

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 BENCHED 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.

GROUND FLOOR LAYOUT

REFER TO SHEET 2 FOR RAINWATER TANK DETAILS.
 LEAF GUTTER GUARDS OR SIMILAR SCREENING RECOMMENDED TO ALL GUTTERS.
 BOX GUTTERS AND RWH/S TO BE DETAILED BY SUPPLIER/INSTALLER IN ACCORDANCE WITH AS3500 U.N.O.
 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.

(X) SITE OF PROPOSED DRAINAGE EASEMENT 1.83 WIDE
 (Y) D486913 - SITE OF EASEMENT FOR DRAINAGE 1.83 WIDE AS SHOWN SO BURDENED IN VOL. 6338 FOL. 128

- ALL GROUND LEVELS TO REMAIN UNALTERED IN ACCORDANCE WITH COUNCIL FLOOD REPORT.
- ALL MATERIALS TO BE FLOOD COMPATIBLE BELOW RL 22.00 AHD.
- ALL SERVICES BELOW THE 1% FLOOD LEVEL+FREEBOARD ARE TO BE FLOOD PROOFED.
- ALL STRUCTURES TO BE DESIGNED TO WITHSTAND FLOOD WATERS PER COUNCIL FLOOD REPORT
- IT IS RECOMMENDED THAT ANY NEW FENCE WITHIN THE FLOOD-AFFECTED AREA BE CONSTRUCTED AS PERMEABLE (OPEN) TYPE TO ALLOW FREE FLOW OF FLOODWATERS
- IT IS ALSO RECOMMENDED TO PROVIDE BARRIER KERB AND / OR GUARD RAIL ALONG THE EDGE OF DRIVEWAY TO PREVENT VEHICLES TO FALL

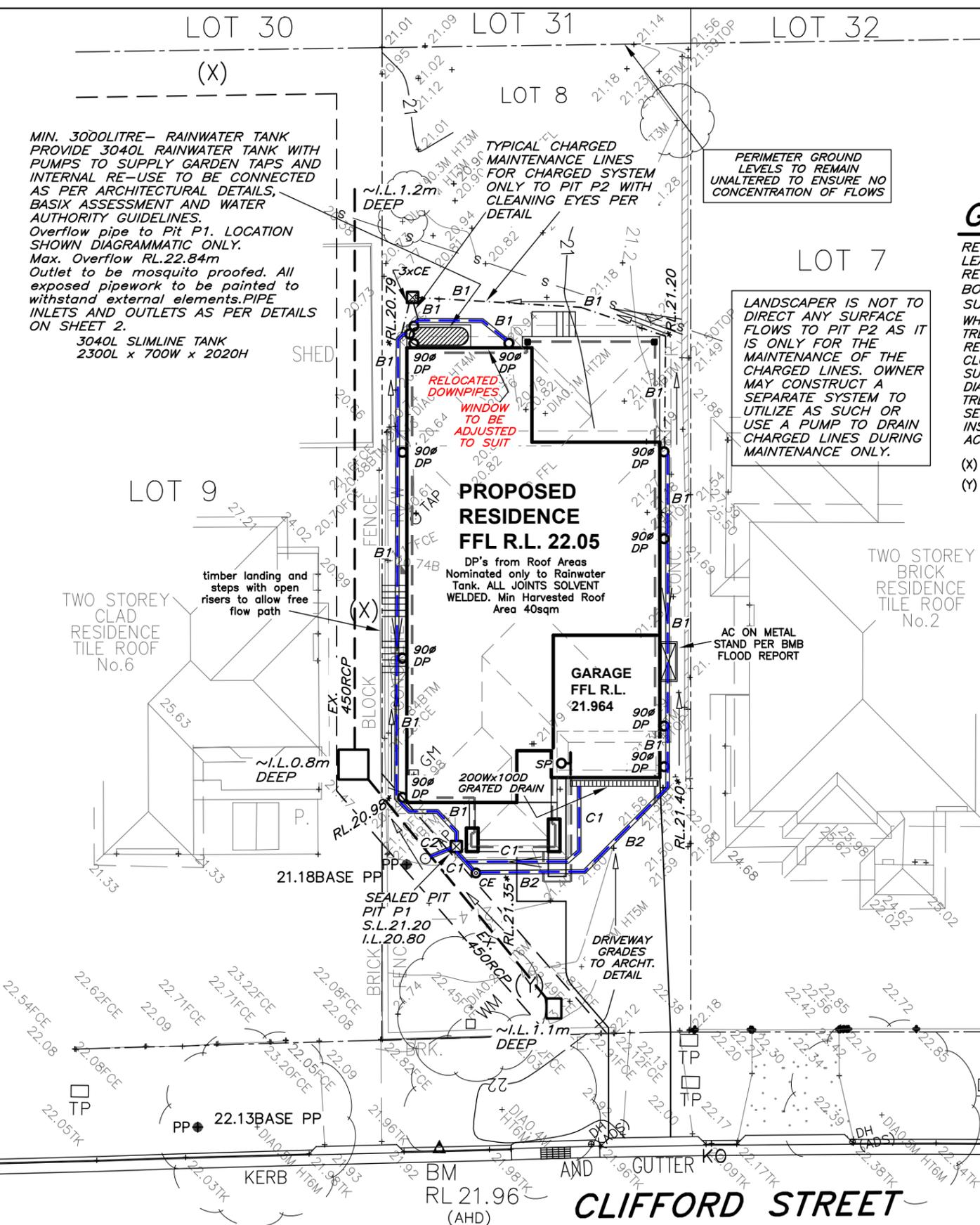
OWNER RESPONSIBLE FOR ATTAINING COMPLIANCE WITH BCA FOR EXTERIOR GROUND LEVELS WHERE LEVELS AND FALLS AS SHOWN ARE NOT MAINTAINED. COMPLIANCE WITH OTHER AREAS INCLUDING BUT NOT LIMITED TO TERMITE PROTECTION MUST NOT BE COMPROMISED IN DOING SO.

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

| 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 |
| LT | PIPE LABEL |
| PIT P1 | SURFACE INLET PIT |
| PIT OP1 | OVERLAND FLOW PIT |
| 90mm. AG. LINE | 90mm. AG. LINE |
| DP | 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 W/ SPREADER |
| BG | BALCONY GULLY PIT |
| CE | CLEANING EYE |
| | GROUND FALL |
|)))) | 100 HIGH EARTH MOUNDING |

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



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

LANDSCAPER IS NOT TO DIRECT ANY SURFACE FLOWS TO PIT P2 AS IT IS ONLY FOR THE MAINTENANCE OF THE CHARGED LINES. OWNER MAY CONSTRUCT A SEPARATE SYSTEM TO UTILIZE AS SUCH OR USE A PUMP TO DRAIN CHARGED LINES DURING MAINTENANCE ONLY.

MIN. 3000LITRE- RAINWATER TANK PROVIDE 3040L 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 P1. LOCATION SHOWN DIAGRAMMATIC ONLY.
 Max. Overflow RL.22.84m
 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.

3040L SLIMLINE TANK
 2300L x 700W x 2020H

PROPOSED RESIDENCE
FFL R.L. 22.05

DP's from Roof Areas Nominated only to Rainwater Tank. ALL JOINTS SOLVENT WELDED. Min Harvested Roof Area 40sqm

GARAGE
FFL R.L. 21.964

AC ON METAL STAND PER BMB FLOOD REPORT

TWO STOREY CLAD RESIDENCE TILE ROOF No.6

TWO STOREY BRICK RESIDENCE TILE ROOF No.2

timber landing and steps with open risers to allow free flow path

| ISSUE | PRINTS | ISSUED TO | DATE |
|-------|--------|----------------|----------|
| 1 | EMAIL | BUILDER/CLIENT | 20-11-23 |
| 2 | EMAIL | BUILDER/CLIENT | 20-12-23 |

SCALE(A3)1:200,100 u.n.o.
 SCALE BAR - 1m INTERVALS
 DATE SEPT. 2023
 DRAWN M.I.
 DESIGNED M.I.
 APPROVED



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PROJECT
PROPOSED RESIDENCE AT 4 CLIFFORD STREET PANANIA, FOR MR. A. S. LAM & MS. A. P. TRUONG

THIS DRAWING JOB NUMBER
STORMWATER LAYOUT SH.1 E11492-27123
 BUILDER SHEET No. REVISION
 EDEN BRAE HOMES **1 of 2** **A**

| REVISIONS | |
|-----------|----------------------|
| A | FFL raised per archt |

Twin 100Dia. Overflow pipes to Pit P1. Outlet to be mosquito proofed. All exposed pipework to be painted to withstand external elements. (Location shown generic only)

Max. Overflow RL.22.84

TANK TO BE BRACED TO TANK PAD

IL.20.50

PAD RL.20.88

3040L SLIMLINE TANK
2300L x 700W x 2020H

3040L Rainwater tank/s, to manufacturer's and Water Authority's specifications.

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.

Leaf Gutter Guard or Downpipe Guard recommended.

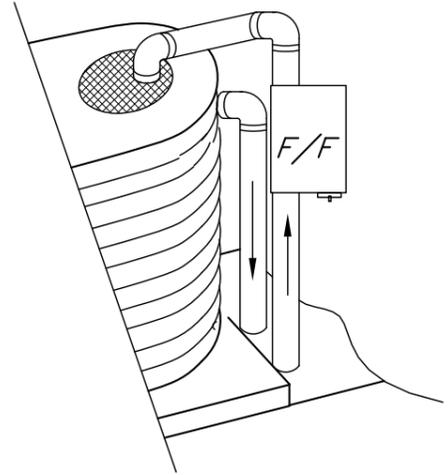
550 MIN

Charged pipes shown

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

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

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



TYPICAL ALTERNATIVE INLET SYSTEM SHOWN DIAGRAMMATICALLY ONLY

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 Water Authority and council DCP's. An approved switch system similar to 'Rainbank' to be used via mains. Pumps to manuf. specs.

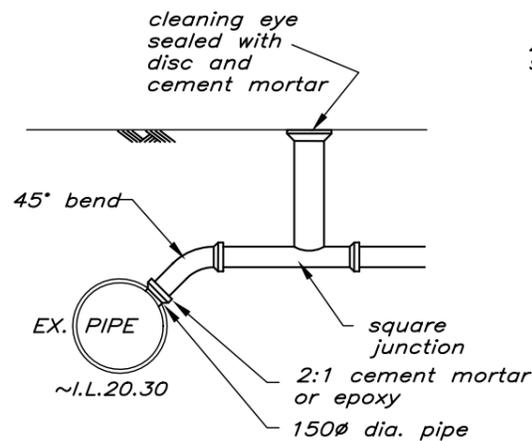
Rain Tank to be installed and maintained to manufacturers specifications and to comply with all Water Authority Guidelines.

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.

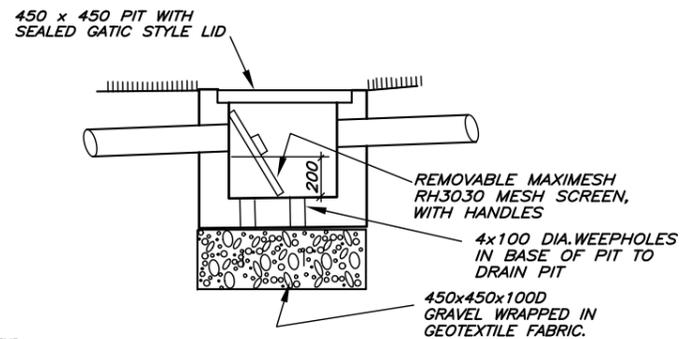
WWSA HAZARD IDENTIFICATION:

INSTALLATION OF RAIN TANKS: 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.



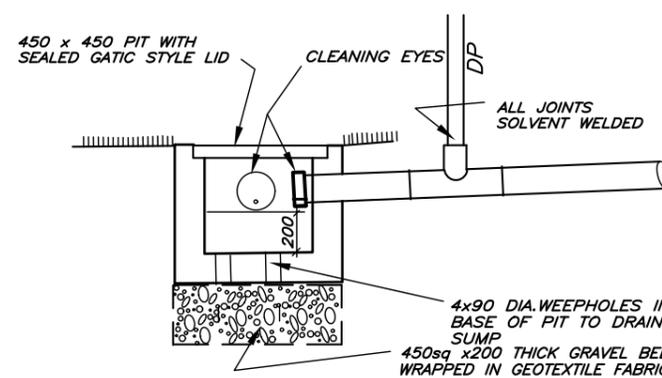
SLOPE JUNCTION CONNECTION

150 dia. pipe using FLOCON CONCONNECT DEVICE AT 11-1 O'CLOCK POSITION. COUNCIL INSPECTION MUST BE BOOKED BEFORE WORKS COMMENCE. INSPECTIONS AT EXCAVATION, CORE DRILLING AND INSTALLATION MUST BE INSPECTED BY COUNCIL



SILT ARRESTOR PIT - P1

WWSA 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.



PIT P2 - MAINTENANCE PIT

NOTE: CLEANING EYES IN PIT FOR FLUSHING OUT OF CHARGED SYSTEM. MAX. 5mm HOLE IN CAPS TO ALLOW SYSTEM TO SELF DRAIN. PIT IS NOT BE USED AS SURFACE INLET PIT UNLESS PROVISIONS HAVE BEEN FOR ITS OUTLET BY THIS DESIGN OTHERWISE BY OWNER.

LANDSCAPER IS NOT TO DIRECT ANY SURFACE FLOWS TO THIS PIT AS IT IS ONLY FOR THE MAINTENANCE OF THE CHARGED LINES. OWNER MAY CONSTRUCT A SEPARATE SYSTEM TO UTILIZE AS SUCH OR USE A PUMP TO DRAIN CHARGED LINES DURING MAINTENANCE ONLY.

BUILDER/CLIENT TO ENSURE THAT ALL SAFETY MEASURES ARE TAKEN DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, SAFETY FENCING, SIGNAGE, OBTAINING STRUCTURAL AND GEOTECHNICAL ADVICE WHERE EXCAVATIONS ARE NEAR STRUCTURES OR SERVICES, SAFETY MEASURES RECOMMENDED BY PRODUCT SUPPLIERS ETC.

| REVISIONS | |
|-----------|----------------------|
| A | FFL raised per archt |

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PROJECT
PROPOSED RESIDENCE
AT 4 CLIFFORD STREET
PANANIA, FOR MR. A. S. LAM &
MS. A. P. TRUONG

THIS DRAWING JOB NUMBER
STORMWATER **E11492-27123**
DETAILS SH.1
BUILDER EDEN BRAE HOMES
SHEET No. **2 of 2**
REVISION **A**

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