

MIN. 3000L FOR BASIX, AND EFFECTIVE 9050L FOR OSD/COUNCIL- OSD/RAINWATER TANK PROVIDE 2x 6930L RAINWATER TANK WITH PUMPS TO SUPPLY GARDEN TAPS AND INTERNAL RE-USE TO BE CONNECTED AS PER ARCHITECTURAL DETAILS, BASIX ASSESSMENT AND WATER AUTHORITY GUIDELINES.

Overflow pipe to Pit DCP1. LOCATION SHOWN DIAGRAMMATIC ONLY.

Max. Overflow RL.99.17m

Outlet to be mosquito proofed. All exposed pipework to be painted to withstand external elements. PIPE INLETS AND OUTLETS AS PER DETAILS ON SHEET 2.

2x 6930L MODLINE TANKS (3100L X 1150W X 2020H)

BASIN AREA TO BE DECKED ABOVE RL.97.10 AND HAVE 2 X 900SQ LOCKABLE ACCESS HATCHES OR BE POOL FENCED SIMILAR TO POOL REGULATIONS

DETENTION AREA

MAX. POOL R.L.97.10

MAX. POOL DEPTH 400mm.

VOLUME STORED 9.6cu.m.

OWNER RESPONSIBLE FOR STRUCTURAL/GEOTECHNICAL ASSESSMENT OF EXISTING RETAINING WALLS AND THEIR RECOMMENDATIONS

LEVEL SPREADER - GRATED DRAIN LEVEL TO ENSURE SHEET OVERFLOW (NO CONCENTRATION OF FLOWS)

KEEP AREA CLEAR OF SERVICES

PERIMETER GROUND LEVELS TO REMAIN UNALTERED TO ENSURE NO CONCENTRATION OF FLOWS

FERGUSON STREET

BM 14  
RL 99.08  
(AHD)

## GROUND FLOOR LAYOUT

REFER TO SHEET 2 FOR RAINWATER TANK DETAILS. LEAF GUTTER GUARDS OR SIMILAR SCREENING RECOMMENDED TO ALL GUTTERS.

WHSA 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.

KELDIE STREET

OWNER RESPONSIBLE FOR ATTAINING COMPLIANCE WITH BCA FOR EXTERIOR GROUND LEVELS WHERE LEVELS AND FALLS AS SHOWN ARE NOT MAINTAINED. COMPLIANCE WITH OTHER AREAS INCLUDING BUT NOT LIMITED TO TERMITE PROTECTION MUST NOT BE COMPROMISED IN DOING SO.

### PIPE SCHEDULE

REFER TO NOTES FOR PIPE CLASS

TAG	PIPE DIA.	MIN.GRADE
B1	100	CHARGED
B2	100	2%
C1	150	1%

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

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

## 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 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, 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.

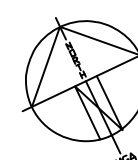
-CONFINED SPACES SIGNAGE TO BE INSTALLED IN ACCESSIBLE UNDERGROUND TANKS TO WORK COVER SPECIFICATIONS. ALL PITS EXCEEDING 600mm DEPTH TO HAVE 'J' BOLTS OR SIMILAR INSTALLED TO GRATES.

-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.

THIS DRAWING IS DIAGRAMMATIC ONLY & NOT TO BE SCALED. IT IS NOT A PART 4A CERT. REFER TO ARCHITECT'S DRAWINGS FOR DIMENSIONS. COPYRIGHT IN THIS DRAWING IS THE PROPERTY OF IBRAHIM STORMWATER CONSULTANTS AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED, WHOLE OR IN PART, IN ANY FORM WITHOUT THE PRIOR WRITTEN APPROVAL OF IBRAHIM STORMWATER CONSULTANTS

N  
O  
R  
T  
H



REVISIONS

ISSUE	PRINTS	ISSUED TO	DATE
1	EMAIL	BUILDER/CLIENT	17-5-22

SCALE (A3) 1:200, 100 u.n.o.  
SCALE BAR - 1m INTERVALS  
DATE APRIL . 2022  
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 46 FERGUSON STREET  
FORESTVILLE, FOR MS SOHAIL &  
MR F. A. SHARIFF

THIS DRAWING

STORMWATER  
LAYOUT SH.1  
BUILDER  
EDEN BRAE HOMES

JOB NUMBER

E10744-26442

SHEET No.

1 of 2

REVISION

Twin 100Dia. Overflow pipes to Pit DCP1. Outlet to be mosquito proofed. All exposed pipework to be painted to withstand external elements.(Location shown generic only)

Max. Overflow  
RL.99.17m

ORIFICE  
IL.97.71

IL.96.45

DEB TO PAD

PAD RL.97.15

2x 6930L MODLINE TANKS  
(3100L X 1150W X 2020H)

3850L for Basix and EFFECTIVE 9050L for OSD  
USE 2 x 6930L Dual Rainwater tank/s, to  
manufacturer's and Sydney Water's specifications.

Leaf Gutter Guard or  
Downpipe Guard  
recommended.

Mosquito proof strainer  
or cover - regular  
cleaning/maintenance  
by owner essential

Internal submersible  
or external pumps  
to supply garden  
taps and internal  
re-use per Basix  
assessment.  
Location as per  
architecturals.

Charged pipes  
shown

INLET LEVEL OF  
CHARGED LINES  
TO BE A  
MINIMUM AS  
SHOWN BELOW  
ALL CONNECTED  
GUTTERS.

First flush water  
diverter at tank  
as req'd by  
L.G.A. F/F

I.O. - Cleaning  
eye to all  
charged  
pipelines for  
maintenance of  
charged system.

WHSA HAZARD  
IDENTIFICATION:  
INSTALLATION OF RAINTANKS:  
PLUMBER/SITE SUPERVISOR  
TO ASSESS ACCESS  
SUITABILITY PRIOR OR POST  
SLAB CONSTRUCTION.  
INSTALLATION OF TANKS TO  
BE CARRIED OUT FOLLOWING  
SWMS OF TANK SUPPLIER  
AND PLUMBER.  
APPROPRIATE GLOVES TO  
BE WORN AT ALL TIMES  
WHILE HANDLING TANKS.

THIS IS AN  
**ON-SITE STORMWATER  
DETENTION SYSTEM**  
REQUIRED BY YOUR LOCAL COUNCIL

IT IS AN OFFENSE TO REDUCE THE  
VOLUME OR TO INTERFERE WITH THE  
ORIFICE PLATE THAT CONTROLS THE  
OUTFLOW  
THE BASE OF THE OUTLET CONTROL  
PIT AND DEBRIS SCREEN MUST BE  
CLEANED OF DEBRIS AND SEDIMENT  
ON A REGULAR BASIS BY THE OWNER.

THIS PLATE MUST NOT BE REMOVED

Signage to be provided  
adjacent tanks Size: 110 mm  
x 80mm

## RAINWATER TANK

TANK DETAILS SHOWN ARE A SUGGESTED CONFIGURATION ONLY. ANY MODIFICATIONS TO TANK VOLUME OR INLET AND OUTLET LEVELS MUST BE APPROVED BY ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION. TANK SHAPE, & DEVICES SHOWN ARE DIAGRAMMATIC ONLY. MINIMUM OF 450 CLEARANCE (UNLESS L.G.A. REQUIRES LARGER SETBACK) TO SIDE BOUNDARIES MUST BE MAINTAINED. CLIENT IS RESPONSIBLE TO ENSURE COMPLIANCE WITH THIS IN THE INSTALLED STATE.

Charged stormwater lines from Roof Areas ONLY to rainwater tank.

All joints to be solvent welded. All exposed pipework to be painted to withstand external elements.

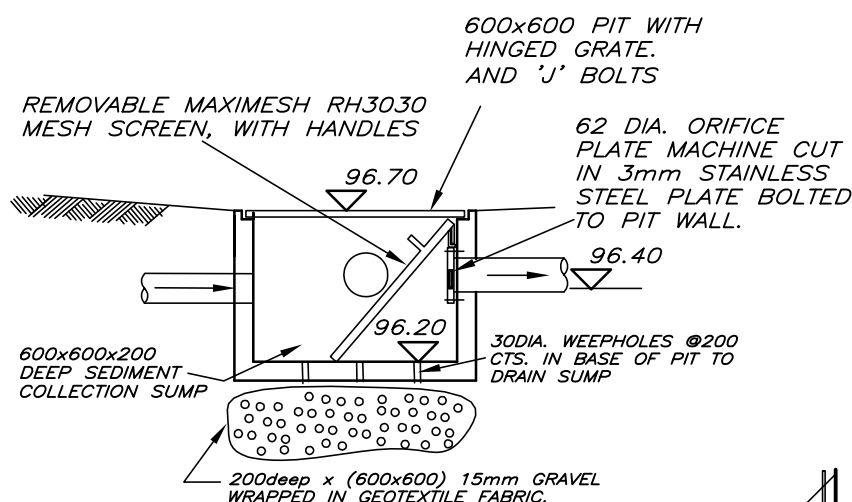
First flush water diverter at tank to comply with Sydney Water and council DCP's. An approved switch system similar to 'Rainbank' to be used via mains. Pumps to manuf. specs.

Rain Tank to be installed and maintained to manufacturers specifications and to comply with all Sydney Water Guidelines.

Client to be responsible for maintenance system of charged pipelines. Debris accumulation significantly affects systems performance.

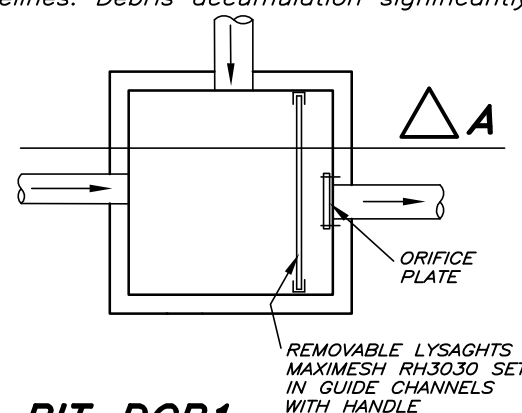
Maintenance program essential.

Structural details for tank base by manufacturer or others.



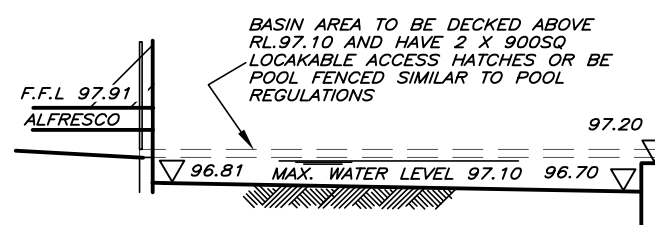
## PIT DCP1 -SECTION A

NOT TO SCALE

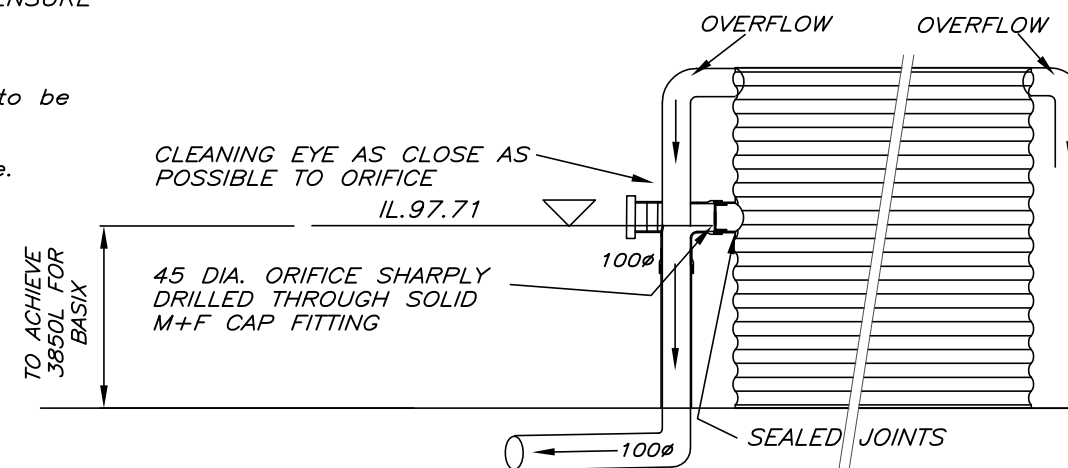
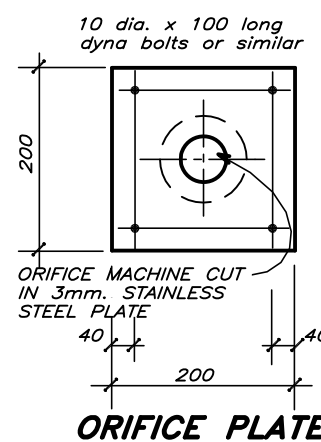


## PIT DCP1

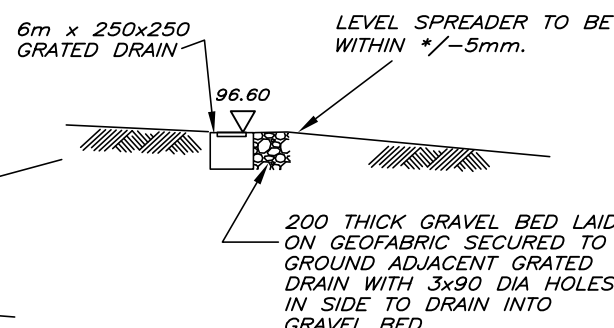
NOT TO SCALE



## SECTION 1



## OSD OUTLET DETAIL



3 DRAWING IS DIAGRAMMATIC ONLY & NOT TO BE SCALED. IT IS NOT A PART 4A CERT.  
ER TO ARCHITECTS DRAWINGS FOR DIMENSIONS. COPYRIGHT IN THIS DRAWING IS THE  
PROPERTY OF IBRAHIM STORMWATER CONSULTANTS AND THE DRAWING SHALL NOT BE  
REPRODUCED OR COPIED, WHOLE OR IN PART, IN ANY FORM WITHOUT THE PRIOR  
WRITTEN APPROVAL OF IBRAHIM STORMWATER CONSULTANTS

REVISIONS	

ALL RETAINING WALLS WHERE REQUIRED TO BE WHOLLY CONTAINED WITHIN SITE BOUNDARIES INCLUDING AG-LINES. STRUCTURAL DESIGN BY OTHERS. CONNECTION OF AGLINE TO BE CONNECTED TO PIT P1 OR ADDITIONAL SILT ARRESTOR PITS BY OWNER AS REQUIRED TO BE APPROVED BY COUNCIL/PCA PRIOR TO DOING SO.

WHSA  
ALL NEARBY SERVICES TO BE LOCATED PRIOR EXCAVATIONS.  
ALL PIPES TO BE CUT FLUSH WITH PIT WALLS AND SPARGED.  
PITS EXCEEDING 600mm IN DEPTH TO HAVE LOCK DOWN MECHANISM.  
SAFETY GEAR TO BE WORN AT ALL TIMES. INCLUDING FOOTWEAR, CLOTHING  
AND GLOVES AS PER SWMS.

ISSUE	PRINTS	ISSUED TO	DATE
1	EMAIL	BUILDER/CLIENT	17-5-22

SCALE (A3) 1:200, 100 u.n.o.  
SCALE BAR - 1m INTERVALS  
DATE APRIL . 2022  
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 46 FERGUSON STREET  
FORESTVILLE, FOR MS SOHAIL &  
MR F. A. SHARIFF**

THIS DRAWING  
**STORMWATER  
DETAILS SH.1**  
BUILDER  
EDEN BRAE HOMES

JOB NUMBER  
**E10744-26442**

SHEET No.  
**2 of 2**  
REVISION