

GENERAL

- 1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE OWNER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- 2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- 3. SETTING OUT DIMENSIONS SHOWN ON THE DRAWING SHALL BE VERIFIED BY THE CONTRACTOR.
- 4. DURING CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER-STRESSED.

STORMWATER DRAINAGE

- 1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH AS 3500.3.
- 2. PIPES OF 300mm DIA. AND UNDER SHALL BE UPVC TO AS 1254.
- 3. PIPES OF 375mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 TO AS 1342, RUBBER RING JOINTED UNO.
- 4. PIPES UP TO 150mm DIA. SHALL BE LAID AT A MINIMUM GRADE OF 1.0%. PIPES 225mm DIA. AND OVER TO BE LAID AT A MINIMUM GRADE OF 0.5%. UNO. BEDDING MATERIAL TO AS 2032 OR AS 3725 AS APPROPRIATE.
- 5. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 450mm IN CARPARK & ROADWAY AREAS UNO.
- 6. BACKFILL TRENCHES WITH APPROVED FILL, SUCH AS SANDY LOAM, COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY TO AS 1289. 5.1.1.
- 7. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS IN ACCORDANCE WITH AS 3500.3.2.
- 8. PITS SHALL BE OF REINFORCED CONCRETE CONSTRUCTION AS DETAILED. METAL GRATES AT LEVELS INDICATED ALL PITS DEEPER THAN 1000mm TO HAVE CLIMB IRONS.
- 9. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERT.
- 10. ALL LINES TO BE 100 DIA. AT 1% MIN. GRADE (U.N.O.)
- 11. ALL PITS TO BE BENCHED TO HALF PIPE SECTION AND TO HAVE GALVANISED STEEL GRATES AND SURROUNDS.
- 12. ALL PITS TO BE 600 SQUARE UNLESS NOTED OTHERWISE.
- 13. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
- 14. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- 15. SUBSOIL LINE: PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO AS 2439 PART 1. LAY PIPES ON FLOOR OF TRENCH GRADED 1% AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.

RAINWATER TANK NOTES

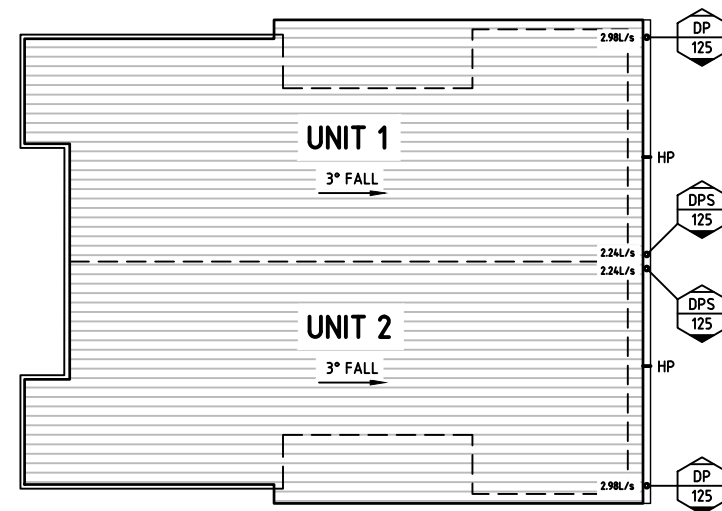
- 1. PUMP FOR RAINWATER TANK TO BE CONNECTED TO TOILETS, LAUNDRY AND GARDEN TAP FOR IRRIGATION.
- 1. PUMP MUST HAVE MAINS WATER BACKUP WITH AN APPROVED BACKFLOW PREVENTION DEVICE. DEVICE TO BE ACCESSIBLE FOR TESTING.
- 2. A FIRST FLUSH DEVICE OR FILTER BAG IS TO BE INSTALLED.
- 3. RAINWATER TANK MUST NOT BE CONNECTED TO THE MAIN DRINKING WATER SUPPLY.
- 4. RAINWATER TANK MUST CONTAIN A BYPASS OF THE PUMP IN THE EVENT OF A POWER FAILURE.
- 5. RAINWATER TANK MUST BE CONSTRUCTED IN ACCORDANCE WITH AUSTRALIAN STANDARD. AS/NZ 3500.1.2-2021: NATIONAL PLUMBING AND DRAINAGE - WATER SUPPLY- ACCEPTABLE SOLUTIONS, WHICH PROVIDES GUIDANCE ON THE DESIGN OF STORMWATER AND RAINWATER REUSE SYSTEMS.
- 6. RAINWATER TANK MUST BE PROVIDED WITH AN AIR GAP (SEE AS/NZ 3500.1.2 AND AS2845.2)
- 7. RAINWATER TANK MUST BE KEPT WELL MAINTAINED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURING REQUIREMENTS AND THE REQUIREMENTS OF SYDNEY WATER.

| SYMBOLS & NOTATION |  |
|--------------------|--|
|                    | PROPOSED STORMWATER DRAINAGE LINE Ø100 @ 1% MIN GRADE UNLESS NOTED OTHERWISE |
|                    | Ø90 AG LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN              |
|                    | GRATED PIT   |
|                    | 150 WIDE TRENCH GRATE  |
|                    | DENOTES HIGH POINT IN EAVE GUTTER  |
|                    | DOWN PIPE SIZE AND PROJECTION  |
|                    | DOWN PIPE SPREADER SIZE AND PROJECTION                                       |
|                    | OVERLAND FLOWS   |

| IFD TABLE |          |         |                   |
|-----------|----------|---------|-------------------|
| DURATION  | ARI (Yr) | AEP (%) | INTENSITY (mm/Hr) |
| 5 mins    | 20       | 5       | 187               |
| 5 mins    | 100      | 1       | 242               |

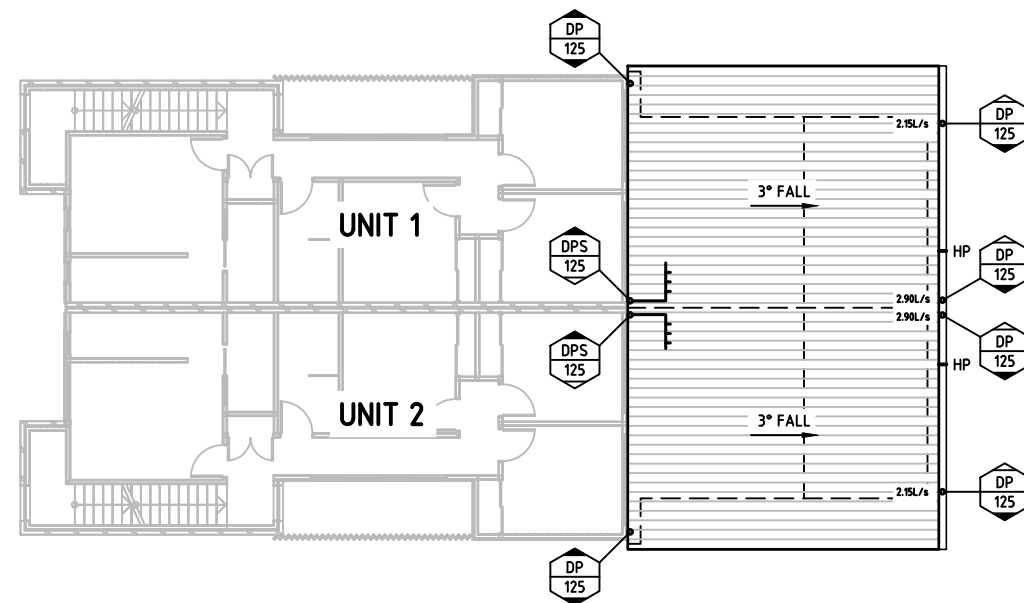
BEFORE EXCAVATION FOR PIPEWORK LOCATE DEPTH OF EXISTING SERVICES & CONTACT DIAL BEFORE YOU DIG

|            |               |            |     |   |  |  |  |                    |
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| A          | ISSUED FOR DA | 09/06/2023 | W.T | PROPOSED DUAL OCCUPANCY   |  | <div>MSL Consulting Engineers Pty Limited<br/>ABN 72 903 080 591<br/>ACN 142 291 165<br/>Suite 102 - 62 Harbour St. Wollongong NSW<br/>PO Box 567 Dapto NSW<br/>p: 02 4226 5247<br/>e: info@mslengineers.com.au<br/>w: www.mslengineers.com.au</div> | Drawn<br>W.T   | Date<br>09/06/2023 |
|            |               |            |     | LOT 37 DP 232662<br>13 GOWLLAND PARADE<br>PANANIA NSW 2213<br>PREPARED FOR:- TONY MARTORANO | ARCHITECTURE REFERENCE:<br>MARTOR DESIGN |  | Checked/Approved<br>Michael Pereira<br>B.E (civil) MIEAust NER | Scale<br>NTS @ A3  |
| AMENDMENTS |               |            |     |   |  |  | Job No 23150      Sheet No C01                                 | REV A              |



## UPPER ROOF DRAINAGE PLAN



SCALE 1:200





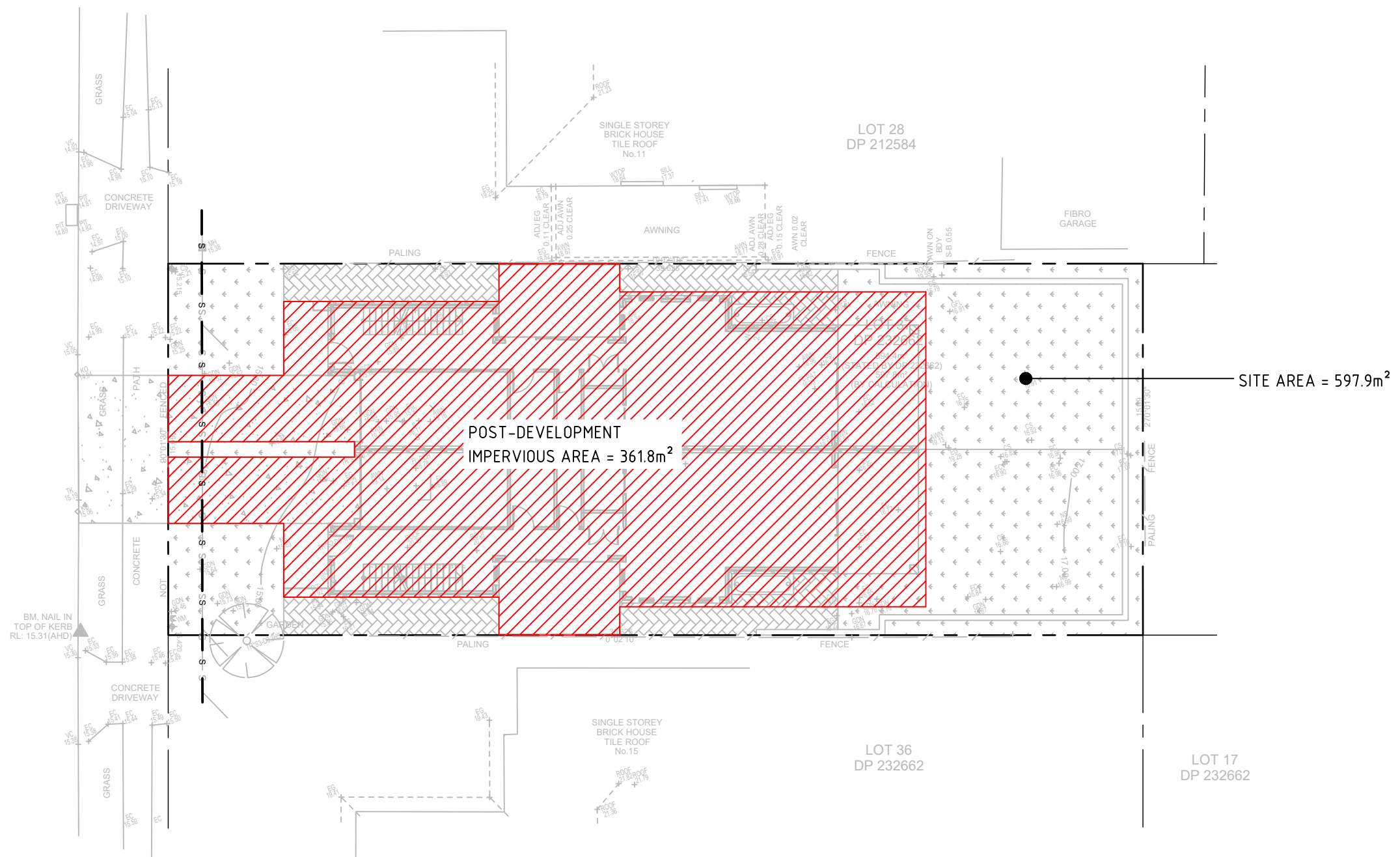
## LOWER ROOF DRAINAGE PLAN

SCALE 1:200

ALL GUTTERS TO HAVE A MINIMUM CROSS SECTIONAL AREA OF 9600mm<sup>2</sup> U.N.O. EAVES GUTTERS, INCLUDING DOWNPIPES TO BE INSTALLED SO THAT WATER WILL NOT FLOW BACK INTO THE BUILDING. ALL GUTTERS TO BE INSTALLED WITH A MINIMUM 1:500 GRADE OR STEEPER. ALL DOWNPIPES TO BE MIN. Ø125 OR 100x75mm U.N.O AND FITTED VERTICALLY TO THE SOLE OF EAVES GUTTERS. GUTTERS AND DOWNPIPES TO BE INSTALLED IN GENERAL ACCORDANCE WITH AS3500.3 (2021).

|            |               |            |     |   |  |   |   |  |                        |
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|            |               |            |     | <b>LOT 37 DP 232662</b><br><b>13 GOWLLAND PARADE</b><br><b>PANANIA NSW 2213</b><br>PREPARED FOR:- <b>TONY MARTORANO</b> | ARCHITECTURE REFERENCE:<br>MARTOR DESIGN |   |   | Checked/Approved<br>Michael Pereira<br>B.E (civil) MIEAust NER | Scale<br>AS SHOWN @ A3 |
| AMENDMENTS |               |            |     |   |  |   |   | Job No 23150 Sheet No C02                                      | REV A                  |

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| AMENDMENTS |               |            |     |   |  |  | Job No 23150   | Sheet No C03           |





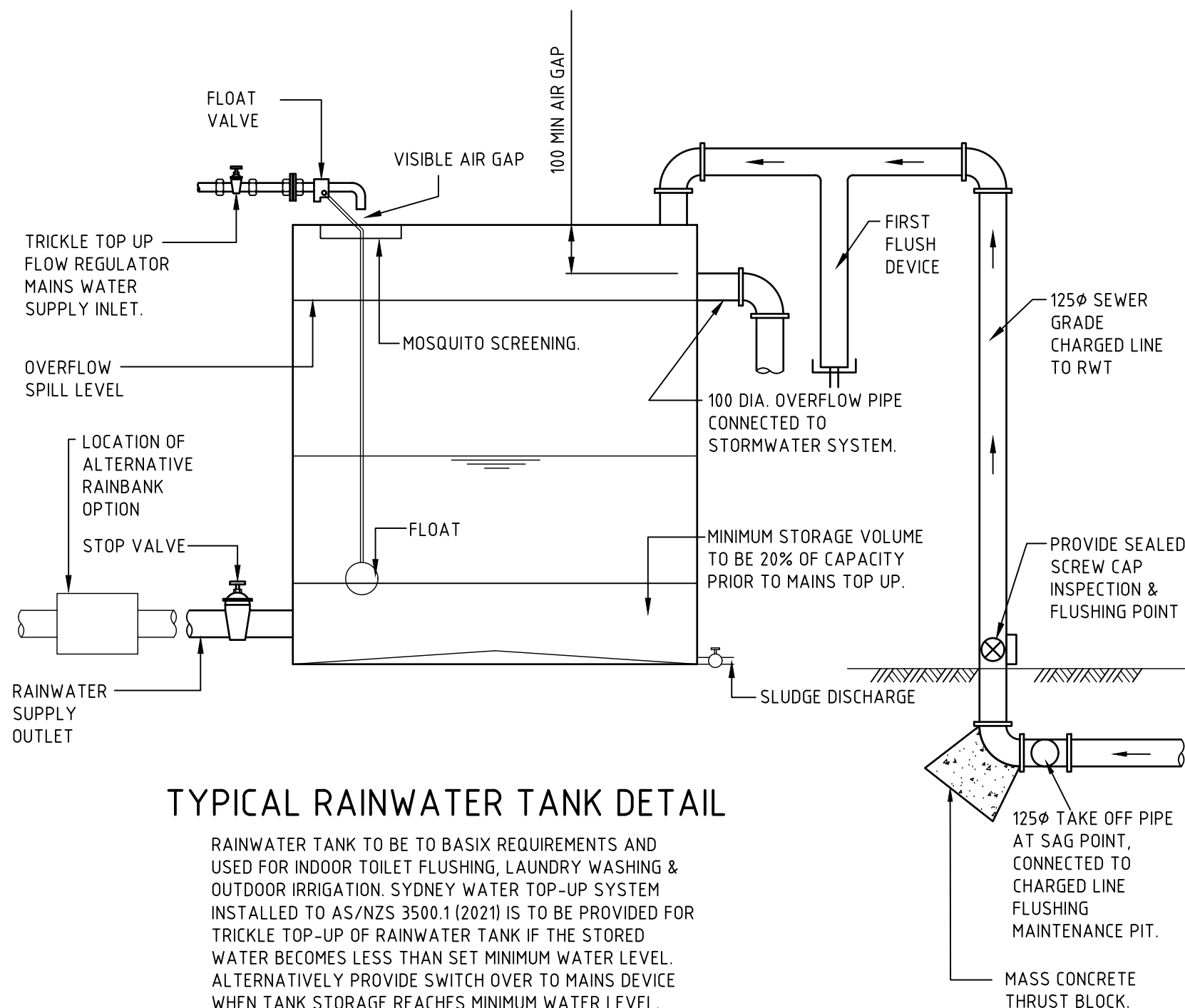
## POST-DEVELOPMENT IMPERVIOUS AREA

SCALE 1:200



DENOTES POST-DEVELOPMENT IMPERVIOUS AREA


|            |               |            |     |   |  |   |   |  |                               |
|------------|---------------|------------|-----|---|--|---|---|--|-------------------------------|
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| AMENDMENTS |               |            |     | PREPARED FOR:- <b>TONY MARTORANO</b>  |  |   |   | Job No <b>23150</b> Sheet No <b>C04</b>                        | <b>REV A</b>                  |

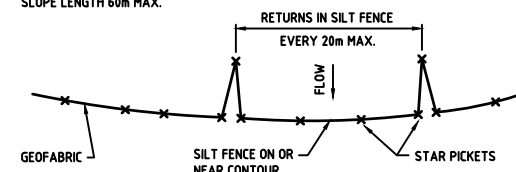


## TYPICAL RAINWATER TANK DETAIL

RAINWATER TANK TO BE TO BASIX REQUIREMENTS AND USED FOR INDOOR TOILET FLUSHING, LAUNDRY WASHING & OUTDOOR IRRIGATION. SYDNEY WATER TOP-UP SYSTEM INSTALLED TO AS/NZS 3500.1 (2021) IS TO BE PROVIDED FOR TRICKLE TOP-UP OF RAINWATER TANK IF THE STORED WATER BECOMES LESS THAN SET MINIMUM WATER LEVEL. ALTERNATIVELY PROVIDE SWITCH OVER TO MAINS DEVICE WHEN TANK STORAGE REACHES MINIMUM WATER LEVEL. (RAINBANK OR SIMILAR)

INSTALL FIRST FLUSH DEVICE TO RESTRICT LEAVES, DEBRIS, DUST AND OTHER CONTAMINATING MATERIAL ENTERING THE RAINWATER TANK AND POLLUTING THE WATER. VOLUME OF INITIAL STORAGE TO BE APPROXIMATELY 0.1m<sup>3</sup> WITH A 5mm DIAMETER LEAKAGE HOLE.

|            |               |            |     |   |  |   |  |                               |
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| AMENDMENTS |               |            |     |   |  |   | Job No <b>23150</b> Sheet No <b>C05</b>                        | <b>REV A</b>                  |

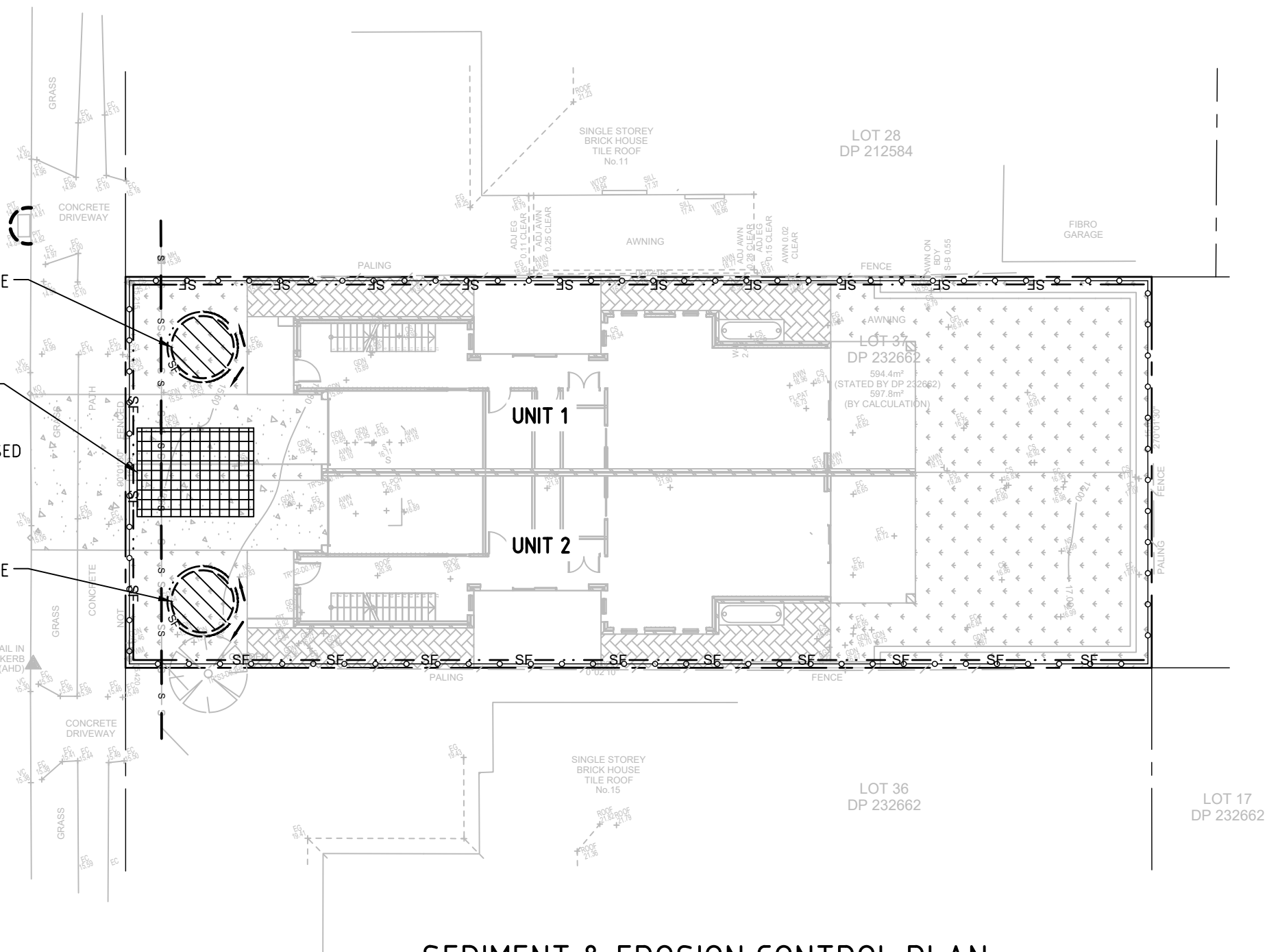
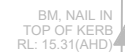


**SILT STOP FENCE - TYPICAL INSTALLATION**  
NOT TO SCALE



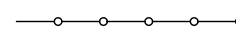
SITE ENTRY/EXIT  
(INDICATIVE ONLY)  
PROVIDE LOCKABLE  
GATE AND STABILISED  
SITE ENTRANCE

POSSIBLE STOCKPILE  
LOCATION  
(INDICATIVE ONLY)

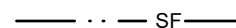


## SEDIMENT & EROSION CONTROL PLAN

SCALE 1:200



SITE FENCE



SILT STOP FENCE



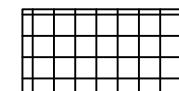
SEDIMENT TRAP FOR KERB INLET





GEOTEXTILE INLET FILTER



TOPSOIL STOCKPILE AREA. PROVIDE HAYBALE BARRIER ON DOWNSTREAM SIDE AND DIVERSION BANK ON UPSTREAM SIDE. IF STOCKPILE IS TO BE LEFT FOR MORE THAN 2 MONTHS, TEMPORARILY REVEGETATE FOR STABILISATION



SITE ENTRANCE/EXIT

|            |               |            |     |   |  |  |  |                            |       |
|------------|---------------|------------|-----|---|--|--|--|----------------------------|-------|
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| AMENDMENTS |               |            |     |   |  |  | Job No 23150   | Sheet No C06               | REV A |