


SITE INFORMATION SUMMARY	
COUNCIL	NORTHERN BEACHES (WARRINGAH)
SITE AREA	609 m ²
DEVELOPMENT TYPE	NEW DEVELOPMENT
OSD CALCULATION SUMMARY	
EXISTING IMPERVIOUS AREA	107 m ² (18 %)
PROPOSED IMPERVIOUS AREA	366.6m ² (60 %)
RWT REQUIREMENT	2.7 m ³
OSD REQUIREMENT	12.2 m ³
OSD AFTER RWT OFFSET	9.5 m ³
TOTAL STORAGE REQUIRED	12.2 m ³
BUILDER TO PROVIDE SUBSOIL DRAINAGE WHERE REQUIRED	
LEGEND	
DP1 ●	100 Ø uPVC DOWNPIPE DIRECTED TO RWT
DP2 ●	100 Ø uPVC DOWNPIPE DIRECTED TO HED
BG1	400 (W) x 130 (D) BOX GUTTER IN ACCORDANCE WITH AS3500.3
RWH	400 (W) x 400 (L) x 400 (D) RAINHEAD IN ACCORDANCE WITH AS3500.3
=====	100mm Ø STORMWATER PIPELINE, UNO
	150 (W) x 50 (D) GRATED DRAIN
NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE	
DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.	
<u>CARELESS DIGGING CAN:</u>	
- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC	
- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS	
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS	
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS	
- CUT OFF EMERGENCY SERVICES	
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED	
MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. – TEL. 1100	

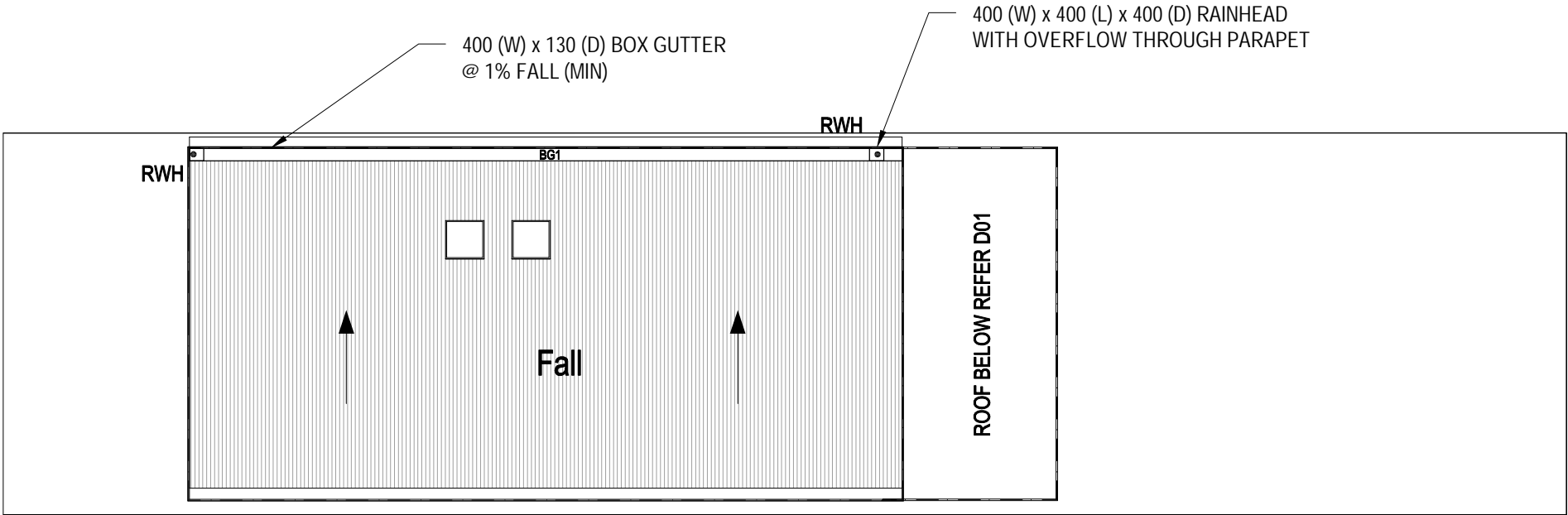
www.dialbeforeyoudig.com.au



1100

BEFORE YOU DIG

			Client	<div><div>GREENWOOD CONSULTING ENGINEERS</div></div> <div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div>	Project	23 GREENWOOD AVENUE NARRAWEENA		Drawn EG	Designed EG	Date 26/5/2019
			Architect		Title SITE DRAINAGE PLAN	Checked EG	Approved EG	Scale 1 : 200		
						Drawing number D01		Revision -		
-	ISSUED FOR DA SUBMISSION	26/5/19								
REVISION	AMENDMENT	DATE								



ROOF DRAINAGE PLAN

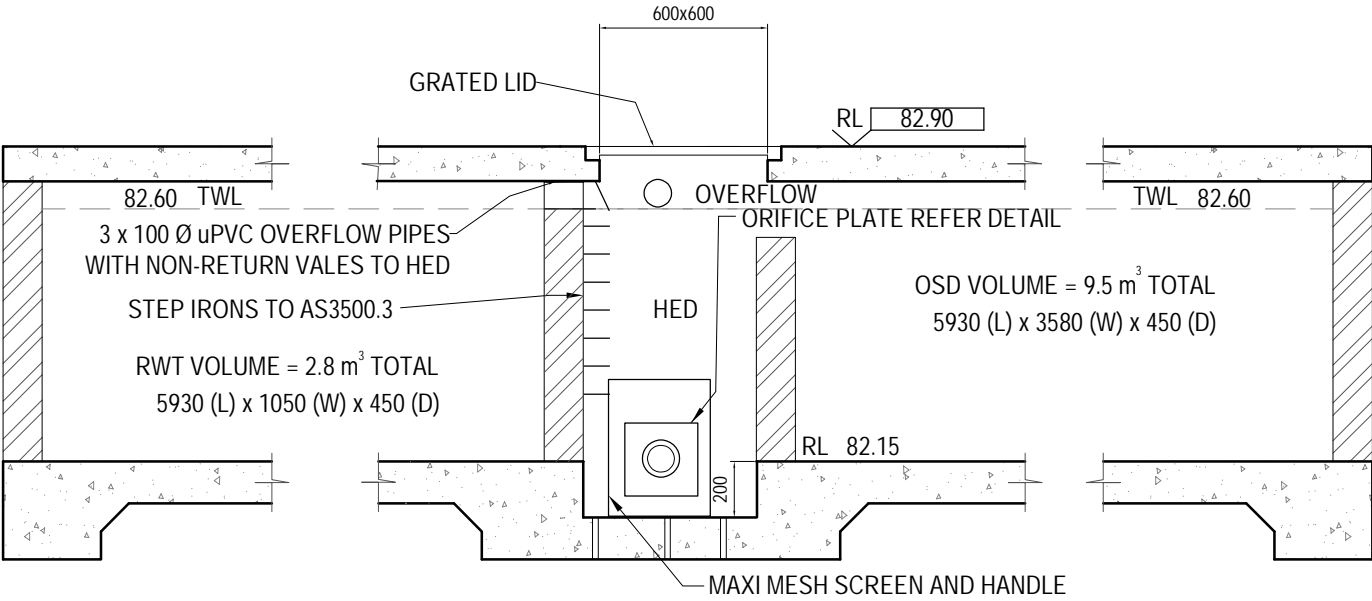
SCALE 1:200

ISSUE FOR DA

			Client	SIMONE MAGAS	 GREENWOOD CONSULTING ENGINEERS 2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project	23 GREENWOOD AVENUE NARRAWEENA	Drawn	Designed	Date
			Architect					EG	EG	26/5/2019
			RAPID PLANS	Checked		Approved	Scale			
								EG	EG	1:200
-	ISSUED FOR DA SUBMISSION	26/5/19		Title		Drawing number	Revision			
REVISION	AMENDMENT	DATE						DETAILS	DO2	-

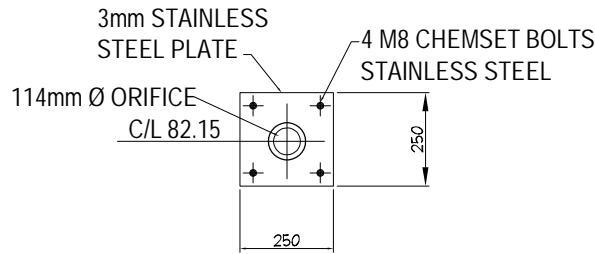
NOTES:

- ALL PIPES TO BE 100mm Ø, LAID AT 1 % MINIMUM GRADE AND uPVC TO AS 1254.2002 U.N.O.
- 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 300mm MINIMUM.
BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE CLEANING EYES AND LEAF CATCHERS TO ALL DOWNPIPES
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- ALL LEVELS SHOWN ARE TO AHD
- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2003 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- SUB-SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
- EXISTING ROOF DRAINAGE AND SITE DRAINAGE SYSTEM TO BE CHECKED AND UPGRADED AS REQUIRED. BUILDER TO INSPECTION AND UPGRADE DRAINAGE IN ACCORDANCE WITH AS 3500.3 IF REQUIRED.
- THE RAINWATER TANK IS TO BE INSTALLED AND USED AS PER BASIX REQUIREMENTS AND SYDNEY WATER AND NSW HEALTH REQUIRMENTS FOR NON DRINKING USE ONLY
- 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
- 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.
- IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100m2 OF ROOF CATCHMENT AREA PRIOR TO ENTERING THE RAINWATER TANK. INDIVIDUAL SITE ANALYSIS IS REQUIRED IN HEAVILY POLLUTED AREAS TO DETERMINE IF LARGER VOLUMES OF FIRST FLUSH RAINWATER ARE TO BE DIVERTED. IF IN DOUBT, CHECK WITH LOCAL HEALTH AUTHORITIES.
- SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEAN
- FIRST FLUSH DEVICES, OR APPROVED ALTERATIVE, TO BE INSTALLED WITH AN AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS.
- BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.
- BUILDER/PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESI AND INSTALLATION HANDBOOK - HB 230-2008. IF IN DOUBT CONTACT ENGINEER.
- RAINWATER TANK TO BE WATER PROOFED IN ACCORDANCE WITH HB 230-200B
- ORIFICE PLATE TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE ROOF DRAINAGE SYSTEI AND CONNECTION OF THE STORMWATER SYSTEM TO THE OSD TANK



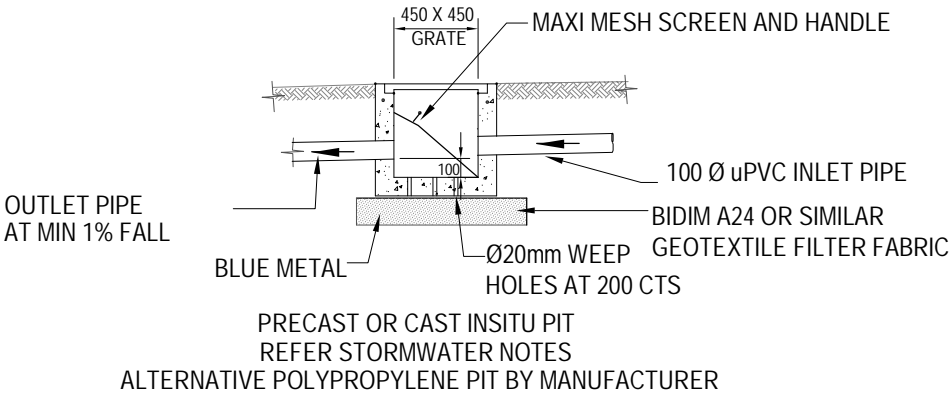
OSD AND RWT TANK DETAIL

SCALE = NTS



ORIFICE PLATE DETAIL

SCALE = NTS



450x450 PIT DETAIL

SCALE = NTS

ISSUE FOR DA

			Client	SIMONE MAGAS		Project 23 GREENWOOD AVENUE NARRAWEENA	Drawn EG	Designed EG	Date 26/5/2019
			Architect	RAPID PLANS			Checked EG	Approved EG	Scale
-	ISSUED FOR DA SUBMISSION	26/5/19			2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Title DETAILS	Drawing number D03		Revision -
REVISION	AMENDMENT	DATE							