



PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT

ADDRESS
NO 18 SETMOUR PARADE, BELFIELD

CLIENT
MICHAEL THAI & ANNE UNG

PROJECT No.
23G8705

DRAWING LIST

S01	DRAINAGE PLAN
S02	CATCHMENT PLAN
S03	DRAINAGE DETAILS
S04	DRAINAGE DETAILS


Director/Principal Engineer
Santosh Paudel
B. Eng (Civil/Structural) MIE (Aust)
santosh@grandengineering.com.au
0411348603

orders@grandengineering.com.au ABN: 9465 0535 989
www.grandengineering.com.au Ph: 1300 816 816

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A	ISSUE FOR REVIEW	S.P.	S.P.	S.P.	01.11.23
REV	REVISION	DRAWN	ENG	CHECK	DATE
AMENDMENTS					

STATUS:			
ISSUED FOR REVIEW			
DATE:	DRAWN:	CHECKED:	REVISION:
01.11.2023	S.P.	S.P.	A

NOTES

ALTERATION OF OSD SYSTEM IS SUBJECT TO COUNCIL'S APPROVAL.

NEW UNDERGROUND OSD IS PROPOSED FOLLOWING ORIGINAL DESIGN AND ANALYSIS CARRIED OUT BY RAFELETOS ZANUTTINI DATED 13/08/01

- VOLUME REQUIRED 5.81 m³
- PSD 6.27 L/s
- ROOF AREA RUNS TO OSD SYSTEM: 136.34m² (76.15%)
- PAVE AREA BYPASS OSD SYSTEM: 42.7m² (23.85%)

DESIGN SUMMARY

CITY OF CANTERBURY BLACKTOWN CITY COUNCIL

SINGLE DWELLING DEVELOPMENT
SITE AREA = 309.90 m2

ALTERATION OF OSD BASIN IS SUBJECT TO COUNCIL'S APPROVAL

ROOF AREA WILL BE COLLECTED INTO RAINWATER TANK, OVERFLOW FROM RAINWATER TANK WILL DISCHARGE TO NEW OSD.

ALL CHARGED LINES MUST BE OF PRESSURE GRADE AND JOINTS ARE TO BE SOLVENT WELDED.

THE PIPE SYSTEM INCLUDING DOWNPIPES MUST BE CONSTRUCTED FROM SUITABLY DURABLE MATERIALS.

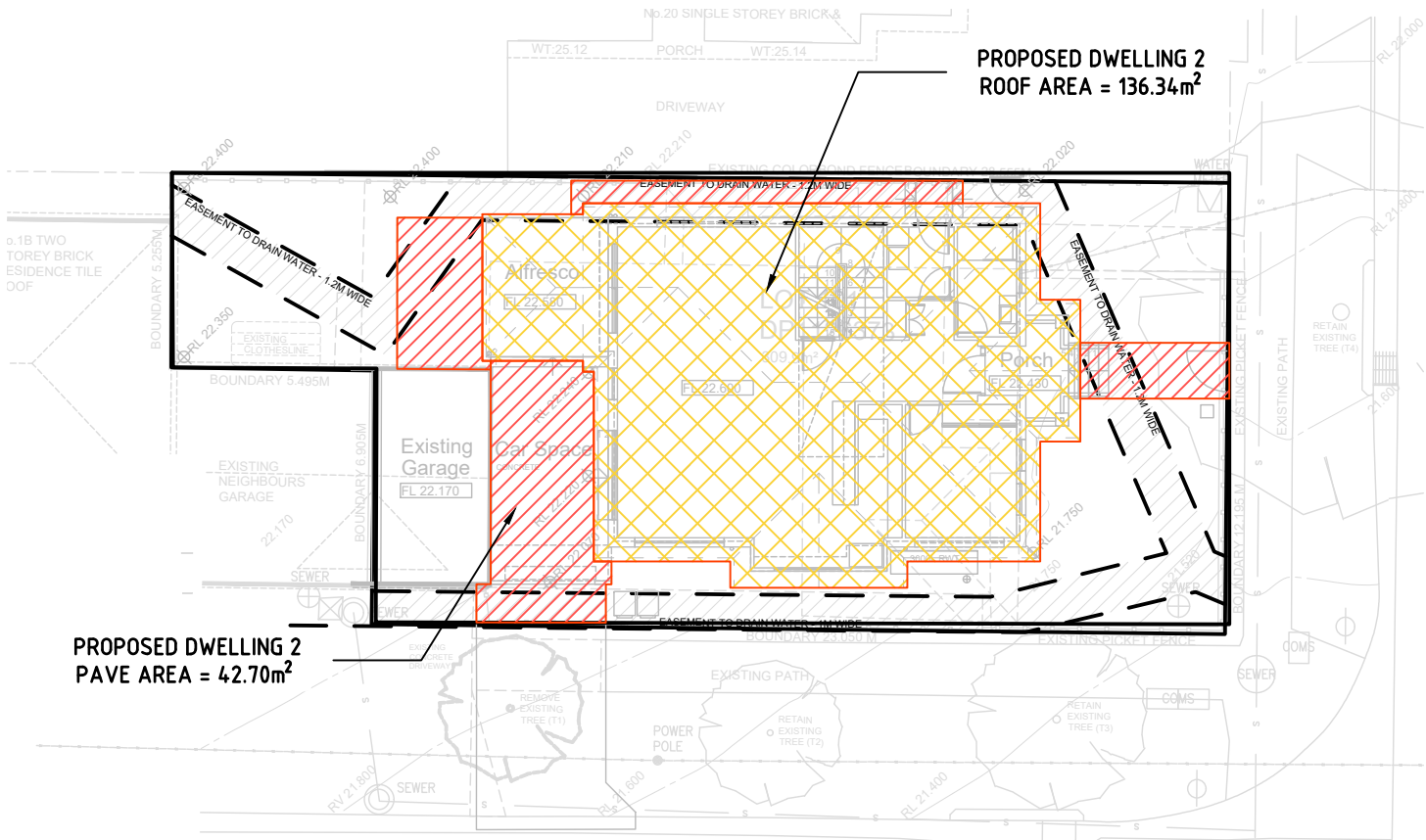
ENSURE FINISH SURFACE LEVEL SLOPES AWAY FROM BUILDING FOOTPRINT.

Orifice Plate Discharge Calculation:

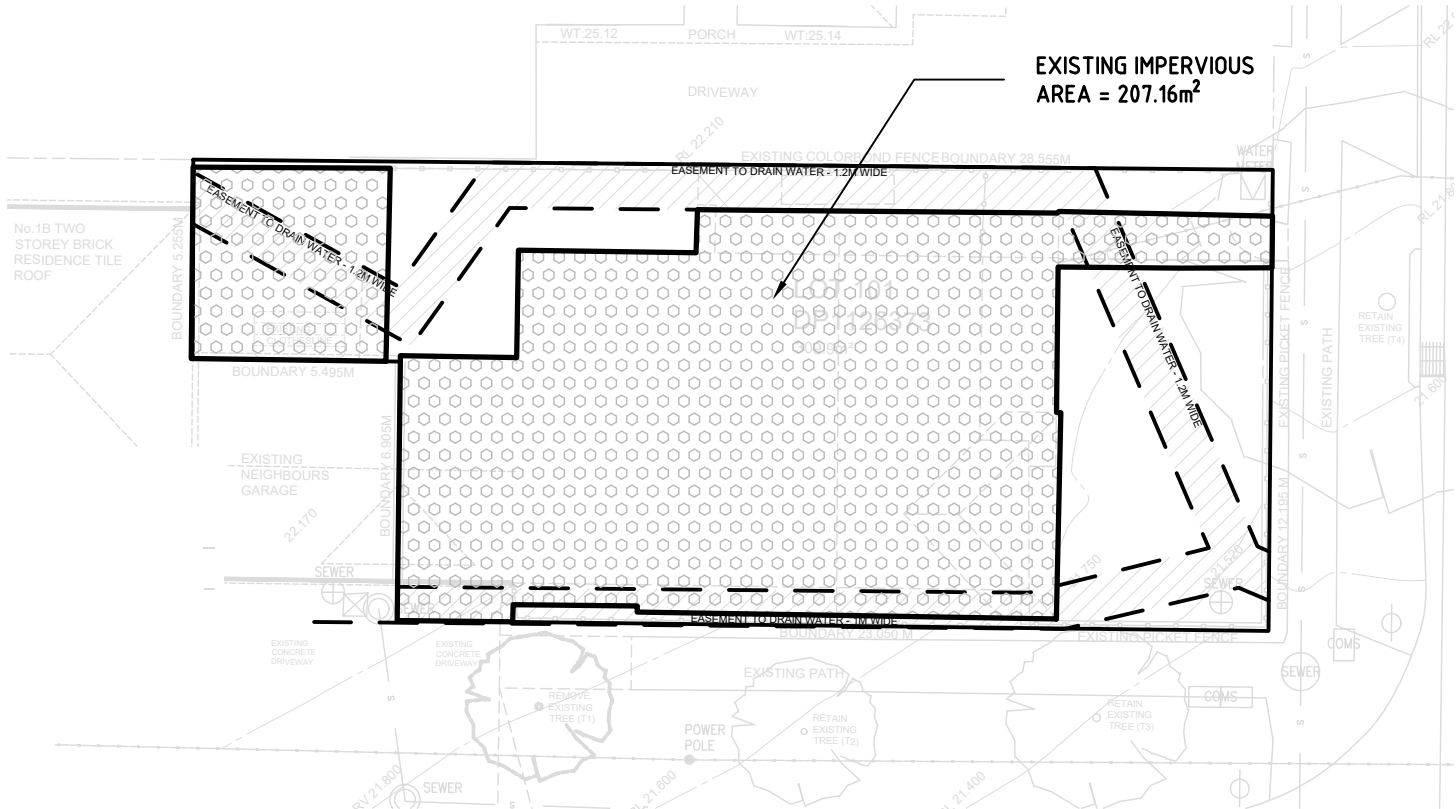
$$Q_{max} = A C_d \sqrt{2gh} \Rightarrow A = \frac{Q_{max}}{C_d \sqrt{2gh}}$$

Qmax = 0.0063 (m3/s)
h = 0.75 (m)
Cd = 0.61
g = 9.8 m/s2
A = 0.003 m2

Orifice Diameter = $D = \sqrt{\frac{A \times 4}{\pi}} = 0.062 \text{ (m)}$



PROPOSED IMPERVIOUS AREA
SCALE 1:200



EXISTING IMPERVIOUS AREA
SCALE 1:200


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B. Eng (Civil/Structural) MIE (Aust)
santosh@grandengineering.com.au
0411348603

**GRAND
ENGINEERING**
Structural Geotech Stormwater
orders@grandengineering.com.au ABN: 9465 0535 989
www.grandengineering.com.au Ph: 1300 816 816


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LOT 18 SEYMOUR STREET, BELFIELD

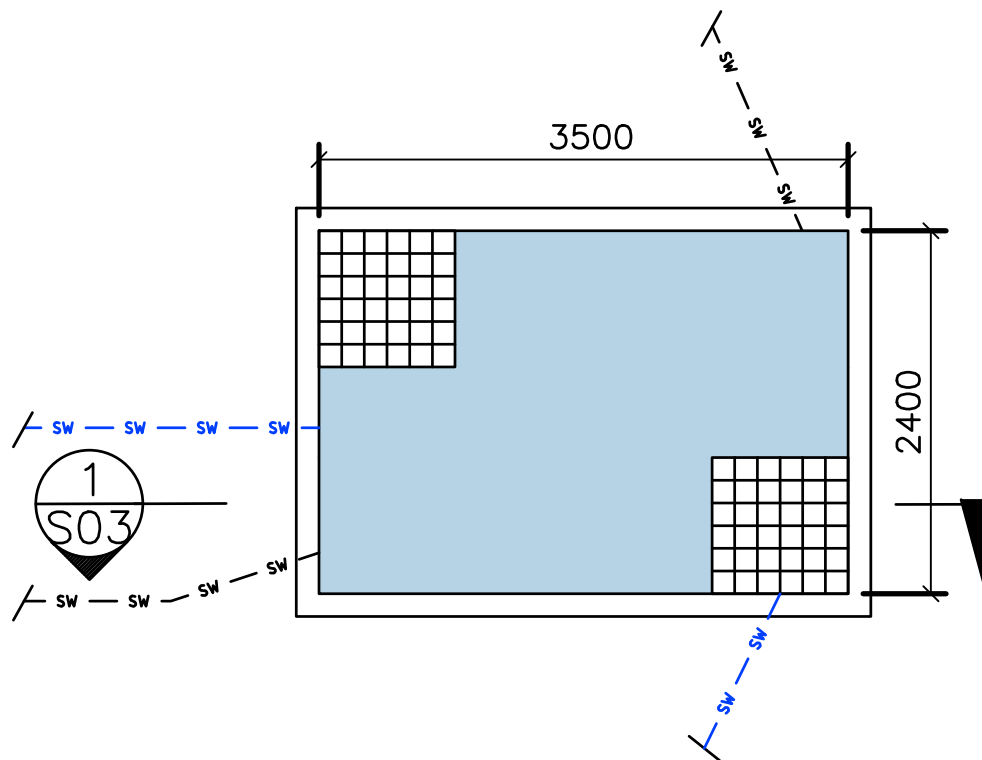
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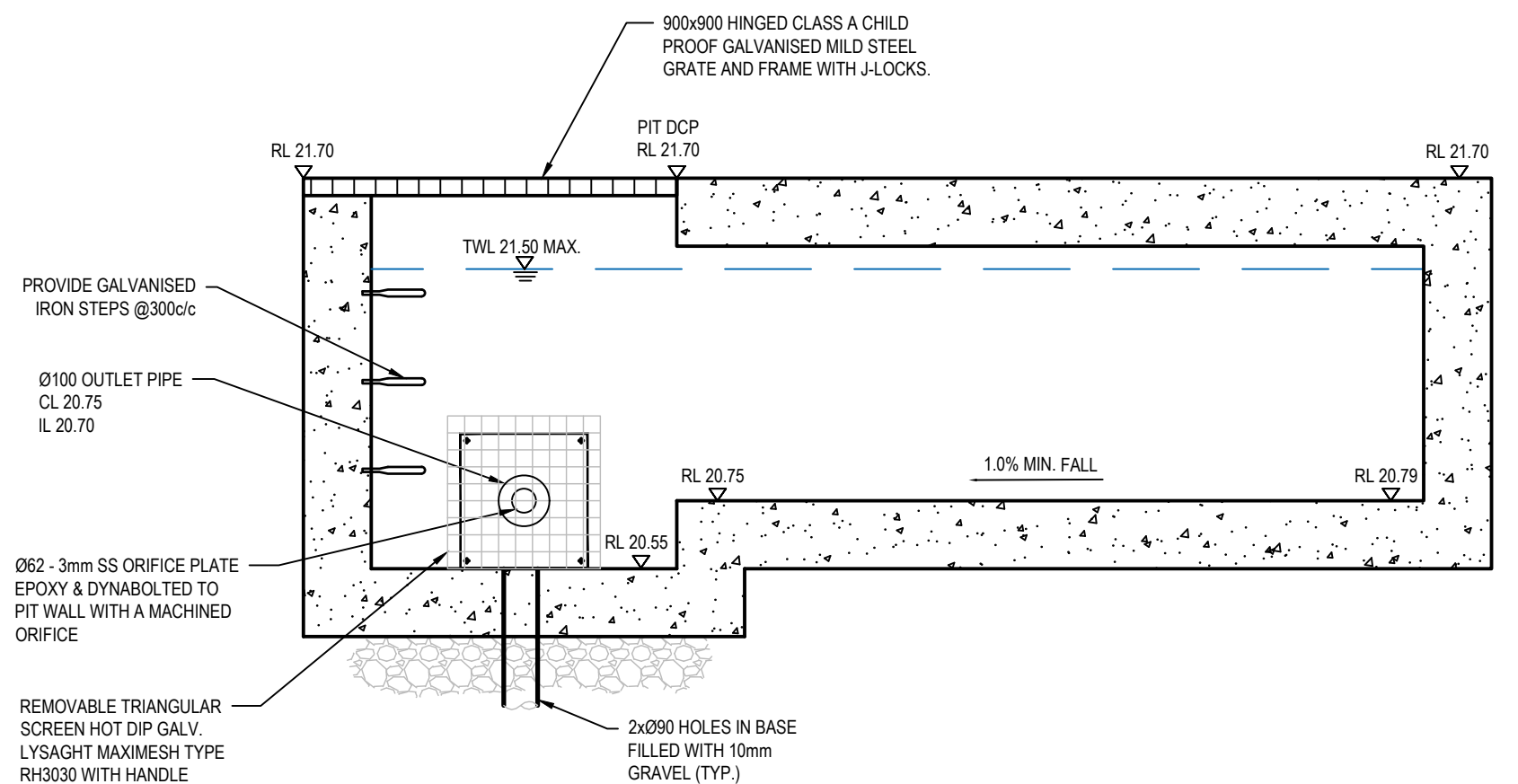
DRAWING TITLE:
CATCHMENT PLAN

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
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23G8705	S02	A



UNDERGROUND OSD TANK PLAN
SCALE: 1:50



UNDERGROUND OSD TANK SECTION 1
SCALE: 1:20

THIS IS AN
**ON-SITE STORMWATER
DETENTION SYSTEM**

REQUIRED BY YOUR LOCAL COUNCIL

IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE
TANK OR BASIN OR TO INTERFERE WITH THE
ORIFICE PLATE THAT CONTROLS THE OUTFLOW

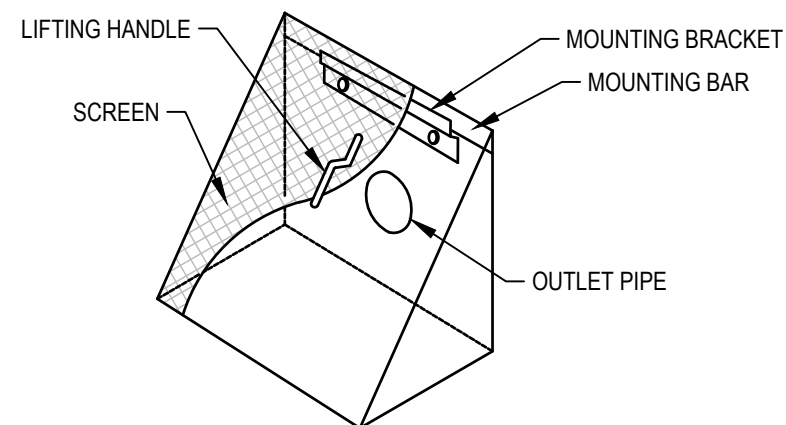
THE BASE OF THE OUTLET CONTROL PIT AND THE
DEBRIS SCREEN MUST BE CLEANED OF DEBRIS AND
SEDIMENT ON A REGULAR BASIS BY THE OWNER

THIS PLATE MUST NOT BE REMOVED

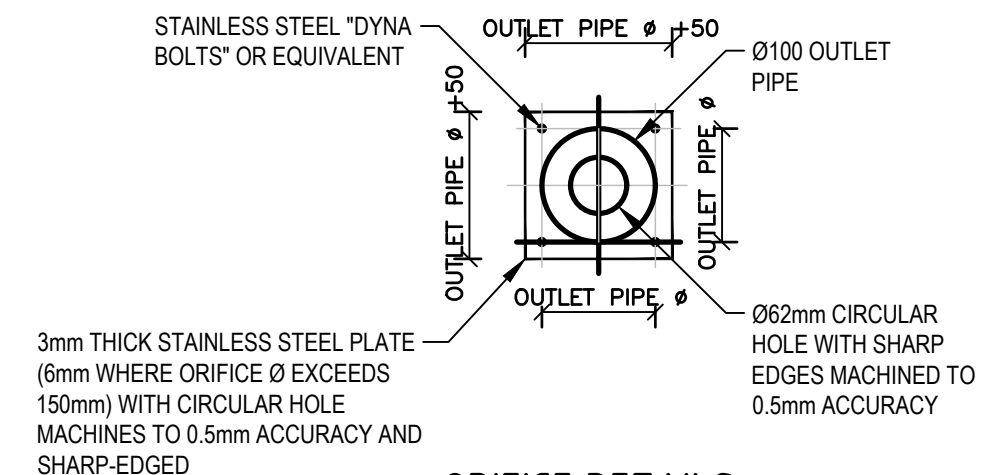
**OSD SIGN TO BE PLACED
INSIDE OSD TANK**
NTS



**CONFINED SPACE SIGN TO BE
PLACED INSIDE OSD TANK**
NTS



DEBRIS SCREEN DETAILS
NTS



ORIFICE DETAILS
SCALE 1:10

Santosh
Director/Principal Engineer
Santosh Paudel
B. Eng (Civil/Structural) MIE (Aust)
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0411348603

**GRAND
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bdaa
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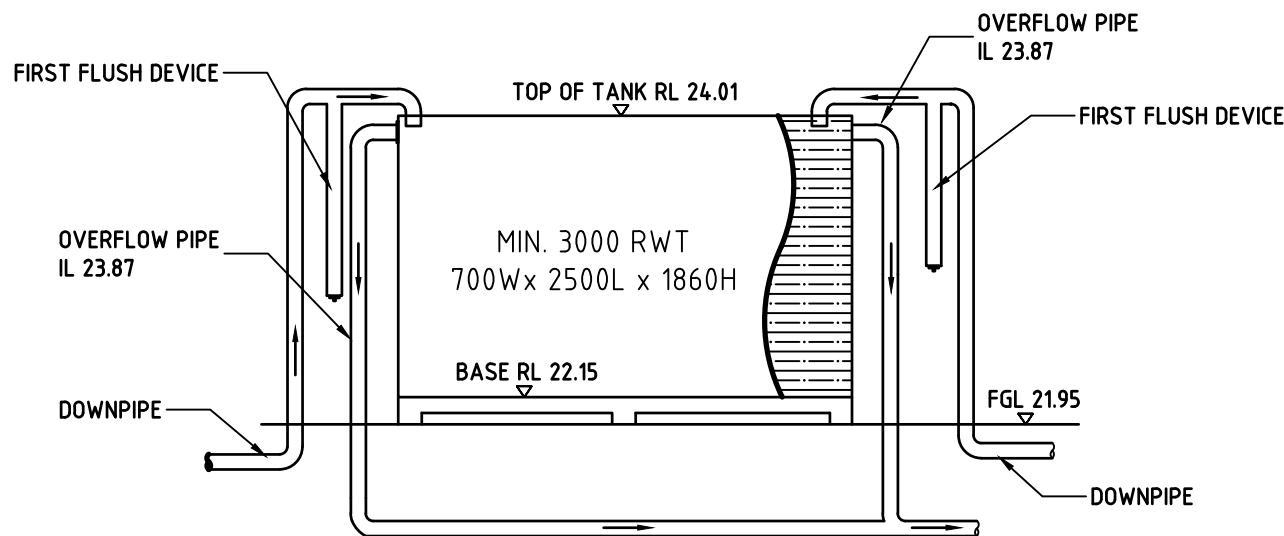
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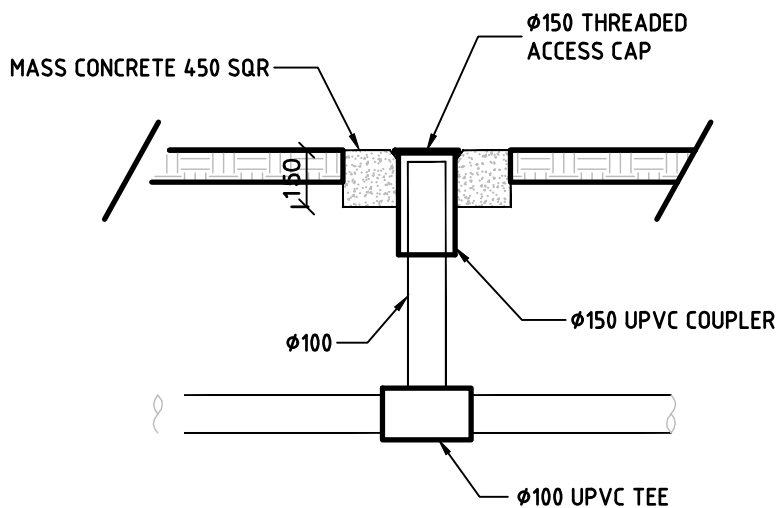
RAINWATER TANK NOTES:

1. A FIRST FLUSH DEVICE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS SHALL BE FITTED TO RAINWATER TANK SYSTEM TO FLUSH OUT THE FIRST 0.5mm OF RUN-OFF FROM THE ROOF AREA THAT DRAINED INTO THE TANK (E.G. 0.5L/m²).
2. PUMP SIZE & SPECIFICATION TO BE NOMINATED BY MANUFACTURER.
3. DIMENSIONS ARE INDICATIVE ONLY. EXACT DETAILS TO MANUFACTURER'S SPECIFICATIONS.



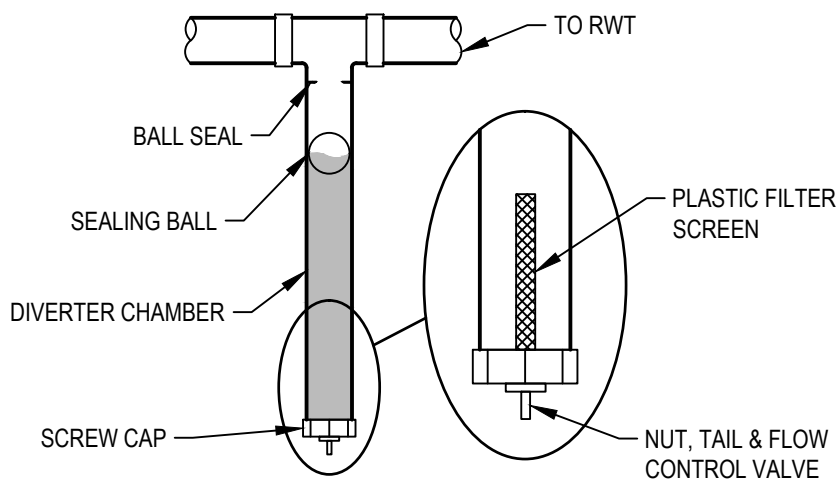
RAINWATER TANK DETAILS

SCALE 1:50



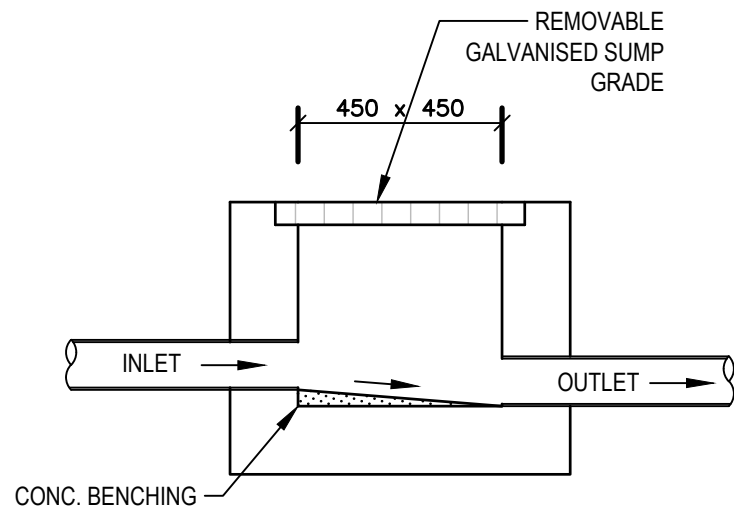
CLEANNING EYE DETAILS

SCALE 1:20



FIRST FLUSH DEVICE

NTS



TYPICAL PIT DETAILS

NTS



SURFACE DRAINAGE (FD)

NTS

Santosh

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