



PO BOX 320

Ph. (02) 4610 1401

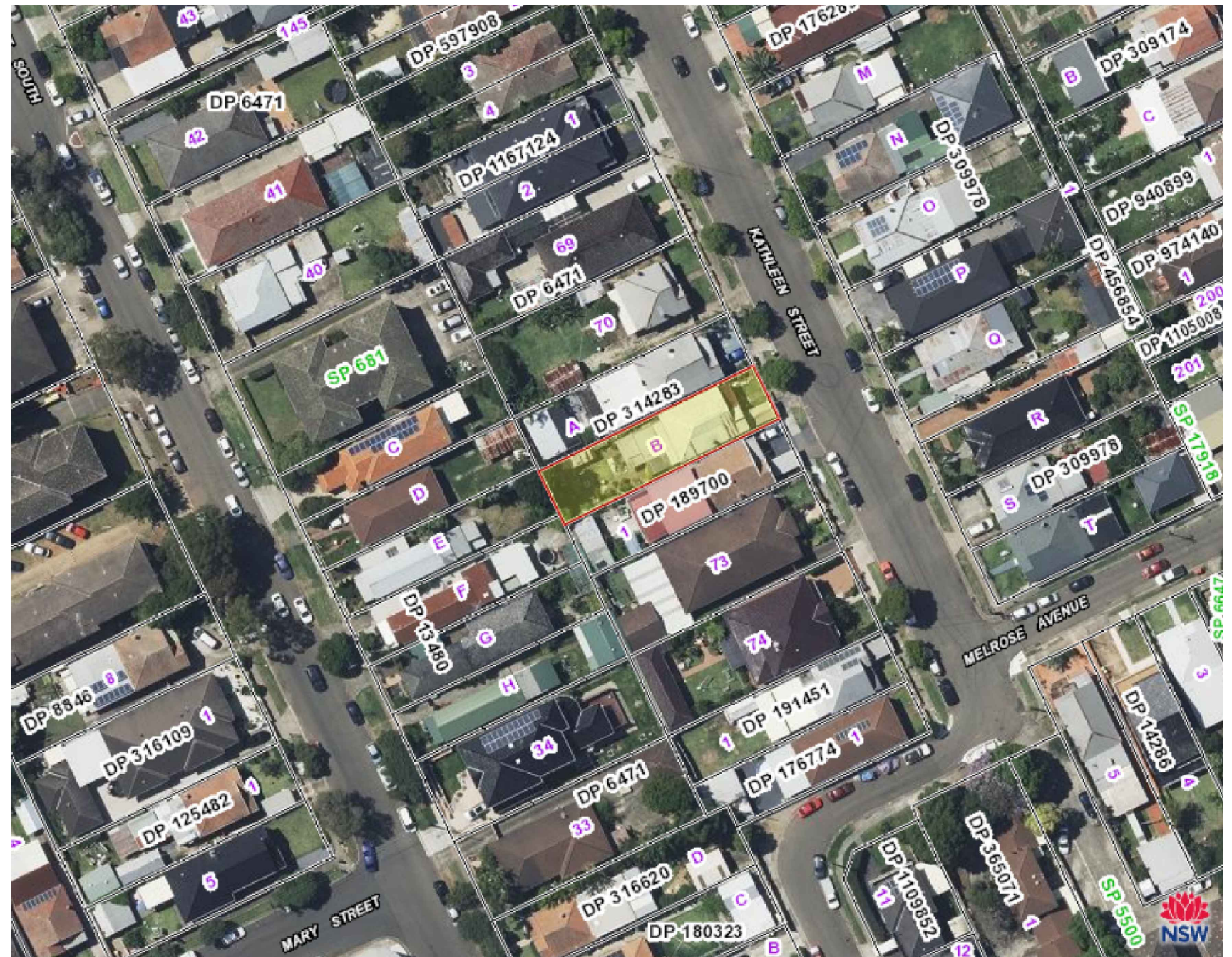
Web: www.hecardconsult.com.au

JOB NO: SW 032-2502

<u>DRAWING NO</u>	<u>DRAWING TITLE</u>
1	COVERPAGE
2	GENERAL NOTES
3	EAVE GUTTER CALCULATION
4	STORMWATER MANAGEMENT PLAN
5	STORMWATER MANAGEMENT PLAN (BASEMENT PLAN)
6	PUMP SUMP TANK
7	RAINWATER TANK DETAIL
8	PIT AND KERB CONNECTION DETAIL
9	EROSION AND SEDIMENT CONTROL PLAN
10	EROSION AND SEDIMENT CONTROL DETAIL

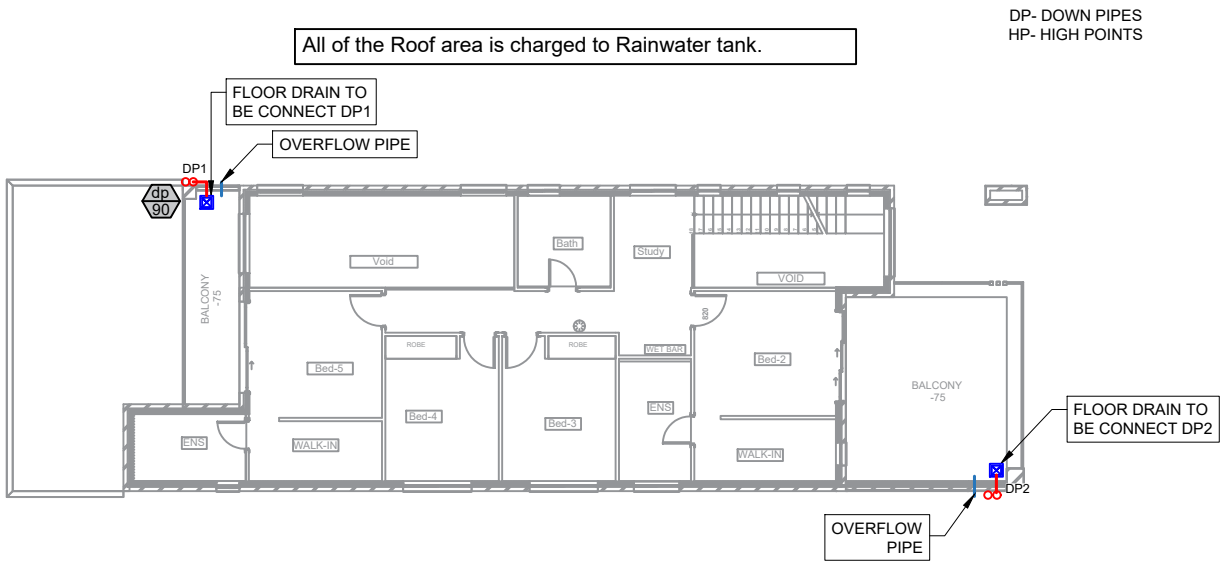
FOR PROPOSED DWELLING

35, KATHLEEN STREET, WILEY PARK, NSW

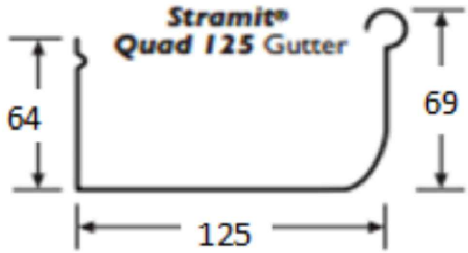


ISSUED FOR: D.A

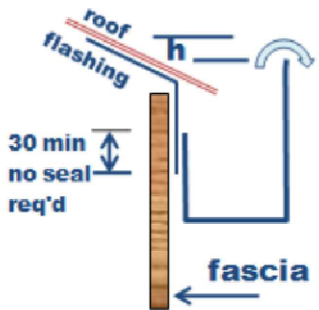
STORMWATER DRAINAGE GENERAL				ENGINEER IS TO BE NOTIFIED AT THE EARLIEST POSSIBLE CONVENIENCE				• PROVIDE CONCRETE BENCHING ACROSS PIT TO SUIT INLET AND OUTLET PIPES AS DETAILED				• RAINWATER TANK TO BE CONNECTED TO ALL TOILETS, LAUNDRY AND AT LEAST ONE (1) OUTDOOR TAP.			
• THESE DRAWINGS SHALL BE READ IN CONJUCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK				• THE CONTRACTOR TO VERIFY THE INVERT LEVELS AT POINT OF CONNECTION TO EXISTING STORMWATER SYSTEM AND REPORT ANY CONFLICT OF LEVELS				• DIA 100 SUBSOIL DRAINAGE PIPE 3.0 M LONG WRAPPED IN FABRIC SOCK TO BE PLACED ADJACENT TO INLET PIPES ON BOTH SIDES AND 100 MM MIN. ABOVE PIT FLOOR				DESIGN NOTES			
• DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. REFER TO ARCHITECT'S FINAL DRAWINGS.				• ALL BUILDINGS HAVE RAISED SO THERE IS AT LEAST 150 mm STEP UP INTO THE BUILDING TO ALLOW SUFFICIENT FREEBOARD FOR OVERLAND FLOWS IN THE CASE OF PIPE BLOCKAGE				• SUB SOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS AND EMBANKMENTS WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.				• ALL EVE GUTTERS AND DOWNPIPES ARE DESIGNED FOR 10 YEAR ARI STORM EVENT.			
• THE BUILDER SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING AND NEW SERVICES, AND SHALL BE RESPONSIBLE FOR DAMAGE TO THE SAME.				• DOWNPIPES AND PITS LOCATIONS AND LEVELS MAY BE VARIED TO SUIT THE SITE CONDITIONS, AFTER ENGINEERING APPROVAL				• SELECTED GRANULAR BACKFILL IS TO BE PLACES AGAINST THE FULL HEIGHT OF THE PIT VERTICAL FACES AND FOR A HORIZOONTAL DISTANCE EQUAL TO ONE-THIRD THE HEIGHT OF THE STRUCTURE.				• BOX GUTTER AND RAINWATER HEADS ARE DESIGNED FOR 100 YEAR ARI STORM EVENT			
• ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SSA CODES, AND THE BY-LAWS AND ORDINANCES OF THE COUNCIL EPA AND WORKCOVER AS 3500 PART 2 & 3				• DOWNPIPES SHOWN ARE INDICATIVE ONLY. ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS				• MORTAT BASES TO BE SHAPED TO GIVE MIN 20 mm FALL ACROSS PITS				• INTENSITY FREQUENCY DURATION (IFD) DESIGN CHART OBTAINED FROM BUREAU OF METEOROLOGY HAS BEEN USED TO DESIGN ON SITE DETENTION SYSTEM.			
• PREPARE PROGRESSIVELY AND FURNISH TO THE ENGINEER WORK AS EXECUTED DRAWINGS OF THE SAME SIZE AND QUALITY AS THIS DRAWING BUT ACCORDANCE WITH DA CONDITIONS AND CC REQUIREMENTS.				• DRAINAGE PIPES TO BE CONCRETE ENCASED WHERE LOCATED UNDER DRIVEWAY OR BUILDING				• MORTAR BASES TO BE DISHED TO SUIT ADJOINING PIPE SIZES TO GICE SELF CLEAINSING PITS.				• SEDIMENT FENCE			
• GIVE SUFFICIENT NOTICE SO THAT INSPECTION MAY BE CARRIED OUT AT THE FOLLOWING STAGES: WORK READY FOR SPECIFIED TESTING, WORK READY TO BE COVERED OR CONCEALED.				• ALL PIPES TO BE FULLY HOUSED INTO PIT WALLS AND JOINED / SEAL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.				• WHERE PIT DEPTH EXCEEDS STANDARD DEPTH, CONCRETE SHALL BE USED AS PIT BASE, AND ALSO TO GAIN REQUIRED INLET/ OUTLET LEVELS.				• SEDIMENT CONTROL DEVICES ARE TO BE IN PLACE PRIOR TO ANY DEMOLITION OR CONSTRUCTION.			
• OBTAIN APPROVAL BEFORE INTERRUPTING AN EXISTING SERVICE. KEEP THE NUMBER OF INTERRUPTIONS TO A MINIMUM.				• GRADE ALL PAVED AND GRASSED AREAS AWAY FROM THE BUILDING.				• THE INLET PIPE OBVERT IS TO BE HIGHER THAT THE OUTLET PIPE OBVERT				• CONSTRUCT A SILT BARRIER FENCE AS SHOWN ON PLAN AND TO DETAILS AS ABOVE.			
• LAY PIPES TO THE LEVELS SHOWN ON THE DRAWINGS AND IN ANY CASE NOT LESS THAN THE FOLLOWING:				• TOP OF GRATE TO BE POSITIONED TO CATCH ALL UPSTREAM SURFACE FLOWS AS INDICATED BY PLANS.				• ALL SWAYLES SHALL HAVE A TURFED INVERT EXTENDING 0.5 m UP THE SIDE SLOPES				• SEDIMENT CONTROL DEVICES ARE TO BE MAINTAINED IN GOOD WORKING ORDER UNTIL COMPLETION OF ALL SITE WORKS OR TO THE SATISFACTION OF THE COUNCIL SUPERVISING OFFICER.			
DIA. 100 MM @ 1.0%, DIA 150 MM @ 1.0%, DIA 225 MM @ 0.5%, DIA 300 MM @ 0.5%				• ALL PIPES WITHIN THE PROPERTY TO BE MIN. OF 150 DIA, @ 1% MIN. GRADE, UNO.				• HAND EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS				• ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			
• ENDS OF PIPES AND STUB CONNECTIONS TO BE SEALED WITH ○ AN APPROVED SEALED DISC.				• ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULHEADS AT ALL JOINTS.				• FOOTHPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS				SEDIMENT BARRIER AROUND PIT:			
• MILD STEEL STAR PICKET 1200 mm LONG WITH 300 mm PAINTED GREEN EXTENDED ABOVE GROUND LEVEL TO BE PLACED AT EACH INTERLOTMENT DRAINAGE CONNECTION POINT.				• ALL PITS WITHIN THE PROPERTY AREA TO BE FITTED WITH WELDOK OR APPROVED EQUIVALENT GRATES TO AS3996:				• ALL FENCES MUST BE RAISED 150 mm FROM THE FINISHED GROUND LEVELS SO THAT OVERLAND FLOWS FROM UPSTREAM PROPERTIES ARE NOT RESTRICTED OR BLOCKED.				• FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.			
• GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION				○ LIGHT DUTY FOR LANDSCAPE AREAS				• THE SYSTEM TO BE INSTALLED WITH THE FOLLOWING CONSIDERATIONS:				• SUPPORT GEOTEXTILE WITH MESH TIED TO THE POSTS AT 1000 MM CENTERS.			
STORMWATER DRAINAGE NOTES:				○ HEAVY DUTY WHERE SUBJECTED TO VEHICULAR CROSSING				• A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS				• DONOT COVER INLET WITH GEOTEXTILE			
• CONTRACTOR IS TO VERIFY THE LEVEL AND LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION.				• ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.				• ADEQUATE SCREENING TO PROVIDE MOSQUITO BREEDING AND ENTRY OF ANIMAL OR FLOATING MATTER				STANDARD PIPE TRENCH			
• THE CONTRACTOR IS TO VERIFY ANY CONFLICT OF SERVICES IN THE ROAD RESERVE OR SUBJECT PROPERTY AND THE				• ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINEOUS HINGE				• TANKS TO BE PLUMBED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIOD WHEN THE TANK IS 80% EMPTY.				• SAND FREE FROM ROCK OR OTHER HARD AND SHARP OBJECTS THAT WOULD RETAINED ON 13.2 SEIVE			
				• ALL COURTYARD AND LANDSCAPE PITS TO BE 400 SQUARE, UNO				• NO DIRECT CROSS-CONNECTION WITH THE POTABLE WATER SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.				• CRISHED ROCK OR GRAVEL OF APPROVED GRADING UP TO MAX SIZE OF 14 mm			
				• ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.								• THE EXCAVATED MATERIAL MAY BE USED IF IT IS FREE FROM ROCK OR HARD MATTER AND BROKEN UP SO STHAT IT CONTAINS NO SOIL LUMPS HAVING ANY DIMENSION GREATER THAN 75 mm WHICH WOULD PREVENT ADEQUATE COMPACTION OF THE BEDDING			
				• PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.								• MATERIAL FOR PIPE SIDE SUPPORT SHOULD BE ADEQUATELY TAMPED IN LAYERS OF NOT MORE THAN 150 mm.			
				• COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE MIN. 25 MPa								• PIPE OVERLAY MATERIAL SHOULD BE LEVELLED AND TAMPED IN LAYERS TO A MINIMUM HEIGHT OF 150 mm ABOVE THE CROWN OF THE PIPE			



FLOOR DRAINAGE SYSTEM (FIRST FLOOR)
SCALE - 1:200

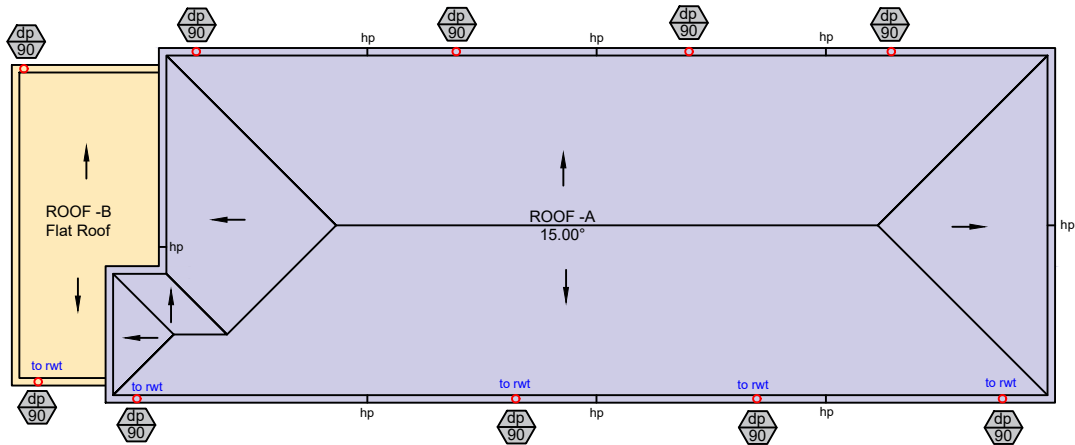


RECOMMENDED GUTTER = Stramit Quad 125
Unslotted NSW; Area = 6200 mm²
OR
EQUIVALENT SHOULD BE USED



**Overflow over the front
with flashing**

REQUIRED SETDOWN (h) FOR 1% AEP
GUTTER OVERFLOW = 25 mm



STORMWATER MANAGEMENT PLAN (ROOF)
scale 1:200

A	ISSUED FOR D.A	CS	05/03/2025
Rev	Description	By	Date

©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.



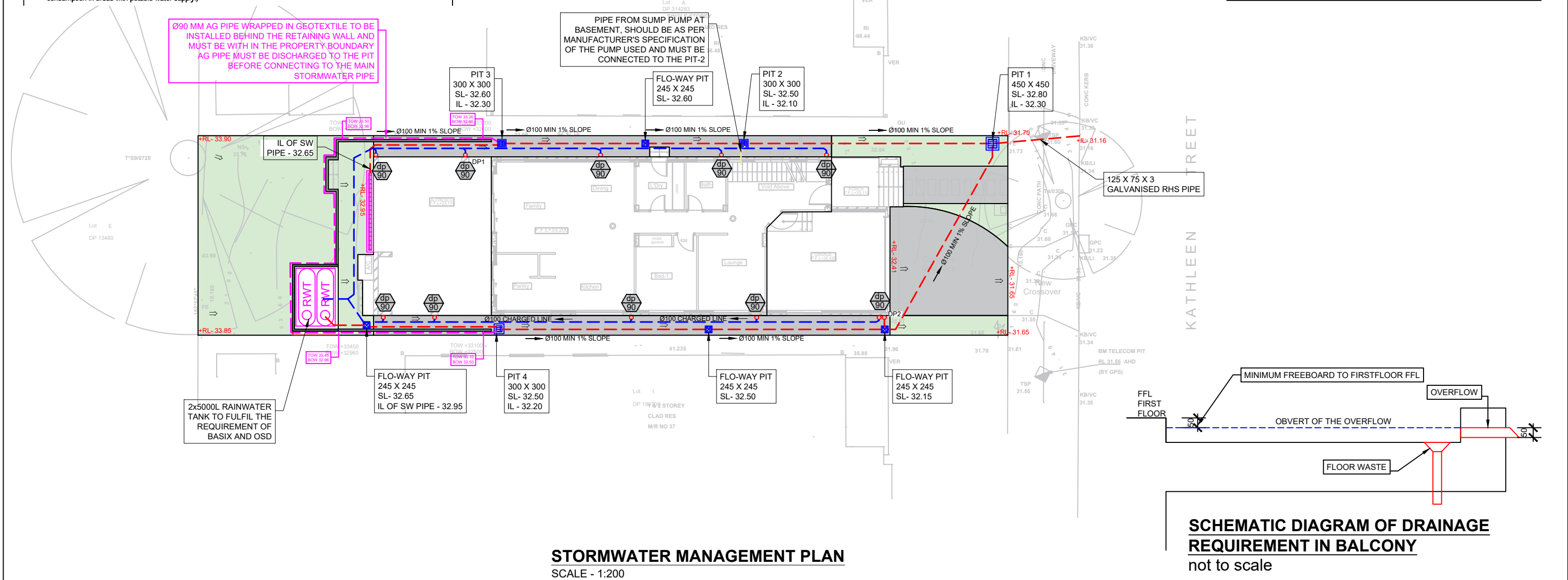
HECARD Consult Pty. Ltd.
PO BOX 320
Macarthur Square, NSW, 2560
Ph. (02) 4610 1401
Email: info@hecardconsult.com.au
Web: www.hecardconsult.com.au























Client:	SOHAIL MURAD
Project:	Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW


Title: 3 EAVE GUTTER CALC	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 05/03/2025
Reviewed By: C.L.A	Issue: A
Scale: as shown (A3)	Job No: SW 032-2502
	Sheet No: 3 OF 10

Alternative water	
Rainwater tank	
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	
The applicant must configure the rainwater tank to collect rain runoff from at least 100 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).	
The applicant must connect the rainwater tank to:	
• all toilets in the development	
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)	

- NOTES:**
- WHERE POSSIBLE, BUILDER SHOULD USE THE EXISTING OUTLET POINT TO DISCHARGE THE WATER FROM THE SITE.
 - IF THE DESIGN AND THE SITE CONDITION DO NOT MATCH, PLEASE CONTACT HECARD CONSULT OR QUALIFIED HYDRAULIC ENGINEER.



	DOWN PIPE DIA OF DOWN PIPE		245 X 245 FLOW-WAY PIT		uPVC STORM WATER PIPE -100mm		CONCRETE AREA
SL	SURFACE LEVEL		450 X 450 STORM WATER PIT		uPVC STORM WATER PIPE -150mm		STORMWATER DRAINAGE EASEMENT
IL	INVERT LEVEL		600 X 600 STORM WATER PIT		uPVC STORM WATER - 225mm		RAINWATER TANKS AS PER BASIX REQUIREMENTS. FURST FLUSH DEVICE MUST BE INSTALLED BEFORE THE INLET POINT. RAINWATER TANK TO BE CONNECTED TO AT LEAST ONE TOILET AND EXTERNAL TAPS. OVERFLOW FROM RAINWATER TANK TO BE CONNECTED TO STORMWATER PIPE DISCHARGING TO PIT-1 AT THE FRONT OF THE PROPERTY
dp°	DOWNPIPES		900 X 900 STORM WATER PIT		uPVC STORM WATER PIPES - 375mm		
	RAINWATER HEAD WITH DOWNPIPE		RETAINING WALL		AG PIPES		Ø100 mm uPVC SEWER GRADE STORMWATER PIPES MINIMUM 1% SLOPE. ARROW REPRESENTS DIRECTION OF FLOW IN PIPE STORMWATER PIPE
+RL- 22.52	FINISH GROUND LEVEL		GRATED DRAIN 150mm		uPVC STORM WATER PIPES TO RAIN WATER TANK -100mm		
	SURFACE FLOW DIRECTION		GRASS AREA		uPVC EXISTING STORM WATER PIPE		Ø100 mm uPVC SEWER GRADE STORMWATER PIPES CHARGED TO RAIN WATER TANK. ARROW REPRESENTS DIRECTION OF FLOW IN PIPE STORMWATER PIPE

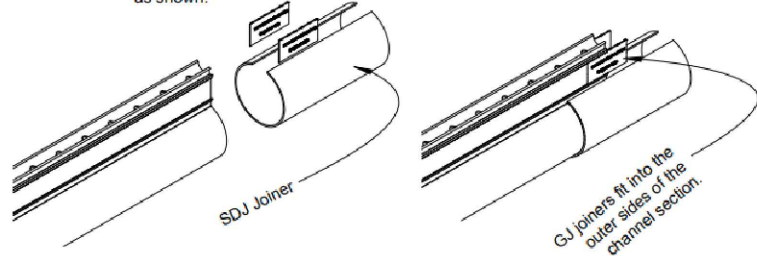
				©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.	 <div>HECARD Consult Pty. Ltd. PO BOX 320 Macarthur Square, NSW, 2560 Ph. (02) 4610 1401 Email: info@hecardconsult.com.au Web: www.hecardconsult.com.au</div>	Client: SOHAIL MURAD		Title: 4 STORMWATER PLAN		
						Project: Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW		Designed By: Chij Shrestha MIEAust, CPEng, NER		Date: 05/03/2025
								Reviewed By: C.L.A		Issue: A
								Scale: as shown (A3)		Job No: SW 032-2502
										Sheet No: 4 OF 10
A	ISSUED FOR D.A	CS	05/03/2025							
Rev	Description	By	Date							



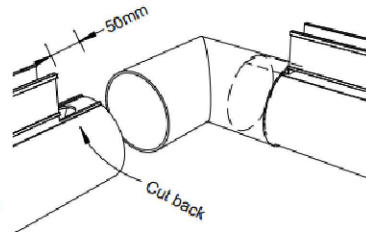
SD90 Slot Drain Assembly

INTAKE
10mm holes @ 50mm 0.7 L/s. metre
13mm holes @ 50mm 1.0 L/s. metre
12mm Open slot = 2.0 L/s. metre
25mm Open slot = 4.0 L/s. metre

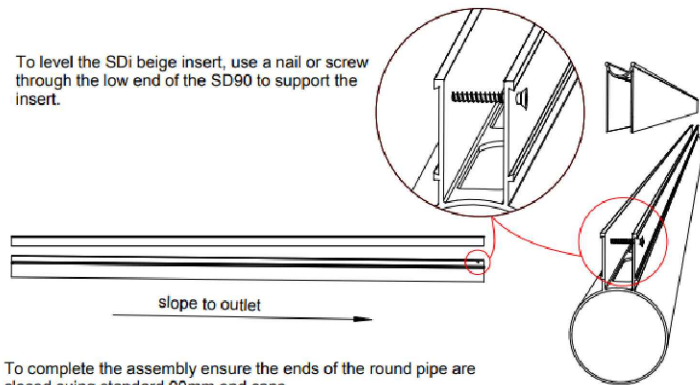
For connecting straight runs of SD90 us the SDJ straight connector collar, and one pair of GJ joiners as shown.



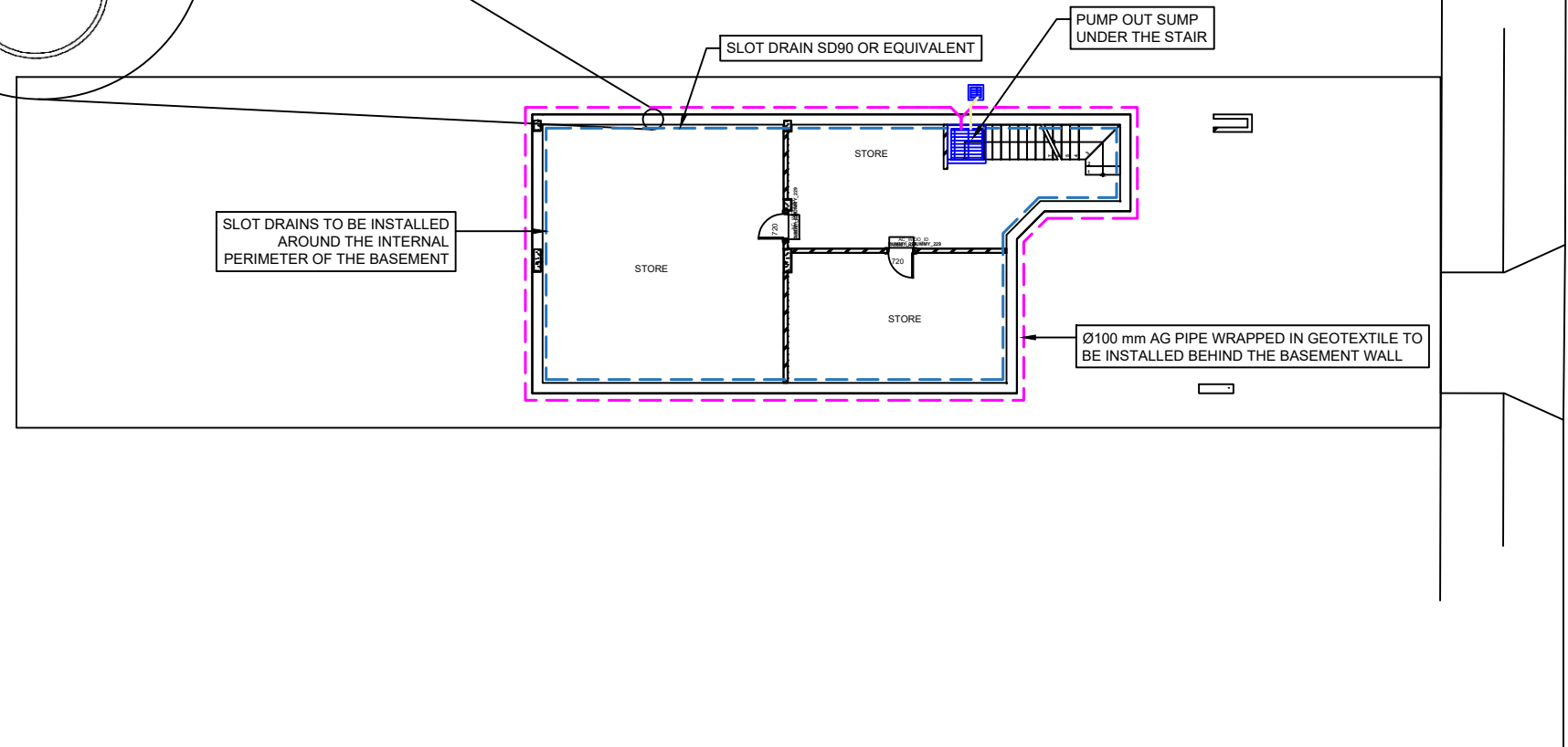
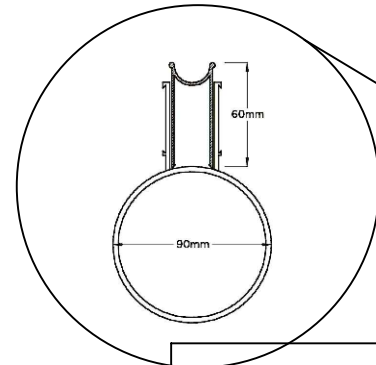
When joining the SD90 around a corner use a standard 90mm elbow. Shown here is a 90 degree corner. Cut the channel section from the round pipe section back by about 50mm. This will allow the SD90 to fit inside the elbow fitting.



To complete the top slot, simply use the SDi beige insert to form a channel section over the elbow. Water entering this will run into the first slot either side.



To complete the assembly ensure the ends of the round pipe are closed suing standard 90mm end caps.



Copyright 1999-2015 Stormtech Pty Ltd

This drawing is the intellectual property of STORMTECH Pty Ltd.

Drawings are not to scale. Use dimensions shown.

Patent number: 626564

e info@stormtech.com.au, w www.stormtech.com.au

SD221982615TC

STORMWATER MANAGEMENT PLAN (BASEMENT)

SCALE - 1:200



DOWN PIPE
DIA OF DOWN PIPE

SL SURFACE LEVEL

IL INVERT LEVEL

dp° DOWNPIPES

RAINWATER HEAD WITH DOWNPIPE

+RL- 22.52 FINISH GROUND LEVEL

SURFACE FLOW DIRECTION



245 X 245 FLOW-WAY PIT



450 X 450 STORM WATER PIT



600 X 600 STORM WATER PIT



900 X 900 STORM WATER PIT



RETAINING WALL



GRATED DRAIN 150mm



GRASS AREA



uPVC STORM WATER PIPE -100mm



uPVC STORM WATER PIPE -150mm



uPVC STORM WATER - 225mm



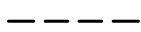
uPVC STORM WATER PIPES - 375mm



AG PIPES



uPVC STORM WATER PIPES TO RAIN WATER TANK -100mm



uPVC EXISTING STORM WATER PIPE



CONCRETE AREA



STORMWATER DRAINAGE EASEMENT



RAINWATER TANKS AS PER BASIX REQUIREMENTS. FURST FLUSH DEVICE MUST BE INSTALLED BEFORE THE INLET POINT. RAINWATER TANK TO BE CONNECTED TO AT LEAST ONE TOILET AND EXTERNAL TAPS. OVERFLOW FROM RAINWATER TANK TO BE CONNECTED TO STORMWATER PIPE DISCHARGING TO PIT-1 AT THE FRONT OF THE PROPERTY

Ø100 MIN 1% SLOPE

Ø100 mm uPVC SEWER GRADE STORMWATER PIPES MINIMUM 1% SLOPE. ARROW REPRESENTS DIRECTION OF FLOW IN PIPE STORMWATER PIPE

Ø100 CHARGED LINE

Ø100 mm uPVC SEWER GRADE STORMWATER PIPES CHARGED TO RAIN WATER TANK. ARROW REPRESENTS DIRECTION OF FLOW IN PIPE STORMWATER PIPE

Rev	Description	By	Date
A	ISSUED FOR D.A	CS	05/03/2025

©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.

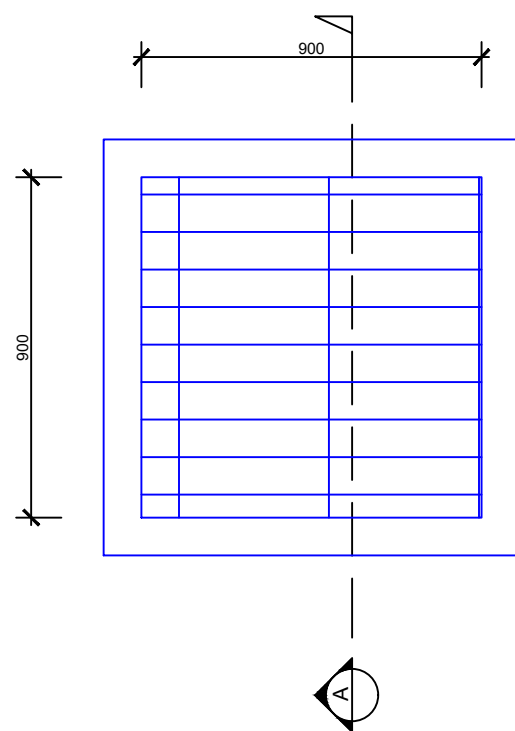


HECARD Consult Pty. Ltd.
PO BOX 320
Macarthur Square, NSW, 2560
Ph. (02) 4610 1401
Email: info@hecardconsult.com.au
Web: www.hecardconsult.com.au

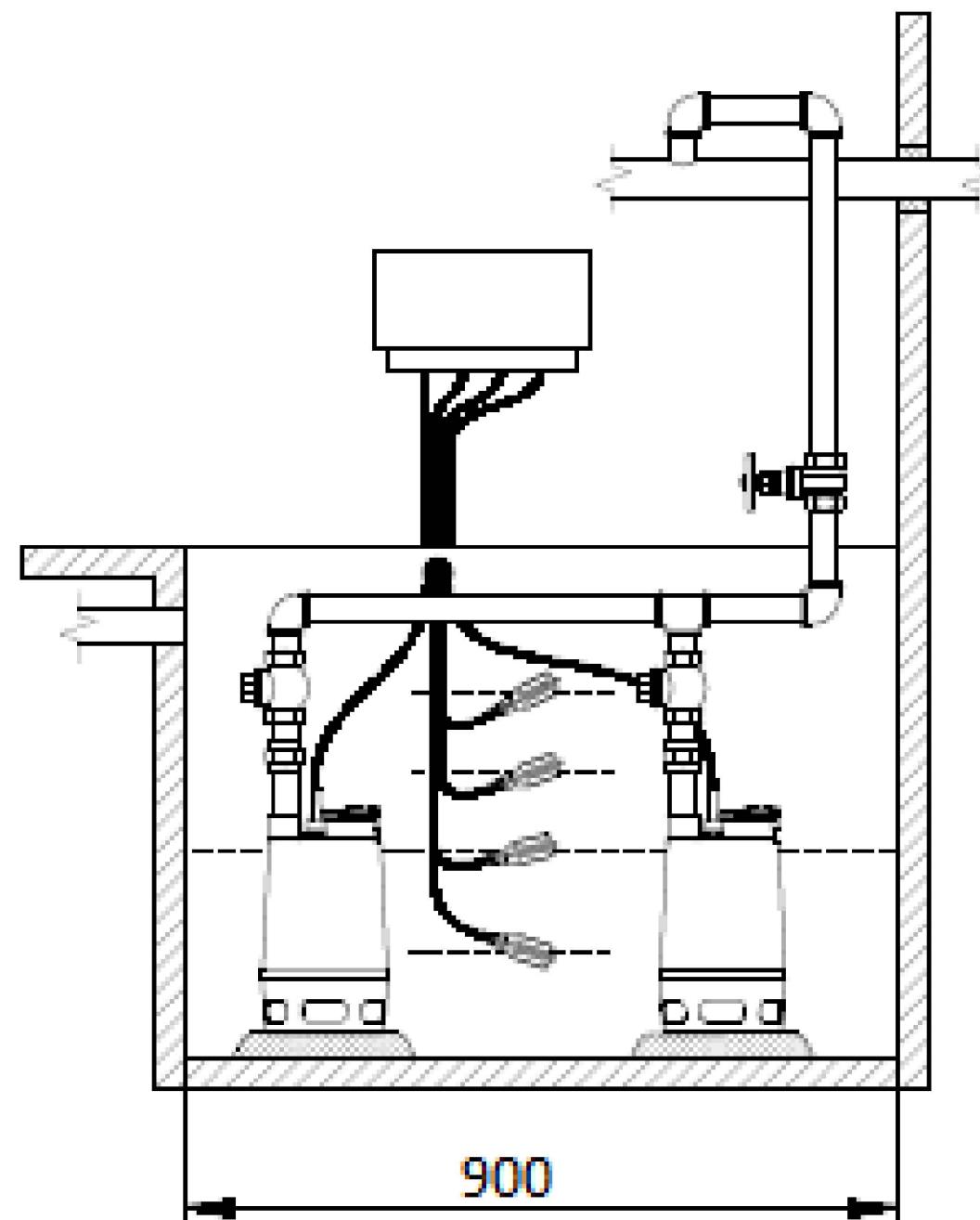
Client:	SOHAIL MURAD
Project:	Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW

Title: 5 STORMWATER PLAN (BASEMENT)	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 05/03/2025 Issue: A
Reviewed By: C.L.A	Job No: SW 032-2502
Scale: as shown (A3)	Sheet No: 5 OF 10

INSTALL 2 X
SUBMIRSIBLE PUMP IN
THE SUMP TANK. WATER
TO PUMP OUT TO KERB
OUTLET
PUMP TYPE:
UNILIFT CC 7 OR
EQUIVALENT SHOULD BE
INSTALLED ACCORDING
TO MANUFACTURER'S
SPECIFICATION.



TYPICAL PUMP SUMP TANK PLAN
scale 1:20



Two-pump installation with four float switches

SECTION A
scale : nts

A	ISSUED FOR D.A	CS	05/03/2025
Rev	Description	By	Date

©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.



HECARD Consult Pty. Ltd.
PO BOX 320
Macarthur Square, NSW, 2560
Ph. (02) 4610 1401
Email: info@hecardconsult.com.au
Web: www.hecardconsult.com.au

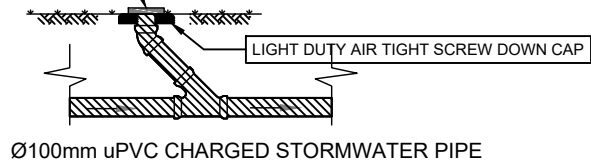
Client:	SOHAIL MURAD
Project:	Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW

Title: 6 PUMP SUMP TANK	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 05/03/2025 Issue: A
Reviewed By: C.L.A	Job No: SW 032-2502
Scale: as shown (A3)	Sheet No: 6 OF 10

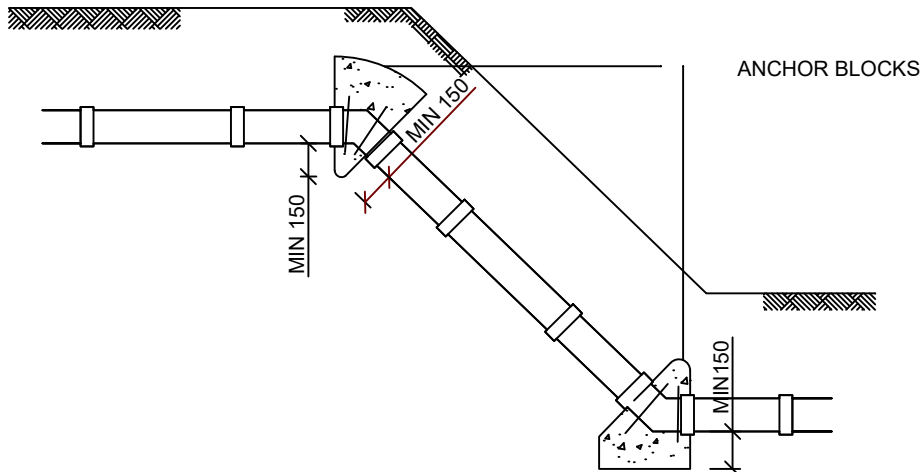


TYPICAL WARNING SIGN
not to scale

CAP TO BE SECURED WITH
CONCRETE SURROUND

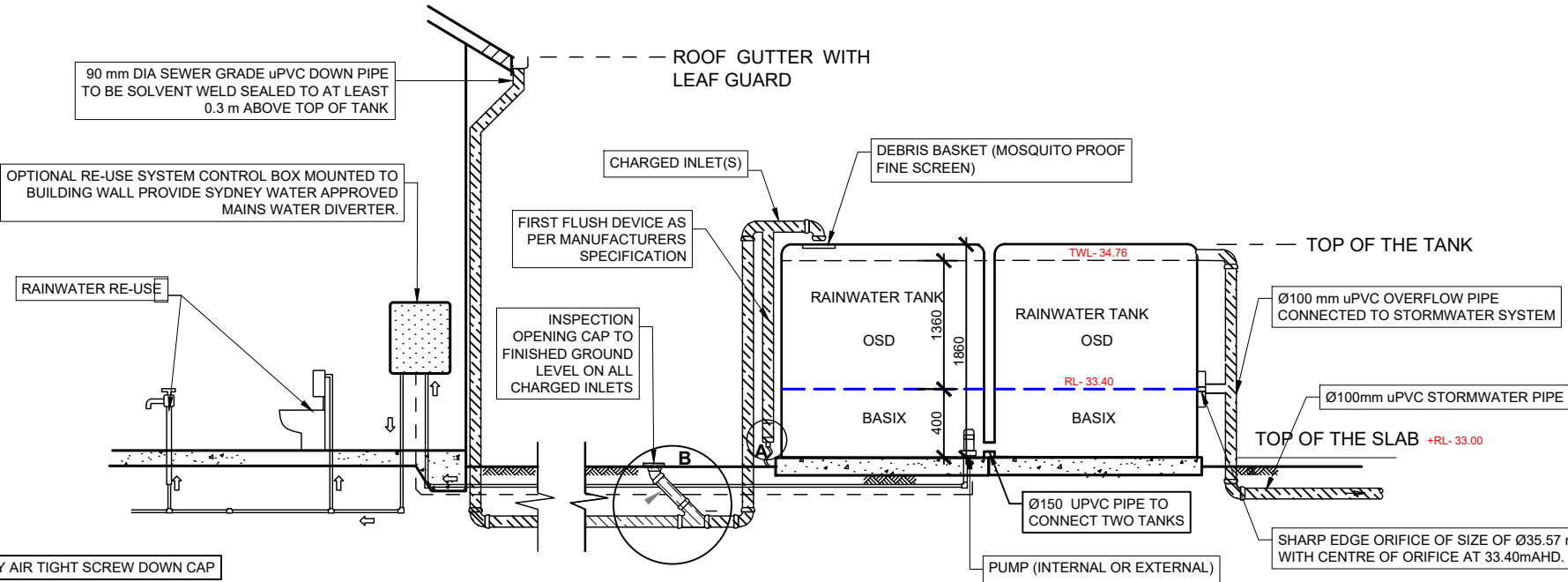


DETAIL AT B
not to scale

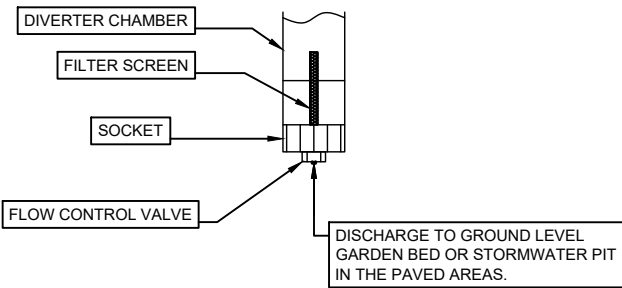


**TYPICAL ANCHOR BLOCK DETAIL FOR
SLOPE GREATER THAN 1:5**
not to scale

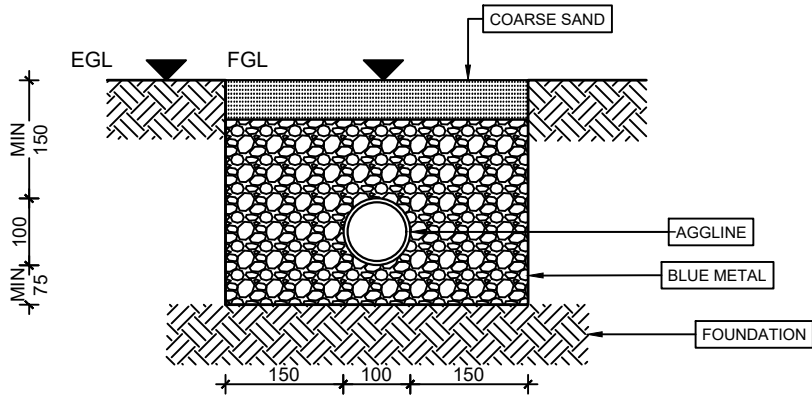
- NOTE:**
WHERE THE GRADIENT OF A SITE OF STORMWATER DRAIN EXCEEDS 1:5, ANCHOR BLOCKS SHALL BE INSTALLED:
- a) AT THE BEND OR JUNCTION AT THE TOP AND BOTTOM OF THE STORMWATER DRAIN
 - b) AT INTERVAL NOT EXCEEDING 3.0 m
 - c) THICKNESS OF ANCHOR BLOCKS SHOULD NOT BE LESS THAN 150 mm
 - d) TWO STEEL REINFORCEMENT BAR BARS NOT LESS THAN 10 mm DIA BENT TO A RADIUS ABOUT 200 mm SHALL BE PROVIDED TO ANCHOT BLOCKS
 - e) ANCHOR BLOCKS SHOULD NOT COVER ANY FLEXIBLE JOINTS



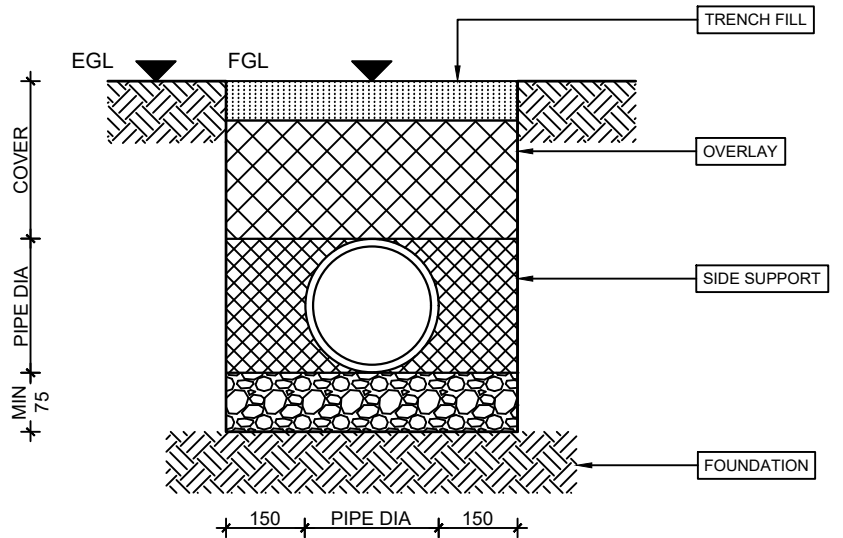
TYPICAL RAINWATER TANK DETAIL
not to scale



DETAIL AT A
not to scale



AGGLINE TRENCH DETAIL
not to scale



STANDARD PIPE TRENCH DETAIL
not to scale

OSD CALCULATION:

- TOTAL IMPERVIOUS AREA = 307.8 SQ M
- OSD VOLUME REQUIRED @ 0.025 m³/sq m OF IMPERVIOUS AREA = 307.8 X 0.025 = 7.69 m³
- PROVIDED OSD VOLUME = 8.0 m³
- PSD = @ 0.026 L/S PER SQ M OF IMPERVIOUS AREA = 8.0 L/S
- BYPASS FLOW INCLUDING PUMPING OUT = 4.87 L/S
- FINAL CALCULATED PSD = 8.0-4.87 = 3.13 L/S

ORIFICE CALCULATION:

- DEPTH TO CENTRE OF ORIFICE = 1.36 M
- PERMISSIBLE SITE DISCHARGE = 3.13 L/S
- CALCULATED ORIFICE SIZE = 35.57 mm
- CENTRE OF ORIFICE = 33.40 mAHD

DUE TO SITE CONDITION, REQUIRED VOLUME OF OSD IS PROPOSED IN THE RAINWATER TANK.



A	ISSUED FOR D.A	CS	05/03/2025
Rev	Description	By	Date

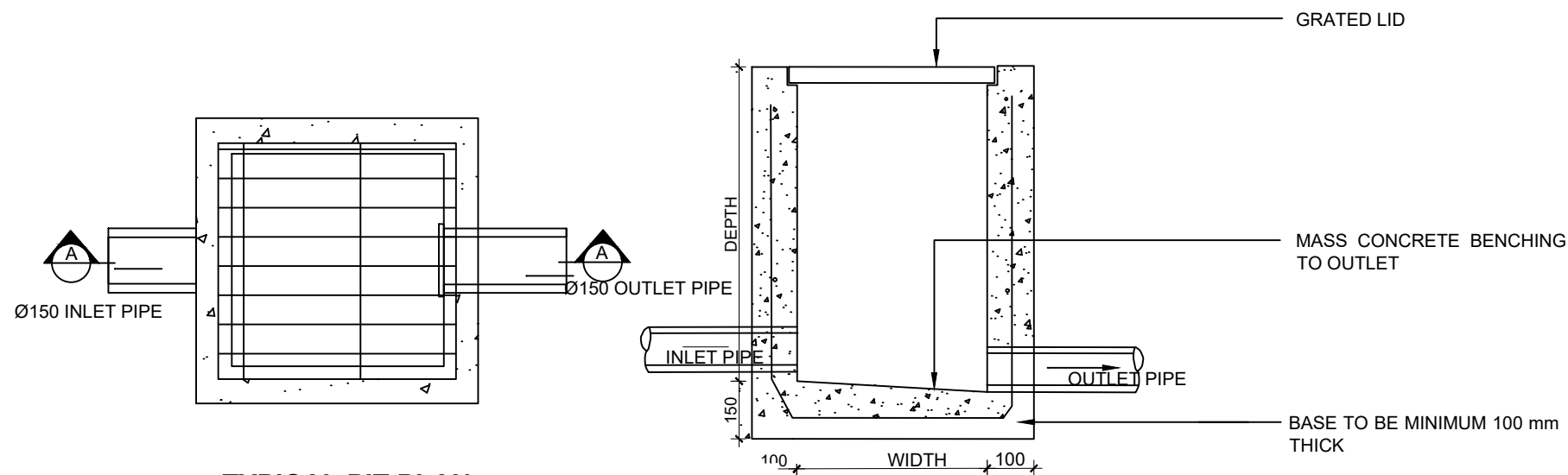
©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.



HECARD Consult Pty. Ltd.
PO BOX 320
Macarthur Square, NSW, 2560
Ph. (02) 4610 1401
Email: info@hecardconsult.com.au
Web: www.hecardconsult.com.au

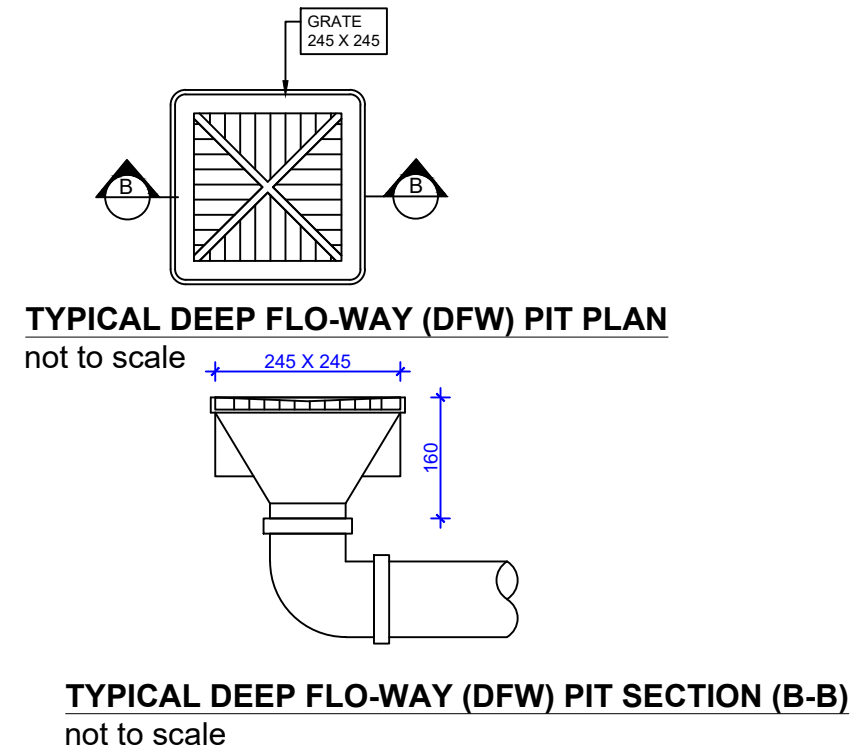
Client:	SOHAIL MURAD
Project:	Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW

Title:	7 RAIN WATER TANK DETAIL
Designed By:	Chij Shrestha MIEAust, CPEng, NER
Reviewed By:	C.L.A
Scale:	as shown (A3)
Date:	05/03/2025
Issue:	A
Job No:	SW 032-2502
Sheet No:	7 OF 10



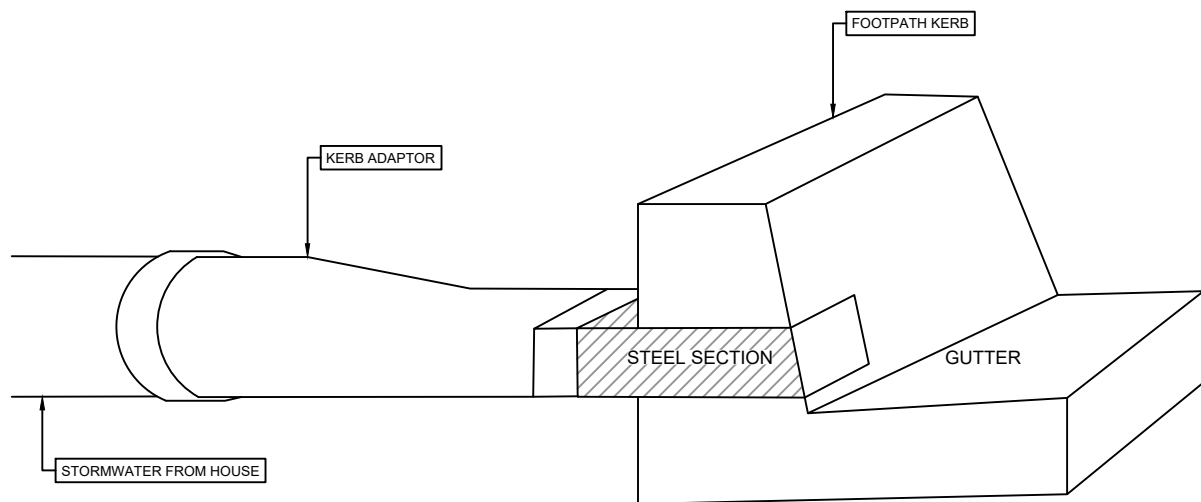
TYPICAL PIT PLAN
not to scale

TYPICAL PIT DETAIL
not to scale

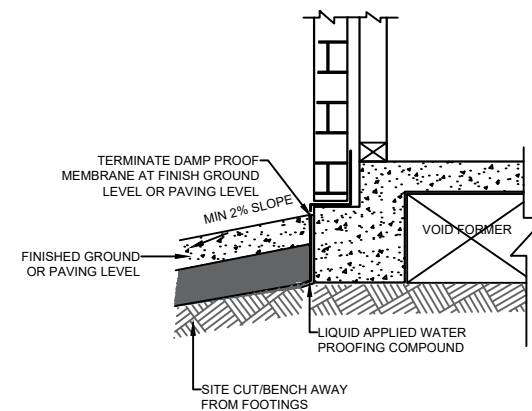


TYPICAL DEEP FLO-WAY (DFW) PIT PLAN
not to scale

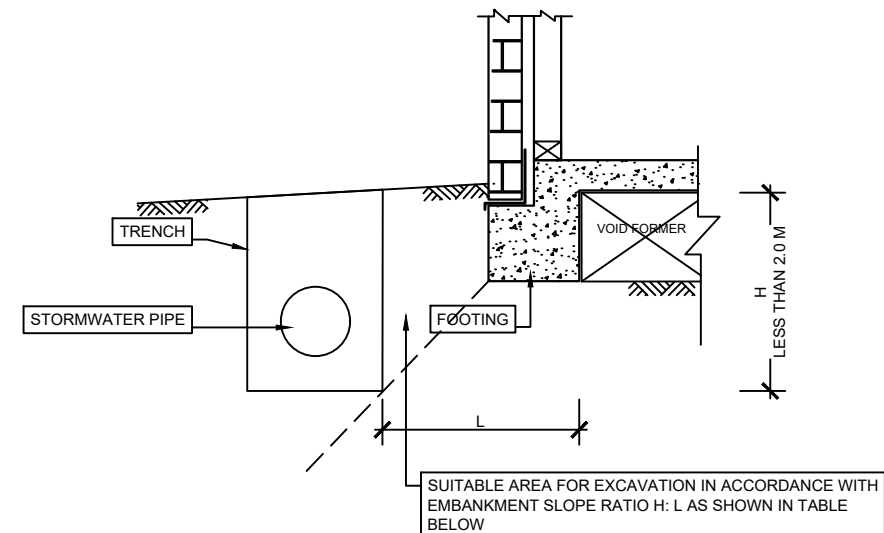
TYPICAL DEEP FLO-WAY (DFW) PIT SECTION (B-B)
not to scale



STREET KERB CONFIGURATION DETAIL (IF REQD)
not to scale



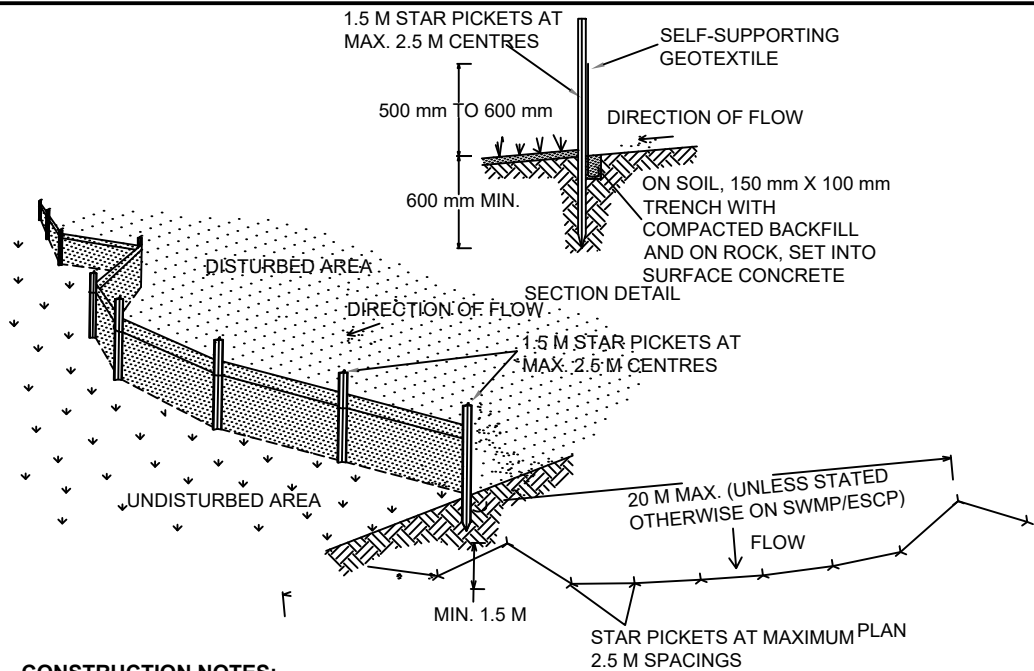
TYPICAL DETAIL OF FINISHED GROUND AROUND THE BUILDING FOOTPRINT
NOT TO SCALE



UN-RETAINED EMBANKMENT SLOPE RATIOS		
Soil class (see Part 3.2.4 for material description)	Site cut (excavation) (maximum embankment slope ratio, angle of site cut H:L ^{Note 1})	Compacted fill (maximum embankment slope ratio, angle of batter H:L ^{Note 1})
Stable rock (Class A)	8:1	2:3
Sand (Class A)	1:2	1:2
Firm clay (Class M-E)	1:1	1:2
Soft clay (Class M-E)	2:3	Not suitable

EXCAVATION FOR DRAINS ADJACENT TO FOOTINGS
NOT TO SCALE

				©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.				 <div>HECARD Consult Pty. Ltd. PO BOX 320 Macarthur Square, NSW, 2560 Ph. (02) 4610 1401 Email: info@hecardconsult.com.au Web: www.hecardconsult.com.au</div>				Client: SOHAIL MURAD				Title: 8 PIT AND KERB CONNECTION DETAIL							
												Project: Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW				Designed By: Chij Shrestha MIEAust, CPEng, NER				Date: 05/03/2025			
																Reviewed By: C.L.A				Issue: A			
																Reviewed By: C.L.A				Job No: SW 032-2502			
																Scale: as shown (A3)				Sheet No: 8 OF 10			
A	ISSUED FOR D.A			CS	05/03/2025																		
Rev	Description			By	Date																		

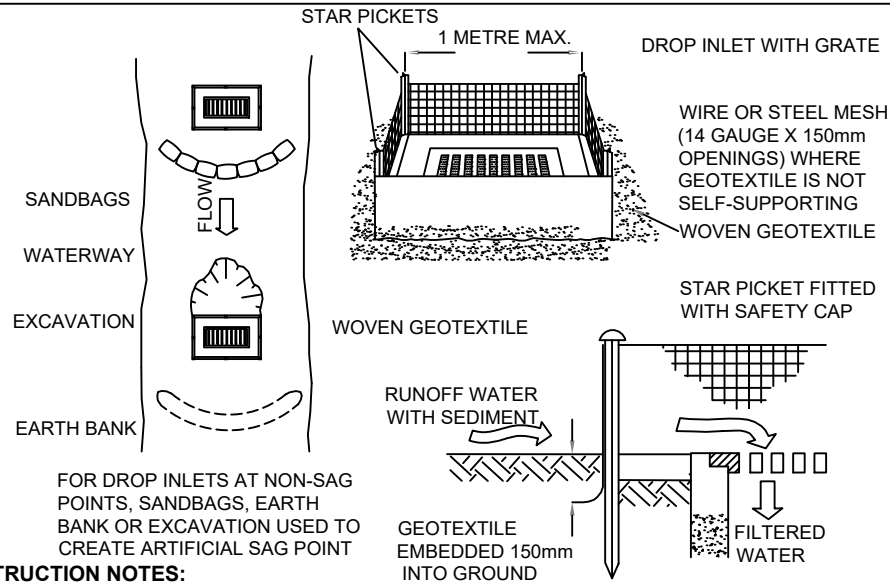


CONSTRUCTION NOTES:

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 STORMEVENT USUALLY THE 10 YEAR EVENT.
2. CUT A 150 MM 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 WIRES 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 THE SUPPORT POST WITH A 150 MM OPERLAP
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE

SD 6-8

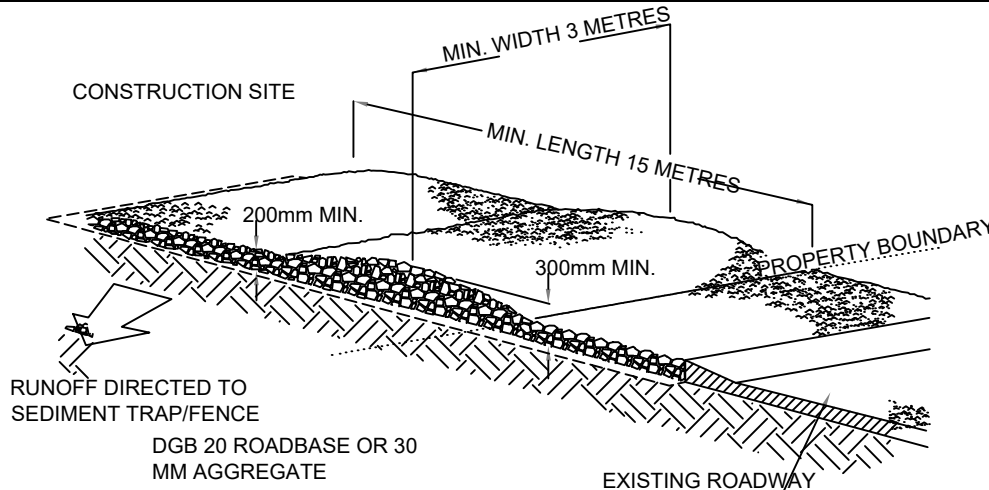


CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES
2. FOLLOW THE INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METER 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 WATER TO BYPASS IT.

GEOTEXTILE INLET FILTER

SD 6-12



GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS. GEOFABRIC MAY BE A WOVEN OR NEEDLE-PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500 N

CONSTRUCTION NOTES:

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE
2. COVER THE AREA WITH NEEDLE PUNCHED GEOTEXTILE
3. CONSTRUCT A 200 MM THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30 MM 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

A	ISSUED FOR D.A	CS	05/03/2025
Rev	Description	By	Date

©HECARD Consult. Copyright in the whole and every part of this drawing belongs to HECARD Consult and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with HECARD Consult. This drawing is produced by HECARD Consult solely for the benefit of and use by the client in accordance with the terms of the engagement. HECARD Consult does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this drawing.



HECARD Consult Pty. Ltd.
PO BOX 320
Macarthur Square, NSW, 2560
Ph. (02) 4610 1401
Email: info@hecardconsult.com.au
Web: www.hecardconsult.com.au

Client:	SOHAIL MURAD
Project:	Proposed Development at 35, KATHLEEN STREET, WILEY PARK, NSW

Title: 10 EROSION & SEDIMENT CONTROL DETAIL	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 05/03/2025
Reviewed By: C.L.A	Issue: A
Scale: as shown (A3)	Job No: SW 032-2502
	Sheet No: 10 OF 10