

STORMWATER DRAINAGE CONCEPT

618 BARRENJOEY ROAD , AVALON

NOTES:

1. MAIN STORMWATER DRAINS SHALL FALL AS NOTED. HOWEVER, ALL OTHER BRANCH DRAINS SHALL HAVE A MINIMUM GRADE OF 1%.
2. STORMWATER DRAINS PIPES OF SIZE LESS THAN 300mm SHALL BE DWV GRADE PVC WITH SOLVENT CEMENT JOINTS.
3. PITS LOCATED IN DRIVEWAY AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - TYPE D.
4. STORMWATER PITS TO LANDSCAPED AND PEDESTRIAN AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - TYPE A.
5. ALL WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE RELEVANT COUNCIL / AUTHORITY, AS 3500.3, AS 2032, AS 3996 AND AS 3725.
6. AT THE COMPLETION OF THE WORKS PROVIDE A "WORK AS EXECUTED" PLAN OF THE STORMWATER DRAINAGE AND DETENTION SYSTEM. THE PLAN SHALL BE PREPARED AND CERTIFIED BY THE REGISTERED SURVEYOR AND SHOW ALL PIPE SIZES, INVERTS, PIT COVER AND BASE LEVELS AND ALL DETENTION TANK DIMENSIONS, SURFACE LEVELS AND THE ORIFICE PLATE SIZE.
7. PITS SHALL BE CI & D PRECAST CONCRETE OR APPROVED EQUAL WITH EXTENSION RISERS AS REQUIRED. PITS SHALL BE BEDDED ON A 50mm LAYER OF 4:1 CEMENT MORTAR AND BACKFILLED WITH EXCAVATED MATERIAL IN 200mm THICK COMPACTED LAYERS TO FINISHED SURFACE LEVEL.
8. COVERS TO PITS LOCATED WITHIN PAVED AREAS SHALL BE CAST IN WITH THE CONCRETE POUR. ALL OTHER PIT COVERS SHALL BE PROVIDED WITH A 150mm CONCRETE SURROUND.
9. PROVIDE 25mm DIAMETER GALVANIZED STEP-IRONS AT INTERVALS OF 300mm WHERE THE INTERNAL DEPTH OF THE PIT EXCEEDS 1200mm.

DESIGN CRITERIA:

TOTAL SITE AREA 282 m2
IMPERVIOUS AREA 237 m2
PERVIOUS AREA 44.60 m2
STORM INTENSITY USED 168 mm/hr - 5 MIN / 20 year storm

ON SITE DETENTION - OSD: IS REQUIRED TO COMPLY WITH NORTHERN BEACHES COUNCIL STORMWATER MANAGEMENT POLICY

DETENTION AREA/ TO MEET NORTHERN BEACHES COUNCIL CODE
DETENTION VOLUME AS PER NORTHERN BEACHES COUNCIL STORMWATER MANAGEMENT CODE.

RAINWATER REUSE TANK VOLUME 2,000 LITRES.

EXISTING SITE DISCHARGE IS BY INFILTRATION.
INTERNAL DRAINAGE PIPE SIZING CALCULATIONS IS BASED ON THE INTENSITY FROM A 20 YEAR STORM EVENT.

DOWNPIPE SIZING 150MM DIA OR 100 MM DIA AS NOMINATED.

NORTHERN BEACHES COUNCIL STORMWATER MANAGEMENT CODE USED AS BASIS FOR THE STORMWATER DESIGN

CATCHMENT SCHEDULE:

AREA No	AREA IN M2	SURFACE TYPE	IMPERVIOUS
1	8.8M2	GARDEN	N
2	3.78M2	PAVING	Y
3	37.8M2	DRIVEWAY PAVEMENT	Y
4	4.0M2	PAVEMENT	Y
5	33.08M2	ROOF	Y
6	6.6M2	GARDEN	N
7	11.5M2	GARDEN	N
8	109.5M2	ROOF	Y
9	12.2M2	ROOF	Y
10	9.88M2	DECK	Y
11	9.70M2	DECK	Y
12	11.80M2	SOAK AWAY	N
13	7.80M2	GRASS	N
14	9.88M2	GRASS	N

LEGEND

- STW : STORMWATER DRAINAGE
SS : SUB-SOIL DRAINAGE
SWP 600 X 600 RL IL : STORMWATER PIT
SPC 600 X 600 RL IL : SEALED STORMWATER PIT
RWO : RAINWATER OUTLET
CO : SUBSOIL CLEAROUT
LINE SIZE REDUCER
CONTOUR LINES
BOUNDARY
RL : RELATIVE LEVEL
IL : INVERT LEVEL
SSRM : SUB-SOIL RISING MAIN
DP 100 : DOWNPIPE



SITE LOCATION PLAN

DA APPROVAL

ARCHITECT:

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SCALE: As indicated @ A3

PROJECT:

#2024062
618 BARRENJOEY RD
AVALON NSW 2107

CLIENT:

DRAWING TITLE:

HYDRAULIC SERVICES
COVER SHEET & NOTES

SHEET NUMBER:

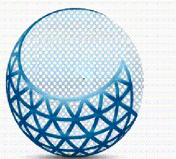
STW-00

DATE: 10/06/2024

REV:

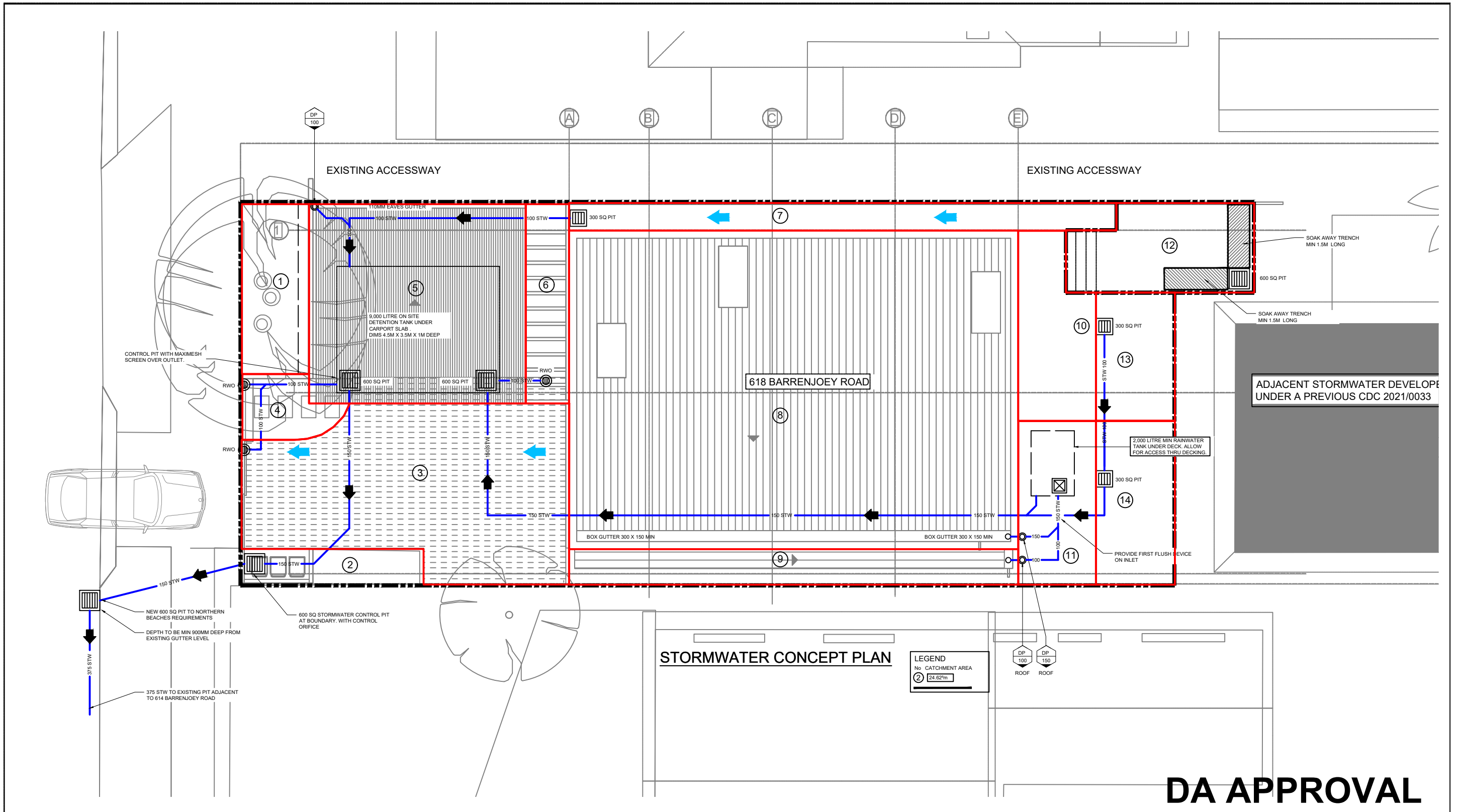
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HYDRAULIC CONSULTANT:



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SCALE: As indicated @ A3

PROJECT:

#2024062
618 BARRENJOEY RD
AVALON NSW 2107

CLIENT:

DRAWING TITLE:

PROPOSED PLAN
HYDRAULIC SERVICES

SHEET NUMBER:

STW-01

DATE: 10/06/2024

REV:

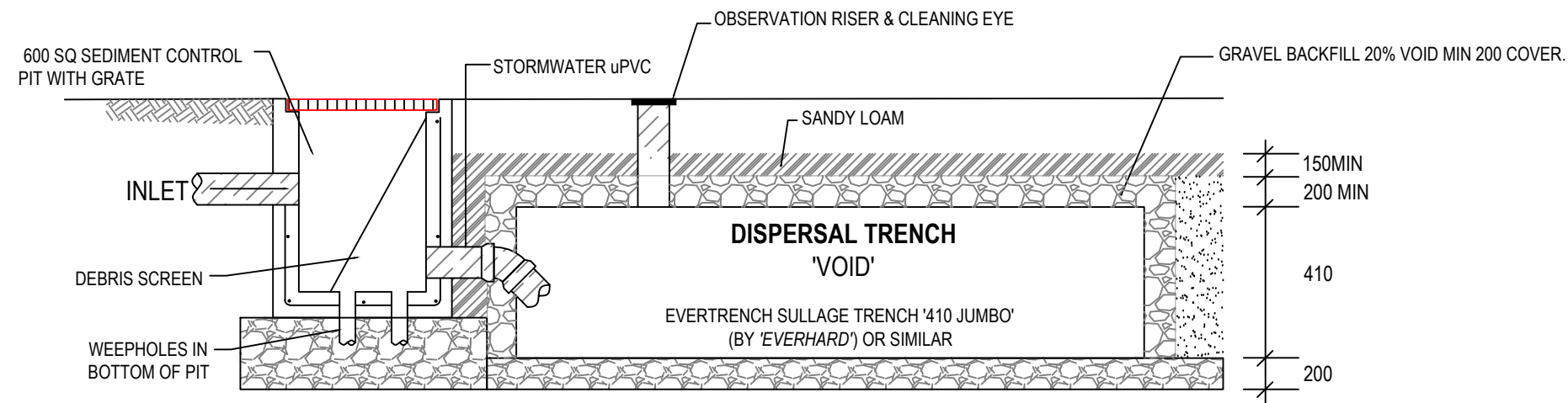
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HYDRAULIC CONSULTANT:



MESH GROUP P/L

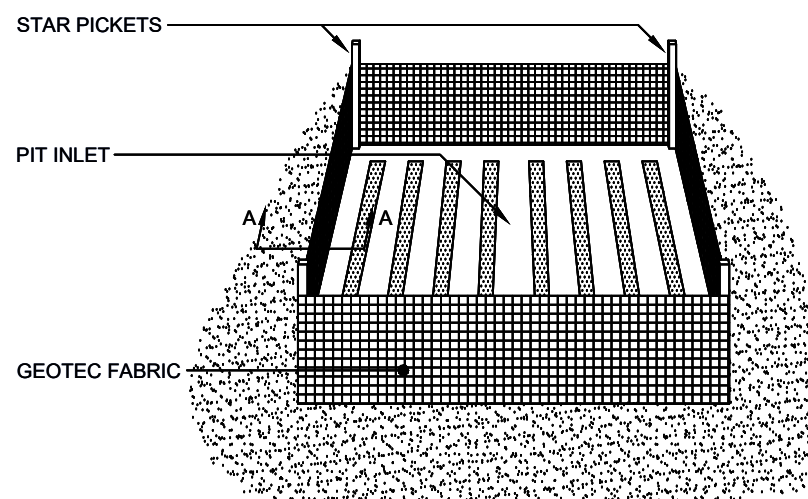
10 POPLAR PLACE, PICTON NSW 2571
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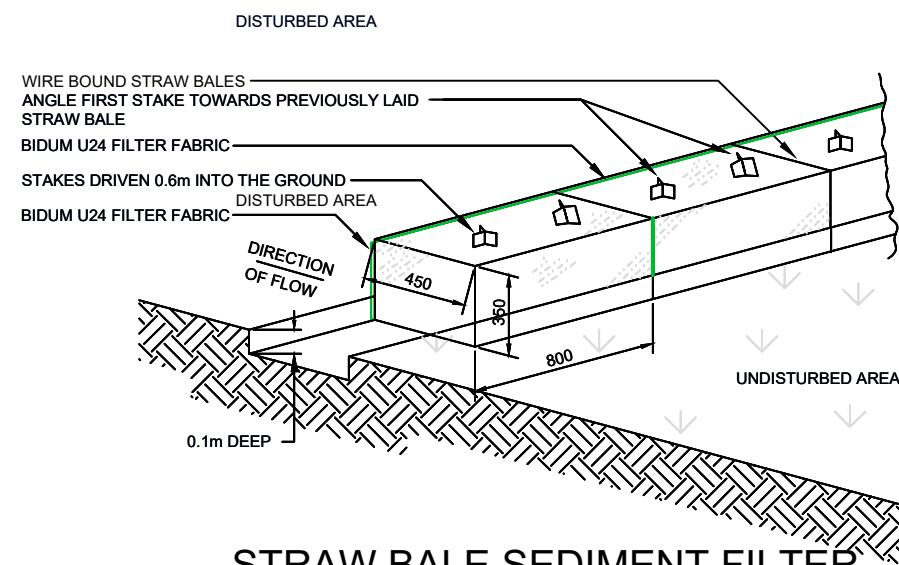
**EVERTRENCH 410 JUMBO
ABSORPTION TRENCH SECTION**

Scale 1:20

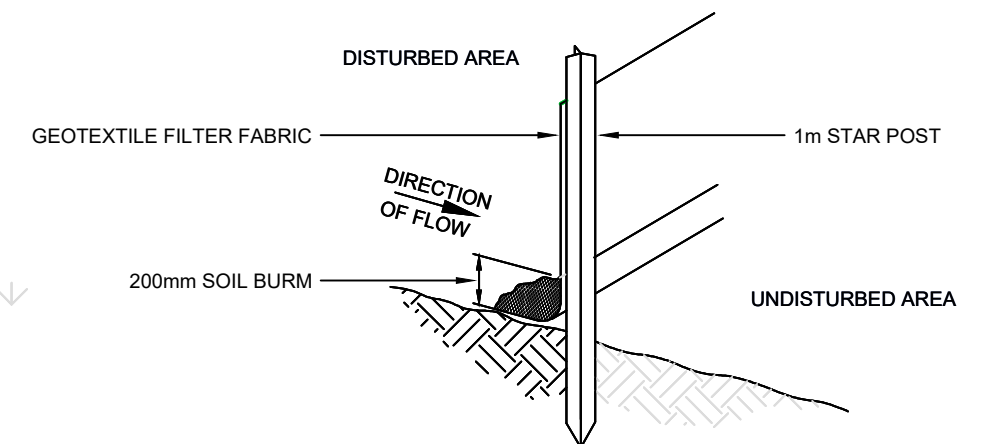
SEDIMENT AND EROSION CONTROL MEASURES



SWP WITH SEDIMENT FENCE
N.T.S



STRAW BALE SEDIMENT FILTER
N.T.S



SEDIMENT FILTER FENCE
N.T.S

DA APPROVAL

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SCALE: As indicated @ A3

PROJECT:

#2024062
**618 BARRENJOEY RD
AVALON NSW 2107**

CLIENT:

DRAWING TITLE:

**HYDRAULIC SERVICES
DETAIL SHEET No 1**

SHEET NUMBER:

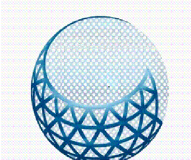
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DATE: 10/06/2024

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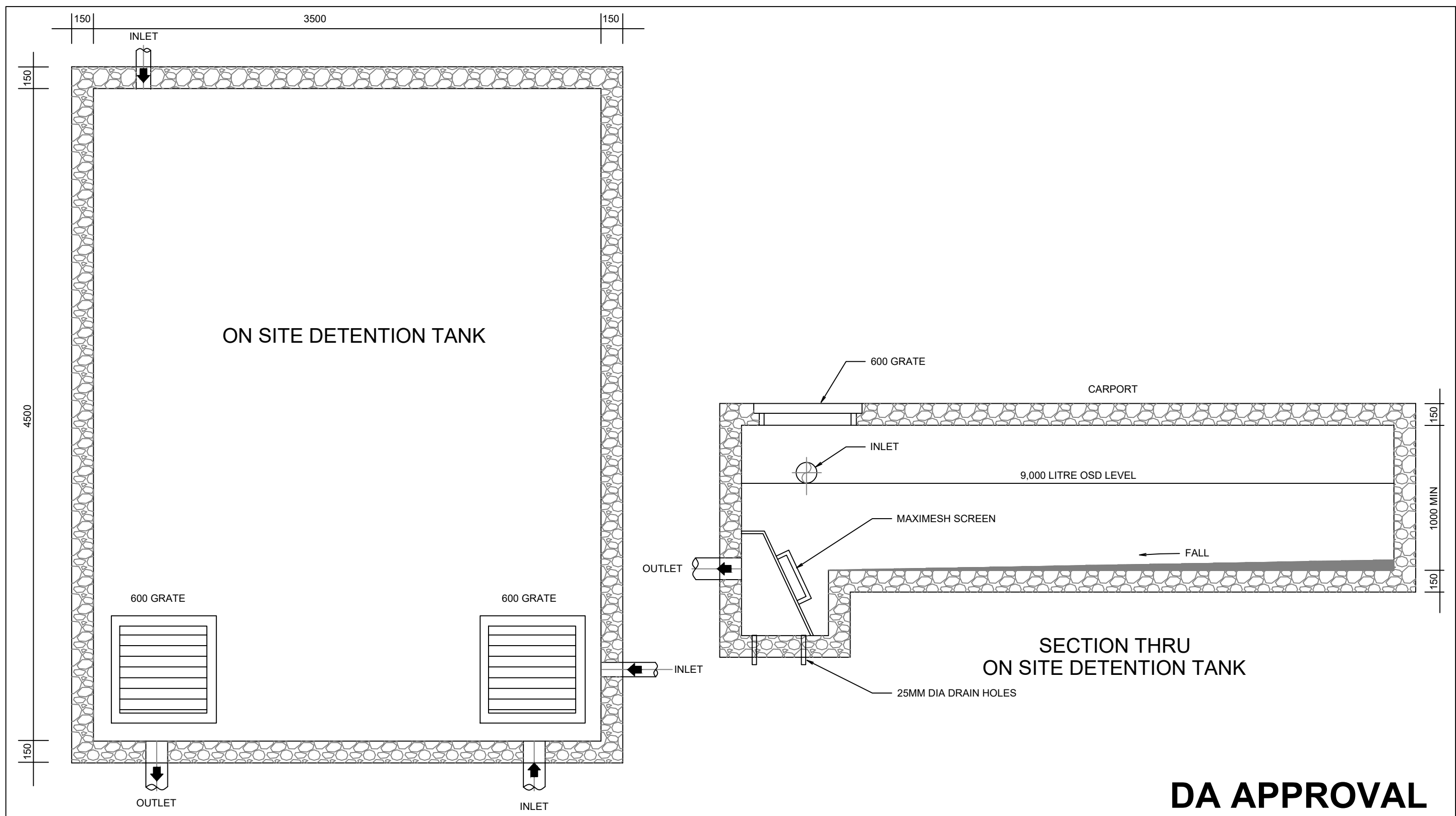
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SCALE: As indicated @ A3

PROJECT:

#2024062
**618 BARRENJOEY RD
AVALON NSW 2107**

CLIENT:

DRAWING TITLE:

**HYDRAULIC SERVICES
DETAIL SHEET No2**

SHEET NUMBER:

STW-03

DATE: 10/06/2024

REV:

A

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