

PROPOSED CHILD CARE CENTRE

AT 46A TOWNSEND STREET, CONDELL PARK NSW 2200

DRAINAGE NOTES:

ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED

100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE

MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm

ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS

BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL

ALL PITS TO HAVE 600x600mm INTERNAL DIMENSIONS (U.N.O.)

SILT ARRESTORS TO HAVE 900x900mm INTERNAL DIMENSIONS

HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS

PIT GRATE TO BE TYPE WELDLOK OR APPROVED EQUIVALENT

ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP

ALL PITS SHALL BE MAINTAINED REGULARLY

TOP OF BENCHING SHALL BE TO THE HALF OF THE OUTLET PIPE DIAMETER

MAXIMUM FRONT ENTRY PIPE:-
STRAIGHT ENTRY - Ø750
SKEW ENTRY 45° - Ø525

Ø100 SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES

COMPRESSIVE STRENGTH f_c FOR CAST IN SITU CONCRETE TO BE A MINIMUM OF 20MPa AT 28 DAYS

PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS

ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS

ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm

STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL

STORMWATER PIPE BEDDING/PAVING NOTES:

WHERE TRENCH BASE IS ROCK A MINIMUM OF 75mm BEDDING TO BE PROVIDED UNDER PIPE COLLARS.

STORMWATER PIPE BEDDING DETAIL TO BE IN ACCORDANCE WITH LOCAL COUNCIL REQUIREMENTS. BEDDING DETAILS TO BE CONFIRMED UPON EXCAVATION & PRIOR TO INSTALLATION OF PIPEWORK.

FOOTPATH REINSTATEMENT NOTES:

REMOVE ALL SAND FILL WITHIN THE FOOTPATH AREA TO THE EXISTING SUBGRADE.

SUPPORT ALL AUTHORITY SERVICES TO STRUCTURAL ENGINEERS DETAILS DURING EXCAVATION.

REINSTATE FOOTPATH SUBGRADE.

THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION FROM A NATA REGISTERED TESTING AUTHORITY. MINIMUM THREE TESTS PER LAYER AS FOLLOWS:
SELECT FILL 95% MODIFIED
SELECT FILL (LESS THAN 300mm 98% MODIFIED BELOW BASE COURSE)
BASE COURSE 100% MODIFIED

EROSION & SEDIMENT CONTROL NOTES:

CONTRACTOR TO PROVIDE SILT FENCE/HAY BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS (TYP).

ISOLATE EXISTING STORMWATER PITS WITH HAY BALES TO FILTER ALL INCOMING FLOWS.

DO NOT STOCK PILE EXCAVATED MATERIAL ON THE ROAD WAY.

SURVEY

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. SYDNEY STRUCTURAL DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAW.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT SYDNEY STRUCTURAL.

DRAWING SCHEDULE

DRAWING No.	DRAWING TITLE
D00	COVER SHEET
D01	STORMWATER DRAINAGE PLAN - BASEMENT LEVEL
D02	STORMWATER DRAINAGE PLAN - GROUND FLOOR
D03	CATCHMENT PLAN
D10	STORMWATER DETAILS SHEET 1
D11	STORMWATER DETAILS SHEET 2

				Sydney Office — A / 64/23 Macmahon Street, Hurstville, NSW P / +61 401 200 104 E / info@sydneystructural.com.au W/ www.sydneystructural.com.au	SSC ENGINEERING	SYDNEY STRUCTURAL & CIVIL	zfa zfa architects architecture / urban design / interior design	CLIENT	ADDRESS 46A TOWNSEND STREET, CONDELL PARK NSW 2200	STATUS ISSUED FOR DEVELOPMENT APPLICATION	DRAWN AM	DESIGNED JL	DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.	SCALE 1:100	AT A1 SIZE	
A	05/12/2023	ISSUED FOR DEVELOPMENT APPLICATION	AK						PROJECT PROPOSED CHILD CARE CENTRE	TITLE COVER SHEET	CHECKED AE	APPROVED AK	PROJECT No. SSCE230444	DRAWING No. D00	REV. A	
REVISIONS																





NOTES

- ALL LINES ARE TO BE MIN. 100Ø UPVC @ MIN 1.0% GRADE UNLESS NOTED OTHERWISE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS. ALL DESIGN LEVELS SHOWN ON PLAN SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL PIPES TO HAVE MIN 200mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS BE HEAVY DUTY GRATES. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
- ALL WORK DO BE DONE IN ACCORDANCE WITH AS/NZ 3500.3.2:1998 AND COUNCIL SPECIFICATIONS.
- LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL PLANS.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.
- ALL PITS OR GRATES IN TRAFFICABLE AREAS TO BE HEAVY DUTY.
- ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES
- EXISTING STORMWATER DRAINAGE TO BE UTILISED WHERE CONTRACTOR SEE FIT.

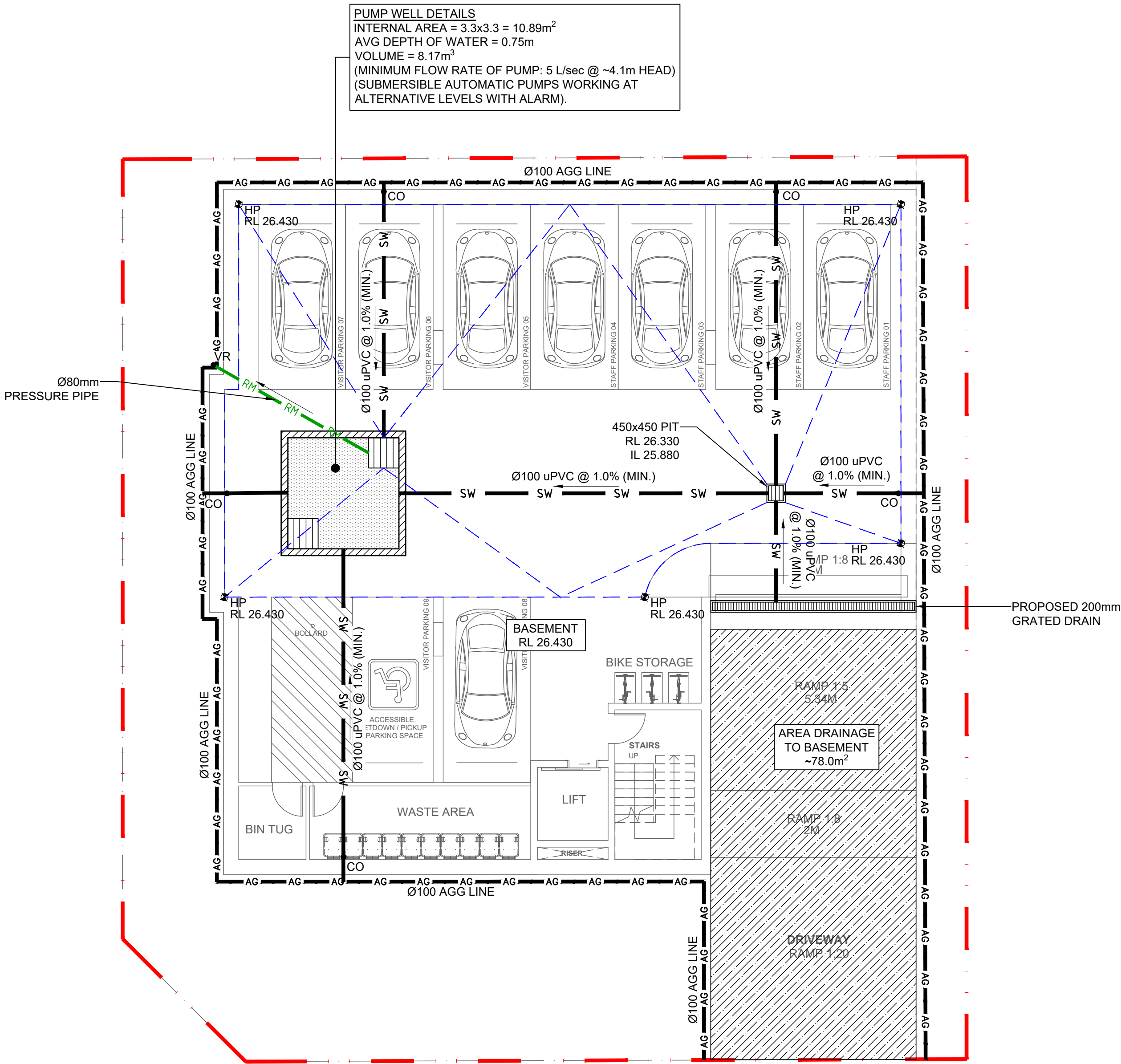
SYMBOLS

- | | |
|-----------------------------|-----------------------------------|
| RL | PIT SURFACE LEVEL |
| IL | INVERT LEVEL |
| TK | TOP OF KERB |
| SW | STORMWATER DRAINAGE PIPE |
| RWT | DOWNPIPE TO RAINWATER TANK |
| OF | OVERFLOW PIPE FROM RAINWATER TANK |
| AG | Ø100 SUBSOIL PIPE |
| RM | RISING MAIN |
| FW | FLOOR WASTE 150X150 |
| FW | FLOOR WASTE 150Ø |
| RWO | RAINWATER OUTLET 300Ø |
| DP | DOWN PIPE |
| DPS | DOWN PIPE SPREADER |
| CO | CLEAN OUT |
| IO | INSPECTION OPENING |
| VD | VERTICAL DROP |
| VR | VERTICAL RISER |
| CONCRETE COVER JUNCTION PIT | |
| GRATED INLET PIT | |
| WIDE GRATED DRAIN | |

DESIGN NOTES

- LGA = CANTERBURY-BANKSTOWN CITY COUNCIL.
- SITE AREA = 665m²
- SCOPE OF WORKS TO INCLUDE DEMOLITION OF EXISTING DWELLING AND CONSTRUCTION OF PROPOSED CHILD CARE CENTRE.
- OSD IS REQUIRED FOR THE SUBJECT DEVELOPMENT. REFER TO D11 FOR OSD DETAILS AND DRAINS MODEL SUMMARY.
- RAINWATER TANK AS PER BASIX SPECIFICATIONS.

M A N A H A N S T R E E T



T O W N S E N D S T R E E T

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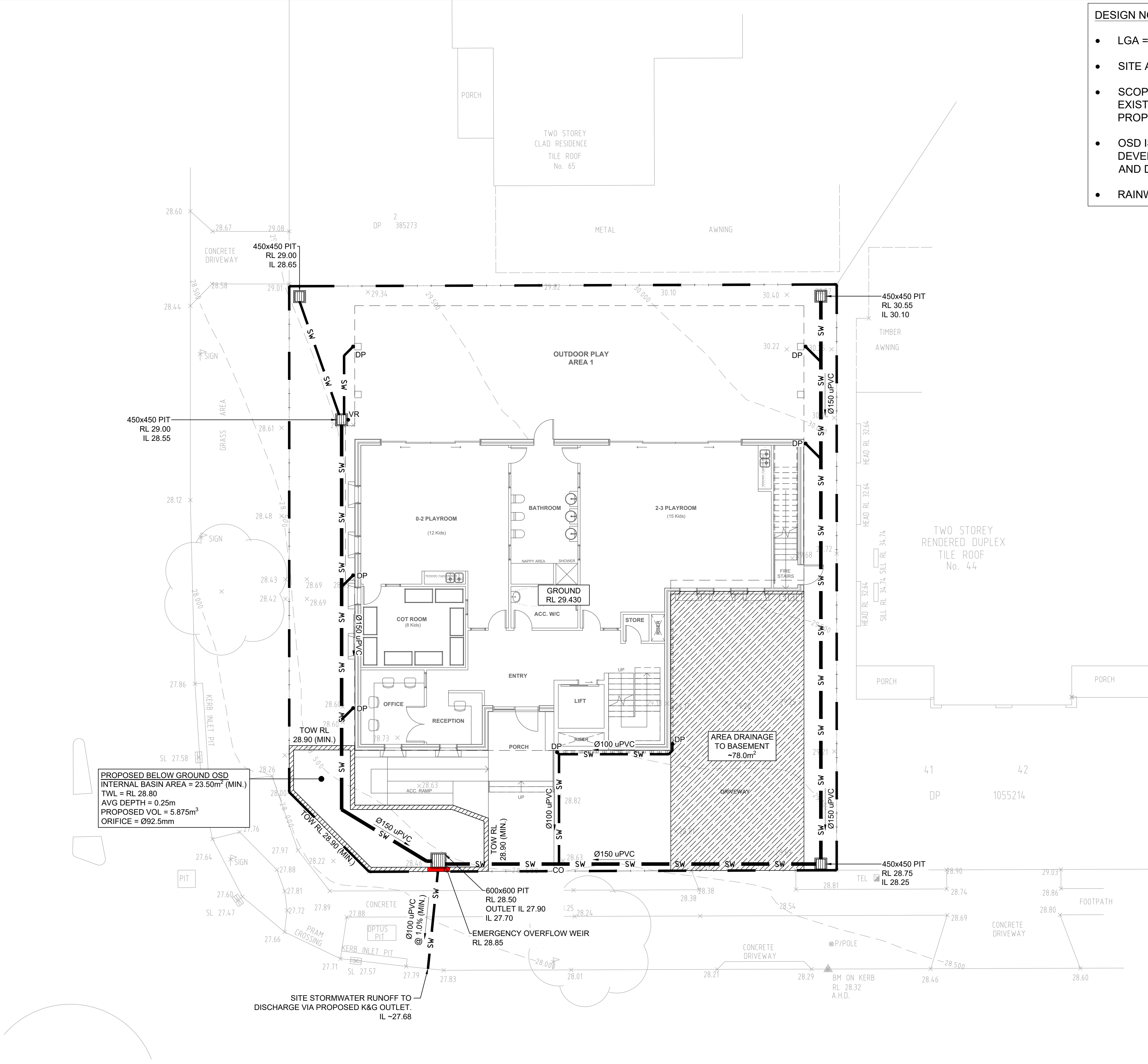


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- RL PIT SURFACE LEVEL
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A	05/12/2023	ISSUED FOR DEVELOPMENT APPLICATION	AK	REV	DATE	DESCRIPTION	RVD				TITLE STORMWATER DRAINAGE PLAN - GROUND FLOOR	CHECKED AE	APPROVED AK	PROJECT No. SSCE230444	DRAWING No. D02	REV. A	

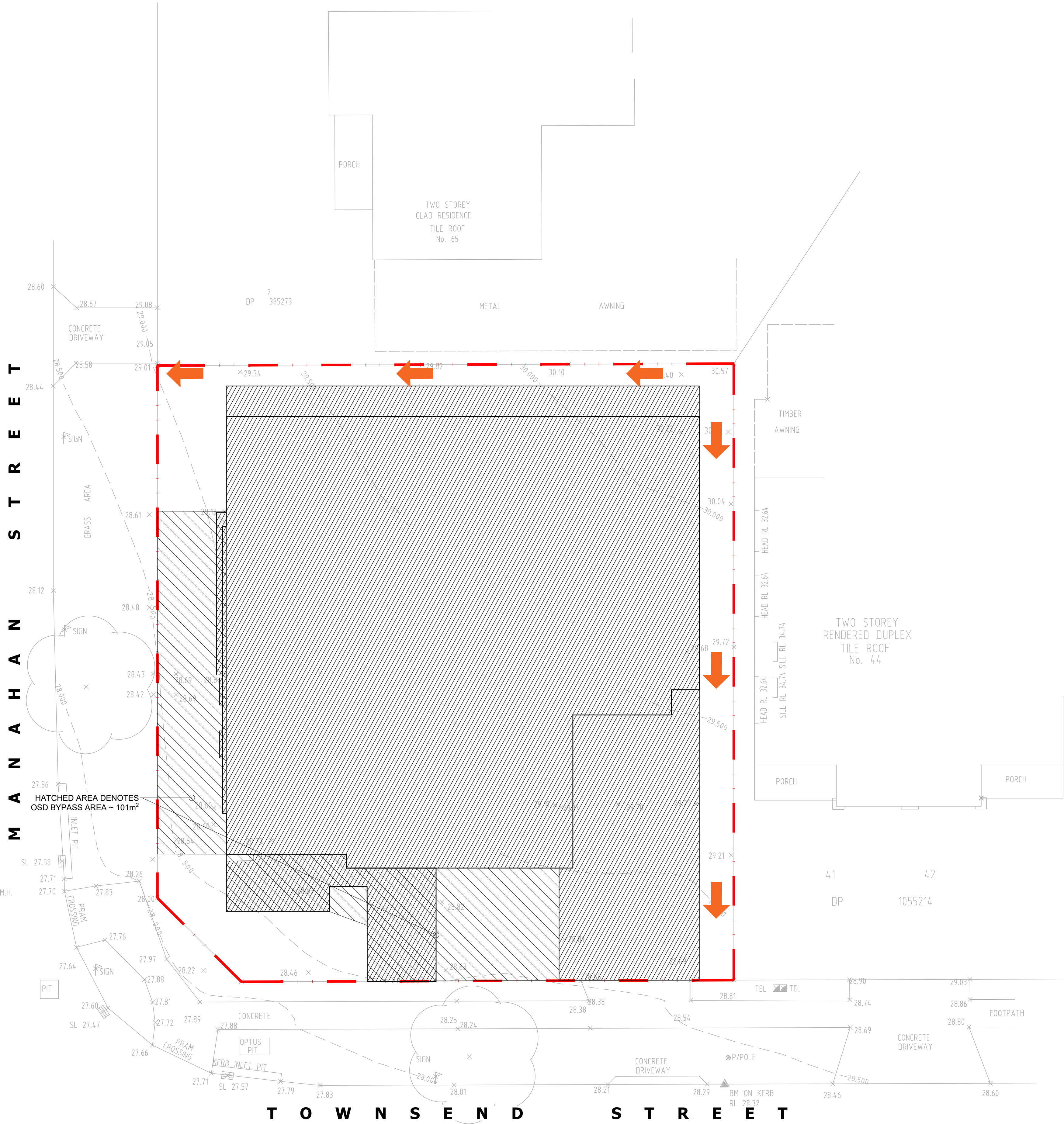


SYMBOLS

IMPERVIOUS AREA

OSD BYPASS AREA

DIRECTION OF OVERLAND FLOW



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REV	DATE	DESCRIPTION	RVD															
REVISIONS																		



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

NOTES:

A SUITABLE ALARM SYSTEM POSITIONED AT ENTRANCE OF BASEMENT CARPARK TO PROVIDE A FLOOD WARNING IN CASE OF PUMP FAILURE (TO COUNCILS SPEC).

THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -

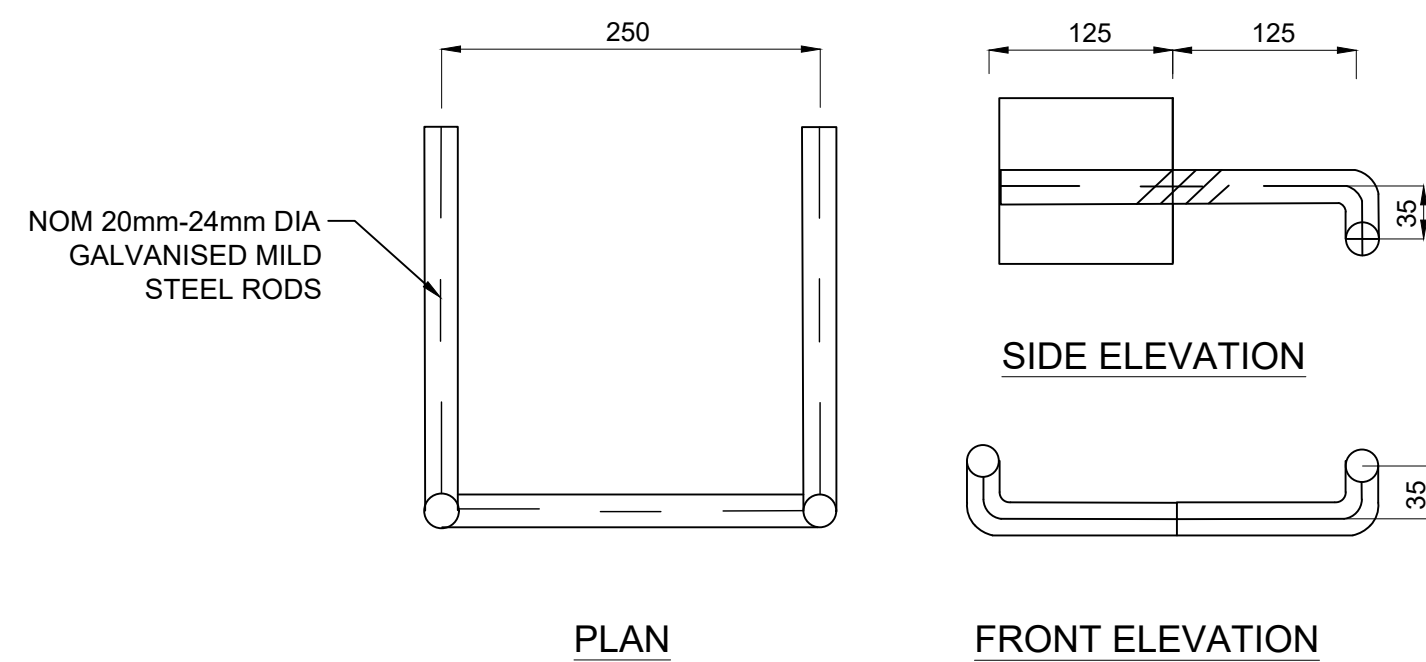
1. THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE EQUAL OPERATION LOAD & PUMP LIFE.
2. A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
3. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
4. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING & ACTIVATE THE ALARM.
5. AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

Type	Output		Outlet		Rated		Maximum		Weigh	Dimension		
					Head Capacity		Head	Capacity				
	HP	kW	mm	Inch	M	LPM	M	LPM		Kg	L(mm)	W(mm)
KS-03	1/3	0.25	40	1 1/2"	3	130	8	180	9	188	141	305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208	140	359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230	156	375
KS-08	1	0.75	50	2"	6	240	13	380	21	290	180	425
KS-20	2	1.5	80	3"	10	300	16	600	31	278	182	475
KS-30	3	2.2	80	3"	10	500	18	800	42	390	250	450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450	240	530
KS-75	7 1/2	5.6	100	4"	15	800	23	1300	60	550	310	590
KS-100	10	7.5	150	6"	18	900	25	1600	70	550	310	610

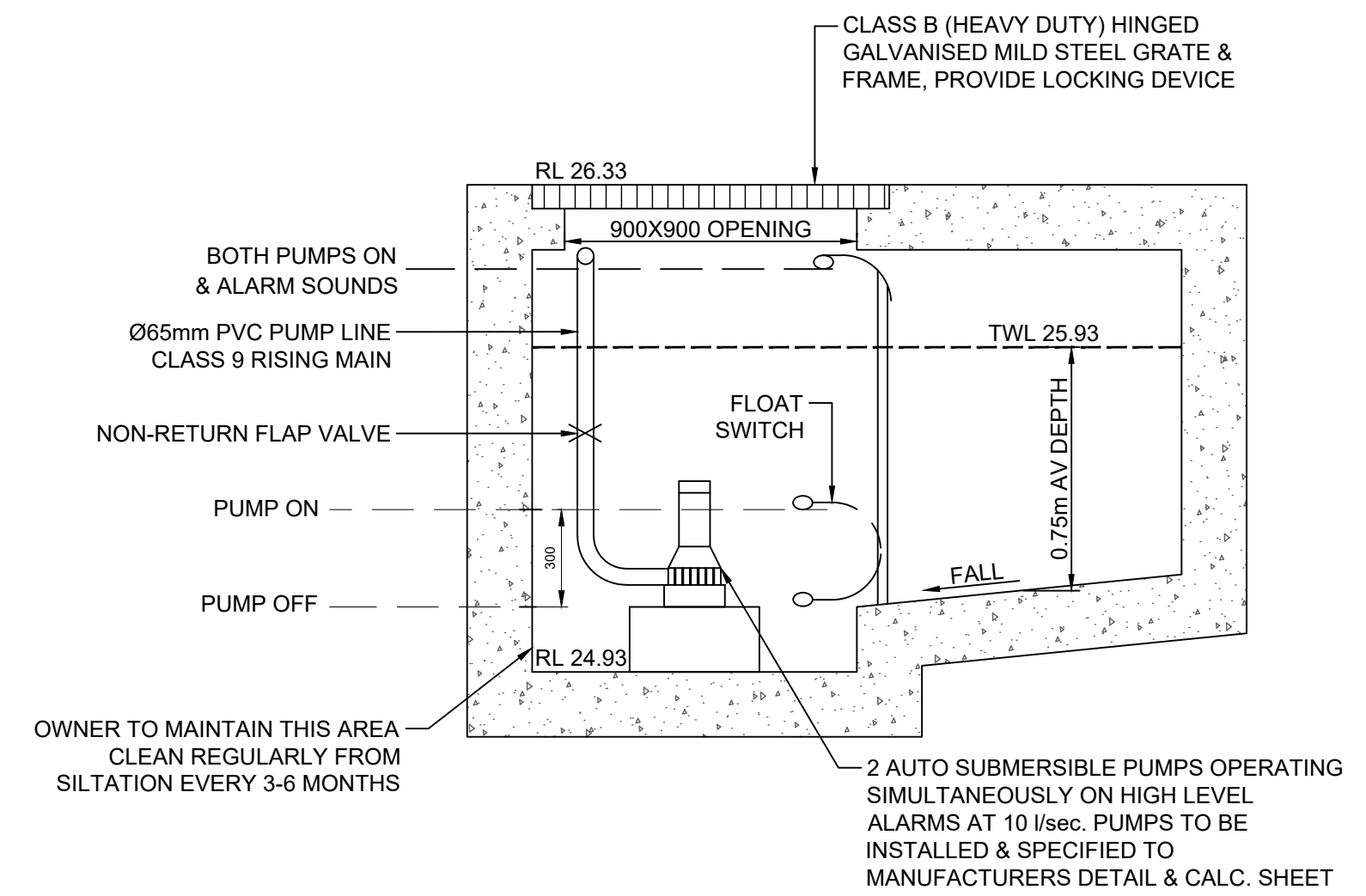
WIDTH 200MM

MATERIALS:
POLYPROPYLENE

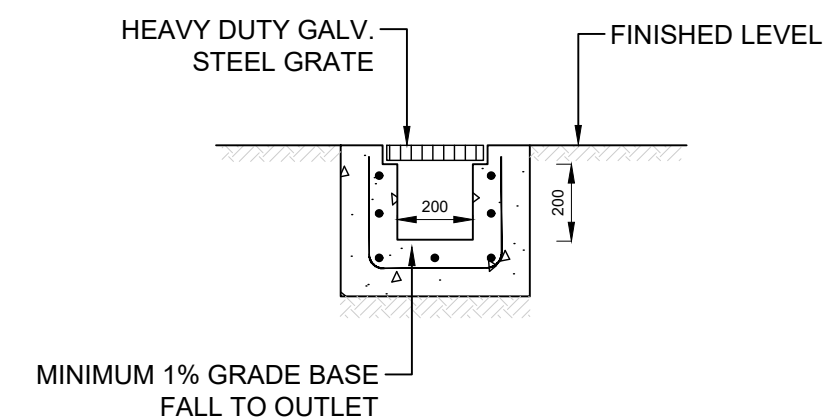
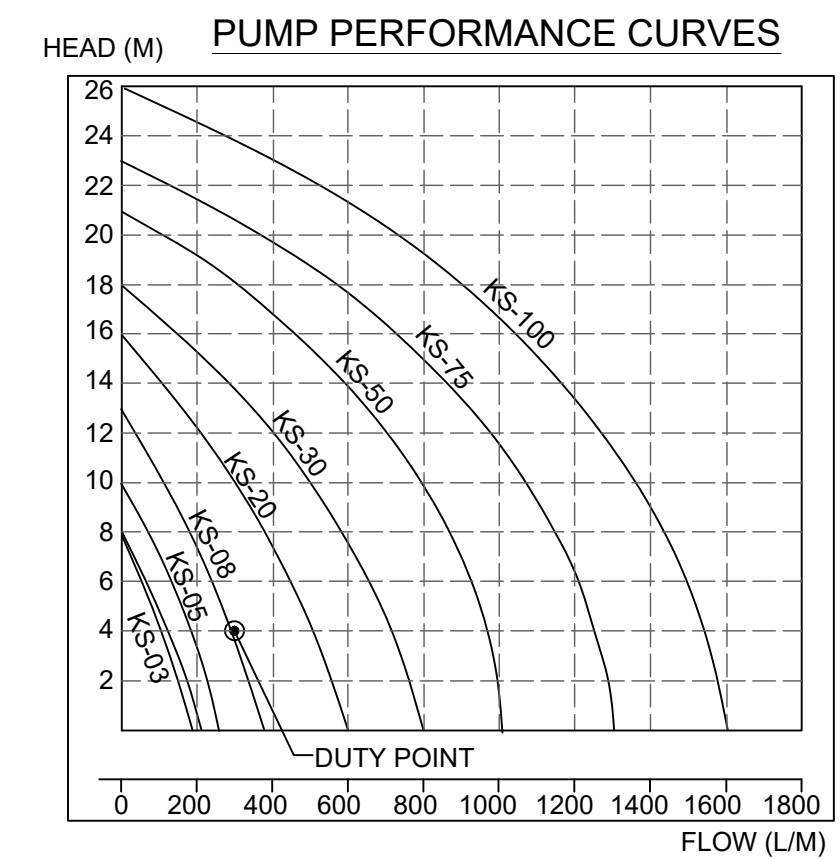
DUAL KS-20 PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO OPERATE SIMULTANEOUSLY ON HIGH LEVEL ALARMS AT 5.0 L/sec (PER PUMP) AT ~4.1m HEAD



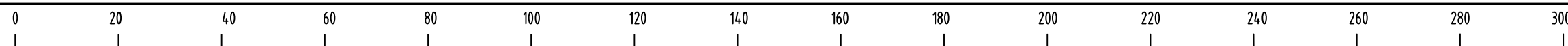
1:5
NOTE: INSTALL WHERE PITS ARE DEEPER THAN 1000

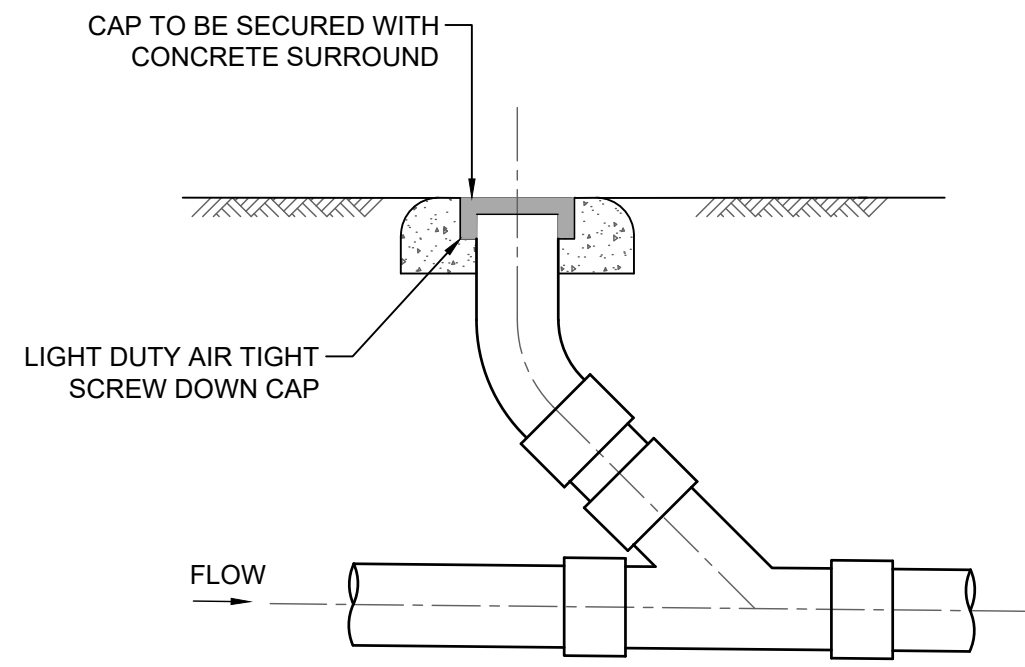


PUMP WELL
SCALE: NTS

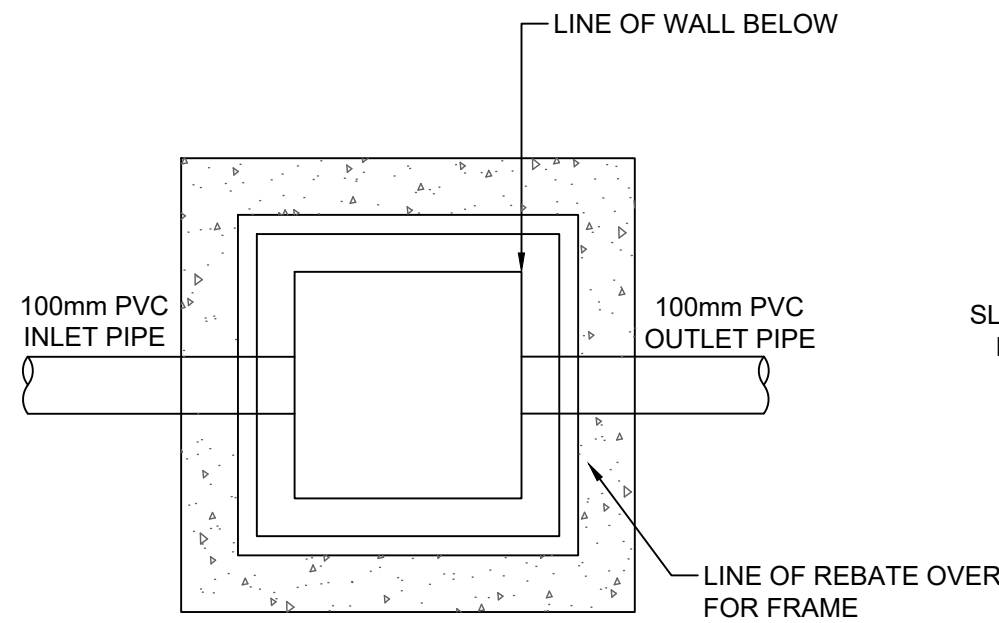


SCALE 1:20

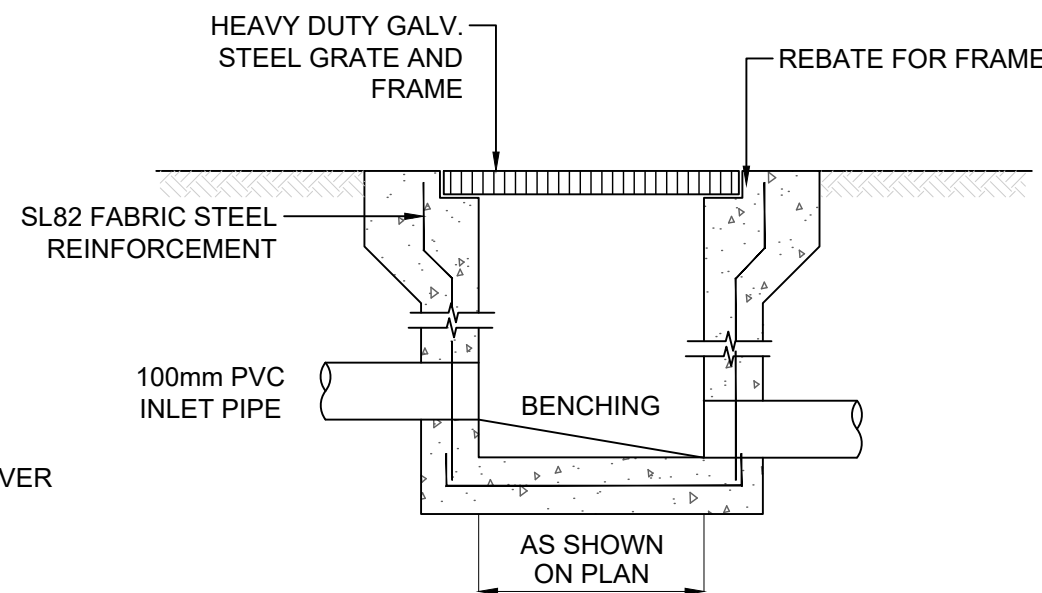
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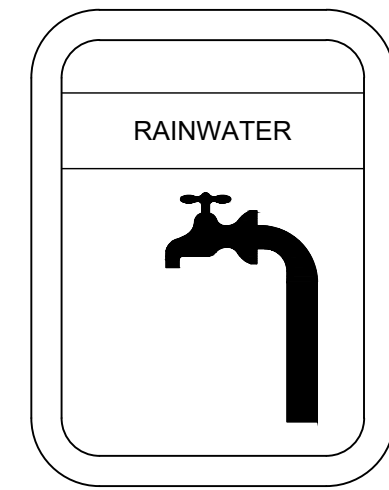
TYPICAL CLEANING EYE DETAIL
SCALE N.T.S.



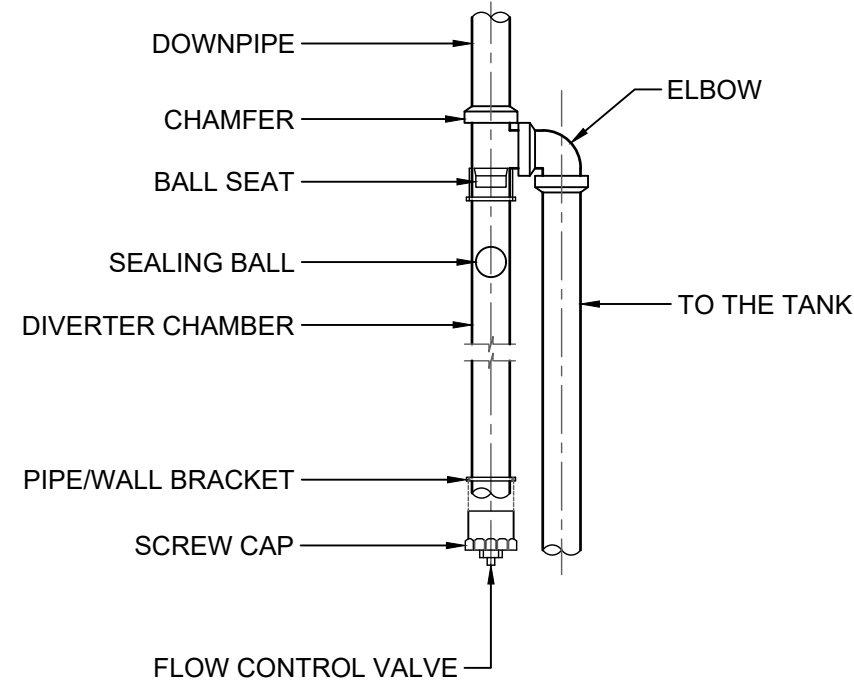
PLAN WITHOUT GRATE



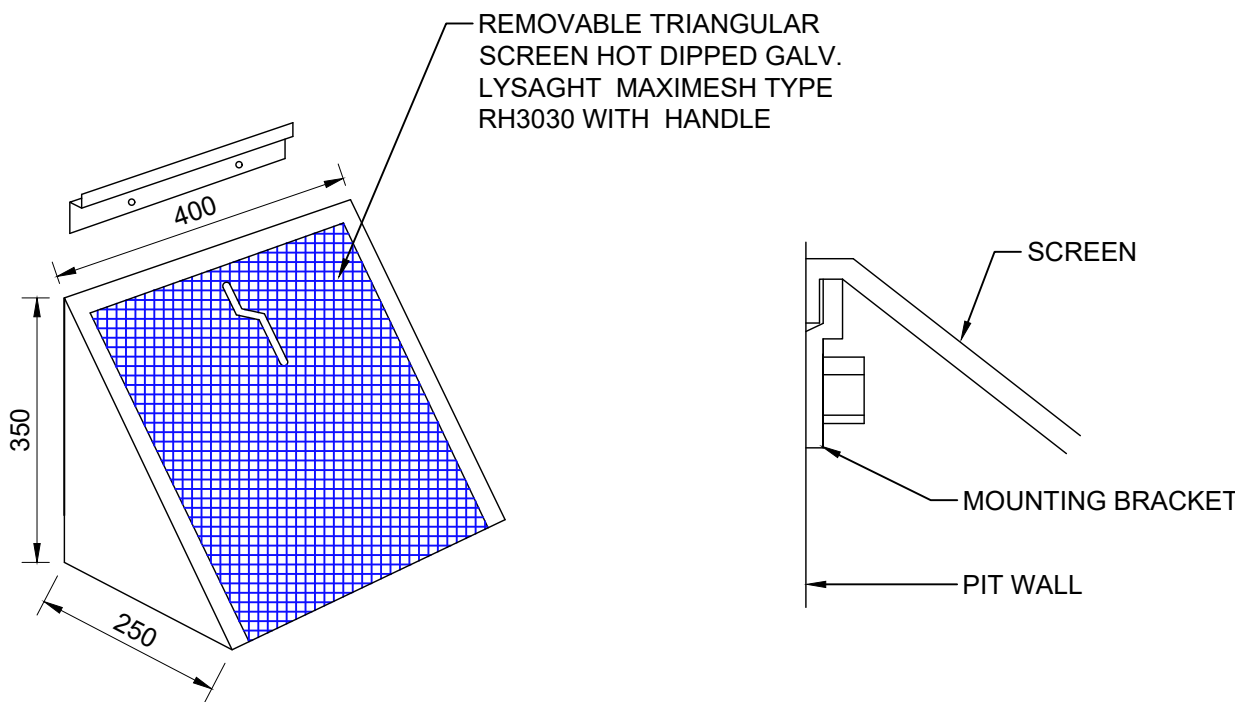
SECTION



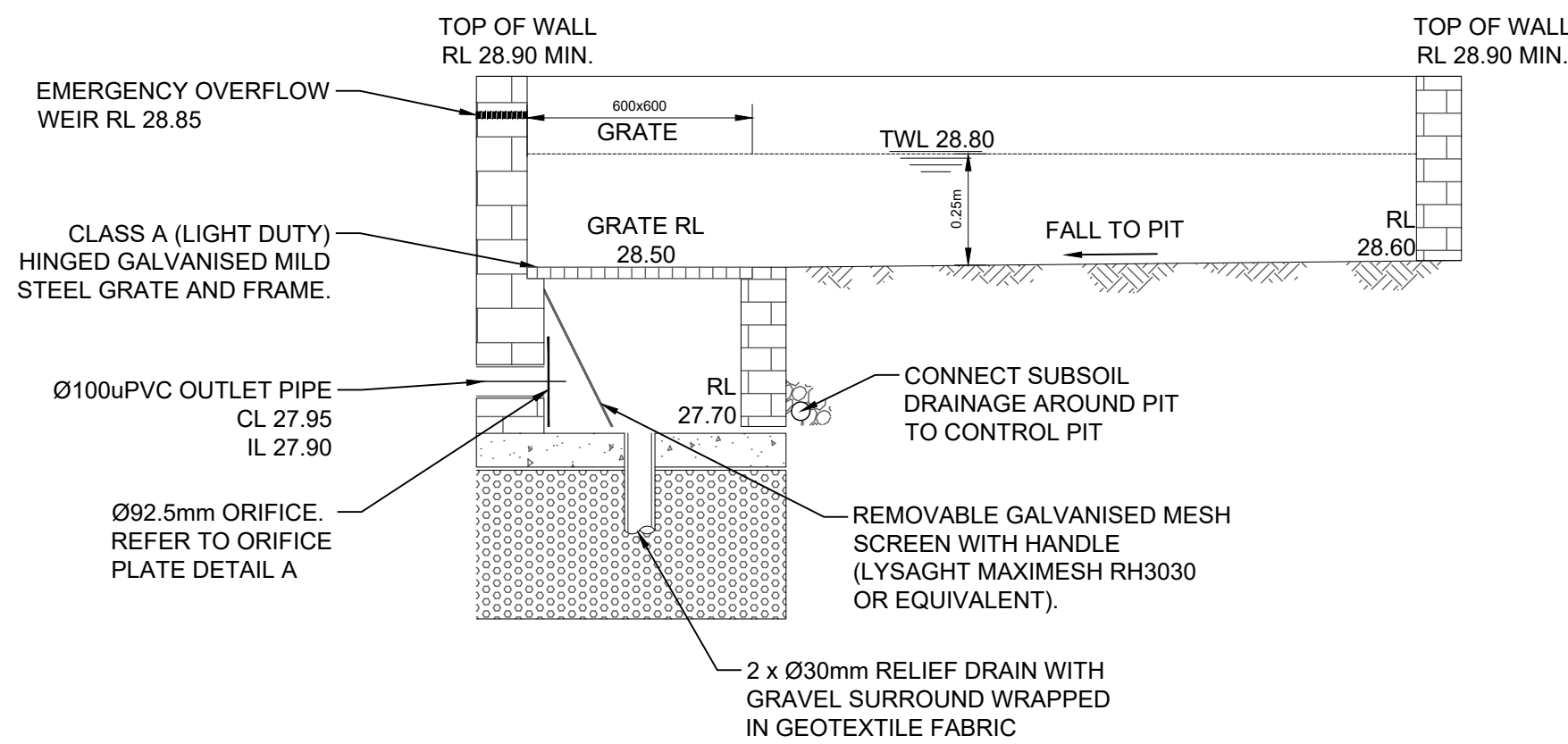
LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND



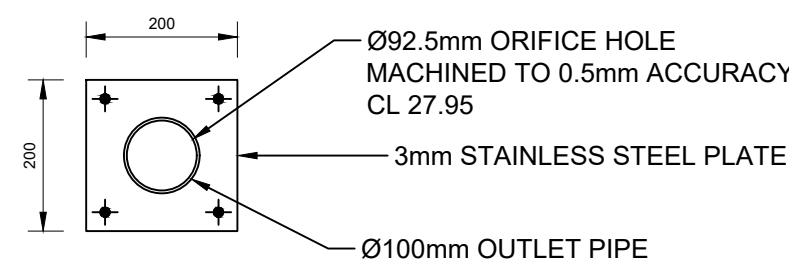
FIRST FLUSH DETAIL
SCALE 1:10



MULTI PURPOSE FILTER SCREEN
SCALE 1:10



TYPICAL ON-SITE DETENTION DETAIL
SCALE: NTS



A ORIFICE PLATE ELEVATION
SCALE 1:10

DRAINS MODEL SUMMARY TABLE

STORM DURATION	PRE-DEVELOPMENT	POST DEVELOPMENT (TOTAL)	POST DEVELOPMENT (ATTENUATED)	POST DEVELOPMENT (UNATTENUATED)
20% AEP	16 L/S	16 L/S	14 L/S	2 L/S
10% AEP	20 L/S	17 L/S	14 L/S	3 L/S
5% AEP	23 L/S	18 L/S	15 L/S	3 L/S
1% AEP	29 L/S	20 L/S	16 L/S	4 L/S

REV	DATE	DESCRIPTION	RVD
A	05/12/2023	ISSUED FOR DEVELOPMENT APPLICATION	AK

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**SYDNEY
STRUCTURAL &
CIVIL**

zta
architects
architecture / urban design / interior design

CLIENT

ADDRESS
46A TOWNSEND STREET, CONDELL PARK NSW 2200

PROJECT
PROPOSED CHILD CARE CENTRE

STATUS
ISSUED FOR DEVELOPMENT APPLICATION

TITLE
STORMWATER DETAILS SHEET 2

DRAWN
AM

DESIGNED
JL

CHECKED
AE

APPROVED
AK

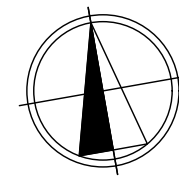
DO NOT SCALE DRAWING, USE
FIGURED DIMENSIONS ONLY.

PROJECT No.
SSCE230444

SCALE
1:100

DRAWING No.
D11

REV.
A



SYDNEY STRUCTURAL & CIVIL ENGINEERING PTY LTD