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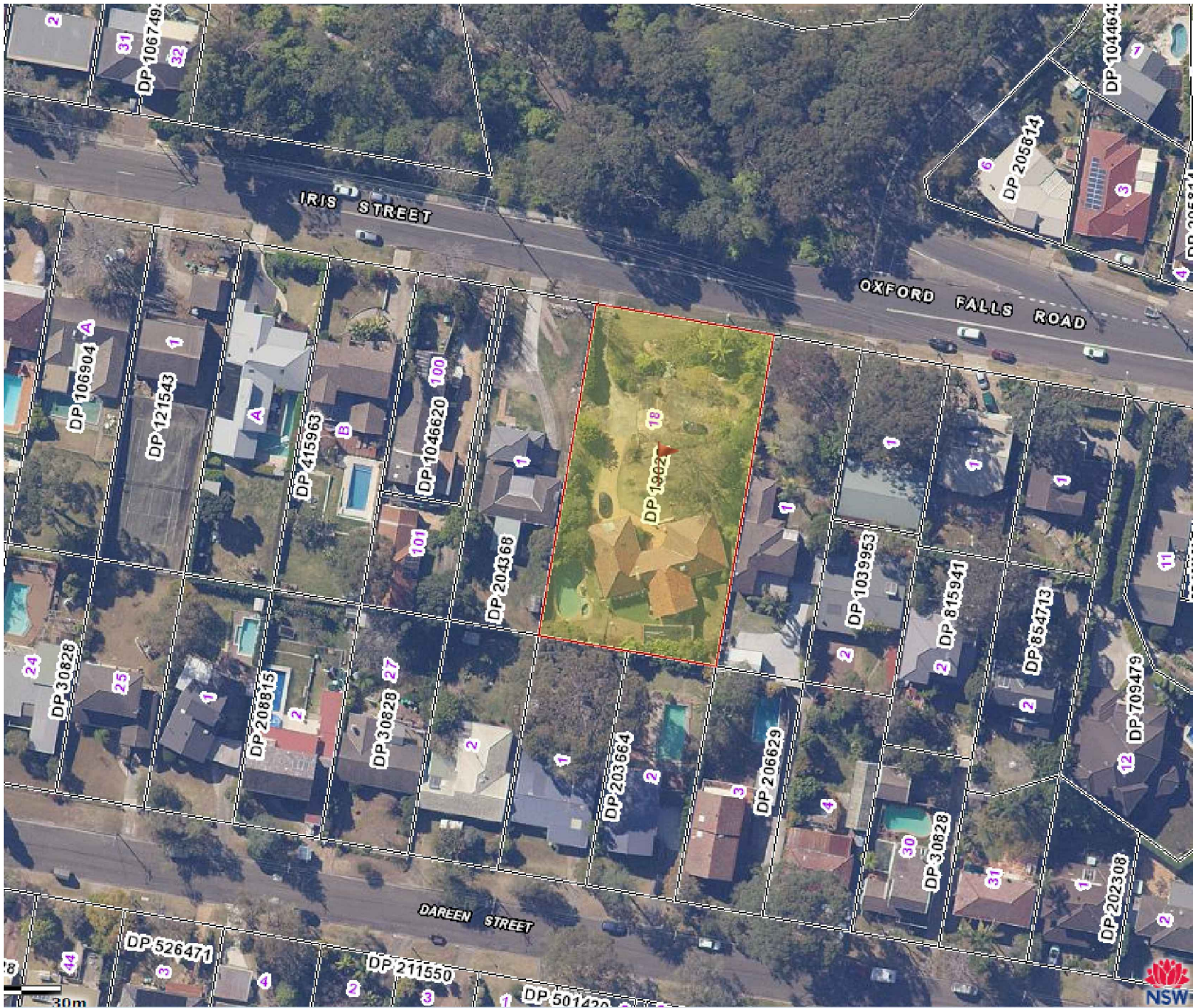
FOR: **Maree Jaloussis Hayes**

JOB NO: SW -152-2307 E
DATE: 06/09/2024

ISSUE: E

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STORMWATER MANAGEMENT PLAN
FOR PROPOSED SUBDIVISION
107 IRIS STREET, BEACON HILL, NSW



ISSUED FOR: DA

STORMWATER DRAINAGE GENERAL

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION 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
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. REFER TO ARCHITECT'S FINAL DRAWINGS.
- THE BUILDER SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING AND NEW SERVICES, AND SHALL BE RESPONSIBLE FOR DAMAGE TO THE SAME.
- 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
- 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.
- 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.
- OBTAIN APPROVAL BEFORE INTERRUPTING AN EXISTING SERVICE. KEEP THE NUMBER OF INTERRUPTIONS TO A MINIMUM.
- LAY PIPES TO THE LEVELS SHOWN ON THE DRAWINGS AND IN ANY CASE NOT LESS THAN THE FOLLOWING:

DIA. 100 MM @ 1.0%, DIA 150 MM @ 1.0%, DIA 225 MM @ 0.5%, DIA 300 MM @ 0.5%
- ENDS OF PIPES AND STUB CONNECTIONS TO BE SEALED WITH AN APPROVED SEALED DISC.
- MILD STEEL STAR PICKET 1200 mm LONG WITH 300 mm PAINTED GREEN EXTENDED ABOVE GROUND LEVEL TO BE PLACED AT EACH INTERLOT DRAINAGE CONNECTION POINT.
- GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION

STORMWATER DRAINAGE NOTES:

- CONTRACTOR IS TO VERIFY THE LEVEL AND LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION.
- THE CONTRACTOR IS TO VERIFY ANY CONFLICT OF SERVICES IN THE ROAD RESERVE OR SUBJECT PROPERTY AND THE

ENGINEER IS TO BE NOTIFIED AT THE EARLIEST POSSIBLE
CONVENIENCE

- THE CONTRACTOR TO VERIFY THE INVERT LEVELS AT POINT OF CONNECTION TO EXISTING STORMWATER SYSTEM AND REPORT ANY CONFLICT OF LEVELS
- 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
- DOWNPIPES AND PITS LOCATIONS AND LEVELS MAY BE VARIED TO SUIT THE SITE CONDITIONS, AFTER ENGINEERING APPROVAL
- DOWNPIPES SHOWN ARE INDICATIVE ONLY. ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS
- DRAINAGE PIPES TO BE CONCRETE ENCASED WHERE LOCATED UNDER DRIVEWAY OR BUILDING
- ALL PIPES TO BE FULLY HOUSED INTO PIT WALLS AND JOINED / SEAL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- GRADE ALL PAVED AND GRASSED AREAS AWAY FROM THE BUILDING.
- TOP OF GRATE TO BE POSITIONED TO CATCH ALL UPSTREAM SURFACE FLOWS AS INDICATED BY PLANS.
- ALL PIPES WITHIN THE PROPERTY TO BE MIN. OF 150 DIA, @ 1% MIN. GRADE, UNO.
- ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULHEADS AT ALL JOINTS.
- ALL PITS WITHIN THE PROPERTY AREA TO BE FITTED WITH WELDOK OR APPROVED EQUIVALENT GRATES TO AS3996:
 - LIGHT DUTY FOR LANDSCAPE AREAS

- HEAVY DUTY WHERE SUBJECTED TO VEHICULAR CROSSING
- ALL PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
- ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINEOUS HINGE
- ALL COURTYARD AND LANDSCAPE PITS TO BE 400 SQUARE, UNO
- ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.
- COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE MIN. 25 MPa

- PROVIDE CONCRETE BENCHING ACROSS PIT TO SUIT INLET AND OUTLET PIPES AS DETAILED
 - 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
 - SUB SOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS AND EMBANKMENTS WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.
 - 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.
 - MORTAT BASES TO BE SHAPED TO GIVE MIN 20 mm FALL ACROSS PITS
 - MORTAR BASES TO BE DISHED TO SUIT ADJOINING PIPE SIZES TO GICE SELF CLEANSING PITS.
 - WHERE PIT DEPTH EXCEEDS STANDARD DEPTH, CONCRETE SHALL BE USED AS PIT BASE, AND ALSO TO GAIN REQUIRED INLET/ OUTLET LEVELS.
 - THE INLET PIPE OBVERT IS TO BE HIGHER THAT THE OUTLET PIPE OBVERT
 - ALL SWAYLES SHALL HAVE A TURFED INVERT EXTENDING 0.5 m UP THE SIDE SLOPES
 - HAND EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS
 - FOOTHPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS
 - ALL FENCES MUST BE RAISED 150 mm FROM THE FINISHED GROUND LEVELS SO THAT OVERLAND FLOWS FROM UPSTREAM PROPERTIES ARE NOT RESTRICTED OR BLOCKED.
- RAINWATER TANK NOTES:**
- THE SYSTEM TO BE INSTALLED WITH THE FOLLOWING CONSIDERATIONS:
 - A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS
 - ADEQUATE SCREENING TO PROVIDE MOSQUITO BREEDING AND ENTRY OF ANIMAL OR FLOATING MATTER
 - TANKS TO BE PLUMBED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIOD WHEN THE TANK IS 80% EMPTY.
 - NO DIRECT CROSS-CONNECTION WITH THE POTABLE WATER SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.

D • RAINWATER TANK TO BE CONNECTED TO ALL TOILETS, LAUNDRY AND AT LEAST ONE (1) OUTDOOR TAP.

DESIGN NOTES

- ALL EVE GUTTERS AND DOWNPIPES ARE DESIGNED FOR 10 YEAR ARI STORM EVENT.
- BOX GUTTER AND RAINWATER HEADS ARE DESIGNED FOR 100 YEAR ARI STORM EVENT
- INTENSITY FREQUENCY DURATION (IFD) DESIGN CHART OBTAINED FROM BUREAU OF METEOROLOGY HAS BEEN USED TO DESIGN ON SITE DETENTION SYSTEM.
- **SEDIMENT FENCE**
- SEDIMENT CONTROL DEVICES ARE TO BE IN PLACE PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
- CONSTRUCT A SILT BARRIER FENCE AS SHOWN ON PLAN AND TO DETAILS AS ABOVE.
- 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.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

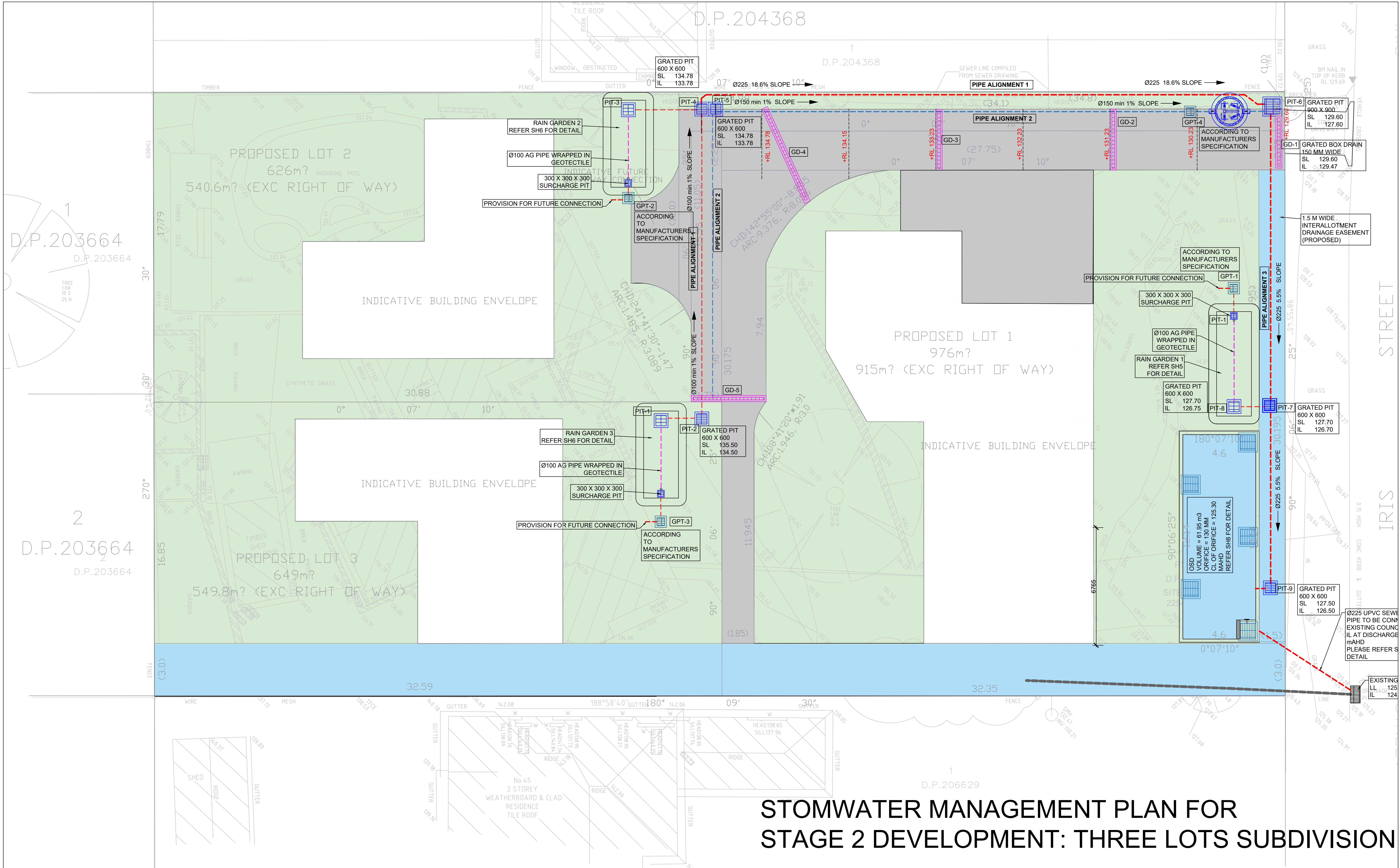
SEDIMENT BARRIER AROUND PIT:

- FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
- SUPPORT GEOTEXTILE WITH MESH TIED TO THE POSTS AT 1000 MM CENTERS.
- DONOT COVER INLET WITH GEOTEXTILE

STANDARD PIPE TRENCH

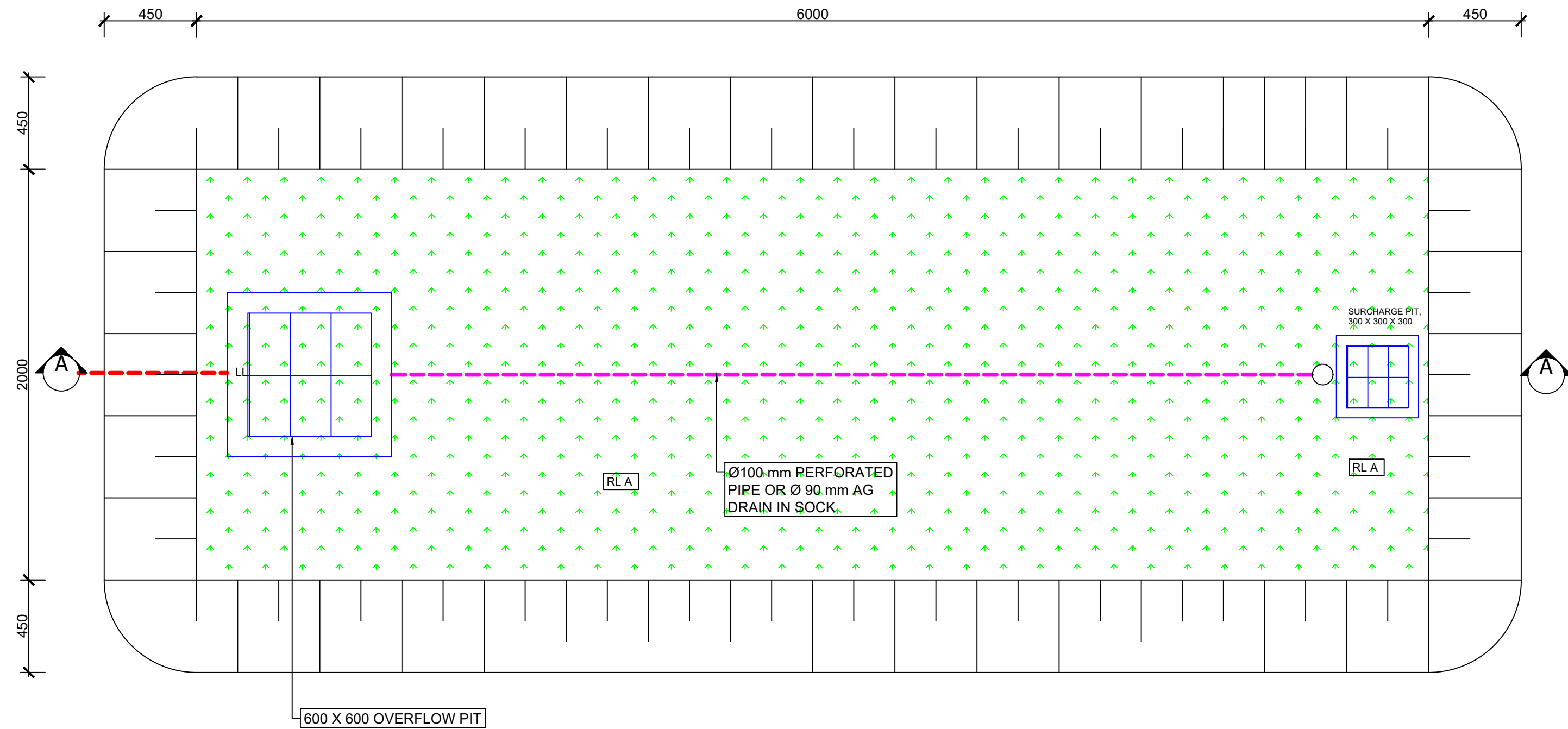
- SAND FREE FROM ROCK OR OTHER HARD AND SHARP OBJECTS THAT WOULD RETAINED ON 13.2 SEIVE
- CRISHED ROCK OR GRAVEL OF APPROVED GRADING UP TO MAX SIZE OF 14 mm
- THE EXCAVATED MATERIAL MAY BE USED IF IT IS FREE FROM ROCK OR HARD MATTER AND BROKEN UP SO STHAT IT CONTAINS NO SOIL LUMPS HAVING ANY DIMENSION GREATER THAN 75 mm WHICH WOULD PREVENT ADEQUATE COMPACTION OF THE BEDDING
- MATERIAL FOR PIPE SIDE SUPPORT SHOULD BE ADEQUATELY TAMPED IN LAYERS OF NOT MORE THAN 150 mm.
- PIPE OVERLAY MATERIAL SHOULD BE LEVELLED AND TAMPED IN LAYERS TO A MINIMUM HEIGHT OF 150 mm ABOVE THE CROWN OF THE PIPE
- FOR MIN COVER REFER TO AS3500

				 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: Maree Jaloussis Hayes		Title: GENERAL NOTES SH2	
E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024			Designed By: Chij Shrestha MIEAust, CPEng, NER		Date: 06/09/2024	
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024					Issue: E	
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023			Project: Proposed Development at 107 IRIS STREET, BEACON HILL, NSW		Reviewed By: C.L.A	
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023					Job No: SW -152-2307 E	
A	ISSUED FOR DA	CS	10/09/2023			Scale: as shown (A3)			
Rev	Description	By	Date						



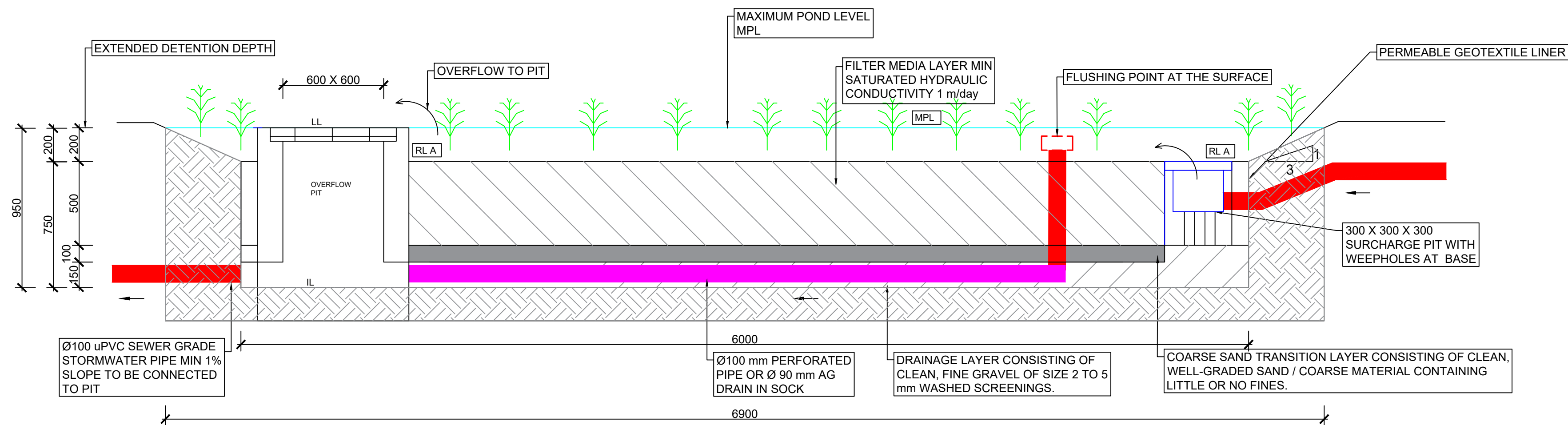
STOMWATER MANAGEMENT PLAN FOR STAGE 2 DEVELOPMENT: THREE LOTS SUBDIVISION

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							Designed By: Chij Shrestha MIEAust, CPEng, NER		Date: 06/09/2024	
E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024							
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024						Issue: E	
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023							
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023							
A	ISSUE FOR DA	CS	10/09/2023						Job No: SW -152-2307 E	
Rev	Description	By	Date							
							Project: Proposed Development at 107 Iris Street, Beacon Hill NSW		Reviewed By: C.L.A	
						Scale: as shown (A1)				



NOTES:

- THE RAIN GARDEN MUST BE LOCATED AT THE LOWEST PART OF THE SITE, CLEAR OF DRIVEWAY, SERVICES AND OTHER CONSTRAINTS.
- THE FILTER MEDIA TO BE SETBACK 450 mm FROM THE BOUNDARY.
- GEOTEXTILE FABRIC LINING MUST BE PROVIDED AT THE BASE OF THE RAIN GARDEN.
- GEOTEXTILE FABRIC LINING MUST NOT BE PROVIDED BETWEEN LAYERS.
- WHERE INFILTRATION FROM THE RAIN GARDEN IN TO THE SURROUNDING SOIL IS UNDESIRABLE, AN IMPERMEABLE LINER MUST ALSO BE PROVIDED IN THE BASE OF THE RAIN GARDEN AT ALL SIDES.
- THE BASE OF RAIN GARDEN MUST FALL TOWARDS THE SUB-SOIL DRAIN



SECTION AT AA
scale 1:20

LOT	LID LEVEL	INVERT LEVEL	MAXIMUM POND LEVEL	REDUCED LEVEL
	LL	IL	MPL	RL-A
1	127.7	126.75	127.7	127.5
2	134.8	133.85	134.8	134.6
3	135.55	134.6	135.55	135.35

Rev	Description	By	Date
E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023
A	ISSUE FOR DA	CS	10/09/2023

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Client:	Maree Jaloussis Hayes
Project:	Proposed Development at 107 Iris Street, Beacon Hill NSW

Title: RAINGARDEN DETAIL SH5	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 06/09/2024
Reviewed By: C.L.A	Issue: E
Scale: as shown (A1)	Job No: SW -152-2307 E

NOT FOR CONSTRUCTION



SECTION A-A

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Client:	Maree Jaloussis Hayes
Project:	Proposed Development at 107 Iris Street, Beacon Hill NSW

Title:		STORM FILTER DETAIL SH 7	
Designed By:	Chij Shrestha MIEAust, CPEng, NER	Date:	06/09/2024
		Issue:	E
Reviewed By:	C.L.A	Job No:	SW - 152-23
Scale:	as shown (A1)		

- STORM FILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED.
- THE STANDARD CONFIGURATION IS SHOWN. ACTUAL CONFIGURATION OF THE SPECIFIED STRUCTURE(S) PER CERTIFYING ENGINEER WILL BE SHOWN ON SUBMITTAL DRAWING(S).
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 178mm.

SITE SPECIFIC DATA REQUIREMENTS

PRECAST MANHOLE WEIGHT	4100kg
PRECAST LID WEIGHT	1100kg



1. PRECAST STRUCTURE SUPPLIED WITH CORE HOLES TO SUIT OUTER DIAMETER OF NOMINATED PIPE SIZE / MATERIAL
2. PRECAST STRUCTURE SHALL MEET W80 WHEEL LOAD RATING ASSUMING A MAXIMUM EARTH COVER OF 2.0m AND A GROUND WATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. CERTIFYING ENGINEER TO CONFIRM ACTUAL GROUNDWATER ELEVATION. PRECAST STRUCTURE SHALL BE IN ACCORDANCE WITH AS3600.
3. IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CERTIFYING ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE SYSTEM, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.
4. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
5. SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
6. DRAWING NOT TO SCALE.

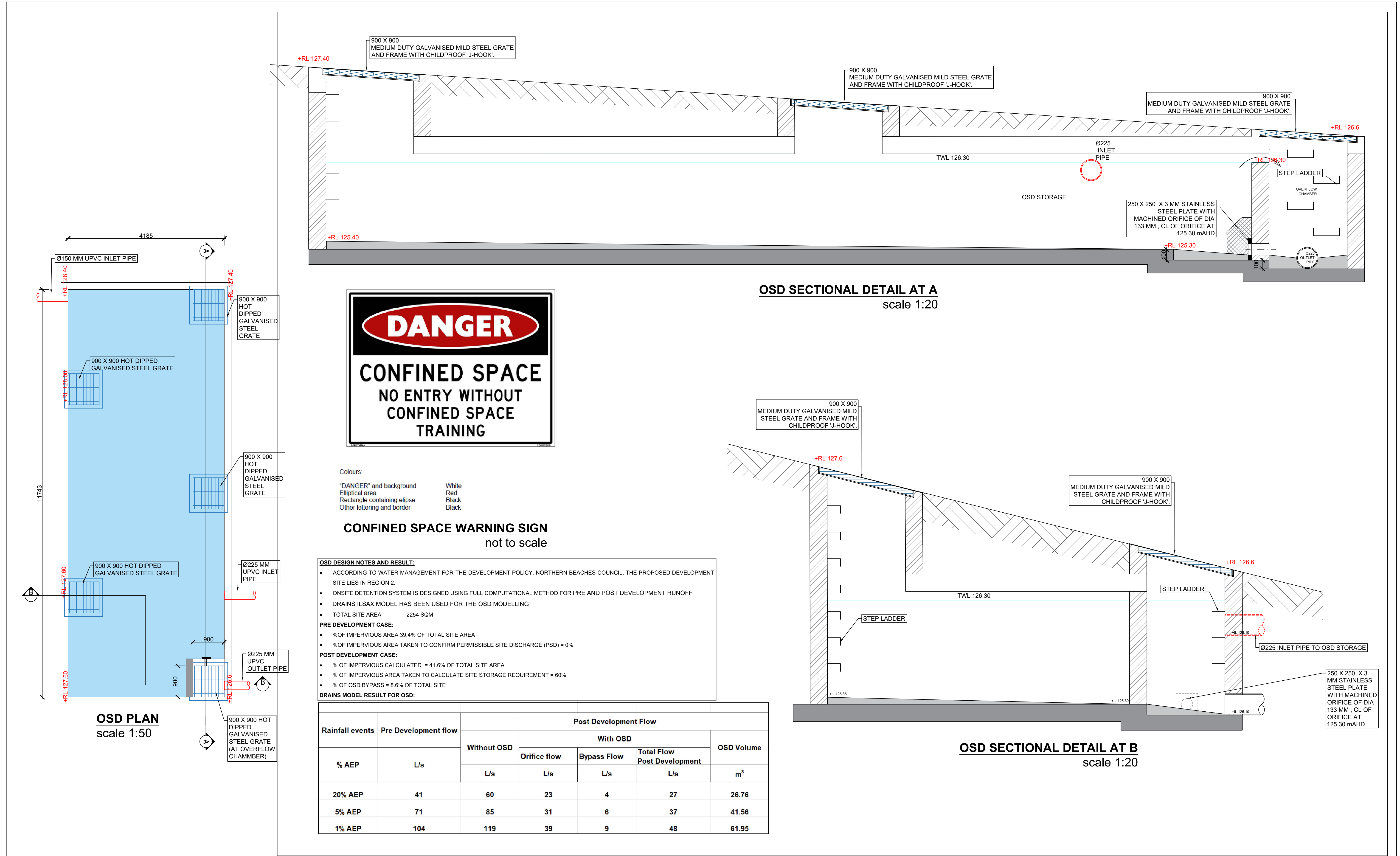
1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY CERTIFYING ENGINEER.
2. CONTRACTOR TO PROVIDE ALL EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING DETAIL PROVIDED SEPARATELY).
3. CONTRACTOR TO APPLY SEALANT TO ALL JOINTS AND TO PROVIDE, INSTALL AND GROUT INLET AND OUTLET PIPES.



PHONE: 1300 354 722

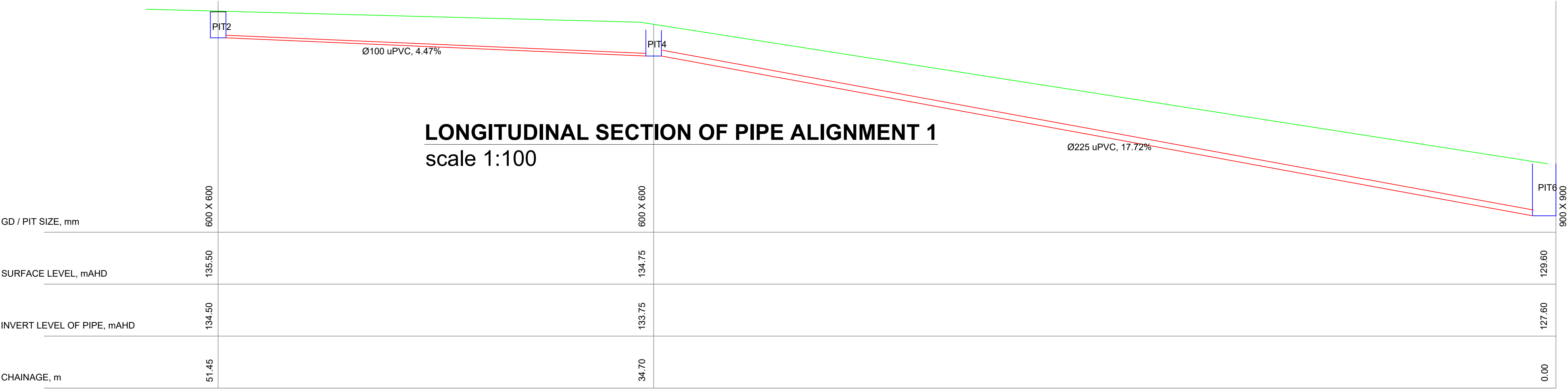
www.oceanprotection.com.au

OCEAN PROTECT
4 CARTRIDGE STORMFILTER SYSTEM
DN1460 MANHOLE
SPECIFICATION DRAWING

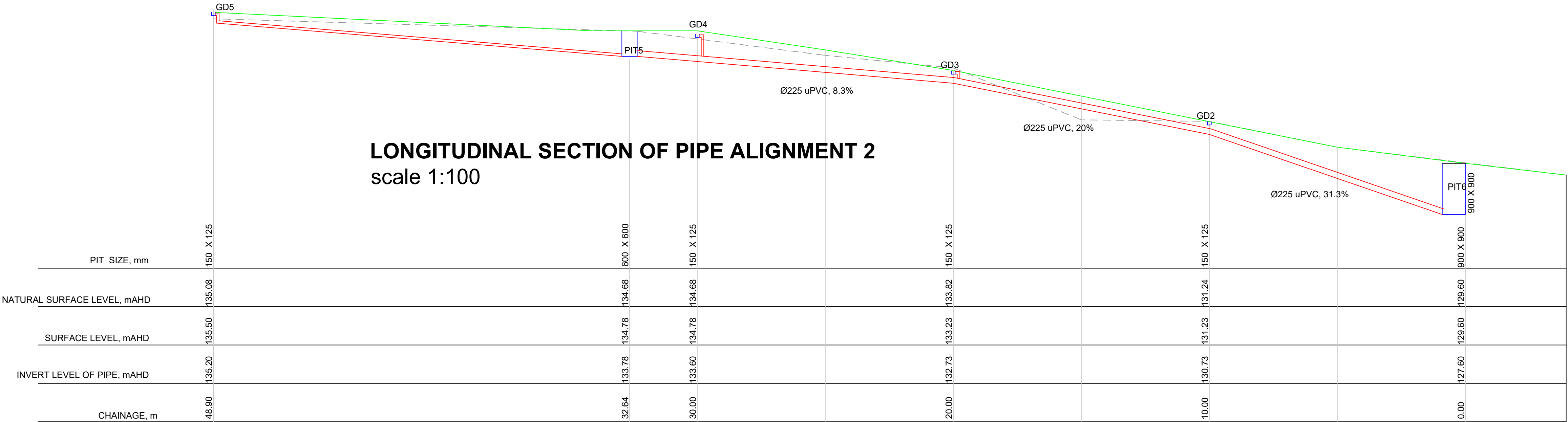


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E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024				Designed By:	Chij Shrestha MIEAust, CPEng, NER	Date:	06/09/2024	
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024						Issue:	E	
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023								
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023				Reviewed By:	C.L.A	Job No:	SW -152-2307 E	
A	ISSUE FOR DA	CS	10/09/2023								
Rev	Description	By	Date						Scale:	as shown (A1)	

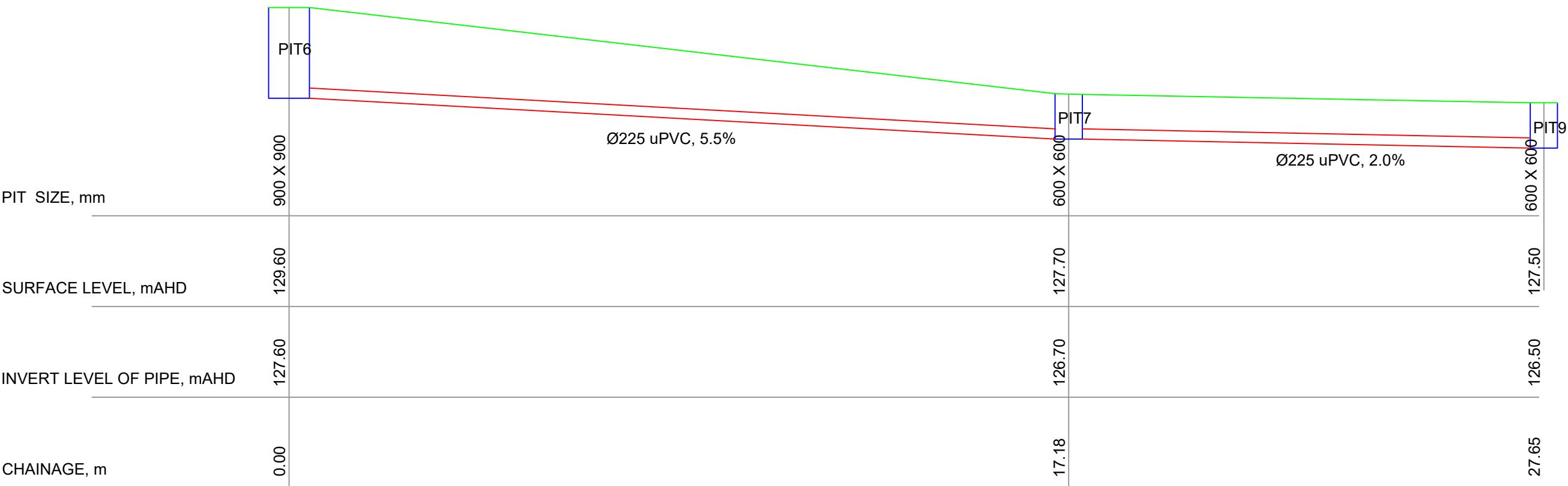
LONGITUDINAL SECTION OF PIPE ALIGNMENT 1
scale 1:100



LONGITUDINAL SECTION OF PIPE ALIGNMENT 2
scale 1:100



LONGITUDINAL SECTION OF PIPE ALIGNMENT 3
scale 1:100



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A	ISSUE FOR DA	CS	10/09/2023
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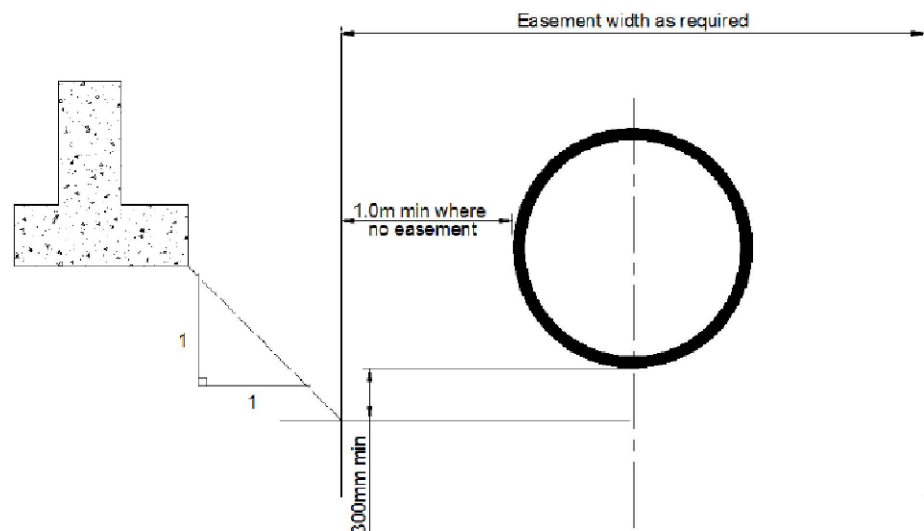
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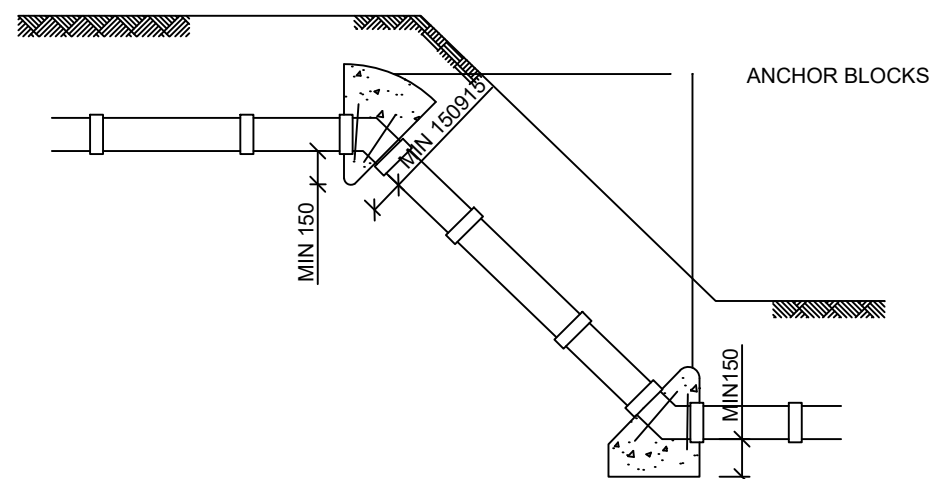
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Client:	Maree Jaloussis Hayes
Project:	Proposed Development at 107 Iris Street, Beacon Hill NSW

Title: PIPE LONG SECTION SH9	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 06/09/2024
Reviewed By: C.L.A	Issue: E
Scale: as shown (A1)	Job No: SW -152-2307 E



Note: Concrete encasing of Council's drainage system will not be permitted



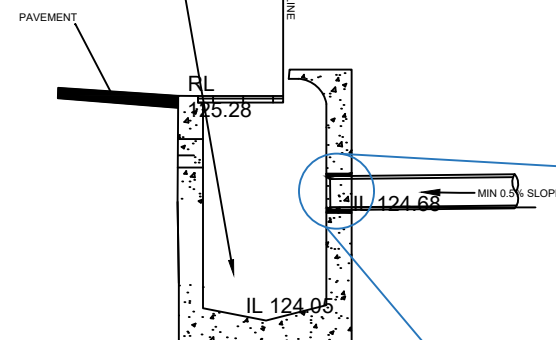
TYPICAL ANCHOR BLOCK DETAIL FOR SLOPE GREATER THAN 1:5
not to scale

NOTE:

WHERE THE GRADIENT OF A SITE OF STORMWATER DRAIN EXCEEDS 1:5, ANCHOR BLOCKS SHALL BE INSTALLED:

- AT THE BEND OR JUNCTION AT THE TOP AND BOTTOM OF THE STORMWATER DRAIN
- AT INTERVAL NOT EXCEEDING 3.0 m
- THICKNESS OF ANCHOR BLOCKS SHOULD NOT BE LESS THAN 150 mm
- TWO STEEL REINFORCEMENT BAR BARS NOT LESS THAN 10 mm DIA BENT TO A RADIUS ABOUT 200 mm SHALL BE PROVIDED TO ANCHOR BLOCKS
- ANCHOR BLOCKS SHOULD NOT COVER ANY FLEXIBLE JOINTS

INSIDE OF JOINT TO BE FILLED WITH MORTAR AND WIPED SMOOTH ALL ROUND

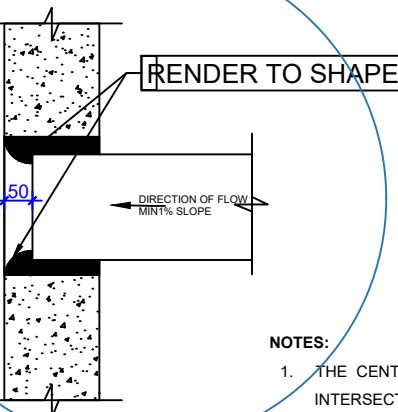


NOTES:

- ENTRY OF MINIMUM SIZE TO SUIT PIPE DIAMETER IS TO BE CAREFULLY CUT IN WALL OF PIT
- END OF ENTRY PIPE IS TO BE CUT OFF AND TRIMMED SO THAT IT IS AT LEAST 50 mm FROM INSIDE WALL SURFACE PIT
- NO DEBRIS OF ANY KIND IS TO BE LEFT IN COUNCIL DRAIN
- CONNECTION OF PIPE AND PIT TO BE SEALED WITH CEMENT MORTAR

SCHEMATIC DETAIL OF CONNECTION
DETAIL AT COUNCIL'S PIT
NOT TO SCALE

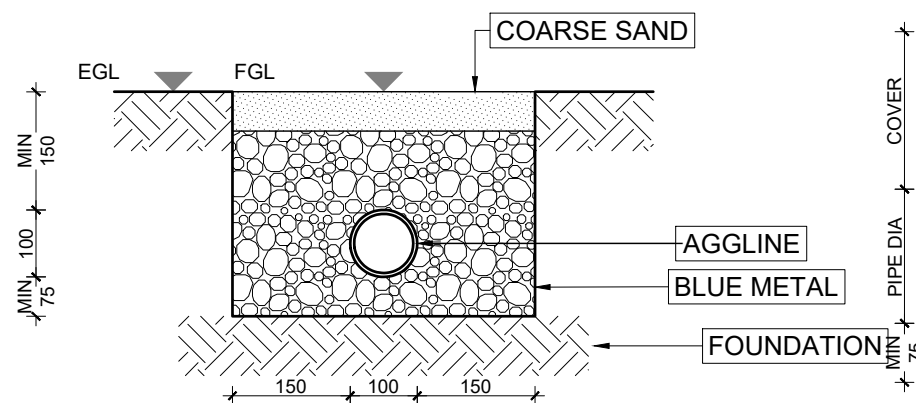
MASS CONCRETE BLOCK
FOR NOMINAL SIZES
GREATER THAN DN 150



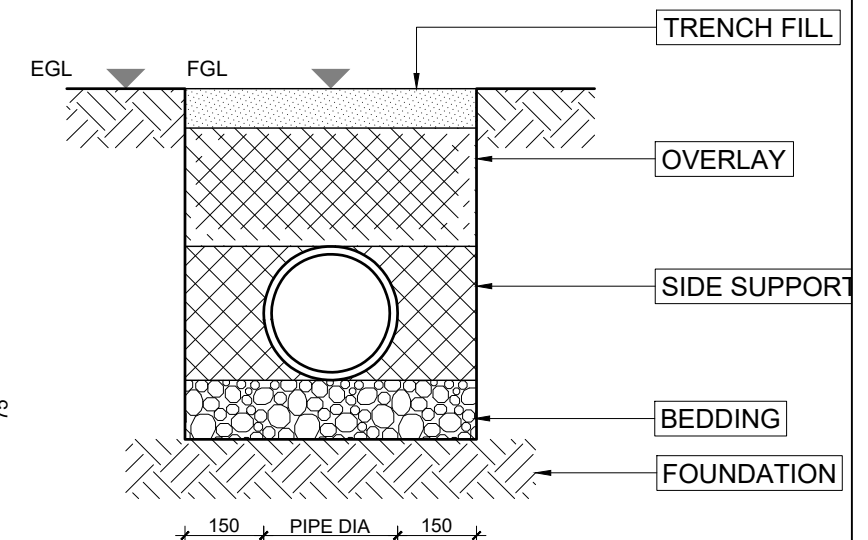
NOTES:

- THE CENTRE- LINE OF EACH BRACH SHALL INTERSECT THE INTER-LINE OF THE MAIN LINE
- THE CHANGE OF DIRECTION OF FLOW A CUT-IN SHALL BE BETWEEN 45° AND 90°, AS SHOWN IN FIGURE

JUNCTION CONNECTION DETAIL
not to scale



AGGLINE TRENCH DETAIL
scale 1:10



STANDARD PIPE TRENCH DETAIL
scale 1:10

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B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023
A	ISSUED FOR DA	CS	10/09/2023

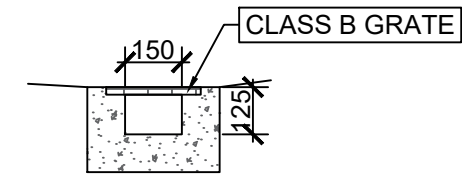
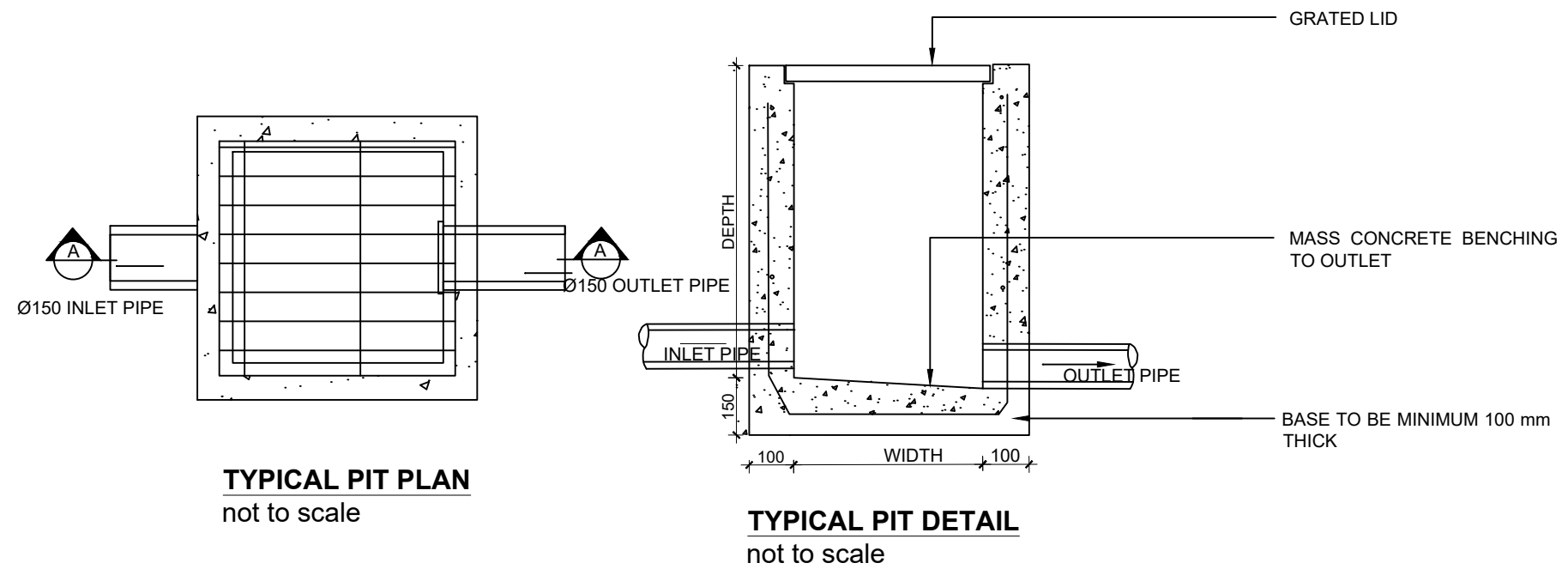
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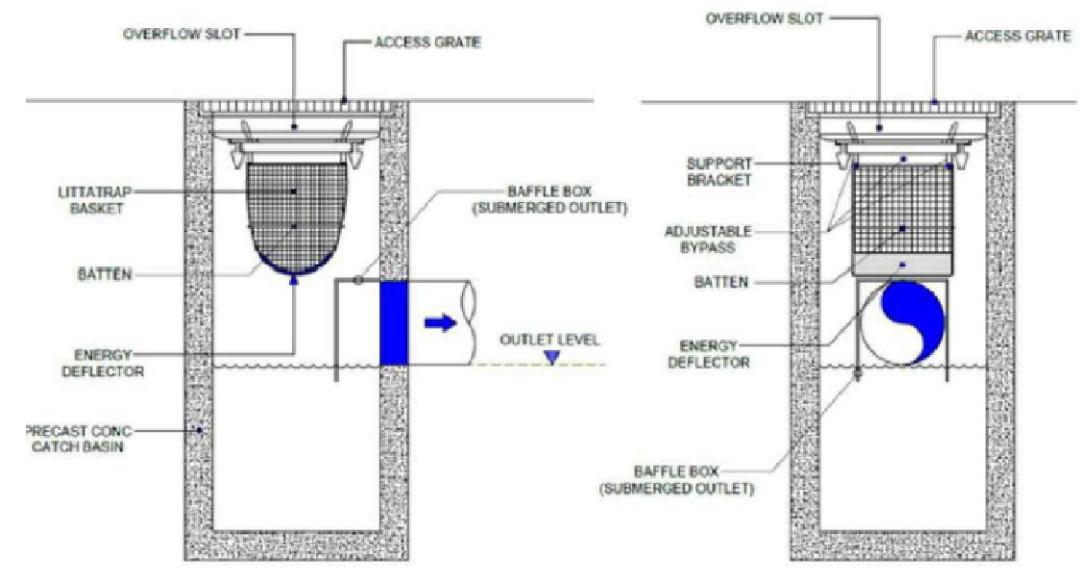
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Client: Maree Jaloussis Hayes
Project: Proposed Development at 107 IRIS STREET, BEACON HILL, NSW

Title: PIPE CONNECTION AND TRENCH DETAIL SH10
Designed By: Chij Shrestha
MIEAust, CPEng, NER
Reviewed By: C.L.A.
Scale: as shown (A3)
Date: 06/09/2024
Issue: E
Job No: SW -152-2307 E



TYPICAL GRATED DRAIN
not to scale

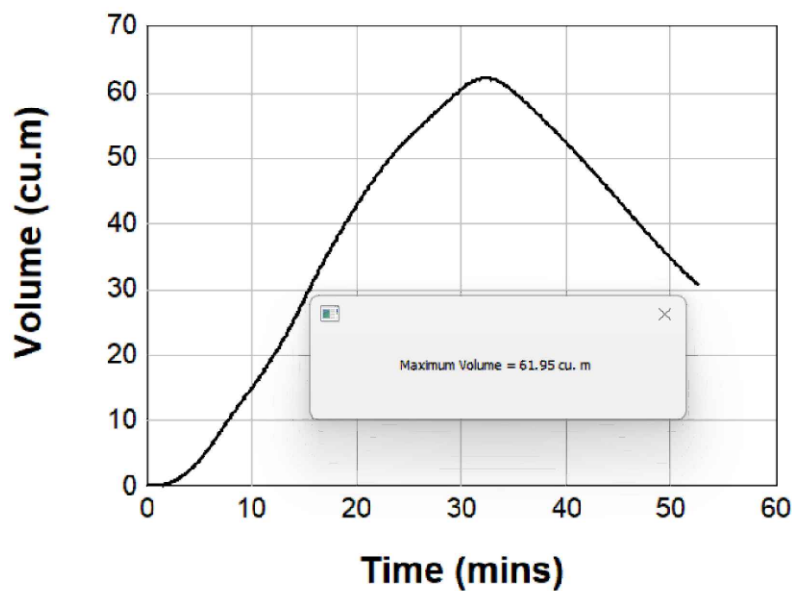
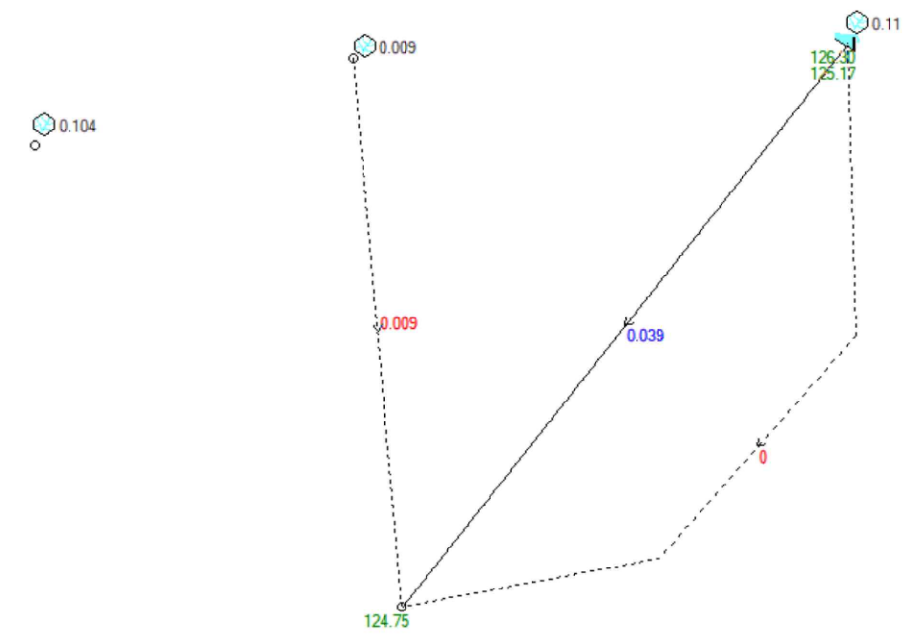
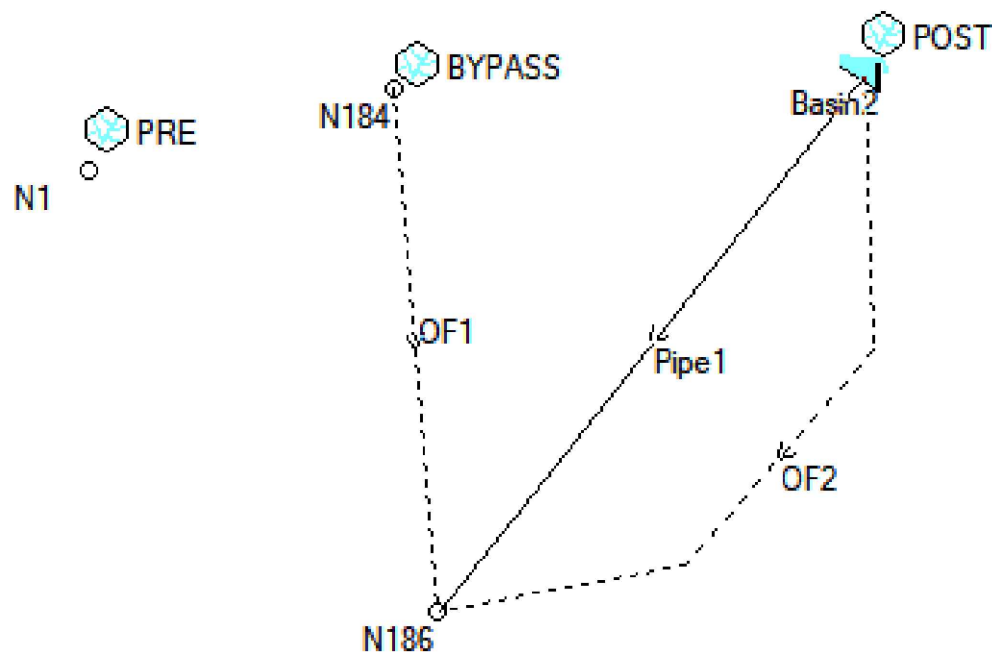


TYPICAL GPT DETAIL
not to scale



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E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024							Designed By: Chij Shrestha MIEAust, CPEng, NER		Date: 06/09/2024	
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024									Issue: E	
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023										
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023										
A	ISSUED FOR DA	CS	10/09/2023									Reviewed By: C.L.A Job No: SW -152-2307 E	
Rev	Description	By	Date							Project: Proposed Development at 107 IRIS STREET, BEACON HILL, NSW		Scale: as shown (A3)	

DRAINS MODEL FOR OSD AND RESULTS



Rainfall events	Pre Development flow	Post Development Flow				
		Without OSD	With OSD			OSD Volume
			Orifice flow	Bypass Flow	Total Flow Post Development	
% AEP	L/s	L/s	L/s	L/s	L/s	m³
20% AEP	41	60	23	4	27	26.76
5% AEP	71	85	31	6	37	41.56
1% AEP	104	119	39	9	48	61.95

Rev	Description	By	Date
E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023
A	ISSUED FOR DA	CS	10/09/2023

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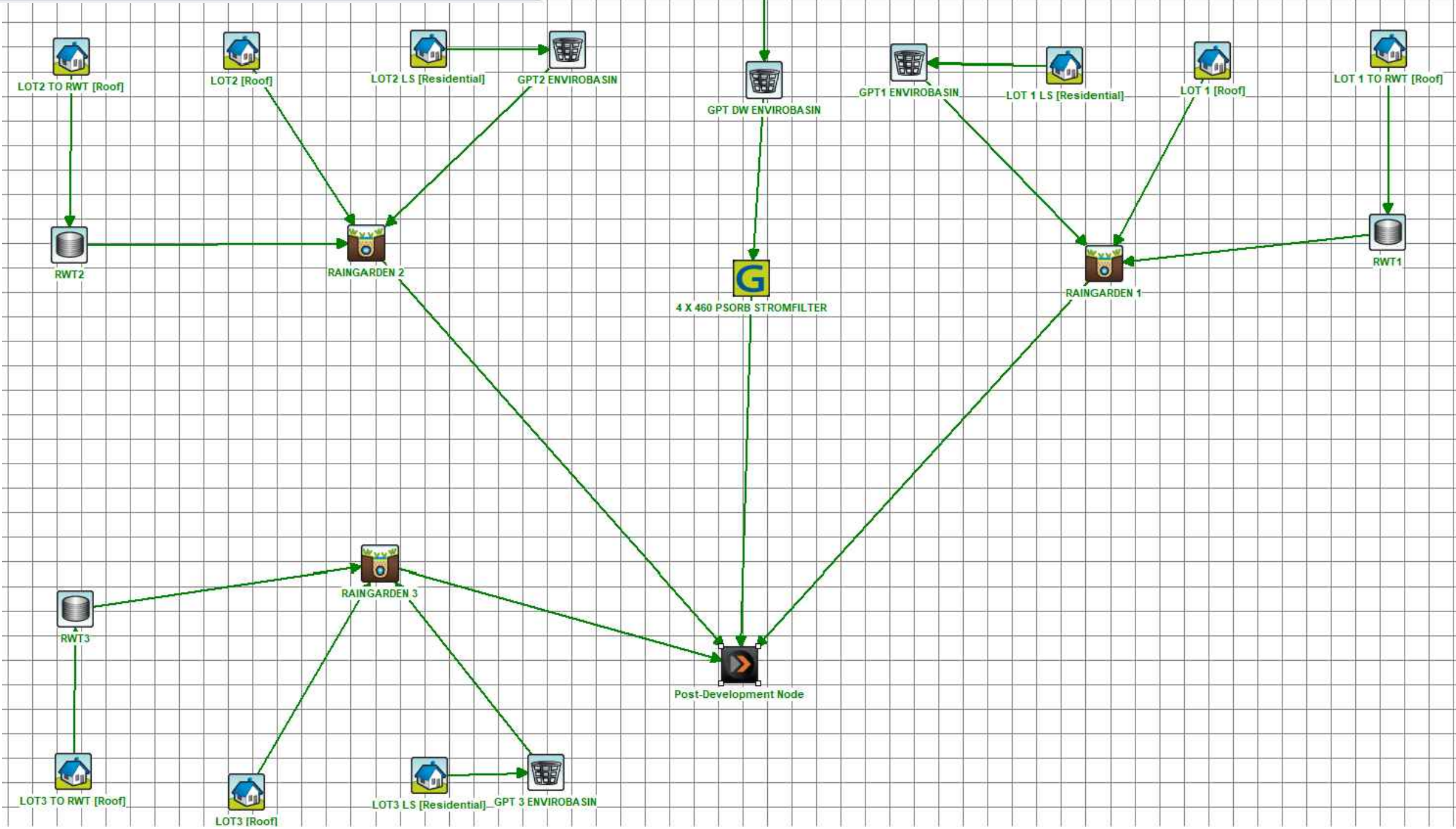
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Client:	Maree Jaloussis Hayes
Project:	Proposed Development at 107 IRIS STREET, BEACON HILL, NSW

Title: DRAINS MODEL SH12	
Designed By: Chij Shrestha MIEAust, CPEng, NER	Date: 06/09/2024 Issue: E
Reviewed By: C.L.A	Job No: SW -152-2307 E
Scale: as shown (A3)	

MUSIC MODEL LAYOUT PLAN

	Sources		Residual Load		% Reduction	
	Pre	Post	Pre	Post	Pre	Post
Flow (ML/yr)	1.27	1.75	1.27	1.08	0	38.3
Total Suspended Solids (kg/yr)	160	223	160	25.7	0	88.5
Total Phosphorus (kg/yr)	0.316	0.47	0.316	0.146	0	68.9
Total Nitrogen (kg/yr)	2.44	3.73	2.44	1.21	0	67.6
Gross Pollutants (kg/yr)	27.1	41.8	27.1	1.08	0	97.4



Rev	Description	By	Date
E	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	06/09/2024
D	ISSUED FOR DA, REVISION FOR CHANGE IN PLAN	CS	13/05/2024
C	ISSUED FOR DA, REVISION FOR COUNCIL'S COMMENT	CS	10/11/2023
B	ISSUED FOR DA, REVISION FOR STAGE 1 DEVELOPMENT	CS	18/10/2023
A	ISSUED FOR DA	CS	10/09/2023

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Client: Maree Jaloussis Hayes
Project: Proposed Development at 107 IRIS STREET, BEACON HILL, NSW

Title: MUSIC MODEL PLAN SH 13
Designed By: Chij Shrestha
MIEAust, CPEng, NER
Reviewed By: C.L.A.
Scale: as shown (A3)
Date: 06/09/2024
Issue: E
Job No: SW -152-2307 E