

# PROPOSED SEPP HOUSING DEVELOPMENT LOT 110, LEONAY PARADE, LEONAY - STAGE 2 STORMWATER CONCEPT DESIGN



LOCALITY PLAN  
NOT TO SCALE  
COPYRIGHT OF GOOGLE MAP, VERSION 3

| DRAWING REGISTER |       |   |     |
|------------------|-------|---|-----|
| SHEET No.        | No.   | TITLE   | REV |
| 1                | SW100 | COVER SHEET                                   | P1  |
| 2                | SW200 | STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN | P1  |
| 3                | SW201 | STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN | P1  |
| 4                | SW300 | STORMWATER CONCEPT DESIGN - DETAILS SHEET     | P1  |
| 5                | SW400 | EROSION AND SEDIMENT CONTROL - PLAN           | P1  |
| 6                | SW500 | MUSIC CATCHMENT PLAN                          | P1  |



**PREPARED BY:**

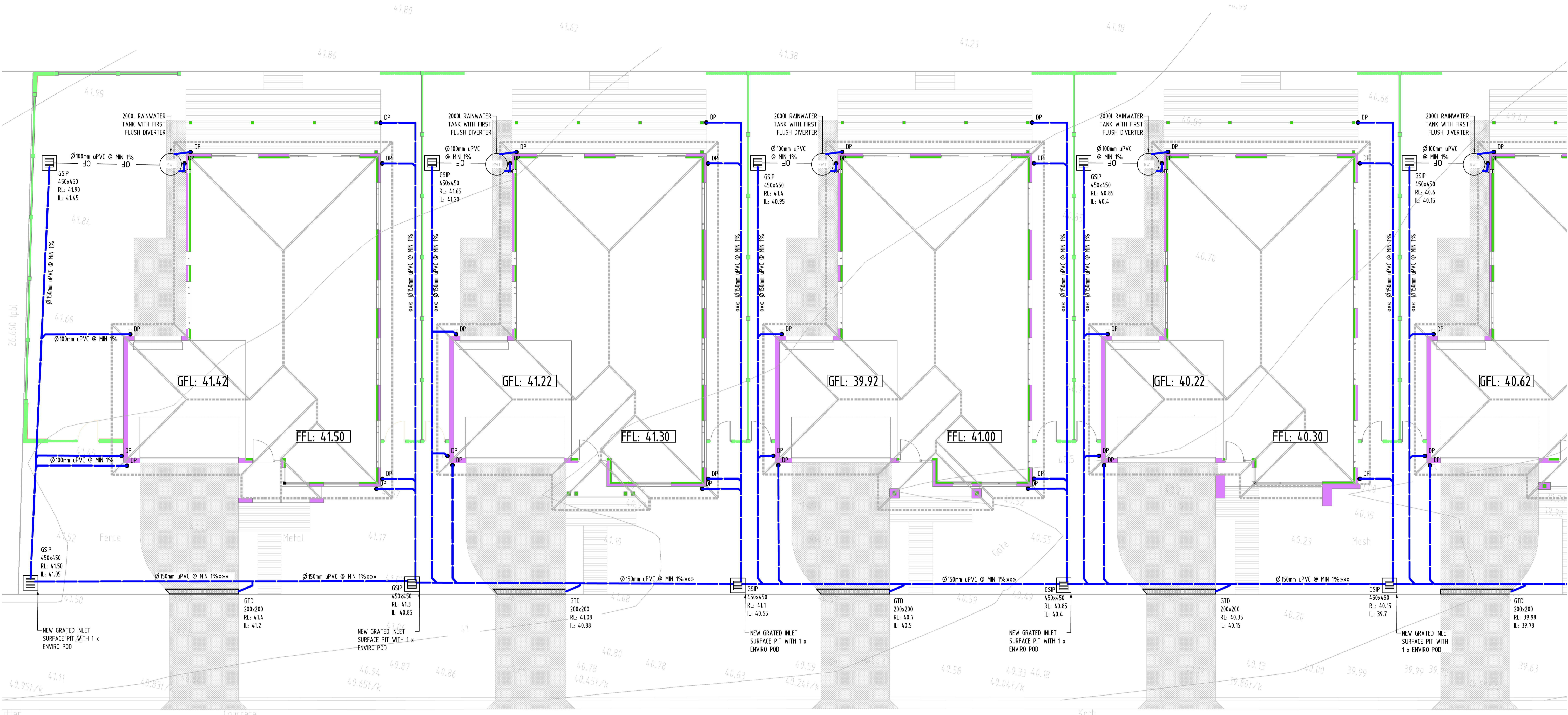
SGC Consulting Engineers  
Unit 412, Level 4  
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Bella Vista, NSW 2153  
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**ARCHITECT:**



**CLIENT :**

THE FAIRWAYS PTY LIMITED



FOR CONTINUATION REFER TO DRAWING SW201

CAPACITY OF RAIN WATER TANKS TO BE DETERMINED BY ARCHITECT

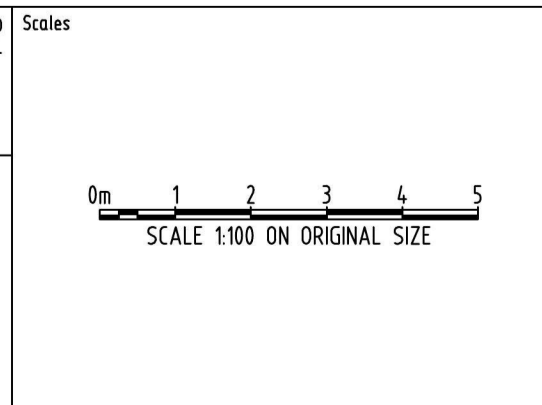
| Discipline | Drawing Title and Number | Date | Rev. |
|------------|--------------------------|------|------|
| ARCH       |                          |      |      |
| STRUCT     |                          |      |      |
| MECH       |                          |      |      |
| ELEC       |                          |      |      |
| FPD        |                          |      |      |
| LANDS      |                          |      |      |
| CIVIL      |                          |      |      |
| SURVEY     |                          |      |      |

| Discipline | Drawing Title and Number | Date | Rev. |
|------------|--------------------------|------|------|
| ARCH       |                          |      |      |
| STRUCT     |                          |      |      |
| MECH       |                          |      |      |
| ELEC       |                          |      |      |
| FPD        |                          |      |      |
| LANDS      |                          |      |      |
| CIVIL      |                          |      |      |
| SURVEY     |                          |      |      |

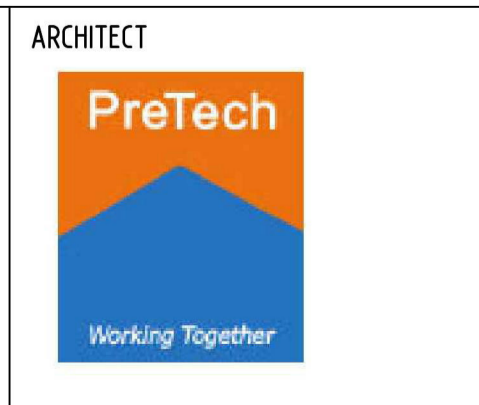
**ENGINEERS AUSTRALIA**  
 Chartered Professional Engineer  
 MEMBER

| QUALITY CONTROL |    |      |          |
|-----------------|----|------|----------|
| DRAWN           | SH | DATE | 18.04.18 |
| CHECKED         | BW | DATE | 18.04.18 |
| DESIGNED        | SH | DATE | 24.04.18 |
| VERIFIED        | SH | DATE | 24.04.18 |
| APPROVED        | SH | DATE | 24.04.18 |

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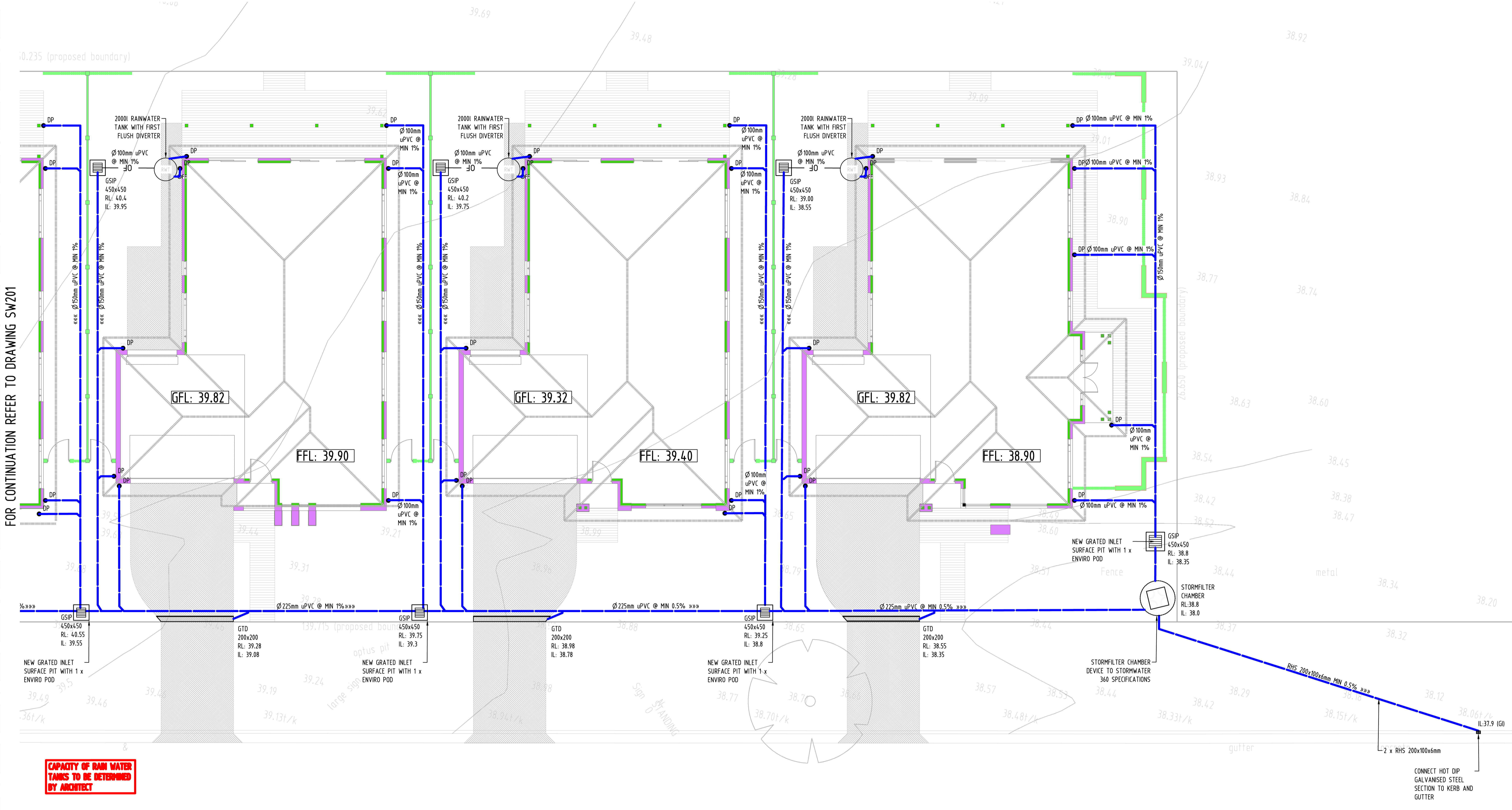
CLIENT  
**THE FAIRWAYS PTY LIMITED**



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 F: +61 2 9672 6977  
 Email: office@sgce.com.au  
 Web: www.sgce.com.au

| PROJECT                           |            |             |
|-----------------------------------|------------|-------------|
| PROPOSED SEPP HOUSING DEVELOPMENT |            |             |
| LOT 110, LEONAY PARADE, LEONAY    |            |             |
| Grid                              | Datum      | Sheet       |
| -                                 | A.H.D.     | 2 OF 6      |
| Scale (at original size)          |            | 1:100 @ A1  |
| Project No                        | Drawing No | Revision No |
| 20180063                          | SW200      | P1          |





**CAPACITY OF RAIN WATER TANKS TO BE DETERMINED BY ARCHITECT**

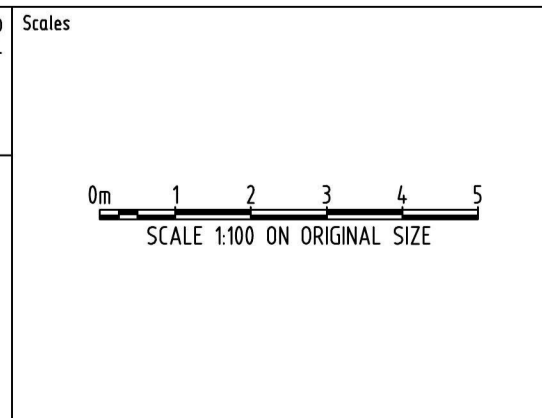
| Reference Coordination Drawing |                          |
|--------------------------------|--------------------------|
| Discipline                     | Drawing Title and Number |
| ARCH                           |                          |
| ARCH                           |                          |
| STRUCT                         |                          |
| MECH                           |                          |
| ELEC                           |                          |
| HYD                            |                          |
| LANDS                          |                          |
| CIVIL                          |                          |
| SURVEY                         |                          |

| Discipline | Drawing Title and Number | Date | Rev. |
|------------|--------------------------|------|------|
| ARCH       |                          |      |      |
| ARCH       |                          |      |      |
| STRUCT     |                          |      |      |
| MECH       |                          |      |      |
| ELEC       |                          |      |      |
| HYD        |                          |      |      |
| LANDS      |                          |      |      |
| CIVIL      |                          |      |      |
| SURVEY     |                          |      |      |

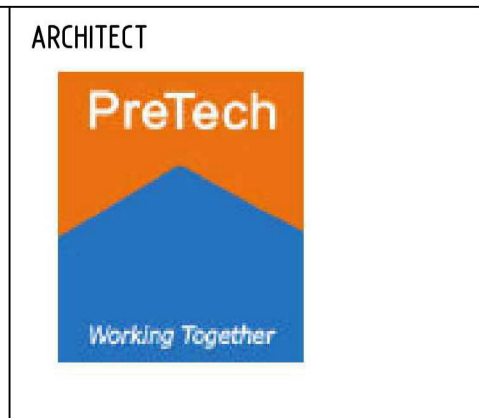
ENGINEERS AUSTRALIA  
 Chartered Professional Engineer MEMBER

| QUALITY CONTROL |    |      |          |
|-----------------|----|------|----------|
| DRAWN           | SH | DATE | 18.04.18 |
| CHECKED         | BW | DATE | 18.04.18 |
| DESIGNED        | SH | DATE | 24.04.18 |
| VERIFIED        | SH | DATE | 24.04.18 |
| APPROVED        | SH | DATE | 24.04.18 |

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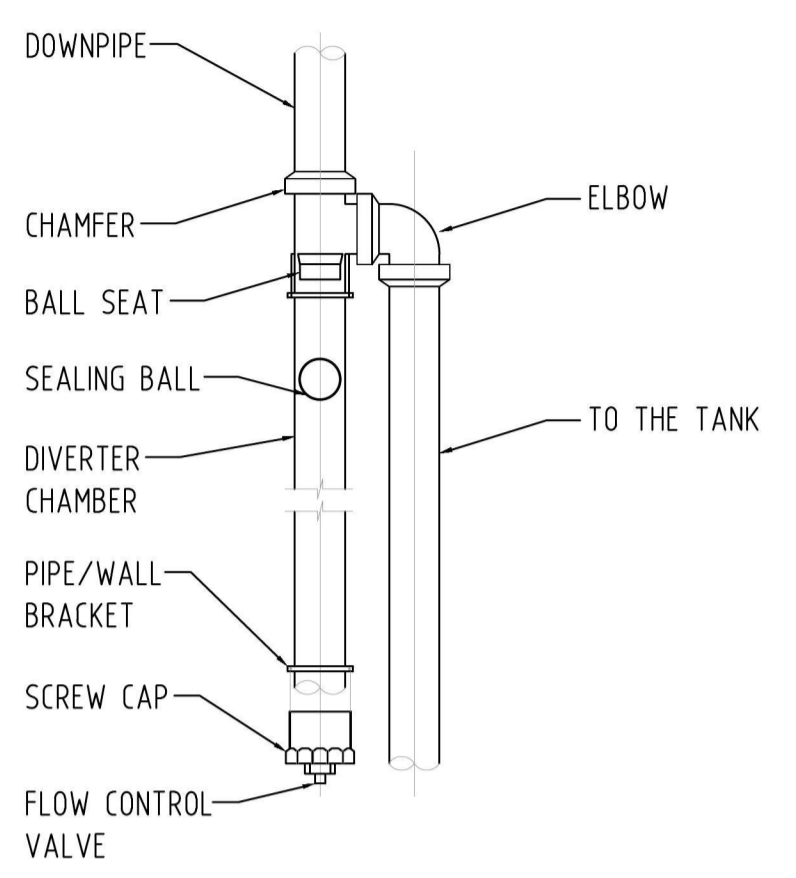
CLIENT  
**THE FAIRWAYS PTY LIMITED**



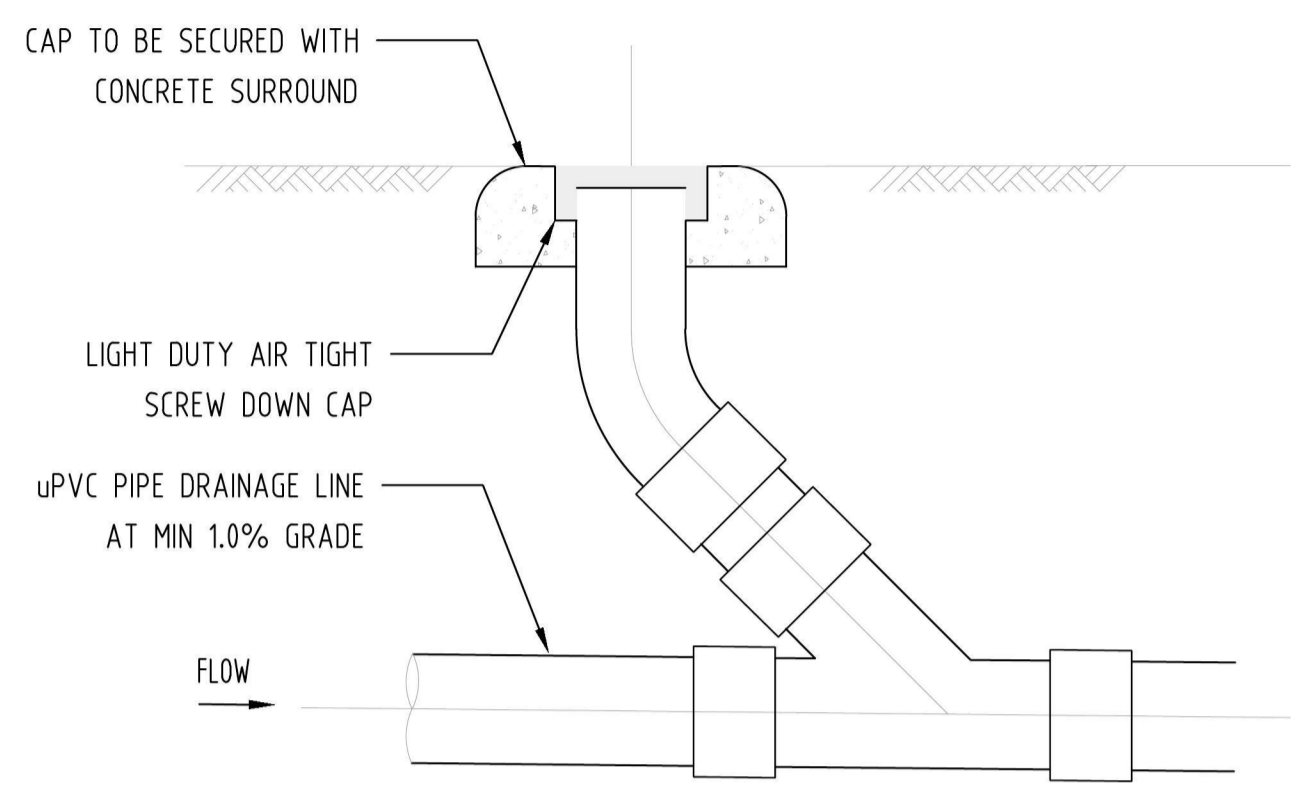
PROJECT  
**PROPOSED SEPP HOUSING DEVELOPMENT**  
 LOT 110, LEONAY PARADE, LEONAY

| Drawing Status  |  |
|---|--|
| PRELIMINARY   | NOT TO BE USED FOR CONSTRUCTION PURPOSES |
| Drawing Title<br><b>STORMWATER CONCEPT DESIGN GROUND FLOOR PLAN</b> |  |
| Project No<br><b>20180063</b>                                       | Drawing No<br><b>SW201</b>               |
| Revision No<br><b>P1</b>  |  |

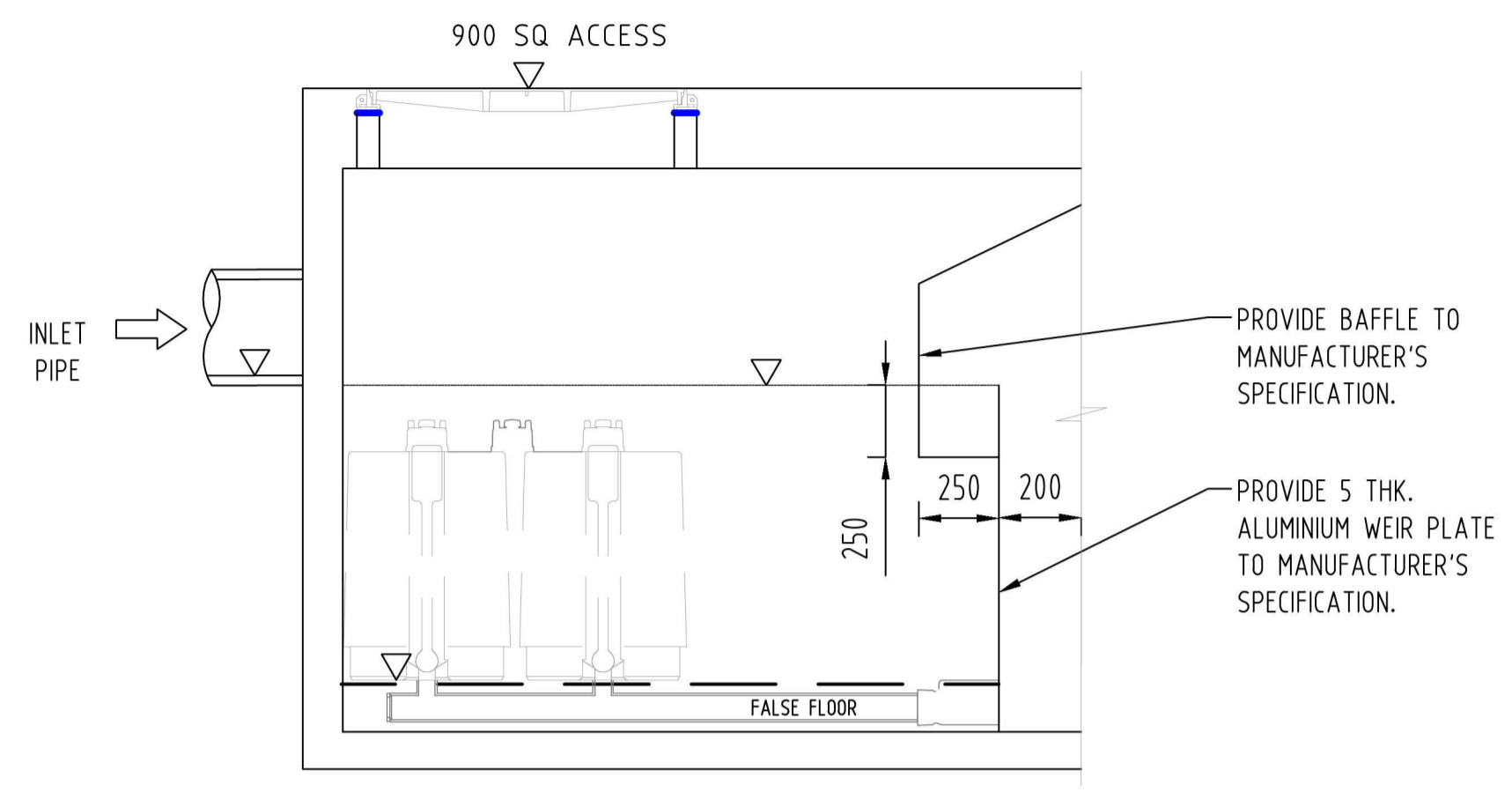




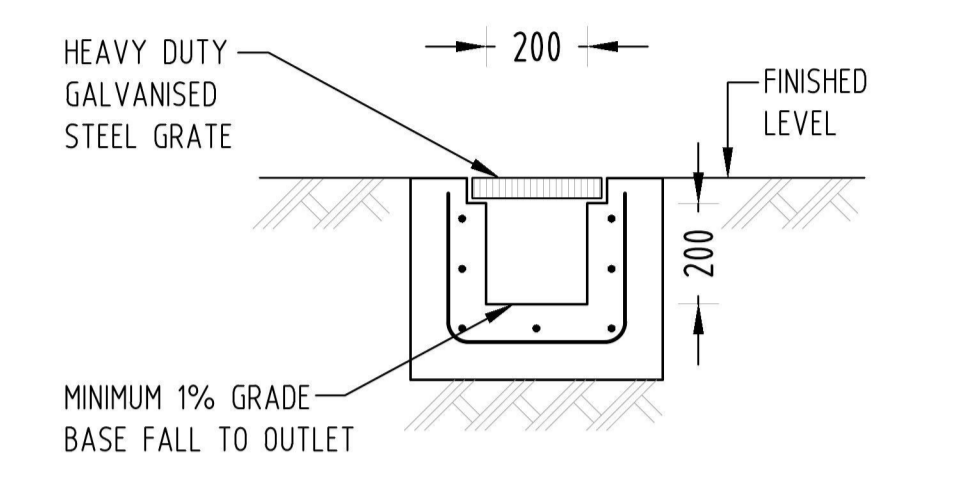
**1** DETAIL  
FIRST FLUSH DIVERTER  
SCALE 1:20



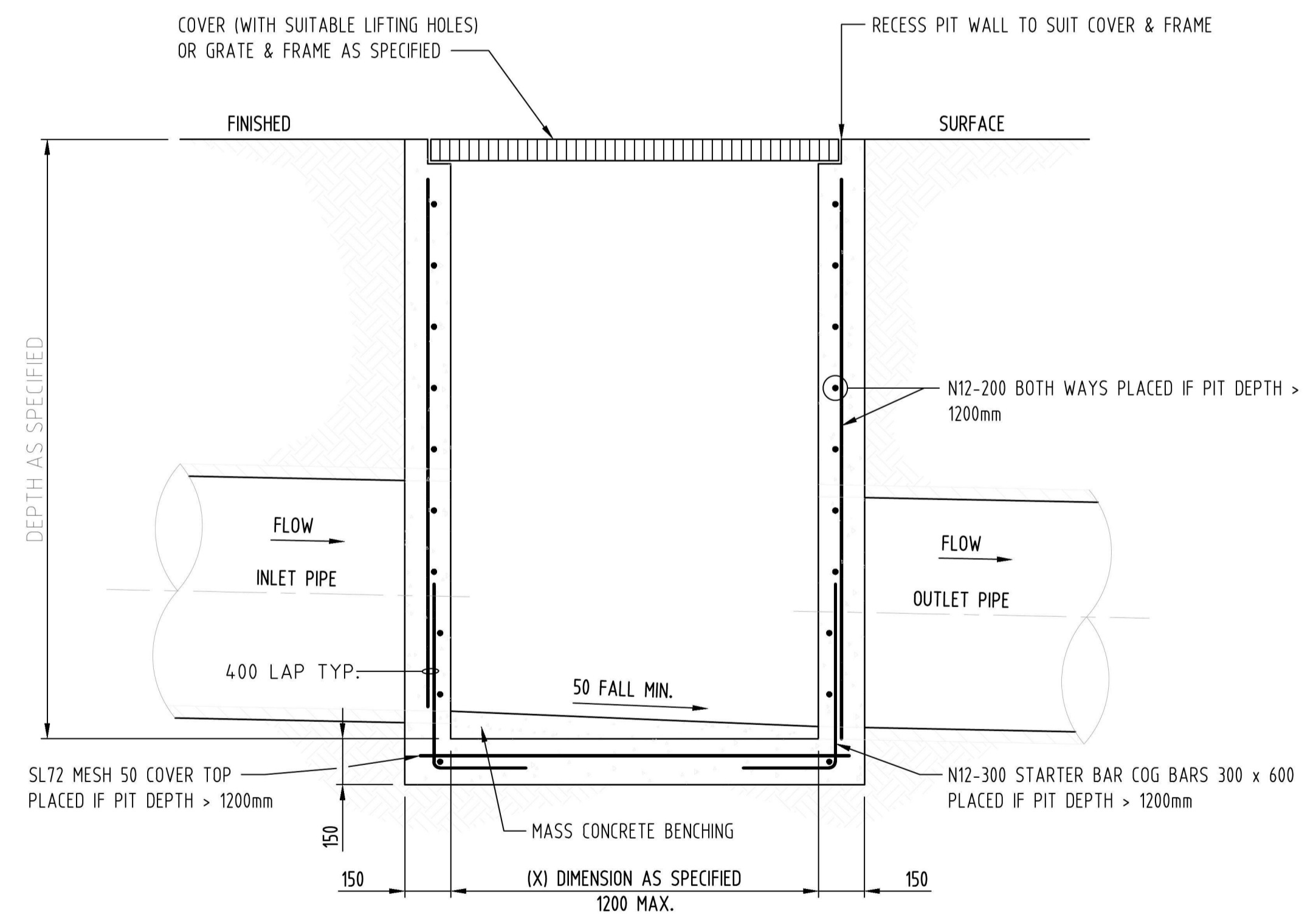
**CLEANING EYE DETAIL**  
1:10



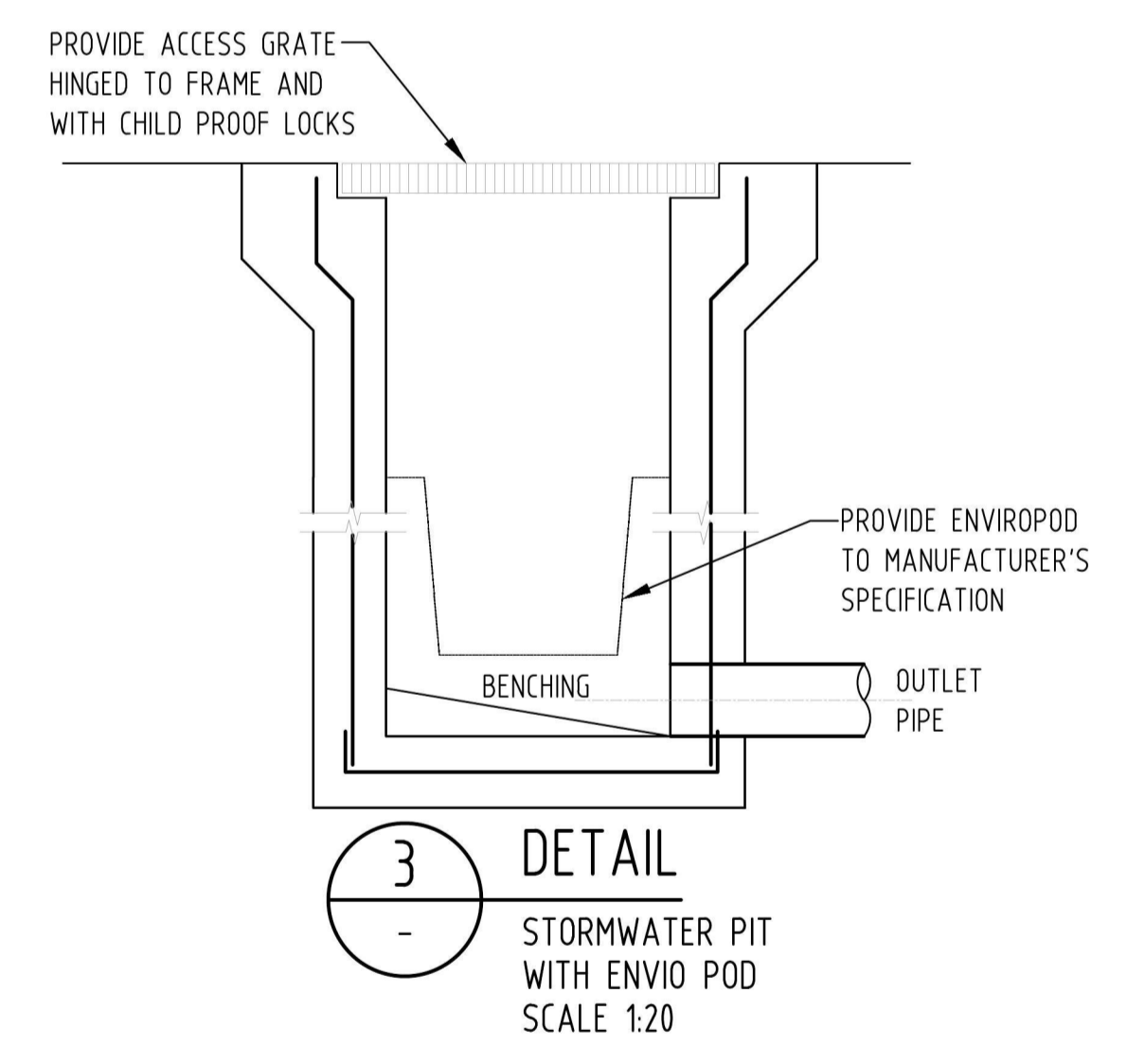
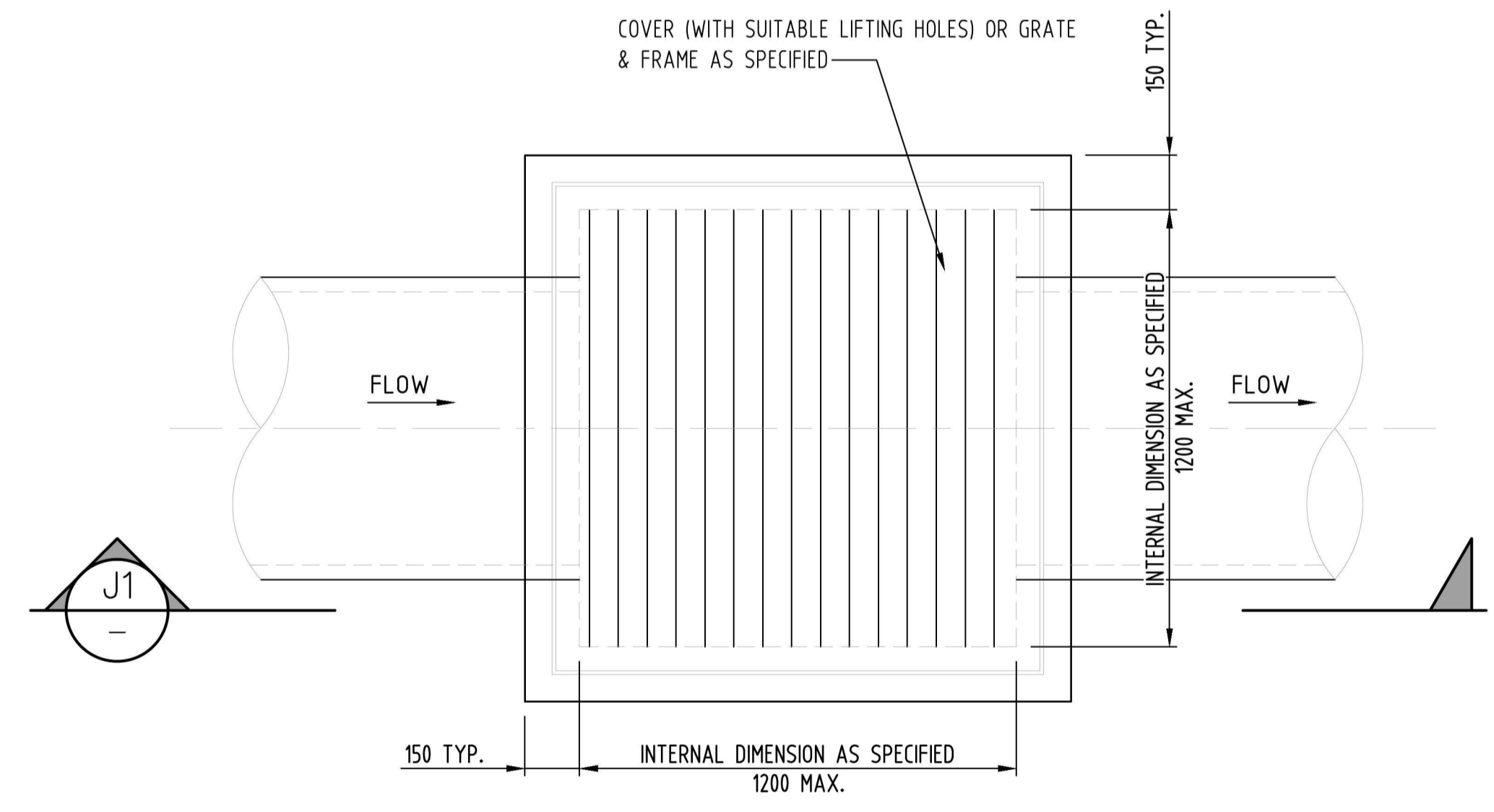
**SECTION**  
STORMFILTER CHAMBER  
NOT TO SCALE



**2** DETAIL  
GRADED TRENCH DRAIN  
NOT TO SCALE



**SECTION J1**  
SCALE: 20



**3** DETAIL  
STORMWATER PIT WITH ENVIRO POD  
SCALE 1:20



| Issue | Last revision title | by  | Date       | Status |
|-------|---------------------|-----|------------|--------|
| P1    | PRELIMINARY ISSUE   | SC1 | 24.04.2018 | 1      |

Issuer internal sequence and revision history

|               |                           |                            |          |                |         |
|---------------|---------------------------|----------------------------|----------|----------------|---------|
| 1-preliminary | 2-development application | 3-construction certificate | 4-tender | 5-construction | 6-other |
|---------------|---------------------------|----------------------------|----------|----------------|---------|

| Discipline | Drawing Title and Number | Date | Rev. |
|------------|--------------------------|------|------|
| ARCH       |                          |      |      |
| MECH       |                          |      |      |
| ELEC       |                          |      |      |
| PROP       |                          |      |      |
| LANDS      |                          |      |      |
| CIVIL      |                          |      |      |
| SURVEY     |                          |      |      |

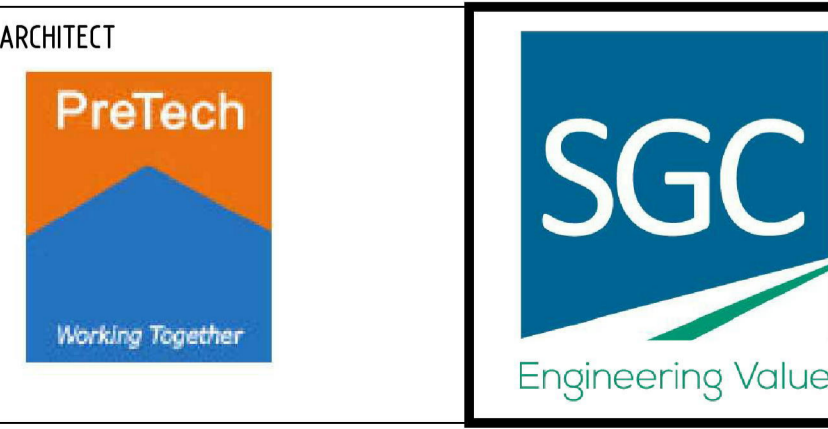
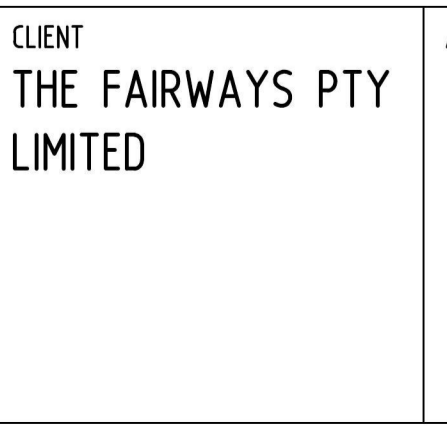
**ENGINEERS AUSTRALIA**  
Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE THIS DRAWING. POSITIONS OF AUTHORITIES MARKS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DESIGN/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

| QUALITY CONTROL |     |      |          |  |
|-----------------|-----|------|----------|--|
| DRAWN           | SH  | DATE | 18.04.18 |  |
| CHECKED         | BW  | DATE | 18.04.18 |  |
| DESIGNED        | SC1 | DATE | 24.04.18 |  |
| VERIFIED        | SH  | DATE | 24.04.18 |  |
| APPROVED        | SH  | DATE | 24.04.18 |  |

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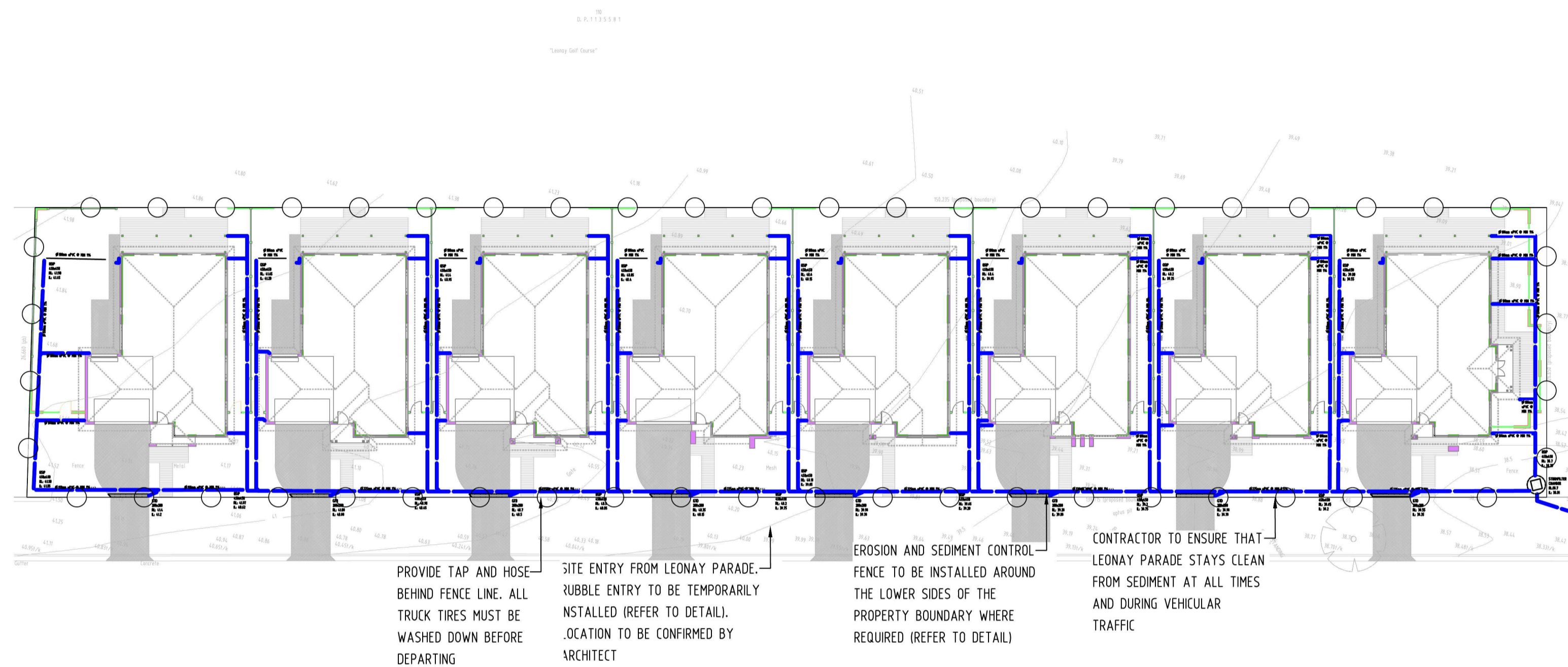
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PROJECT  
**PROPOSED SEPP HOUSING DEVELOPMENT**

LOT 110, LEONAY PARADE, LEONAY

|      |        |        |                          |
|------|--------|--------|--------------------------|
| Grid | Datum  | Sheet  | Scale (at original size) |
| -    | A.H.D. | 4 OF 6 | A SHOWN                  |

|            |            |             |
|------------|------------|-------------|
| Project No | Drawing No | Revision No |
| 20180063   | SW300      | P1          |



PROVIDE TAP AND HOSE BEHIND FENCE LINE. ALL TRUCK TIRES MUST BE WASHED DOWN BEFORE DEPARTING

SITE ENTRY FROM LEONAY PARADE. RUBBLE ENTRY TO BE TEMPORARILY INSTALLED (REFER TO DETAIL). LOCATION TO BE CONFIRMED BY ARCHITECT

EROSION AND SEDIMENT CONTROL FENCE TO BE INSTALLED AROUND THE LOWER SIDES OF THE PROPERTY BOUNDARY WHERE REQUIRED (REFER TO DETAIL)

CONTRACTOR TO ENSURE THAT LEONAY PARADE STAYS CLEAN FROM SEDIMENT AT ALL TIMES AND DURING VEHICULAR TRAFFIC

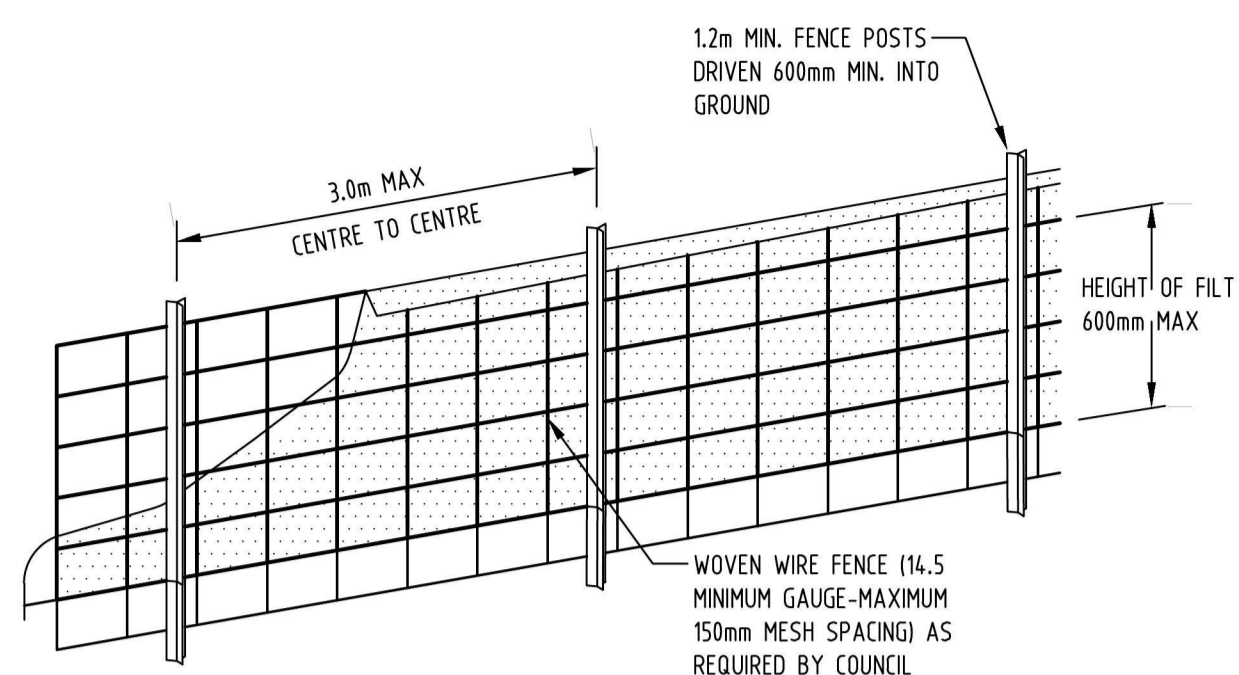
**EROSION AND SEDIMENT CONTROL PLAN**  
SCALE NTS

**EROSION & SEDIMENTATION CONTROL NOTES**

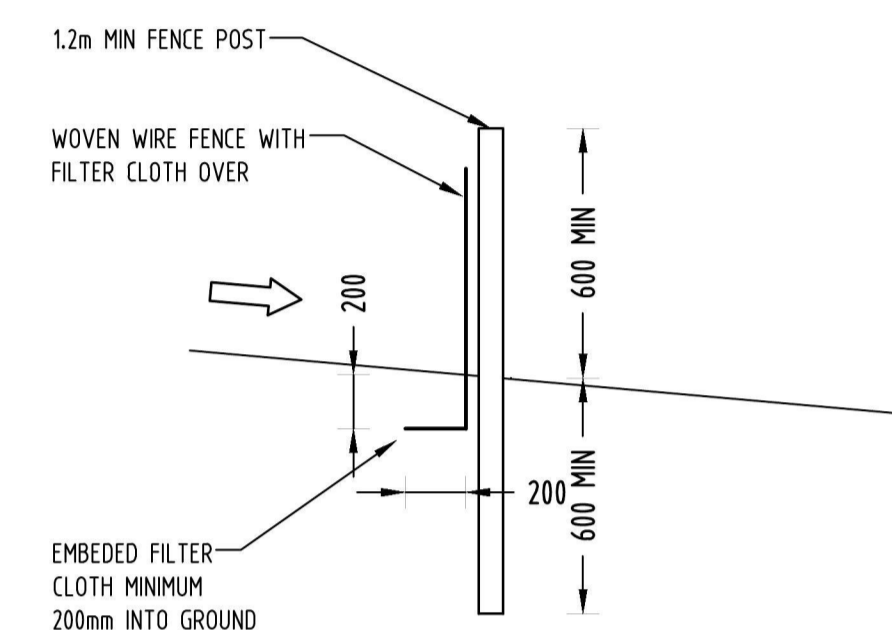
- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.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

**GENERAL NOTES**

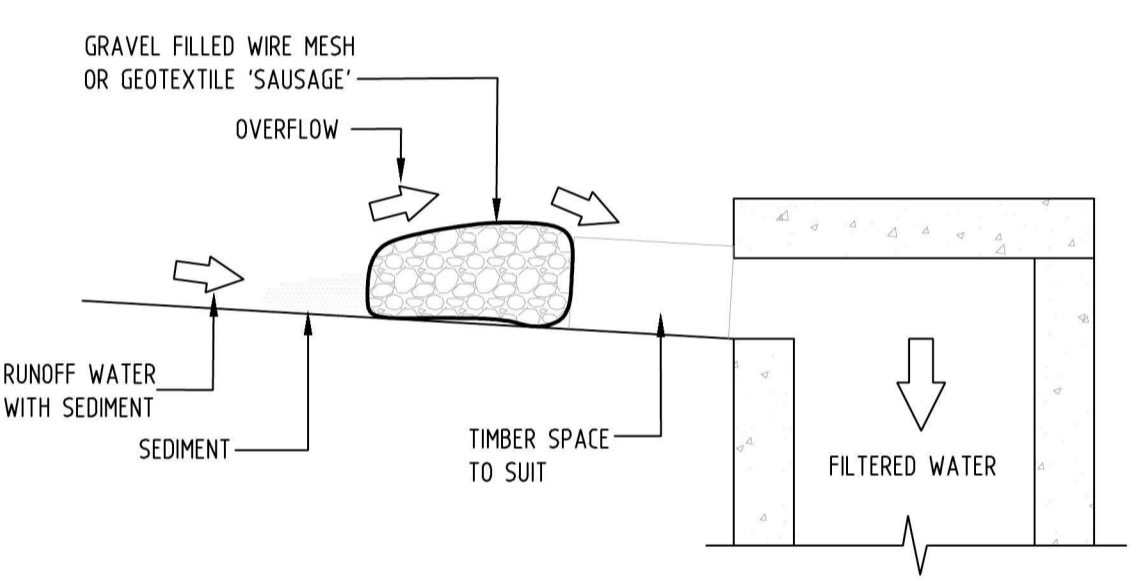
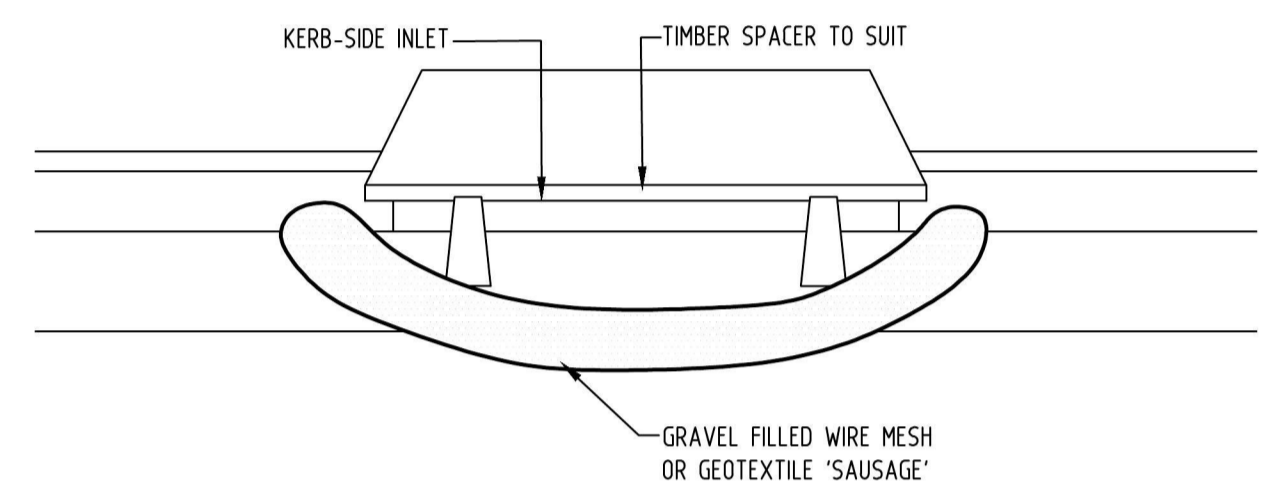
- THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
  - ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.
- CLAY SOILS**
- A SYSTEM SHALL BE INSTALLED TO EITHER:
- TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
  - TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POED 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.



DIAGRAMMATIC VIEW



TYPICAL SECTION



**GRAVEL INLET FILTER (SAUSAGE)**  
NOT TO SCALE

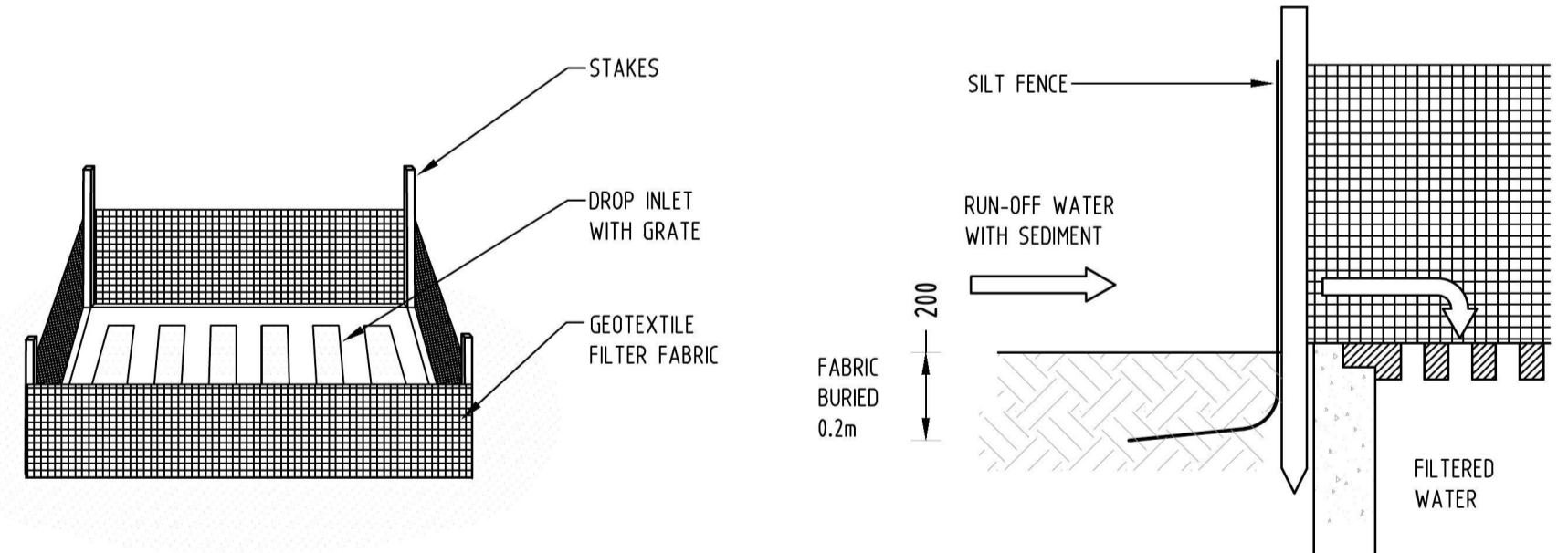
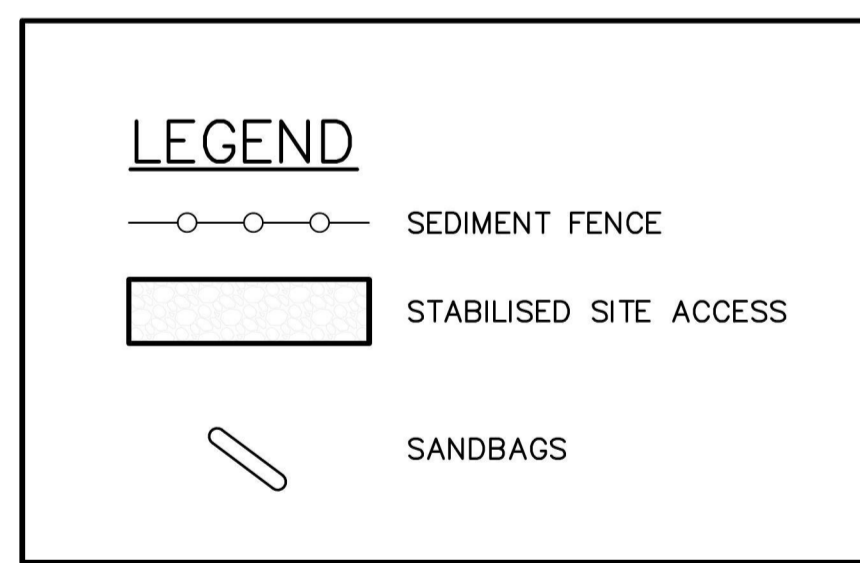
**CONSTRUCTION NOTES:**

- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAT THE LENGTH OF THE INLET PIT
- FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL
- FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY
- MAINTAIN THE OPENING WITH SPACER BLOCKS
- FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER
- FIT TO ALL KERB INLETS AT SAG POINTS

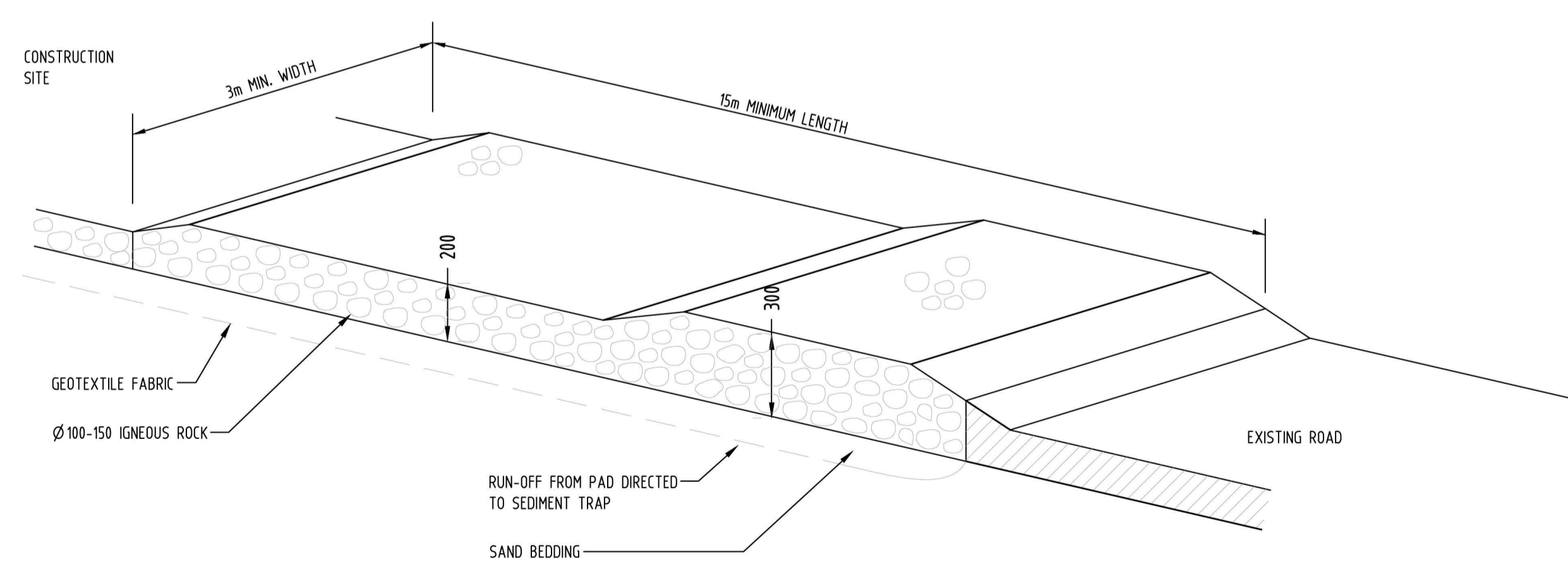
**SEDIMENT FENCE**  
NOT TO SCALE

**GEOTEXTILE INLET FILTER**

GEOTEXTILE INLET FILTER IS PLACED IN EVERY PIT WITHIN THE SITE TO ENSURE THE RUNOFF WATER DURING CONSTRUCTION NOT ENTER THE PITS.



**GEOTEXTILE INLET FILTER**  
NOT TO SCALE



**TEMPORARY CONSTRUCTION EXIT**  
**RUBBLE ALTERNATIVE**  
NOT TO SCALE



| Reference Coordination Drawing |                          |
|--------------------------------|--------------------------|
| Discipline                     | Drawing Title and Number |
| ARCH                           |                          |
| ARCH                           |                          |
| STRUCT                         |                          |
| MECH                           |                          |
| ELEC                           |                          |
| HYD                            |                          |
| LANDS                          |                          |
| CIVIL                          |                          |
| SURVEY                         |                          |

| QUALITY CONTROL |               |               |               |
|-----------------|---------------|---------------|---------------|
| DRAWN           | CHECKED       | DESIGNED      | VERIFIED      |
| SCH             | BW            | SH            | SH            |
| DATE 18.04.18   | DATE 18.04.18 | DATE 24.04.18 | DATE 24.04.18 |
| APPROVED        | SH            | DATE 24.04.18 |               |

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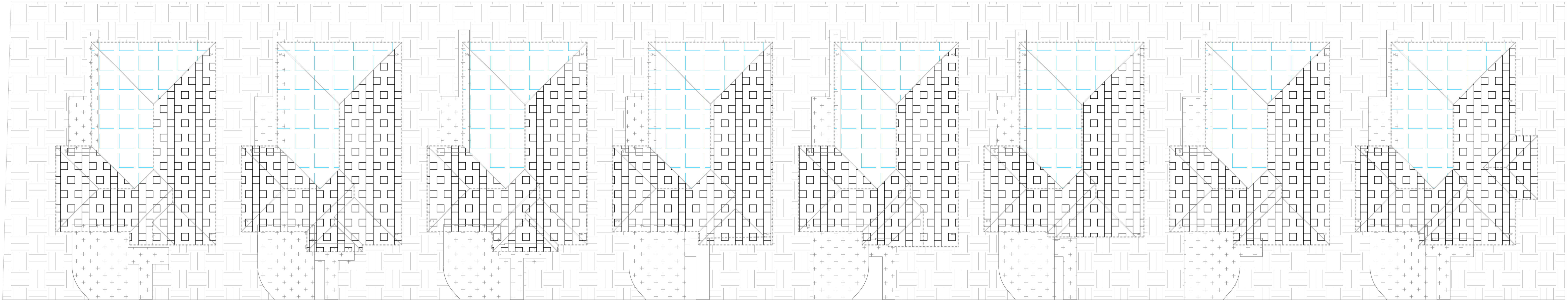
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**THE FAIRWAYS PTY LIMITED**

ARCHITECT  
**PreTech**  
Working Together

**SGC**  
Engineering Value  
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Web: www.sgce.com.au  
A.B.N. 21 118 222 530

PROJECT  
**PROPOSED SEPP HOUSING DEVELOPMENT**  
LOT 110, LEONAY PARADE, LEONAY

|            |            |             |
|------------|------------|-------------|
| Project No | Drawing No | Revision No |
| 20180063   | SW400      | P1          |

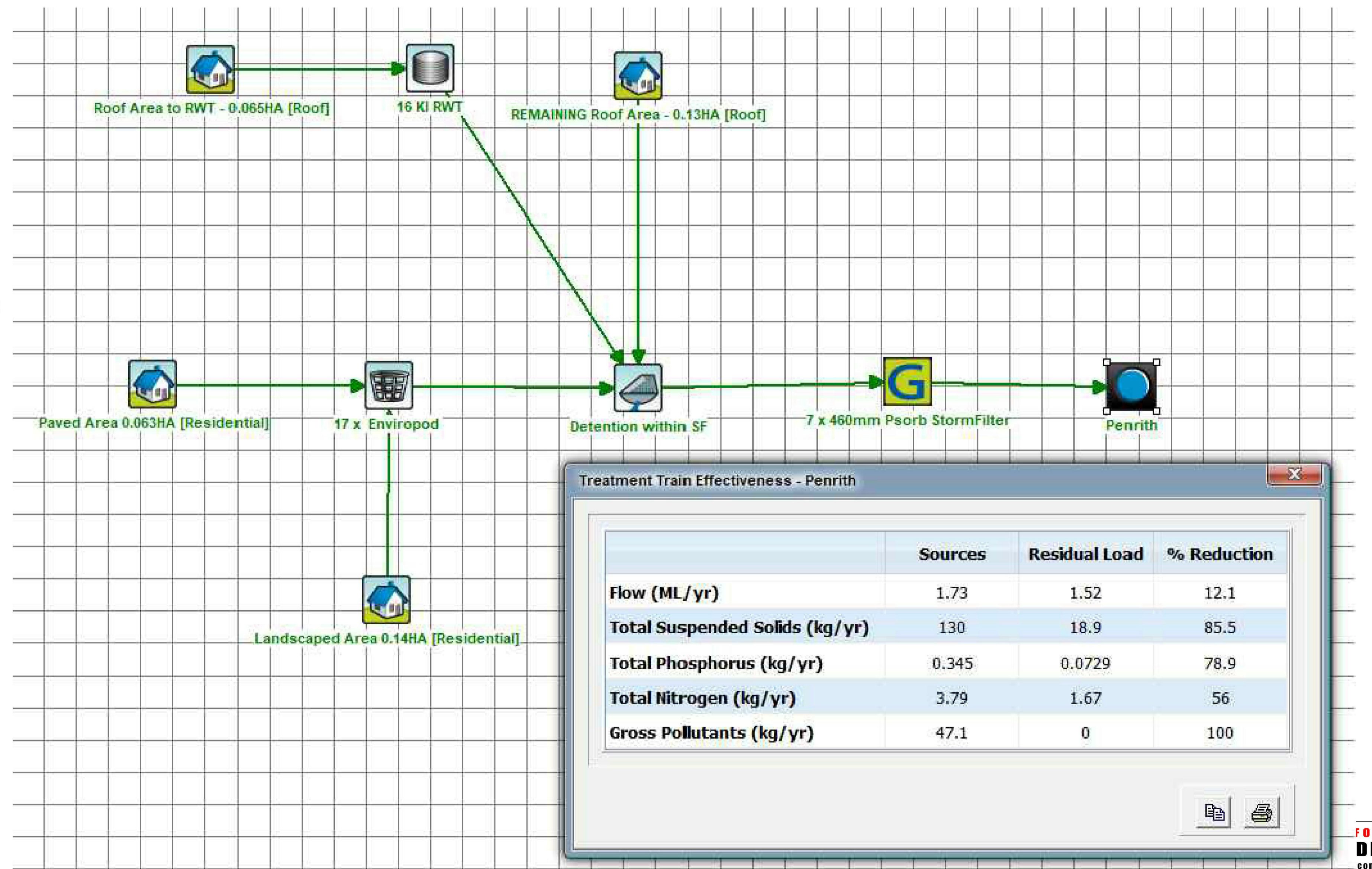


ROOF AREA TO RWT  
AREA: 650.6 SQ.M

PAVEMENT  
AREA: 631 SQ.M

ROOF REMAINING  
AREA: 1274.8 SQ.M

LANDSCAPE  
AREA: 1360.45 SQ.M

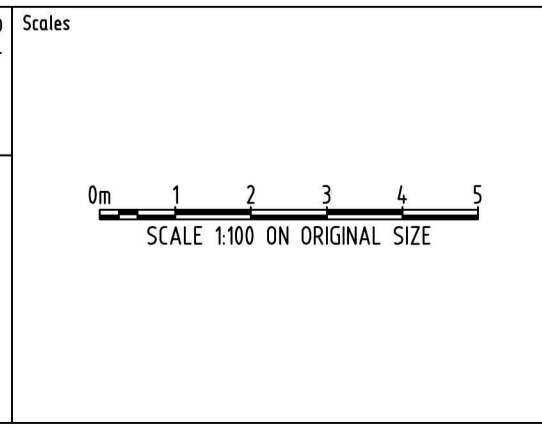


|                                | Sources | Residual Load | % Reduction |
|--------------------------------|---------|---------------|-------------|
| Flow (ML/yr)                   | 1.73    | 1.52          | 12.1        |
| Total Suspended Solids (kg/yr) | 130     | 18.9          | 85.5        |
| Total Phosphorus (kg/yr)       | 0.345   | 0.0729        | 78.9        |
| Total Nitrogen (kg/yr)         | 3.79    | 1.67          | 56          |
| Gross Pollutants (kg/yr)       | 47.1    | 0             | 100         |

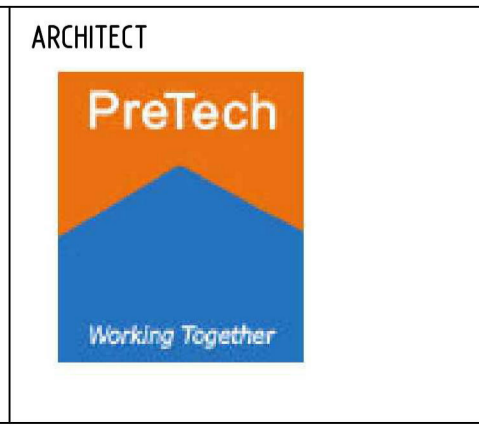
| Reference Coordination Drawing |                          |      |      |
|--------------------------------|--------------------------|------|------|
| Discipline                     | Drawing Title and Number | Date | Rev. |
| ARCH                           |                          |      |      |
| ARCH                           |                          |      |      |
| STRUCT                         |                          |      |      |
| MECH                           |                          |      |      |
| ELEC                           |                          |      |      |
| HYD                            |                          |      |      |
| LANDS                          |                          |      |      |
| CIVIL                          |                          |      |      |
| SURVEY                         |                          |      |      |

| QUALITY CONTROL |      |          |           |
|-----------------|------|----------|-----------|
| Role            | Name | Date     | Signature |
| DRAWN           | SH   | 18.04.18 |           |
| CHECKED         | BW   | 18.04.18 |           |
| DESIGNED        | SH   | 24.04.18 |           |
| VERIFIED        | SH   | 24.04.18 |           |
| APPROVED        | SH   | 24.04.18 |           |

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F: +61 2 9672 6977  
Email: office@sgce.com.au  
Web: www.sgce.com.au  
A.B.N. 21 118 222 530

PROJECT  
**PROPOSED SEPP HOUSING DEVELOPMENT**  
LOT 110, LEONAY PARADE, LEONAY

|   |                     |                   |
|---|---------------------|-------------------|
| Drawing Status<br>PRELIMINARY<br>NOT TO BE USED FOR CONSTRUCTION PURPOSES |                     |                   |
| Drawing Title<br>STORMWATER CONCEPT DESIGN<br>MUSIC CATHMENT PLAN         |                     |                   |
| Project No<br>20180063  | Drawing No<br>SW500 | Revision No<br>P1 |