

CONCEPT PLAN

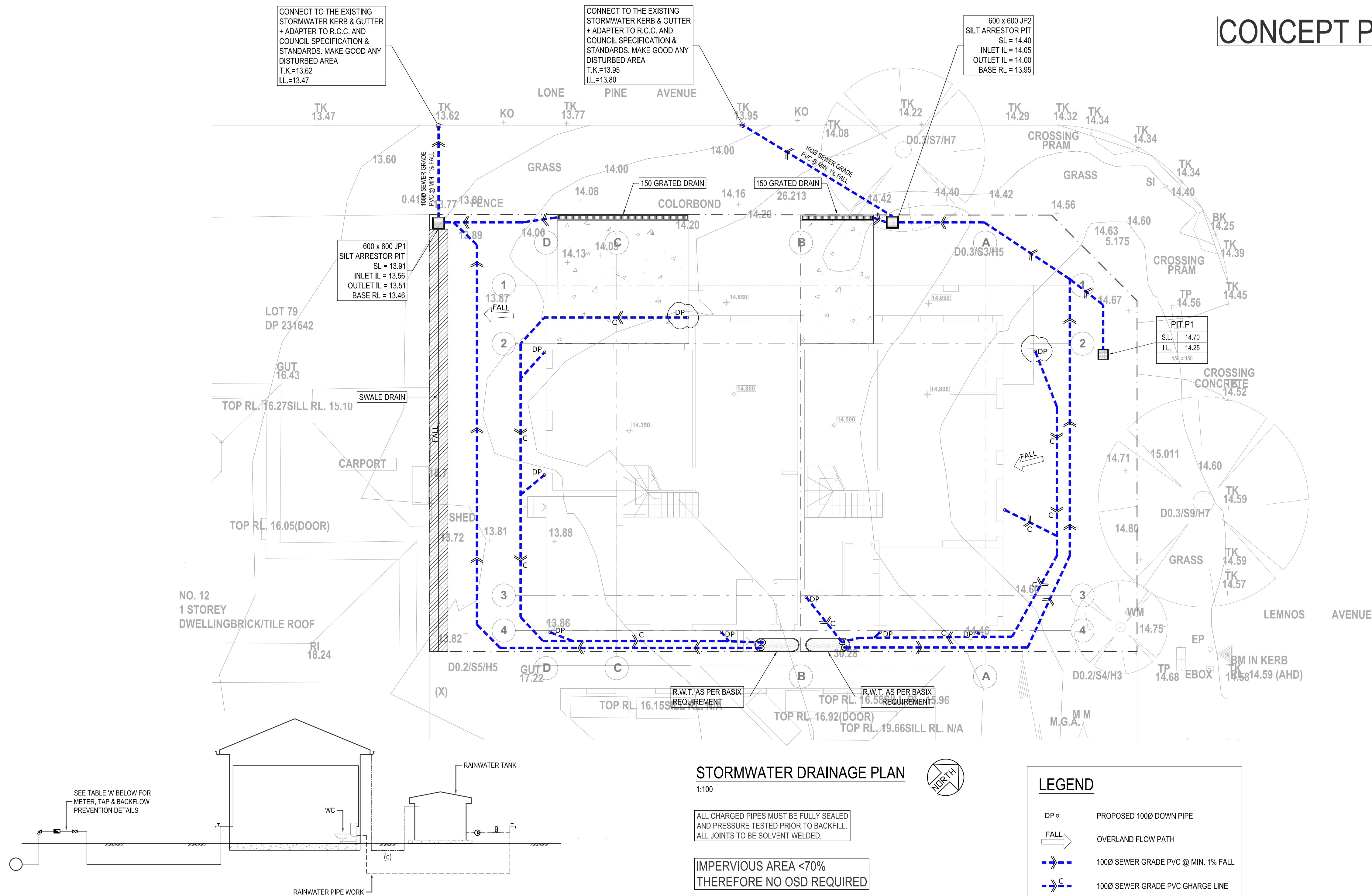
STORMWATER LAYOUT NOTES

PITS UP TO 600mm DEEP TO BE 450x450 U.N.O.
PITS UP TO 900mm DEEP TO BE 600x600 U.N.O.
PITS UP TO 1200mm DEEP TO BE 900x900 U.N.O.

PITS TO BE PRECAST CONCRETE OR RENDERED BRICK WITH CONCRETE
HEAVY DUTY GRATES. U.N.O. LIGHT DUTY PITS & GRATES MAY BE USED ONLY
IN LIGHT/FOOT TRAFFICABLE AREAS.

U.N.O. ALL PITS TO BE BENCHED TO DISCHARGE PIPES (U.N.O. GALVANISED STEP IRONS TO ALL PITS EXCEEDING 900 DEPTH.)

- COVER & SUMO GRATES SHALL COMPLY WITH AS2733 & AS4198.
- DOWNPIPES Ø=90mm IF CHARGED AND 100x50 BOX IF GRAVITY. U.N.O. D.P.S SHALL BE INSTALLED IN ACCORDANCE WITH AS3500.3.2.4,11 & AS4198. MAXIMUM ROOF AREA PER DOWNPIPE IS 30m² WITH A QUAD 115 HI-FRONT GUTTER U.N.O.
- PIPES TO HAVE 1% MINIMUM GRADE U.N.O. BY PIT INVERTS, PIPES TO BE V.C. CLASS "X" OR U.P.V.C. CLASS STORMWATER PIPE TO AS1254,1260,1273,1477,2179.2 AND WHERE EXPOSED TO DIRECT SUNLIGHT TO HAVE ADEQUATE PROTECTION TO U.V. RADIATION IN ACCORDANCE WITH AS2032. SEWER GRADE/GALVANISED PIPES TO BE USED WHERE COUNCIL POLICY OR CONSENT REQUIRE SUCH.
- GUTTER OUTLETS SHALL BE FITTED VERTICALLY TO THE SOLE OF THE EAVE GUTTERS. RAINHEADS TO HAVE AN OVERFLOW DUCT OR WEIR 50mm BELOW THEIR CREST.
- PROVIDE OVERFLOW SPITTERS TO ALL COVERED BALCONIES/TERRACES. NOT TO BE DIRECTED ON TO ROOF SURFACES.
- RISING MAINS (PRESSURE PIPE) TO BE IN ACCORDANCE WITH AS3500.1.2.
- SUBSOIL DRAINS TO BE IN ACCORDANCE WITH AS2439.1 CLASS 100 TO BE USED ONLY IN SINGLE DWELLINGS.
- ALL PIPE JOINTS TO BE IN ACCORDANCE WITH AS3500.3.2.2.7
- ALL VALVES TO BE IN ACCORDANCE WITH AS3500.3.2
- EXPANSION JOINTS AND ACCESSORIES TO COMPLY WITH AS2179.2 & AS4198.
- ALL TRENCHES TO BE IN ACCORDANCE WITH AS3500.3.2.7.2.8-14, EMBEDMENT MATERIAL & TRENCH FILL TO ALL PIPES & SUBSOIL DRAINS TO BE IN ACCORDANCE WITH AS3500.3.2.7, ALL WORKS TO BE IN ACCORDANCE WITH AS1254,1741,2032,2733,2865,3996,1260,1477,2179.1 & 2.2566, 6367,8301, ARR97 & BCA
- IT IS THE BUILDER'S RESPONSIBILITY TO CONFIRM THAT LEVELS AND SURVEYS ARE IN ACCORDANCE WITH LEVELS ON SITE AND ARE APPROVED BY COUNCIL & THE ARCHITECT BEFORE COMMENCING WORK.
- NO SEWER VENTS, GULLY PITS OR SIMILAR TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS. ALL BASIN WALLS TO BE WATERTIGHT & STRUCTURALLY DESIGNED BY A STRUCTURAL ENGINEER.
- ALL FENCES WHICH MAY DEFLECT FLOW FROM PROPOSED DIRECTION TO BE RAISED 100mm.
- BUILDER TO ENSURE ALL DRAINAGE AREAS INCLUDING EXPOSED BALCONIES TO HAVE OVERFLOW MECHANISM IN PLACE IN THE EVENT OF BLOCKAGE WITH ADEQUATE OVERFLOW SECTION THROUGH PLANTERS, PARAPETS ETC.
- ALL EXTERIOR FINISHED GROUND LEVEL TO BE SLOPING AWAY FROM PERIMETER WALLS IN ALL CASES.
- ALL HEADROOM CLEARANCES TO BE COORDINATED BETWEEN THE BUILDER & THE ARCHITECT. NOTIFY ENGINEER FOR APPROVAL IF ANY CHANGES ARE TO OCCUR.
- ALL GULLY POSITIONS ARE DIAGRAMMATIC ONLY - BUILDER SHOULD CONSULT ARCHITECTURALS FOR DIMENSIONS TO LOCATE STORMWATER ELEMENTS U.N.O.
- FIRE RATING TO ARCHITECT'S SPECIFICATIONS.
- ALL FINISHED FLOOR LEVELS ARE NOMINATED BY ARCHITECT.
- ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION. NO WORK IS TO COMMENCE UNTIL ALL WORKERS CARRY OUT SITE INDUCTION, PREPARED AND CARRIED OUT BY BUILDER. ANY HAZARD IDENTIFICATION TO BE REPORTED IMMEDIATELY TO SITE SUPERVISOR TO CARRY OUT NECESSARY PROCEDURES TO ELIMINATE HAZARD, PRIOR TO PROCEEDING WITH WORK. STRUCTURAL AND GEOTECHNICAL ADVICE SHOULD BE SOUGHT IN ALL CASES. CONFINED SPACES SIGNAGE TO BE INSTALLED IN ACCESSIBLE UNDERGROUND TANKS TO WORK COVER SPECIFICATIONS. ALL PITS EXCEEDING 600mm DEPTH TO HAVE "J" BOLTS INSTALLED TO GRATES.
- MAINTENANCE DEVICES REQUIRED BY AUTHORITIES ARE NOT TO BE ASSUMED SHOWN ON DRAWINGS.
- EARTH MOUNDING SHOWN AS TEMPORARY MEASURE UNTIL LANDSCAPING COMPLETED TO DIRECT FLOWS AS SHOWN.



RAINWATER TANK LOCATION	METER SIZE (m)	TYPE OF TAP	TYPE OF BACKFLOW PREVENTION
ABOVE GROUND	20	BALL VALVE	DUAL CHECK VALVE (COMBINED WITH METER)
	25	BALL VALVE	DUAL CHECK VALVE
	≥ 32	BALL VALVE	DUAL CHECK VALVE
BELOW GROUND	20	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	25	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	≥ 32	BALL VALVE	TESTABLE DOUBLE CHECK VALVE










LEGEND	
	PRESSURE VESSEL
	METER
	BALL VALVE RIGHT ANGLE TYPE
	DUAL CHECK VALVE
	PUMP
	GARDEN TAP
	DRINKING WATER SUPPLY PIPES
	RAINWATER SUPPLY PIPES
	DOWN PIPES

DIAGRAM NOTES

1. **WHERE INSTALLATION REQUIREMENTS FOR TANKS 10,000 LITERS OR LESS: COUNCIL DEVELOPMENT CONSENT IS NOT REQUIRED, IF THEIR CONDITIONS FOR INSTALLATION ARE FOLLOWED.**
2. **FOR TANKS GREATER THAN 10,000 LITRES COUNCIL DEVELOPMENT CONSENT IS GENERALLY REQUIRED.**
3. **FOR TANKS MORE THAN 10,000 LITRES APPROVAL IS REQUIRED FOR BUILDING OVER SEWERS.**
4. **SYDNEY WATER'S APPROVAL IS REQUIRED FOR ANY TOP UP FROM DRINKING WATER SUPPLY, REGARDLESS OF TANK SIZE.**
5. **NO DIRECT CONNECTION IS ALLOWED BETWEEN THE DRINKING WATER SUPPLY AND THE RAINWATER TANK SUPPLY.**
6. **RAINWATER PIPEWORK IS SHOWN ON THE DIAGRAM AS SURFACE INTERNAL RAINWATER USES**
7. **ANY DESIGNED ACCESS LID INTO RAINWATER RE-USE TANK IS TO HAVE A LOCKABLE LID. IF THE LID IS DESIGNED TO BE ACCESSED BY A MAINTENANCE PERSON, IT MUST BE AT LEAST 600 mm x 900 mm IN SIZE.**
8. **MAINS WATER TO BYPASS TANK (BY PLUMBER) FOR LOW TANK STORAGE.**

STORMWATER DRAINAGE PLAN

1:10

ALL CHARGED PIPES MUST BE FULLY SEALED
AND PRESSURE TESTED PRIOR TO BACKFILL
ALL JOINTS TO BE SOLVENT WELDED.

IMPERVIOUS AREA <70%
THEREFORE NO OSD REQUIRED

ALL PIT & GRATE LOCATIONS & RL'S TO BE CONFIRMED IN ACCORDANCE WITH LANDSCAPE & ARCHITECTURAL PLAN

DUAL WATER & RAINWATER SUPPLY DIAGRAM

N.T.S.

THE RAINWATER TANK SHALL BE INSTALLED WITH A FIRST FLUSH DEVICE TO SUPPLIERS DETAILS

Rev.	Description	By.	App.	Date
A	ISSUED FOR D.A.	G.N.	M.A.	06.03.2023



Client **MR & MRS NICOLAS**

Project 1 LEMNOS AVENUE,
MILPERRA

Title **STORM WATER DRAINAGE PLAN**

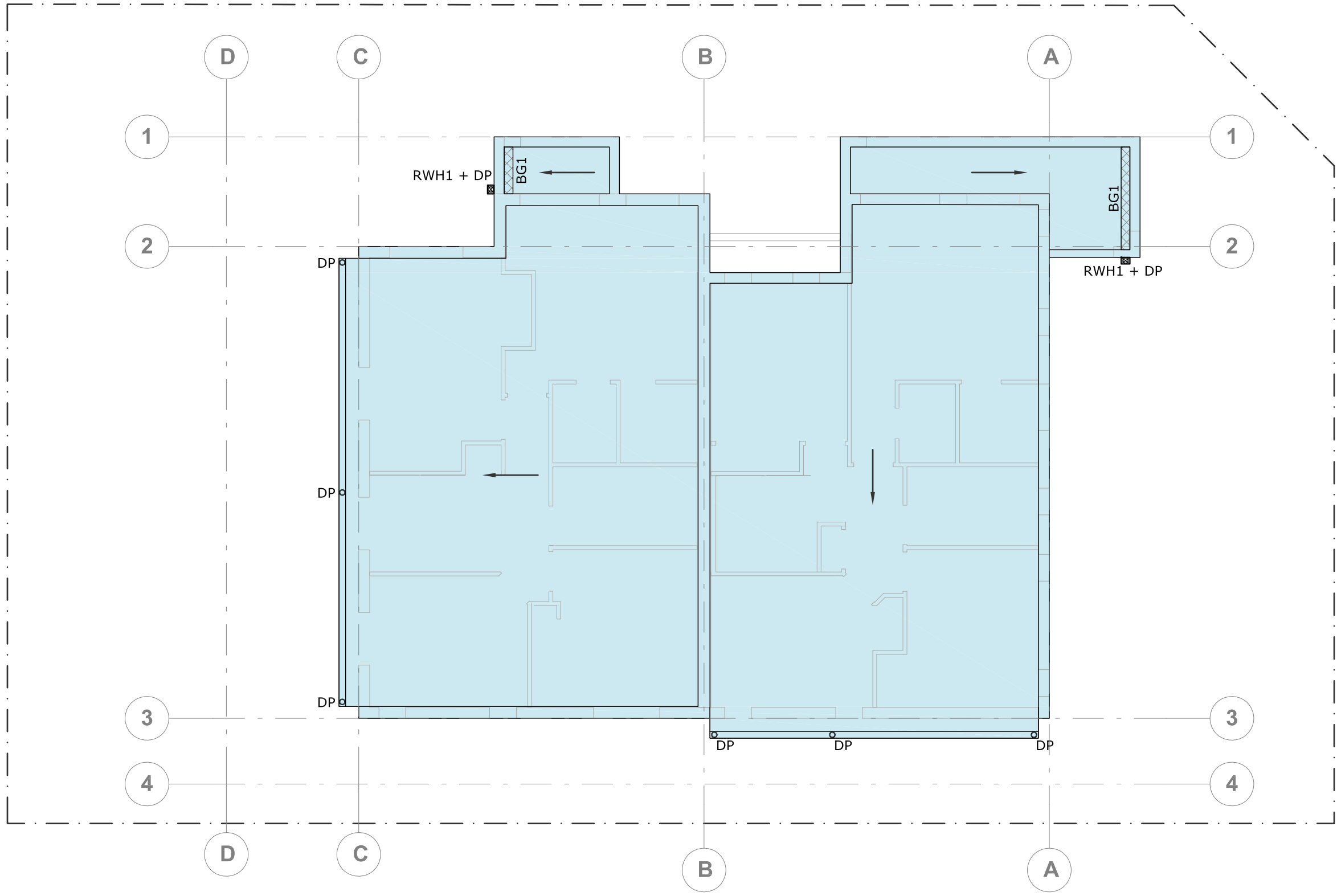
ISSUED FOR
DEVELOPMENT APPLICATION

Project Number
23 H 080

Design	Drawn
M.A.	G.N.

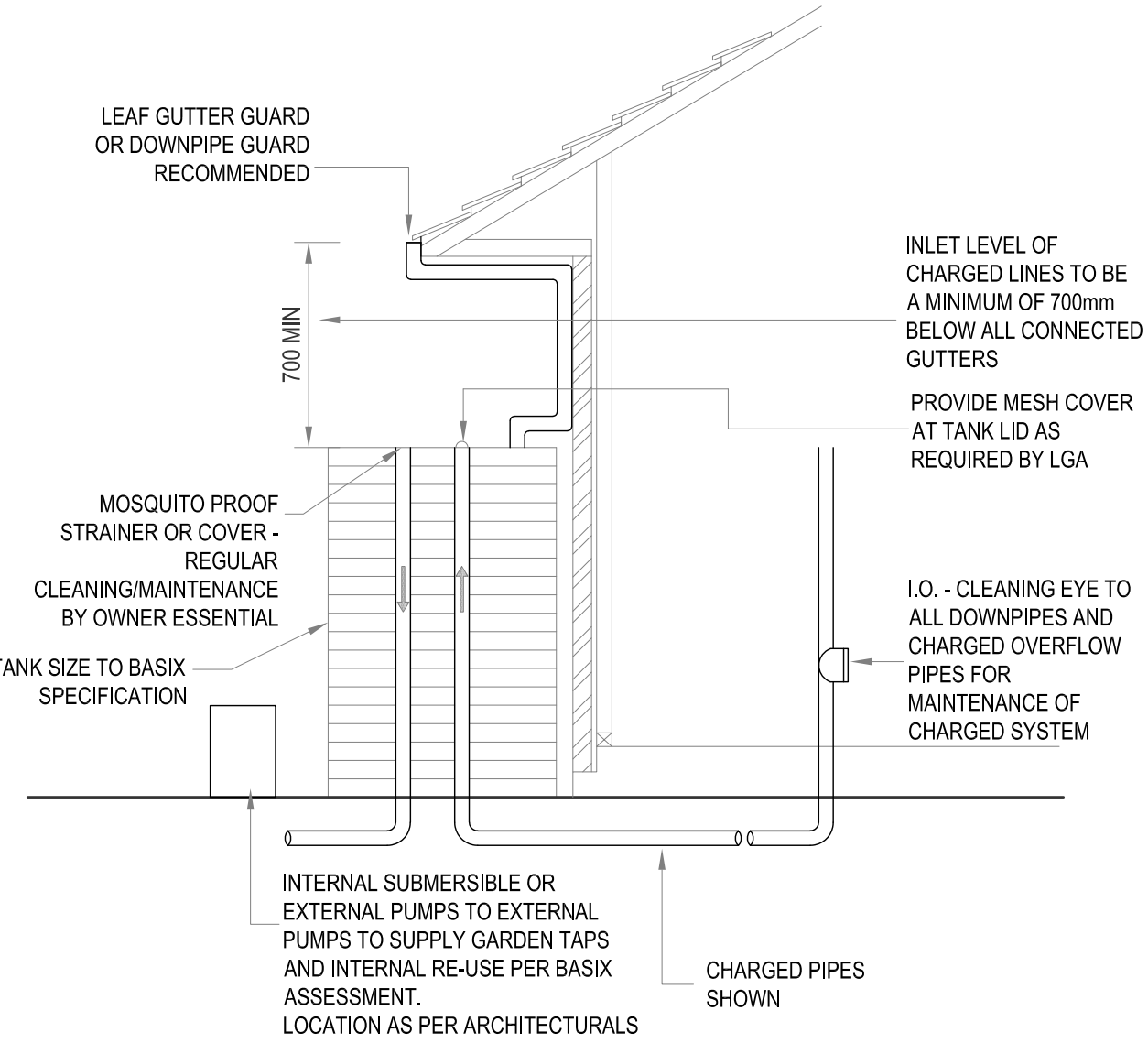
Drawing Number
SW 01



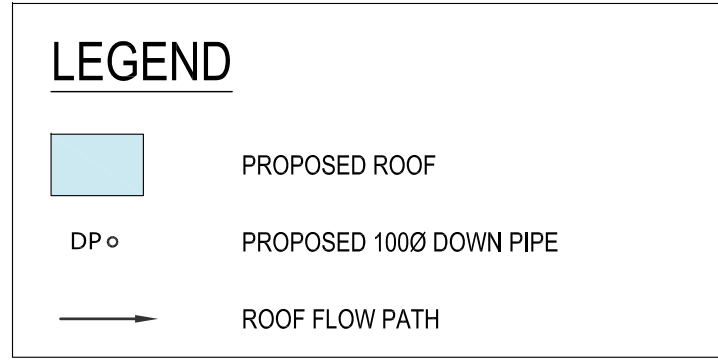


ROOF DRAINAGE PLAN
1:100

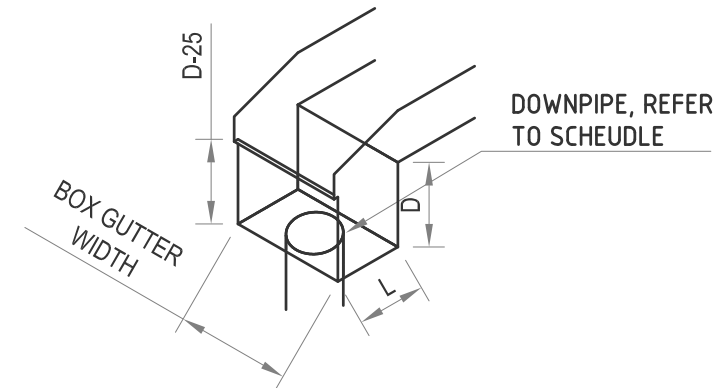
TANK WATER IS NOT RECOMMENDED FOR HUMAN CONSUMPTION. A SIGN STATING **NOT FOR DRINKING** MUST BE AFFIXED TO THE TANK AND TAP FIXTURE



ABOVEGROUND RAINWATER TANK
1:100

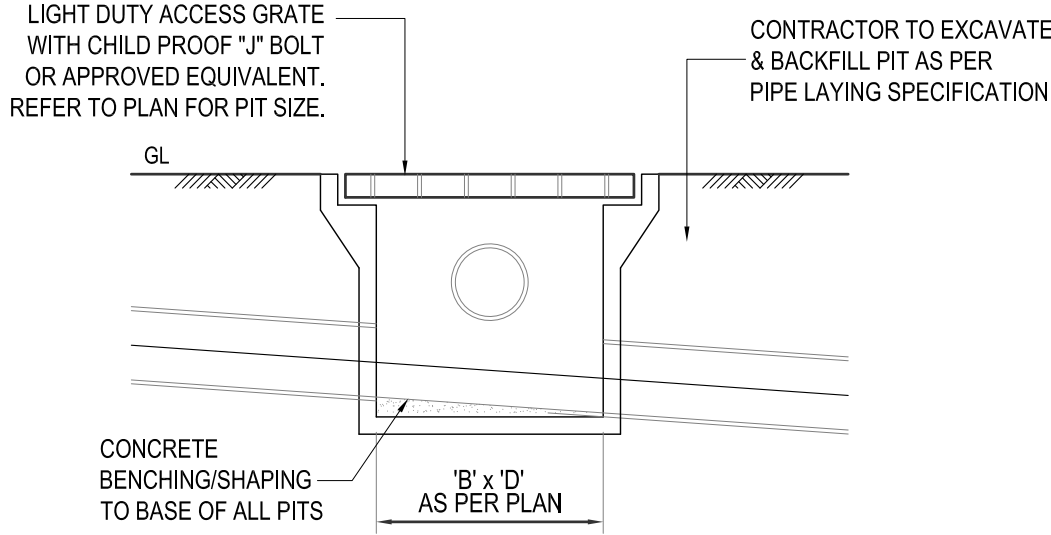


ROOF DRAINAGE PLAN
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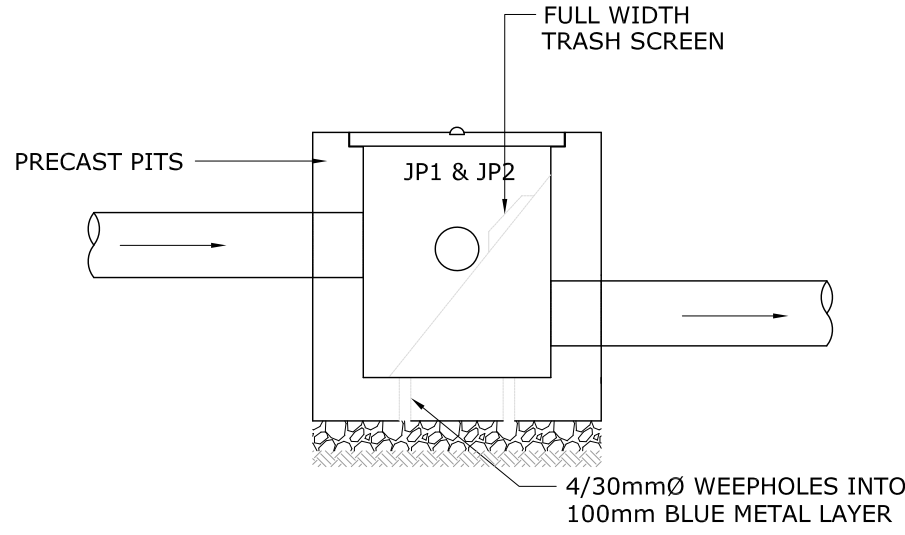


RAINWATER HEAD SECTION
N.T.S.

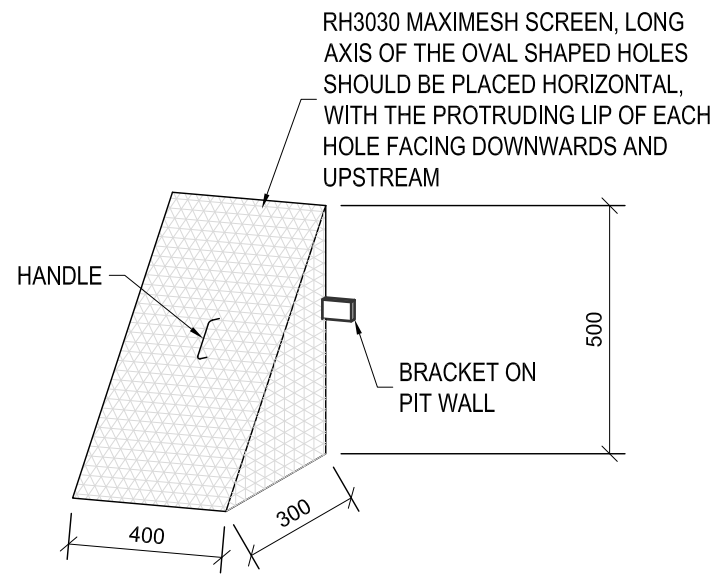
BOX GUTTER & RAINWATER HEAD			
NODE	BOX GUTTER SIZE	RAINWATER HEAD SIZE	DOWNPIPE Ø mm
BG1 & RWH1	200 W x 150 D	150L x 200W x 150D	100
RWH2	-	150L x 200W x 200D	100



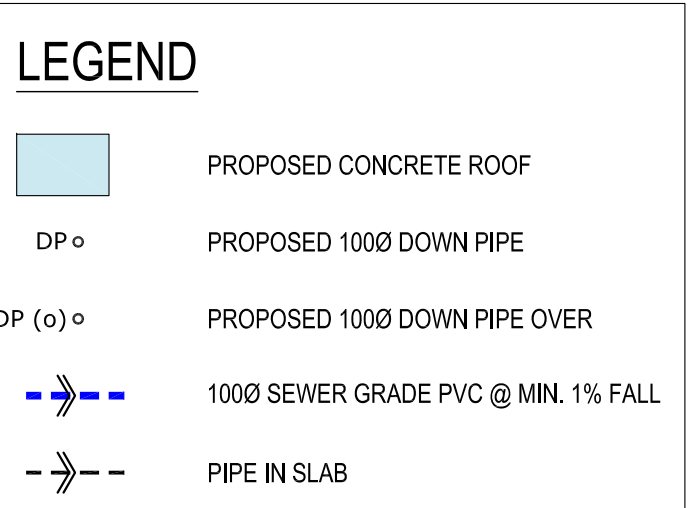
TYPICAL SURFACE INLET PIT DETAIL
N.T.S.
TYPICAL FOR ALL PITS IN NON TRAFFIC AREAS.



SILT ARRESTOR PIT DETAIL
SCALE 1:100



STANDARD TRASH SCREEN



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Rev.	Description	By.	App.	Date
A	ISSUED FOR D.A.	G.N.	M.A.	06.03.2023



Client **MR & MRS NICOLAS**
Project **1 LEMNOS AVENUE, MILPERRA**

Title **STORM WATER DRAINAGE DETAILS & SECTIONS**

ISSUED FOR **DEVELOPMENT APPLICATION**

Project Number **23 H 080**

Design **M.A.**
Drawn **G.N.**
Drawing Number **SW 02**