



On-site Stormwater Detention (OSD) Checklist

For Single Dwelling Residential Developments

This form is to be used to determine if OSD will be required for demolition and reconstruction, or construction of new single dwelling residential developments and **must be completed and included with the submission of any development application for these works.** Please read both sides of this form carefully for its applications, guidelines and definitions.

For assistance and support, please contact Council's Customer Service Centre on (02) 9942 2111.

Address of Proposed Development

Address of proposed development	Lot	<input type="text" value="20"/>	DP (if applicable)	<input type="text" value="UNREG"/>
	No.	<input type="text" value="29-31"/>	Street	<input type="text" value="WARREWOOD ROAD"/>
	Suburb	<input type="text" value="WARRIEWOOD"/>		

PART 1 Exemption for properties that drain naturally away from the street

Tick one only	Does the site fall naturally away from the street? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, stormwater drainage must be in accordance with Council's Policy No. PDS-POL 136 'Stormwater Drainage from Low Level Properties'. If no, proceed to the next part.
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PART 2 Is the site area less than 450m²

Tick one only	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, OSD is not required. If no, proceed to next part.
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PART 3 Exemption for Direct Discharge to Ocean

Tick one only	Does the site of the development drain directly to the ocean without the need to pass through a drainage control structure such as a pipe, bridge, culvert, kerb and gutter or natural drainage system? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, OSD is not required. If no, proceed to the next part.
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PART 4 Exemption for Flood Affected Areas

Tick one only

Is the site of the development located within an established Flood Prone Land as referred to in the Warringah Local Environmental Plan?

Refer to section 2.6 of Council's OSD Technical Specification.

Yes No

If yes, OSD is not required.

If no, proceed to the next part.

PART 5 Determination of OSD Requirements

3.1 Calculations

(a) Site area _____ m² x 0.40 = _____ m²

(b) Proposed and remaining impervious area _____ m²

Please view below examples

OSD will not be required when (a) is greater than (b)

Is OSD required for this development (tick one only) Yes No

If yes, then a design in accordance with the Streamlined Method in Council's OSD Technical Specification is to be provided with the Development Application (refer to Clause 3.1.1)

If no, OSD is not required.

3.2 Example

If the proposed combined impervious area is greater than 40% of the site area, then OSD is required.

Example 1: Site Area = 600m² Total proposed & remaining impervious area = 290m²
600 x 0.4 = 240m² (290 > 240) OSD required

Example 2: Site Area = 800m² Total proposed & remaining impervious area = 290m²
800 x 0.4 = 320m² (290 < 320) OSD is **not** required

DEFINITIONS

Designed to help you fill out this application

Site area: This refers to the area of the land bounded by its existing or proposed boundaries.

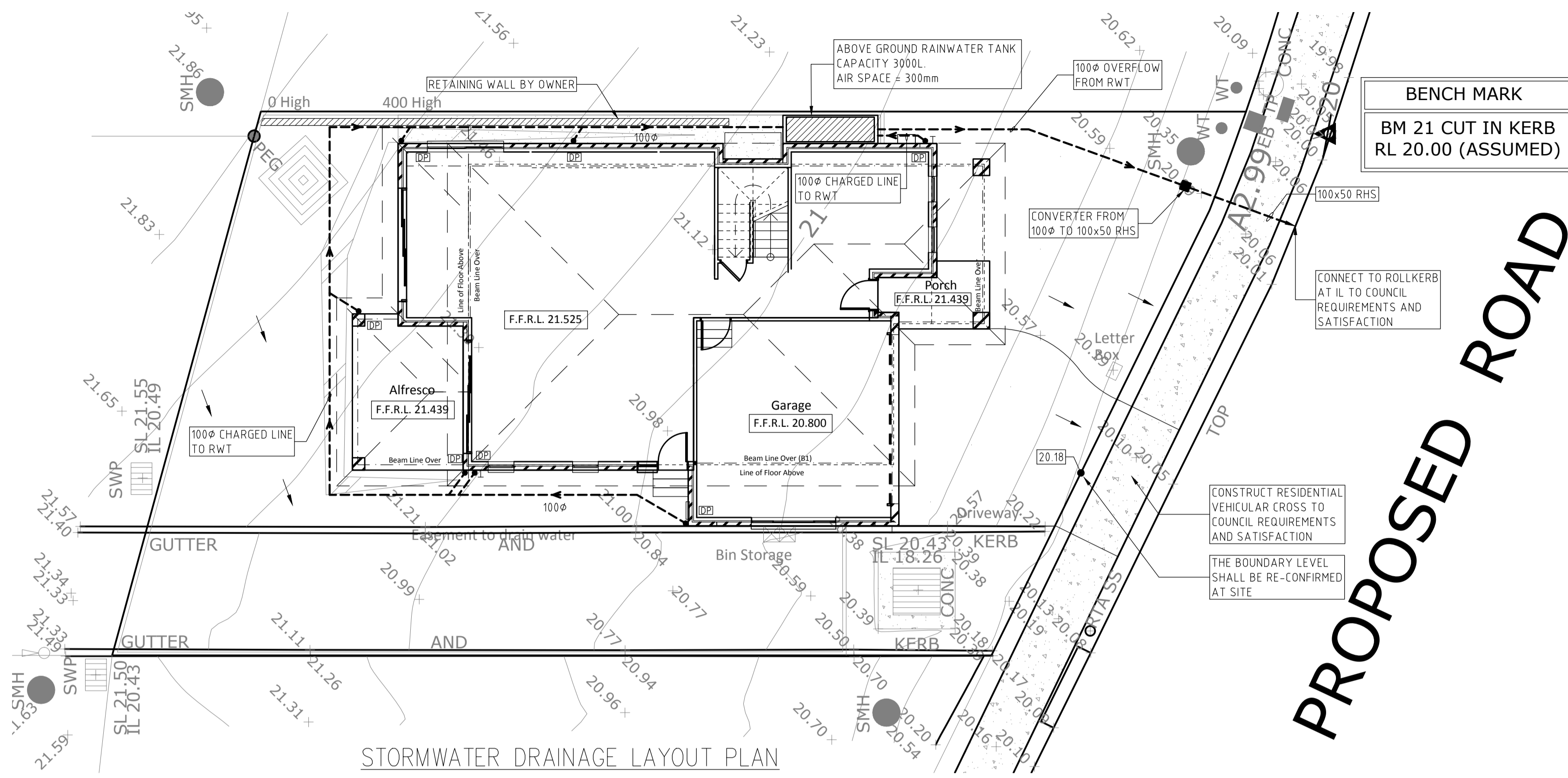
Impervious areas: This refers to driveways, pathways, paved areas, hardstand areas, roofed areas, garages and outbuildings that are proposed and to be retained.

Where an existing structure is to be demolished to make way for a new dwelling, only the proposed impervious areas and remaining impervious areas are to be used in the calculations. No credit is given for existing impervious areas that are not retained.

NOTES

Please read before filling out this form

- Other works, ancillary buildings, commercial, industrial, subdivisions and multiple occupancy developments are to comply with Council's **OSD Technical Specification**.
- A reduction in the OSD volume required may be permitted. Refer to Council's "OSD Rainwater Re-use Policy for Single Residential Dwellings". If OSD is required, then a design for OSD in accordance with Council's "OSD Technical Specifications" is to be provided with the development application.



RAINWATER TANK NOTES:

CAPACITY: RAINWATER TANK HAS A CAPACITY AS MARKED IN THE PLAN.

RAINWATER CONNECTION: TANK WATER WILL BE PLUMBED TO ALL TOILETS, AN OUTLET IN THE LAUNDRY FOR WASHING MACHINES AND ALL OUTDOOR WATERING AS PER BASIX REQUIREMENT.

FIRST FLUSH: 'FIRST FLUSH' DEVICE WILL BE FITTED TO REMOVE SURFACE CONTAMINATION.

NON DRINKING: TANK 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 TANK 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 TANKS GROUND ONLY).

WATER PRESSURE: TANKS WILL BE FITTED WITH SMALL MOTORISED PUMP TO PROVIDE ACCEPTABLE WATER PRESSURE.

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.

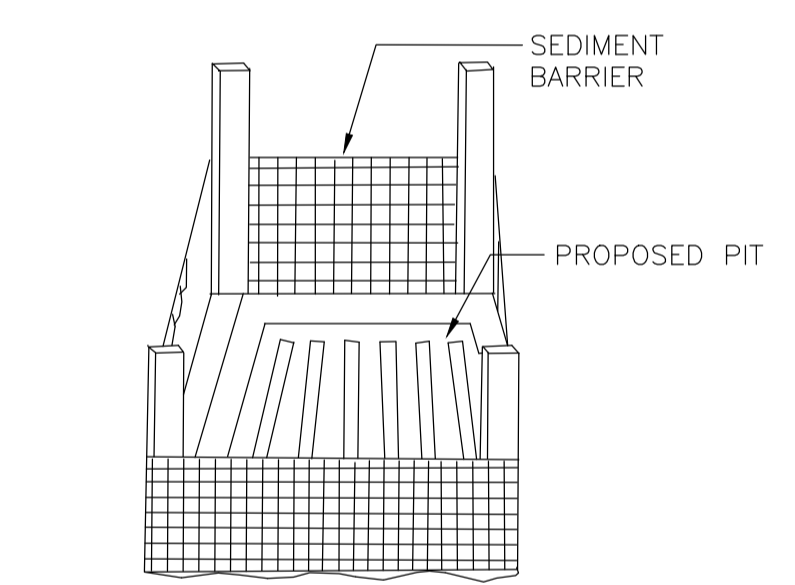
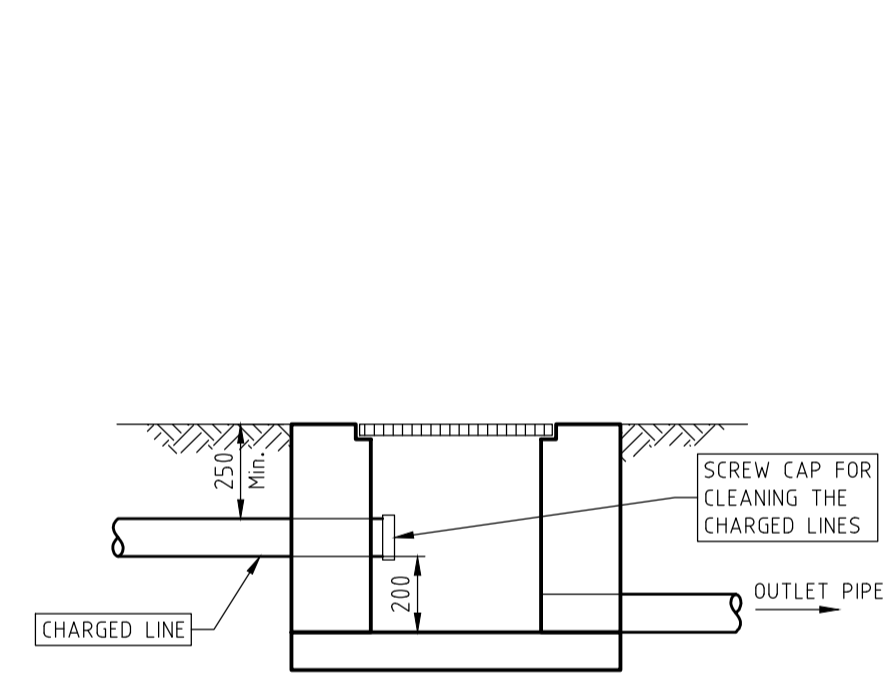
TANK CONSTRUCTION: TANKS WILL BE STRUCTURALLY SOUND AND CONSTRUCTED IN ACCORDANCE WITH AS/NZ3500.1.2-1998 NATIONAL PLUMBING AND DRAINAGE-WATER SUPPLY-ACCEPTABLE SOLUTIONS.

AIR GAP: TANKS WILL BE PROVIDED WITH AN AIR GAP IN ACCORDANCE WITH AS/NZ 3500.1.2 AND AS2845.2 ON GOING MAINTENANCE.

TANKS WILL BE WELL KEPT AND MAINTAINED.

- NOTES:**
- ALL WORKS TO BE CONSTRUCTED TO THE REQUIREMENTS AND SATISFACTION OF NORTHERN BEACHES COUNCIL.
 - 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 WORKING 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 100Ø.
 - U.N.O. ALL PIPES TO BE 100Ø CLASS 'SH' 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 TANK SHALL BE CHARGED LINES AND SOLVENT WELD JOINTED.

PROPOSED ROAD



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.

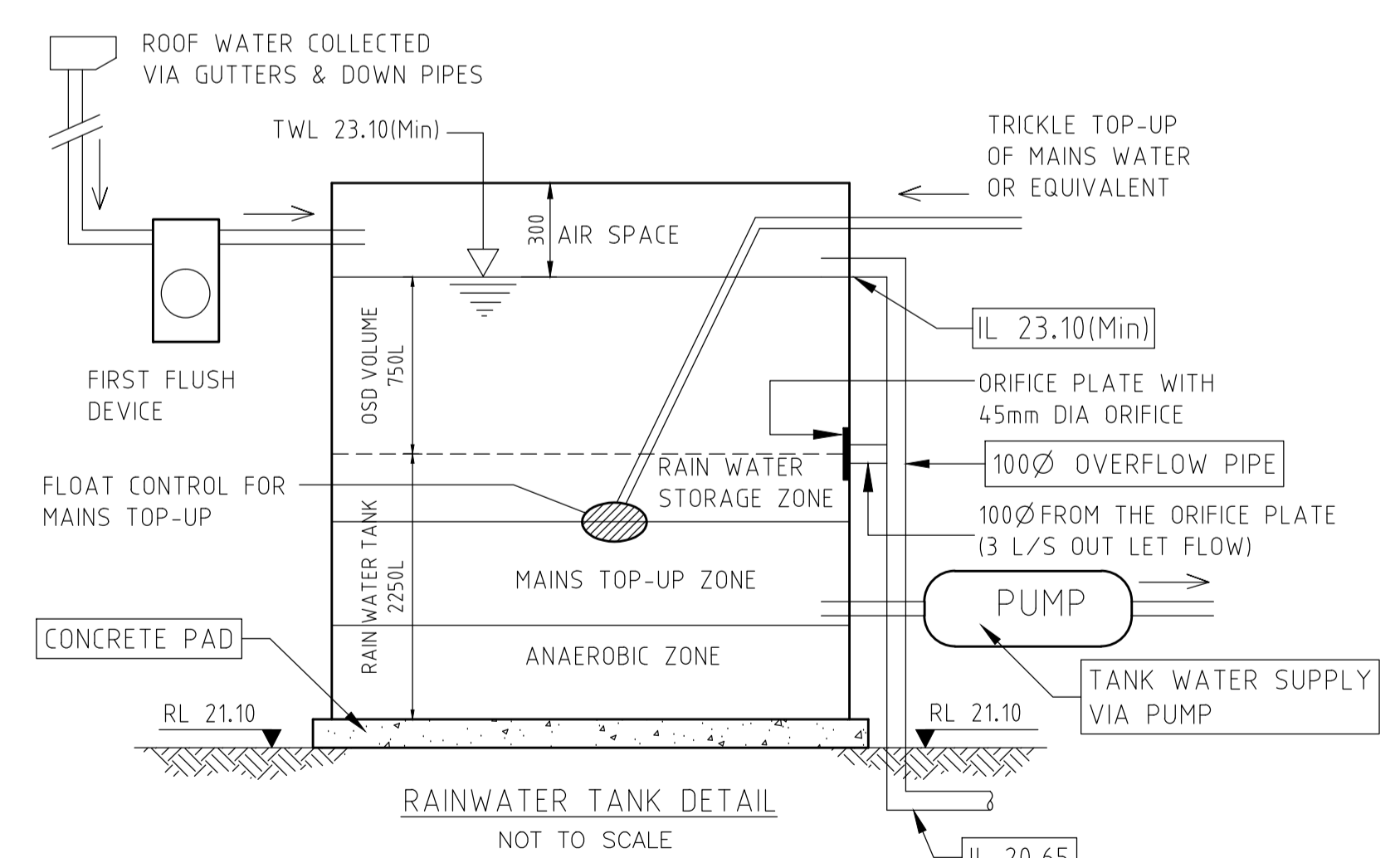
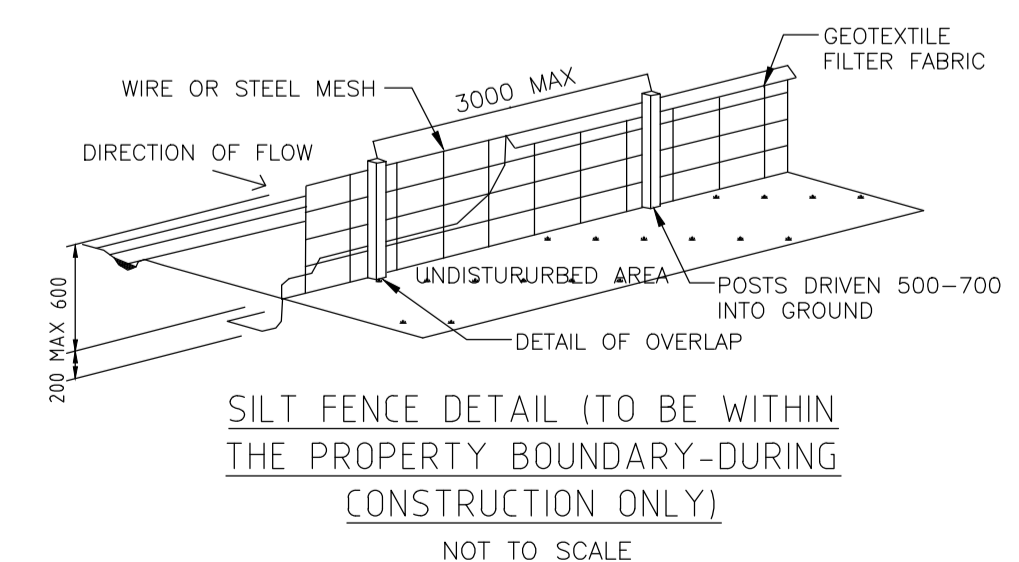
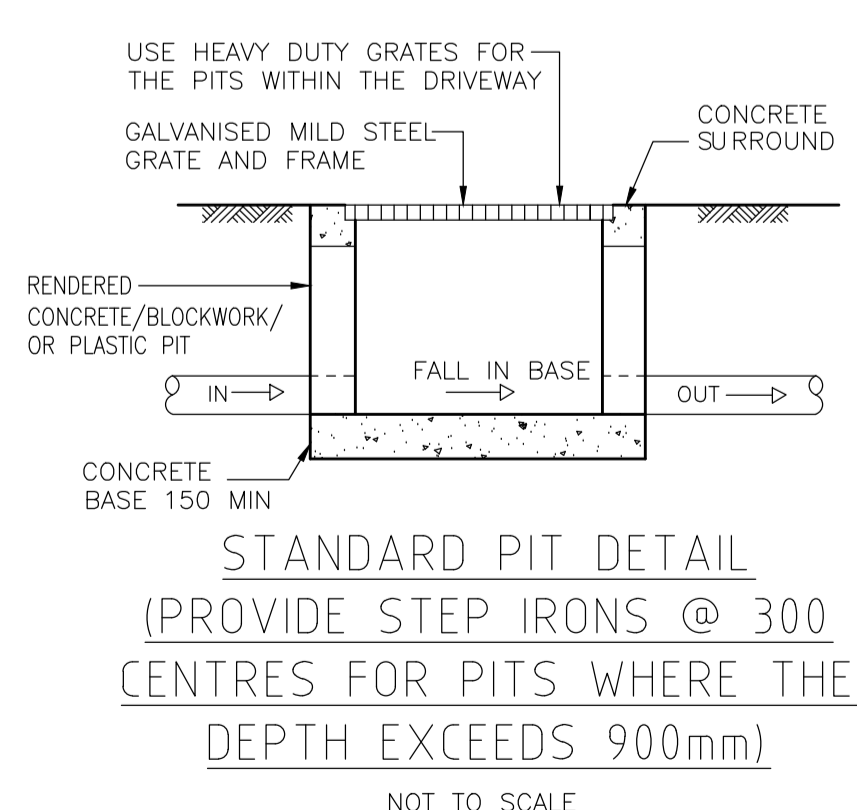
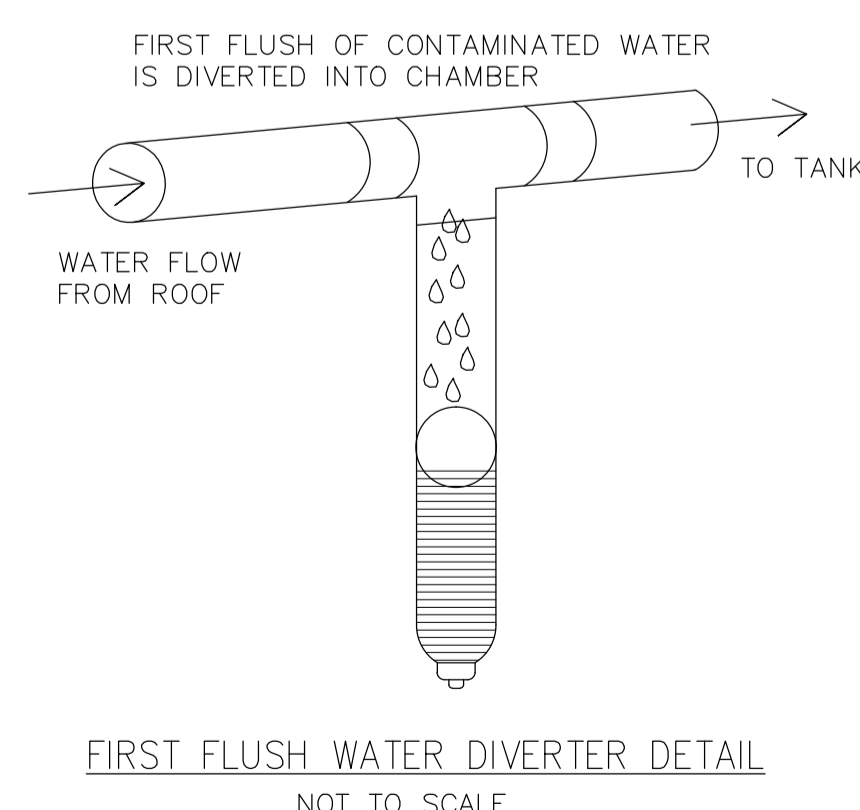
NOTE:
THE SURFACE INLET PITS SHALL BE HEAVY DUTY PLASTIC PITS

NOTE:
PLEASE FOLLOW THE RAINWATER TANK LEVELS AT SITE

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

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.

- LEGEND**
- DRAINAGE LINE: - - - - -
 - AG. LINE: — a — a
 - SILT FENCE: X X X
 - EXISTING LEVEL: x
 - SILT BARRIER AROUND PIT: []
 - CLEANING EYE (OR INSPECTION EYE): []
 - SURFACE LEVEL: SL 45.50
 - INVERT LEVEL: IL 45.00
 - REMOVED TREE: ()
 - SURFACE INLET PIT: []
 - JUNCTION PIT: []
 - DOWN PIPE: []
 - SPREADER PIPE: []
 - PLANTER GRATE: []
 - FLOOR GRATE: []
 - DROPPER: []
 - STEP IN THE RETAINING WALL: []



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

DESIGN BY:	VNK CONSULTING Pty Ltd PO BOX 9118 Harris Park NSW 2150 Mobile: 0401 132 386 Email: VNKCONSULTING@GMAIL.COM	Drawing Title:	DESIGNED:	NL	Project:	Ref No.	080818-01
PRINCIPAL ENGINEER:	LOGAN N LOGESWARAN	STORMWATER DRAINAGE LAYOUT PLAN	DRAWN:	AJ	PROPOSED DWELLING LOT 20 KARINYA ESTATE WARRIEWOOD NSW 2102	Issue:	A
QUALIFICATIONS:	BscEng, MEng, MEngStud, MASCE, MIEAust, CPEng, NER		DATUM:	ASSUMED			
			DATE:	08.08.2018			SHEET 1 of 1