

# GROUND FLOOR LAYOUT

REFER TO SHEET 2 FOR RAINWATER TANK DETAILS.  
LEAF GUTTER GUARDS OR SIMILAR SCREENING  
RECOMMENDED TO ALL GUTTERS.  
BOX GUTTERS AND RWHS TO BE DETAILED BY  
SUPPLIER/INSTALLER IN ACCORDANCE WITH AS3500 U.N.O.  
WHS HAZARD IDENTIFICATION:  
TRENCHING-ALL PERSONS TO FOLLOW THEIR APPROVED SWMS IN  
RELATION TO BARRICADING DEEP TRENCHES AND WEARING APPROPRIATE  
CLOTHING. ANY PERSON WORKING INSIDE A TRENCH MUST BE  
SUPERVISED BY ANOTHER PERSON.  
DIAL BEFORE YOU DIG 1100 MUST BE CHECKED BEFORE ANY  
TRENCHING COMMENCES ON SITE. ANY WORKS NEAR IDENTIFIED  
SERVICES TO BE CARRIED OUT IN ACCORDANCE WITH THE TRADES SWMS.  
INSTALLATION OF DOWNPIPES AND GUTTERING TO BE CARRIED OUT IN  
ACCORDANCE WITH INSTALLERS APPROVED SWMS.

PIPE SCHEDULE		
REFER TO NOTES FOR PIPE CLASS		
TAG	PIPE DIA.	MIN.GRADE
B1	100	CHARGED
B2	100	2%
C1	150	1%
C2	150	4%

## STORMWATER LAYOUT NOTES

-PITS UP TO 450 DEEP TO BE 350SQ U.N.O., PITS UP TO 600 DEEP TO BE 450 SQ U.N.O., PITS UP TO 900 DEEP TO BE 600 SQ U.N.O., PITS UP TO 1200 DEEP TO BE 900 x 600 U.N.O., PITS EXCEEDING 1200 DEEP TO BE 900 SQ. U.N.O. PITS TO BE PRECAST CONCRETE OR RENDERED BRICK WITH CONCRETE HEAVY DUTY GRATES. U.N.O. LIGHT DUTY PITS AND GRATES MAY BE USED ONLY IN LIGHT/FOOT TRAFFICABLE AREAS. U.N.O. ALL PITS TO BE BENCH TO DISCHARGE PIPES U.N.O. GAL. STEP IRONS TO ALL PITS EXCEEDING 900 DEPTH.  
-COVER AND SUMP GRATES SHALL COMPLY WITH AS2733 & AS4198.  
-DOWNPIPES TO BE 90 DIA IF CHARGED AND 100 x 50 BOX IF GRAVITY. U.N.O. DP'S SHALL BE INSTALLED IN ACCORDANCE WITH AS3500.3.2.4.11 & AS4198. MAX. ROOF AREA PER DOWNPIPE WITH A NOMINATED GUTTER SIZE TO BE DETERMINED USING MANUFACTURERS SPECIFICATIONS WITH OVERFLOW PROVISIONS BY INSTALLERS.  
-PIPES TO HAVE 1% MIN.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/GAL. PIPES AND KERB ADAPTORS TO BE USED WHERE COUNCIL POLICY OR CONSENT REQUIRE SUCH.  
-GUTTER OUTLETS SHALL BE FITTED VERTICALLY TO THE SOLE OF THE EAVE GUTTERS. RAINHEADS/BOX GUTTER SUMPS TO HAVE AN OVERFLOW DUCT OR WEIR IN ACCORDANCE WITH AS3500 .  
-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, VALVES TO BE IN ACCORDANCE WITH AS3500.3.2.2.7 & AS3500.3.2  
-EXPANSION JOINTS SHALL COMPLY WITH AS3500.3.2:TABLE 4.1 PVC 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 AND 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 & ARE APPROVED BY COUNCIL & 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 DIVERT 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 LEVELS TO BE SLOPING AWAY FROM PERIMETER WALLS IN ALL CASES.  
-ALL HEADROOM CLEARANCES TO BE COORDINATED BETWEEN BUILDER & ARCHITECT. NOTIFY ENGINEER FOR APPROVAL IF ANY CHANGES 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 SPECIFICATION.  
-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 OR SIMILAR INSTALLED TO GRATES.  
-MAINTENANCE DEVICES REQ'D BY AUTHORITIES ARE NOT TO BE ASSUMED SHOWN ON DRAWINGS.  
-EARTH MOUNDING SHOWN AS TEMPORARY MEASURE UNTIL LANDSCAPING COMPLETED TO DIRECT FLOWS AS SHOWN.

ALL OTHER SURFACE WATERS TO BE STRICTLY CONNECTED TO A SEPARATE SYSTEM BY OWNER IN ACCORDANCE WITH AS 3500.3:2003 AND BCA PART 3.1.2.3.

RAINWATER TANKS WITH PUMPS TO SUPPLY GARDEN TAPS AND INTERNAL RE-USE AS PER BASIX ASSESSMENT

## LEGEND

REFER TO NOTES FOR DP SIZE		REFER TO NOTES FOR DP SIZE	
R.L. 0.00	NEW REDUCED LEVEL (NEW FINISHED GROUND LEVEL)	DP	DOWNPIPE-SIZE
+ 00.00	EXISTING LEVEL	GP	GULLY PIT
S.L. 0.00	SURFACE LEVEL	GP	GARDEN GULLY PIT
I.L. 0.00	INVERT LEVEL	O/F	OVERFLOW-200x100
T.O.W.	TOP OF WALL LEVEL	RWH/S	RAIN WATER HEAD/SUMP
G.F.L. 0.00	GARAGE FLOOR LEVEL	SP	DP WITH SPREADER
F.F.L. 0.00	FINISHED FLOOR LEVEL A,B,C etc.	BG	BALCONY GULLY PIT
L1	SEE PIPE SCHEDULE	CE	CLEANING EYE
PIT P1	PIPE LABEL		GROUND FALL
PIT OP1	SURFACE INLET PIT		100 HIGH EARTH MOUNDING
	OVERLAND FLOW PIT		
	90mm. AG. LINE		

NORTH



REVISIONS	

ISSUE	PRINTS	ISSUED TO	DATE
1	EMAIL	BUILDER/CLIENT	15-11-24

SCALE(A3)1:200,100 u.n.o.  
SCALE BAR - 1m INTERVALS  
DATE MAY . 2024  
DRAWN M.I.  
DESIGNED M.I.  
APPROVED



**IBRAHIM STORMWATER CONSULTANTS**  
**CONSULTING CIVIL ENGINEERS**  
P.O. BOX 400 CHERRYBROOK NSW 2126  
TELEPHONE: (02) 9980 5515 FAX: (02) 9980 6114  
www.stormwater.net.au email: mail@stormwater.net.au

PROJECT  
**PROPOSED RESIDENCE**  
**AT 172 GRASSTREET RIDGE ROW**  
**MUSWELLBROOK**  
**FOR MRS. REGGIE MILKELLIDES**

THIS DRAWING  
**STORMWATER LAYOUT SH.1**  
BUILDER  
METRICON HOMES  
JOB NUMBER  
**M11723-745413**  
SHEET No.  
**1 of 2**  
REVISION



