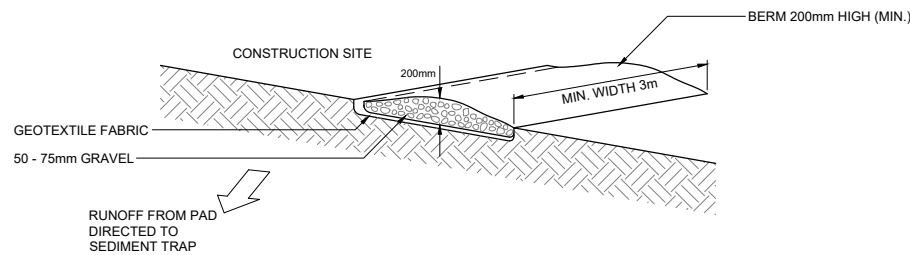
| TITLE                                                       | SCALE                    | DRAWN                     | DESIGNED | CHECKED    | APPROVED                |
|-------------------------------------------------------------|--------------------------|---------------------------|----------|------------|-------------------------|
| STORMWATER DRAINAGE<br>EROSION AND SEDIMENT CONTROL<br>PLAN | 1:200 @ A1<br>1:400 @ A3 | RM                        | LP       | LP         |                         |
| DATE<br>May 18, 2021                                        |                          | DRAWING No.<br>DA-STW-005 |          | ISSUE<br>B |                         |
| JOB No.<br>2017-1138                                        |                          |                           |          |            | DEVELOPMENT APPLICATION |



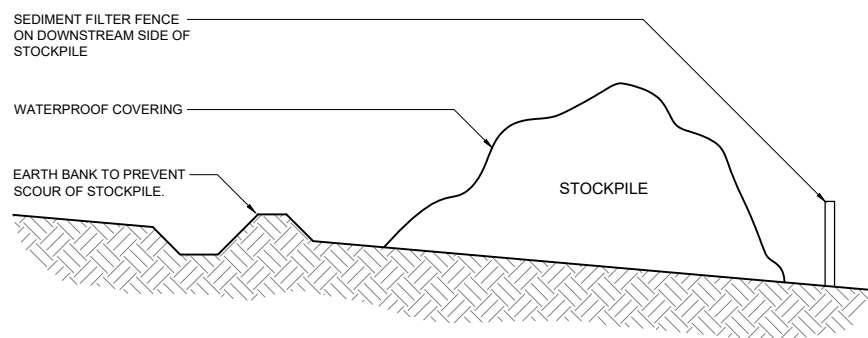
**STRAW BALE SEDIMENT FILTER**  
N.T.S



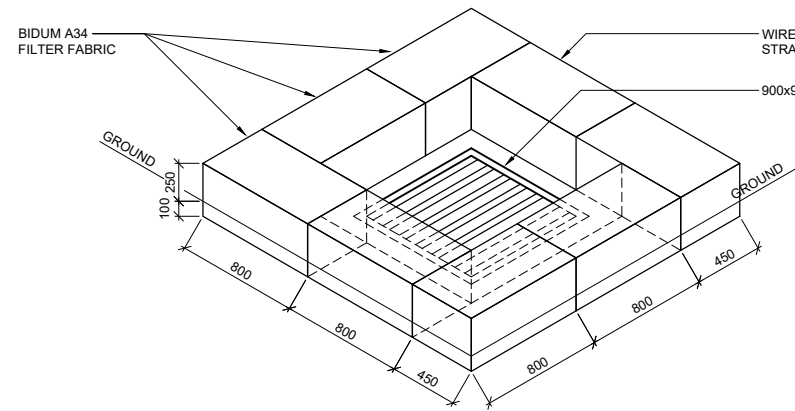
**SEDIMENT FILTER FENCE**  
N.T.S



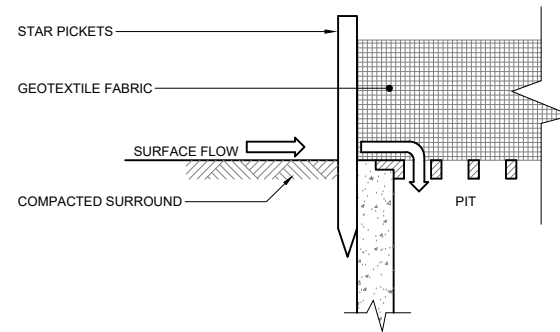
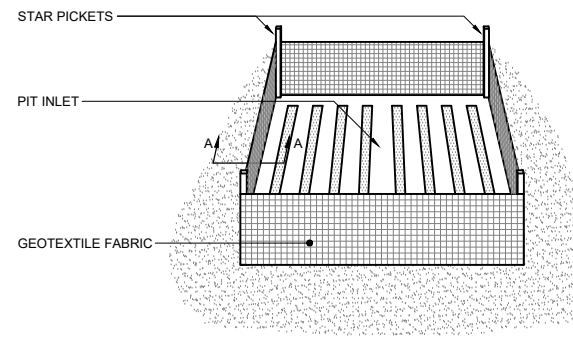
**VEHICLE ACCESS TO SITE**  
N.T.S



**BUILDING MATERIALS STOCKPILE**  
N.T.S

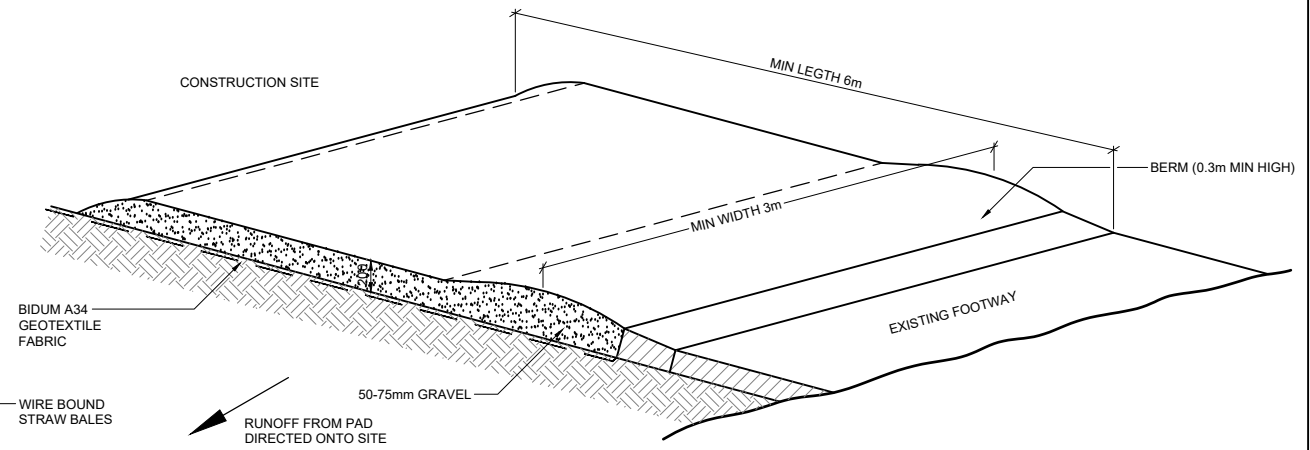


**SWP WITH STRAW BALE SEDIMENT FILTER**  
N.T.S



**SECTION A-A  
TYPICAL DETAIL**

**GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP**  
N.T.S



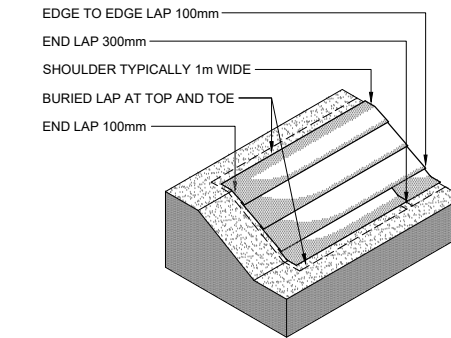
**TEMPORARY CONSTRUCTION EXIT**  
N.T.S

ALL FILL TO BE PERFORMED UNDER LEVEL 1 GEOTECHNICAL SUPERVISION IN ACCORDANCE WITH AS.3798-1990 + AMENDMENTS. FILL TO BE CLEAN & UNCONTAMINATED. DETAILS OF COMPLIANCE OF THIS CONDITION INCLUDING SOURCE OF MATERIAL AND CERTIFICATION THAT IT IS NOT CONTAMINATED MUST BE SUBMITTED TO THE PRINCIPAL AUTHORITY.

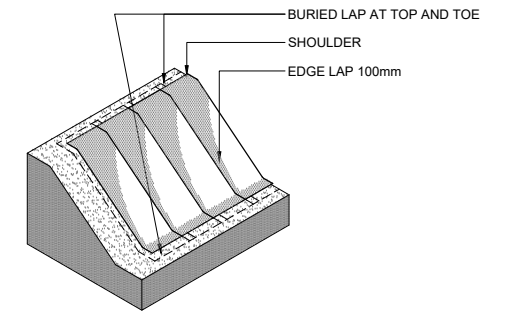
TOPSOIL FREE OF HARDPANS AND OF DEPTH ADEQUATE TO PROVIDE SEED BED. SEED TO BE DISTRIBUTED CONSISTANTLY OVER TOPSOIL.

SOIL PROFILE TO BE ESTABLISHED AND CULTIVATED WITH SUBGRADE CAPABLE OF ACCEPTING PEGS REQUIRED TO FIX MAT.

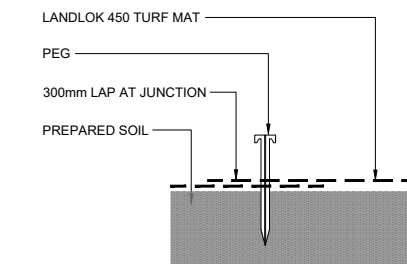
**FLOOD RETENTION BANKING DETAIL + ANTI-SOUR TREATMENT**



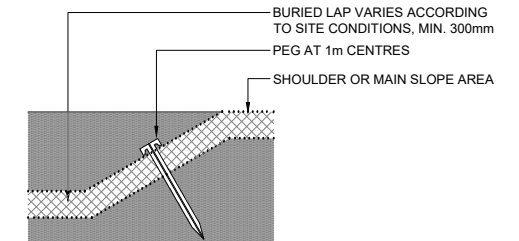
**TREATMENT OF SLOPES UP TO 35° FROM THE HORIZONTAL**



**TREATMENT OF SLOPES GREATER THAN 35° FROM THE HORIZONTAL**



**TYPICAL CROSS SECTION THROUGH INSTALLED LANDLOK 450**



**TYPICAL CROSS SECTION SHOWING EDGE TREATMENT**

**FLOOD RETENTION BANKING**  
N.T.S

Xref: 20171138\_A1.TITLEBK-A1  
Rev Date: 18.05.2021 @ 11:18 Log Name: Michael  
Caf File: Z:\p\da\20171138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138\_DA-STW-006.dwg

|                                                                                                                                                                                                                                                     |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                                                      |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |             |            |          |                   |                        |  |         |  |                   |                         |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------------|------------|----------|-------------------|------------------------|--|---------|--|-------------------|-------------------------|--|--|--|
| <div>DO NOT SCALE FROM DRAWINGS. CHECK &amp; VERIFY ALL DIMENSIONS &amp; LEVELS BEFORE COMMENCEMENT OF ANY WORK.</div> <div>THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD</div> | <div>NORTH POINT</div> <div></div> <div>SHEET SIZE: A1</div> | <div>NOTES</div> <div><div>1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.</div><div>2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.</div><div>3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.</div></div> | <div>ISSUE</div> <div><div>A</div><div>B</div></div> <div>DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION DEVELOPMENT APPLICATION ISSUE</div> | <div>DATE</div> <div>07.05.2021<br/>21.05.2021</div> | <div>ARCHITECT</div> <div><div><div>marchesepartners</div><div>masterplanning   architecture   interior design   engineering</div><div>passionate about... happiness</div></div><div></div></div> | <div>PROJECT</div> <div>280-292 Lakemba Street &amp;<br/>62-70 King Georges Road,<br/>Wiley Park, NSW 2195</div> <div>CLIENT</div> <div><div><div>AlliedBuilding</div><div><div></div></div></div></div> | <div>CONSULTANT</div> <div><div><div></div><div>LP CONSULTING</div><div>AUSTRALIA PTY LTD</div></div><div><div>A: Suite 12.01, Level 12, 300 George Street<br/>Sydney NSW Australia 2000<br/>P: GPO Box 2662 Sydney NSW 2001<br/>E: info@lp-consulting.com.au</div><div>T: +61 (2) 9223 4444<br/>W: www.lp-consulting.com.au</div></div></div> | <div>TITLE</div> <div>STORMWATER DRAINAGE<br/>EROSION AND SEDIMENT<br/>CONTROL DETAILS</div> <table><tr><td>SCALE N.T.S @ A1</td><td>DRAWN RM</td><td>DESIGNED LP</td><td>CHECKED LP</td><td>APPROVED</td></tr><tr><td>DATE May 18, 2021</td><td colspan="2">DRAWING No. DA-STW-006</td><td colspan="2">ISSUE B</td></tr><tr><td>JOB No. 2017-1138</td><td colspan="4">DEVELOPMENT APPLICATION</td></tr></table> | SCALE N.T.S @ A1 | DRAWN RM | DESIGNED LP | CHECKED LP | APPROVED | DATE May 18, 2021 | DRAWING No. DA-STW-006 |  | ISSUE B |  | JOB No. 2017-1138 | DEVELOPMENT APPLICATION |  |  |  |
| SCALE N.T.S @ A1                                                                                                                                                                                                                                    | DRAWN RM                                                                                                                                        | DESIGNED LP                                                                                                                                                                                                                                                                                              | CHECKED LP                                                                                                                                     | APPROVED                                             |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |             |            |          |                   |                        |  |         |  |                   |                         |  |  |  |
| DATE May 18, 2021                                                                                                                                                                                                                                   | DRAWING No. DA-STW-006                                                                                                                          |                                                                                                                                                                                                                                                                                                          | ISSUE B                                                                                                                                        |                                                      |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |             |            |          |                   |                        |  |         |  |                   |                         |  |  |  |
| JOB No. 2017-1138                                                                                                                                                                                                                                   | DEVELOPMENT APPLICATION                                                                                                                         |                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                                                      |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |             |            |          |                   |                        |  |         |  |                   |                         |  |  |  |

STORMWATER CALCS:

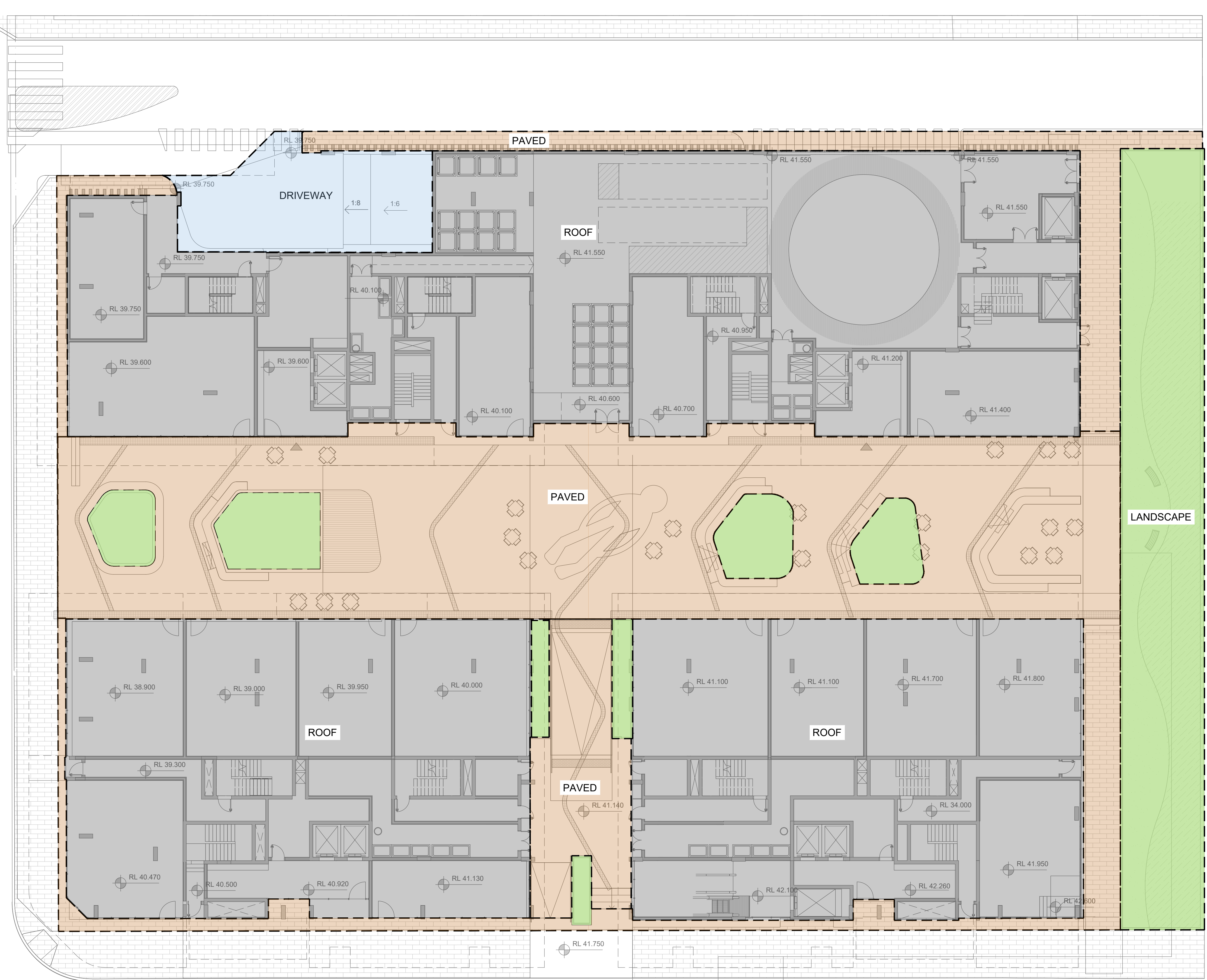
$C = 1.0$  (ROOF)  
 $C = 0.95$  (PAVED)  
 $C = 0.7$  (LANDSCAPE)  
 $20I_5 = \dots\text{mm/hr}$   
 $100I_5 = \dots\text{mm/hr}$   
 $Q = \frac{C \cdot I \cdot A}{3600}$  (L/s)

CATCHMENT AREAS

|                       |                          |
|-----------------------|--------------------------|
| $A_p$                 | = 1397.24 m <sup>2</sup> |
| $A_L$                 | = 511.15 m <sup>2</sup>  |
| $A_{\text{ROOF}}$     | = 2827.12 m <sup>2</sup> |
| $A_{\text{DRIVEWAY}}$ | = 133.71 m <sup>2</sup>  |
| TOTAL AREA            | 4855.00 m <sup>2</sup>   |

AREA LEGEND

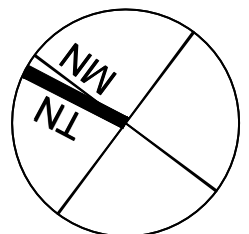
|                                                                                      |                |
|--------------------------------------------------------------------------------------|----------------|
|   | PAVEMENT AREA  |
|   | LANDSCAPE AREA |
|   | ROOF AREA      |
|  | DRIVEWAY AREA  |



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

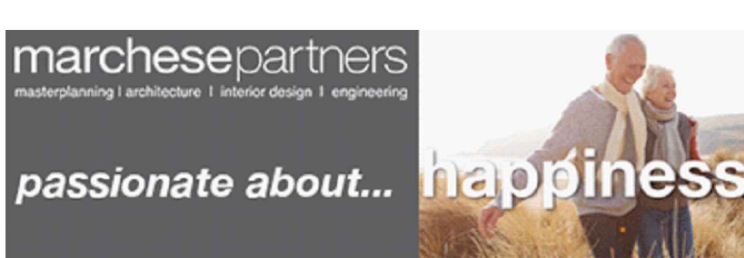
AMENDMENT

DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE

07.05.2021  
21.05.2021

ARCHITECT



PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

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  
STORMWATER QUALITY  
CATCHMENT PLAN - GROUND FLOOR

SCALE 1:150 @ A1  
1:300 @ A3

DATE May 18, 2021

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

DRAWING No. DA-STW-007

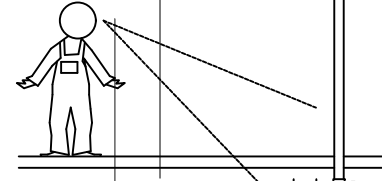
CHECKED LP

ISSUE

B

DEVELOPMENT APPLICATION

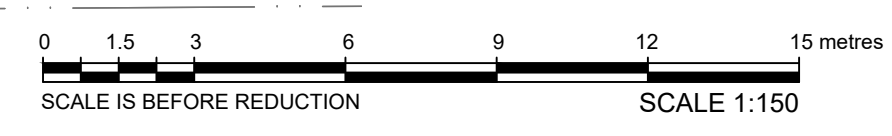
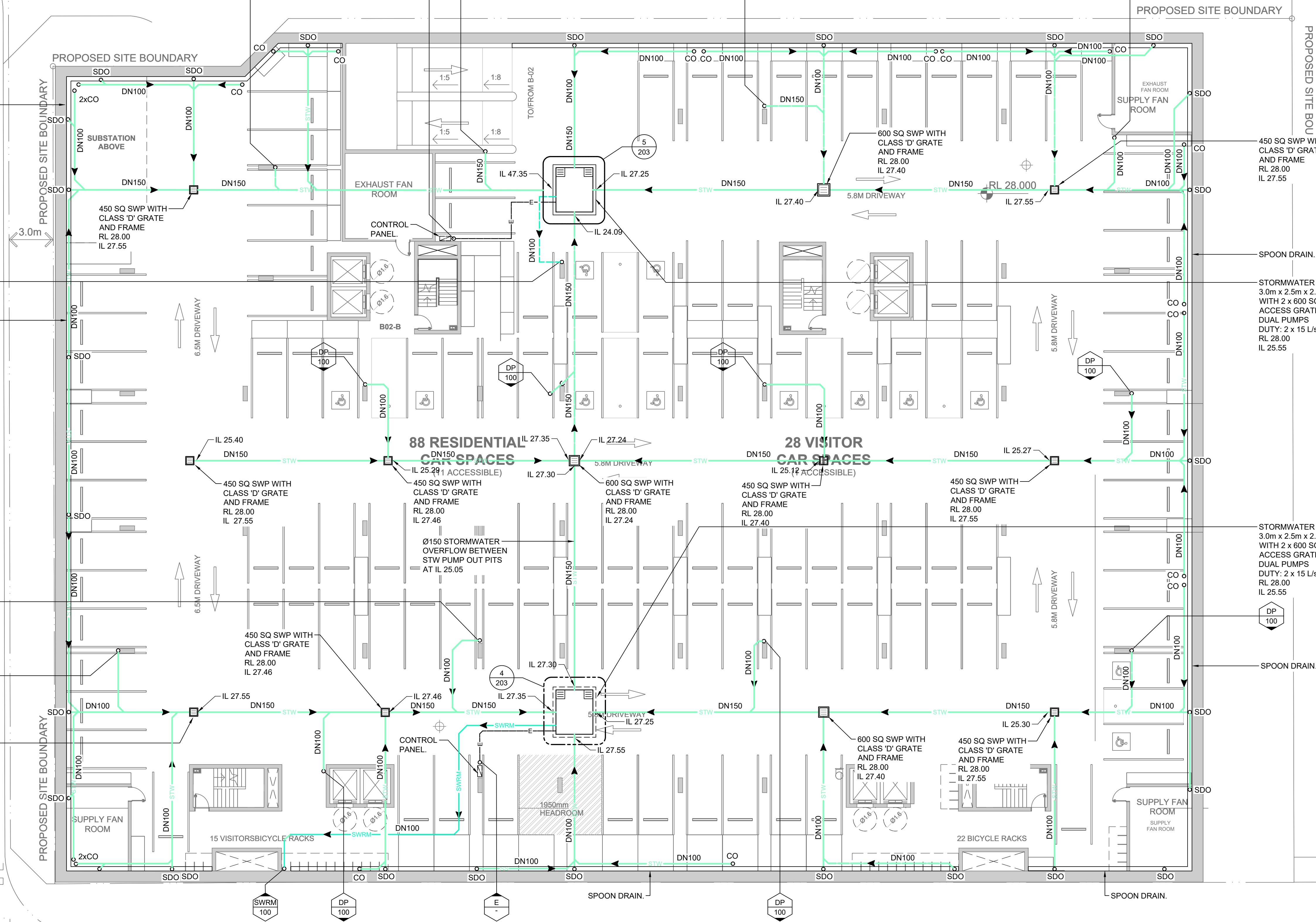
PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE



#### STORMWATER CALCS:

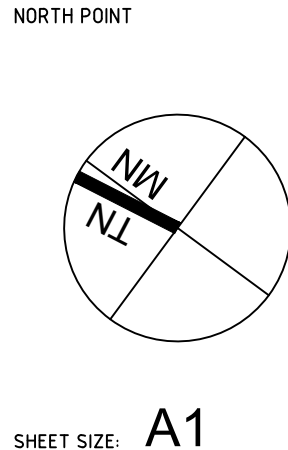
C = 1.0 (ROOF)  
C = 0.95 (PAVED)  
C = 0.7 (LANDSCAPE)  
 $20I_5 = 194\text{mm/hr}$   
 $100I_5 = 252\text{mm/hr}$   
 $Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$

LAKEMBA STREET



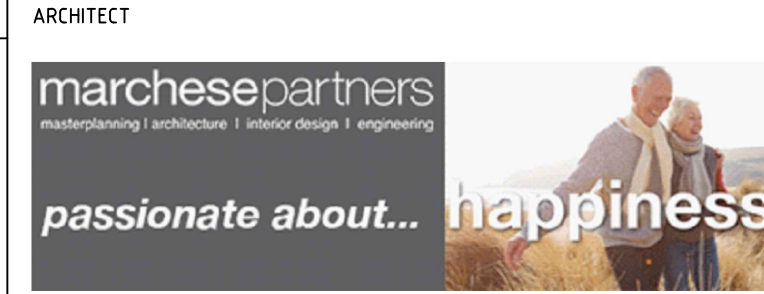
DO NOT SCALE FROM DRAWINGS.  
CHECK & VERIFY ALL  
DIMENSIONS & LEVELS BEFORE  
COMMENCEMENT OF ANY WORK.

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<br>B | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION<br>DEVELOPMENT APPLICATION ISSUE | 07.05.2021<br>21.05.2021 |



PROJECT  
280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195



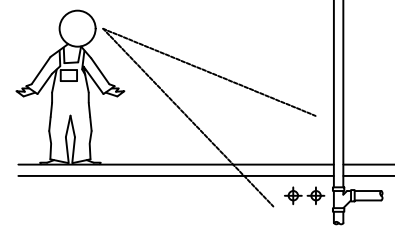
CONSULTANT

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<br>STORMWATER DRAINAGE<br>BASEMENT 3 |                         |             |            |          |
|--------------------------------------------|-------------------------|-------------|------------|----------|
| SCALE 1:150 @ A1<br>1:300 @ A3             | DRAWN RM                | DESIGNED LP | CHECKED LP | APPROVED |
| DATE May 18, 2021                          | DRAWING No.             | B           |            |          |
| JOB No.                                    | DA-STW-101              |             |            |          |
| 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)

SPOON DRAIN.

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

SPOON DRAIN.

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)

LAKEMBA STREET

34 RESIDENTIAL  
CAR SPACES  
(4 ACCESSIBLE)

59 RETAIL  
CAR SPACES  
(6 ACCESSIBLE)

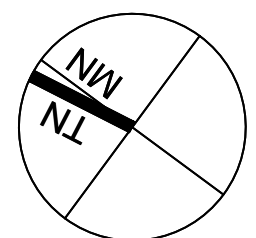
NOTE:  
MAINTAIN 2200mm HEAD  
HEIGHT IN BASEMENT  
CARPARK.

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

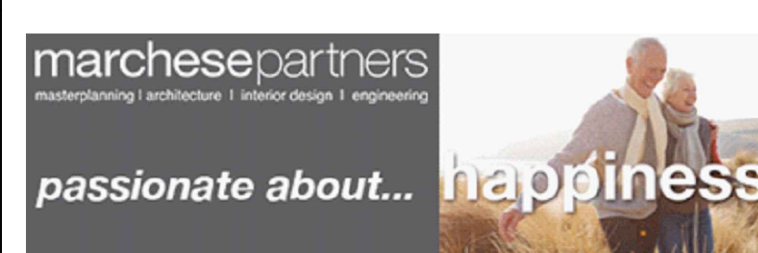
A  
B

DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE

07.05.2021  
21.05.2021

ARCHITECT



PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

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 2

SCALE 1: 150 @ A1

1: 300 @ A3

DATE May 18, 2021

JOB No. 2017-1138

DRAWN RM

DESIGNED LP

DRAWING No. DA-STW-102

DEVELOPMENT APPLICATION

CHECKED LP

ISSUE

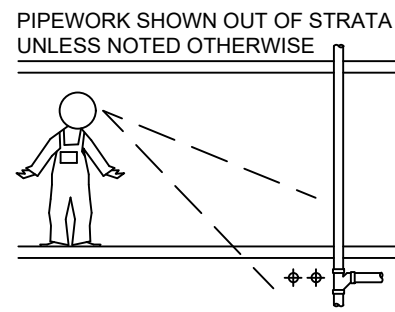
B

APPROVED









LAKEMBA STREET



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

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

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

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

CATCHMENT AREAS

$A_{\text{BALCONY}} = 314.35 \text{ m}^2$

$200Q_{5(B)} = 20.90 \text{ L/sec}$

AREA LEGEND

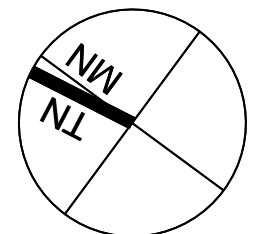
BALCONY AREA

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

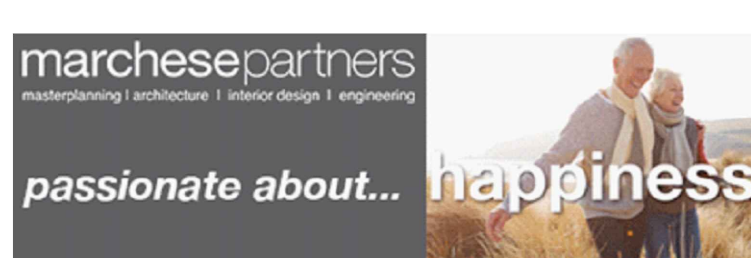
A  
B

DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE

07.05.2021  
21.05.2021

ARCHITECT



PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

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 1

SCALE 1:150 @ A1  
1:300 @ A3

DATE May 18, 2021

JOB No 2017-1138

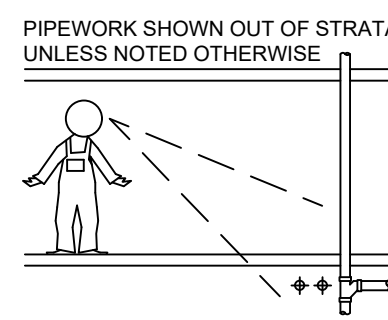
DRAWN RM

DESIGNED LP

CHECKED LP

APPROVED B

DA-STW-106  
DEVELOPMENT APPLICATION



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

$$^{20}I_5 = 194 \text{ mm/hr}$$
$$^{100}\text{I}_5 = 252\text{mm/hr}$$
$$Q = \frac{C I A}{3600} \text{ (L/s)}$$

## CATCHMENT AREAS

$$A_{\text{BALCONY}} = 310.84 \text{ m}^2$$
$$^{100}Q_{F(R)} = 20.67 \text{ L/sec}$$

### AREA LEGEND

 BALCONY AREA

FULL HEIGHT  
45 DEGREES  
ALUMINIUM  
PRIVACY  
LOUVERS

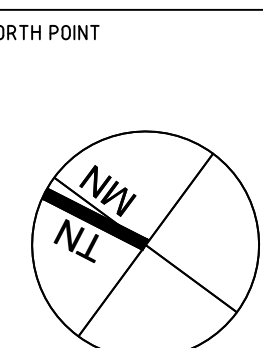
FULL HEIGHT  
45 DEGREES  
ALUMINIUM  
PRIVACY  
LOUVERS

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



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     |

|                                                  |
|--------------------------------------------------|
| DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION |
| DEVELOPMENT APPLICATION ISSUE                    |

| DATE       |
|------------|
| 07.05.2021 |
| 01.05.2021 |

marchesepartners  
masterplanning | architecture | interior design | engineering

*passionate about...* happiness

|         |
|---------|
| PROJECT |
|---------|

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

|        |  |
|--------|--|
| CLIENT |  |
|--------|--|



|            |
|------------|
| 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](mailto:info@lp-consulting.com.au)

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

| TITLE |
|-------|
|-------|

## STORMWATER DRAINAGE LEVEL 2

SCALE 1 : 150 @ A1  
1 : 300 @ A3

|      |              |
|------|--------------|
| DATE | May 18, 2021 |
|------|--------------|

JOB No.  
2017-1138

|       |
|-------|
| DRAWN |
| RM    |

|  |             |    |
|--|-------------|----|
|  | FIG.        | ET |
|  | DRAWING No. |    |

|                         |   |
|-------------------------|---|
| DA-STW-107              | B |
| DEVELOPMENT APPLICATION |   |

|          |
|----------|
| DESIGNED |
| IP       |

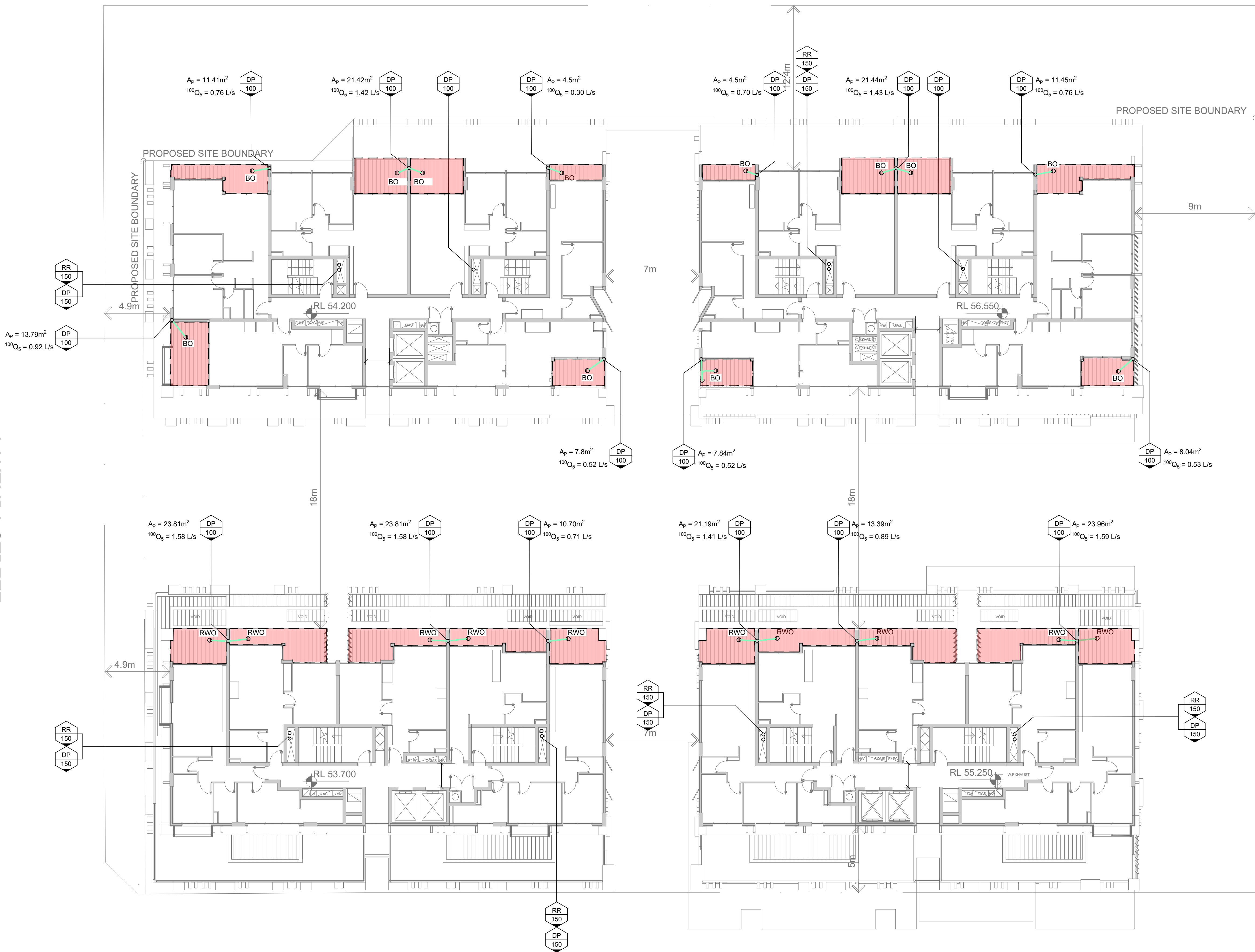
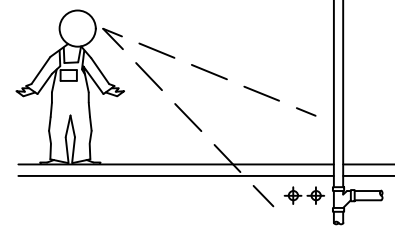
|         |
|---------|
| CHECKED |
| IP      |

ISSUE

APPLIC



PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)  
C = 0.95 (PAVED)  
C = 0.7 (LANDSCAPE)  
 $20I_s = 194\text{mm/hr}$   
 $100I_s = 252\text{mm/hr}$   
 $Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$

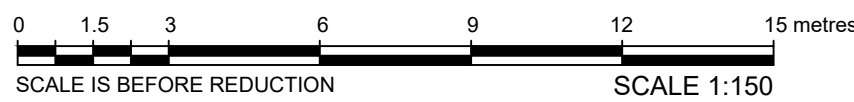
CATCHMENT AREAS

$A_{\text{BALCONY}} = 229.43 \text{ m}^2$   
 $100Q_{s(B)} = 15.26 \text{ L/sec}$

AREA LEGEND

BALCONY AREA

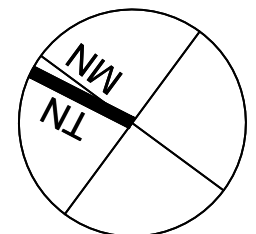
KING GEORGES RD



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

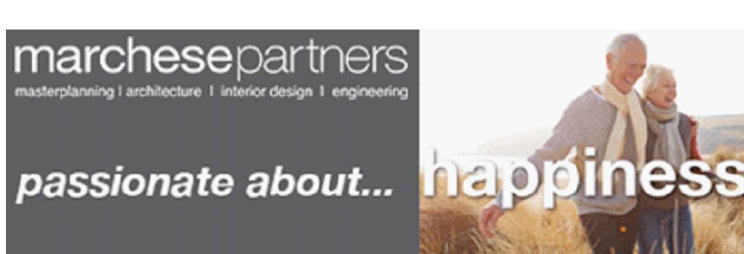
A  
B

DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE

07.05.2021  
21.05.2021

ARCHITECT



PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

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 4

SCALE 1:150 @ A1  
1:300 @ A3

DATE  
May 18, 2021

JOB No.  
2017-1138

DRAWN  
RM

DESIGNED  
LP

CHECKED  
LP

APPROVED

DRAWING No.

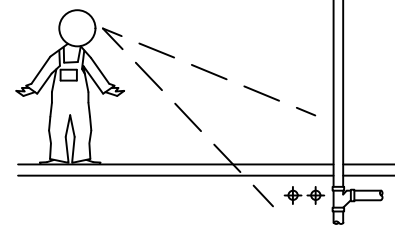
DA-STW-109

ISSUE

B

DEVELOPMENT APPLICATION

PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)  
C = 0.95 (PAVED)  
C = 0.7 (LANDSCAPE)  
 $20I_5 = 194\text{mm/hr}$   
 $100I_5 = 252\text{mm/hr}$   
 $Q = \frac{C \cdot I \cdot A}{3600} \text{ (L/s)}$

CATCHMENT AREAS

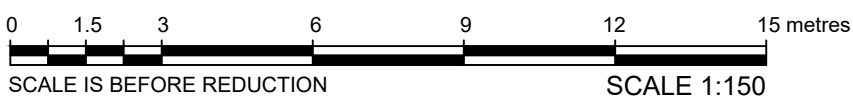
$A_{\text{BALCONY}} = 240.75 \text{ m}^2$   
 $100Q_{5(B)} = 16.01 \text{ L/sec}$

AREA LEGEND

BALCONY AREA

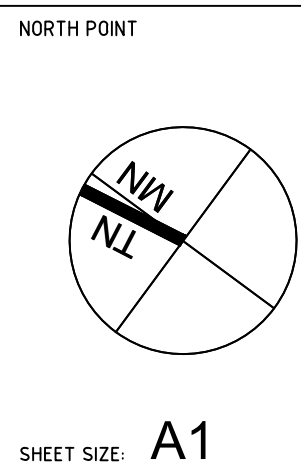
LAKEMBA STREET

KING GEORGES RD



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

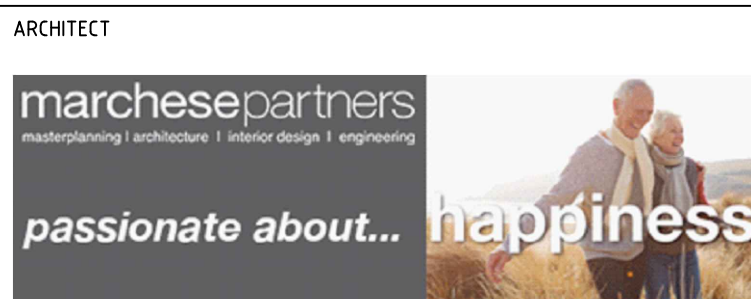


- NOTES
- REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.
  - CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.
  - CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.

ISSUE  
A  
B

AMENDMENT  
DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE  
07.05.2021  
21.05.2021



PROJECT  
280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

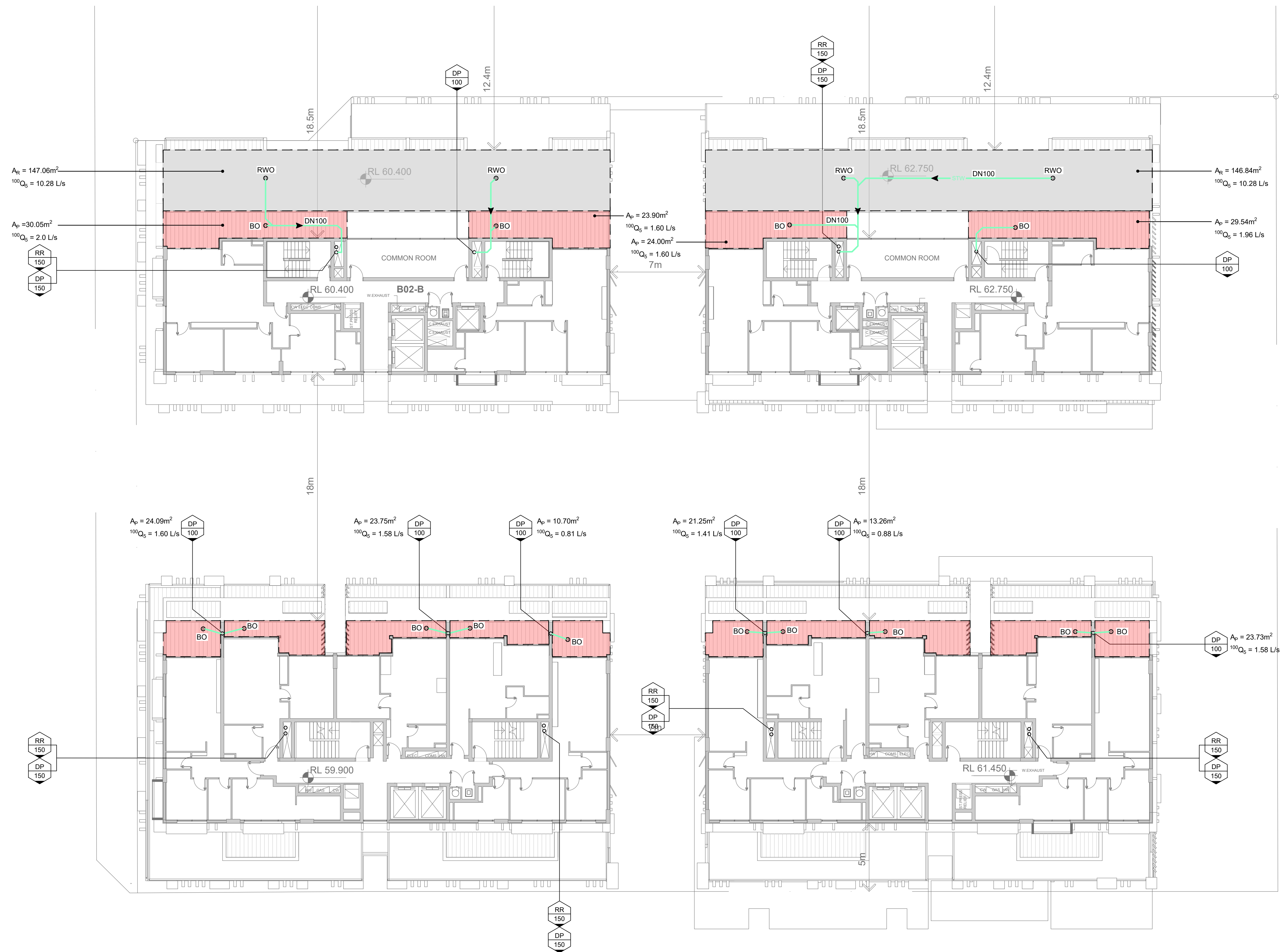


CONSULTANT  
LP CONSULTING  
AUSTRALIA PTY LTD

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<br>LEVEL 5   |                           |                |               |          |
| SCALE 1: 150 @ A1<br>1: 300 @ A3 | DRAWN<br>RM               | DESIGNED<br>LP | CHECKED<br>LP | APPROVED |
| DATE<br>May 18, 2021             | DRAWING No.<br>DA-STW-110 |                | ISSUE<br>B    |          |
| JOB No.<br>2017-1138             | DEVELOPMENT APPLICATION   |                |               |          |



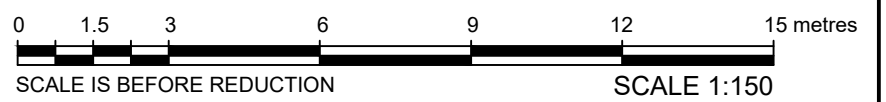
$C = 1.0$  (ROOF)  
 $C = 0.95$  (PAVED)  
 $C = 0.7$  (LANDSCAPE)  
 $^{20}I_5 = 194\text{mm/hr}$   
 $^{00}I_5 = 252\text{mm/hr}$   
 $Q = \frac{C I A}{3600}$  (L/s)

|               |   |                       |
|---------------|---|-----------------------|
| $A_R$         | = | 293.87 m <sup>2</sup> |
| $A_{BALCONY}$ | = | 224.33 m <sup>2</sup> |
| <hr/>         |   |                       |
| TOTAL         | = | 518.20 m <sup>2</sup> |

 ROOF AREA  
 BALCONY

LAKEMBA STREET

KING GEORGES RD



NORTH POINT

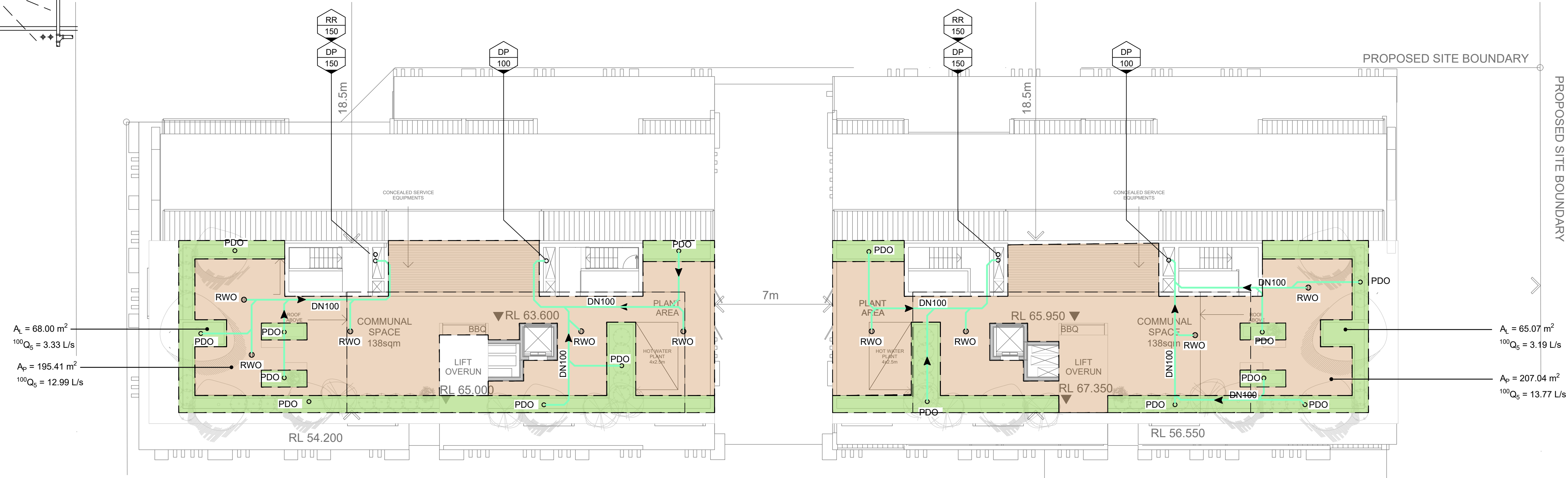
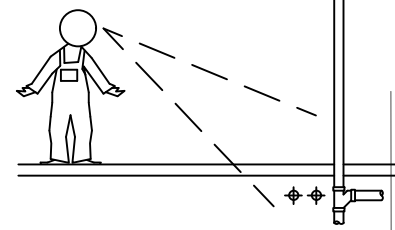


A circular diagram divided into four quadrants by a vertical and a horizontal line. The top quadrant is labeled 'N' (North), the bottom quadrant is labeled 'S' (South), the left quadrant is labeled 'W' (West), and the right quadrant is labeled 'E' (East). A thick black arrow points from the center towards the 'N' label.

SHEET SIZE: **A1**

|                                |                              |                         |                |               |          |
|--------------------------------|------------------------------|-------------------------|----------------|---------------|----------|
| TITLE                          |                              |                         |                |               |          |
| STORMWATER DRAINAGE<br>LEVEL 6 |                              |                         |                |               |          |
| SCALE                          | 1 : 150 @ A1<br>1 : 300 @ A3 | DRAWN<br>RM             | DESIGNED<br>LP | CHECKED<br>LP | APPROVED |
| DATE                           | May 18, 2021                 | DRAWING No.             |                | ISSUE         |          |
| JOB No.                        | 2017-1138                    | DA-STW-111              |                | B             |          |
|                                |                              | DEVELOPMENT APPLICATION |                |               |          |

PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE



STORMWATER CALCS:

C = 1.0 (ROOF)

C = 0.95 (PAVED)

C = 0.7 (LANDSCAPE)

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

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

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

CATCHMENT AREAS

$A_{\text{BALCONY}} = 109.73 \text{ m}^2$

$100Q_{S(B)} = 7.68 \text{ L/sec}$

$A_p = 402.45 \text{ m}^2$

$100Q_{S(P)} = 26.76 \text{ L/sec}$

$A_L = 133.07 \text{ m}^2$

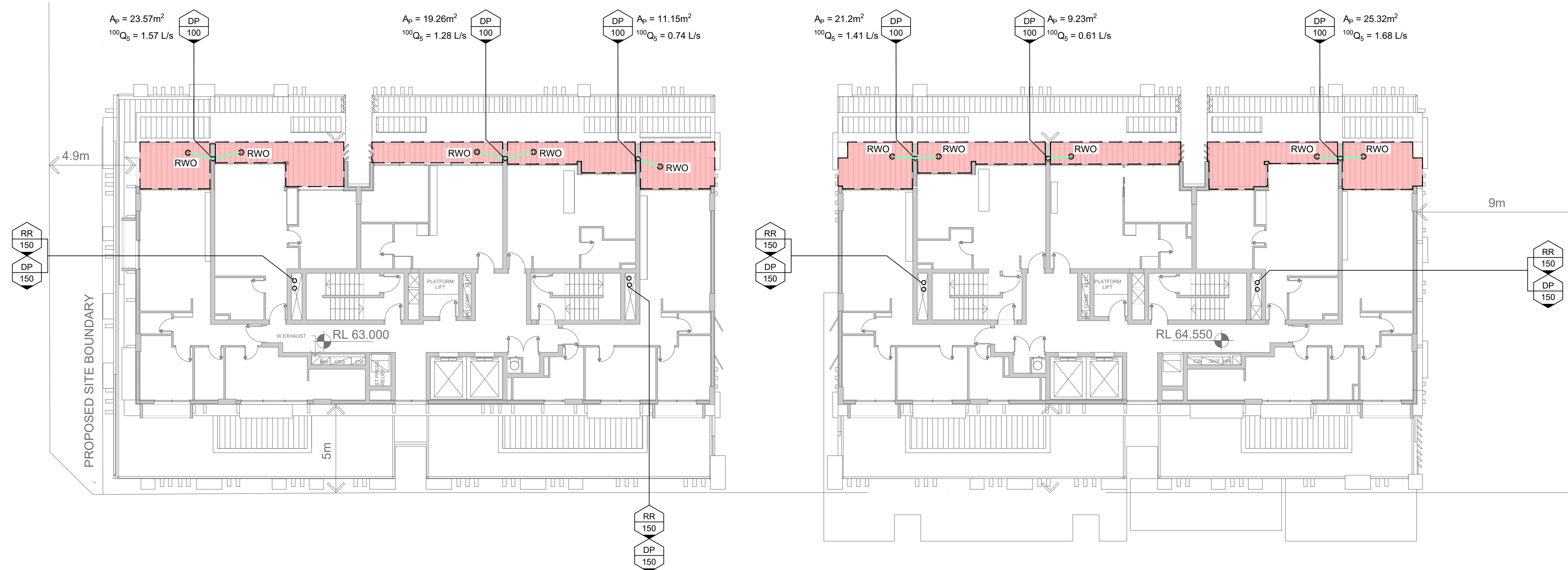
$100Q_{S(L)} = 6.52 \text{ L/sec}$

AREA LEGEND

PAVEMENT AREA

LANDSCAPE AREA

BALCONY

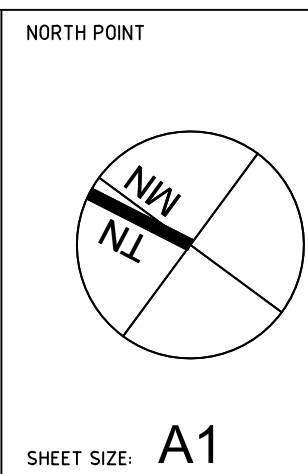


KING GEORGES RD



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

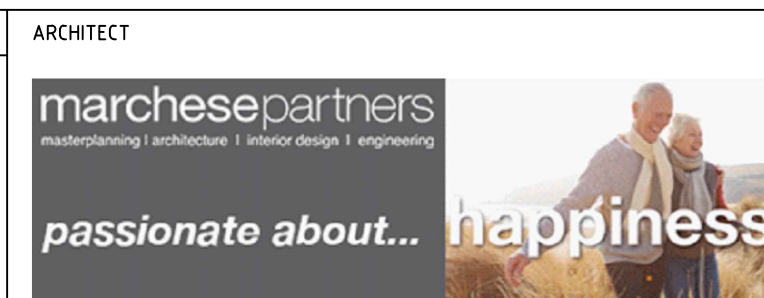
THIS DRAWING IS NOT TO BE  
COPIED IN PART OR WHOLE  
WITHOUT WRITTEN PERMISSION  
FROM LP CONSULTING  
AUSTRALIA PTY LTD



- 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  
A  
B  
DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

DATE  
07.05.2021  
21.05.2021



PROJECT  
280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

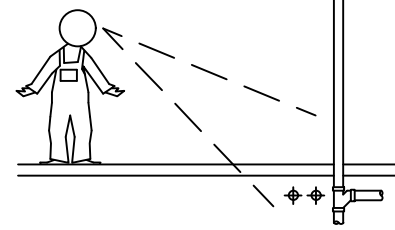


A: Suite 12.01, Level 12, 300 George Street  
Sydney NSW Australia 2000  
P: GPO Box 2662 Sydney NSW 2001  
E: info@lp-consulting.com.au  
T: +61 (2) 9223 4444  
W: www.lp-consulting.com.au

TITLE  
STORMWATER DRAINAGE  
LEVEL 7

| SCALE   | 1:150 @ A1   | DRAWN      | DESIGNED                | CHECKED | APPROVED |
|---------|--------------|------------|-------------------------|---------|----------|
| DATE    | May 18, 2021 | RM         | LP                      | LP      | B        |
| JOB No. | 2017-1138    | DA-STW-112 | DEVELOPMENT APPLICATION |         |          |

PIPEWORK SHOWN OUT OF STRATA  
UNLESS NOTED OTHERWISE



#### STORMWATER CALCS:

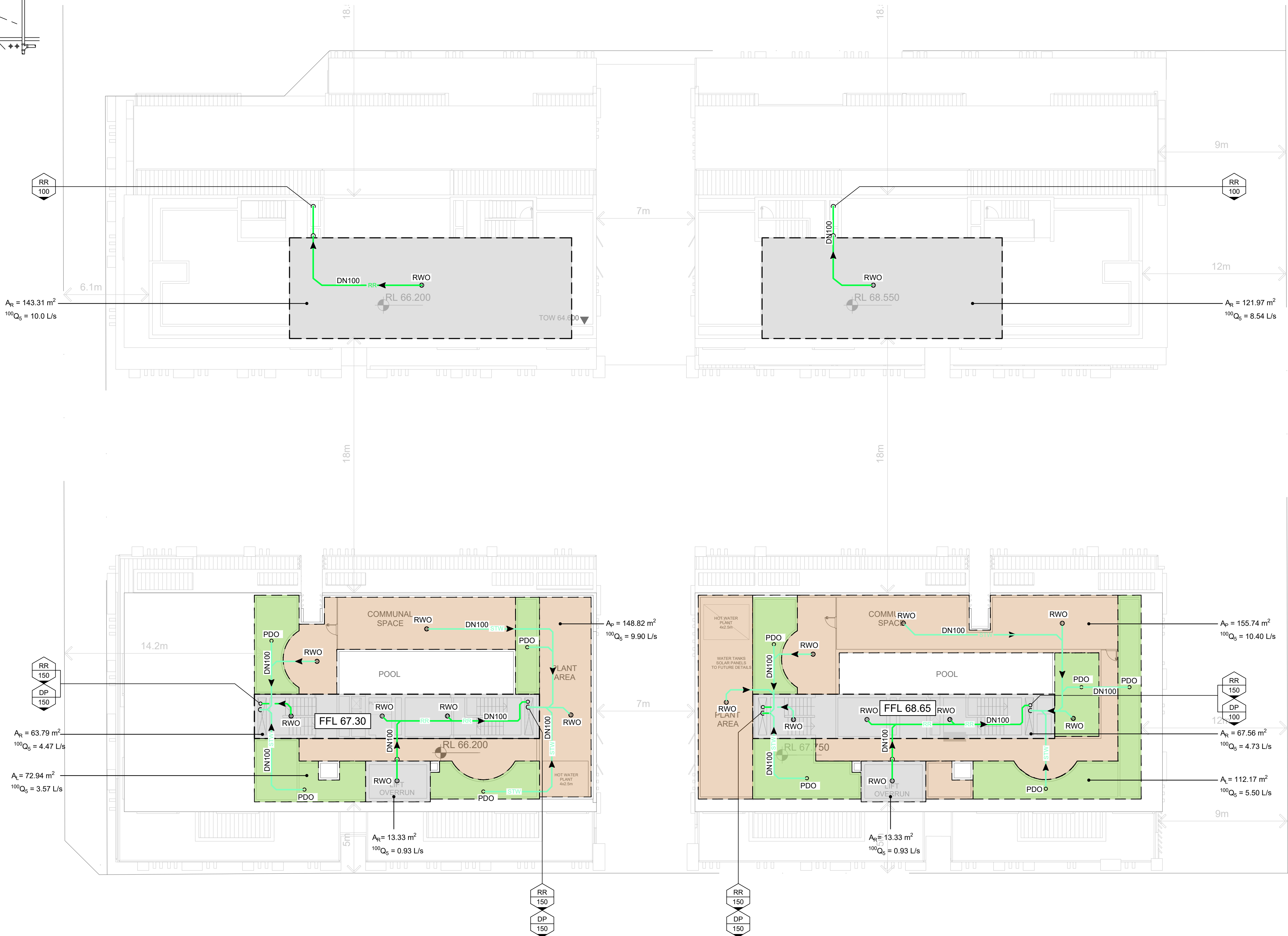
$$\begin{aligned}C &= 1.0 \quad (\text{ROOF}) \\C &= 0.95 \quad (\text{PAVED}) \\C &= 0.7 \quad (\text{LANDSCAPE}) \\^{20}I_s &= 194\text{mm/hr} \\^{100}I_s &= 252\text{mm/hr} \\Q &= \frac{C \cdot I \cdot A}{3600} \quad (\text{L/s})\end{aligned}$$

#### CATCHMENT AREAS

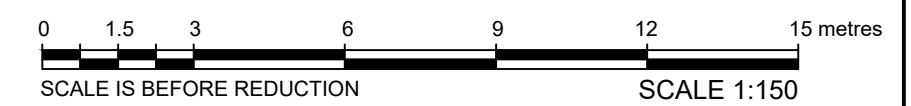
$$\begin{aligned}A_R &= 423.29 \text{ m}^2 \\A_P &= 360.57 \text{ m}^2 \\A_L &= 185.11 \text{ m}^2 \\A_{\text{TOTAL}} &= 968.97 \text{ m}^2\end{aligned}$$

#### AREA LEGEND

|  |                |
|--|----------------|
|  | PAVEMENT AREA  |
|  | LANDSCAPE AREA |
|  | ROOF AREA      |



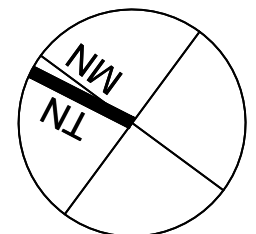
KING GEORGES RD



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

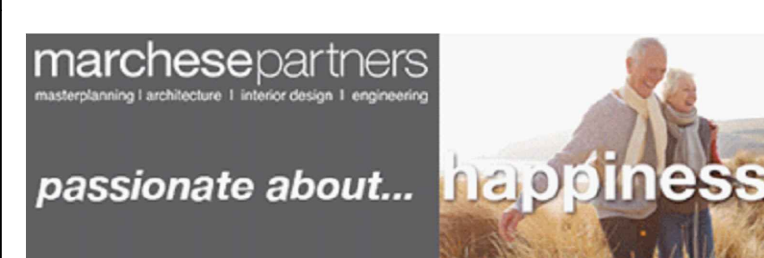
#### AMENDMENT

DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION  
DEVELOPMENT APPLICATION ISSUE

#### DATE

07.05.2021  
21.05.2021

#### ARCHITECT



#### PROJECT

280-292 Lakemba Street &  
62-70 King Georges Road,  
Wiley Park, NSW 2195

#### 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 PLAN

SCALE 1:150 @ A1  
1:300 @ A3

DATE May 18, 2021

JOB No. 2017-1138

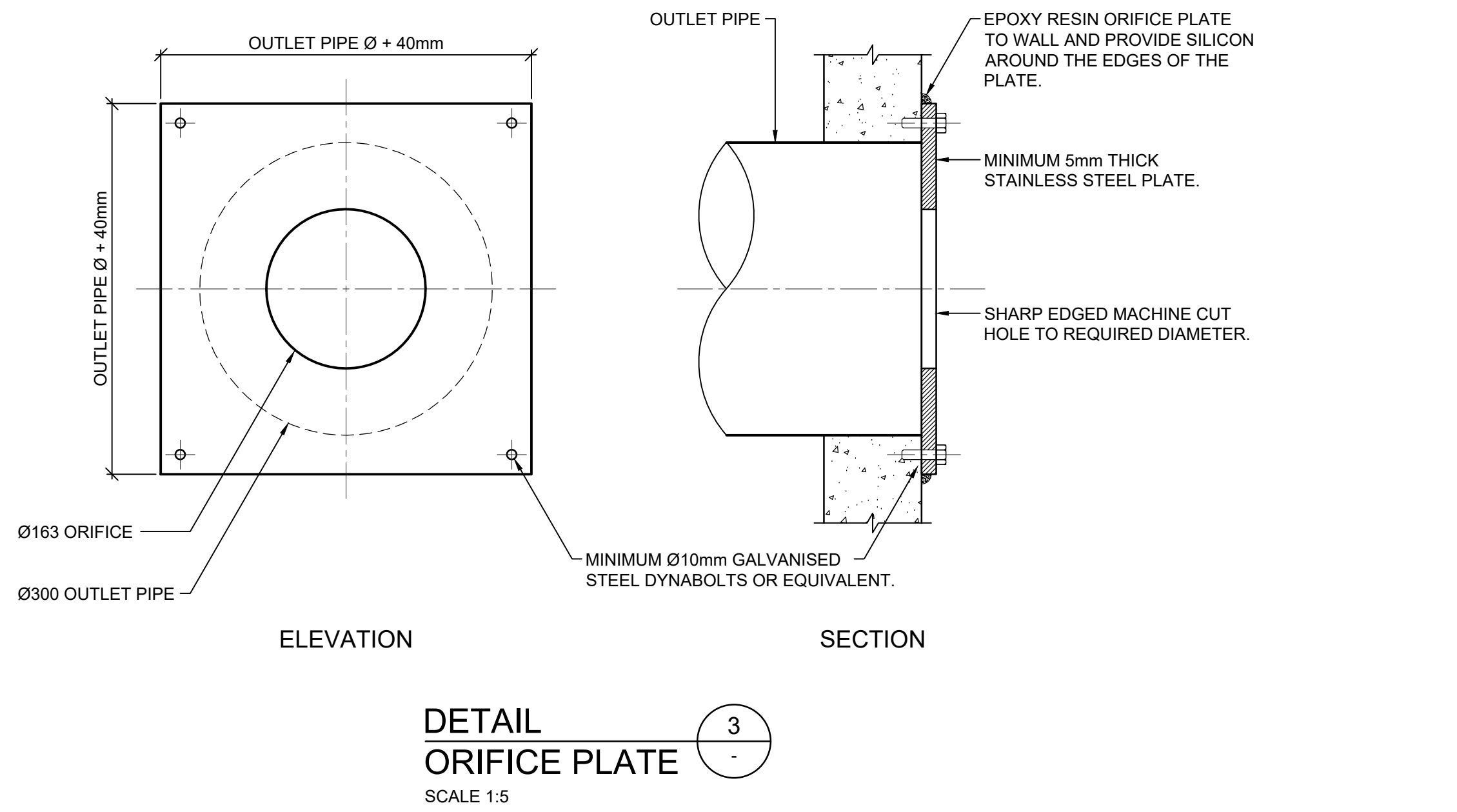
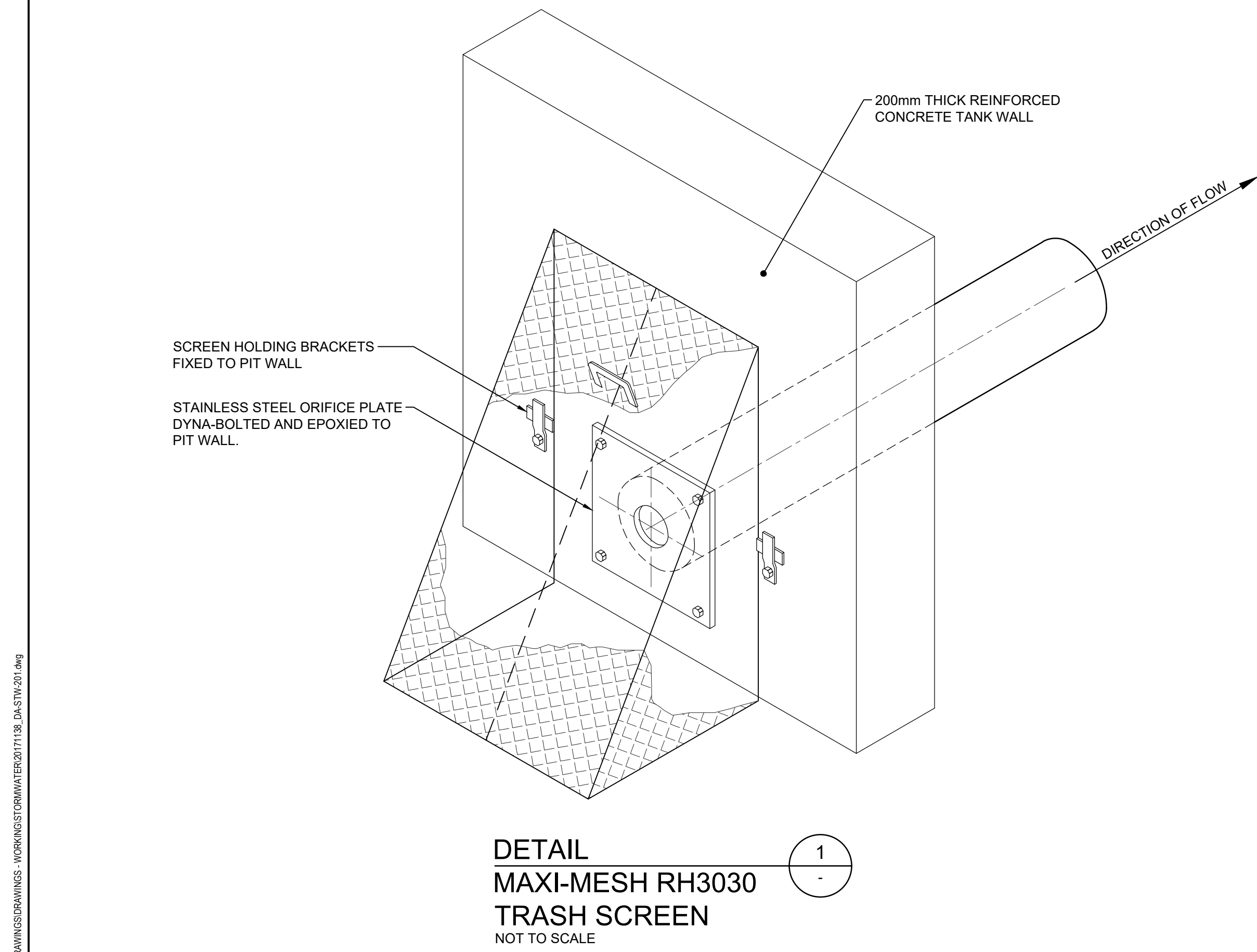
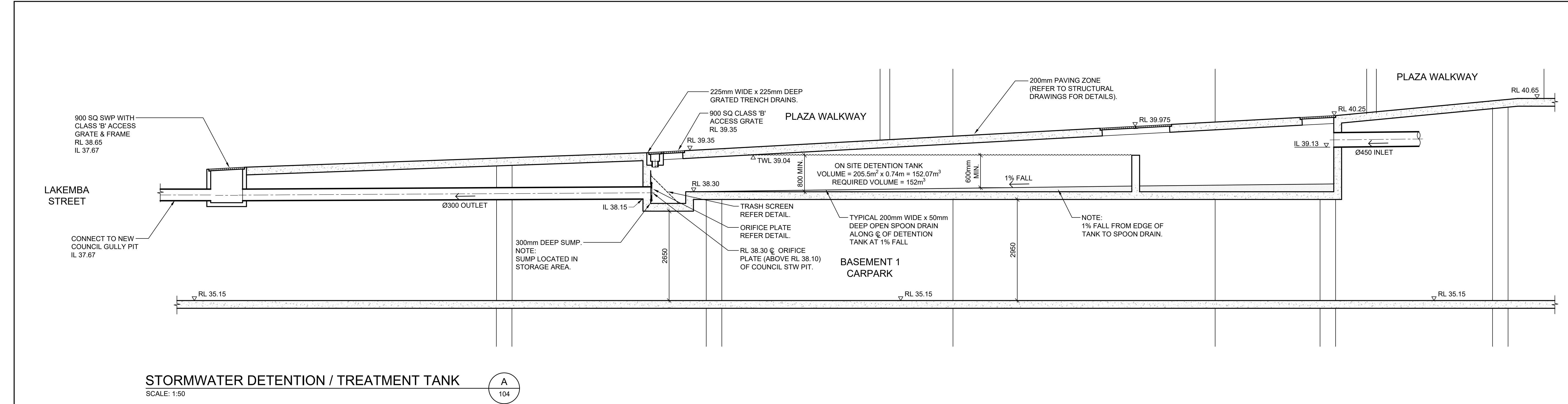
DRAWN RM

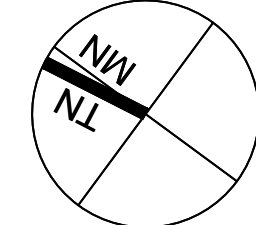
DESIGNED LP

CHECKED LP

APPROVED LP  
DA-STW-113  
DEVELOPMENT APPLICATION

B

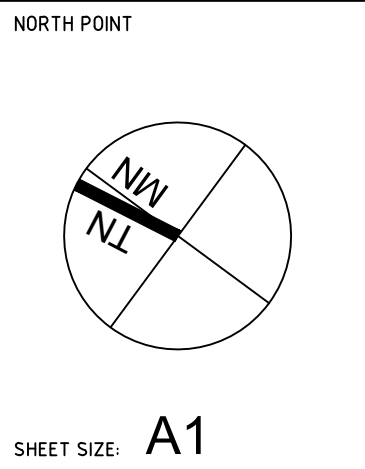


|                                                                                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                                                                                                                                                                 |                       |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------|---------|----------|---------------------------|----|----|----|--|------|-------------|--|-------|--|--------------|------------|--|---|--|---------|-----------|--|--|--|-------------------------|--|--|--|--|
| <p>DO NOT SCALE FROM DRAWINGS, CHECK &amp; VERIFY ALL DIMENSIONS &amp; LEVELS BEFORE COMMENCEMENT OF ANY WORK.</p> <p>THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM LP CONSULTING AUSTRALIA PTY LTD</p> | <p>NORTH POINT</p>  <p>SHEET SIZE: <b>A1</b></p> | <p>NOTES</p> <p>1. REFER TO DRAWING DA-STW-002 FOR DRAWING LIST.</p> <p>2. CONTRACTOR TO CHECK AND CONFIRM ALL LEVELS ON SITE.</p> <p>3. CONTRACTOR TO INVESTIGATE ALL EXISTING SERVICES, SUCH AS APPLY FOR "DIAL BEFORE YOU DIG" SERVICES PRIOR TO START OF WORKS ON SITE.</p> | <p>ISSUE</p> <p>A</p> | <p>AMENDMENT</p> <p>DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION</p> | <p>DATE</p> <p>07.05.2021</p> | <p>ARCHITECT</p> <p>marchese partners<br/>masterplanning   architecture   interior design   engineering</p> <p>passionate about... happiness</p> | <p>PROJECT</p> <p>280-292 Lakemba Street &amp; 62-70 King Georges Road, Wiley Park, NSW 2195</p> | <p>CONSULTANT</p> <p> <b>LP CONSULTING</b><br/>AUSTRALIA PTY LTD</p> <p>A: Suite 12.01, Level 12, 300 George Street Sydney NSW Australia 2000<br/>P: GPO Box 2662 Sydney NSW 2001<br/>E: info@lp-consulting.com.au</p> <p>T: +61 (2) 9223 4444<br/>W: www.lp-consulting.com.au</p> | <p>TITLE</p> <p><b>STORMWATER DRAINAGE OSD TANK GENERAL ARRANGEMENT AND DETAILS</b></p> <table><tr><td>SCALE</td><td>DRAWN</td><td>DESIGNED</td><td>CHECKED</td><td>APPROVED</td></tr><tr><td>1: 50 @ A1<br/>1: 100 @ A3</td><td>RM</td><td>LP</td><td>LP</td><td></td></tr><tr><td>DATE</td><td colspan="2">DRAWING No.</td><td colspan="2">ISSUE</td></tr><tr><td>May 28, 2021</td><td colspan="2">DA-STW-201</td><td colspan="2">B</td></tr><tr><td>JOB No.</td><td colspan="4">2017-1138</td></tr><tr><td colspan="5">DEVELOPMENT APPLICATION</td></tr></table> | SCALE    | DRAWN | DESIGNED | CHECKED | APPROVED | 1: 50 @ A1<br>1: 100 @ A3 | RM | LP | LP |  | DATE | DRAWING No. |  | ISSUE |  | May 28, 2021 | DA-STW-201 |  | B |  | JOB No. | 2017-1138 |  |  |  | DEVELOPMENT APPLICATION |  |  |  |  |
|                                                                                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                                                                                                                                                                 | SCALE                 | DRAWN                                                                    | DESIGNED                      |                                                                                                                                                  | CHECKED                                                                                          |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | APPROVED |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
| 1: 50 @ A1<br>1: 100 @ A3                                                                                                                                                                                                                   | RM                                                                                                                                  | LP                                                                                                                                                                                                                                                                              | LP                    |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
| DATE                                                                                                                                                                                                                                        | DRAWING No.                                                                                                                         |                                                                                                                                                                                                                                                                                 | ISSUE                 |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
| May 28, 2021                                                                                                                                                                                                                                | DA-STW-201                                                                                                                          |                                                                                                                                                                                                                                                                                 | B                     |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
| JOB No.                                                                                                                                                                                                                                     | 2017-1138                                                                                                                           |                                                                                                                                                                                                                                                                                 |                       |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
| DEVELOPMENT APPLICATION                                                                                                                                                                                                                     |                                                                                                                                     |                                                                                                                                                                                                                                                                                 |                       |                                                                          |                               |                                                                                                                                                  |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |
|                                                                                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                                                                                                                                                                 | <p>B</p>              | <p>DEVELOPMENT APPLICATION ISSUE</p>                                     | <p>21.05.2021</p>             | <p>CLIENT</p> <p></p>                                       |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |          |         |          |                           |    |    |    |  |      |             |  |       |  |              |            |  |   |  |         |           |  |  |  |                         |  |  |  |  |

X:\p\2017\1138 - 3 TITLE BLOCK.dwg  
PLOT Date: 18.05.2021 @ 15:41:47  
Caf File: Z:\Project\2017\1138\DRAWINGS\DRAWINGS - WORKING\STORMWATER\20171138\_DA-STW-203.dwg  
User Name: Michael

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<br>B | DEVELOPMENT APPLICATION - ISSUE FOR COORDINATION<br>DEVELOPMENT APPLICATION ISSUE | 07.05.2021<br>21.05.2021 |



CONSULTANT

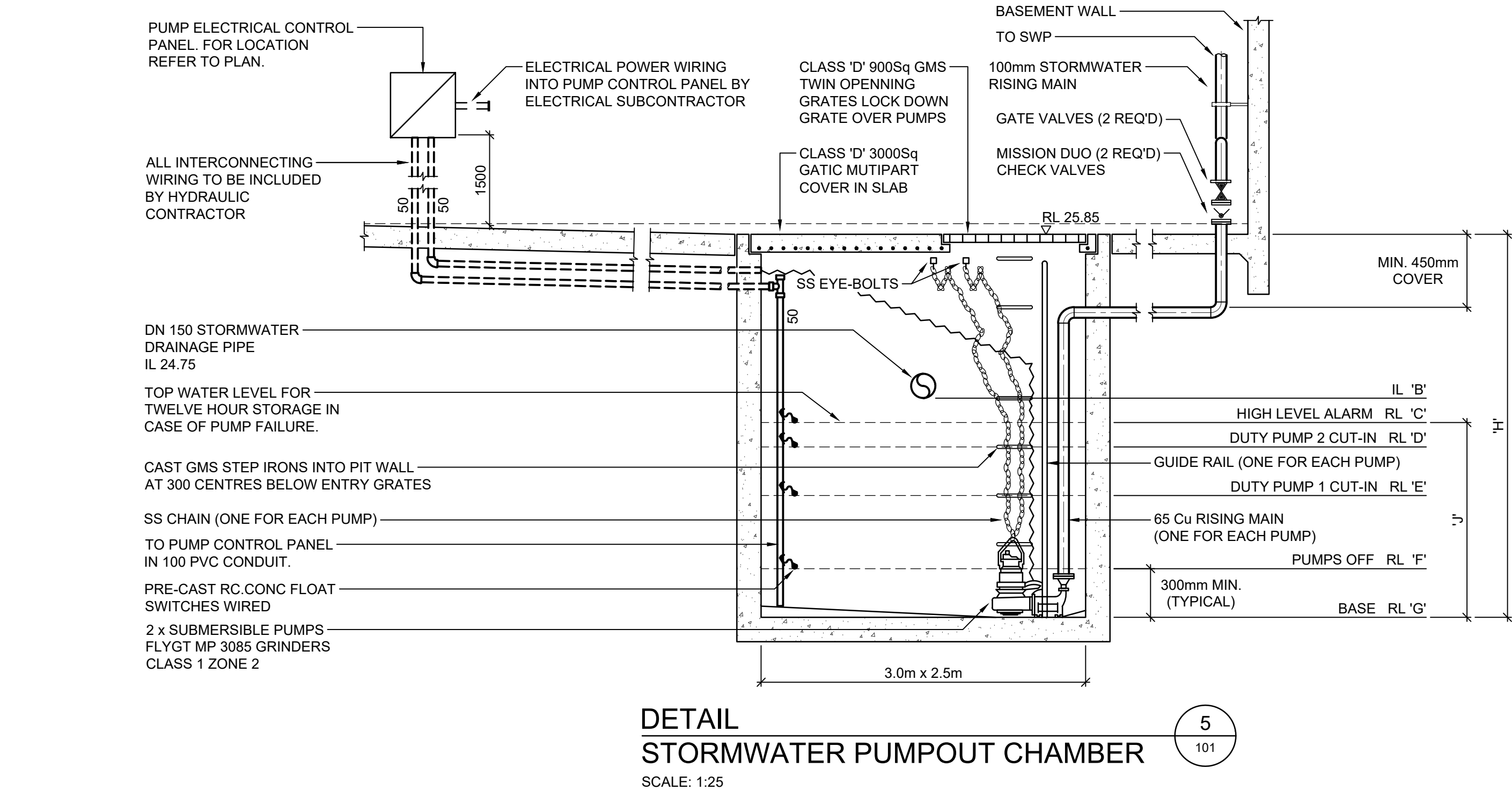
A: Suite 12.01, Level 12, 300 George Street  
Sydney NSW Australia 2000  
P: GPO Box 2662 Sydney NSW 2001  
E: info@lp-consulting.com.au

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

TITLE

**STORMWATER DRAINAGE  
DETAILS**

|         |                          |                         |    |          |            |         |    |          |  |
|---------|--------------------------|-------------------------|----|----------|------------|---------|----|----------|--|
| SCALE   | 1: 20 @ A1<br>1: 40 @ A3 | DRAWN                   | RM | DESIGNED | LP         | CHECKED | LP | APPROVED |  |
| DATE    | May 18, 2021             | DRAWING No.             |    |          | DA-STW-203 |         | B  |          |  |
| JOB No. | 2017-1138                | DEVELOPMENT APPLICATION |    |          |            |         |    |          |  |



**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

**CALCULATION:**

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

WHERE C = 0.9 (CONCRETE)  
 $100 I_{2hr} = 30.1 \text{ mm/hr}$   
A =  $24 \text{ m}^2$   
=  $24 \text{ m}^2 \times 30.1 \text{ mm/hr} \times 2 \text{ hrs}$   
=  $1.44 \text{ m}^3$

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

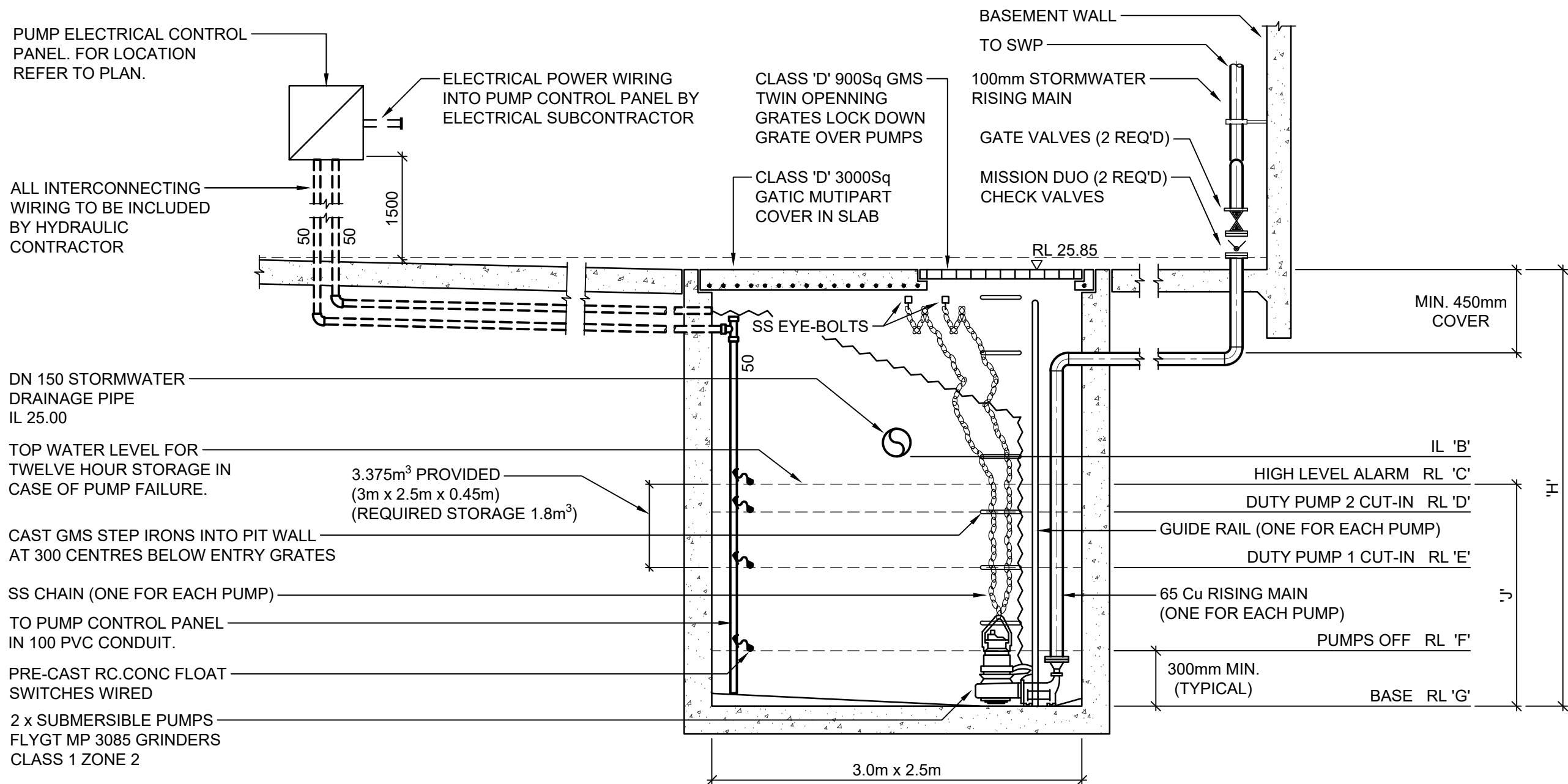
COLOURS:  
WARNING - RED  
BORDER AND OTHER - BLACK

**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 9**  
**PUMP-OUT PIT WARNING SIGN**  
NOT TO SCALE



**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 |

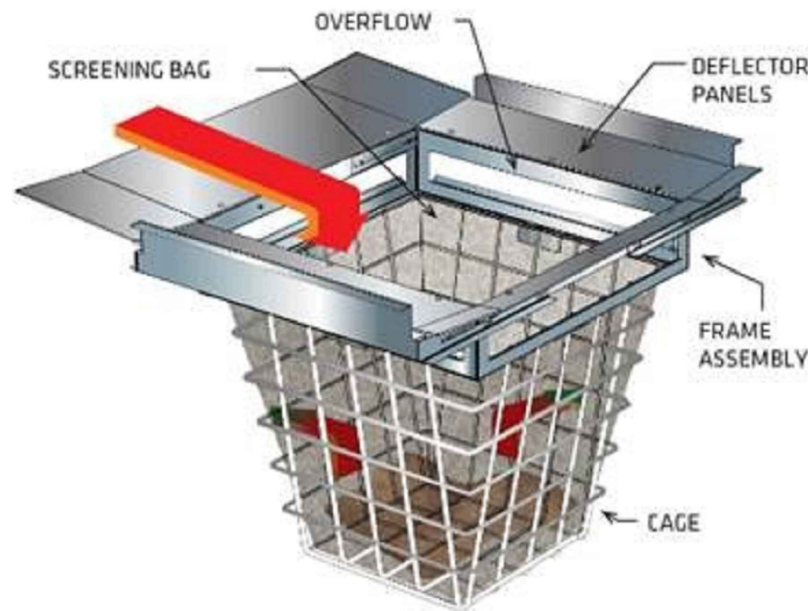
HIGH LEVEL ALARM TO BE  
LINKED TO VISUAL AND  
AUDIBLE ALARM LOCATED AT  
ENTRY RAMP TO BASEMENT

**EnviroPod®**

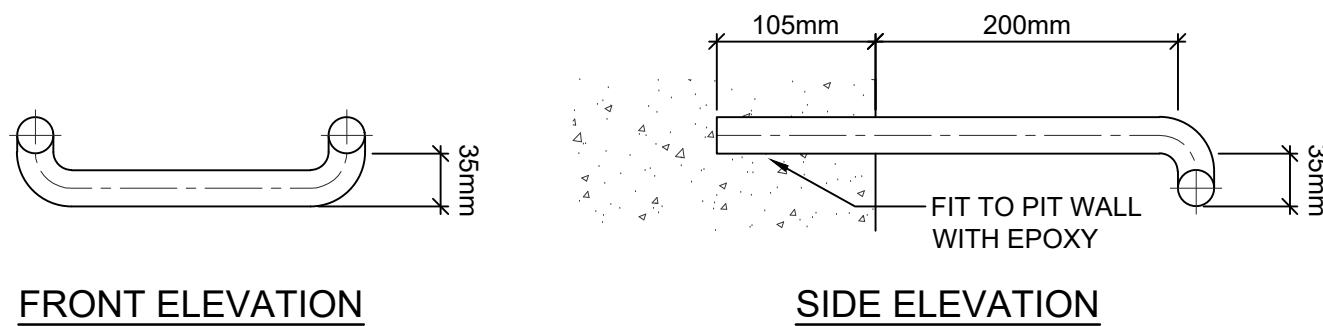
The EnviroPod® is an effective, easily maintained catch pit insert that captures and retains litter, debris and other pollutants as runoff enters the storm drain system.

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.

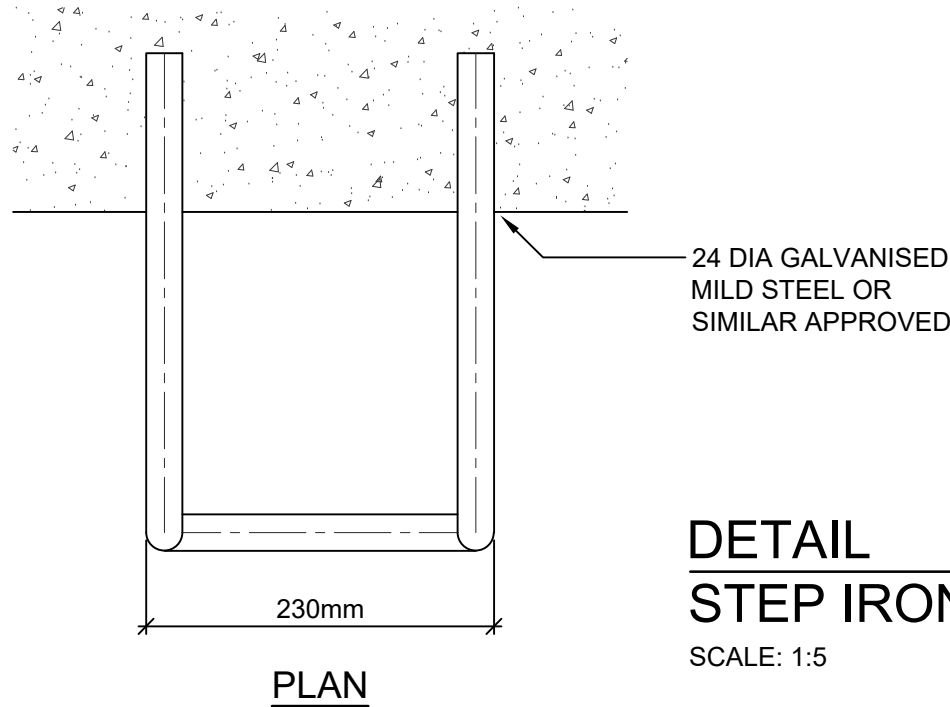


**DETAIL 6**  
**ENVIROPD**  
NOT TO SCALE



**FRONT ELEVATION**

**SIDE ELEVATION**



**PLAN**

**DETAIL 8**  
**STEP IRONS**  
SCALE: 1:5