

STORMWATER MANAGEMENT PLAN

SCALE 1 : 200 IN A1

OWNER SHOULD CONFIRM THAT THE EASEMENT THROUGH LOW LEVEL PROPERTIES ARE REJECTED PRIOR TO PROPOSE PUMP-OUT SYSTEM

EASEMENT THROUGH REAR PROPERTY OWNERS WERE REJECTED AFTER SEVERAL ATTEMPT. THE LETTER OF REFUSAL TO BE ATTACHED WITH THIS DOCUMENT.

DOWN PIPE TO BE INSTALLED NOT MORE THAN 12m INTERVALS

ANY GRATED PIT IN CHILDREN'S PLAY AREAS SHALL BE PROVIDED WITH CHILD PROOF "J" TYPE SPRING LOCK.

REMOVAL OF TREES SUBJECT TO COUNCIL APPROVAL

ROOF DRAINAGE SYSTEM TO COMPLY WITH PART 3.5.2.4(d) OF BCA AND CLAUSE 3.5 AND APPENDIX G OF AS/NZS 3500.3:3002 PLUMBING AND DRAINAGE STANDARDS

GUTTER SLOPE SHOULD BE 1 IN 500 MINIMUM AS PER AS/NZS:3500.3-2003

DOWN PIPE TO BE 90mm OR 100*75mm MINIMUM SIZE AND FOR 45 Sqm MAXIMUM

DESIGN AND LAYOUT OF PARKING AS PER AS2890.1-2004

ALL DEMOLITION OF ANY STRUCTURES SHOULD SATISFY AS 2601-1991

WARNING:

EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS SUPPLIED BY THE PUBLIC UTILITY AUTHORITIES. LOCATIONS HAVE INTERPRETED FROM THESE RECORDS AND ARE APPROXIMATE ONLY. EXTREME CAUTION SHOULD BE TAKEN WHEN EXCAVATING

ALL DRAINAGE AND PLUMBING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3:2 PLUMBING AND DRAINAGE CODE

STORMWATER DESIGN AND CONSTRUCTION SHOULD SATISFY BCA 3.1.2



SYMBOLS & NOTATIONS

- -- -- -- -- PROPOSED STORMWATER DRAINAGE LINE
- Grated Inlet Pit
- G. DESIGNED GRATE LEVEL
- I. INVERT LEVEL OF PIPE
- DP DOWN PIPE 90mm Dia. OR 100mm Dia
- SP SPREADER PIPE 90mm Dia. OR 100mm Dia
- RL REDUCED LEVEL (DESIGNED)
- -- -- -- -- SILT BARRIER FENCE
- ← SURFACE RUNOFF DIRECTION

CONCEPT PLAN

| | | | | | | | | |
|---|----------------------------------|------------|-------------------------|------------|--|--|-----------|---------------|
| | | | | | <div>Consulting Design and Inspection Engineers Pty. Ltd.</div> <div>STRUCTURAL, STORMWATER & CIVIL ENGINEERS.</div> <div>221 HOMEBUSH ROAD STRATHFIELD NSW 2135</div> <div>PHONE: 9642 0818 Email: yprabu@smartchat.net.au MOBILE: 0410 658886</div> <div>P Yoganathan (1172197) B.Sc., M.Eng.Sc., MIE Aust. CPEng. NER</div> | STORM WATER DISPOSAL AND SEDIMENT CONTROL PLAN | | |
| C | ISSUED FOR D.A | 12.07.2022 | | | | PROPOSED GRANNY FLAT AT 10 SHORTER AVENUE BEVERLY HILLS | | |
| B | ISSUED FOR D.A | 28.03.2022 | | | | | | |
| A | ISSUED FOR D.A | 24.02.2022 | Y.P | Y.P | | | | |
| | AMENDMENT OR REASON FOR ISSUE | ISSUE DATE | DRAWING COMPLETED BY | CHECKED BY | | | | |
| | | | | | | CLIENT | ARCHITECT | DWG. S1 OF S4 |
| | | | | | | MR. KEN | DEZKON | PROJ. 3662 |

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STORM WATER DISPOSAL AND SEDIMENT CONTROL PLAN

PROPOSED GRANNY FLAT AT 10 SHORTER AVENUE BEVERLY HILLS

CLIENT
MR. KEN

ARCHITECT
DEZKON

DWG. S1 OF S4
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STORMWATER DRAINAGE NOTES

ALL WORK IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT,
COUNCIL’S STANDARD SPECIFICATION & CODES & TO THE
SATISFACTION OF COUNCIL’S SUPERVISING OFFICER.

THIS PLAN TO BE READ IN CONJUNCTION WITH PLANS PREPARED
BY THE ARCHITECTS AND PLANS PREPARED BY THE STRUCTURAL
ENGINEERS.

ALL LINES TO BE 100 DIA. AT 1% MIN. GRADE UNLESS
NOTED UTERWISE ON PLAN.

INSTALL TEMPORARY SEDIMENT BARRIERS AROUND ALL INLET PITS
TO DETAIL UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED

CONTRACTOR IS TO VERIFY THE LOCATION & LEVEL OF ALL EXISTING
SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE

ALL PITS TO BE BENCHED TO HALF PIPE SECTION AND TO HAVE
GALVANISED STEEL GRATES AND SURROUNDS.

PIPE GRADES SHOWN ARE INDICATIVE MINIMUM.

PIPES ARE TO BE LAID TO I.L.LEVELS INDICATED AT PITS.

REDUNDANT VEHICLE CROSSINGS ARE TO BE REMOVED AND
REPLACED WITH INTERGRAL CONCRETE KERB & GUTTER
TO THE SATISFACTION OF COUNCIL.

PLANTER BOXES ARE TO BE LINED WITH ’BIDIM A24’ PERMANENT
GEOTEXTILE FABRIC. CONNECT PLANTERS, VIA FLOOR WASTES, TO
STORMWATER DRAINAGE AND DETENTION SYSTEM.

BALCONIES ARE TO BE CONNECTED, VIA FLOOR WASTES, TO THE
PROPOSED STORM WATER SYSTEM.

ABBREVIATED ROOF WATER
RUNOFF CALCULATIONS

ARI = 1:100 yr.

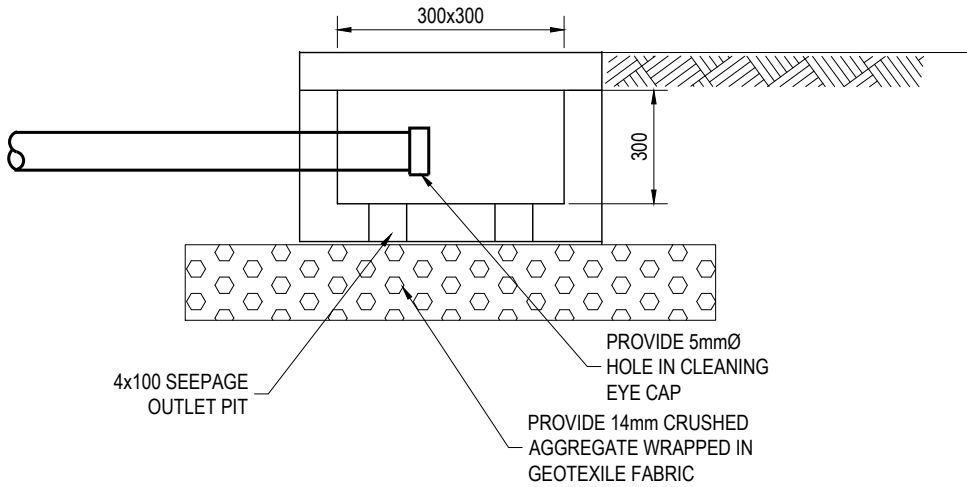
I = 223 mm/hr.

Tc = 5 mm.

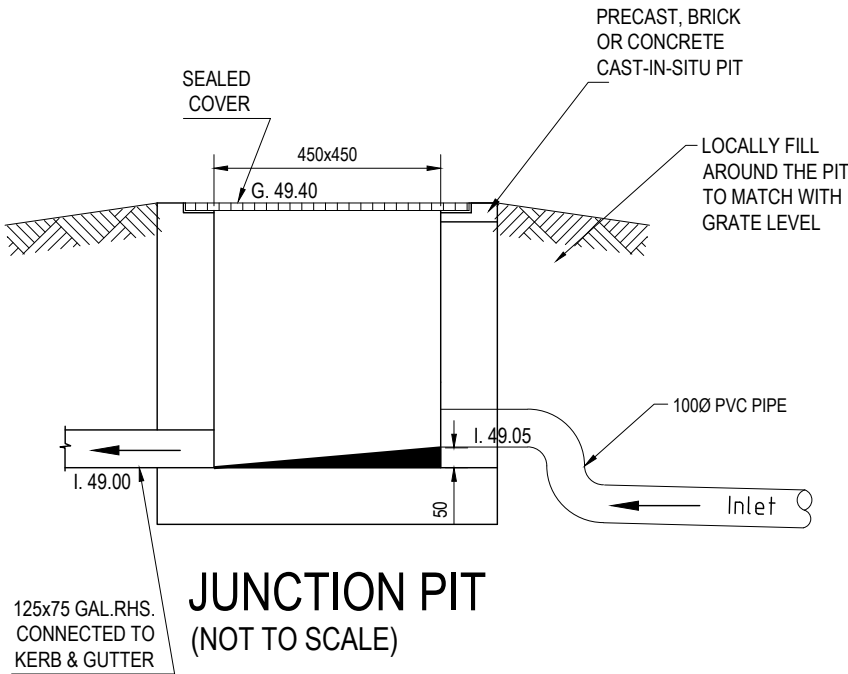
C = 1

Q = CIA/3600 l/s

RUNOFF RATE FOR EACH CATCHMENT AREAS ARE
MARKED ON THE PLAN.



TYPICAL CLEAN OUT PIT
NOT TO SCALE



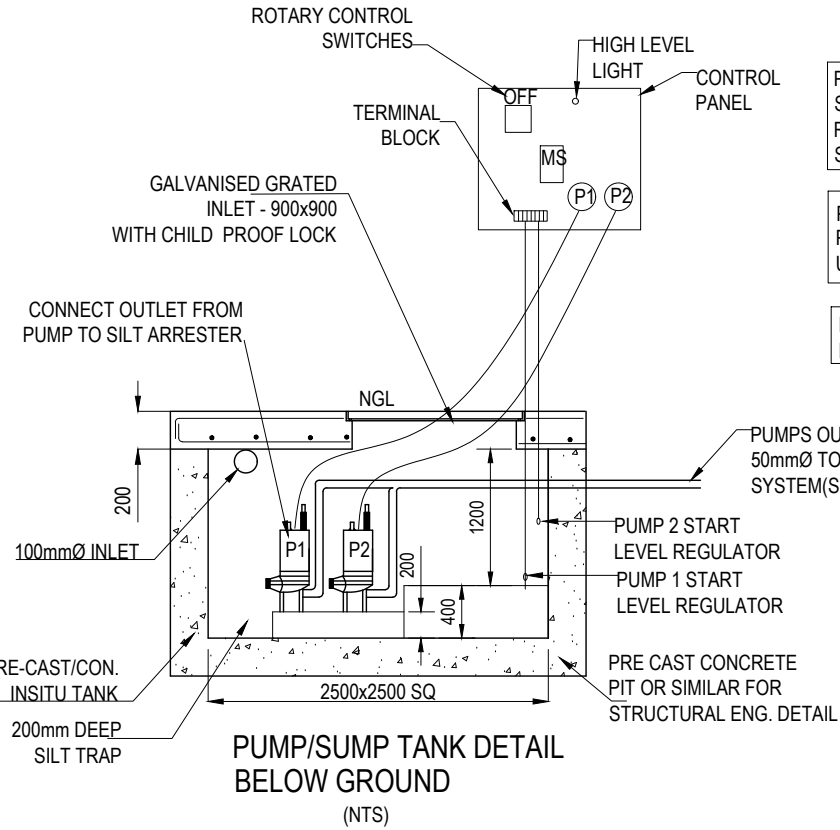
JUNCTION PIT
(NOT TO SCALE)

CONCEPT PLAN

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PUMP-SUMP CALCULATION

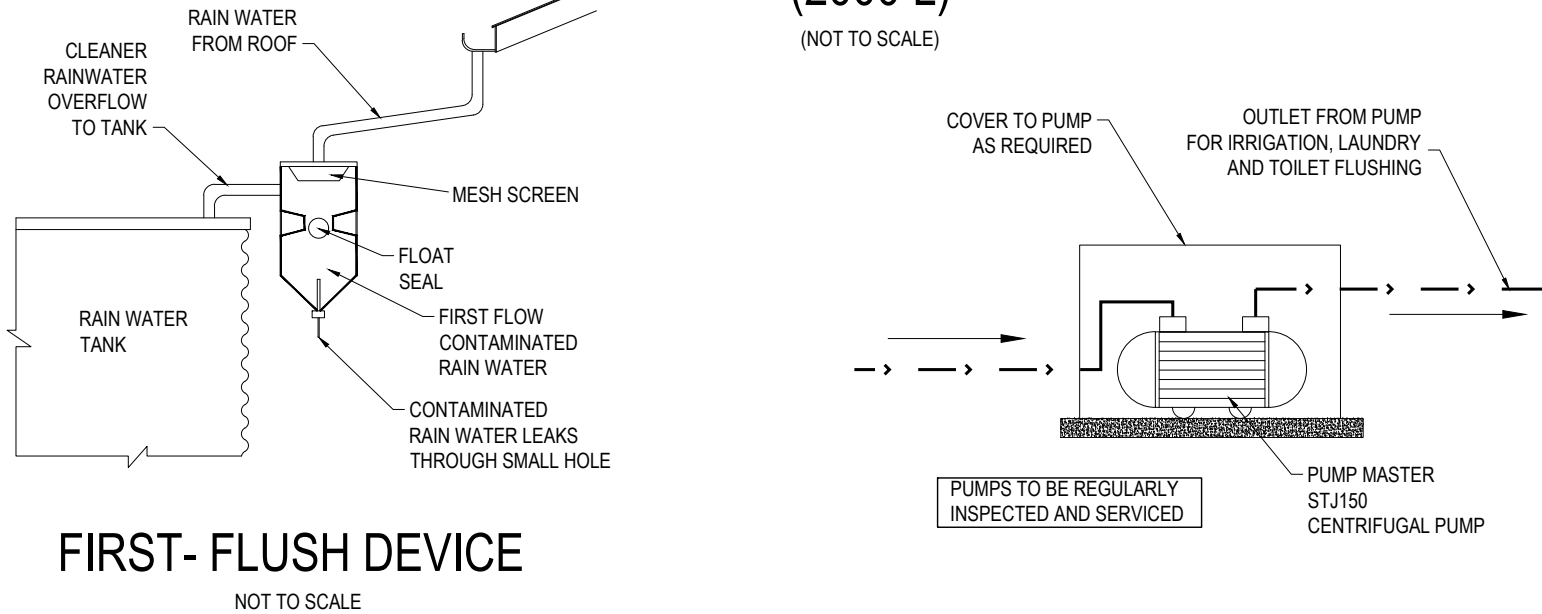
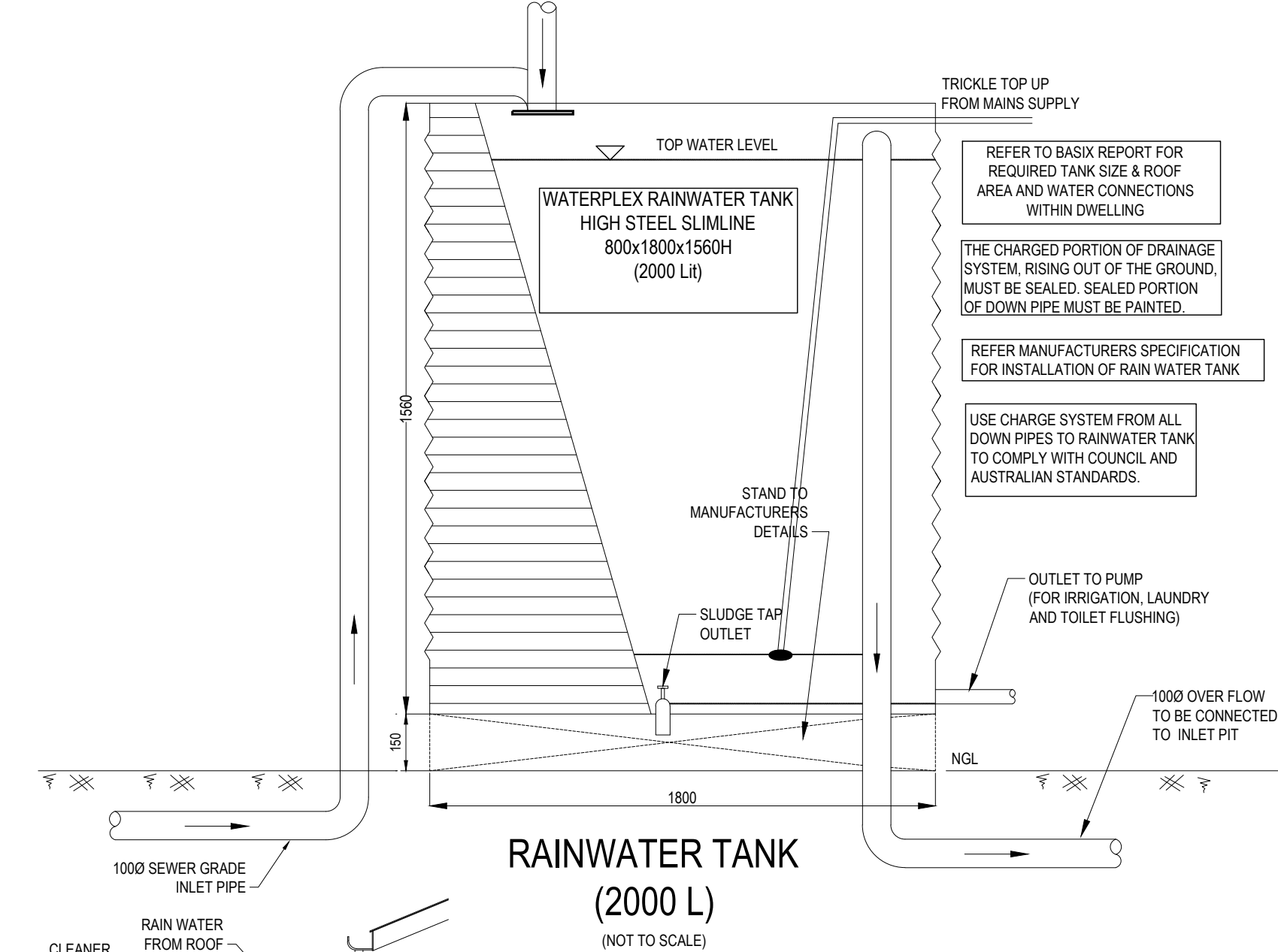
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|---|-------------------|--------------|------------------|-----------------------------|--------------------|------------------|
| Pit Dimensions | | | | | | |
| Length(m) | Width (m) | Depth(m) | Pit Volume | | | |
| 2.5 | 2.5 | 1.2 | 7.50 | Extra Above Ground Storage= | 0 | |
| Available Storage (m^3) = | | | 7.5 | | | |
| Calculating Inflows, Outflows and Storages | | | | | | |
| Contributing Areas (m^2)- | | Pervious | 30 | Impervious | 240 | |
| Equivalent Impervious Area (m^2) = | | 259.8 | | | | |
| Nominal Pump Rate (l/s) = | | 5 | | | | |
| Council's SWC minimum storage requirement - one hour 1 in 20 year storm (m^3) | | | | 17.8 | | |
| Time (min) | Intensity (mm/hr) | Inflow (l/s) | Inflow Vol (m^3) | Outflow Vol (m^3) | Required Vol (m^3) | Avail-Reqd (m^3) |
| 5 | 258 | 18.62 | 5.59 | 1.50 | 4.09 | 3.41 |
| 6 | 243 | 17.54 | 6.31 | 1.80 | 4.51 | 2.99 |
| 7 | 231 | 16.67 | 7.00 | 2.10 | 4.90 | 2.60 |
| 8 | 220 | 15.88 | 7.62 | 2.40 | 5.22 | 2.28 |
| 9 | 211 | 15.23 | 8.22 | 2.70 | 5.52 | 1.98 |
| 10 | 203 | 14.65 | 8.79 | 3.00 | 5.79 | 1.71 |
| 12 | 189 | 13.64 | 9.82 | 3.60 | 6.22 | 1.28 |
| 15 | 173 | 12.48 | 11.24 | 4.50 | 6.74 | 0.76 |
| 20 | 152 | 10.97 | 13.16 | 6.00 | 7.16 | 0.34 |
| 25 | 138 | 9.96 | 14.94 | 7.50 | 7.44 | 0.06 |
| 30 | 127 | 9.17 | 16.50 | 9.00 | 7.50 | 0.00 |
| 40 | 110 | 7.94 | 19.05 | 12.00 | 7.05 | 0.45 |
| 50 | 98 | 7.07 | 21.22 | 15.00 | 6.22 | 1.28 |
| 60 | 89 | 6.42 | 23.12 | 18.00 | 5.12 | 2.38 |
| 90 | 69 | 4.98 | 26.89 | 27.00 | -0.11 | 7.61 |
| 120 | 57 | 4.11 | 29.62 | 36.00 | -6.38 | 13.88 |
| 360 | 27.9 | 2.01 | 43.49 | 108.00 | -64.51 | 72.01 |
| NOTE THAT COLUMN 'Avail-Reqd' MUST BE POSITIVE FOR ALL VALUES. | | | | | | |



PROVIDE TWIN DUTY-STANDBY SUBMERSIBLE PUMPS, WITH ALL RELEVANT EQUIPMENT AS SPECIFIED BY MANUFACTURER

PUMP OUT SYSTEM
PUMP SUMP HOLDING CAPACITY = 7.5m3
USE 5.0 Lit/Sec PUMP CAPACITY

PUMPS TO BE REGULARLY INSPECTED AND SERVICED



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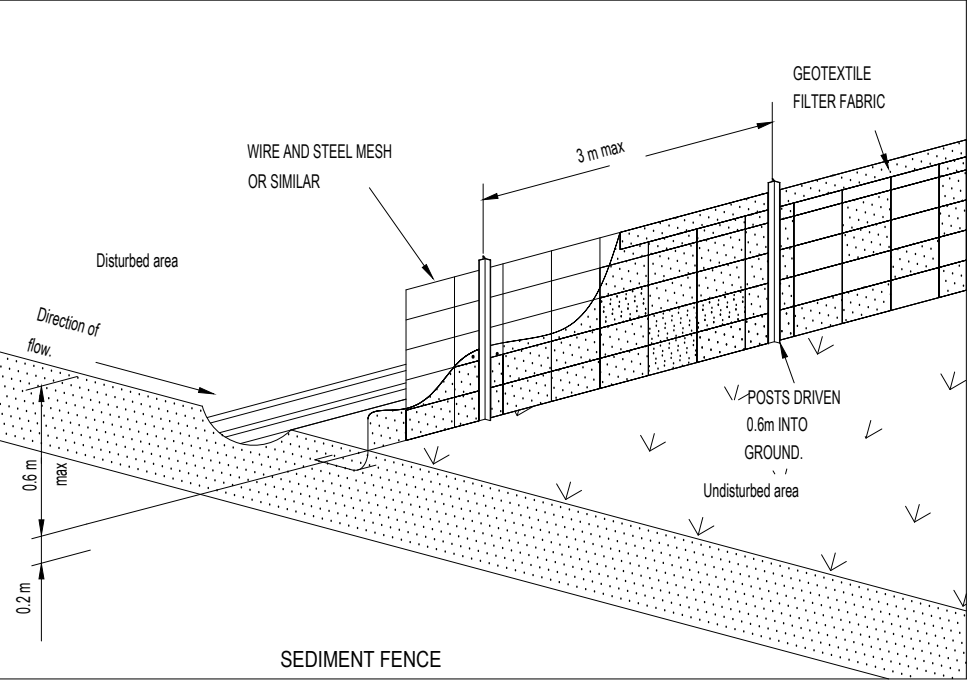
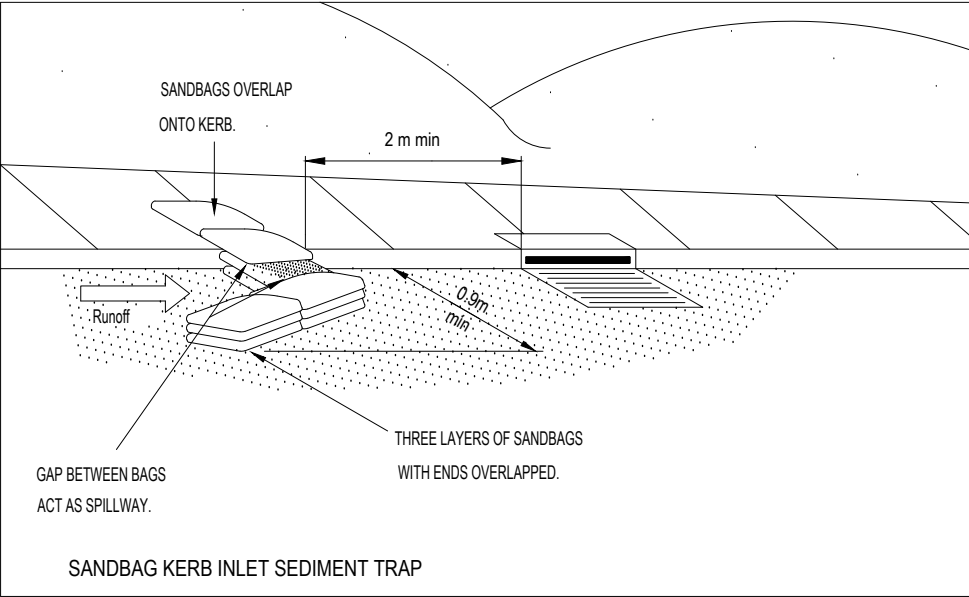
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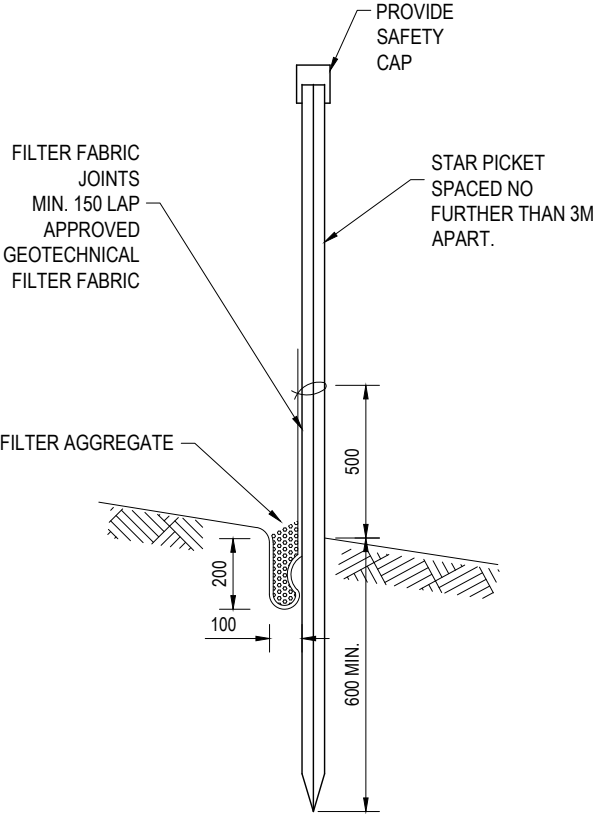
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SYMBOLS & NOTATIONS

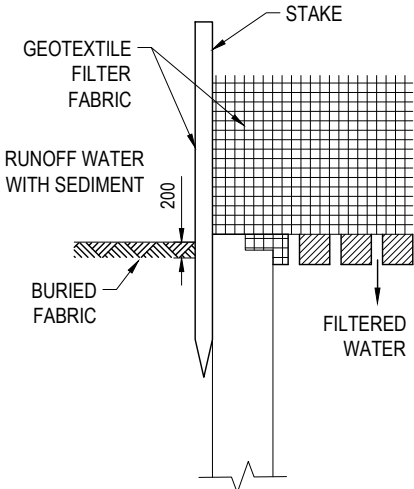


SILT FENCE BARRIER DETAIL

PROVIDE SILT FENCE AT BOUNDARY OF SITE AS SHOWN ON PLAN

SEDIMENT BARRIER AROUND PIT CONSTRUCTION NOTES

- 1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE
- 2. SUPPORT GEOTEXTILE WITH MESH TIED TO POSTS AT 1000mm CENTRES.
- 3. DO NOT COVER INLET WITH GEOTEXTILE.
- 4. INSTALL & SUPPOY GEOTEXTILE AS PER SITE FENCE BARRIER DETAIL.



SEDIMENT CONTROL NOTES

- 1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED TO THE STANDARDS OF THE SOIL CONSERVATION OF NSW.
- 2. ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILIZED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
- 3. SEDIMENT TRAPS SHALL BE CONSTRUCTED AROUND ALL INLET PITS, CONSISTING OF 300mm WIDE X 300mm DEEP TRENCH.
- 4. ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM OF 60 % FULL OF SOIL MATERIALS, INCLUDING THE MAINTENANCE PERIOD.
- 5. ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED.
- 6. SOIL AND TOPSOIL STOCKPILES SHALL BE LOCATED AWAY FROM DRAINAGE LINES AND AREA WHERE WATER MAY CONCENTRATE.
- 7. FILTER SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR APPROVED EQUIVALENT BETWEEN POST AT 2.0m CENTRES. FABRIC SHALL BE BURIED 150mm ALONG ITS LOWER EDGE

EROSION & SEDIMENT CONTROL

- 1. SEDIMENT CONTROL DEVICES ARE TO BE IN PLACE PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
- 2. CONSTRUCT A SILT BARRIER FENCE WHERE SHOWN ON PLAN AND TO DETAILS ABOVE.
- 3. SEDIMENT CONTROL DEVICES ARE TO BE MAINTAINED, IN GOOD WORKING ORDER, UNTIL COMPLETION OF ALL SITE WORKS OR TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
- 4. PROVIDE HAY BALE BARRIERS AROUND ALL EXISTING SURFACE INLET PITS DURING CONS.
- 5. INSTALL STABILISED SITE ACCESS IF REQUIRED BY COUNCIL AS PER COUNCIL'S DETAIL.

CONCEPT PLAN

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