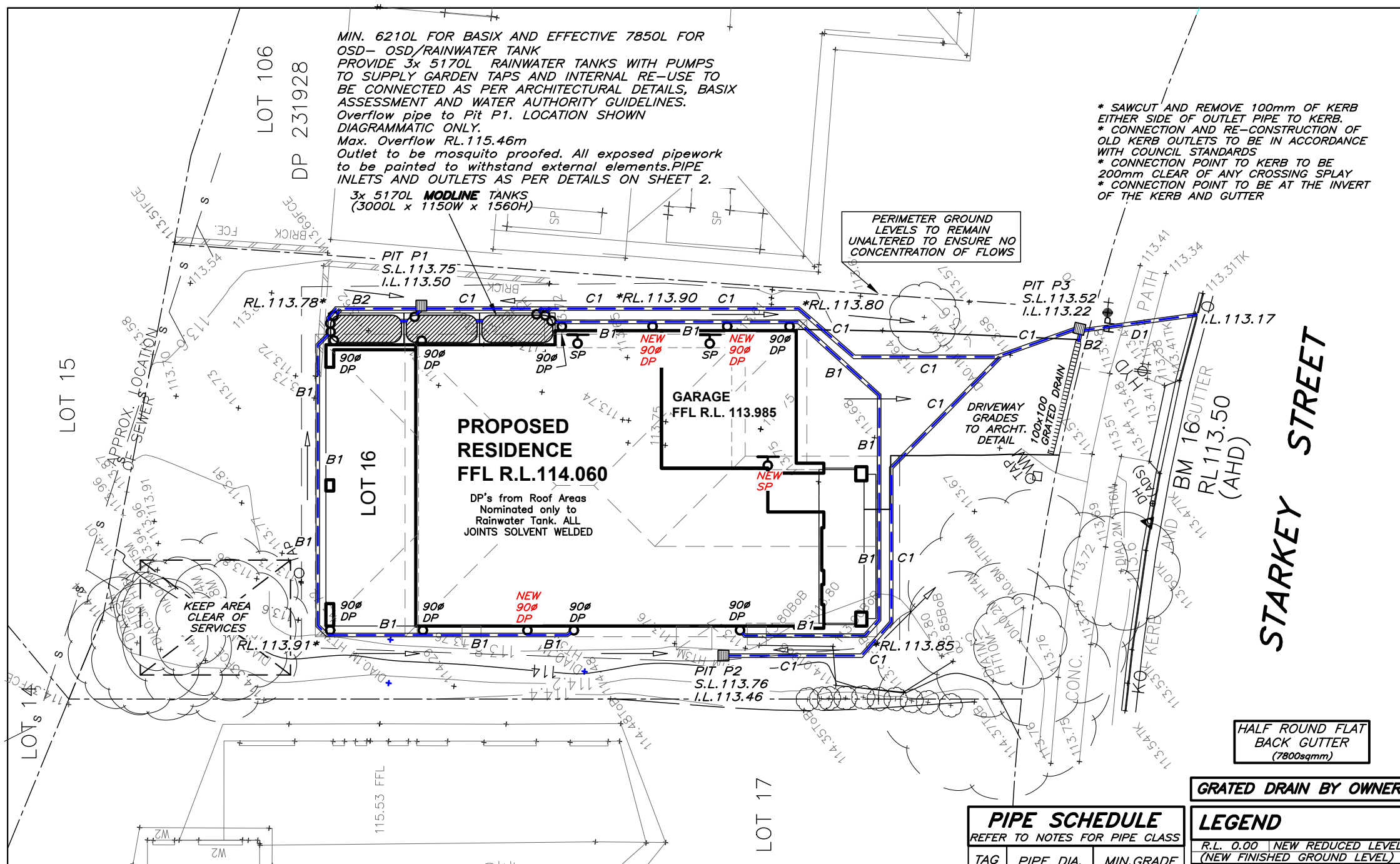


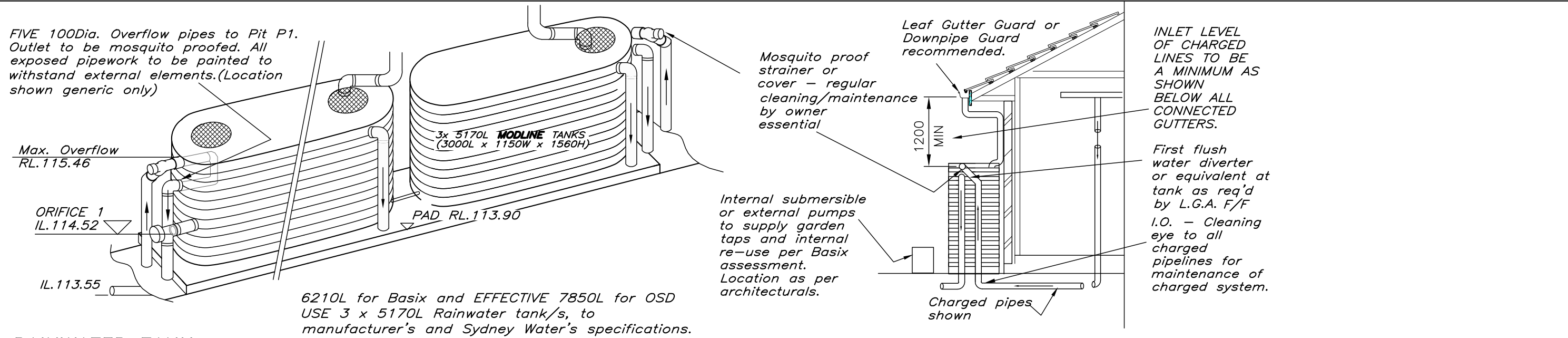
**STORMWATER LAYOUT NOTES**

- 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.

- \* SAWCUT AND REMOVE 100mm OF KERB EITHER SIDE OF OUTLET PIPE TO KERB.
- \* CONNECTION AND RE-CONSTRUCTION OF OLD KERB OUTLETS TO BE IN ACCORDANCE WITH COUNCIL STANDARDS
- \* CONNECTION POINT TO KERB TO BE 200mm CLEAR OF ANY CROSSING SPLAY
- \* CONNECTION POINT TO BE AT THE INVERT OF THE KERB AND GUTTER

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





**RAINWATER TANK**

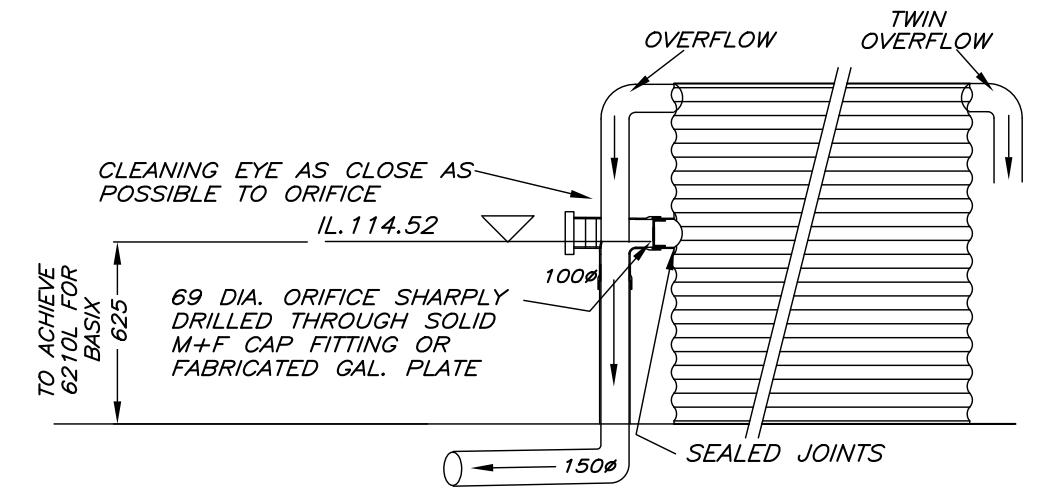
TANK DETAILS SHOWN ARE A SUGGESTED CONFIGURATION ONLY. ANY MODIFICATIONS TO TANK VOLUME OR INLET AND OUTLET LEVELS MUST BE APPROVED BY ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION. TANK SHAPE, & DEVICES SHOWN ARE DIAGRAMMATIC ONLY. MINIMUM OF 450 CLEARANCE (UNLESS L.G.A. REQUIRES LARGER SETBACK) TO 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.

WHSA 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.



**OSD OUTLET DETAIL**

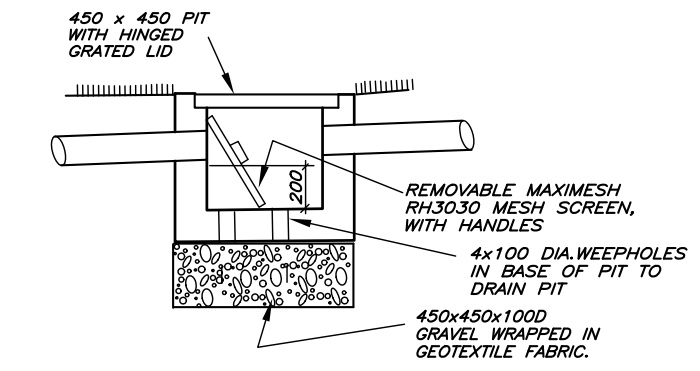
THIS IS AN ON-SITE STORMWATER DETENTION SYSTEM REQUIRED BY YOUR LOCAL COUNCIL

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.

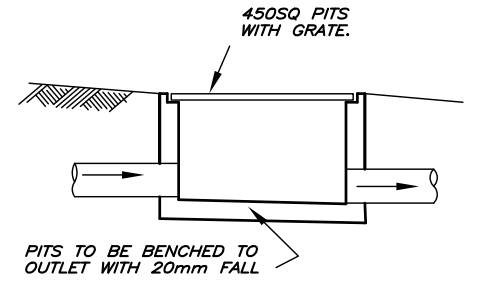
THIS PLATE MUST NOT BE REMOVED

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



**SILT ARRESTOR PIT - P3**

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.



**TYPICAL PIT DETAIL**

NOT TO SCALE

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	

ISSUE	PRINTS	ISSUED TO	DATE
1	EMAIL	BUILDER/CLIENT	26-6-24

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 107 STARKEY STREET**  
**KILLARNEY HEIGHTS**  
**FOR MRS. NI**

THIS DRAWING JOB NUMBER  
**STORMWATER C11739-16885**  
 DETAILS SH.1  
 BUILDER SHEET No. REVISION  
 CLARENDON HOMES **2 of 2**

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