

PROJECT:24 EPACRIS AVENUE FORESTVILLE 2087

PLANSET:STORMWATER MANAGEMENT PLAN

CLIENT:AFORM ARCHITECTURE PTY LTD



NOT TO SCALE

LGA: NORTHERN BEACHES COUNCIL

DRAWING LIST

DRAWING NO.	REV	DRAWING TITLE
D100	B	COVER SHEET
D101	B	GENERAL NOTES
D102	B	SITE DRAINAGE PLAN
D103	B	ROOF & LEVEL 1 DRAINAGE PLAN
D104	B	DRAINAGE DETAILS SHEET 1 / 2
D105	B	DRAINAGE DETAILS SHEET 2 / 2

B	10/08/25	DEVELOPMENT APPLICATION	WP	VH	
A	27/07/25	ISSUE FOR REVIEW	WP	VH	
REV	DATE	DESCRIPTION	DRN	ENG	

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SCALE:
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S&V

ENGINEERING

PROJECT	24 EPACRIS AVENUE FORESTVILLE, 2087
CLIENT	AFORM ARCHITECTURE

DRAWING TITLE	COVER SHEET
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STATUS FOR DA APPROVAL			
SCALE -	DRAWN: WP	CHECKED VH	DATE 27/07/25
PROJECT NO. SV25010	DRAWING NO. D100	REV.1 B	

GENERAL NOTES:

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER AND ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
2. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING ANY SHOWN ON STORMWATER DRAWINGS, SHALL BE IN ACCORDANCE WITH THE ARCHITECTS DRAWINGS AND VERIFIED BY THE BUILDER BEFORE CONSTRUCTION OR FABRICATION COMMENCES. ANY DISCREPANCIES IN THE DOCUMENTS MUST BE RESOLVED BEFORE ORDERING OR PLACING ANY MATERIALS. THESE DRAWINGS ARE NOT TO BE SCALED.
3. UNLESS NOTED OTHER WISE, ALL LEVELS ARE IN METERS AND ALL DIMENSIONS ARE IN MILLIMETERS.
4. DURING CONSTRUCTION, THE BUILDER SHALL ENSURE THAT ALL PARTS OF THE STRUCTURE ARE MAINTAINED IN A STABLE CONDITION AND THAT NO PART OF THE STRUCTURE IS OVERSTRESSED AS A RESULT OF HIS CONSTRUCTION PROCEDURE OR THE CONSTRUCTION LOADS WHICH ARE APPLIED.
5. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES, THE BUILDING CODE OF AUSTRALIA, AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
6. THE BUILDER SHALL BE RESPONSIBLE FOR ENSURING THAT ALL TEMPORARY WORKS (I.E. FORMWORK, SCAFFOLDING, PROPPING, PLATFORMS, HOISTS, CRANEAGE, HOARDING, SIGNAGE ETC.) ARE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES, THE BUILDING CODE OF AUSTRALIA, AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
7. THE BUILDER SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH AND SAFETY ACTS, CODES OF PRACTICE, GUIDANCE NOTES AND OTHER INFORMATION RELEVANT TO HEALTH AND SAFETY.
8. IF ANY DISCREPANCY OCCURS BETWEEN THE ENGINEER'S DRAWINGS AND SITE CONDITION, THE BUILDER SHALL SEEK ADVISE FROM THE ENGINEER.
9. BUILDER TO NOTIFY THE ENGINEER FOR INSPECTION PRIOR TO COVERING UP ANY STORMWATER ELEMENTS.

STORMWATER NOTE:

1. BOUNDARY LEVELS MUST BE CONFIRMED PRIOR TO CONSTRUCTION.
2. THE CONNECTION TO COUNCIL'S DRAINAGE SYSTEM SHALL BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ALL INTERNAL DRAINAGE. THE COUNCIL ENGINEERS BEING GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
3. STORMWATER DRAINAGE CONNECTION TO THE COUNCIL'S STORMWATER SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF THE LOCAL COUNCIL.
4. ALL PIPES TO BE 100Ø or 150Ø UPVC SEWER GRADE, LAID ON A MIN 1% GRADE, MINIMUM 300mm COVER UNO.
5. PIT SIZE TO BE:
 - 450x450mm, PITS UP TO 600mm IN DEPTH
 - 600x600mm, PITS UP TO 1000mm IN DEPTH
6. ALL PITS FLOORS TO HAVE A MINIMUM OF 20mm FALL, PROFILED AND STREAMLINED (FOR HALF THE DEPTH OF THE PIPE) IN THE DIRECTION OF FLOW.
7. PROVIDE INSPECTION OPENINGS TO ALL DOWN PIPES NOT DIRECTLY CONNECTED TO PITS.
8. CLEANING EYE/INSPECTION OPENING SHALL BE INSTALLED AT:
 - ALL JUNCTIONS,
 - CHANGE OF GRADIENTS & DIRECTION,
 - MAXIMUM SPACING OF 30m ALONG THE LENGTH OF PIPE,
 - DIRECTLY ABOVE ANY REFLUX VALVES & ORIFICES & DEBRIS SCREENS.
9. ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS.
10. HEAVY DUTY GRATES AND COVERS TO BE PROVIDED IN TRAFFICABLE AREAS.
11. ALL GUTTERS, PITS, PIPES AND DOWN PIPES TO BE INSTALLED IN ACCORDANCE WITH AS3500.3.
12. ISOLATION JOINTS TO BE PROVIDED BETWEEN CONCRETE PAVEMENT AND PITS.
13. ALL BALCONIES/ROOF AREAS TO HAVE 150X75 OVERFLOW SPOUTS, 70mm BELOW INTERIOR FFL, UNLESS NOTIFIED BY THE ARCHITECT.
14. BALCONY OVERFLOW SPOUTS TO BE AT LEAST 2.4m APART.
15. GRATES 900 DEEP OR GREATER OR 600x600 OR GREATER TO BE LOCKABLE AND HINGED.
16. PITS TO HAVE APPROPRIATE BENCHING OR AS PER COUNCIL REQUIREMENTS.
17. ALL MILD STEEL FIXTURES INCLUDING GRATES, FRAMES, STEP IRONS, LADDERS, ETC., SHALL BE HOT DIP GALVANISED. GALVANIZING SHALL COMPLY WITH THE REQUIREMENTS OF AS 1214 OR AS 1650, AS APPROPRIATE.
18. GEOFABRIC FILTER SHALL BE PERMEABLE, NON -WOVEN FABRIC MANUFACTURED FROM A POLYMER SUCH AS POLYPROPYLENE OR POLYESTER OF MASS NOT LESS THAN 135 g/m2.
19. ALL PIPES SHALL BE BACKFILLED WITH GRANULAR MATERIAL SUCH AS QUARRY FINES OR COARSE RIVER SAND TO A MINIMUM OF 150 mm ABOVE THE PIPE. THE GRANULAR MATERIAL SHALL BE PLACED IN 150 mm THICK MAXIMUM LAYERS AND COMPACTED TO ACHIEVE A DENSITY AT LEAST 95% OF STANDARD MAXIMUM DRY DENSITY. THE TOP 500MM BELOW PAVEMENT SUBGRADE LEVELS SHALL BE COMPACTED TO AT LEAST 100% STANDARD MAXIMUM DRY DENSITY.

RAINWATER REUSE NOTE:

1. EVERY FIXTURE SERVICED FROM THE RECYCLED WATER SUPPLY MUST BE NOTED WITH A PLAQUE FOR IDENTIFICATION AND MARKED WITH "NOT FOR HUMAN CONSUMPTION" OR "NON-POTABLE WATER".
2. RAINWATER TANKS SYSTEM TO BE DESIGNED WITH A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINATES AND ADEQUATE SCREENING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMALS OR FOREIGN MATTER
3. OVERFLOW FROM RAINWATER TANK TO BE CONNECTED TO STORMWATER DRAINAGE SYSTEM.
4. NO DIRECT CROSS-CONNECTION WITH THE SYDNEY WATER POTABLE SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.
5. ALL RECYCLE WATER PIPES TO BE COLOUR CODED FOR IDENTIFICATION.
6. WATER AUTHORITY MUST BE CONTACTED REGARDING RECYCLED WATER ON THE BUILDING AND FOR THE BACKFLOW PREVENTION REQUIREMENTS AND TOP-UP SYSTEM.
7. ANY GARDEN OR CARWASH TAPS CONNECTED RECYCLE SYSTEM MUST BE LOCATED 1.5m MIN. ABOVE THE SURFACE.
8. FOR PERIOD OF LOW WATER LEVEL IN THE RAINWATER TANK, A CONNECTION TO WATER MAIN IS NEEDED AND TO BE PROVIDED IN ACCORDANCE WITH THE WATER AUTHORITY.

LEGEND:

- CO

GSIP

DIA

DP

FFL

HL

SP

IC

IL

IL_{IN}

IL_{OUT}

RHS

RL

RWO

FDO

RW

GL

STW

SAP

GSIP

COP
- CLEAN OUT

GRATED SURFACE INLET PIT

DIAMETER

DOWNPIPE

FINISHED FLOOR LEVEL

HIGH LEVEL

SPREADER

INSPECTION CHAMBER

INVERT LEVEL

INVERT LEVEL IN

INVERT LEVEL OUT

RECTANGULAR HOLLOW SECTION

REDUCED LEVEL

RAINWATER OUTLET

FLOOR DRAIN OUTLET

RAIN WATER

GROUND LEVEL

STORMWATER

SILT ARRESTOR PIT

GRATED SURFACE INLET PIT

CLEAN OUT PIT
- PROPOSED DRAINAGE PIT WITH SOLID COVER
- PROPOSED DRAINAGE PIT WITH GRATED COVER
- PROPOSED OSD TANK
- FLOW DIRECTION
- EARTH BUNDING
- SCOUR PROTECTION
- DETENTION BASIN
- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED STORMWATER OVERFLOW PIPE
- PROPOSED RAINWATER PIPE
- PROPOSED RISING MAIN PIPE
- PROPOSED GRATED STRIP DRAIN
- DOWN PIPE
- DOWN PIPE +SPREADER
- PROPOSED RAINWATER OUTLET
- PROPOSED RAINWATER HEAD
- PROPOSED INSPECTION EYE
- PROPOSED FLOOR WASTE
- PROPOSED REDUCED LEVELS

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PROJECT

24 EPACRIS AVENUE
FORESTVILLE, 2087

CLIENT

AFORM ARCHITECTURE

DRAWING TITLE

GENERAL NOTES

STATUS

FOR DA APPROVAL

SCALE

-

DRAWN:

WP

CHECKED

VH

DATE

27/07/25

PROJECT NO.

SV25010

DRAWING NO.

D101

REV.1

B

SITE INFORMATION:

- TOTAL SITE AREA: 860 m²
- POST-DEVELOPMENT IMPERVIOUS AREA: 528 m²
- DWELLING NUMBER: 2
- IMPERVIOUS AREA PERCENTAGE: 61.4%

ON-SITE DETENTION CALCULATION:)

1. ILSAX METHOD (USING DRAINS):

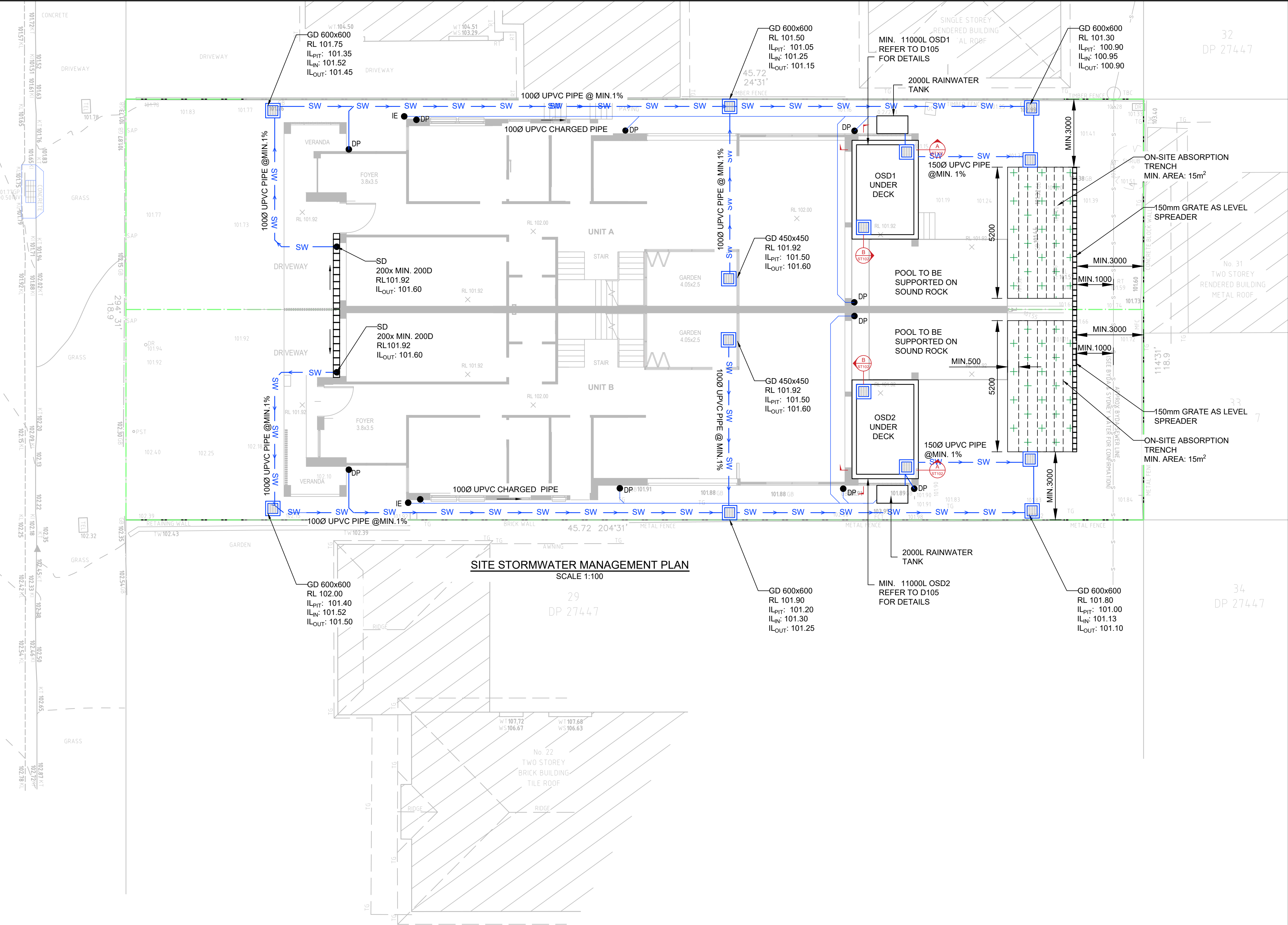
UNIT A - ABSORPTION TRENCH/OSD SUMMARY			
STORM EVENT	PRE-DEVELOPMENT L/S	POST DEVELOPMENT	
		OSD/INFIL. TRENCH (L/S)	BY PASS L/S
AEP 20%	9	8	5
AEP 5%	16	13	7
AEP 2%	19	15	8
AEP 1%	22	17	9

INFILTRATION RATE: 3.2m/Day

UNIT B- ABSORPTION TRENCH/OSD SUMMARY			
STORM EVENT	PRE-DEVELOPMENT L/S	POST DEVELOPMENT	
		OSD/INFIL. TRENCH (L/S)	BY PASS L/S
AEP 20%	9	8	5
AEP 5%	16	13	7
AEP 2%	19	15	8
AEP 1%	22	17	9

INFILTRATION RATE: 2.4m/Day

EPACRIS AVENUE



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SCALE: 1:100 A1

0 1 2 3 4 5 m

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PROJECT
24 EPACRIS AVENUE
FORESTVILLE, 2087

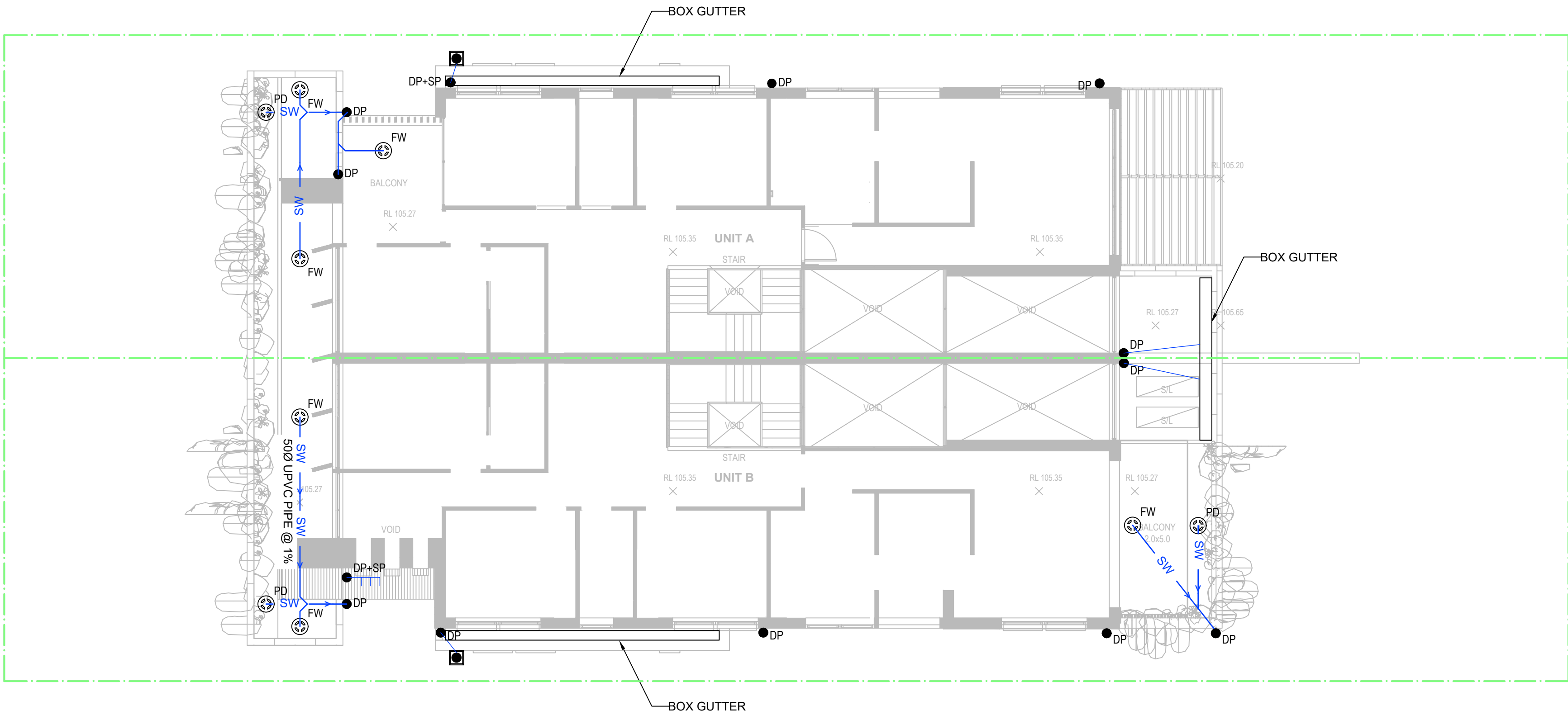
CLIENT
AFORM ARCHITECTURE

DRAWING TITLE
SITE DRAINAGE PLAN

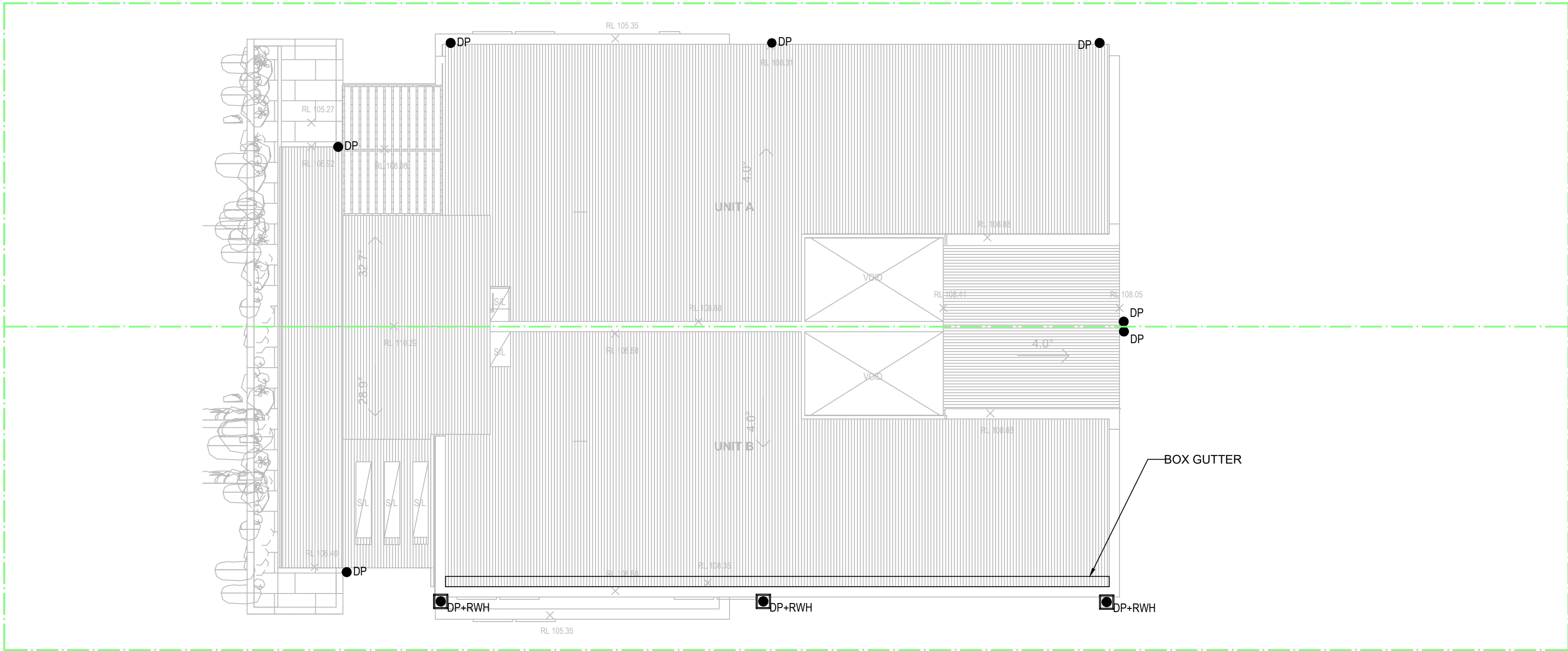
STATUS
FOR DA APPROVAL

SCALE: 1:100
DRAWN: WP
CHECKED: VH
DATE: 27/07/25

PROJECT NO: SV25010
DRAWING NO: D102
REV.1: B



FIRST FLOOR DRAINAGE PLAN
SCALE 1:100



ROOF DRAINAGE PLAN
SCALE 1:100

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SCALE:
SCALE 1:100 A1

0 1 2 3 4 5 m

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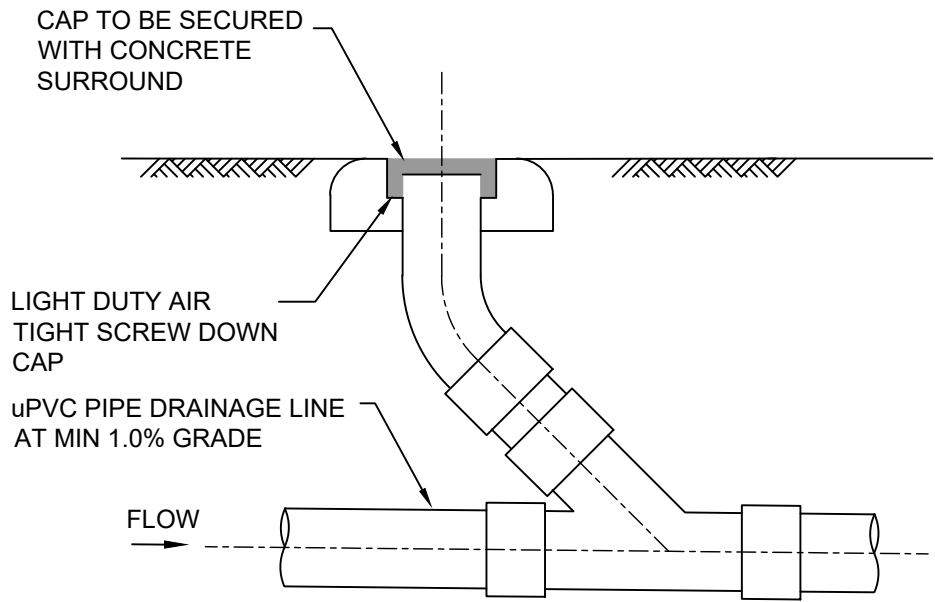
PROJECT
**24 EPACRIS AVENUE
FORESTVILLE, 2087**

CLIENT
AFORM ARCHITECTURE

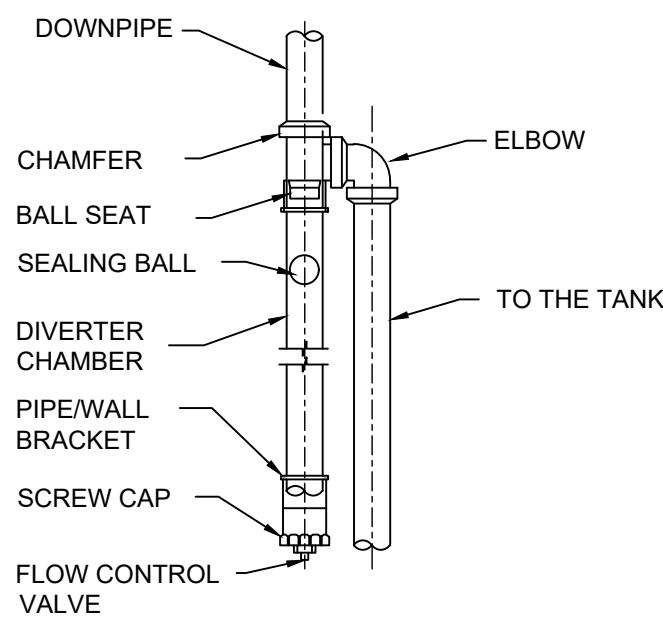
DRAWING TITLE
**ROOF & LEVEL 1
DRAINAGE PLAN**

STATUS
FOR DA APPROVAL

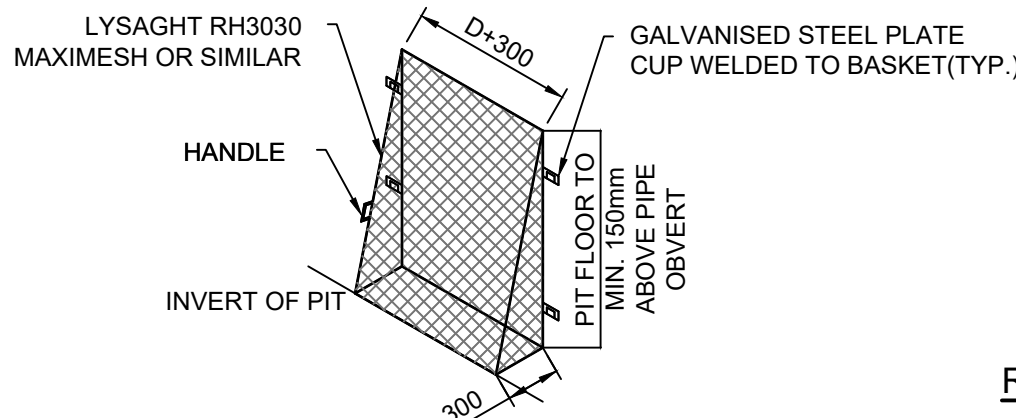
SCALE 1:100	DRAWN: WP	CHECKED VH	DATE 27/07/25
PROJECT NO. SV25010	DRAWING NO. D103	REV.1 B	



TYPICAL CLEANING EYE DETAIL
SCALE 1:20



FIRST FLUSH DIVERTER DETAIL
SCALE 1:20

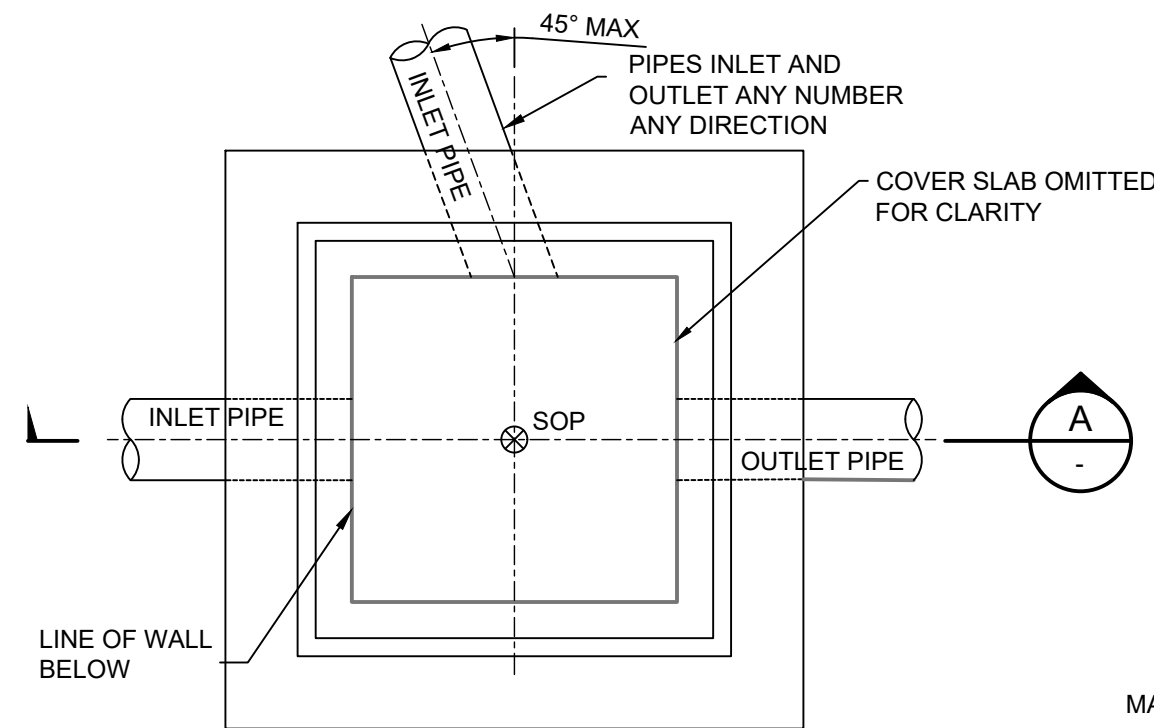


SCREEN MESH DETAIL
N.T.S.

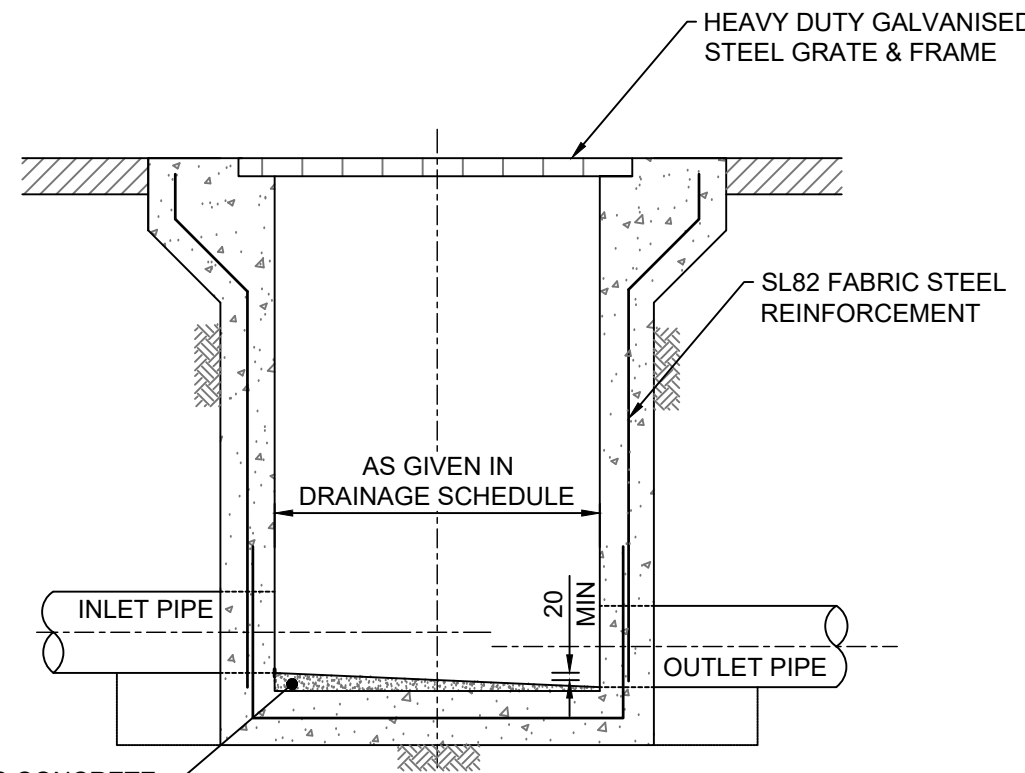


RAINWATER TANK & TAP SIGNAGE
N.T.S.

BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK BACKGROUND



PLAN
SCALE 1:20



SECTION
SCALE 1:20

TYPICAL DRAINAGE PIT DETAIL
N.T.S.

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FORESTVILLE, 2087

CLIENT

AFORM ARCHITECTURE

DRAWING TITLE

DRAINAGE DETAILS
SHEET 2/2

STATUS

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SCALE
1:100

DRAWN:
WP

CHECKED
VH

DATE
27/07/25

PROJECT NO.
SV25010

DRAWING NO.
D105

REV.1
B