

### STORMWATER NOTES:

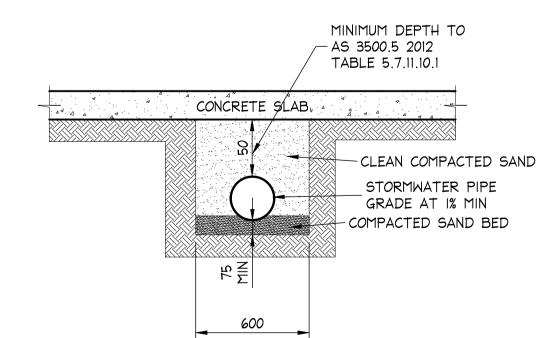
- 1 ALL PIPES TO BE 100mm & SEWER GRADE UPVC UNLESS NOTED OTHERWISE.
- 2 ALL PIPES TO BE UPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE. 3 - ALL PIPES TO BE LAID AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- 4 ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO
- 100% S.M.D.D. BELOW PAVEMENTS. ( NO COMPACTION REQUIRED BELOW LANDSCAPING ) COVER TO SURFACE FROM TOP OF PIPE TO BE AS PER AS3500. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- 5 DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
- 6 PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- 7 ALL PITS TO BE PRECAST, PREFORMED OR HDPE, IN ACCORDANCE WITH LOCAL COUNCIL SPECIFICATIONS.
- 8 ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
- AND SPECIFICATIONS. 10 - PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL

9 - ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS

- COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION. 11 - ALL LEVELS SHOWN ARE TO AHD 12 - ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR
- FROM TREE ROOT SYSTEMS.
- 13 ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO UPVC.
- 14 ALL WORKS TO BE IN ACCORDANCE WITH AS 3500.3-2021 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.

# RAINWATER RE-USE TANKS:

- 1. CONSIDERING THE ROOF CATCHMENT AREA, LOCATION OF PROPERTY, INTENDED USE OF RAINWATER AND GARDEN SIZE WE RECOMMEND PROVIDING A 5000 L CAPACITY RAINWATER TANK (FROM 97 m2 OR ROOF) FOR THE FOLLOWING USES: a) TO WATER GARDEN AREAS b) VEHICLE WASHING
- 2. THE TANKS PROVIDED WILL REDUCE PRESSURE ON COUNCIL'S STORMWATER INFRASTRUCTURE.
- COOMBES P.J. & KUCZERA G. (2001), "RAINWATER TANK DESIGN FOR WATER SUPPLY & STORMWATER MANAGEMENT." STORMWATER INDUSTRY ASSOCIATION REGIONAL CONFERENCE. PATRICK DUPONT & STEVE SHACKEL, "RAINWATER"
- AUSTRALIAN GOVERNMENT (2004), "GUIDANCE ON USE OF RAINWATER TANKS" 4. ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS TO BE IN ACCORDANCE WITH SYDNEY WATERS' GUIDE "INSTALLING A RAINWATER TANK"
- AVAILABLE AT www.sydneywater.com.au 5. PROVIDE A DUAL SUPPLY SYSTEM AND BACKFLOW PREVENTION SYSTEM IN ACCORDANCE WITH 'BASIX-DESIGN GUIDE FOR SINGLE DWELLINGS' BY NSW DEPARTMENT OF INFRASTRUCTURE, PLANING AND NATURAL RESOURCES.
- 6. PROVIDE A PROPRIETARY FIRST FLUSH DIVERTER UPSTREAM OF THE RAINWATER TANK.



### ONSITE DETENTION SYSTEM SUMMARY NOTES -NORTHERN BEACHES COUNCIL

COUNCIL'S " WATER MANAGEMENT FOR DEVELOPMENT POLICY, REVISED 26/2/2021" USED SECTION 5.5 - FOR REGION 1 - NORTHERN CATCHMENTS

TOTAL SITE AREA DESIGN METHOD USED

PRE DEVELOPMENT IMPERVIOUS AREA POST DEVELOPMENT IMPERVIOUS AREA ADDITIONAL IMPERVIOUS AREA - SINCE 1996

BUT OSD IS NOT REQURIED AS PER ENGINEERING REFERRAL DATED 28/07/2023

		North	ern Bea	ches Cou	ncil	
	Gut	ter Calc	ulations	s-20 yr <i>A</i>	ARI Storm	
		Alter	ations 8	د Additio	ns	
	94	0 Barre	njoev R	oad Palm	Beach	
to AS 3500.3						
Eaves	Horizontal	Slope	Area A <sub>c</sub>	<sup>20</sup> I <sub>5</sub>	From	Downpipe
Gutters	Area A <sub>h</sub>	Factor		from	Figure	From
		from		Appendix	5.6.4.1.b	Table
		Table		12	gutter	5.6.4.7.1
		5.6.3.2		Page 79	size reqd	size reqd
	$m^2$		m <sup>2</sup>	mm/hr	$mm^2$	mm
EXDP1	39	1.27	49.5	201	9400	<b>1</b> 00 dia
EXDP2	29.2	1.27	37.1	201	7300	<b>100</b> dia
DP3	29.2	1.27	37.1	201	7300	<b>100</b> dia
DP4	22	1.05	23.1	201	5000	90 dia
	119.4					
new Eaves G	utters - Lys	aght Half	Round			
Area -				9400	$mm^2$	
New Larger G	outters to be	provided	l to reduc	e number d	of new DPs r	equired
in way of win	idows & decl	ks, For all	existing 8	k New Gutt	ers	
Larger DPs re	quired as sh	own in sa	ame locati	ion		
& Gutters Gr					•	
All undergrou	und Pipes to	be 100 D	ia Sewer (	Grade PVC	UNO	

GUTTER CALCULATIONS

#### TYPICAL TRENCHING DETAIL SCALE = 1 : 20

## NOTES:

- 1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
- 2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: SOI.

DOCUMENT CERTIFICATION

Date: JUNE 2023 Bruce Lewis (Principal : Peninsula Consulting Engineers) BE(Civil), CPEng, MIEAust., NPER. Institute of Engineers Membership No. 879131

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	27-02-2025	В	REMOVE OSD
	7-06-2023	А	FOR COUNCIL SUBMISSION
••	26-05-2023	ΡĪ	DRAFT
	Date:	Rev:	Amendment:

#### Peninsula Consulting Engineers PO Box 6186, Narraweena, NSW, 2099 Ph: 0424 253 818

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1011 m²

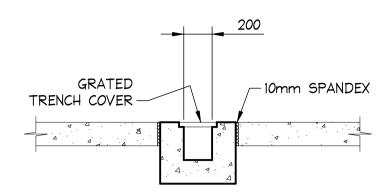
COUNCIL

 $360.5 \text{ m}^2$ 

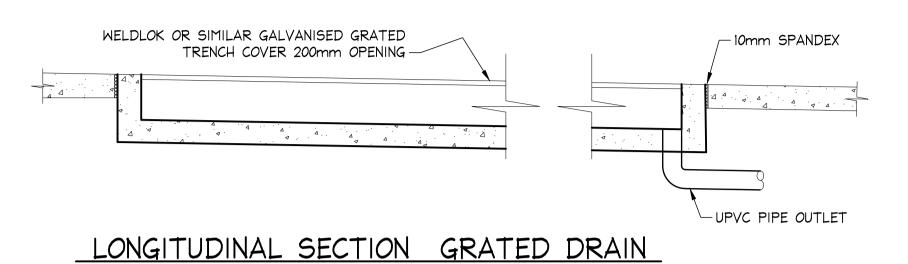
 $177.2 \text{ m}^2$ 

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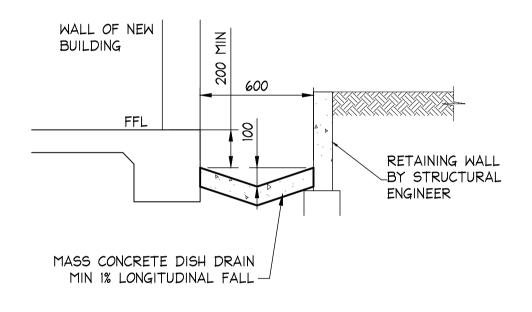
STORMWATER MANAGEMENT PLAN & DETAILS Drawing No: 23-0509



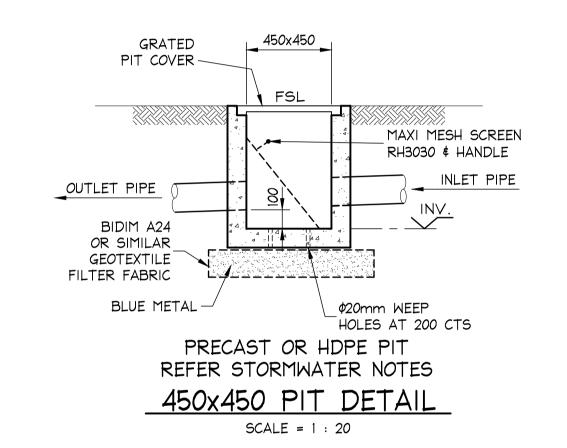
GRATED DRAIN SCALE = 1 : 20 PRECAST OR HDPE GRATED DRAIN ALTERNATIVE



SCALE = 1 : 20



600 WIDE DISH DRAIN SCALE = 1 : 20



		aches Council	
940 Ba	arrenjoey	Road Palm Beach	
A	<b>Alterations</b>	& Additions	
On S	Site Draina	age Calculations	
ea Calculation - Existing	m <sup>2</sup>		
Block	1011	Area Calculation -Proposed	m <sup>2</sup>
Main Roof	119.2	Main Roof	119.
Terrace	10.6		
		Lower Concrete	196.
Timber Stairs - 50% Impervious	19.7	Timber Stairs - 50% Impervious	21.
Front Timber Deck -50% Imp		Front Timber Deck -50% Imp	23.
All Impervious	183.3	All Impervious	360
Pervious	827.7	Pervious	650
Percent Impervious Existing	18.1	Percent Impervious Proposed	35.
Impervious Area Increase	177.2		
chnical Requirements from Council - " Wa	ter Managen	nent for Development Policy" - 26/02/2021	
echnical Requirements from Council - " Wa <sup>.</sup> 3.1 Onsite Stormwater Disposal Requireme	_	· · · · · · · · · · · · · · · · · · ·	
·	ents for Regio	on 1 Northern Catchments	
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DRAINAGE CALCULATIONS

# NOTES:

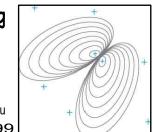
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CHARTERED MEMBER DOCUMENT CERTIFICATION

Date: JUNE 2023 Bruce Lewis ... (Principal : Peninsula Consulting Engineers) BE(Civil),CPEng,MIEAust.,NPER. Institute of Engineers Membership No. 879131

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I	Date:	Rev:	Amendment:	E∶bru <b>A</b> .B

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23-0509

В

Drawing No: H02