

ABSORPTION DESIGN CALCULATIONS

TOTAL SIZE AREA (m ²) =	467.9	
IMPERVIOUS AREA TO SYSTEM - DA(m ²) =	349	
ABSORPTION RATE - A _{Rn} (l/s/m ²) =	0.5	(ASSUMED)
REDUCED FACTOR - Fr =	0.95	
ABSORPTION RATE - A _{Rd} (l/s/m ²) =	0.475	(A _{Rd} = A _{Rn} * Fr)
BASE AREA OF ABSORPTION PIT - BA (m ²) =	12.57	

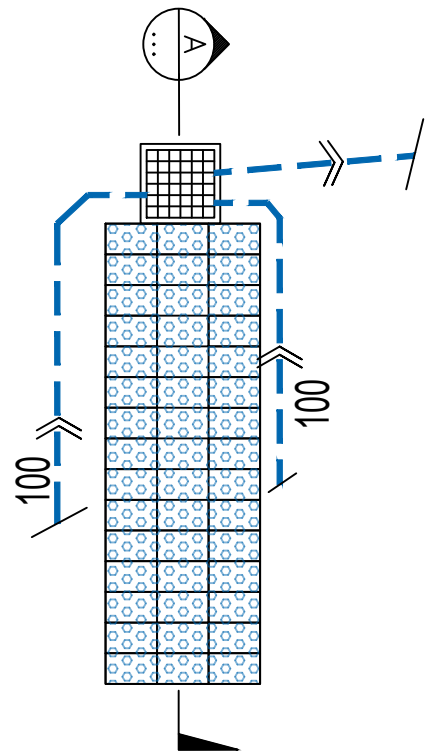
REQUIRED ABSORPTION VOLUM FOR 50 YEAR ARI STORM

TIME (min)	RAINFALL INTENSITY (mm/hr)	RUNOFF (l/s) R=I*DA/3600	RUNOFF m ³ RV= R*T*60/1000	INFILTRATION VOL. m ³ IV=BA*A _{Rd} *T*60/1000	REQUIRED VOLUME m ³ RV-IV
5	238	23.07	6.92	1.791225	5.13
10	186	18.03	10.82	3.58245	7.24
15	160	15.51	13.96	5.373675	8.59
30	118	11.44	20.59	10.74735	9.84
60	81.7	7.92	28.51	21.4947	7.02
120	53.1	5.15	37.06	42.9894	-5.93
MAXIMUM REQUIRED ABSORPTION SYSTEM (m³) =					9.84

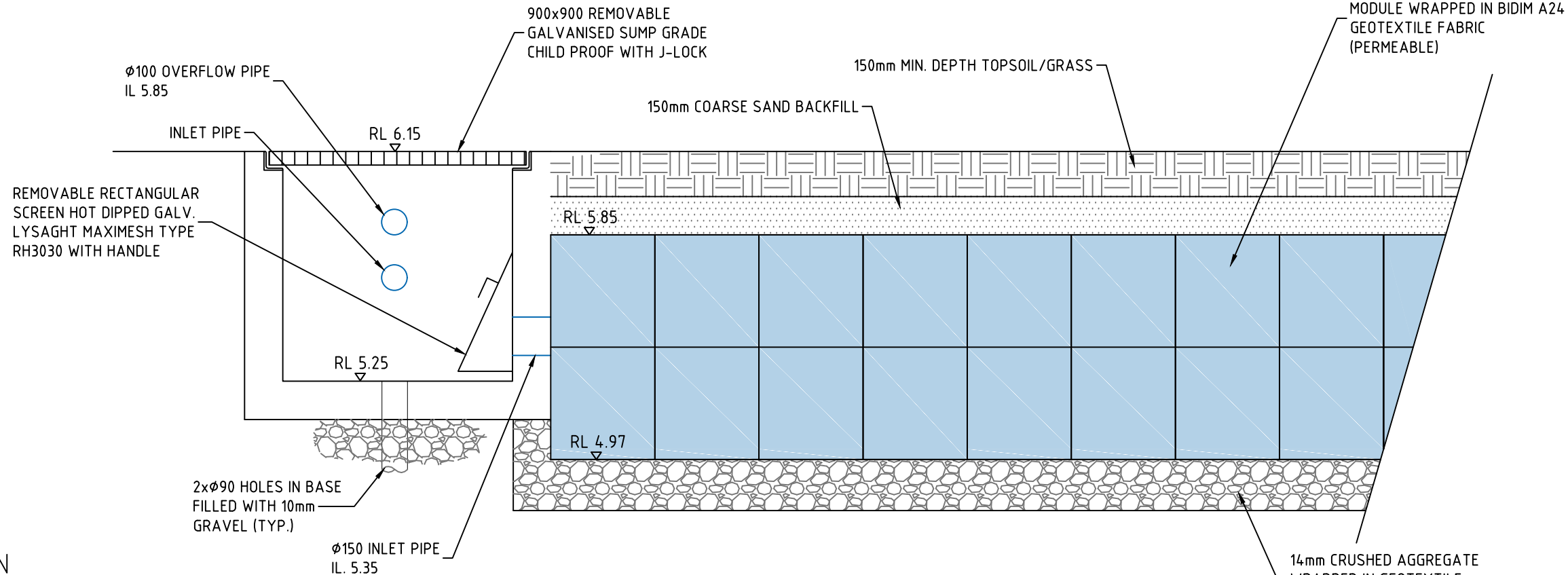
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ELEC.			
HYD.			
ISSUE	REVISION	DATE	

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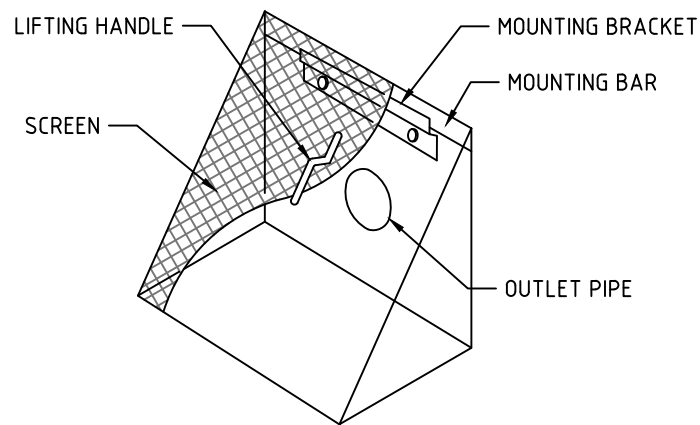




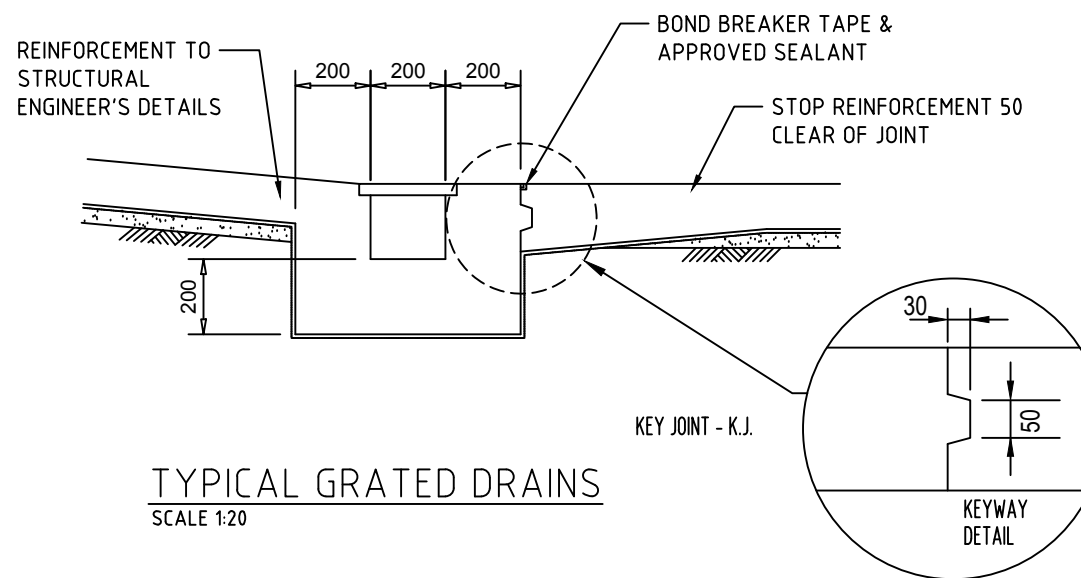
ABSORPTION SYSTEM PLAN
SCALE 1:100



ABSORPTION SYSTEM SECTION A
SCALE 1:20



DEBRIS SCREEN DETAILS
SCALE 1:20



TYPICAL GRATED DRAINS
SCALE 1:20



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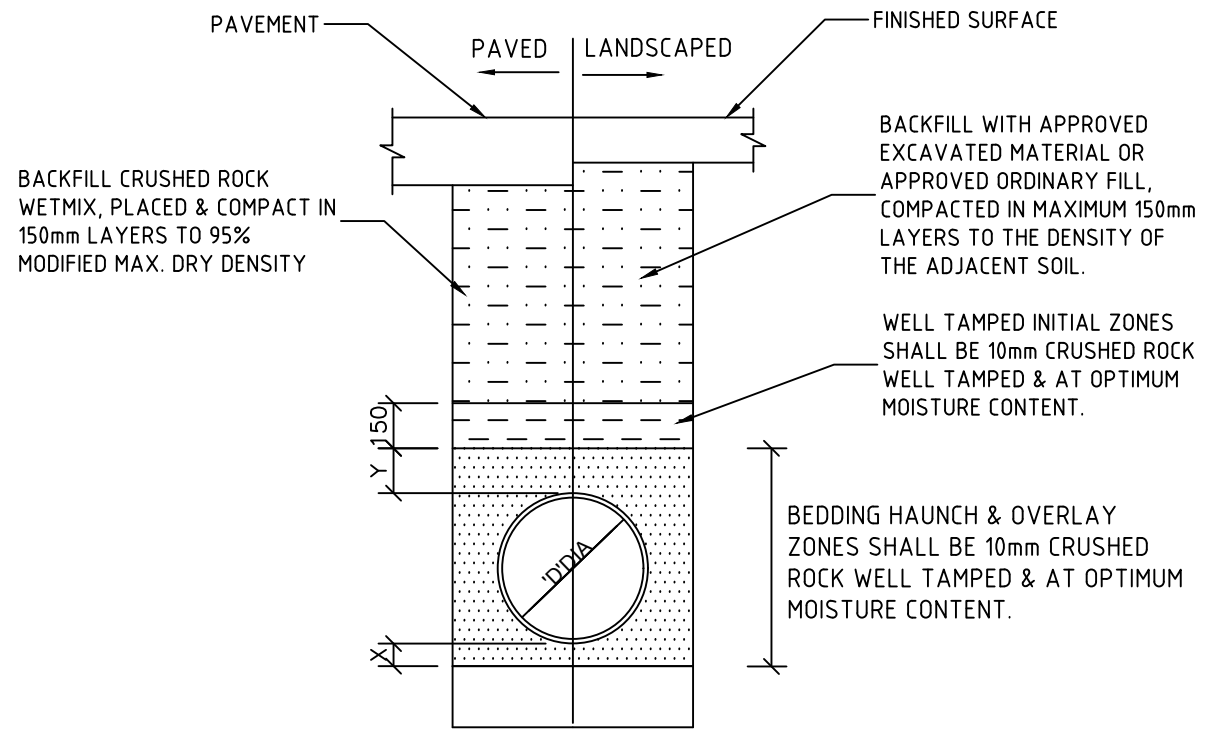
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ABSORPTION SYSTEM DETAILS

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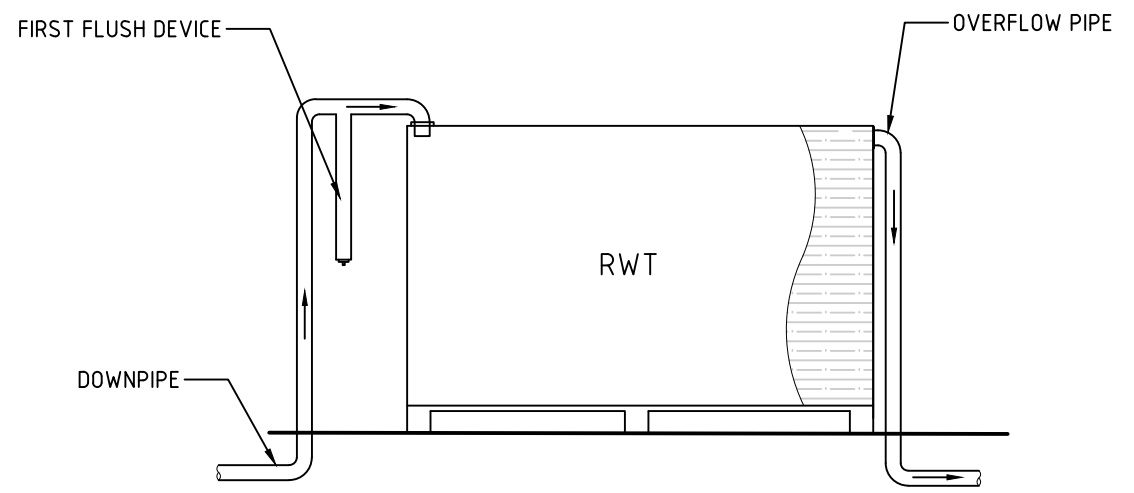


NOTE:
1 REFER TO PIPE LAYING SPECIFICATIONS FOR DETAILS.

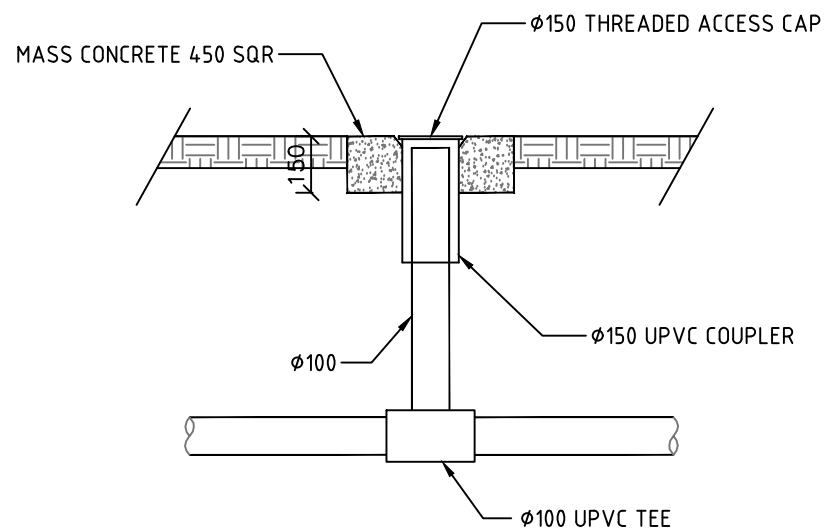
PIPE DIA 'D'	W	X MIN	Y
100-150	300	75	75
225-300	600	75	75

UPVC PIPE
TYPICAL PIPE LAYING DETAIL
NTS

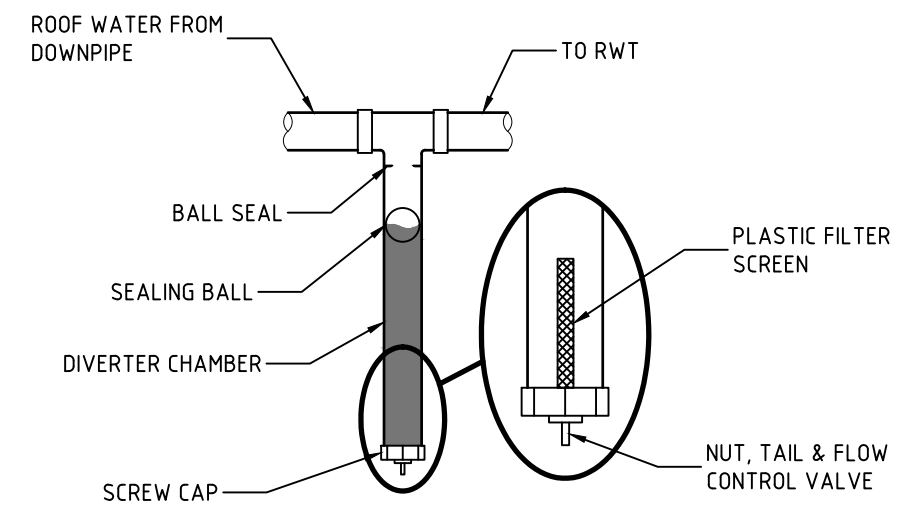
RAINWATER TANK NOTES:
1. A FIRST FLUSH DEVICE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS SHALL BE FITTED TO RAINWATER TANK SYSTEM TO FLUSH OUT THE FIRST 0.5mm OF RUN-OFF FROM THE ROOF AREA THAT DRAINED INTO THE TANK (E.G. 0.5L/m²).
2. PUMP SIZE & SPECIFICATION TO BE NOMINATED BY MANUFACTURER



RAINWATER TANK DETAIL
NTS



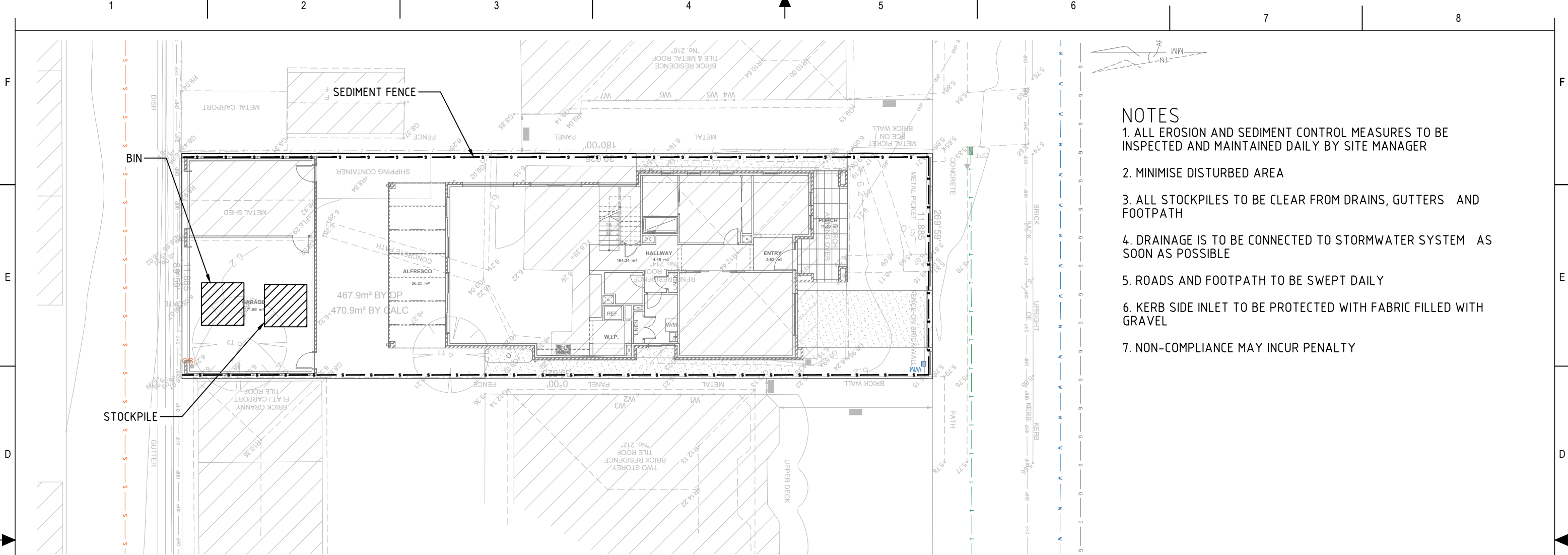
CLEANING EYE DETAILS
SCALE 1:20



FIRST FLUSH DEVICE DETAIL
NTS

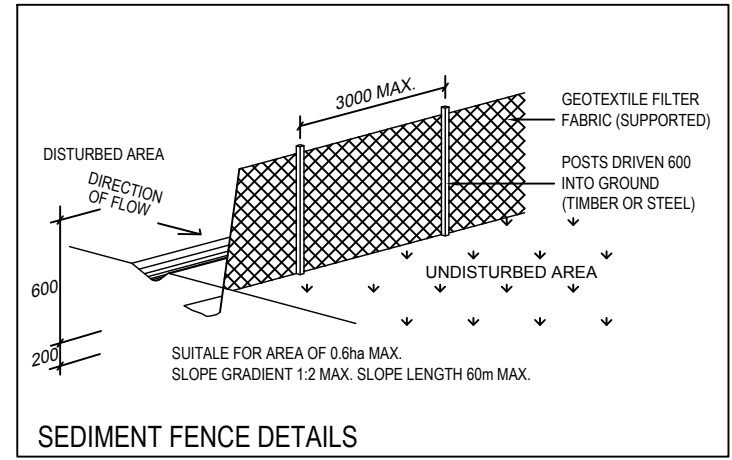
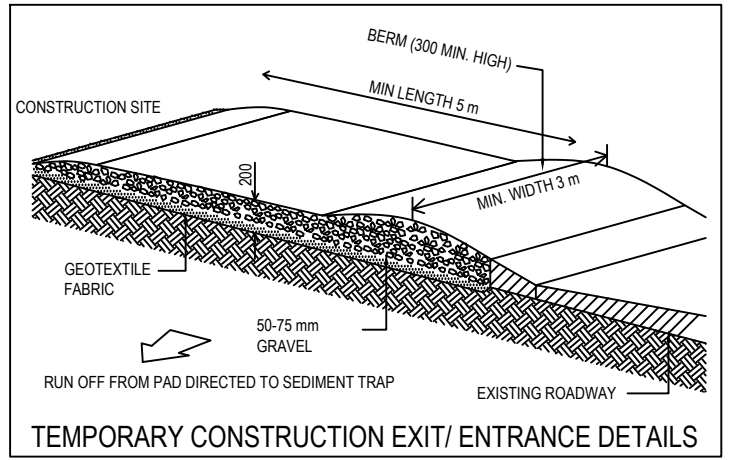
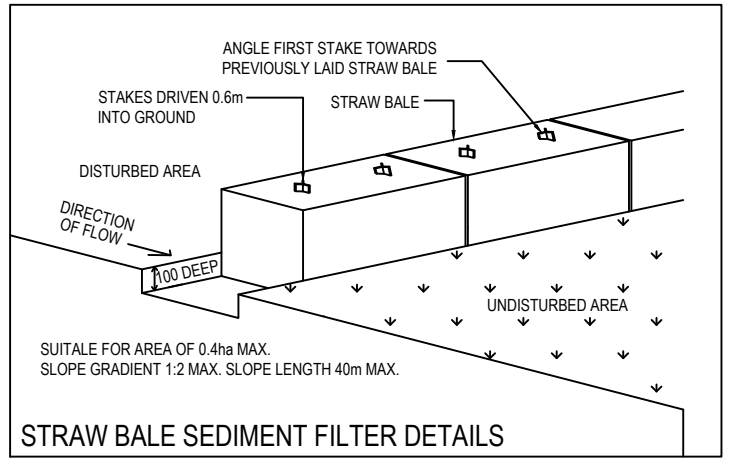


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1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER
 2. MINIMISE DISTURBED AREA
 3. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATH
 4. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE
 5. ROADS AND FOOTPATH TO BE SWEEPED DAILY
 6. KERB SIDE INLET TO BE PROTECTED WITH FABRIC FILLED WITH GRAVEL
 7. NON-COMPLIANCE MAY INCUR PENALTY

SEDIMENT CONTROL PLAN
SCALE 1:200



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