PROPOSED SECONDARY DWELLING

15 LIDO AVENUE, NORTH NARRABEEN

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EXACT ENGINEERS

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PROJECT
PROPOSED SECONDARY DWELLING
15 LIDO AVENUE, NARRABEEN

TITLE
COVER SHEET

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REV	ISSUE / REVISION DESCRIPTION	DATE
A	ISSUE FOR DA	11.06.2024
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DRAWN	M.D
CHECKED	Z.C
SCALE @ A3	N/A
JOB No.	SHEET No.
JB490	S-0.0

GENERAL NOTES:

1. ALL WORKS SHALL BE IN ACCORDANCE WITH B.C.A AND AS3500.3.
2. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
3. THE BUILDER SHALL ENSURE THAT THE STORMWATER ENGINEERS DRAWINGS CORRESPOND TO THE ARCHITECTURAL, STRUCTURAL, AND LANDSCAPING DRAWINGS. IF THERE EXISTS ANY DISCREPANCIES BETWEEN THE DRAWINGS, THE BUILDER SHALL REPORT THE DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORKS.
4. PRIOR TO COMMENCING ANY WORKS, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTS INTO THE COUNCILS KERB/DRAINAGE SYSTEM MATCHED THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER.
5. THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
6. ALL LEVELS SHALL RELATE TO THE ESTABLISHED BENCH MARK. THIS IS TYPICALLY METRES TO AUSTRALIAN HEIGHT DATUM (AHD).
7. ALL DOWNPIPES TO BE 100MM DIAMETER UNLESS NOTED OTHERWISE.
8. ALL DOWN PIPES TO HAVE LEAF GUARDS.
9. ALL LINES ARE TO BE 100MM DIAMETER uPVC AT A MINIMUM 1.0% SLOPE UNLESS NOTED OTHERWISE. LINES ARE TO BE SEWER-GRADE AND SEALED.
10. ALL PIPES TO HAVE MINIMUM 150MM COVER IF LOCATED WITHIN PROPERTY.
11. ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES.
12. ALL SUB-SOIL DRAINAGE SHALL BE OF A MINIMUM 100MM DIAMETER AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE ARCHITECT OR STORMWATER ENGINEER.
13. ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER. WALLS FORMING THE ON-SITE DETENTION SYSTEM SHALL BE OF MASONARY/BRICK/CONCRETE CONSTRUCTION AND WATER TIGHT.
14. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON-SITE DETENTION STORAGE SHALL BE OF A NON-FLOTABLE MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. PINE PARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
15. ALL DRAINAGE WORKS ARE TO AVOID TREE ROOTS. ROOT BARRIER TO BE INSTALLED ADJACENT TO TREE ZONES WHERE DRAINAGE MAY BE AT RISK.
16. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
17. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.

RAINWATER TANKS:

1. RAINWATER TANK, DRAINED ROOF AREAS AND REUSE PLUMBING TO COMPLY WITH BASIX REQUIREMENTS AND CERTIFICATE.
2. ADEQUATE SCREENING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMAL OR FLOATING MATTER.
3. A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS MUST BE PROVIDED.
4. TANKS TO BE PUMPED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIOD WHEN THE TANK IS 80% EMPTY.
5. PUMP TO BE SUITABLY SOUNDPROOFED.
6. A SIGN IS TO BE INSTALLED NEAR THE RAINWATER TANK HIGHLIGHTING “NOT FOR HUMAN CONSUMPTION”.

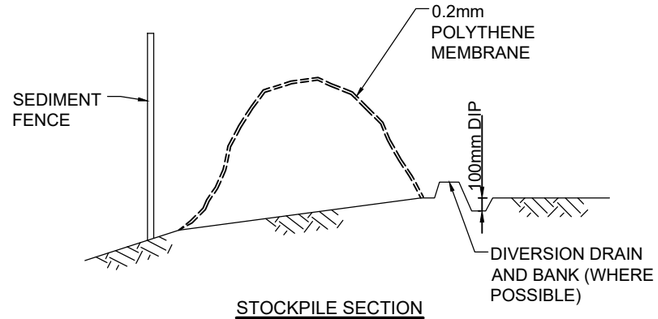
SEDIMENT & EROSION CONTROL:

1. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURE TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
3. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
4. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
5. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
6. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
7. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
8. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
9. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
10. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGHOUT CONSTRUCTION.
11. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
12. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON SITE BY THE SUPERINTENDENT.

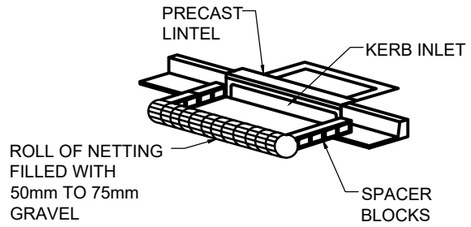
SEDIMENT FENCE:

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150MM AND FOLDED.
3. POSTS SHALL NOT BE SPACED MORE THAN 3.0 METRES APART.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14MM GAUGE, 150MM MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, SPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40M ON FLAT TERRAIN DECREASING TO 20M SPACINGS ON STEEP TERRAIN

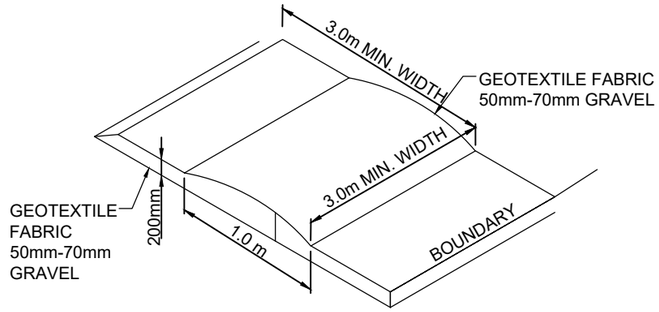
- ALL WORK TO BE IN ACCORDANCE WITH AS3500.3.1 AND AS3500.3.2
- NOTIFY ENGINEER OF ANY DISCREPANCIES ON SITE
- DIAL BEFORE YOU DIG. PRIOR TO COMMENCING WORK.
- SILT ARRESTOR/ GRATED INLET PITS 450X450 U.N.O
- ALL WORK IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT. COUNCILS STANDARD SPECIFICATION AND CODES AND TO THE SATISFACTION OF COUNCILS SUPERVISING OFFICER.
- THIS PLAN TO BE READ IN CONJUNCTION WITH PLANS PREPARED BY THE ARCHITECTS AND STRUCTURAL ENGINEERS PLANS.
- INSTALL TEMPORARY SEDIMENT BARRIERS AROUND ALL INLET PITS TO DETAIL UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
- CONTRACTOR IS TO VERIFY THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.
- ALL PITS TO BE BENCHED TO HALF PIPE SECTION AND TO HAVE GALVANISED STEEL GRATES AND SURROUNDS.
- PIPE GRADES SHOWN ARE INDICATIVE MINIMUM.
- PIPES ARE TO BE LAID TO I.L. LEVELS INDICATED AT PITS.
- ALL STORMWATER TO CONNECT TO EXISTING STORMWATER MAIN, LOCATION TO BE CONFIRMED ONSITE



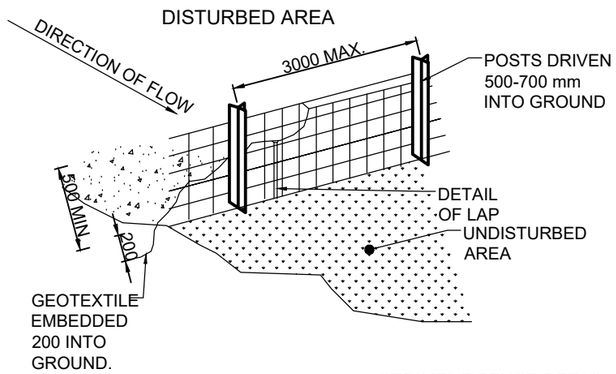
STOCKPILE SECTION

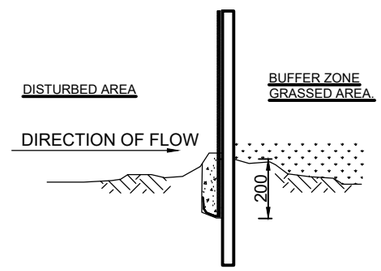


KERB INLET PROTECTION DETAIL



TEMPORARY CONSTRUCTION





SEDIMENT FENCE DETAIL

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JB490	S-0.1

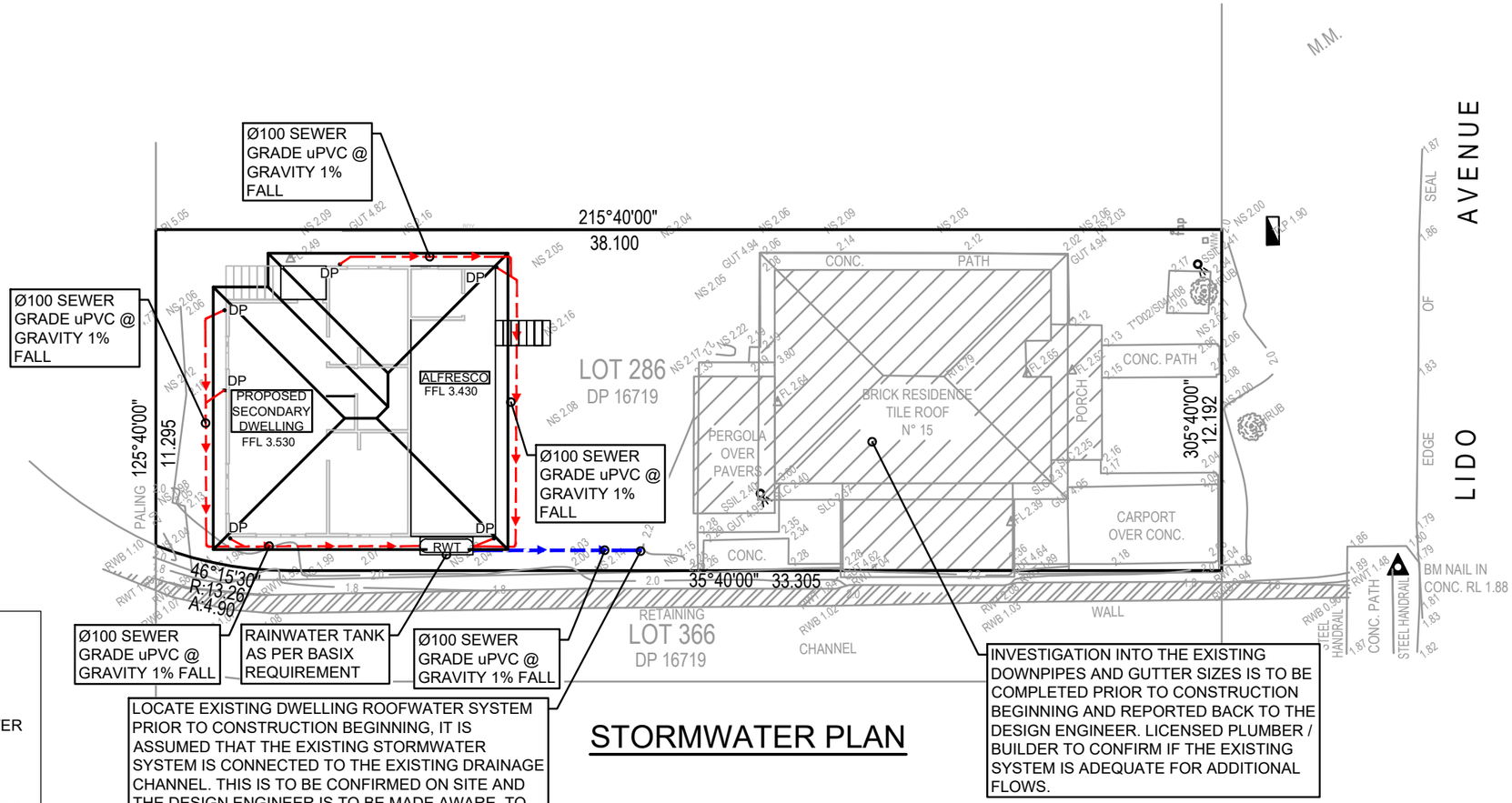
DESIGN SUMMARY

SYDNEY CITY COUNCIL
SITE AREA = 463 (APPROX) m^2
TOTAL ROOF AREA = 109m^2 (APPROX)
1:100 ARI 5MIN. = 261 mm/hr
1:20 ARI 5MIN. = 198 mm/hr
CATCHMENT PER DP = 25m^2

1. DOWNPIPE SIZE MIN. Ø90, QUAD LO-FRONT MINIMUM 6165MM^2 EFFECTIVE XSEC AREA EAVE.
2. ALL CHARGED LINES MUST BE OF PRESSURE GRADE AND JOINTS ARE TO BE SOLVENT WELDED
3. THE PIPE SYSTEM INCLUDING DOWNPIPES MUST BE CONSTRUCTED FROM SUITABLY DURABLE MATERIALS
4. FLUSHING POINTS/SEALED CLEANING EYES ARE TO BE PROVIDED AT LOWEST POINTS IN THE SYSTEM AND AT FRONT BOUNDARY PRIOR TO COUNCIL LAND AND SHOULD BE EASE TO ACCESS
5. ALL SURFACE PIT SHALL BE CAST - IN - SITU OR PRECAST CONCRETE PIT

LEGEND

- PROPOSED STORMWATER
- PROPOSED STORMWATER DRAINING TO RAINWATER TANK
- ROOF SLOPE
- SURFACE FLOW ARROWS
- DP DP — 90Ø OR 100 X 50 DOWNPIPE
- RWT — PROPOSED RWT



LOCATE EXISTING DWELLING ROOFWATER SYSTEM PRIOR TO CONSTRUCTION BEGINNING, IT IS ASSUMED THAT THE EXISTING STORMWATER SYSTEM IS CONNECTED TO THE EXISTING DRAINAGE CHANNEL. THIS IS TO BE CONFIRMED ON SITE AND THE DESIGN ENGINEER IS TO BE MADE AWARE, TO CONFIRM IF A RE-DESIGN IS APPLICABLE. LICENSED PLUMBER TO CONFIRM THAT THE EXISTING SYSTEM IS ADEQUATE FOR ADDITIONAL FLOWS.

STORMWATER PLAN

INVESTIGATION INTO THE EXISTING DOWNPIPES AND GUTTER SIZES IS TO BE COMPLETED PRIOR TO CONSTRUCTION BEGINNING AND REPORTED BACK TO THE DESIGN ENGINEER. LICENSED PLUMBER / BUILDER TO CONFIRM IF THE EXISTING SYSTEM IS ADEQUATE FOR ADDITIONAL FLOWS.

ALL DRAINAGE LINES ARE TO BE A MINIMUM OF Ø100mm SEWER GRADE uPVC @ 1% UNLESS NOTED OTHERWISE. ALL PIPES SIZED FOR 1% AEP STORM EVENT

ALL PIPE WORK IS SHOWN INDICATIVELY/ DIAGRAMMATICALLY AND SHOULD NOT BE SCALED OF THE PLAN, THE DOWNPIPES ARE TO RUN ALONG THE WALL OF THE SECONDARY DWELLING

SERVICES SHOWN ARE INDICATIVE ONLY. CONTRACTOR SHALL CONFIRM ALL SERVICE LOCATIONS AND DEPTH PRIOR TO EXCAVATION

ALL PIPES AND GUTTERS SIZED FOR STORM EVENTS UP TO AND INCLUDING THE 5% AEP. ALL PIPES TO BE SEWER GRADE uPVC

ALL DRAINAGE LINES BEND AND PITS ARE TO BE SEALED.

PLUMBER TO MAKE GOOD CONNECTION TO COUNCIL STORMWATER PIPE. IF ANY ISSUES CONTACT ENGINEER IMMEDIATELY.

1. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S DCP
2. THE CONTRACTOR IS TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE IF NECESSARY
3. ALL PIPES ARE TO BE 100mm U.P.V.C ON 1% MINIMUM GRADE U.N.O AND TO HAVE MIN 200mm COVER

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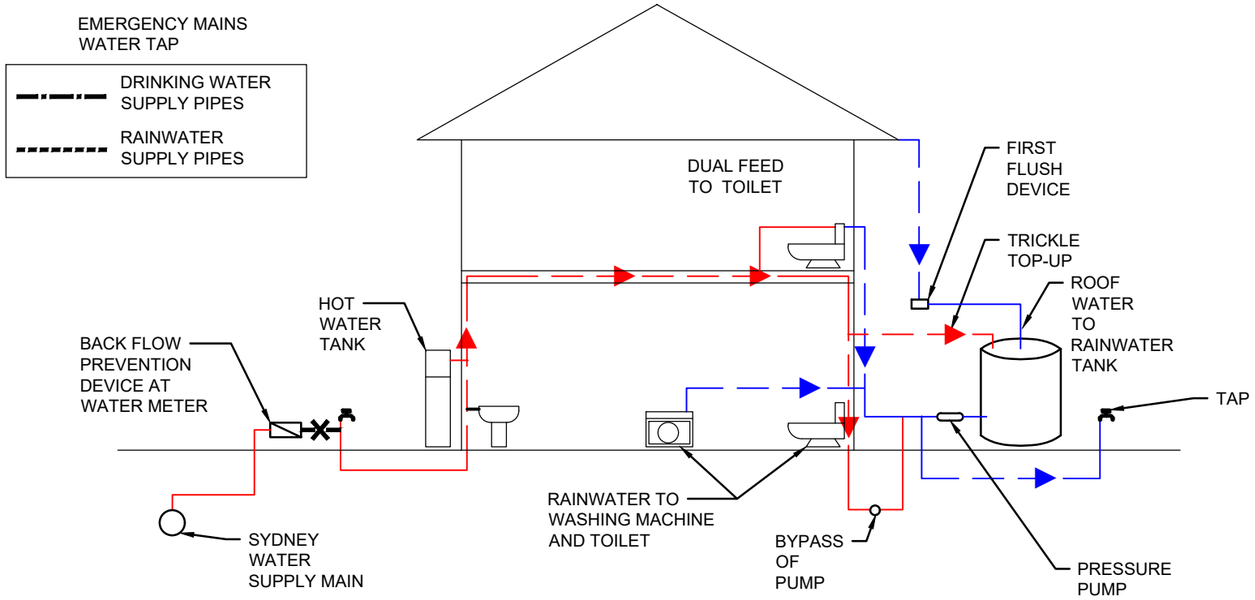
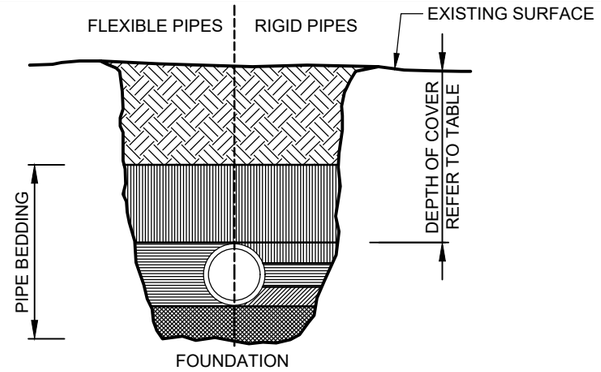


TYPICAL RAINWATER TANK RE-USE DIAGRAM

EVERY EXTERNAL SUPPLY OUTLET FROM RAINWATER RE-USE TANK TO BE LABELED WITH METALLIC WARNING SIGN

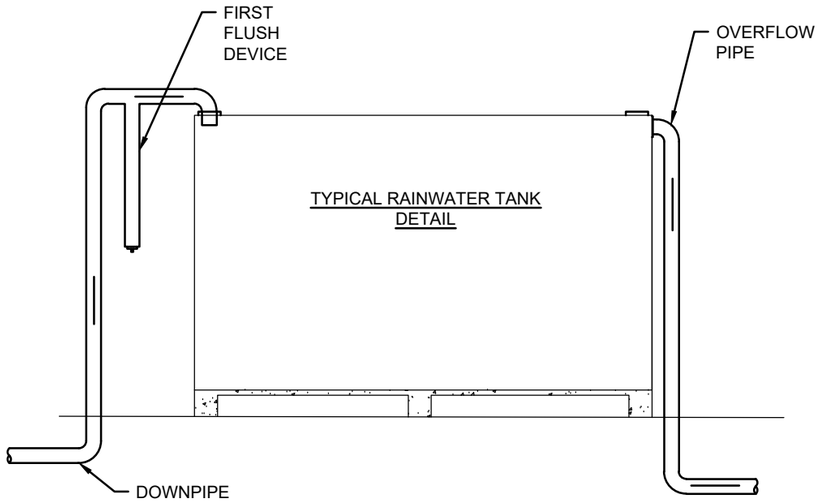
TYPICAL WARNING SIGN



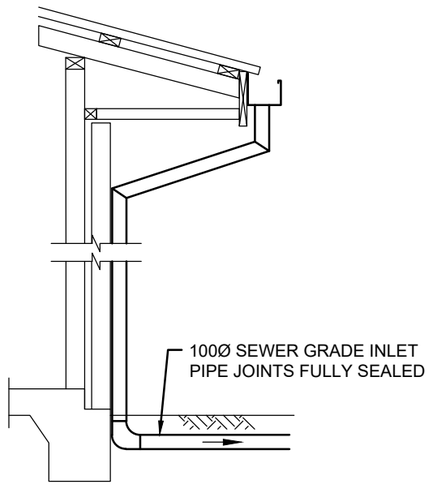
NOTE:
STORMWATER DRAINS CONSTRUCTED OF OTHER THAN CAST IRON, DUCTILE IRON OR GALVANISED STEEL HAVING COVER LESS THAN THAT SPECIFIED IN THE TABLE SHALL BE COVERED WITH AT LEAST 50mm OVERLAY AND SHALL BE PAVED WITH AT LEAST:
a. 100mm THICKNESS OF REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICULAR LOADING.

TYPICAL PIPE LAYING DETAIL

LEGEND - TRENCH BACKFILL		
SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACK FILL	
	PIPE OVERLAY	
	PIPE SIDE SUPPORT	SIDE ZONE
	-	HAUNCH ZONE
	PIPE UNDERLAY	BED ZONE



RAINWATER TANK DETAIL



TYPICAL CHARGED DOWNPIPE OVERFLOW

MINIMUM PIPE COVER
(FROM FINISHED SURFACE TO TOP OF PIPE)

FOOTINGS	MINIMUM COVER (mm)	
	CAST/ DUCTILE IRON GAL STEEL	OTHER AUTHORISED PRODUCTS(*)
1. NOT SUBJECT TO VEHICULAR LOADING:		
A. WITHOUT PAVEMENT		
I. FOR SINGLE DWELLING.	0	100
ii. OTHER THAN SINGLE DWELLINGS.	0	300
B. WITH PAVEMENT OF BRICK/ UNREINFORCED CONCRETE	0(**)	50(**)
1. SUBJECT TO VEHICULAR LOADING:		
A. OTHER THAN ROADS:		
I. WITHOUT PEVEMENT.	300	450
ii. WITH PAVEMENT OF.		
- REINF. CONC. FOR HEAVY VEHICLES	0(** #)	10(** #)
- BRICK/UNREINF. CONC. LIGHT VEHICLES	0(** #)	75(** #)
B. ROADS		
i. SEALED	300	500
ii. UNSEALED	300	500
3. SUBJECT TO CONSTRUCTION VEHICLES OR IN EMBANKMENT CONDITIONS	300	500

*) INCLUDES OVERLAY ABOVE THE TOP OF THE PIPE OF NOT LESS THAN 50mm THICK
**) BELOW THE UNDERSIDE OF THE PAVEMENT
#) SUBJECT TO COMPLIANCE WITH AS1762, AS2033, AS/NZS 2566.1, AS3725 OR AS 4060

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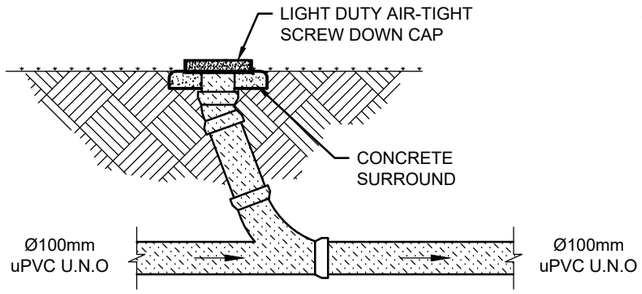
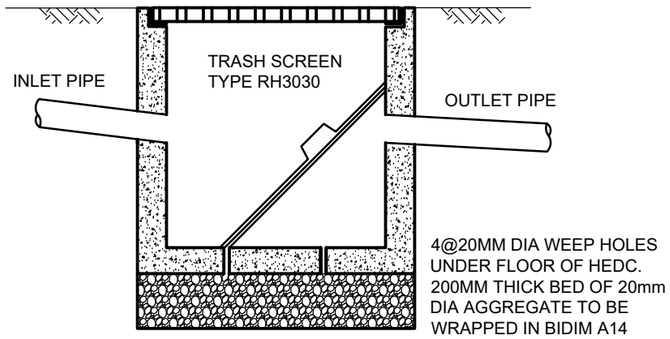
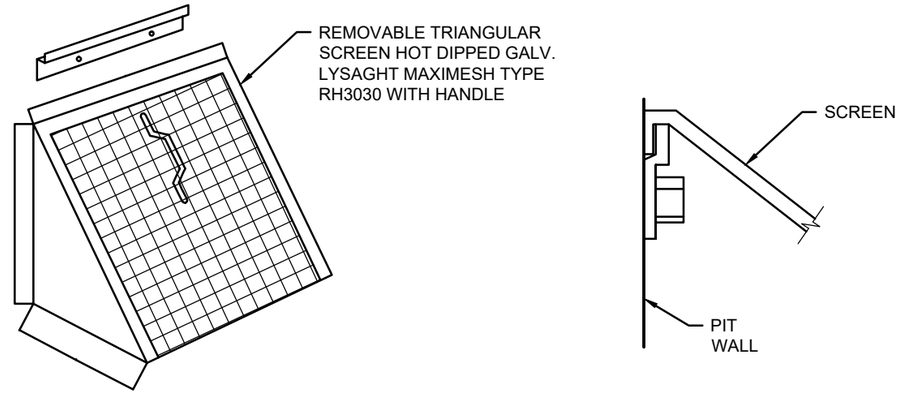


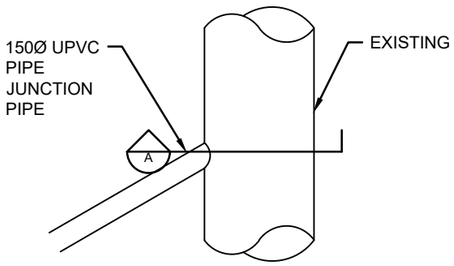
TYPICAL INSPECTION RISER DETAIL



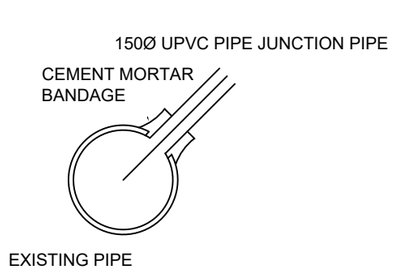
TYPICAL SILT ARRESTOR PIT DETAIL



TYPICAL MULTI-PURPOSE FILTER SCREEN



PLAN



SECTION A

TYPICAL DIRECT CONNECTION TO EASEMENT

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