

NEW DWELLING AND TORRENS TITLE SUBDIVISION

15 ALTO AVENUE, SEAFORTH






STORMWATER MANAGEMENT CONCEPT DESIGN

GENERAL DRAINAGE NOTES
1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LOCAL COUNCIL'S RELEVANT SPECIFICATIONS AND/OR STORMWATER CODE. ANY DISCREPANCY VARIATION OR ADDITIONAL WORK SHALL BE APPROVED BY THE PRINCIPAL CERTIFIER.
2. ALL SERVICES SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. DIAL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO COMMENCEMENT.
4. ALL DRAINAGE PIPEWORK AND PLUMBING SHALL BE INSTALLED BY A CERTIFIED PLUMBER IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS3500 AND COUNCIL REQUIREMENTS.
5. ALL DRAINAGE PIPES ARE TO BE SEWER GRADE UNLESS NOTED OTHERWISE.
6. ALL COVERS, GRATES AND FRAMES ARE TO BE CLASS C HEAVY DUTY WHERE SUBJECT TO VEHICULAR TRAFFIC.
7. ALL COVERS, GRATES AND FRAMES ARE TO BE CLASS A MEDIUM DUTY WHERE SUBJECT TO PEDESTRIAN TRAFFIC OR IN LANDSCAPE AREAS.
8. COUNCIL PERMIT/APPROVAL SHALL BE OBTAINED PRIOR TO WORKS ON COUNCIL LAND AND CONNECTION TO COUNCIL SYSTEM.
9. ALL PIPE BENDS TO BE FITTED WITH AN INSPECTION OPENING.

RAINWATER TANK NOTES
1. THE TANK SHALL NOT BE LOCATED OVER A WATER OR SEWER MAIN UNLESS IT IS INSTALLED IN ACCORDANCE WITH THE REGULATORY AUTHORITY REQUIREMENTS
2. ABOVE GROUND TANKS SHALL BE LOCATED AT LEAST 100 MM FROM ANY POTABLE WATER SUPPLY PIPE AND AT LEAST 300 MM FOR BELOW GROUND TANKS.
3. ALL PLUMBING WORK SHALL BE CARRIED OUT BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS AND COUNCIL REGULATIONS.
4. ALL INLETS SHALL BE SCREENED OR FILTERED TO PREVENT THE ENTRY OF FOREIGN MATTER OR CREATURES.
5. REUSE PUMP TO BE INSTALLED BY A LICENSED PLUMBER AND ELECTRICIAN TO SYDNEY WATER REQUIREMENTS
6. A SIGN SHALL BE AFFIXED TO THE RAINWATER TANK AND ALL APERTURES CLEARLY STATING THAT THE WATER IN THE TANK IS RAINWATER
7. NOISE EMISSIONS FROM ANY PUMP SHALL MEET COUNCIL'S REQUIREMENTS.
8. WATER RETAINED FOR INDOOR HOUSEHOLD USE SHALL BE AUGMENTED BY MAINS WATER SUPPLY AND APPROVAL OBTAINED BY SYDNEY WATER.
9. WHERE RETAINED WATER IS AUGMENTED BY MAINS WATER SUPPLY A BACKFLOW PREVENTION DEVICE AND FLOW RESTRICTOR SHALL BE INSTALLED IN ACCORDANCE WITH AS 3500 AND SYDNEY WATER REQUIREMENTS.
10. ALL INLETS SHALL BE FITTED WITH A FIRST FLUSH DEVICE PRIOR TO DISCHARGING TO THE RAINWATER TANK.
11. THE INDIRECT CONNECTION TO MAINS WATER SUPPLY SHALL HAVE A VISIBLE AIR GAP IN ACCORDANCE WITH AS 3500.

EROSION & SEDIMENT CONTROL NOTES
1. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH LOCAL REGULATORY AUTHORITY SPECIFICATION AND THE EROSION AND SEDIMENT CONTROL PLAN.
2. NO CONSTRUCTION IS TO COMMENCE UNTIL ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE.
3. ALL PERIMETER AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO ANY EARTHWORKS AND CLEARING TAKES PLACE.
4. FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
5. ALL SEDIMENT TRAPPING DEVICES ARE TO BE INSPECTED AFTER ALL STORMS FOR STRUCTURAL DAMAGE OR CLOGGING TRAPPED MATERIAL TO BE REMOVED.
6. ALL TOP SOIL IS TO BE STOCKPILED ON SITE FOR REUSE. MEASURES ARE TO BE APPLIED TO PREVENT EROSION OF STOCKPILES.
7. NO DISTURBED AREAS SHALL REMAIN DENUDED LONGER THAN 14 DAYS.
8. NO MORE THAN 150 METRES OF TRENCH IS TO BE OPEN AT ANY TIME.
9. ALL FOOTPATHS BERMS AND BATTER, AD SITE REGRADING AREAS ARE TO BE TOPSOILED WITH MINIMUM 200MM OF SELECTED TOPSOIL.
10. DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS.
11. ALL SITE ACCESS TO BE ACHIEVED FROM DESIGNATED SITE ACCESS PROTECTED BY THE INSTALLATION OF AN APPROVED CONSTRUCTION ENTRY / EXIT RAMP. THIS ENTRY / EXIT RAMP IS TO BE REGULARLY MAINTAINED TO ENSURE ITS EFFECTIVENESS.
12. STREET SWEEPING SHALL BE UNDERTAKEN AS REQUIRED ALONG THE STREET PROPERTY FRONTAGE DURING AND AFTER THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED WORKS UNTIL THE SITE IS FULLY ESTABLISHED.
13. TO PREVENT POLLUTION OF ANY WATERCOURSE AND STREET DRAINAGE SYSTEM THE LOCAL REGULATORY AUTHORITY SHALL BE NOTIFIED AT LEAST 2 DAYS PRIOR TO THE INTENTION TO COMMENCE WORKS FOR COUNCIL TO INSPECT EROSION AND SEDIMENT CONTROL DEVICES WHERE NECESSARY.

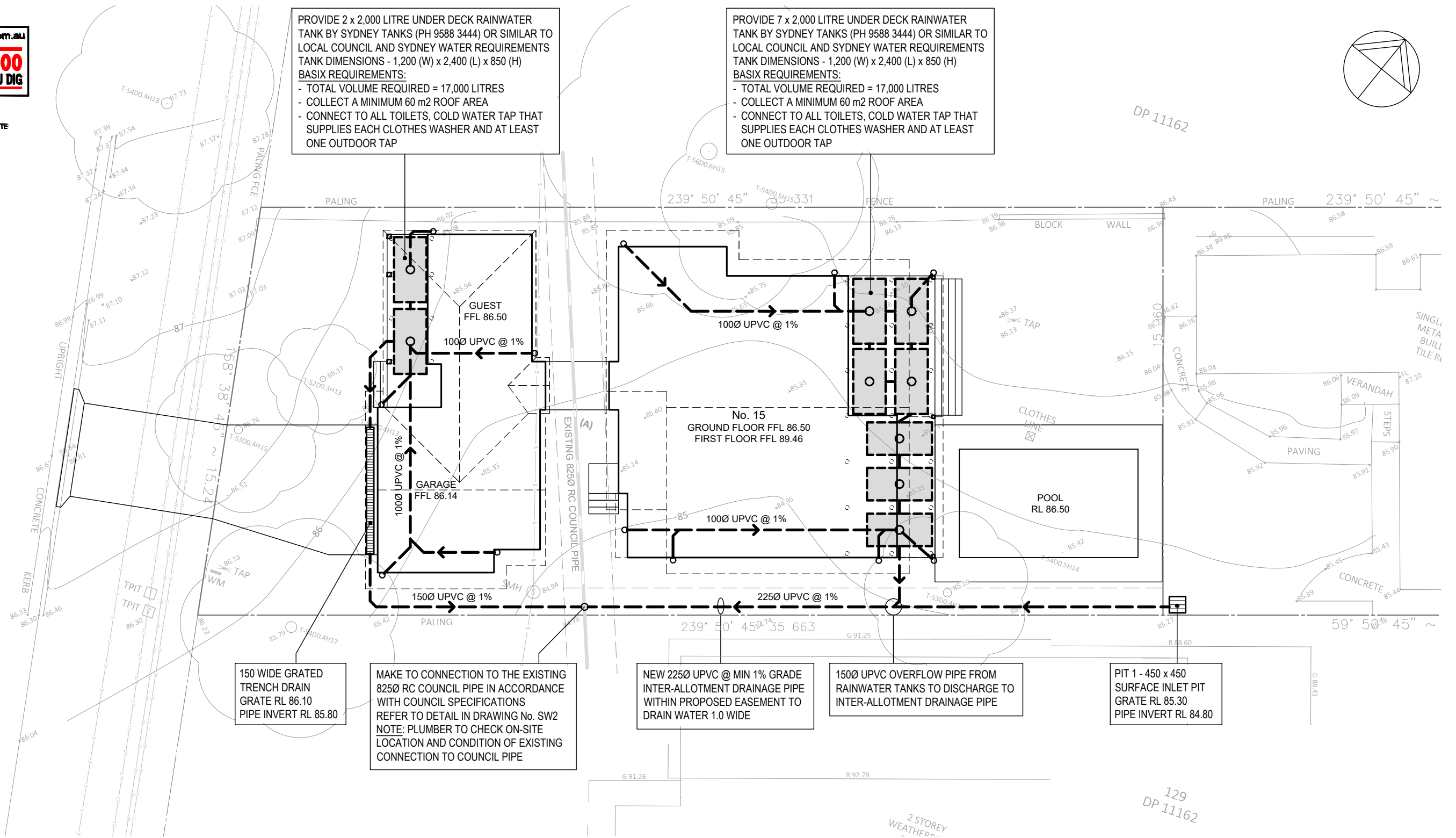
NORTHERN BEACHES (MANLY) COUNCIL REQUIREMENTS
THE ON-SITE DETENTION HAS BEEN DESIGNED IN ACCORDANCE WITH MANLY COUNCIL'S SPECIFICATION FOR ON-SITE STORMWATER MANAGEMENT POLICY
DESIGN PARAMETERS:- DENSITY SUBZONE 3-6 - 0% PRE DEVELOPMENT AREA (4-7% SLOPE)
SITE AREA (m2) 512.6
PRE-DEVELOPMENT TOTAL IMPERVIOUS AREA (m2) 107.4 (21%)
PERMITTED SITE DISCHARGE (l/s) 13.0
TOTAL SITE STORAGE REQUIRED (m3) 17.0
TOTAL STORAGE VOLUME PROVIDED (m3) 18.0
*RAINWATER REUSE STORAGE VOLUME PROVIDED FOR BASIX TO BE USED TO FULLY OFFSET ON-SITE DETENTION STORAGE REQUIREMENT
BASIX CERTIFICATE REQUIREMENTS: - PROVIDE A MINIMUM 17,000 LITRE RAINWATER TANK - RAINWATER TANK TO COLLECT A MINIMUM 60m2 ROOF AREA - CONNECTED TO ALL TOILETS, COLD WATER TAP THAT SUPPLIES EACH CLOTHES WASHER AND AT LEAST ONE OUTDOOR TAP

LEGEND
 STORMTECH STAINLESS STEEL GRATED TRENCH DRAIN
 STORMWATER INLET PIT UNLESS NOTED OTHERWISE
 DOWNPIPE NUMBER DOWNPIPE SIZE
 DOWNPIPE NUMBER DOWNPIPE SPREADER
 STORMWATER DRAINAGE PIPE

SHEET INDEX
COVER SHEET AND NOTES SHEET SW1
STORMWATER MANAGEMENT PLAN SHEET SW2
SECTIONS AND DETAILS SHEET SW3



DIAL BEFORE YOU DIG
SHOULD BE CONTACTED
PRIOR TO ANY EXCAVATION ON SITE



NOTE:- TREE PRESERVATION

IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ANY APPROVALS NECESSARY FROM LOCAL COUNCIL PRIOR TO ANY WORKS COMMENCING WITH RESPECT TO THE POTENTIAL IMPACT ON ANY TREES FOR ANY WORKS SHOWN ON THIS DRAWING

NOTE:

THIS DESIGN MANAGES STORMWATER RUNOFF FROM ROOF WATER AND DRIVEWAY SURFACES ONLY AS SHOWN ON THE ARCHITECTURAL DRAWINGS ALL ROOF GUTTER TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS 3500.3.

NOTE:

APPROVAL SHALL BE OBTAINED FROM LOCAL COUNCIL PRIOR TO CONNECTION TO THE COUNCIL'S STORMWATER DRAINAGE SYSTEM

NOTE:

ROAD OPENING PERMIT TO BE OBTAINED FROM COUNCIL PRIOR TO COMMENCEMENT OF ANY WORK IN THE ROAD RESERVE

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CIVIL ENGINEERS

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PROJECT TITLE:
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15 ALTO AVENUE
SEAFORTH NSW**

DRAWING TITLE:
**STORMWATER
MANAGEMENT PLAN**

DRAWN: **A.L.**
DATE: **28.03.2019**
JOB NO: **2018-053**

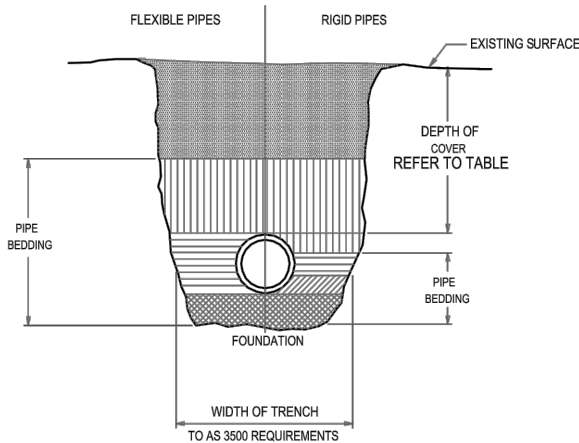
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No. REVISION / ISSUE DESCRIPTION

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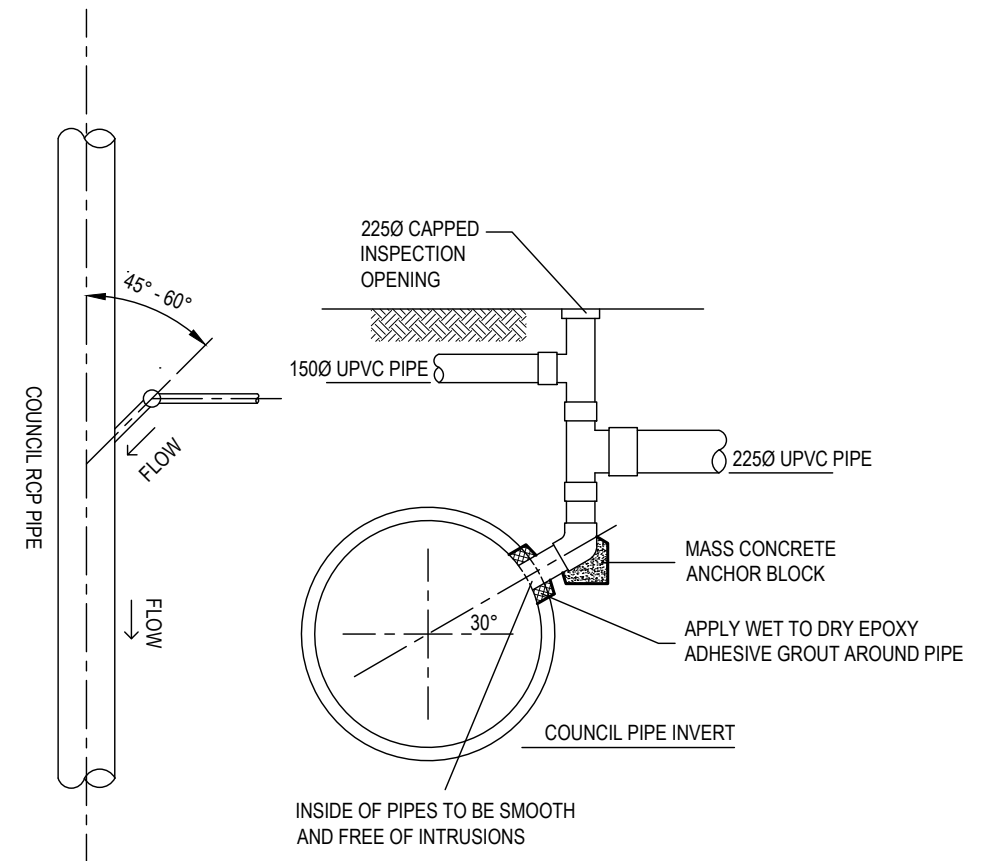
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LEGEND - TRENCH BACKFILL

SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACKFILL	
	PIPE OVERLAY	
	PIPE SIDE SUPPORT	SIDE ZONE
	—	HAUNCH ZONE
	PIPE UNDERLAY	BED ZONE

MINIMUM PIPE COVER (FROM FINISHED SURFACE TO TOP OF PIPE)		
LOCATION	MINIMUM COVER (mm)	
	CAST/DUCTILE IRON GAL STEEL	OTHER AUTHORISED PRODUCTS (*)
1. NOT SUBJECT TO VEHICULAR LOADING:		
A. WITHOUT PAVEMENT:		
i. FOR SINGLE DWELLINGS -	0	100
ii. OTHER THAN SINGLE DWELLINGS -	0	300
B. WITH PAVEMENT OF BRICK/UNREINFORCED CONCRETE -	0 (**)	50 (**)
2. SUBJECT TO VEHICULAR LOADING:		
A. OTHER THAN ROADS:		
i. WITHOUT PAVEMENT -	300	450
ii. WITH PAVEMENT OF:		
- REINF. CONC. FOR HEAVY VEHICLES -	0 (** #)	100 (** #)
- 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		



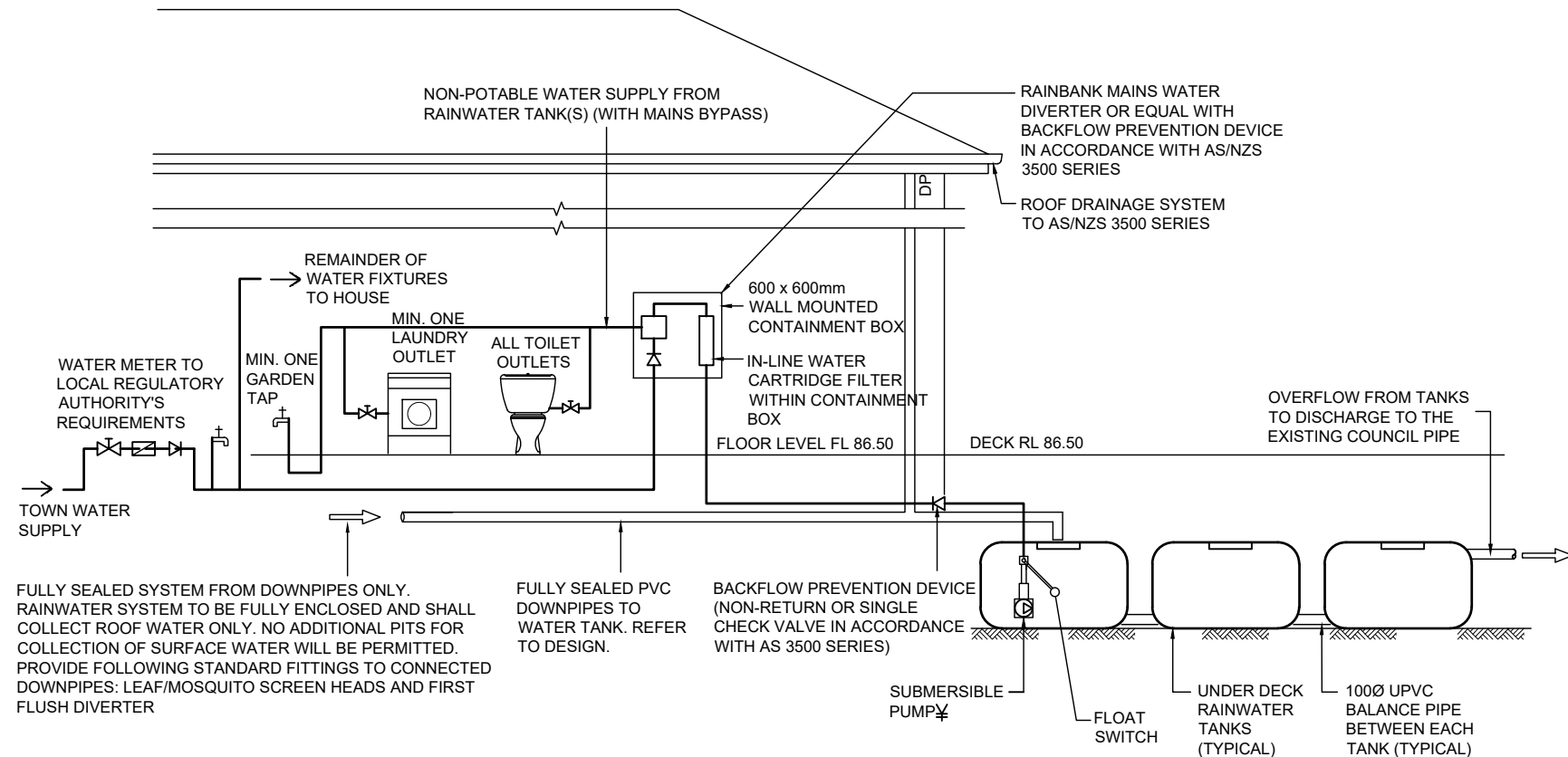
PLAN

SECTION OF PIPE

DIRECT PIPE CONNECTION DETAIL

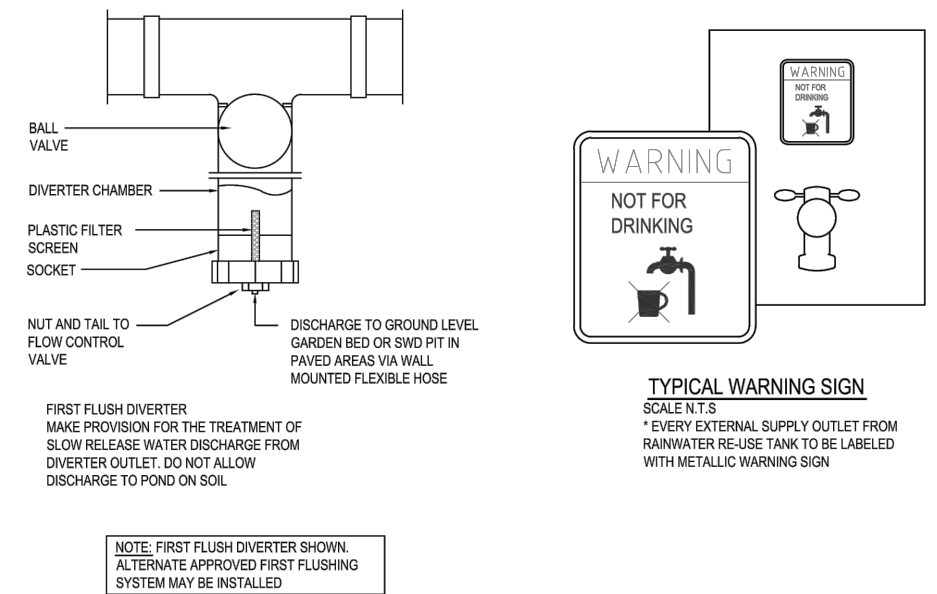
NOT TO SCALE

NOTE: IMMEDIATELY PRIOR TO APPLICATION OF CONCRETE AFFECTED SURFACES SHALL BE PAINTED WITH WET TO DRY EPOXY



TYPICAL UNDER DECK RAINWATER TANK DETAIL

NOT TO SCALE



FIRST FLUSH DIVERTER DETAIL

NOT TO SCALE

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