

PROPOSED TORRENS TITLE SUBDIVISION

63 FRANCIS STREET, MANLY NSW 2095

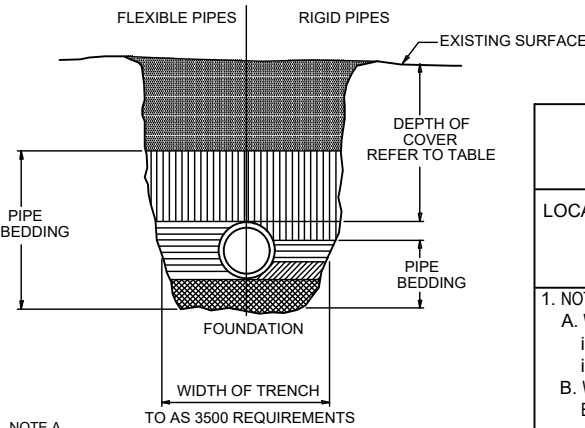
STORMWATER MANAGEMENT CONCEPT DESIGN

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.



NOTE A
STORMWATER DRAINS CONSTRUCTED OF OTHER THAN CAST IRON, DUCTILE IRON OR GALVANISED STEEL HAVING COVER LESS THAN THAT SPECIFIED IN 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

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 OR GALV STEEL	AUTHORISED PRODUCTS (*)
1. NOT SUBJECT TO VEHICULAR LOADING: A. WITHOUT PAVEMENT: i. FOR SINGLE DWELLINGS - ii. OTHER THAN SINGLE DWELLINGS -	0 0	100 300
B. WITH PAVEMENT OF BRICK/UNREINFORCED CONCRETE -	0 (**)	50 (**)
2. SUBJECT TO VEHICULAR LOADING: A. OTHER THAN ROADS: i. WITHOUT PAVEMENT - ii. WITH PAVEMENT OF: - REINF. CONC. FOR HEAVY VEHICLES - - BRICK/UNREINF. CONC LIGHT VEHICLES -	300 0 (** #) 0 (** #)	450 100 (** #) 75 (** #)
B. ROADS i. SEALED ii. UNSEALED	300 300	500 (#) 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

NORTHERN BEACHES (MANLY) COUNCIL REQUIREMENTS

THE STORMWATER DRAINAGE SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH MANLY COUNCIL'S SPECIFICATION FOR ON-SITE STORMWATER MANAGMENT 2003 AND AUSTRALIAN RAINFALL AND RUNOFF

DESIGN PARAMETERS:- 20 year ARI storm

SITE AREA (m2) 743.4

ON-SITE DETENTION REQUIREMENTS:

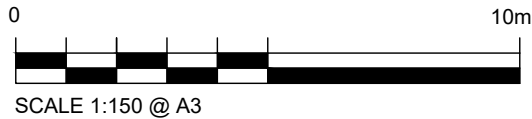
THE DEVELOPMENT IS A TORRENS TITLE SUBDIVISION OF ONE LOT INTO TWO. THERE IS NO CHANGES PROPOSED TO THE EXISTING DWELLING ON PROPOSED LOT A. ON-SITE DETENTION WILL BE PROVIDED WITH THE DESIGN OF A FUTURE DWELLING HOUSE ON LOT B. A POSITIVE COVENANT SHALL BE CREATED ON THE 88B INSTRUMENT AFFECTING LOT B.

LEGEND

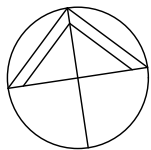
- STORMTECH STAINLESS STEEL GRATED TRENCH DRAIN
- STORMWATER INLET PIT UNLESS NOTED OTHERWISE
- DOWNPIPE NUMBER
- DOWNPIPE SIZE
- DOWNPIPE NUMBER DOWNPIPE SPREADER
- STORMWATER DRAINAGE PIPE

SHEET INDEX

COVER SHEET AND NOTES SHEET SW1
STORMWATER MANAGEMENT PLAN SHEET SW2



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



NOTE:- TREE PRESERVATION

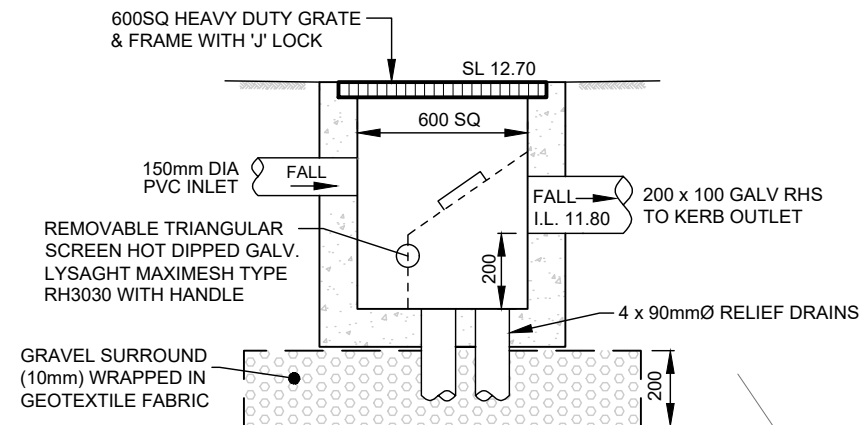
IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ANY APPROVALS NECESSARY FROM LOCAL COUNCIL PRIOR TO ANY WORKS COMMENCING WITH RESPECT TO THE POTENTIAL IMPACT ON ANY TREES FOR ANY WORKS SHOWN ON THIS DRAWING

NOTE:

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

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.



POLLUTION CONTROL PIT DETAIL
NOT TO SCALE

ALL EXISTING DOWNPIPES TO BE CONNECTED TO NEW STORMWATER PIPE REDIRECTED UNDER HOUSE FLOOR JOIST
150 mm Ø UPVC PIPE
@ MIN 1% GRADE

NOTE: - ON-SITE DETENTION

AN ON-SITE DETENTION SYSTEM SHALL BE PROVIDED WITH THE FUTURE CONSTRUCTION OF A DWELLING HOUSE ON PROPOSED LOT B IN ACCORDANCE WITH MANLY COUNCIL'S SPECIFICATIONS

PROPOSED LOT A
415 m²

ALL STORMWATER FROM THE ROOF OF A FUTURE DWELLING ON LOT B SHALL BE DRAINED TO AN ON-SITE DETENTION TANK PRIOR TO DISCHARGING TO THE INTER-ALLOTMENT DRAINAGE SYSTEM

PROPOSED LOT B
328 m²

ALL STORMWATER FROM THE ROOF OF A FUTURE DWELLING ON LOT B SHALL BE DRAINED TO AN ON-SITE DETENTION TANK PRIOR TO DISCHARGING TO THE INTER-ALLOTMENT DRAINAGE SYSTEM

600 x 600 POLLUTION CONTROL PIT
GRATE RL 12.70
PIPE INVERT RL 11.80

200 x 100 GALV RHS
@ MIN 1% GRADE
GUTTER OUTLET
INVERT RL 11.58

150 mm Ø UPVC PIPE
@ 3% GRADE
PIPE CAPACITY - 45 l/s

600 x 600 POLLUTION CONTROL PIT
GRATE RL 13.50
PIPE INVERT RL 12.50

INDICATIVE LOCATION OF FUTURE BELOW GROUND ON-SITE DETENTION TANK IN ACCORDANCE WITH MANLY COUNCIL'S CIVIL WORKS SPECIFICATIONS

WATERDESIGN
CIVIL ENGINEERS

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CLIENT NAME:
COLIN WARDLE

PROJECT TITLE:
**TORRENS TITLE SUBDIVISION
63 FRANCIS STREET
MANLY NSW 2095**

DRAWING TITLE:
**STORMWATER
MANAGEMENT PLAN**

DRAWN: **A.L.**
DATE: **05.09.2019**
JOB No: **2019-043**

APPROVED BY:

ANDREW LAM
MIEAust B.E. Civil (Hons)
DWG NO: **SW2**
no. IN SET: **2**

No.	REVISION / ISSUE DESCRIPTION	DATE
A	TANDEM CAR SPACES ADDED	01.11.19

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