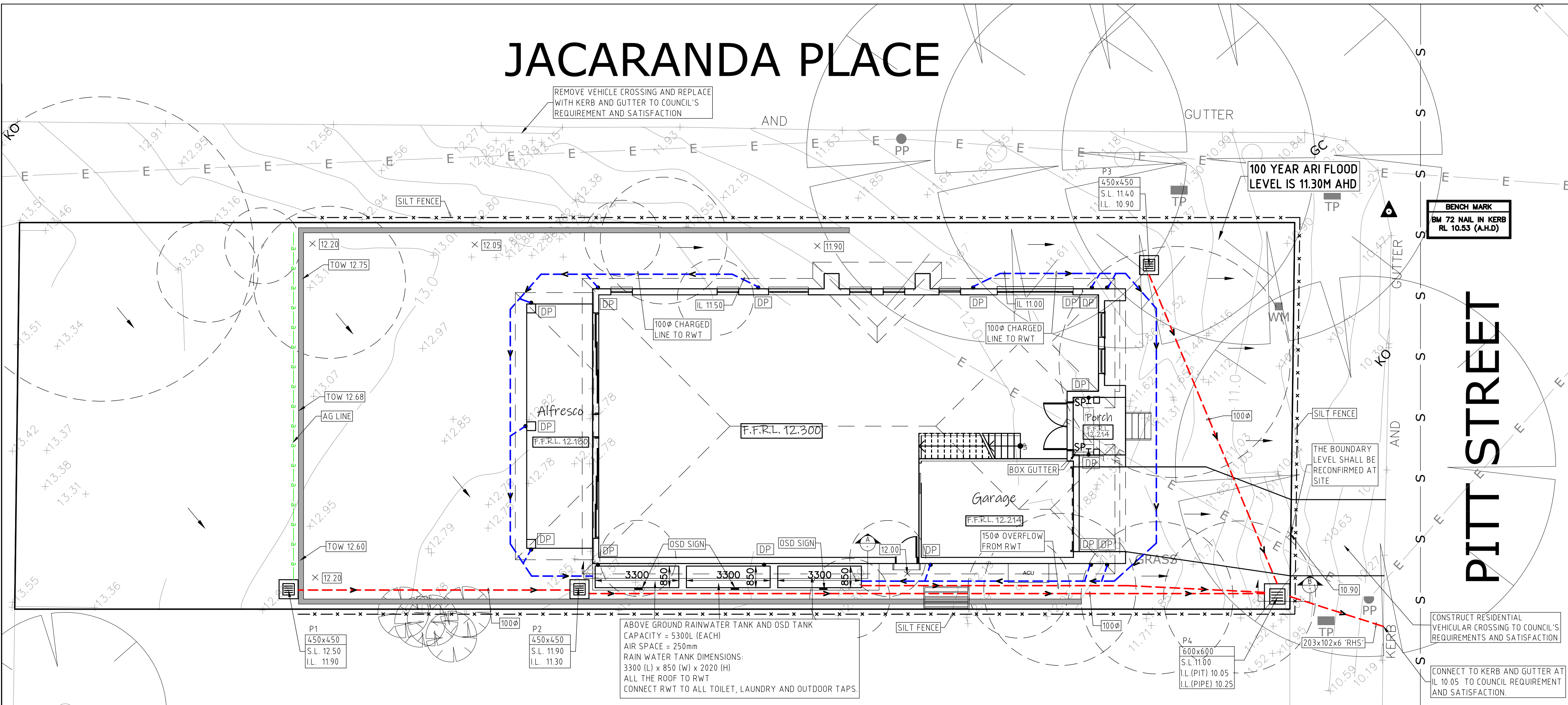


JACARANDA PLACE

A1

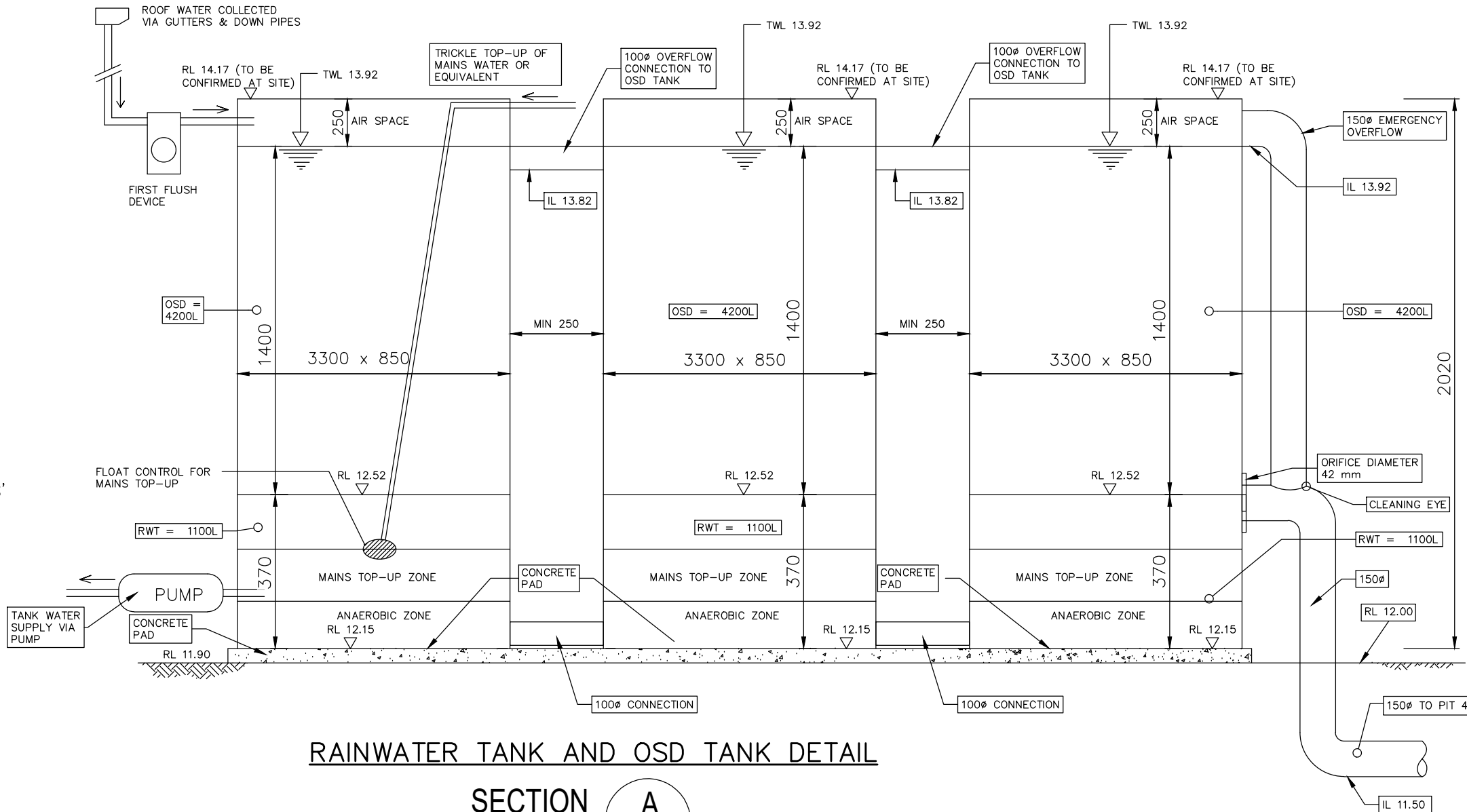
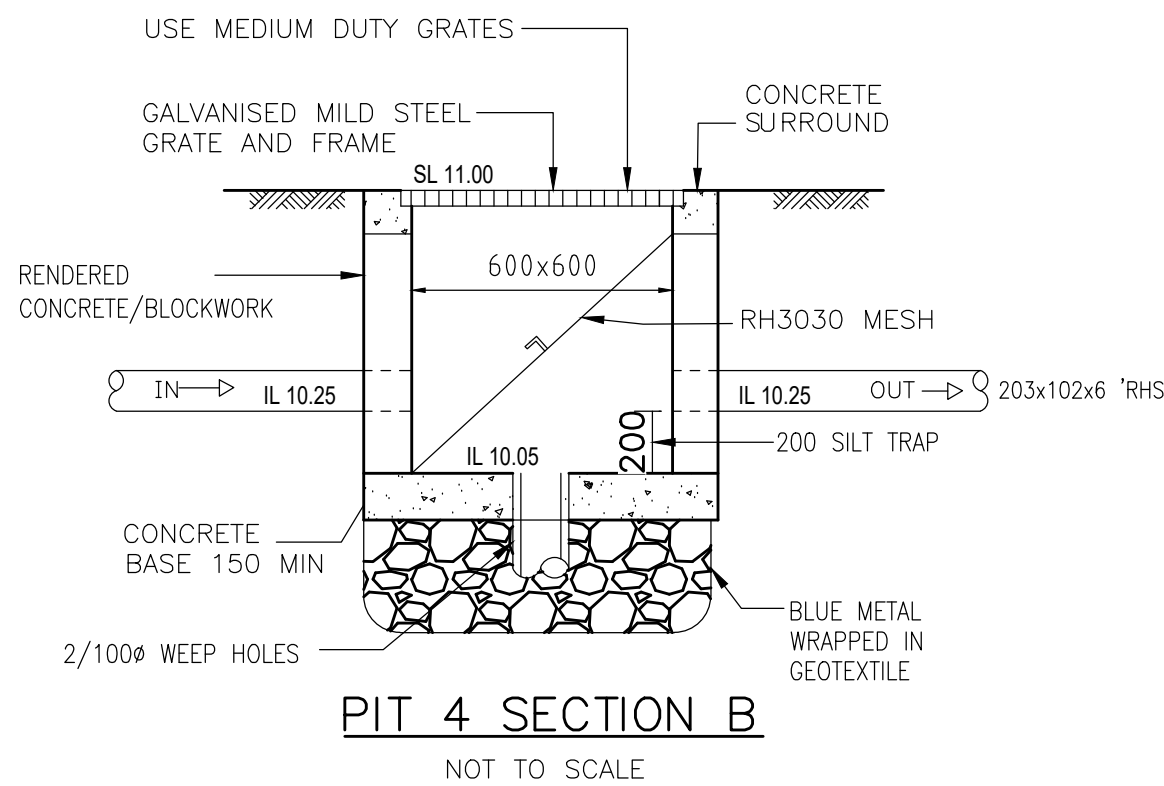


STORMWATER DRAINAGE LAYOUT PLAN

SCALE: - 1:100 @ A1

OSD CALCULATION (FORMER WARRINGAH COUNCIL AREA)

- TOTAL SITE AREA = 766.40m²
- TOTAL PROPOSED IMPERVIOUS AREA = 353m²
- PERCENTAGE IMPERVIOUS AREA = $\frac{353}{766.40} \times 100 = 46$
- OSD IS REQUIRED FOR THIS SITE.
- STORAGE REQUIRED = 0.0766 x 200 = 15.32m³
- ALLOWABLE DISCHARGE = 0.0766 x 400 = 30.64L/S
- ROOF CATCHMENT AREA TO RAINWATER TANK = 287m²
- TOTAL 100 YEAR ARI FLOW FROM THE SITE = 45.90L/S
- BY PASS FLOW FROM THE OSD = 4.79 x 5.50 = 26.34L/S
- ALLOWABLE DISCHARGE FROM OSD = 4.30L/S
- MAXIMUM HEIGHT TO ORIFICE CENTRE = 1.40m
- ORIFICE DIAMETER = 42mm
- VOLUME OF THE RWT = 3.30m³
- RAINWATER TANK REQUIRED AS PER BASIX = 3.0m³
- OSD VOLUME REQUIRED = (15.32 - 3.30) = 12.02m³
- TOTAL VOLUME OF OSD AND RAIN WATER TANK = 15.30m³



RAINWATER TANK NOTES:

- CAPACITY:
RAINWATER TANKS HAVE A CAPACITY AS MARKED IN THE PLAN.
- RAINWATER CONNECTION:
TANKS WATER WILL BE PLUMBED TO ALL OUTDOOR WATERING, LAUNDRY AND TOILETS AS PER BASIX REQUIREMENTS.
- FIRST FLUSH:
'FIRST FLUSH' DEVICE WILL BE FITTED TO REMOVE SURFACE CONTAMINATION.
- NON DRINKING:
TANKS WATER WILL NOT BE CONNECTED TO DRINKING OR BATHING WATER OUTLETS.
- FULLY ENCLOSED:
TANKS WILL BE FULLY ENCLOSED AND SEALED TO PREVENT ACCESS BY MOSQUITOES.
- NON REFLECTIVE FINISH:
TANKS SURFACES WILL HAVE NON REFLECTIVE FINISH.
- WARNING LABELS:
A LABEL WILL BE AFFIXED TO THE TANKS WARNING THAT WATER IS NOT TO BE CONSUMED AND RAINWATER SIGNAGE WILL BE PLACED ABOVE ALL TANKS WATER OUTLETS.
- ROOFING MATERIALS:
THE ROOF SURFACE FROM WHICH RAINWATER IS BEING DRAWN WILL NOT CONTAIN LEAD, TAR, ASBESTOS OR PAINTS BASE.
- TANKS WILL BE BUILT ON A SELF SUPPORTING BASE (ABOVE GROUND TANKS ONLY)
- WATER PRESSURE:
TANKS WILL BE FITTED WITH SMALL MOTORISED PUMP TO PROVIDE ACCEPTABLE WATERPRESSURE.
- PUMP NOISE:
PUMP WILL BE DESIGNED AND LOCATED NOT TO CAUSE A NOISE DISTURBANCE TO NEIGHBOURS (GENERALLY NOT 5 dBA ABOVE BACKGROUND NOISE)
- INSTALLATION:
WILL BE INSTALLED BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS AND THE NSW CODE OF PRACTICE: PLUMBING AND DRAINAGE
- BACK FLOW PREVENTION:
A BACK FLOW PREVENTION DEVICE WILL BE PROVIDED AT THE MAINS WATER METER
- DUAL SUPPLY:
A TRICKLE TOP-UP SYSTEM WILL BE PROVIDED AT THE MAINS WATER.
- BACK UP SUPPLY:
A BACK UP SUPPLY OF MAINS WATER WILL BE PROVIDED IN EVENT OF FAILURE OR MAINTENANCE.
- ANAEROBIC ZONE:
WATER WILL BE DRAWN FROM ABOVE THE ANAEROBIC ZONE OF TANKS.
- TANKS CONSTRUCTION:
TANKS WILL BE STRUCTURALLY SOUND AND CONSTRUCTED IN ACCORDANCE WITH AS/NZ3500.1.2-1998: NATIONAL PLUMBING AND DRAINAGE-WATER SUPPLY-ACCEPTABLE SOLUTIONS.
- AIR GAP:
TANKS WILL BE PROVIDED WITH AN AIR GAP IN ACCORDANCE WITH AS/NZ 3500.1.2 & AS2845.2
- ON GOING MAINTENANCE:
TANKS WILL BE WELL KEPT AND MAINTAINED BY THE OWNER.

NOTES:

- ALL WORKS TO BE CONSTRUCTED TO THE REQUIREMENTS AND SATISFACTION OF THE NORTHERN BEACHES COUNCIL DCP.
- PRIOR TO COMMENCEMENT OF ANY SITE WORKS, THE BUILDING CONTRACTOR/PLUMBER HAS TO EXPOSE ALL SERVICES IN THE FULL WIDTH OF THE FOOTPATH TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPE.
- THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
- THE BUILDER IS TO VERIFY ALL LEVELS ON THE SITE PRIOR TO COMMENCING CONSTRUCTION.
- SILT FENCE IS TO BE ERECTED PRIOR TO COMMENCING WORK. FENCE TO BE MAINTAINED IN ORDER DURING THE TIME OF CONSTRUCTION.
- W.A.E. DRAWING BY A REGISTERED SURVEYOR IS REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE.
- U.N.O. ALL DOWN PIPES ARE TO BE 100mm UPVC.
- U.N.O. ALL PIPES TO BE 100mm UPVC WITH 1% MIN SLOPE.
- ALL THE RETAINING WALLS TO STRUCTURAL ENGINEERS DETAIL AND SHOULD BE WITHIN THE SITE BOUNDARY.
- ALL THE DOWN PIPES FROM THE ROOF GUTTER TO RAINWATER TANKS SHALL BE CHARGED LINES AND SOLVENT WELD JOINTED.
- PROVIDE OSD SIGNS IN THE OSD TANKS.

LEGEND

- DRAINAGE LINE TO RWT
- ALL OTHER DRAINAGE LINE
- AG. LINE
- SILT FENCE
- EXISTING LEVEL
- DESIGN LEVEL
- SILT BARRIER AROUND PIT
- CLEANING EYE (OR INSPECTION EYE)
- SURFACE LEVEL SL 10.50
- INVERT LEVEL IL 10.00
- REMOVED TREE
- SURFACE INLET PIT
- JUNCTION PIT
- DOWN PIPE
- SPREADER PIPE
- PLANTER GRATE
- FLOOR GRATE
- DROPPER
- STEP IN THE RETAINING WALL
- FLUSHING POINT

CAUTION:

ALL THE LEVELS AND DIMENSIONS ARE CRITICAL. PLEASE FOLLOW THE SW PLAN FOR CONSTRUCTION TO AVOID FINAL CERTIFICATION DELAY. IF YOU SEE SOMETHING NOT CORRECT OR NOT SUITED FOR SITE PLEASE CONTACT THE STORMWATER ENGINEER FOR CLARIFICATION AND FURTHER DIRECTIONS.

NOTE:

THE PIT SURFACE (GRATE) LEVELS WERE OBTAINED FROM THE CONTOUR SURVEY PLAN. THERE MAY BE SOME VARIATIONS ON SITE DUE TO SOME VARIATIONS IN THE SURVEY PLAN. IF THERE ARE SOME VARIATIONS, PLEASE CONTACT VNK CONSULTING PTY LTD FOR FURTHER DIRECTION.

NOTE:

PRIOR TO CONSTRUCTION THE BUILDER IS TO COORDINATE ALL THE PLANS (ARCHITECTURE PLAN, LANDSCAPE PLAN, STRUCTURAL ENGINEER'S PLAN AND THE STORMWATER PLAN) TO MAKE SURE ALL THE DESIGN LEVELS, DOWNPIPE LOCATIONS AND THE FLOOR LEVELS ARE SAME IN ALL THE PLANS.

NOTE:

THE PIT SURFACE LEVELS AND THE TOP OF RETAINING WALLS SHALL BE RE-CONFIRMED AT SITE.

NOTE:

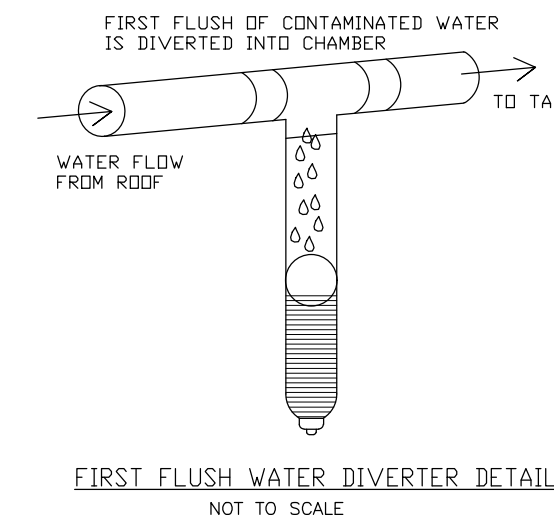
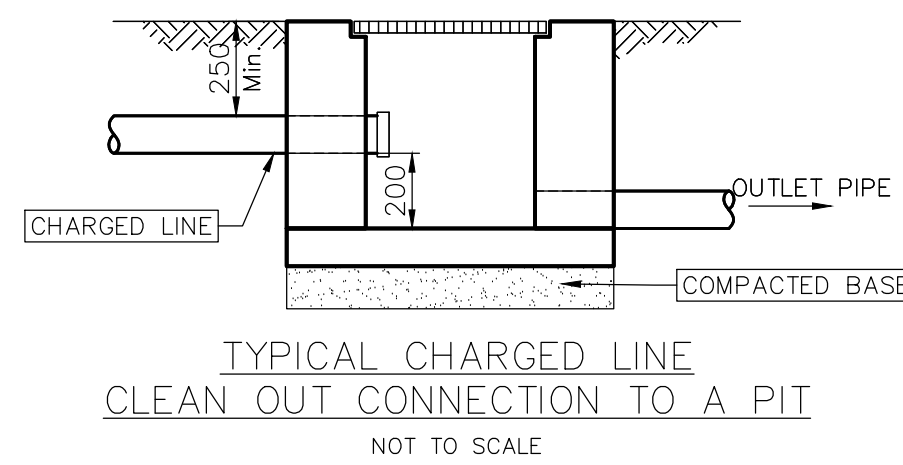
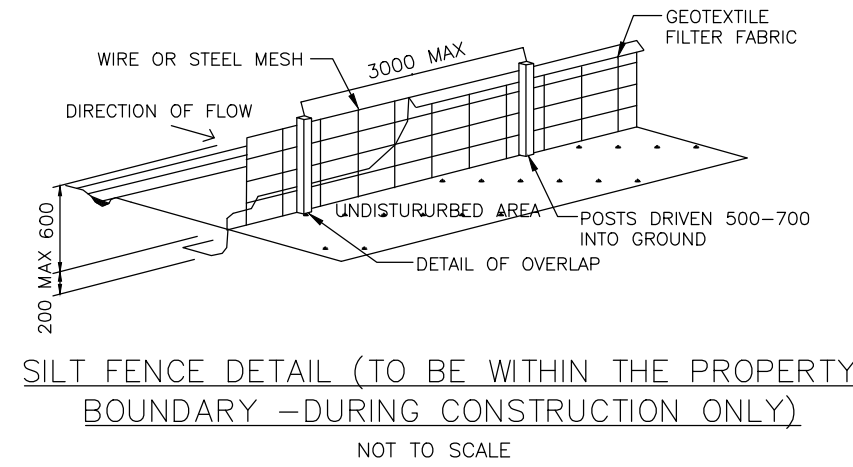
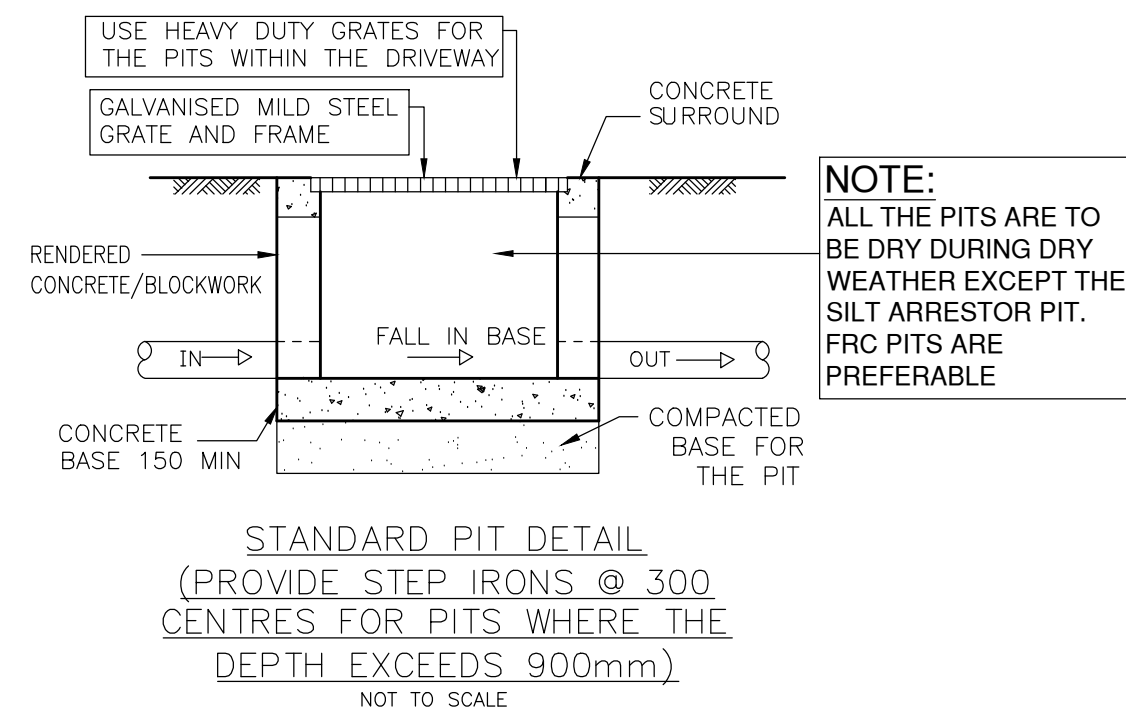
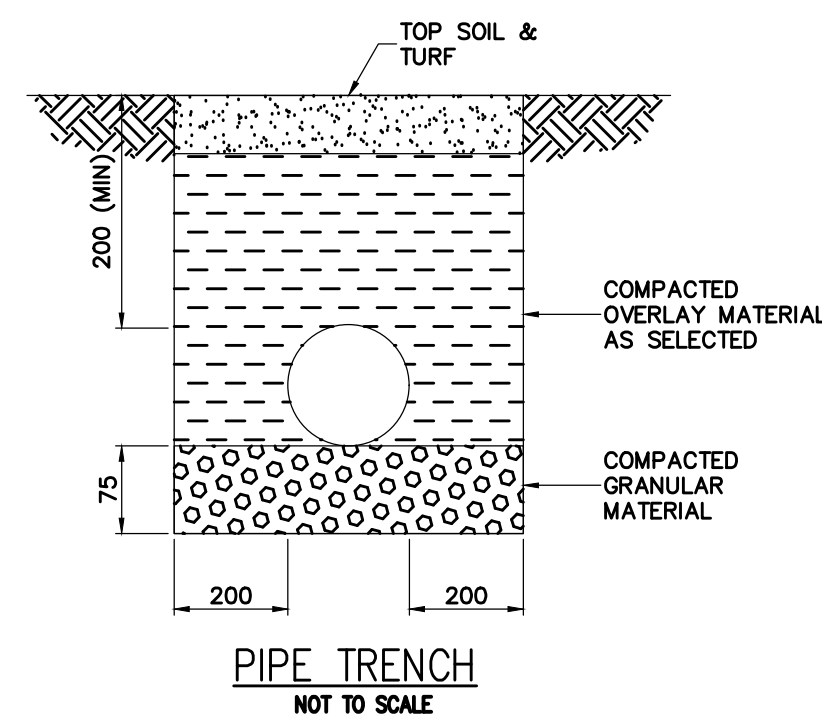
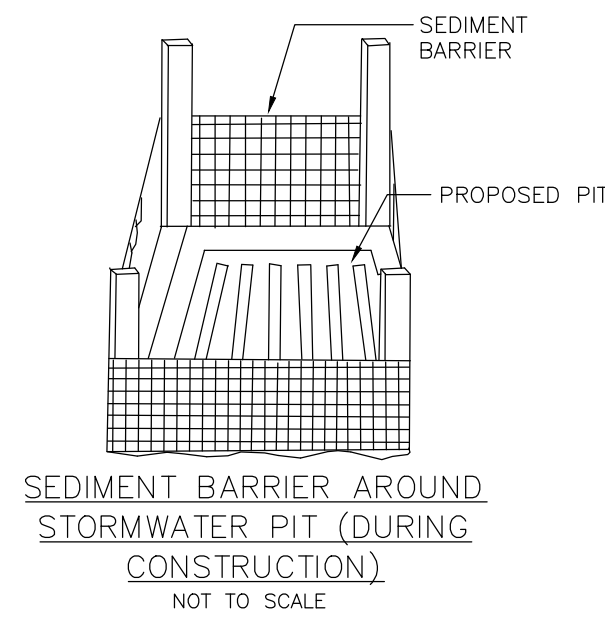
CLEAN OUT LINES FROM THE CHARGED LINES TO BE CONNECTED TO THE NEAREST PITS WITH END CAP AT THE PIT END.

NOTE:

PROVIDE FLOOR GRATES (1000) FOR THE FIRST FLOOR BALCONIES (DO NOT CONNECT TO THE RAINWATER TANK).

NOT FOR CONSTRUCTION

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							DRAWN	INO	PROPOSED DWELLING 15 PITT STREET MANLY VALE NSW 2093	230225-01
							DATUM	AHD		Issue:
							DATE	23.02.2025		A
A	23.02.2025	ISSUED FOR DA APPROVAL	INO	PRINCIPAL ENGINEER:	LOGAN N LOGESWARAN					SHEET 1 of 2
Issue	Date	Description	By	Qualifications:	BscEng, MEng, MEngStud, M.ASCE, MIEAust, CPEng, NER					



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				QUALIFICATIONS:	BscEng, MEng, MEngStud, M.ASCE, MIEAust, CPEng, NER			DATE	23.02.2025		SHEET 2 of 2
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