

STANDARD PUMP OUT DESIGN NOTES

THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.

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. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.

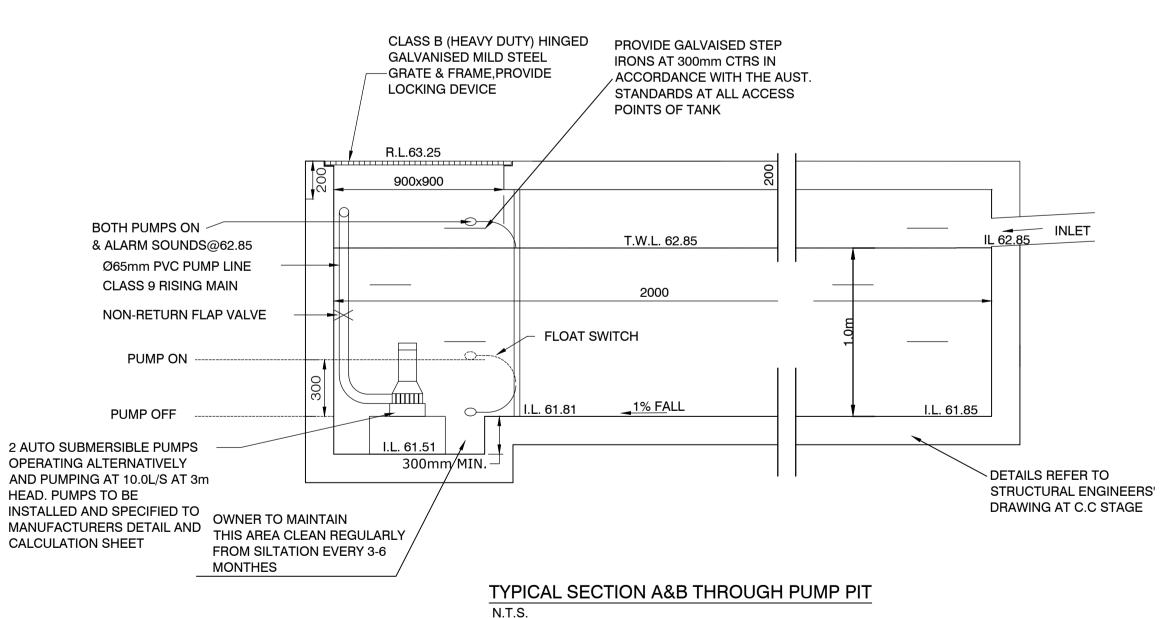
A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.

AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AN 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

PUMP WELL DETAILS:

SUMP SIZE AND PUMP SIZE BASED ON 100 YEAR 2.0 HR STORM INTENSITY IS 55.4mm/hr, AREA DRAINING TOWARDS SUMP IS 35m² Q=CIA/3600 = 0.538L/s VOLUME REQUIRED IN THE TANK IS =0.538x2.0x3600=3,878L STORAGE PROVIDED IN THE TANK 2000X2000X1000=4,000L THEREFORE ADEQUATE STORAGE PROVIDED BASED ON 100YR 6MIN. STORM = 209mm/hr

Q=CIA/3600 = =2.03L/sUSE KS-30 DUAL PUMPS OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO ACT ALTERNATIVELY AT 10L/S AND 5m HEAD



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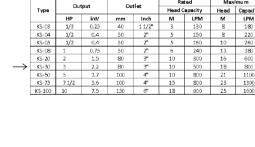
E/ info@danmorconsulting.com.au A/ PO BOX 489 St Marys NSW 1790

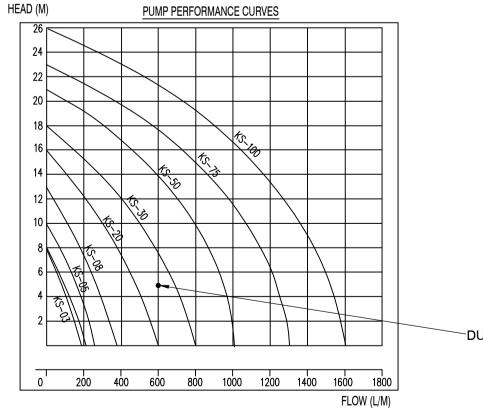
	AMENDMENTS
NO.	DESCRIPTION
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BASEMENT STORMWATER DRAINAGE PLAN SCALE 1:100

SCALE 1:100

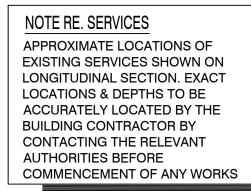




VOLUME: 4000L

VOLUME: 4000L

	DRAWN: D.M.	DESIGNED: D.M.	PROJECT:	CLIENT:
DATE 03/10/18	APPROVED: DANNY MORCHEI	DATE: 03-11-18 D	DWELLING HOUSING DEVELOPMENT	Joel Lewis
15/03/20 08/07/20	B.E CIVIL M.E STRUCTURAL CPEng,MIEAust,NPER MEMB. NO: 2320868		12 PATEY STREET, DEE WHY, NSW	TITLE:
	SCALE AT A1: 1:	:100 U.N.O.		BASEMENT STOR





NOTES

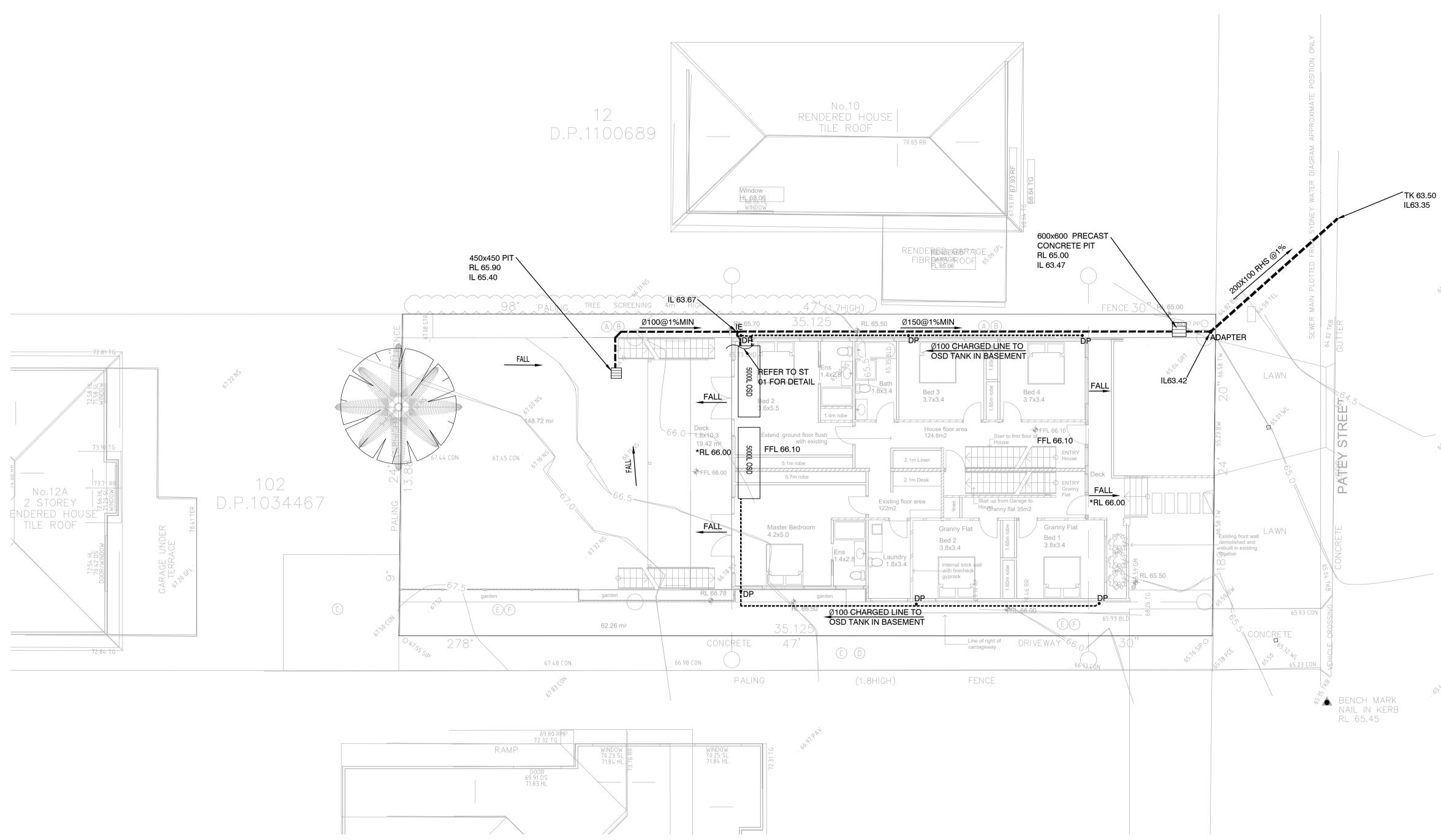
- 1. ALL LINES ARE TO BE MIN. 100Ø UPVC @ MIN 1.0% GRADE UNLESS NOTED OTHERWISE.
- 2. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS. ALL DESIGN LEVELS SHOWN ON PLAN SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. ALL PIPES TO HAVE MIN 200mm COVER IF LOCATED WITHIN PROPERTY.
- 4. ALL PITS IN DRIVEWAYS BE HEAVY DUTY GRATES. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
- 5. ALL WORK DO BE DONE IN ACCORDANCE WITH AS/NZ 3500.3.2:2003 AND COUNCIL SPECIFICATIONS.
- 6. 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.
- 7. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL PLANS.
- 8. ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.
- 9. ALL PITS OR GRATES IN TRAFFICABLE AREAS TO BE HEAVY DUTY.
- 10. ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES

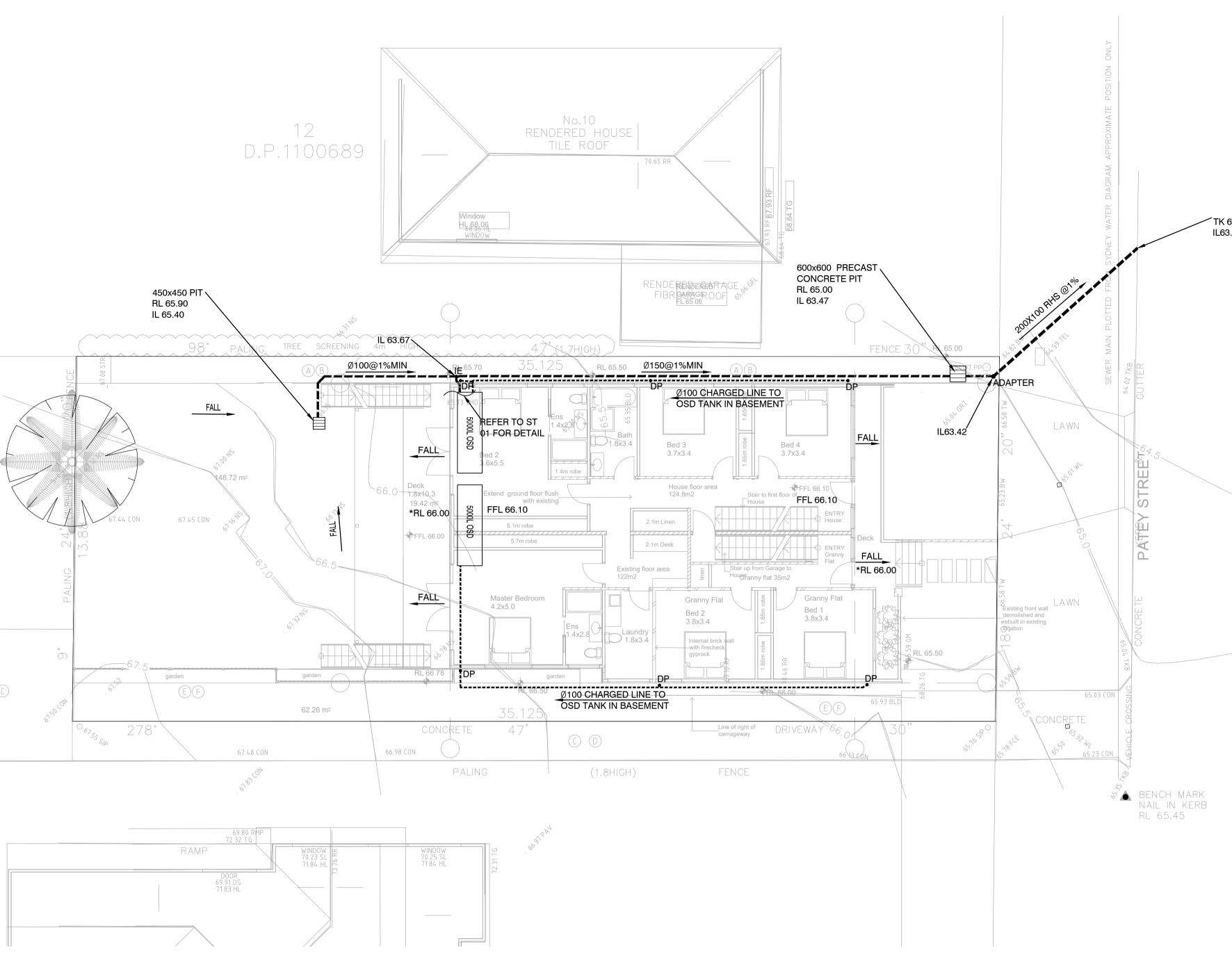
SYMBOLS

	F.F.L.	FINISHED FLOOR LEVEL
	Т.К.	TOP OF KERB
	RL	PIT SURFACE LEVEL
	IL	INVERT LEVEL
	an from from from from from from from	STORMWATER DRAINAGE PIPE
		DOWNPIPE TO RAINWATER TANK
	∘ DP	100Ø DOWN PIPE (U.N.O.)
	SP	SPREADER
	● IE	INSPECTION EYE
7		MASONRY RETAINING WALL
-	⊗ FW	FLOOR WASTE 150Ø
		GRATED INLET PIT
		GRATED DRAIN
		GRATED DRAIN
	\leftarrow	OVERLAND FLOW PATH
	ES	EMERGENCY SPILTTER
	VD●	VERTICAL DROP
	• EDP	EXISTING 100Ø DOWN PIPE (U.N.O.)
	<u> </u>	EXISTING STORMWATER DRAINAGE PIPE
DUTY POINT		
		ALL DIMENSIONS IN 'mm' UNLESS OTHERWISE STATE
		D18405
RMWATER DRAINAGE	PLAN	DRAWING NO. ST01







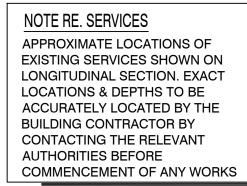


SCALE 1:100



SITE STORMWATER DRAINAGE PLAN

	DRAWN: D.M.	DESIGNED: D.M.	PROJECT:	CLIENT:
DATE	APPROVED:	DATE: 03-11-18	DWELLING HOUSING DEVELOPMENT	Joel Lew
03/10/18 15/03/20 08/07/20	DANNY MORCHED B.E CIVIL		12 PATEY STREET, DEE WHY, NSW	TITLE:
	SCALE AT A1: 1:	100 U.N.O.		SITE STO





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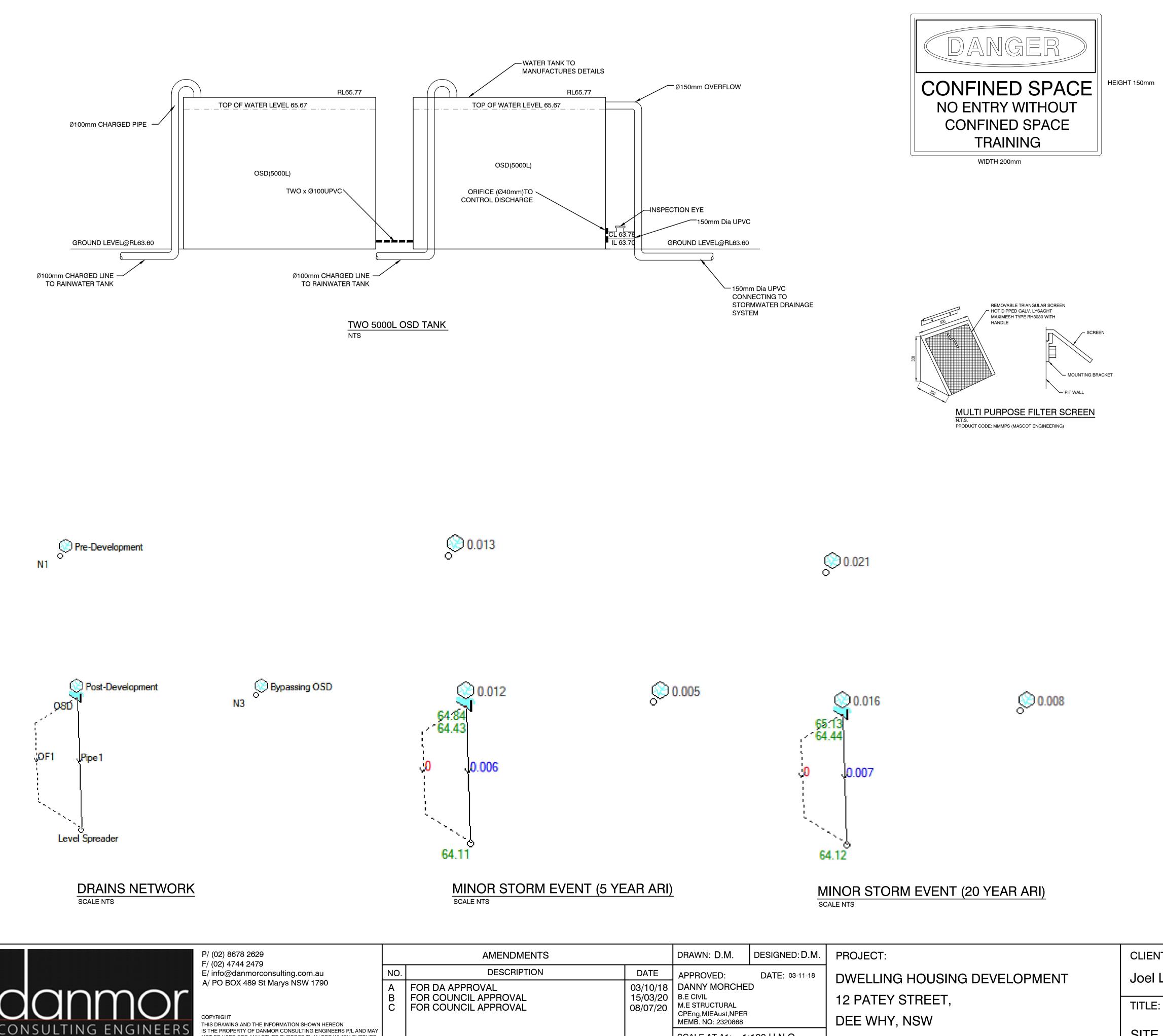
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SYMBOLS

F.F.L. T.K. RL IL	FINISHED FLOOR LEVEL TOP OF KERB PIT SURFACE LEVEL INVERT LEVEL STORMWATER DRAINAGE PIPE
	DOWNPIPE TO RAINWATER TANK
○ DP	100Ø DOWN PIPE (U.N.O.)
SP	SPREADER
● IE	
	MASONRY RETAINING WALL
🚫 FW	FLOOR WASTE 150Ø
	GRATED INLET PIT
	GRATED DRAIN
\leftarrow	OVERLAND FLOW PATH
ES	EMERGENCY SPILTTER
VD•	VERTICAL DROP
• EDP	EXISTING 100Ø DOWN PIPE (U.N.O.)
<u> </u>	EXISTING STORMWATER DRAINAGE PIPE

vis	ALL DIMENSIONS IN 'mm' UNLESS OTHERWISE STATED
	ЈОВ NO. D18405
ORMWATER DRAINAGE PLAN	DRAWING NO. ST02

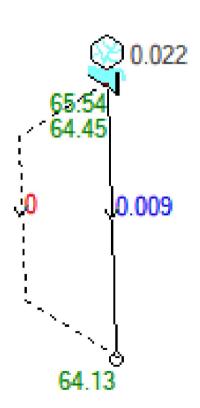


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03/10/18 15/03/20 08/07/20	B.E CIVIL		12 PATEY STREET, DEE WHY, NSW	TITLE:
	SCALE AT A1: 1:	:100 U.N.O.		SITE ST

wis	ALL DIMENSIONS IN 'mm' UNLESS OTHERWISE STATED
	јов NO. D18405
TORMWATER DRAINAGE DETAIL	DRAWING NO. ST03

MINOR STORM EVENT (100 YEAR ARI)



SCALE NTS







