

NOTE RE. SERVICES

APPROXIMATE LOCATIONS OF EXISTING SERVICES SHOWN ON LONGITUDINAL SECTION. EXACT LOCATIONS & DEPTHS TO BE ACCURATELY LOCATED BY THE BUILDING CONTRACTOR BY CONTACTING THE RELEVANT AUTHORITIES BEFORE COMMENCEMENT OF ANY WORKS



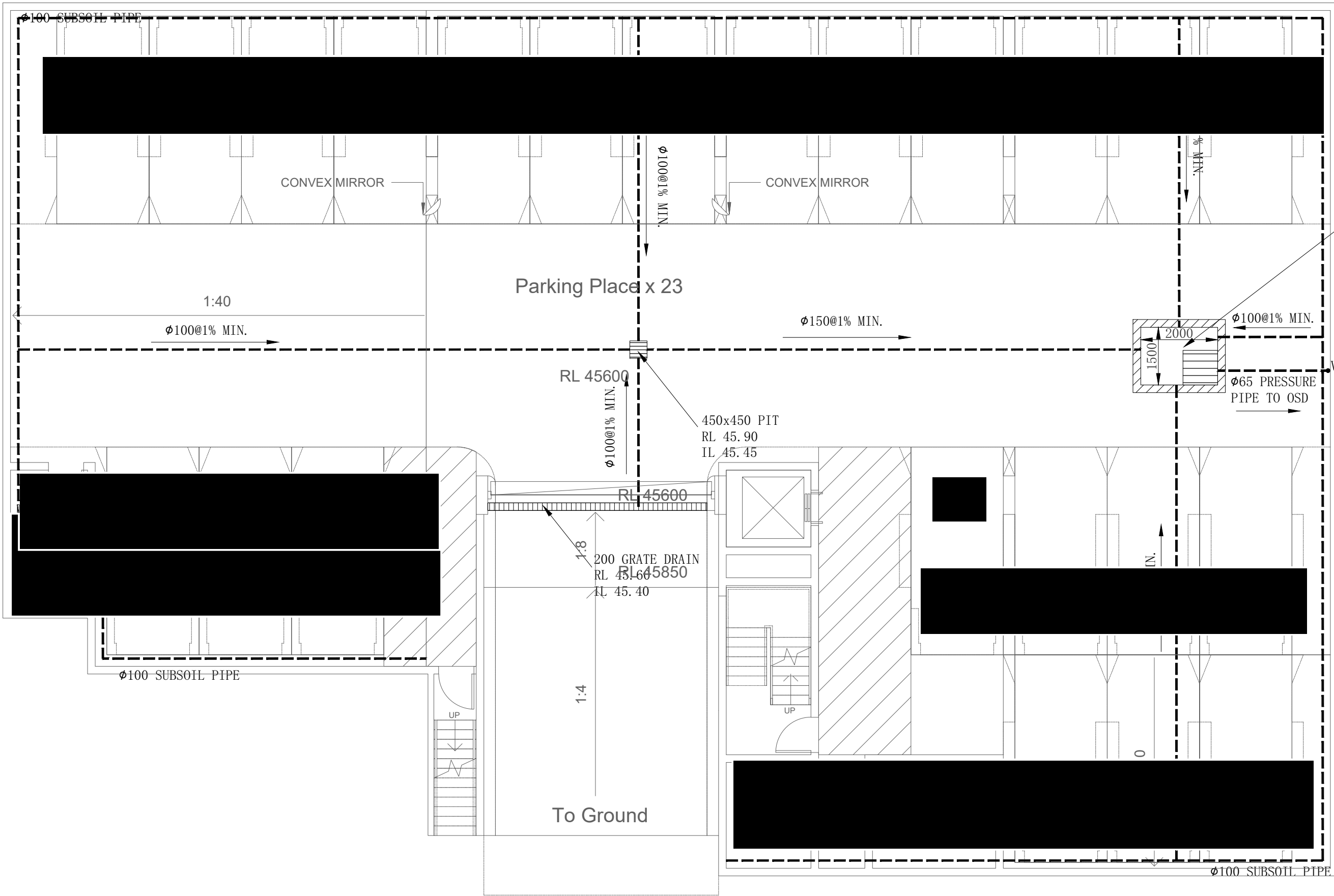
NOTES

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SYMBOLS

F.F.L.	FINISHED FLOOR LEVEL
T.K.	TOP OF KERB
RL	PIT SURFACE LEVEL
IL	INVERT LEVEL
---	STORMWATER DRAINAGE PIPE
---	DOWNPIPE TO RAINWATER TANK
•DP	100 $\phi$ DOWN PIPE (U.N.O.)
•SP	SPREADER
•IE	INSPECTION EYE
////	MASONRY RETAINING WALL
FW	FLOOR WASTE 150 $\phi$
■	GRATED INLET PIT
▨	GRATED DRAIN
←	OVERLAND FLOW PATH
ES	EMERGENCY SPILTTER
VD	VERTICAL DROP
•EDP	EXISTING 100 $\phi$ DOWN PIPE (U.N.O.)
---	EXISTING STORMWATER DRAINAGE PIPE

91.408



PUMP WELL  
2.00x1.50x1.00 DEPTH OF WATER  
TWL 45.60  
RL 45.90  
IL 44.60  
(SUBMERSIBLE AUTOMATIC PUMPS WORKING AT ALTERNATIVE LEVELS WITH ALARM)

34.748

71.749

BASEMENT STORMWATER DRAINAGE PLAN

SCALE 1:100

C	FOR DA APPROVAL	SH	IN	02/08/21	
B	FOR DA APPROVAL	SH	IN	15/07/21	
A	FOR DA APPROVAL	SH	IN	22/07/19	
Rev	Description	By	App	Date	

Rev	Description	By	App	Date	

Engineering Consultant

STRONGHOLD ENGINEERS  
Email: admin@shens.com.au  
Suite 79 89-97 JONES STREET  
ULTIMO NSW 2007

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799 Pacific Highway, Chesham NSW 2067  
Phone (02) 80983119 Email info@dreamscapes.com.au  
Website www.dreamscapes.com.au ACN 109 027 006

Project

619-621 HUME HWY,  
CASULA, NSW

Drawing Title

BASEMENT STORMWATER  
DRAINAGE PLAN

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NOT FOR CONSTRUCTION

Project Number	Drawing Number	Revision
SH18171	ST01	C
Engineer	Drawn	
SH	IN	
Date	Scale	
JUL 2019	1:100 A1	

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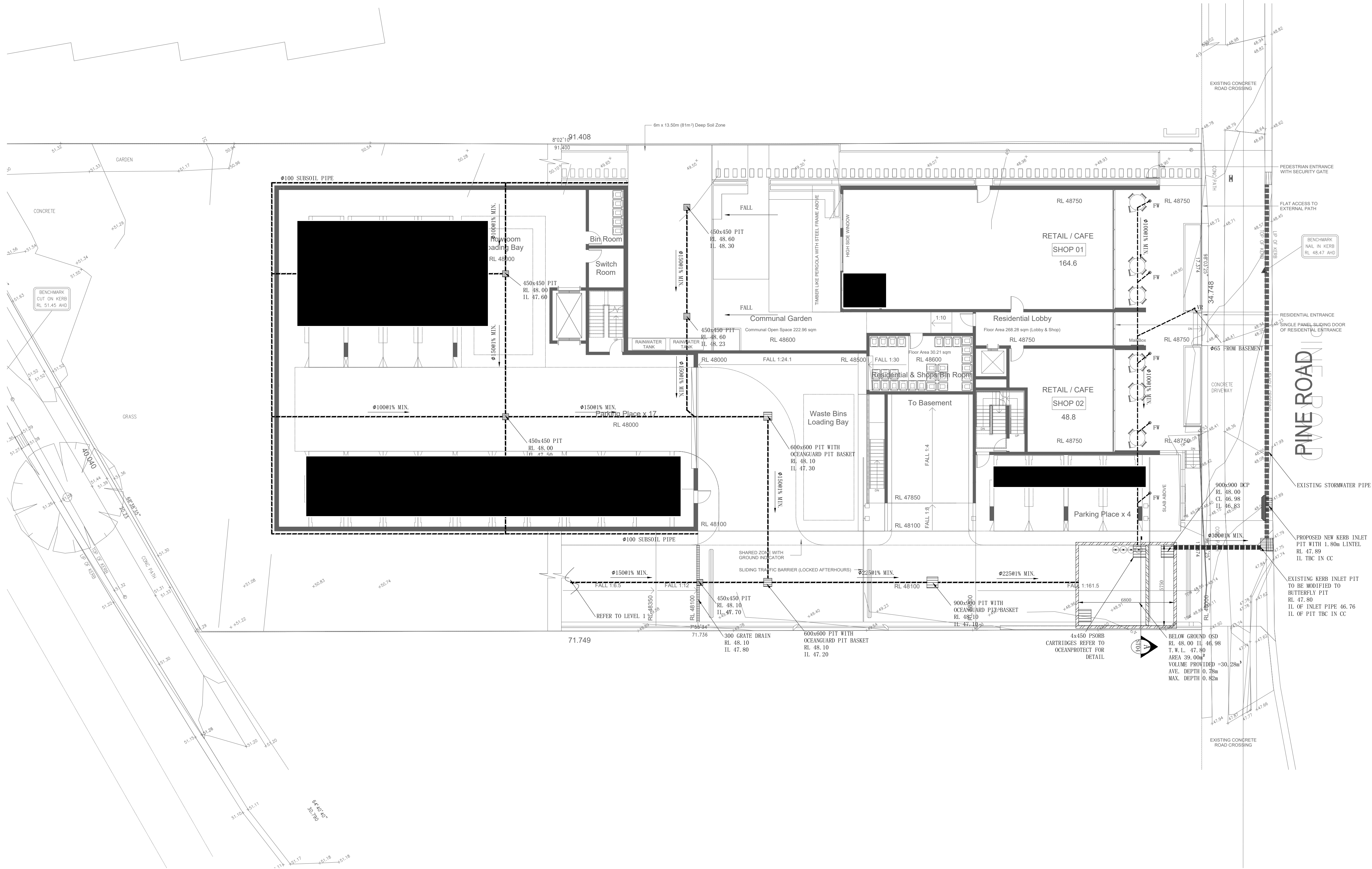


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• IE	INSPECTION EYE
///	MASONRY RETAINING WALL
FW	FLOOR WASTE 150 $\phi$
■	GRATED INLET PIT
■	GRATED DRAIN
←	OVERLAND FLOW PATH
ES	EMERGENCY SPILLER
VD	VERTICAL DROP
• EDP	EXISTING 100 $\phi$ DOWN PIPE (U.N.O.)
---	EXISTING STORMWATER DRAINAGE PIPE



SITE STORMWATER DRAINAGE PLAN

SCALE 1:150

Rev	Description	By	App	Date
C	FOR DA APPROVAL	SH	IN	02/08/21
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Engineering Consultant

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Technological Engineers

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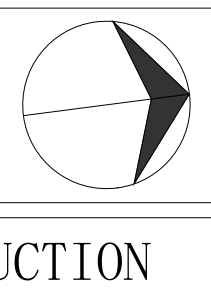
Project

**619-621 HUME HWY,  
CASULA, NSW**

Drawing Title

**SITE STORMWATER DRAINAGE  
PLAN**

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Project Number	Drawing Number	Revision
SH18171	ST02	C
Engineer	Drawn	
SH	IN	
Date	Scale	
JUL 2019	1:100 A1	

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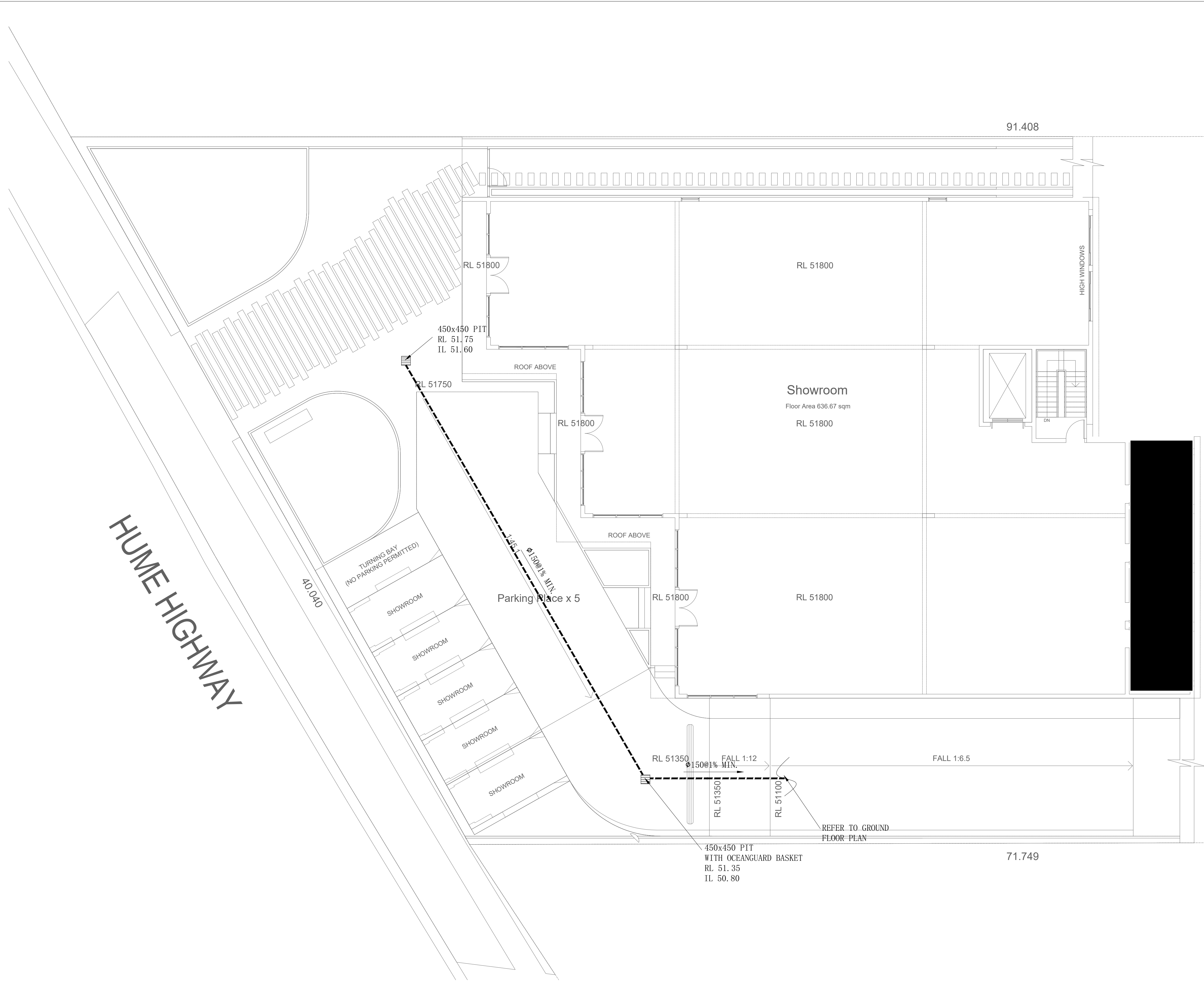


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LEVEL 1 STORMWATER DRAINAGE PLAN

SCALE 1:100

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C	FOR DA APPROVAL	SH	IN	02/08/21
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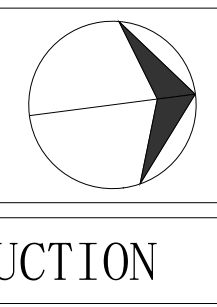
Project

619-621 HUME HWY,  
CASULA, NSW

Drawing Title

LEVEL 1 STORMWATER DRAINAGE  
PLAN

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SH18171	ST03	C
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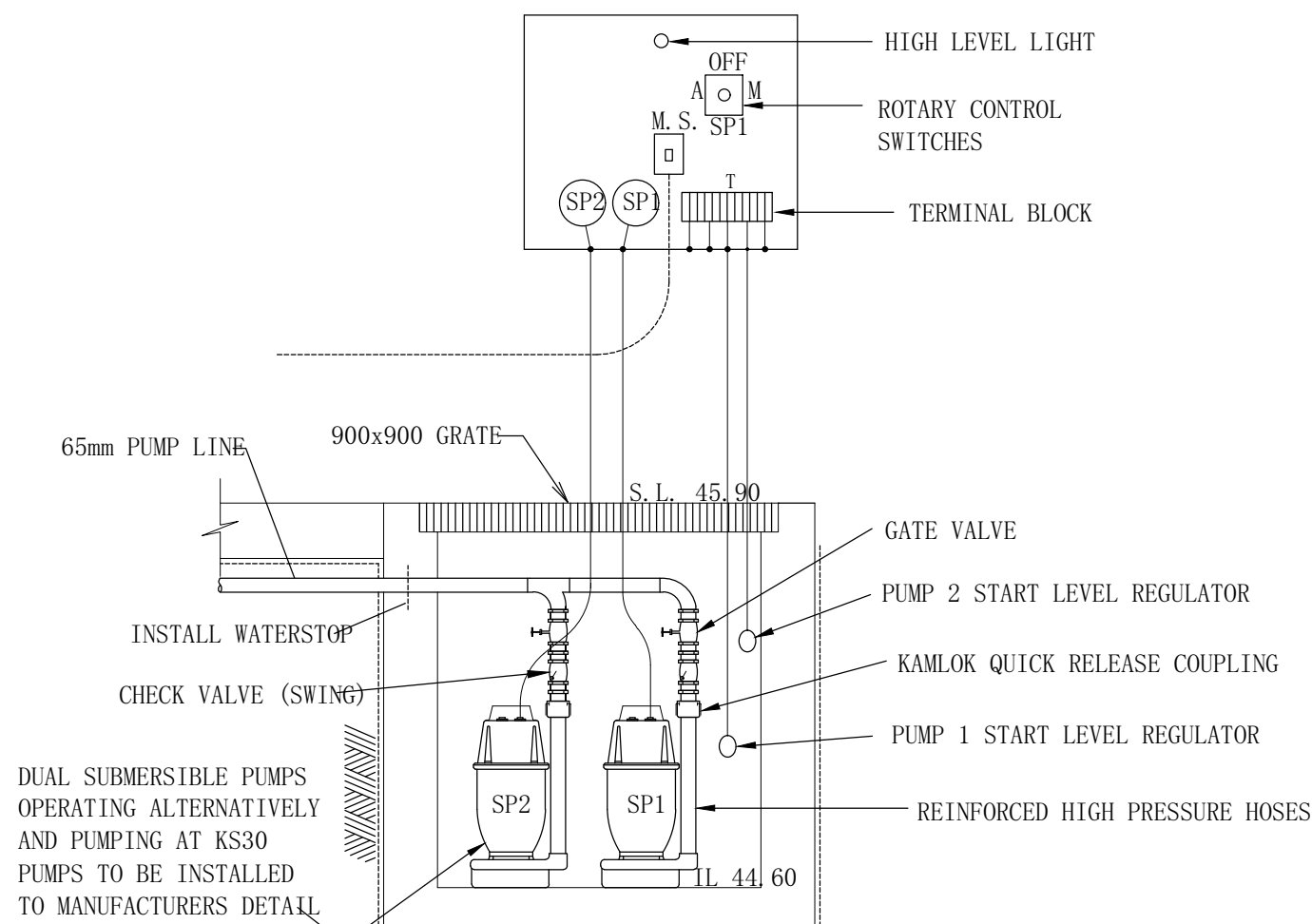


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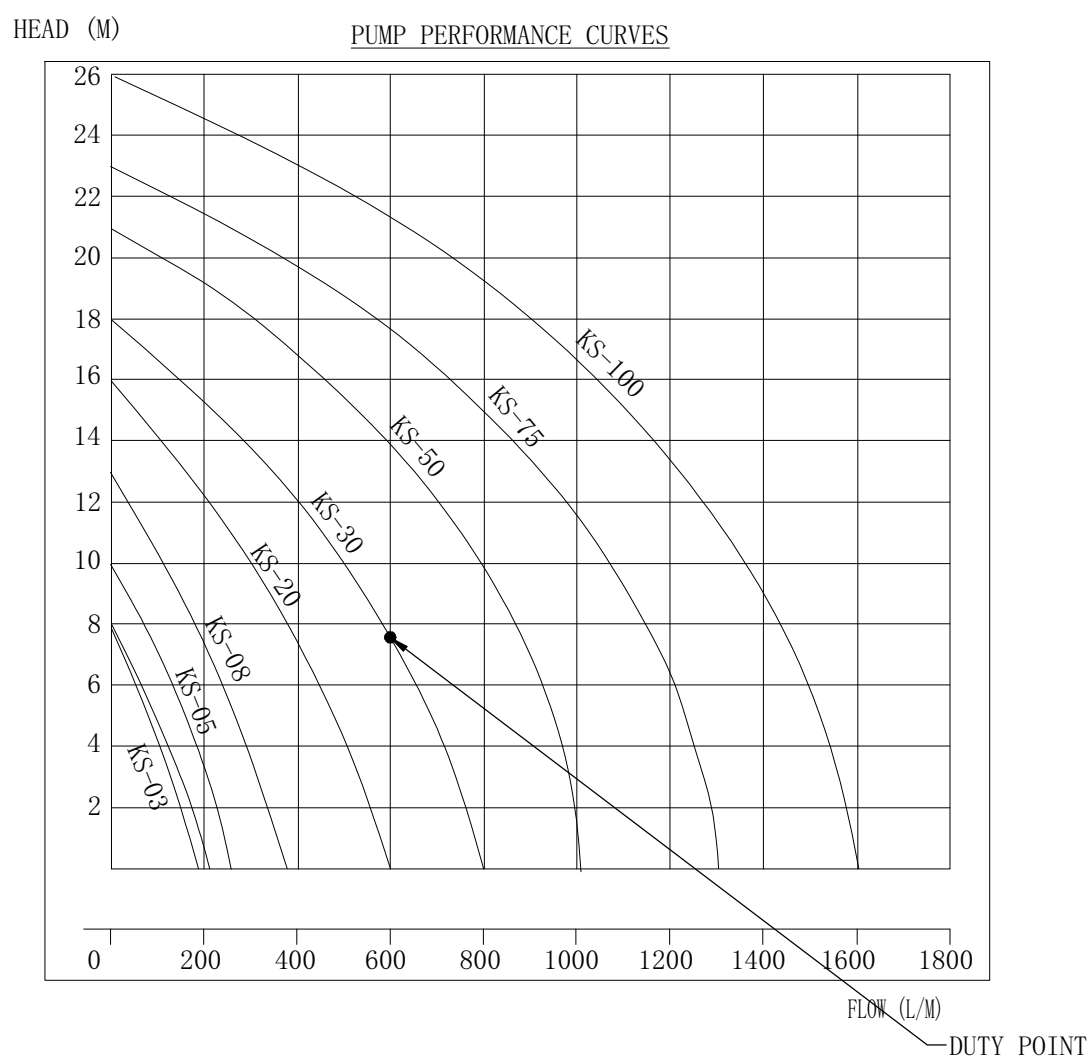
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BASEMENT PUMP WELL SECTION  
N.T.S.



**WARNING**  
PUMP OUT SYSTEM  
FAILURE IN BASEMENT  
WHEN LIGHT IS FLASHING  
AND SIREN SOUNDING

HEIGHT 150mm

WIDTH 200mm

BASEMENT PUMP OUT FAILURE

WARNING SIGN

NOTE:-

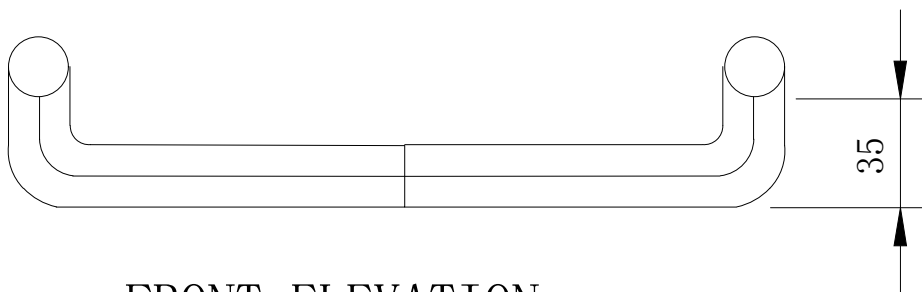
1- SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT.

COLOURS :: -

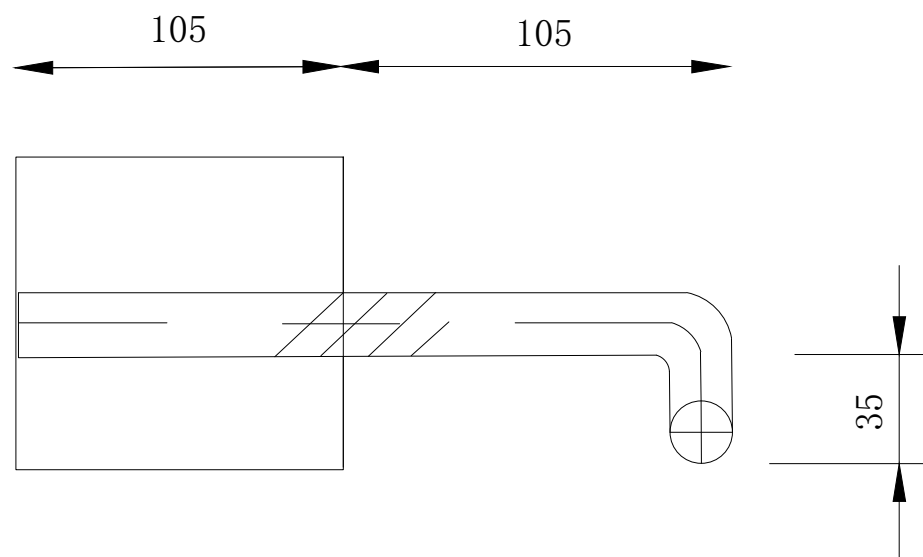
WARNING - RED

BORDER AND OTHER COLOURING - BLACK

NOTE: A SUITABLE ALARM SYSTEM POSITIONED AT ENTRANCE OF BASEMENT CARPARK TO PROVIDE A FLOOD WARNING IN CASE OF PUMP FAILURE (TO COUNCILS SPEC). AS SHOWN ABOVE.



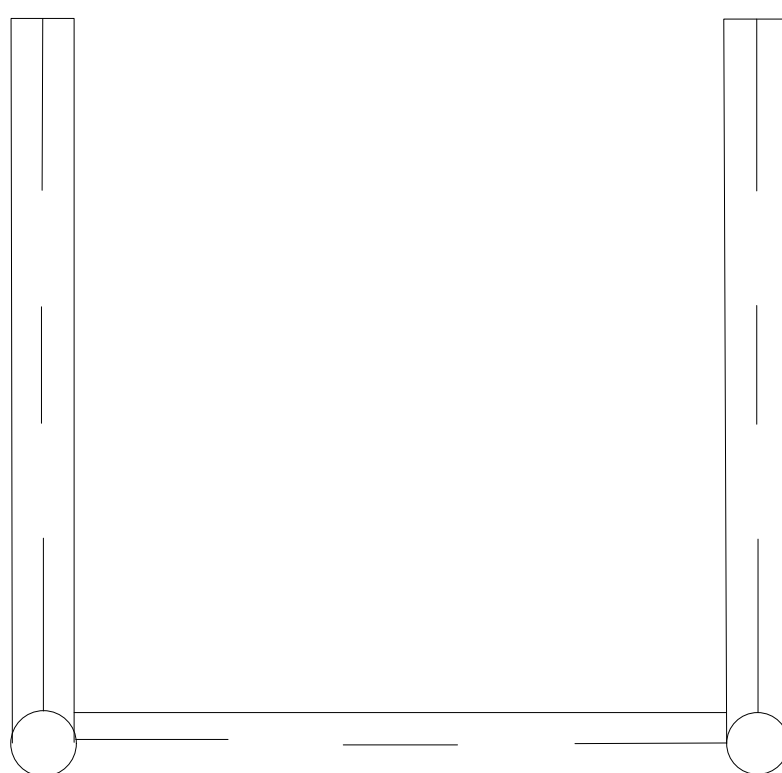
FRONT ELEVATION  
N.T.S.



SIDE ELEVATION  
N.T.S.

250

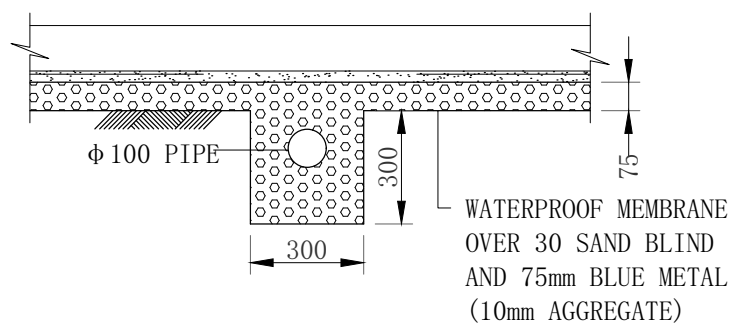
NOM 20mm-24mm  
DIA GALVANISED  
MILD STEEL  
RODS



PLAN  
N.T.S.

STEP IRON DETAILS  
N.T.S.

NOTE: INSTALL WHERE  
PITS ARE DEEPER THAN  
1000mm



TYPICAL SECTION THROUGH SUBSOIL HARD PIPE  
N.T.S.

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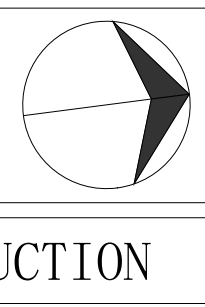
Project

**619-621 HUME HWY,  
CASULA, NSW**

Drawing Title

**BASEMENT STORMWATER  
DRAINAGE DETAIL**

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SH18171	ST04	C
Engineer	Drawn	
SH	IN	
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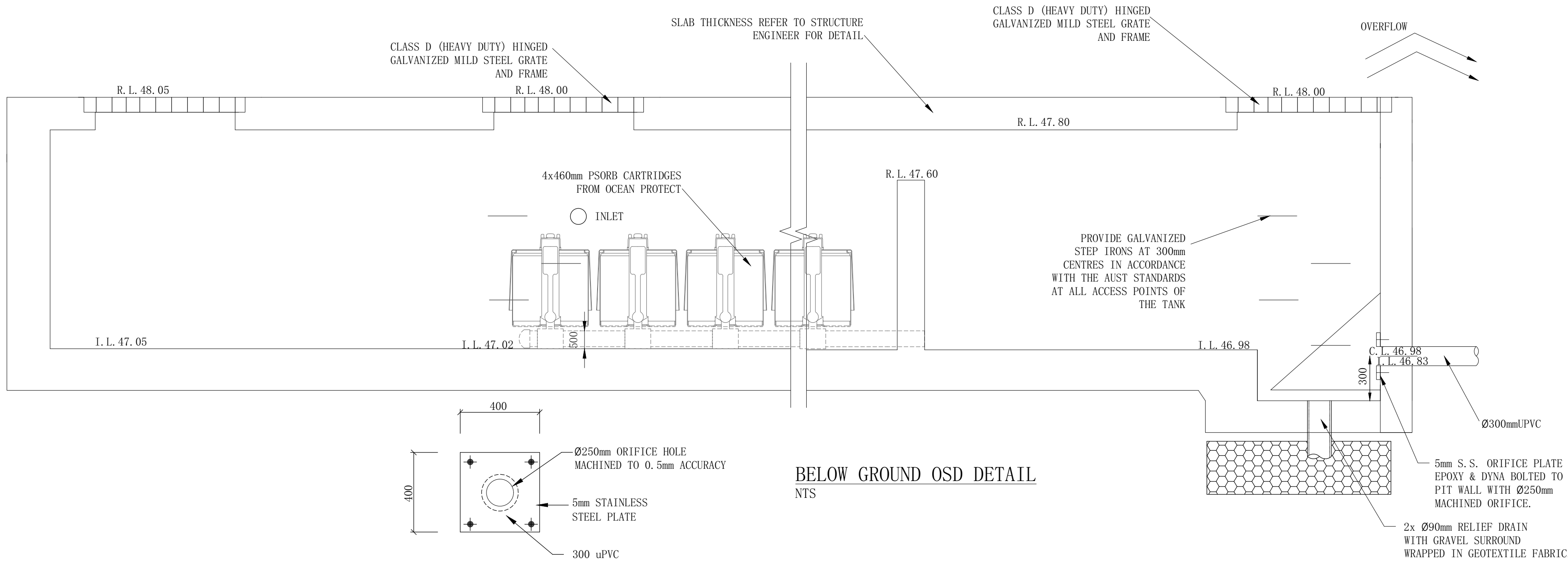


NOTES

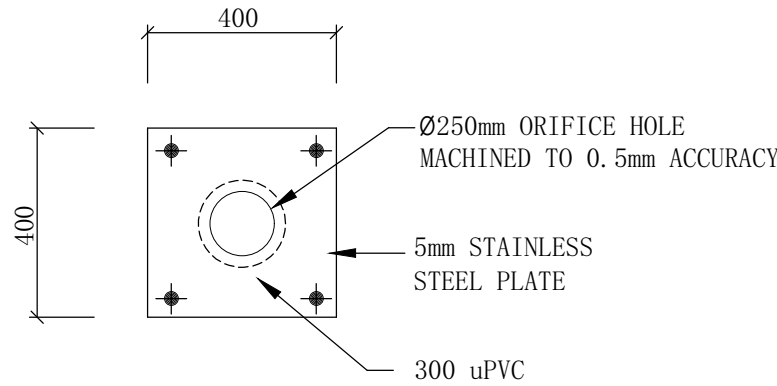
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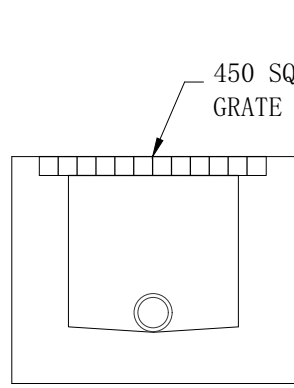
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•EDP	EXISTING 100 $\phi$ DOWN PIPE (U.N.O.)
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TYPICAL ORIFICE PLATE ELEVATION  
NTS

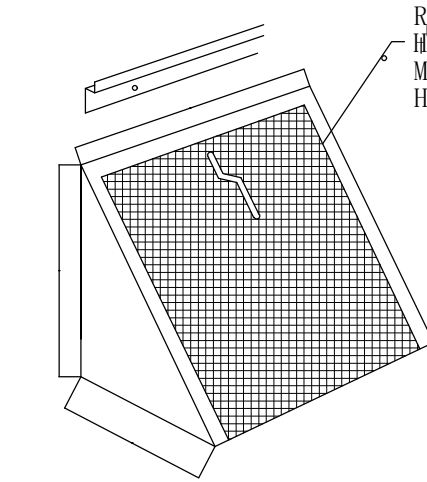


BELOW GROUND OSD DETAIL  
NTS

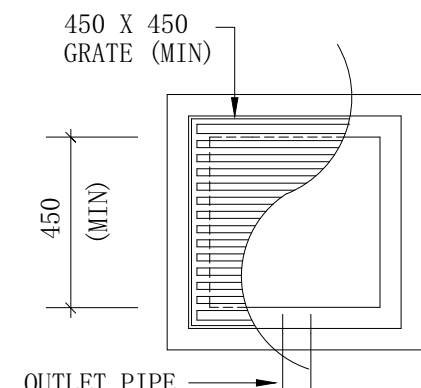


PRECAST PIT

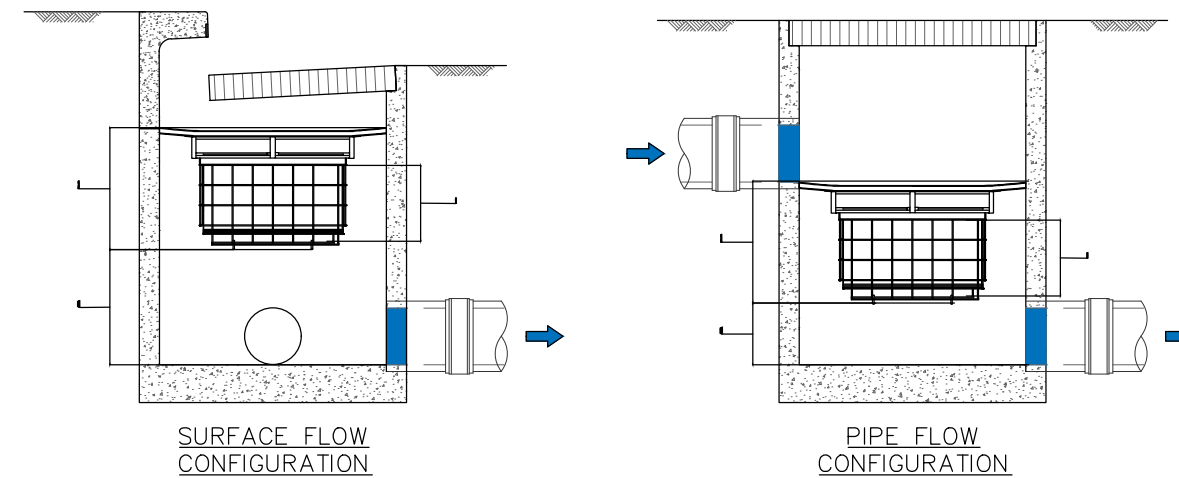
TYPICAL PIT SECTION  
N.T.S.



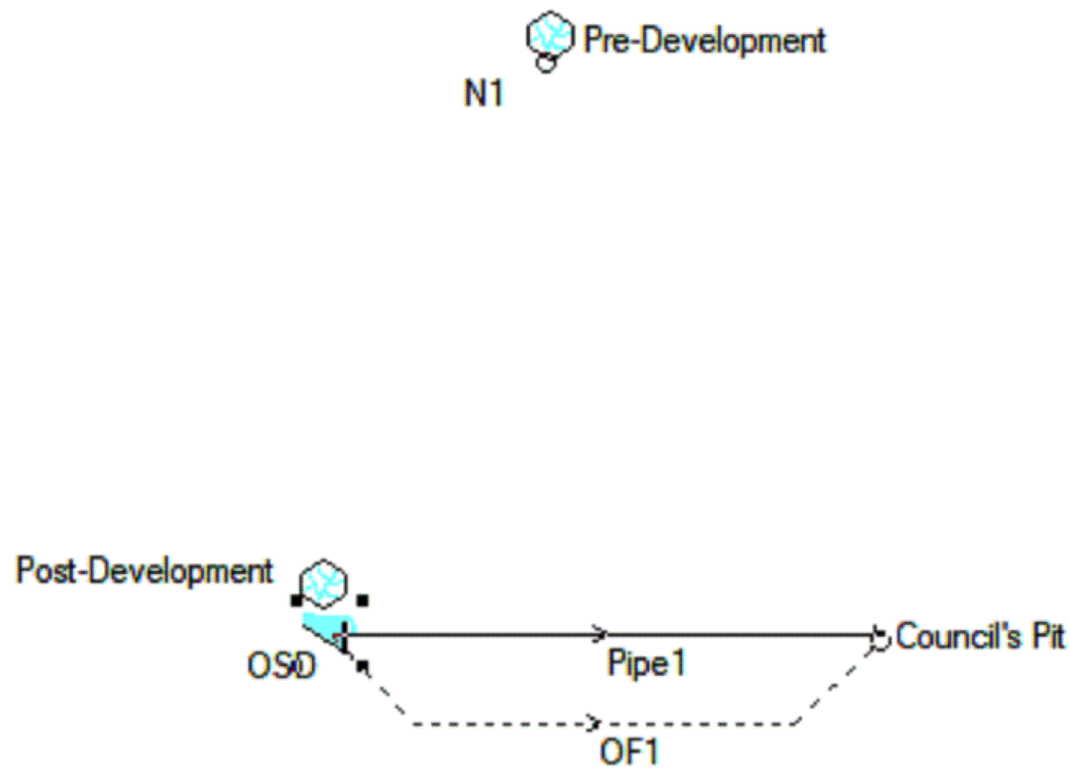
MULTI PURPOSE FILTER SCREEN  
N.T.S.



STANDARD PIT  
N.T.S.



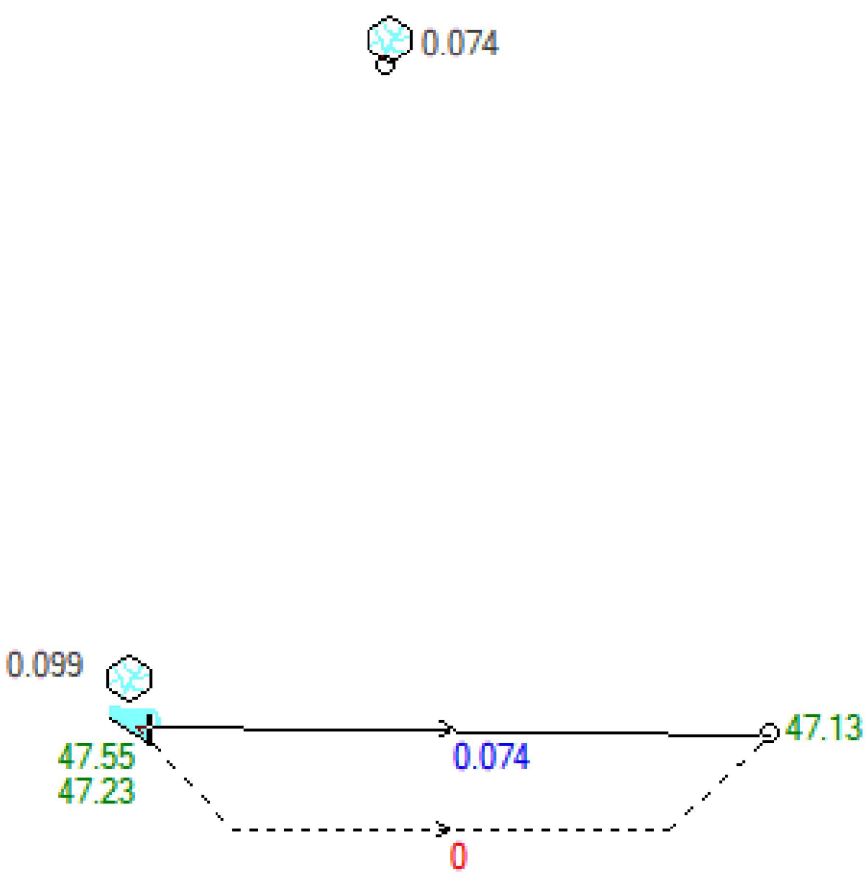
OCEANGUARD PIT BASKET



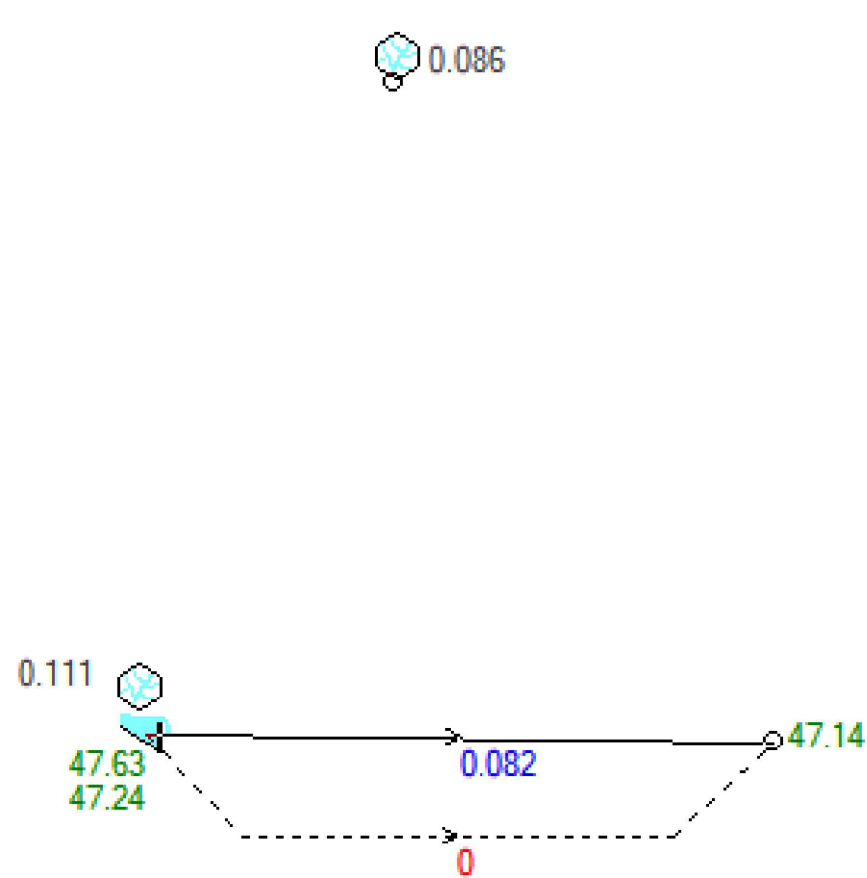
DRAINS NETWORK

Address: 619-621 Hume Hwy, Casula	
Pre Development	2840 m <sup>2</sup>
0% Hard Paved	0 m <sup>2</sup>
100% Soft Paved	2840 m <sup>2</sup>
Post Development	
Area to OSD	2840 m <sup>2</sup>
85% Hard Paved	2414 m <sup>2</sup>
15% Soft Paved	426 m <sup>2</sup>
5 year ARI storm event	
Existing	74 L/s
Proposed	74 L/s
10 year ARI storm event	
Existing	86 L/s
Proposed	82 L/s
20 year ARI storm event	
Existing	103 L/s
Proposed	93 L/s
50 year ARI storm event	
Existing	115 L/s
Proposed	102 L/s
100 year ARI storm event	
Existing	132 L/s
Proposed	131 L/s

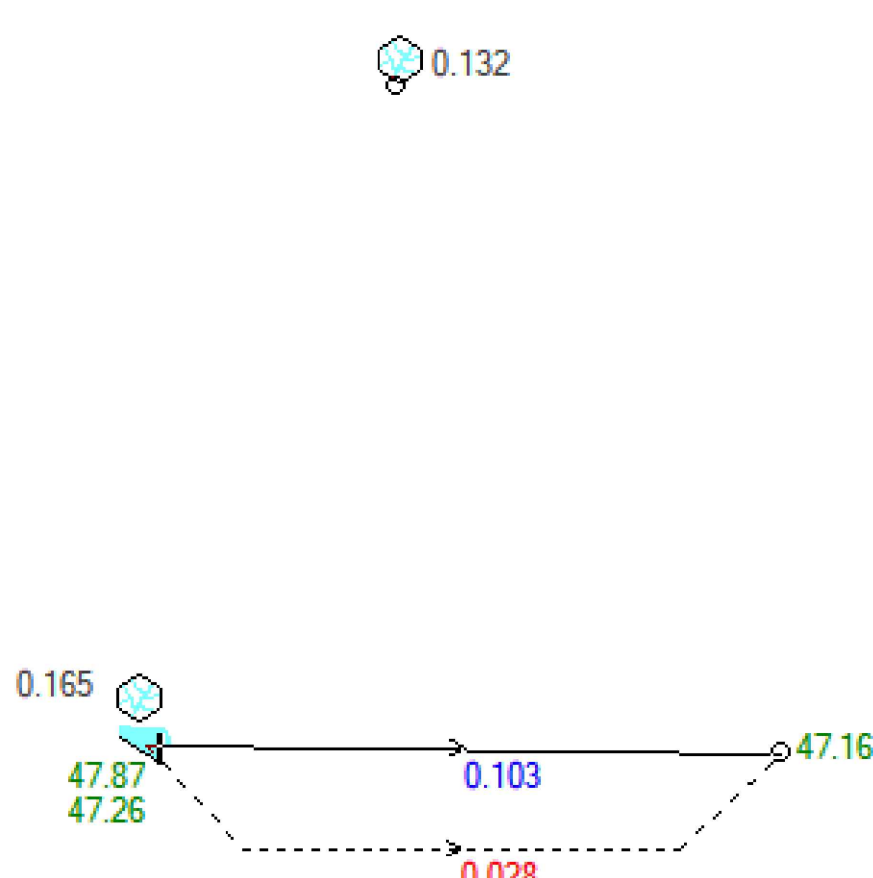
DRAINS RESULT SUMMARY



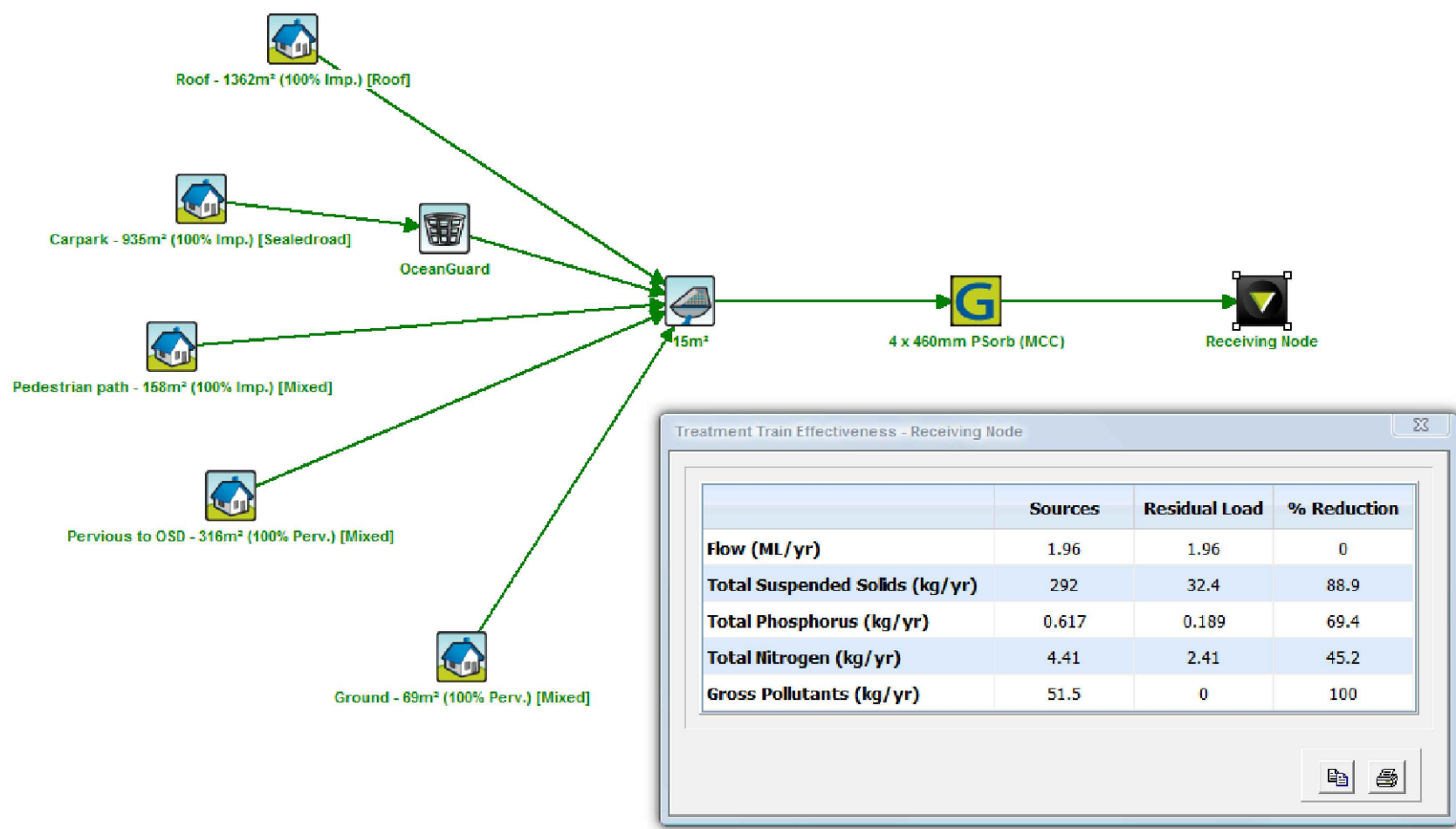
5 YEAR ARI



10 YEAR ARI



100 YEAR ARI



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Project

**619-621 HUME HWY,  
CASULA, NSW**

Drawing Title

**SITE STORMWATER DRAINAGE  
DETAIL**

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NOT FOR CONSTRUCTION

Project Number	Drawing Number	Revision
SH18171	ST05	C
Engineer	Drawn	
SH	IN	
Date	Scale	
JUL 2019	1:100 A1	

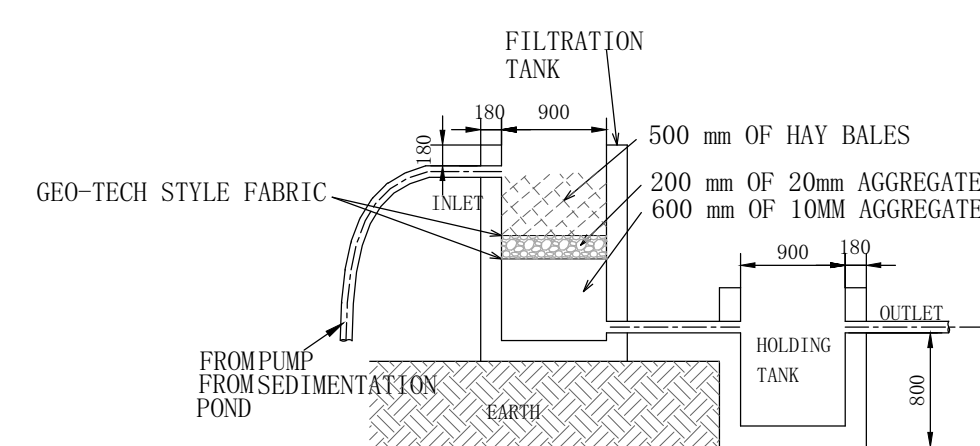




1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 'MANAGING URBAN STORMWATER, 3RD EDITION' PRODUCED BY THE NSW DEPARTMENT OF HOUSING.
2. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION
3. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEANED FOR BUILDINGS, PAVEMENTS ETC.
4. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER
5. NOT WITHSTANDING DETAILS SHOWN IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT.

## SYMBOLS

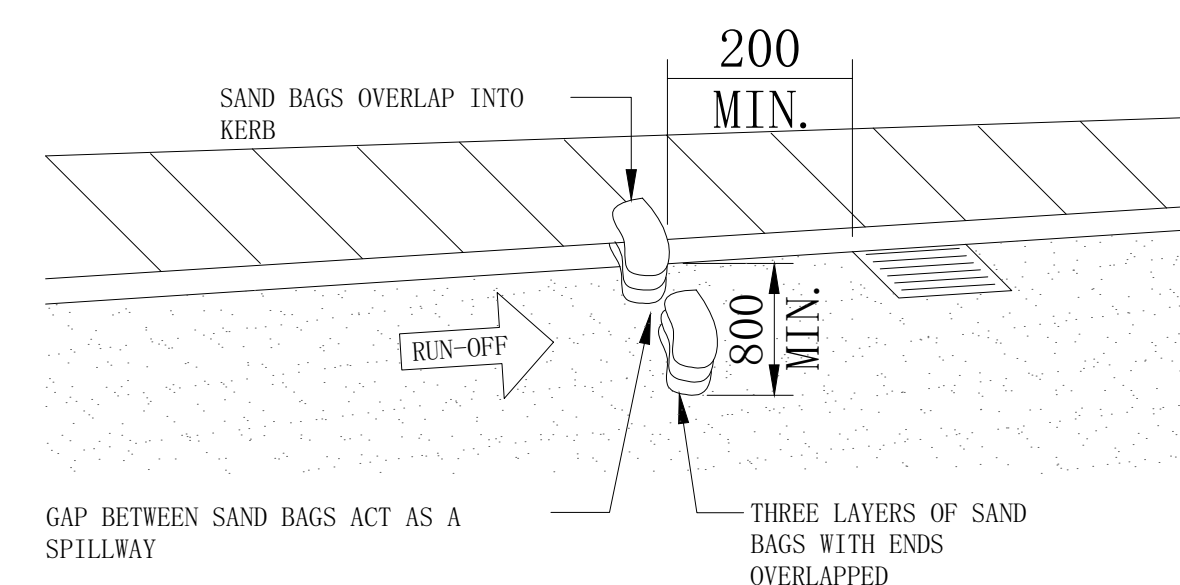
- EXISTING CONTOUR  
 \_\_\_\_\_ SILT FENCE  
 \_\_\_\_\_ WIRE MESH FENCE  
 - - - - -  $\phi$  50 PUMP LINE

TYPICAL DETAIL OF FILTRATION UNIT (IF RE  
NTS

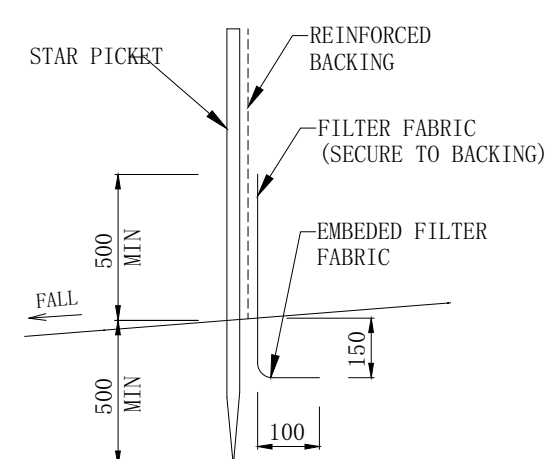
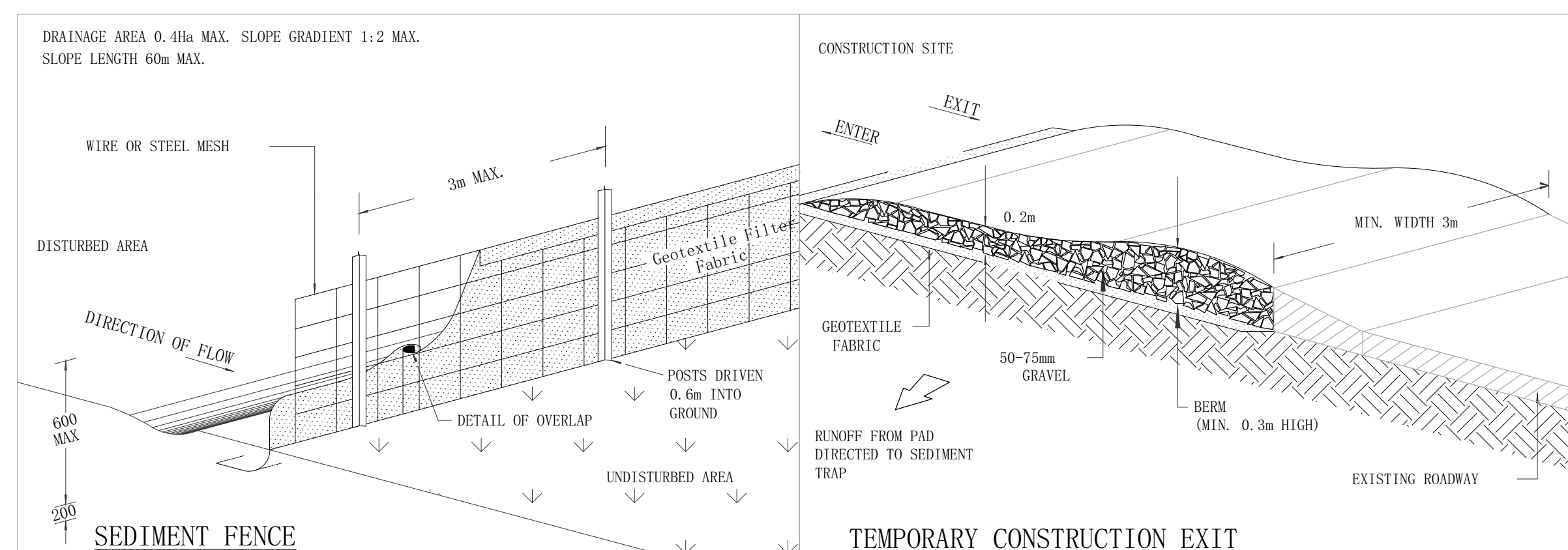
NOTE: HAY TO BE CHANGED EVERY DAY  
GEO-TECH, SAND, AND BLUE METAL, TO BE CHANGED WEEKLY

NOTES: SOIL & WATER MANAGEMENT

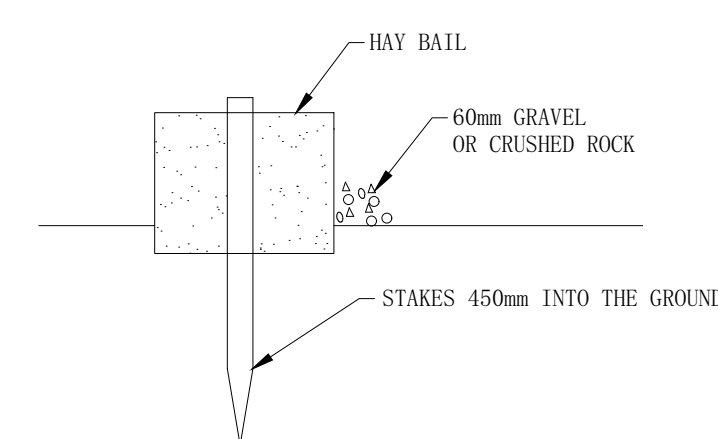
1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER.
2. MINIMISE DISTURBED AREAS.
3. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
4. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
5. ROADS AND FOOTPATH TO BE SWEEP DAILY.
6. NO MATERIAL TO BE STORED ON FOOTPATH.
7. IF YOU DO NOT COMPLY YOU MAY BE LIABLE TO A \$1500 FINE.



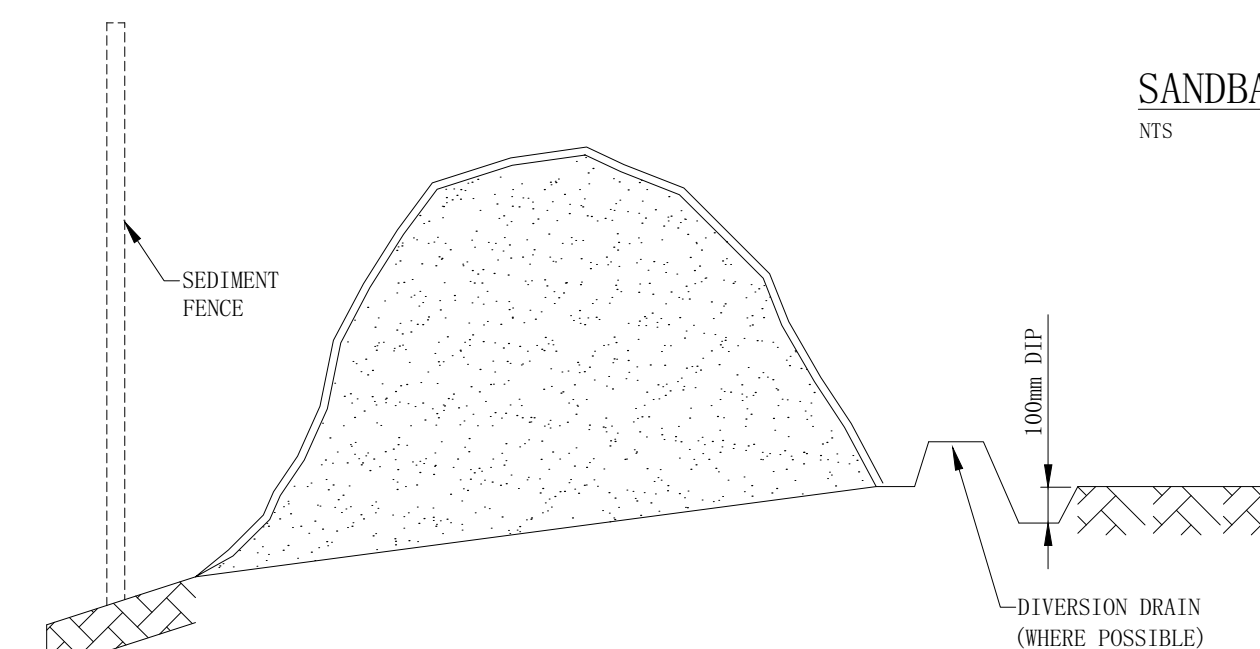
SANDBAG KERB INLET SEDIMENT TRAP



## SILT FENCE DETAIL




## HAY BAIL DETAIL



## SOIL STOCK PILE

[illegible]

Engineering Consultant

 **STRONGHOLD ENGINEERS**  
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Client

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Website [www.dreamscapgroup.com.au](http://www.dreamscapgroup.com.au)

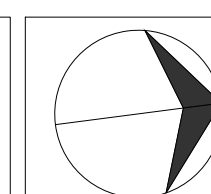
Project

619-621 HUME HWY,  
CASULA, NSW

Drawing Title

EROSION AND SEDIMENT  
CONTROL PLAN AND DETAILS

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