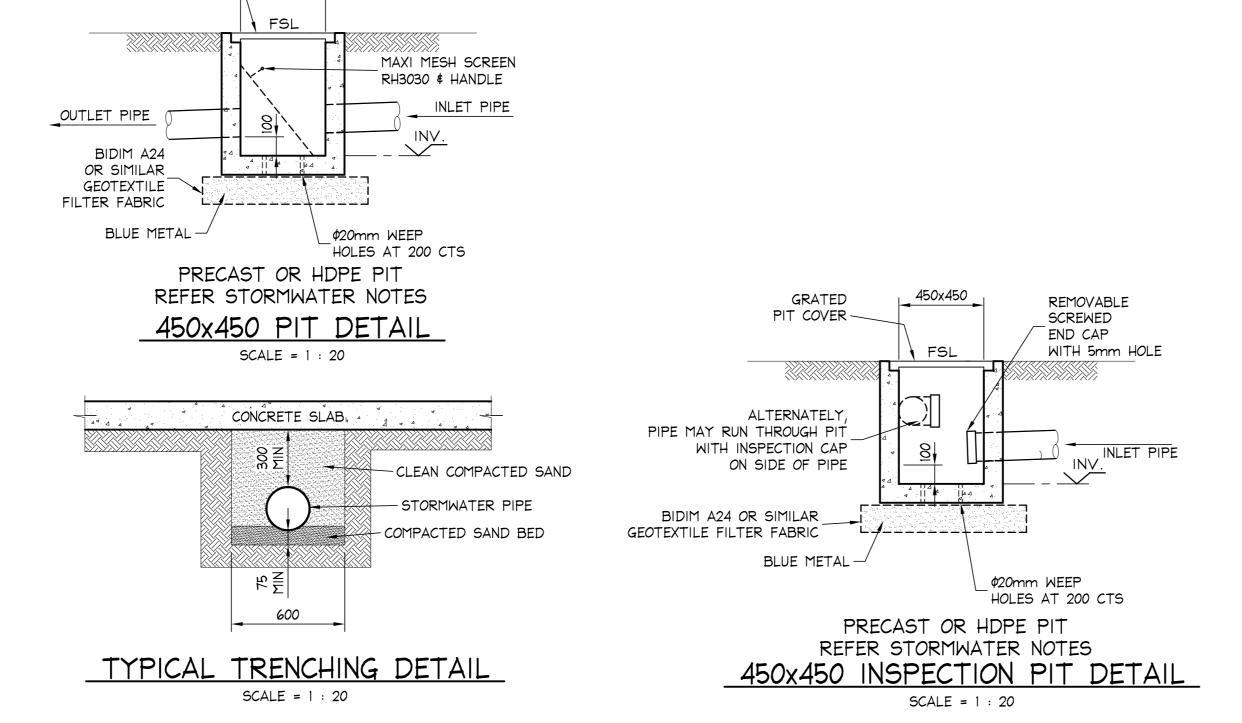


## STORMWATER NOTES:

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.
- 9 ALL WORK TO BE IN ACCORDANCE WITH LOCAL 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 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 3500-2003 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.



## ONSITE DETENTION SYSTEM - SUMMARY NOTES NORTHERN BEACHES COUNCIL - REGION 3

STORMWATER CONTROL ZONE ZONE 1 RESIDENTIAL DENSITY SUB-ZONE ZONE 3  $529.6 \, \text{m}^2$ TOTAL SITE AREA  $302.0 \,\mathrm{m}^{2}$ PRE DEVELOPMENT IMPERVIOUS AREA  $313.0 \text{ m}^{-2}$ POST DEVELOPMENT IMPERVIOUS AREA INCREASE IN IMPERVIOUS AREA 11.0  $m^2$ 

BASED ON THE NORTHERN BEACHES STORMWATER REGION 3, PART 4.3.2.2 FOR ALTS & ADDS, "IF THE CURRENT IMPERVIOUS AREA OF THE SITE IS MORE THAN 60% OF THE SITE AREA, OSD WILL BE REQUIRED.

THEREFORE OSD IS NOT REQUIRED, AS 59.1 % IMPERVIOUS AREA (REFER OSD CHECKLIST). ALL IMPERVIOUS AREA ARE TO BE DRAINED TO THE UPGRADED DISPERSION SYSTEM.

## 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: NOV 2020

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

				Peninsula Consulting		
	16-12-2020	В	DISPERSION SYSTEM	Engineers		
	9-11-2020	А	FOR COUNCIL SUBMISSION	PO Box 6491, Frenchs Forest, NSW, 2086 Ph: 0424 253 818 Fax: (02) 9982 4722 E: bruce@peninsulaconsulting.com.au		
	3-11-2020	PI	DRAFT			
	Date:	Rev:	Amendment:	A.B.N. 60 493 390 399		

Peninsula Consulting Engineers PO Box 6491, Frenchs Forest, NSW, 2086 Ph: 0424 253 818 Fax: (02) 9982 4722

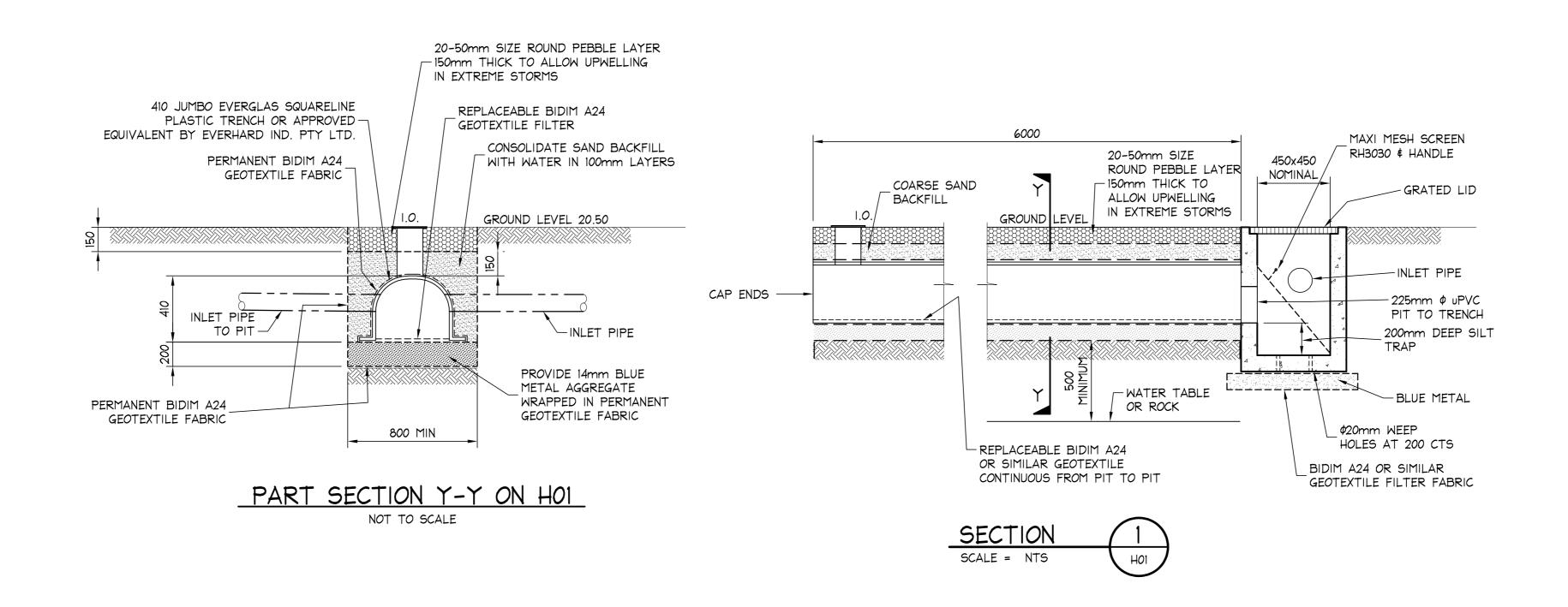


The copyright of this drawing remains with Peninsula Consulting Engineers. PROPOSED WORKS at: 7 WILLYAMA AVE FAIRLIGHT for: MR & MRS LINDELL

CONCEPT STORMWATER MANAGEMENT PLAN & DETAILS

20-0926

Drawing No:



					•1							
Northern Beaches Council - region 3												
Gutter Calculations - 20 yr ARI Storm												
Alterations & Additions												
7 Willyama avenue, Fairlight												
to AS 3500												
Eaves	Horizontal	Slope	Area A <sub>c</sub>	Gutter	<sup>20</sup> I <sub>5</sub>	From	Downpipe					
Gutters	Area A <sub>h</sub>	Factor		Slope		Figure	From					
		from		steeper	from	5.6.4.1.a	Table					
		Table		than	App A1	gutter	5.6.4.7.1					
		5.6.3.2			p25	size reqd	size reqd					
	m <sup>2</sup>		m <sup>2</sup>	1 in	mm/hr	$mm^2$						
DP1	16.9	1.17	19.8	500	207	4500	90dia or 100x50					
DP2	0.5	1.17	0.6	500	207	3000	90dia or 100x50					
DP3	33.6	1.05	35.3	500	207	7500	90dia or 100x50					
DP4	29	1.05	30.5	500	207	6000	90dia or 100x50					
DP5	40.9	1.05	42.9	500	207	8000	90dia or 100x50					
DP6	22.7	1.05	23.8	500	207	5500	90dia or 100x50					
DP7	35.2	1.17	41.2	500	207	7500	90dia or 100x50					
DP8	17.2	1.17	20.1	500	207	4500	90dia or 100x50					
DP9	19.1	1.17	22.3	500	207	5000	90dia or 100x50					
total	215.1											
New Eaves	s Gutters req	uired										
Fielders 15	50 half round	gutter				8600	mm <sup>2</sup>					
Existing &	New Gutters	to be gra	ided to ne	ew Down	oipes at o	ne in 500						

## GUTTER CALCULATIONS

