



DREAM BUILD

1 BILAMBEE AVENUE, BILGOLA PLATEAU

SITWORKS AND STORMWATER MANAGEMENT PLAN
DEVELOPMENT APPLICATION

DRAWING SCHEDULE

DRAWING NO.	DESCRIPTION
200019-DA-C01.01	COVER SHEET AND DRAWING SCHEDULE
200019-DA-C01.21	GENERAL NOTES AND LEGEND
200019-DA-C02.01	CONCEPT EROSION AND SEDIMENTATION CONTROL PLAN
200019-DA-C02.11	EROSION AND SEDIMENTATION CONTROL DETAILS
200019-DA-C03.01	SITWORKS AND STORMWATER MANAGEMENT PLAN - BASEMENT LEVEL 2
200019-DA-C03.02	SITWORKS AND STORMWATER MANAGEMENT PLAN - BASEMENT LEVEL 1
200019-DA-C03.03	SITWORKS AND STORMWATER MANAGEMENT PLAN - GROUND FLOOR LEVEL
200019-DA-C05.01	DRIVEWAY LONGITUDINAL SECTION
200019-DA-C06.01	DETAILS - SHEET 01
200019-DA-C06.02	DETAILS - SHEET 02

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
1	1/10/2020	ISSUED FOR DEVELOPMENT APPLICATION	RT	RT	AD	AD

Client

Scale

SCALE 1:5000 @A1

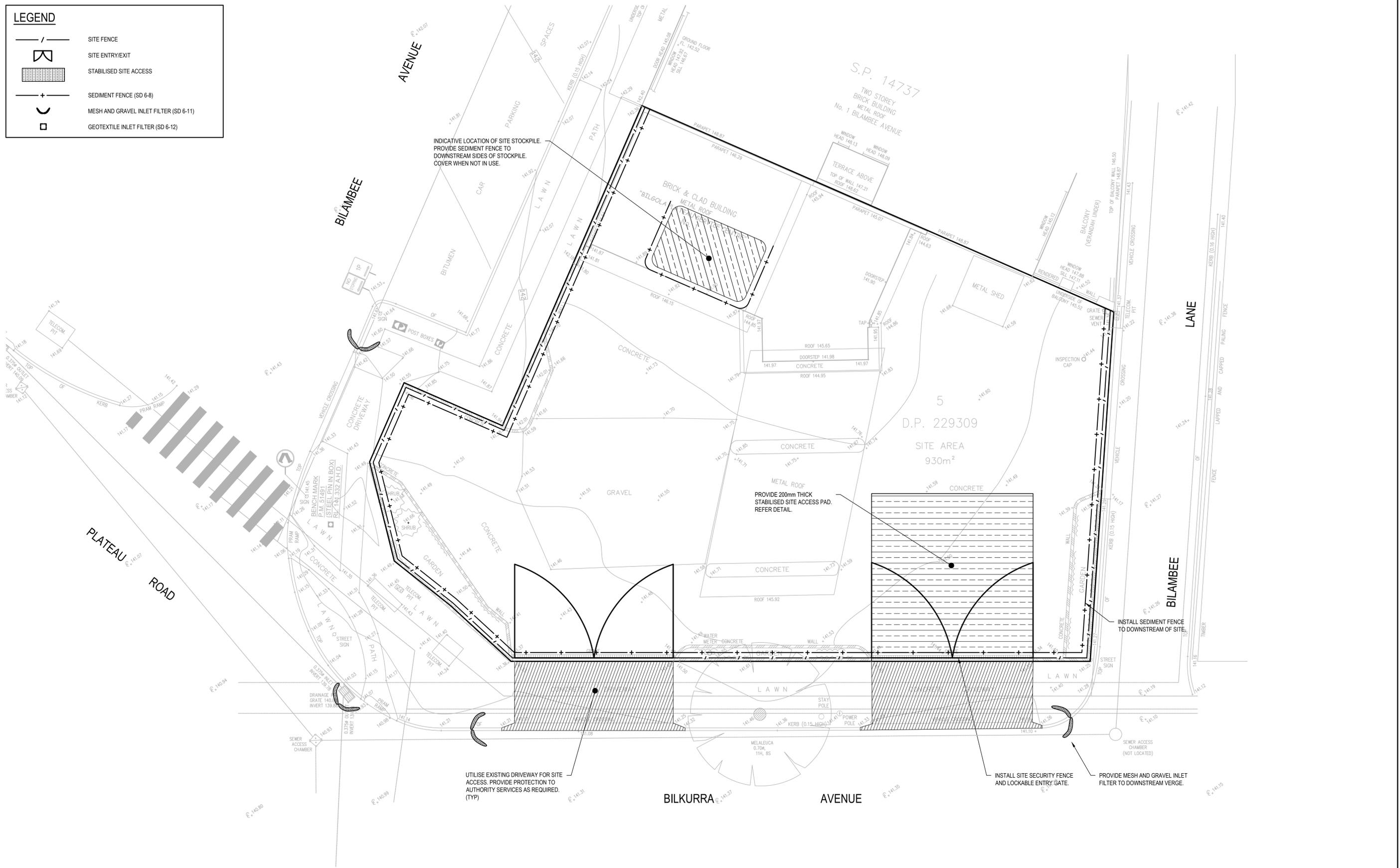
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Date 01/10/2020	Project Number/Drawing Number 200019-DA-C01.01
Size A1	Revision 1
Datum AHD	

LEGEND	
	SITE FENCE
	SITE ENTRY/EXIT
	STABILISED SITE ACCESS
	SEDIMENT FENCE (SD 6-8)
	MESH AND GRAVEL INLET FILTER (SD 6-11)
	GEOTEXTILE INLET FILTER (SD 6-12)



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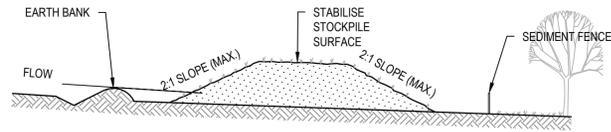
Project

1 BILAMBEE AVENUE,
BILGOLA PLATEAU
SITWORKS AND STORMWATER MANAGEMNT PLAN

Title

CONCEPT EROSION AND SEDIMENTATION
CONTROL PLAN

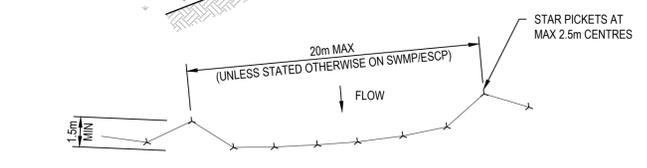
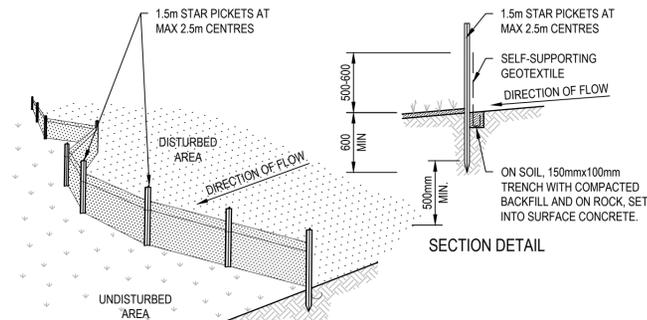
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CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

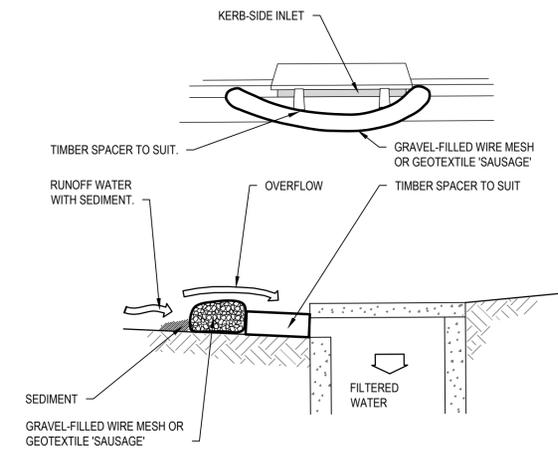
STOCKPILES (SD 4-1)



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE (SD 6-8)

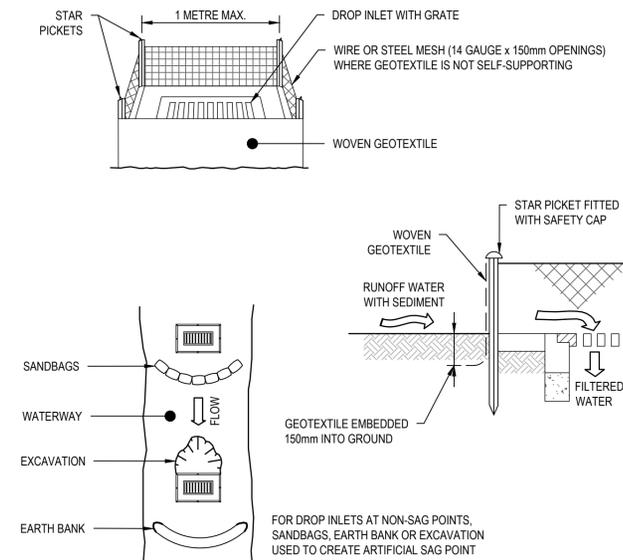


NOTE: THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN APPROVED SWMP/ESCP.

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

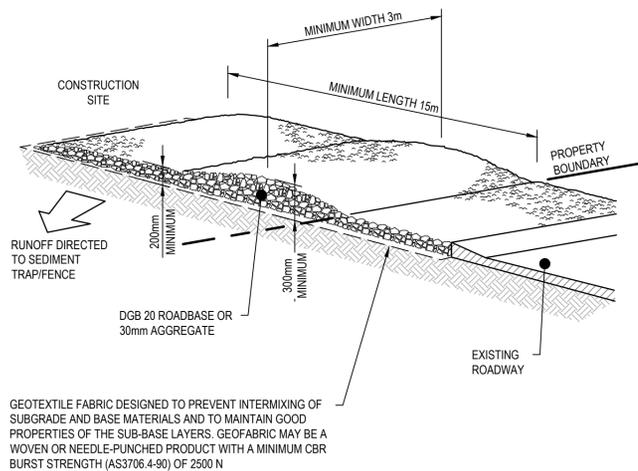
MESH AND GRAVEL INLET FILTER (SD 6-11)



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER (SD 6-12)



CONSTRUCTION NOTES

1. STRIP THE TOPSOIL LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

STABILISED SITE ACCESS (SD 6-14)

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Client
Scale
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Project
1 BILAMBEE AVENUE,
BILGOLA PLATEAU
SITWORKS AND STORMWATER MANAGEMNT PLAN
Title
EROSION AND SEDIMENTATION
CONTROL DETAILS

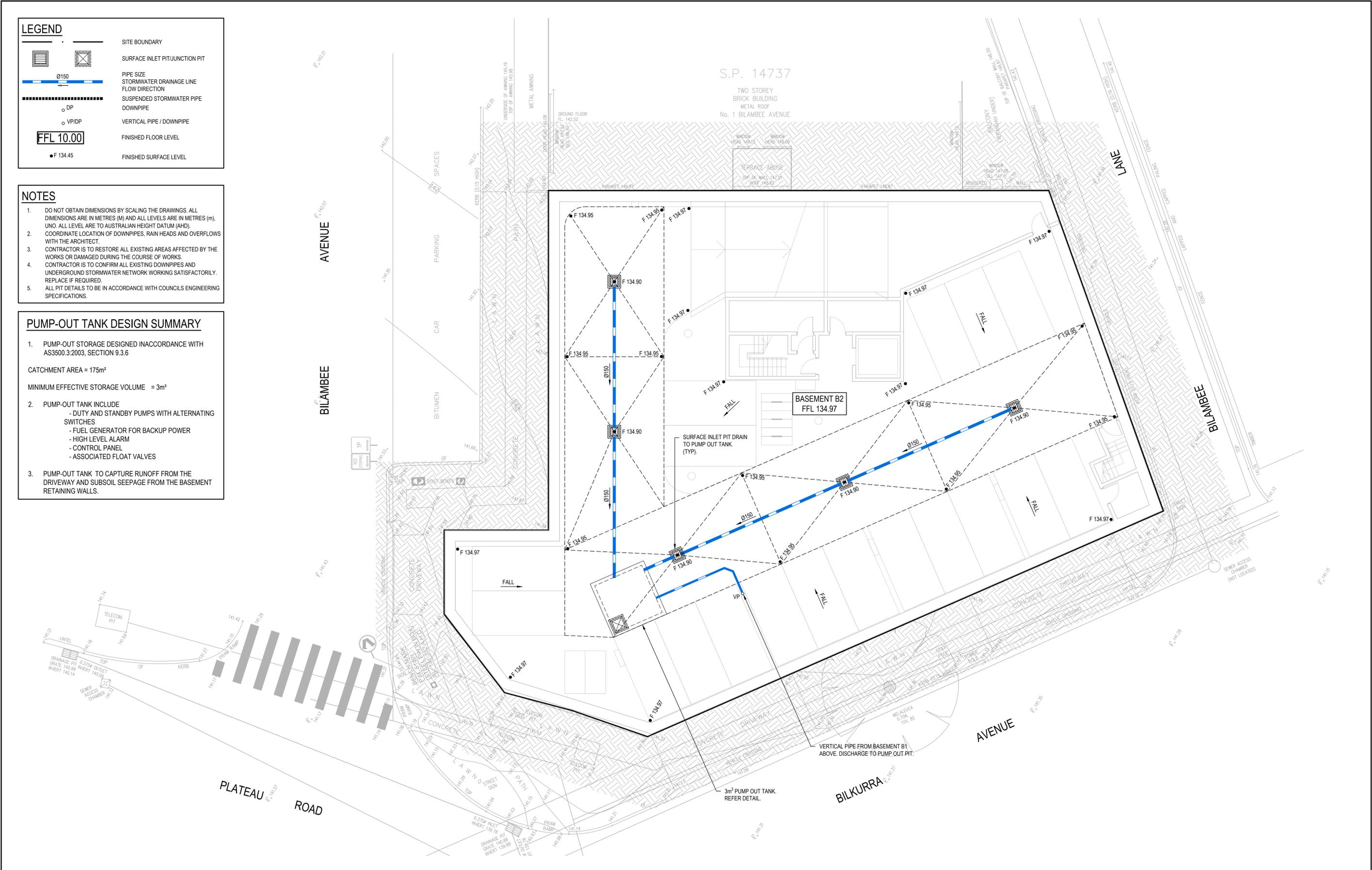
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Date 01/10/2020	Project Number/Drawing Number 200019-DA-C02.11
Size A1	Revision 1
Datum AHD	

LEGEND

	SITE BOUNDARY
	SURFACE INLET PIT/JUNCTION PIT
	PIPE SIZE
	STORMWATER DRAINAGE LINE
	FLOW DIRECTION
	SUSPENDED STORMWATER PIPE
	DOWNPIPE
	VERTICAL PIPE / DOWNPIPE
	FINISHED FLOOR LEVEL
	FINISHED SURFACE LEVEL

- NOTES**
- DO NOT OBTAIN DIMENSIONS BY SCALING THE DRAWINGS. ALL DIMENSIONS ARE IN METRES (M) AND ALL LEVELS ARE IN METRES (m). UNO. ALL LEVEL ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
 - COORDINATE LOCATION OF DOWNPIPES, RAIN HEADS AND OVERFLOWS WITH THE ARCHITECT.
 - CONTRACTOR IS TO RESTORE ALL EXISTING AREAS AFFECTED BY THE WORKS OR DAMAGED DURING THE COURSE OF WORKS.
 - CONTRACTOR IS TO CONFIRM ALL EXISTING DOWNPIPES AND UNDERGROUND STORMWATER NETWORK WORKING SATISFACTORILY. REPLACE IF REQUIRED.
 - ALL PIT DETAILS TO BE IN ACCORDANCE WITH COUNCILS ENGINEERING SPECIFICATIONS.

- PUMP-OUT TANK DESIGN SUMMARY**
- PUMP-OUT STORAGE DESIGNED INACCORDANCE WITH AS3500.3:2003, SECTION 9.3.6
 CATCHMENT AREA = 175m²
 MINIMUM EFFECTIVE STORAGE VOLUME = 3m³
 - PUMP-OUT TANK INCLUDE
 - DUTY AND STANDBY PUMPS WITH ALTERNATING SWITCHES
 - FUEL GENERATOR FOR BACKUP POWER
 - HIGH LEVEL ALARM
 - CONTROL PANEL
 - ASSOCIATED FLOAT VALVES
 - PUMP-OUT TANK TO CAPTURE RUNOFF FROM THE DRIVEWAY AND SUBSOIL SEEPAGE FROM THE BASEMENT RETAINING WALLS.



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 SITWORKS AND STORMWATER MANAGEMNT PLAN

Title
 SITWORKS AND STORMWATER MANAGEMENT PLAN

BASEMENT LEVEL 2

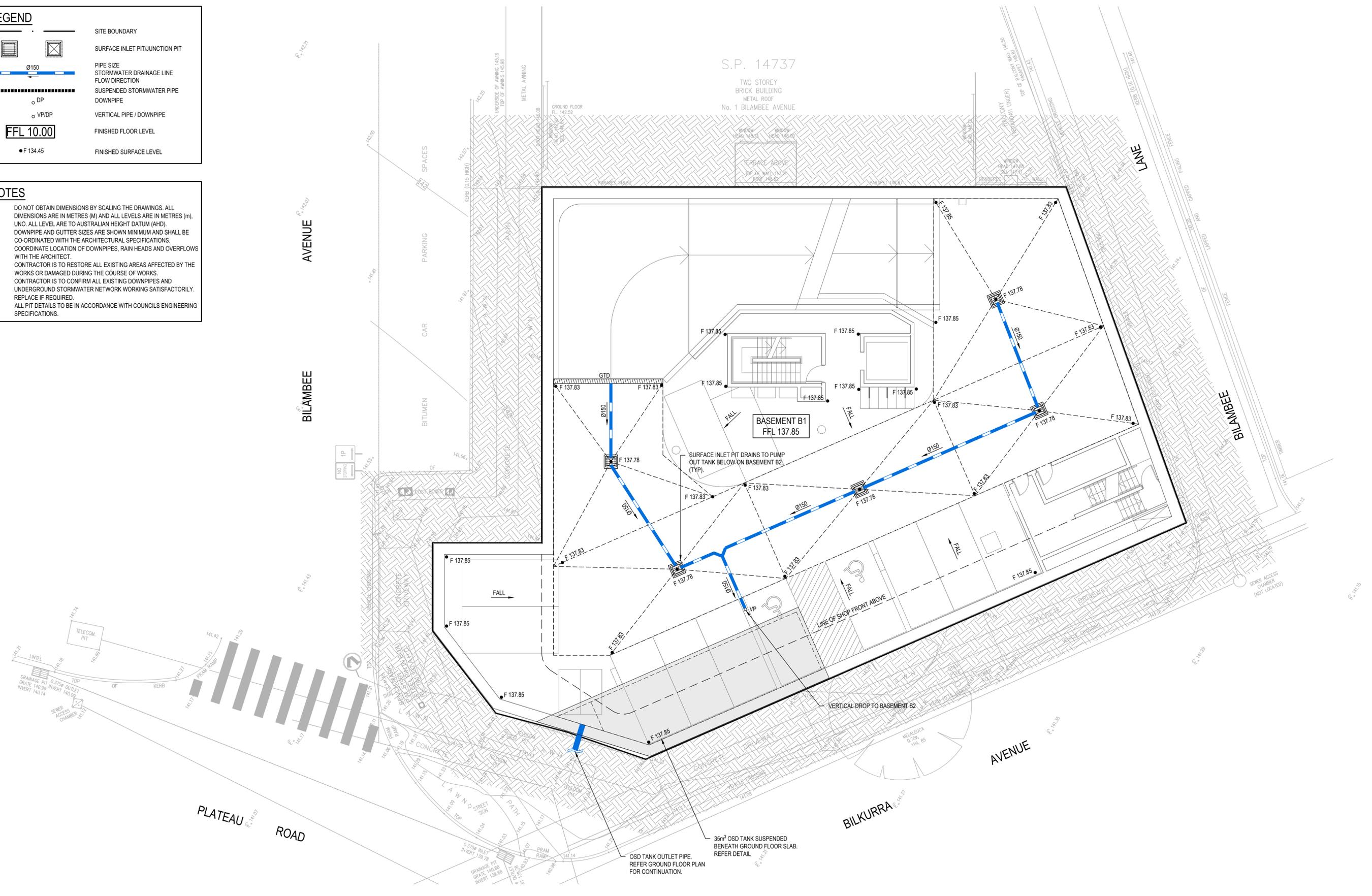
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LEGEND

- SITE BOUNDARY
- SURFACE INLET PIT/JUNCTION PIT
- PIPE SIZE
- STORMWATER DRAINAGE LINE
- FLOW DIRECTION
- SUSPENDED STORMWATER PIPE
- DOWNPIPE
- DP
- VP/DP
- VERTICAL PIPE / DOWNPIPE
- FINISHED FLOOR LEVEL
- FINISHED SURFACE LEVEL

$\varnothing 150$
 $\varnothing 100$
 FFL 10.00
 F 134.45

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 SITWORKS AND STORMWATER MANAGEMNT PLAN

Title
 SITWORKS AND STORMWATER MANAGEMENT PLAN
 BASEMENT LEVEL 1

Scale
 1:100

Date
 01/10/2020

Size
 A1

Datum
 AHD

Status
FOR APPROVAL
 NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number
200019-DA-C03.02

Revision
1

LEGEND

- SITE BOUNDARY
- SURFACE INLET PIT/JUNCTION PIT
- PIPE SIZE
- STORMWATER DRAINAGE LINE
- FLOW DIRECTION
- SUSPENDED STORMWATER PIPE
- DOWNPIPE
- DP
- VP/DP
- VERTICAL PIPE / DOWNPIPE
- F11.00
- FINISHED FLOOR LEVEL
- F 134.45
- FINISHED SURFACE LEVEL

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DESIGN SUMMARY:

- SITE AREA = 930m²
- POST-DEVELOPMENT IMPERVIOUS AREA = 930m²
- AREA BYPASSING OSD = 0m²

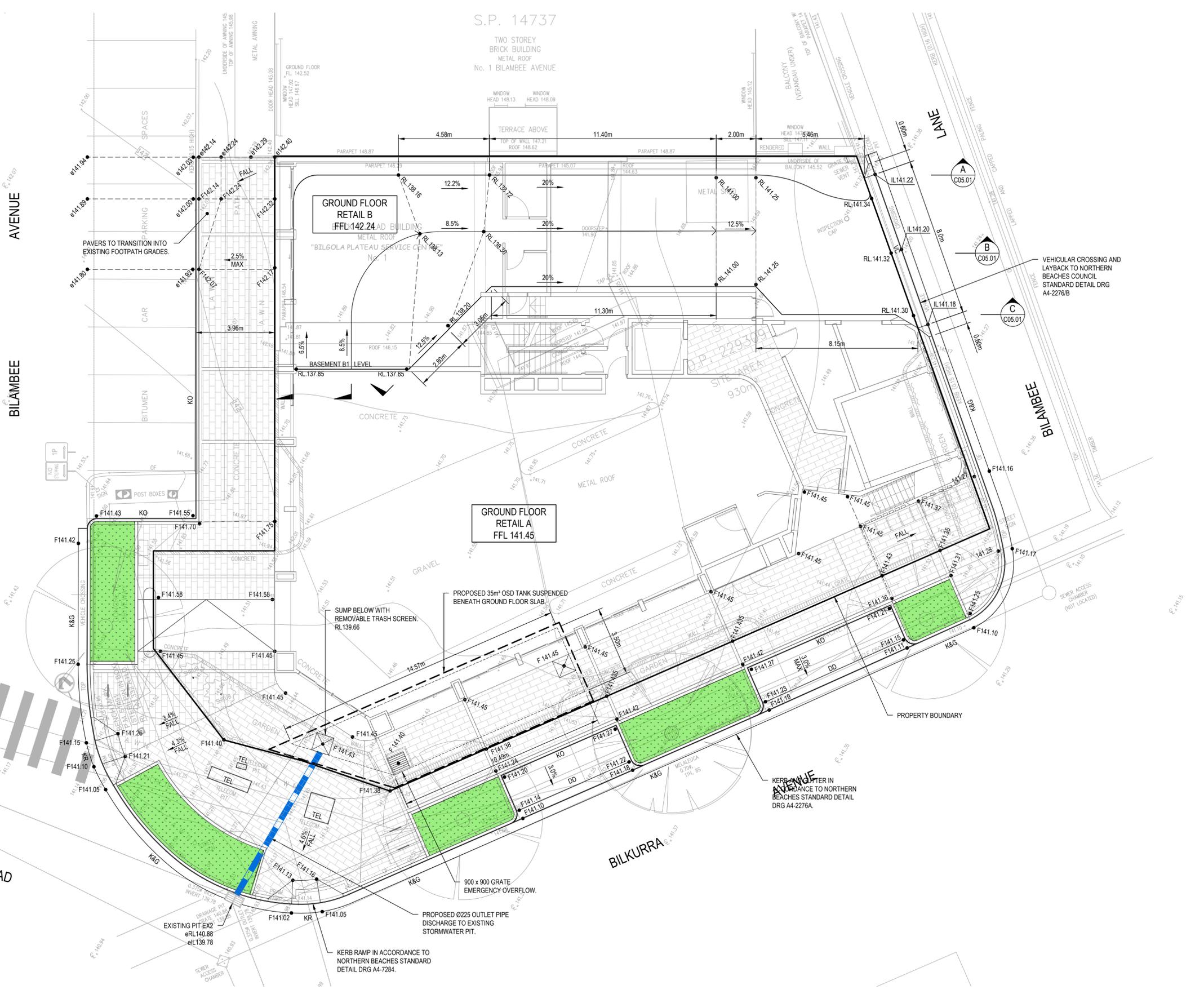
OSD CALCULATED USING DRAINS WITH ARR 1987 PROCEDURE.

- THE POST-DEVELOPMENT RUNOFF FOR 5, 20 AND 100 YEAR ARI STORM EVENTS MUST BE RESTRICTED TO THE PRE-DEVELOPMENT DISCHARGE RATES.
- PRE-DEVELOPMENT RATES ARE CALCULATED ON THE MAXIMUM ALLOWABLE IMPERIOUS FRACTION OF 0%.

STORM	PRE-DEVELOPMENT FLOWS (L/S)	POST-DEVELOPMENT FLOWS (L/S)
5YR	18	18
20YR	29	21
100YR	39	26

- OSD VOLUME = 35m³ (MIN)
- NO WATER QUALITY TREATMENT REQUIRED

THE STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH WARRINGAH COUNCIL ON-SITE STORMWATER DETENTION TECHNICAL SPECIFICATION, PL 850 WATER MANAGEMENT POLICY AND NORTHERN BEACHES COUNCIL WSUD MODELLING GUIDELINES.



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SITWORKS AND STORMWATER MANAGEMNT PLAN

Title
SITWORKS AND STORMWATER MANAGEMENT PLAN

GROUND FLOOR LEVEL

Scale
1:100

Date
01/10/2020

Size
A1

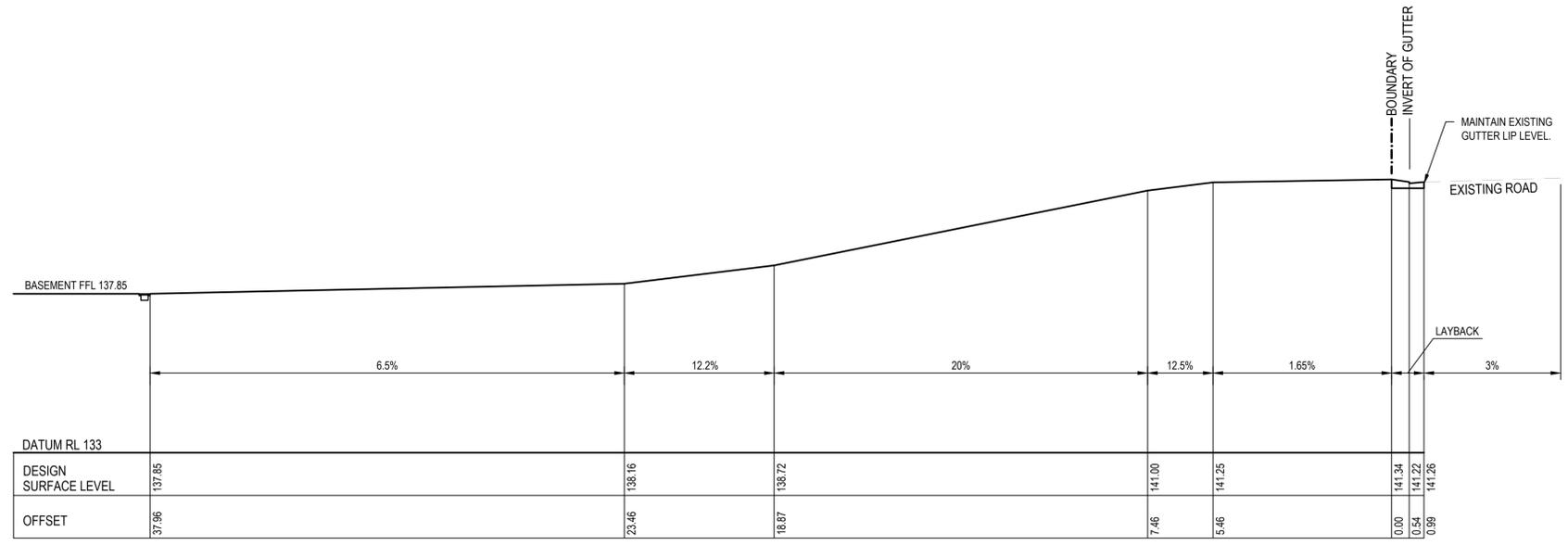
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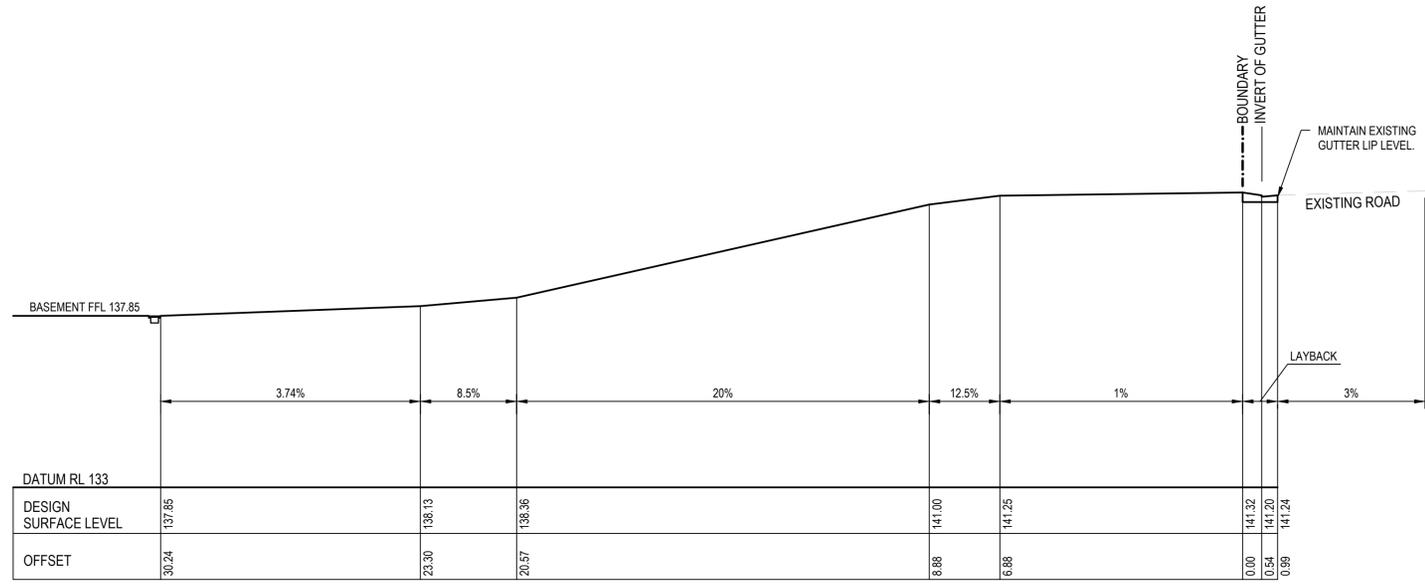
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Revision
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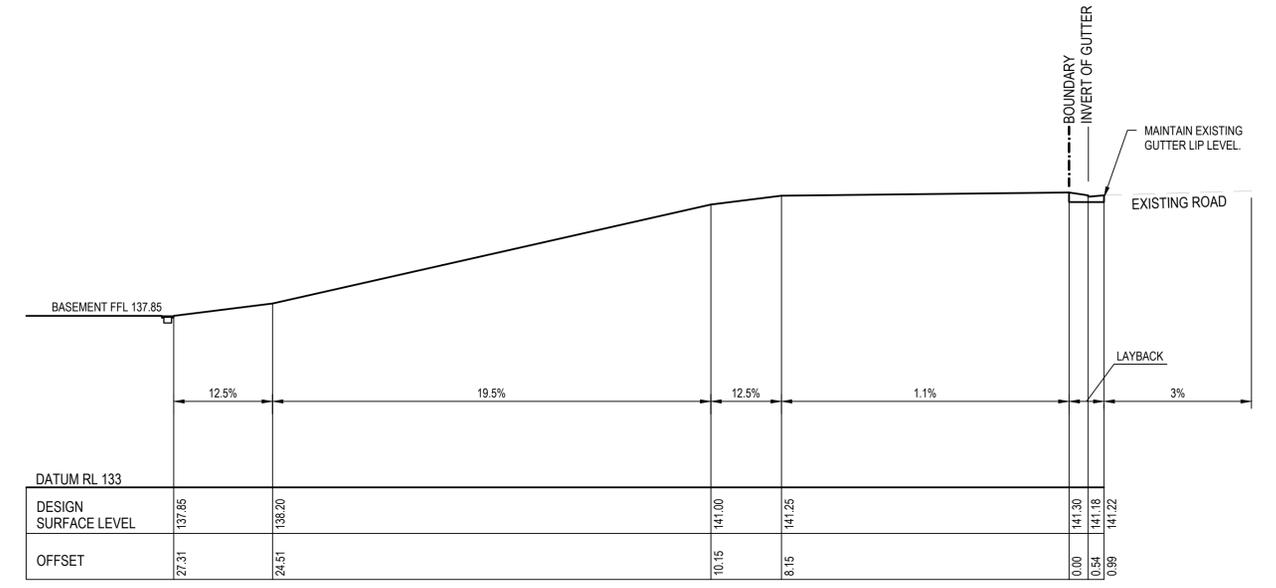
NOTES
 1. FINAL VERGE LEVELS TO BE DETERMINED BY COUNCIL.



DRIVEWAY LONGITUDINAL SECTION **A**
 SCALE 1:100 C03.03



DRIVEWAY LONGITUDINAL SECTION **B**
 SCALE 1:100 C03.03



DRIVEWAY LONGITUDINAL SECTION **C**
 SCALE 1:100 C03.03

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Title
 DRIVEWAY LONGITUDINAL SECTION

Scale
 AS SHOWN

Date
 01/10/2020

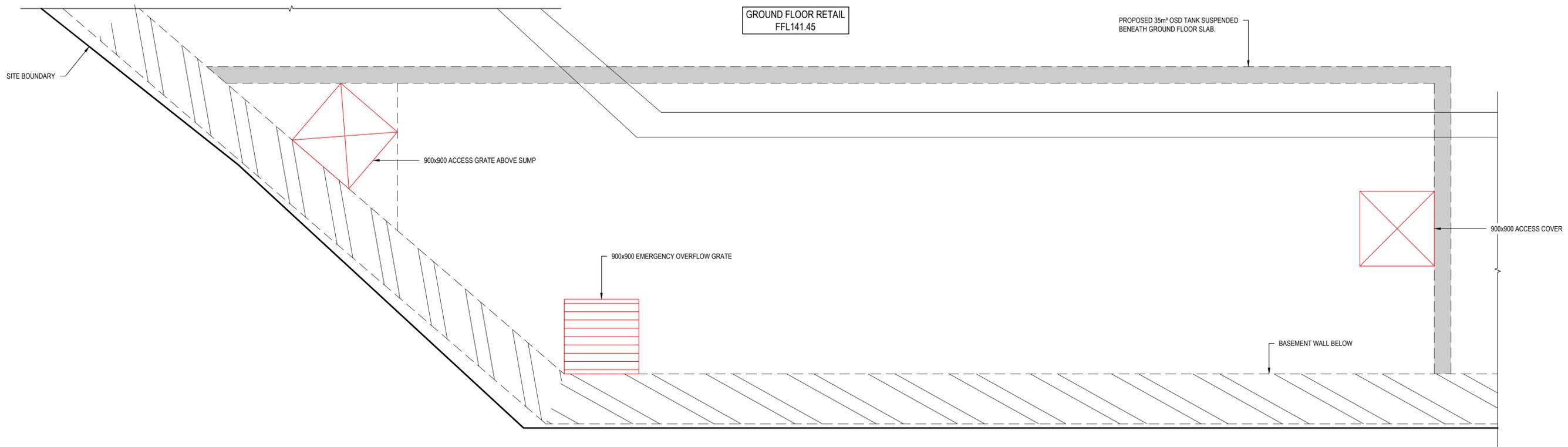
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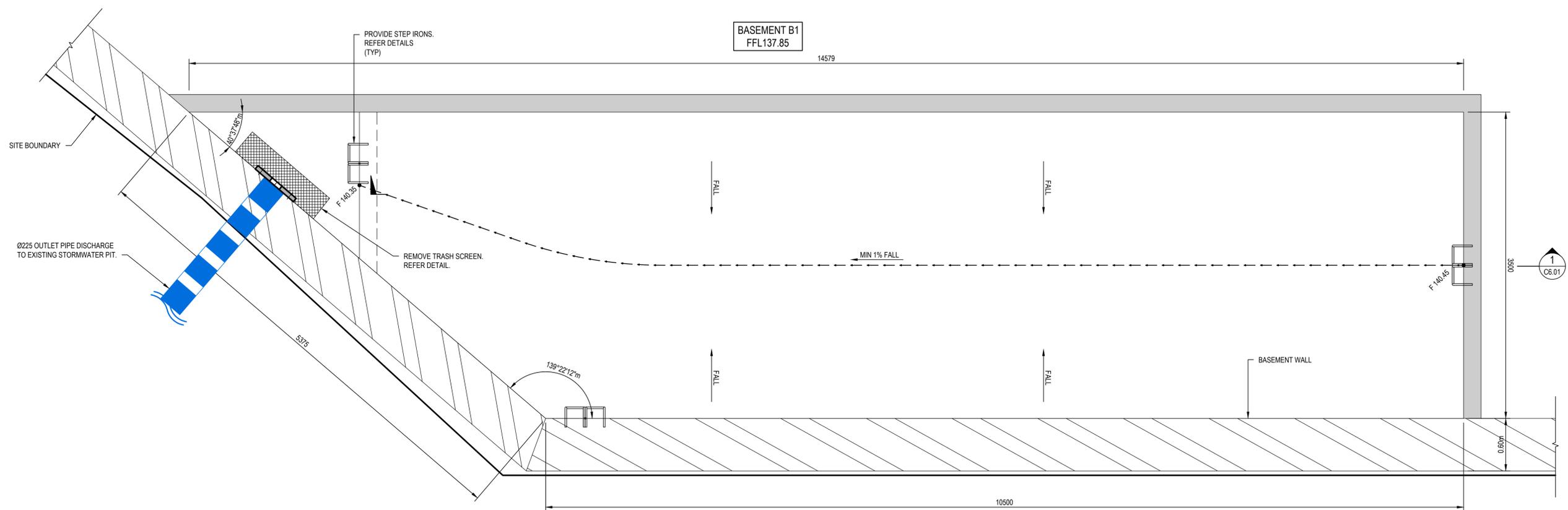
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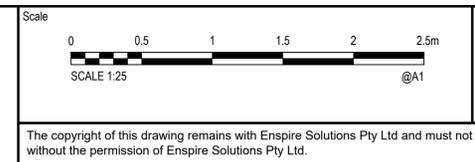


OSD TANK - GROUND FLOOR PLAN
SCALE 1:25



OSD TANK - BASEMENT B1 LEVEL
SCALE 1:25

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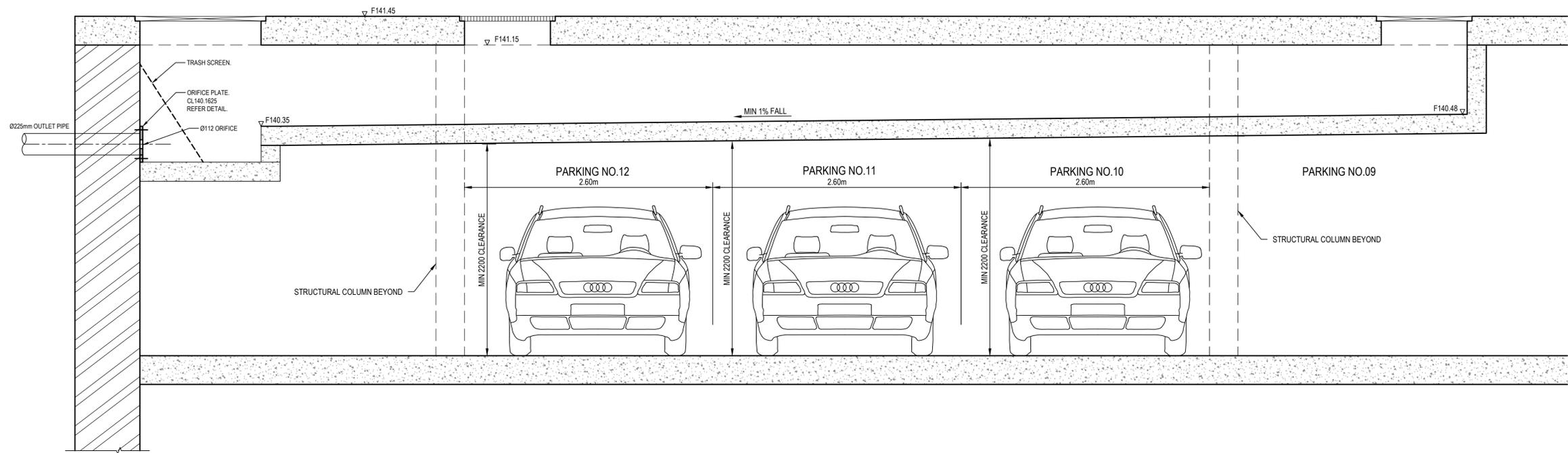


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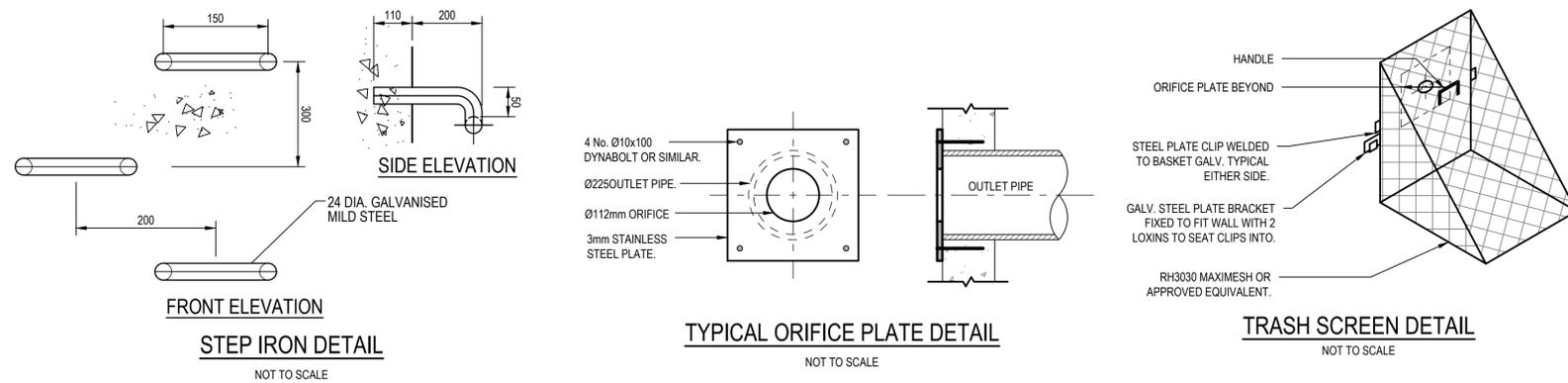
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DETAILS - SHEET 01

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SECTION 1
SCALE 1:25



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Scale

0 200 400 600 800 1000mm
SCALE 1:10 @A1
0 0.5 1 1.5 2 2.5m
SCALE 1:25 @A1

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